Republic of Armenia: Third Reviews Under the Extended Fund Facility and Extended Credit Facility, and Request for Modification of Performance Criteria—Staff Report; Staff Supplements; Press Release on the Executive Board Discussion; and Statement by the Executive Director for the Republic of Armenia.

In the context of the third reviews under the Extended Fund Facility and Extended Credit Facility, and request for modification of performance criteria, the following documents have been released and are included in this package:

- The staff report for the third reviews under the Extended Fund Facility and Extended Credit Facility, and request for modification of performance criteria prepared by a staff team of the IMF, following discussions that ended on September 20, 2011, 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 23, 2011. 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.
- An informational annex dated November 23, 2011 and a joint IMF/World Bank debt sustainability analysis dated November 28, 2011, updating information on recent developments.
- A Press Release summarizing the views of the Executive Board as expressed during its December 12, 2011 discussion of the staff report that completed the request and/or review.
- A statement by the Executive Director for the Republic of Armenia.

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

Third Reviews Under the Extended Fund Facility and Under the Extended Credit Facility, and Request for Modification of Performance Criteria

Prepared by the Middle East and Central Asia Department (In Consultation with Other Departments)

Approved by Ratna Sahay (MCD) and Thomas Dorsey (SPR)

November 23, 2011

- **Background**. Growth has picked up in 2011, and inflation has come down rapidly, reflecting a rebound in agriculture, as well as timely policy rate hikes, budgetary spending restraint, and global price developments. Credit continues to grow briskly, particularly in foreign currency. The fiscal deficit should remain well below program targets in 2011, and an ambitious tax package for 2012 should ease spending restraint while fiscal consolidation continues. The external current account deficit remains high, and while important business environment reforms are proceeding, they have not yet translated into a decisive improvement in the business climate.
- **Program**. The program is on track, with all but one performance criteria and most indicative targets met, and most structural benchmarks implemented. The authorities are requesting a waiver for the end-June PC on net domestic assets of the central bank, which was missed by a small margin due to temporary factors. They are also requesting that SDR 36.2 million be made available upon completion of the review.
- **Discussions**. Discussions were held September 6–20 in Yerevan. The mission met President Sargsyan, Prime Minister Sargsyan, Central Bank of Armenia Chairman Javadyan, Minister of Finance Gabrielyan, Minister of Economy Davtyan, Minister of Energy Movsisyan, Minister of Agriculture Karapetyan, and other senior officials and representatives of the private sector, civil society, and the diplomatic community. The team comprised M. Horton (head), A. Bordon, and C. Caceres (MCD), T. Komatsuzaki and R. Romeu (FAD), J. Thornton (SPR), and K. Fujita (MCM). G. Tolosa (Resident Representative) and A. Manookian and A. Ghazaryan (IMF office) assisted, and G. Sargsyan (OED) joined the discussions.
- **Publication**. The authorities have consented to publication of the staff report and Letter of Intent.

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EXECUTIVE SUMMARY

Growth has picked up further in 2011, led by manufacturing, mining, and services, while agriculture has rebounded from last year's collapse. Credit continues to grow rapidly, particularly in foreign currency and based on strong inflows to banks. Inflation has come down sharply, reflecting policy rate hikes, spending restraint, the agriculture recovery, and favorable global price developments. The dram has remained stable, and the CBA has built up additional reserves, compared with program targets. The external current account deficit remains high, and growth is expected to moderate to 4 percent in 2012. Risks are on the downside, with prospects for a global slowdown and possible pressures during the upcoming election cycle.

The EFF/ECF-supported program is on track, with all but one performance criteria (PCs) and most indicative targets (ITs) met. A waiver is being requested for the end-June 2011 PC on CBA net domestic assets (NDA), which was missed by a small margin due to temporary factors. All but one of the structural benchmarks were implemented, one with a delay.

The 2011 fiscal deficit is expected to reach 3½ percent of GDP, well below the 3.9 percent target and reflecting higher grants and lower spending. For 2012, staff and the authorities agreed to retain the deficit target of 3.1 percent of GDP. The authorities will undertake an ambitious tax package (excises, income taxes, mining) that aims to generate an additional 0.6 percent of GDP and reduce the need for further spending restraint.

The rapid decline of inflation should facilitate exchange rate flexibility. Accordingly, the end-2011 reserves (NIR) target was increased to lock in strong performance and to provide an additional buffer, including for upcoming repayment of crisis-related financing. The authorities also agreed that further policy rate cuts should proceed cautiously, as inflation is now projected to remain within the target band, and the output gap is expected to close.

Business environment reforms are proceeding, including in tax administration (e.g., risk-based approaches for audit, customs, and VAT refunds, improved taxpayer services), easing regulations, inspections, and procedures, and stepping up anti-competitive enforcement actions. Further steps are planned in 2012. These actions are important, but they have not yet translated into a decisive improvement in the business climate or investment and growth.

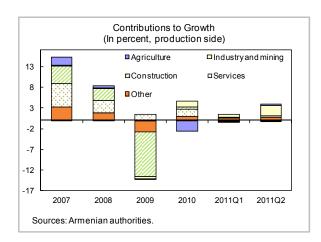
I. ECONOMIC CONTEXT

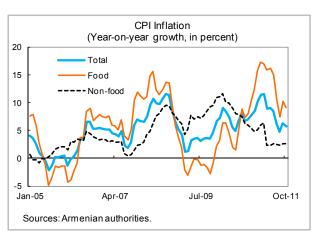
A. Background and Program Implementation

- 1. Armenia's post-crisis recovery is continuing, although challenges remain. Growth has strengthened in 2011, and inflation has declined rapidly. Challenges include safeguarding financial system stability, strengthening tax revenues to ensure sustainability and support pro-growth and pro-poor spending, improving the business environment to enhance growth and reduce poverty and unemployment, reducing external imbalances.
- 2. **Program performance has been sound**. All but one of the quantitative PCs was met. PCs on the fiscal deficit and NIR were met with large margins. The end-June PC on NDA of the CBA was missed by a small amount due to brief delays in budget support loans. A waiver is being requested, and an adjustor will be incorporated into the program. All but one of the structural benchmarks were met, one with a delay.¹
- 3. **The election cycle is gaining speed**. Parliamentary and presidential elections are due in 2012 and 2013, respectively, and there may be changes in coalition arrangements or a return to politics by two-term former President Robert Kocharian, which may affect electoral dynamics. The 2008 presidential elections were followed by demonstrations that turned violent, and opposition protests have taken place throughout 2011.

B. Recent Developments and the Outlook for 2011

4. With strong performance in mining, manufacturing and services, growth is expected to reach 4.6 percent in 2011. While construction remains subdued, agriculture is

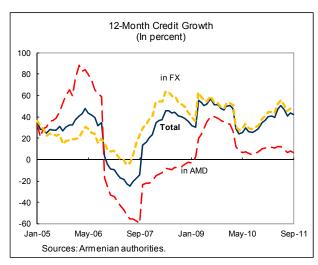




¹ The end-June indicative target (IT) on social spending was missed by a small margin, reflecting efforts to verify recipients of pension and other social payments. The end-September reserve money IT was also missed, due to higher-than-expected commercial bank foreign exchange reserves.

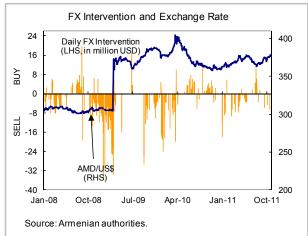
rebounding from last year's collapse with better weather, a recovery of remittances (a key financing source), and targeted policy interventions.² Along with policy rate hikes, spending restraint, and favorable global price developments, the agriculture recovery helped bring headline inflation down sharply from a peak of 11.5 percent in March.³ The CBA reduced its policy rate in September, the first time since September 2009.

5. While credit has grown at a fast pace, the banking sector remains sound. Credit grew by 37 percent year-on-year through September, with demand spread evenly across sectors and consumers. The credit-to-GDP ratio remains relatively low at around 30 percent, while strong financial flows have continued from parent banks and international financial institutions. Deposit and credit dollarization remain high. Rapid growth of foreign currency (FX) lending—by 47 percent through September—has increased vulnerabilities to exchange rate changes, and with higher risk



weights, has contributed to declining capital adequacy ratios (CAR). The ratio of non-performing loans to total loans has remained low, but edged up recently, mainly in respect of FX lending, suggesting that rapid credit growth and competition may have lowered lending standards. Still, the system-wide CAR remains around 20 percent, with no bank below the required 12 percent.

6. With the nominal exchange rate roughly at its end-2010 level, the dram likely remains overvalued. Modest depreciation in the first part of 2011 was offset by appreciation over the summer. Staff estimates suggest that that the real effective exchange rate is overvalued by 10–15 percent. The authorities have continued to intervene to smooth



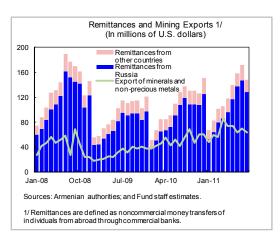
² These included government payment of a portion of interest on commercial bank loans of 12 thousand farmers, support for milk prices, and government import and distribution of high-quality seeds.

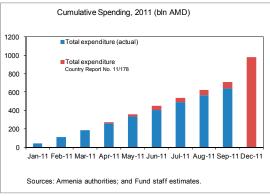
³ Food prices have been broadly stable since the start of 2011, and residential gas prices were not adjusted this year. This has contributed to favorable base effects, and a substantial fall in year-on-year inflation in the non-core component of the CPI. Nonfood inflation has remained fairly stable at around 3 percent.

volatility, although with concerns about inflation, sales have exceeded purchases.

- 7. Consolidation of the external current account deficit is continuing, although at a slow pace. Driven by strong growth in remittances and exports (particularly metals and minerals), the current account deficit fell in percent of GDP in the first half of 2011. The deficit for 2011 is projected at just over 12 percent, down from 14.7 percent in 2010.
- 8. **Fiscal consolidation has also continued**. The end-June deficit target was met by a wide margin, as the authorities restrained both current and

capital expenditures. Spending is expected to pick up in the second half of the year, but better targeting of pension and social allowances is expected to lead to savings. Combined with higher-than-projected grants, the deficit is projected to reach 3½ percent of GDP, well below the 3.9 percent target, and possibly lower, if first half underspending is not unwound.





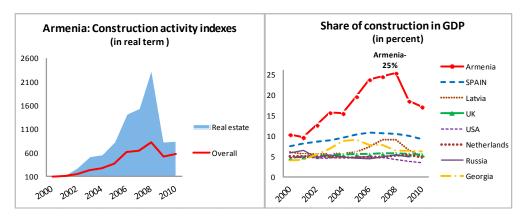
9. **Business environment reforms are proceeding**. Risk-based approaches are being adopted by inspection agencies, with a focus on simplification and transparency. Greater use is being made of electronic services and one-stop shops, and processes for obtaining permits are being streamlined. Legal changes have given greater power and tools to the competition committee, which initiated cases in telecommunications, energy, and food marketing. Two free economic zones were inaugurated in Yerevan: one focused on agricultural exports at the airport and a second aiming to spur high-tech activities. Neither has commenced operations, however, as the authorities are ensuring that proper tax and customs controls are in place.

C. Short-and Medium-Term Outlook and Risks

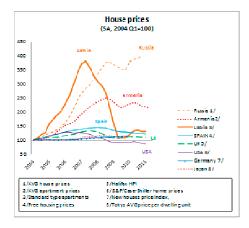
10. **Growth is expected to moderate in 2012**. In the absence of shocks, growth should remain close to potential, estimated by staff at 4 percent, from 2012 onwards. Mining, manufacturing, and services are likely to outperform other sectors, notably agriculture and construction, where significant structural challenges remain (Box 1). Headline inflation is

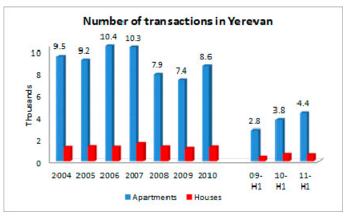
Box 1. Armenia: Recent Developments and Prospects for the Construction Sector¹

Armenia experienced major real estate and housing-price booms prior to the crisis, as construction increased from 10 to 25 percent of GDP during 2000–08. The booms were fueled by the large diaspora and remittances and were concentrated in residential real estate in Yerevan. Construction activity in Yerevan reached nearly 90 percent of nationwide building in 2007–08. House prices increased by 2.5 times during 2004–08, larger than in advanced countries but less than in Russia, Latvia, and Georgia.



Notably, construction was undertaken by households and financed by pre-payment, rather than bank credit. Mortgages peaked at just 2.3 percent of GDP in Armenia, compared with 40 percent of GDP in Latvia. The sector was also characterized by informality; official statistics on tax revenues and employment do not show a rise commensurate with the sector's growing contribution to GDP.





Construction activity fell sharply with the crisis. Also, transaction volumes declined by 30 percent, and prices fell by 15 percent. Prices recovered somewhat in 2010, possibly linked to the government's stimulus, which included creation of a mortgage fund and guarantees for construction companies. However, unsold inventories remain large, and prices have again fallen. Even with the recovery of remittances, household-financed construction has continued to decline.

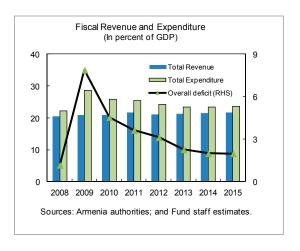
The outlook for construction is uncertain. As housing projects initiated during the boom are finished, the inventory of unsold units continues to grow. While limited use of bank credit mitigated financial sector impacts, some buyers who pre-financed construction took losses and depressed prices are likely to weigh on activity for some time.

¹Prepared by G. Tolosa and A. Manookian.

expected to return to the CBA's target band $(4 \pm 1.5 \text{ percent})$ later this year and remain there through end-2012, based on current interest rate levels and barring supply-side shocks. Credit growth is projected to be lower next year, as economic activity moderates and banks react to lower capital adequacy ratios.

11. Further fiscal consolidation is planned.

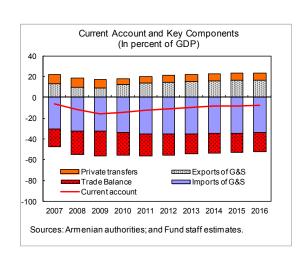
The 2012 budget targets a deficit of 3.1 percent of GDP, and deficits of 2.3 percent of GDP in 2013 and 2 percent of GDP from 2014 would keep debt on a declining path (Appendix I).⁴ Higher tax revenues are needed to safeguard priority social and capital spending, and the authorities will implement comprehensive tax measures in 2012 and complete a tax strategy paper to lay out reforms for 2013–15. In the absence of significant additional tax revenues, spending restraint will be needed in 2013 and beyond.



12. **Business environment reforms should continue**. "Doing Business" and investment climate reform action plans are being implemented, while a new streamlining ("guillotine") initiative aims to significantly reduce the regulatory burden. Preparations for a free trade agreement with the EU should provide a further push.

13. The external current account deficit is projected to decline to below 11 percent of GDP in 2012 and below 10 percent in 2013.

This will be driven by further fiscal tightening, a continued recovery of remittances, and business environment improvements, which should spur domestic competition (including to imports), FDI, and export growth. Export growth is expected to moderate in 2012 (along with import growth), mainly reflecting slower growth of minerals and metals prices. Greater flexibility of the dram should also facilitate external adjustment.



14. **The key risk facing Armenia is a significant global slowdown**, which would have consequences for remittances, exports, and capital flows (Box 2). Other risks include election-related policy slippages and renewed conflict over Nagorno-Karabakh.

⁴ Debt projections are based on a headline deficit of 2 percent of GDP, plus external net lending of 0.8 percent of GDP.

Box 2. Armenia: Is Armenia Prepared for a Global Downturn?¹

Armenia was among the countries most affected by the 2008–09 crisis, with growth declining from over 13 percent in 2006–07 to 6.9 percent in 2008, and output contracting by 14.2 percent in 2009. Armenia has recovered well from the crisis, with strong export growth and a recovery of remittances, foreign direct investment, bank flows, and reserves. However, many of these flows (remittances, FDI, non-mining exports, banks inflows) are concentrated on Russia, which is vulnerable to lower oil prices and adverse trade and financial spillovers from the euro area. In the event of a second global downturn, Armenia's financing options may be more constrained compared with 2008–09, due to debt sustainability concerns, and possibly, availability of funding. Import compression may need to play a larger role, and if fiscal revenues are affected, spending may come under pressure.

Possible Vulnerabilities

- Remittances. Gross private transfers and compensation of employees were 17 percent of GDP in 2010, 80 percent from Russia (services and construction), 5 percent from the U.S., and the remainder from the EU. During the previous crisis, remittances fell by 30 percent.
- Exports. Exports consist largely of raw materials; minerals and metals constituted 60 percent of exports last year. In 2009, these exports fell 30 percent in dollar terms, driven largely by prices. The net effect may be mitigated, if a fall in metals prices is accompanied by lower prices of oil and other imports.
- **FDI**. With telecoms and energy projects winding down, the major FDI destination is mining. While business environment reforms aim to make Armenia more attractive for mining FDI, a fall in the price of copper, molybdenum, and iron may have an impact, possibly with a lag.
- Other capital flows and banking sector resilience. Bank funding is relatively stable, relying largely on retail deposits and FX credit lines of parent banks and IFIs. Financial turbulence could lead to a reduction or reversal of these flows. Direct losses from exchange rate (ER) movements are expected to be limited as the net FX open position is small. ER changes could affect unhedged borrowers, but relatively large capital buffers would help weather possible losses.
- **Fiscal risks**. Revenues could fall in the event of a downturn; in 2009 revenues fell by 14 percent in real terms. The recent increase in public debt and the legislative debt ceiling (50 percent of GDP) may necessitate spending cuts (to reach a deficit of 3 percent of GDP), although the political cycle and recent expenditure compression could make cuts challenging.

Buffers and Policy Responses

- Reserves. Gross reserves stand at just under \$2 billion, or nearly five months of imports. While this buffer is large, in late-2008 and early-2009, sizable reserves were used to support the dram, while in 2012, fairly large repayments of crisis-related support are due. ER flexibility will be critical in the event of another global downturn.
- **Debt ratios**. At end-2008 Armenia's public debt ratio stood at 16 percent of GDP, compared with 42 percent at present. Some space remains, and debt is sustainable under the baseline scenario. However, an ER shock or fall in GDP could push the debt-to-GDP ratio towards the 50 percent of GDP debt threshold. Larger fiscal deficits may be difficult in the event of a second slowdown, in light of higher debt ratios and limited availability of financing. Efforts would be needed to protect priority social spending and the poor.

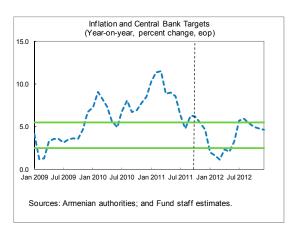
¹Prepared by J. Thornton, K. Fujita, and T. Komatsuzaki

II. POLICY DISCUSSIONS

15. Key objectives for 2011–12 are to support the recovery and alleviate poverty, while ensuring that inflation remains low. This will require: (i) prudent monetary policy; (ii) exchange rate flexibility; (iii) continuing fiscal adjustment (securing an increase in tax revenues, while maintaining priority investment and social spending); and (iv) further structural reforms.

A. Monetary and Exchange Policy and the Financial Sector

16. The CBA will continue to focus on price stability. Inflation is projected to decline below the mid-point of the target band in the first half of 2012, reflecting the current policy stance, base effects, the favorable outcome in agriculture, and the easing of international food price inflation. The authorities expressed concern with undershooting their inflation target; however, given the temporary nature of the decline and the projection of inflation returning to the upper end of the band by end 2012, staff argued and the CBA agreed that further policy rate cuts are



not needed. However, the CBA should stand ready to cut the policy rate, if downside risks materialize.

- 17. The CBA has used its instruments more actively in 2011 to target dram liquidity and strengthen the interest rate channel (Box 3). However, interbank rates remain volatile, and the authorities acknowledged the need to further improve liquidity management to more effectively guide interbank rates. Following a regional IMF-CBA-EBRD inflation targeting workshop in Armenia last April, the CBA is enhancing its modeling and forecasting capacity in collaboration with the IMF's Research Department.
- 18. The CBA agreed that it should further enhance tools for monitoring FX lending risks. The authorities noted that high credit growth rates are not surprising, given the recovery from the crisis and Armenia's low credit-to-GDP ratio. However, they agreed that FX lending poses vulnerabilities and have taken steps to manage risks (net open position limits and higher risk weights and provisioning for FX loans). They are improving stress-testing methodology by developing a credit risk model and using loan-by-loan information. Staff urged consideration of liquidity coverage ratios by major currencies, and the CBA agreed to assess potential impacts on bank portfolios, profitability, and the government securities market. The forthcoming FSAP Update will assess financial sector stability in the context of rapid credit growth and dollarization and a possible global downturn. In particular, the assessment will examine crisis preparedness and the sufficiency of the prudential policy framework.

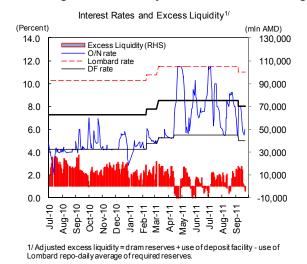
19. The CBA reaffirmed its commitment to stronger reserves and exchange rate flexibility. Higher reserves were viewed by both staff and the CBA as crucial to smoothing BOP pressures, particularly as crisis support unwinds and the external environment becomes more risky. The end-December NIR target was increased by \$16 million, and ambitious 2012 targets were agreed. With inflationary pressures having moderated, staff stressed the need for greater exchange rate flexibility. The authorities agreed, but underscored that stability of the dram has reflected market forces and argued that developments in 2011 had reduced or eliminated overvaluation.

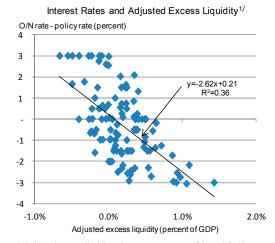
Box 3. Armenia: Recent Developments in Monetary Operations¹

Since April, the CBA has stopped allowing large excess dram liquidity on a daily basis, and overnight interbank rates, which had stayed close to the deposit facility rate (300 bps below the policy rate), have come to move around the policy rate. Volatility of interbank rates has increased, however, weakening the interest rate channel of monetary policy and suggesting room for improvement in these operations.

Staff analysis suggests that there is a statistically-significant relationship between daily changes in aggregate excess dram liquidity and overnight interbank rates. The relationship is not rock-solid (right chart), however, and the interbank market at times fails to redistribute liquidity due to segmentation.

The CBA could take actions to lessen the volatility of interbank rates. Reducing the daily deviation of dram liquidity from the amount of required reserves would help stabilize overnight interbank rates. This would require more accurate liquidity forecasting by the CBA and more frequent open market operations. Second, efforts should be continued to facilitate market transactions. Planned measures such as publication of liquidity forecasts by the CBA and introduction of new term interbank transaction tools are welcome. If these steps fail to lessen volatility, the CBA may need to consider intervening more forcefully in the market, including by narrowing the interest rate corridor.





1/Adjusted excess liquidity = dram reserves + use of deposit facility - use of Lombard repo-daily average of remaining required reserves

¹Prepared by K. Fujita.

B. Fiscal Policy

20. Staff and the authorities agreed to maintain the 2012 deficit target of 3.1 percent of GDP, which continues the consolidation aimed at ensuring debt sustainability. Discussions focused on the availability of financing. The timing of possible new funding from official partners is not yet clear, and the authorities expressed concern

	Deficit F (In percen	inancing it of GDP))		
	2009	2010	2011	2012	2013
Deficit of which:	7.9	4.5	3.6	3.1	2.3
IMF	1.8	1.1	0.6	0.4	0.0
Russia	5.9	0.0	0.0	0.0	0.0
Other budget support	1.7	0.0	1.1	0.4	0.3
Domestic financing	-0.9	2.7	1.8	1.5	1.2
Unidentified	0.0	0.0	0.0	0.0	1.4

that domestic sources could not make up the difference. They requested continuing Fund support for external budgetary payments of 0.4 percent of GDP for 2012, a reduction from 2011 (0.6 percent of GDP). Additional World Bank and domestic funding was also identified.

- 21. The authorities will implement a wide-ranging tax package in 2012. The package aims to raise Armenia's relatively low revenue-to-GDP ratio by 0.6 percent and improve efficiency and equity. Key measures include a new mining royalty, increased income and payroll taxes on high-income earners, higher excise and presumptive taxes across a range of goods, transfer pricing and thin capitalization provisions, and gains from ongoing tax administration improvements (Box 4). Staff welcomed these measures and looks forward to the tax strategy paper, due in December, which will lay out further reform plans. Both sides noted risks that the envisaged gains may not materialize, however, given the complexity of administering the new measures and uncertainty about yields and growth.
- 22. Additional revenues will allow the authorities to protect priority spending, while continuing the post-crisis consolidation. The authorities will safeguard pension and family benefits and improve medical and other benefits for the core civil service. Funding will also be directed to organizing elections and higher debt service. Capital spending will be reduced next year, partly reflecting a significant decline in grants.² Spending on wages and goods and services will also be restrained in 2012. The authorities pledged to again manage budgetary expenditures cautiously.

been programmed (EU MFA grants were 0.5 percent of GDP in 2011).

² A five-year funding compact with the U.S. Millennium Challenge Corporation was completed in 2011 (grants of 0.7 percent of GDP were provided in 2011), while no macro-financial assistance (MFA) from the EU has

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¹ Armenia's legal system forbids direct lending by the CBA to the government.

Box 4. Armenia: Tax Measures in 2012¹

The authorities are committed to wide-ranging tax measures in 2012 to increase the tax-to-GDP ratio by 0.6 percent. They reviewed recommendations of two IMF TA missions and identified measures based on yield, administrative feasibility and readiness, and inflationary impacts. Measures include:

- **Personal income tax**. An increase in the personal income tax rate and higher social security contributions for high-income tax payers.
- Mining. A redesign (profit-based) of the royalty for metallic minerals, complemented by a strict limit on the length and coverage of the fiscal stability clause and a transfer pricing rule.
 Introduction of an extraction-based royalty for non-metallic minerals. A broad transfer pricing rule to be implemented for other sectors from 2013.
- Excises. An increase of excise rates for domestically-produced (by 20–58 percent) and most imported (20–35 percent) alcoholic beverages, domestic (14 percent) and imported (7 percent) filtered cigarettes, and luxury vehicles, and SUVs. Introduce a new excise tax on engine oil. For most items, the excise rate increase is far higher than what would be implied by inflation indexation. The authorities will reiterate their objective of increasing excise yields over the next few years to recoup erosion since 2002 in a tax strategy document due in December
- **Presumptive taxes**. An increase of the presumptive tax rate on casinos and other gambling activities by 50 percent. An increase of the presumptive tax rate on restaurants by 30 percent.
- Customs duty. Introduction of the new customs duty on car parts.

Α	tax strategy paper	to be	e issued b	v Decem	her will lav	out further	reforms t	for 2	2013-	-15
1 L	tan strategy paper	ω	issucu o	v DCCCIII	oci wili lav	Out fulfiller	1 CIUIIII I	UI 2	<i>.</i> UIJ	10.

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¹ Prepared	by T.	Komatsuzaki.

23. The authorities are considering concessional external borrowing for Nairit, a privatized chemical company and Armenia's largest industrial enterprise. They are exploring financing from the EurAsEC Anti-Crisis Fund of \$400 million (4 percent of GDP), and involvement of a new strategic investor. Staff cautioned that the considerable operational and financial difficulties encountered by Nairit in the past increase the risks of the borrowing, notwithstanding the concessional terms. In addition, with elevated public debt after the crisis, the borrowing would utilize a large share of Armenia's remaining fiscal space, and staff urged that the project be clarified and strengthened and other options assessed, including a private-sector solution. The authorities contended that with new ownership, management, and modernization, Nairit could attain profitability and export markets in Russia, the CIS, Europe and North America. They pledged to enhance project plans and consider the full range of options prior to securing concrete financial commitments and funding.

14

C. Structural Reforms

24. Continuing structural reforms are vital for sustainable growth, reducing poverty and unemployment, and addressing imbalances. The authorities highlighted actions taken to increase transparency and reduce the cost of inspections, registration, tax filing and compliance, customs declaration, legal proceedings, and contract enforcement.³ A follow-up set of "Doing Business" reforms was recently approved, and the authorities have initiated a major initiative to streamline Armenia's numerous, complex, and cumbersome regulations over the next 18 months. Staff welcomed recent legal changes and enforcement actions aimed at creating more competitive domestic markets. Further enforcement actions and greater public information on market concentration would help. Staff and the authorities agreed that progress on the EU FTA would also be beneficial.

III. PROGRAM ISSUES

25. **Program design and monitoring remain broadly unchanged**. The authorities are requesting a waiver for non-observance of the end-June PC on CBA NDA, modification of end-December PCs for NIR and NDA, and revision of the NDA PC to include a symmetrical adjustor on external financing. Structural benchmarks focus on tax policy and revenue administration. The authorities' capacity to repay remains strong and is supported by an agreement between the CBA and the Ministry of Finance. Staff estimates indicate a financing gap of 1.4 percent of GDP in the balance of payments (BOP) and the fiscal accounts in 2013. Staff expects this gap to be filled by additional official support. Preliminary discussions are underway with partners who have provided significant budgetary and BOP support in the recent past, including the EU.

IV. STAFF APPRAISAL

- 26. **Policies continue to deliver on program objectives.** The recovery has picked up and broadened, and inflation, a significant concern earlier this year, has moderated. Private inflows and credit growth have continued, and banking sector indicators remain sound. The fiscal adjustment is continuing, helping reestablish sustainability. Business environment reforms are progressing, although important structural challenges remain. External vulnerabilities continue to be significant, and buffers are still being rebuilt. The global outlook is uncertain, which adds to the downside risk.
- 27. Continuing fiscal consolidation will help maintain stability and reduce vulnerability. With the output gap closing next year and limited external funding, further

³ Armenia's country ranking improved six places in Doing Business 2012, from 61st to 55th and the ninth biggest improvement globally, due to improvements across several DB categories, including starting a business, dealing with construction permits, obtaining credit, and ease of paying taxes (see Appendix II).

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adjustment is needed to ensure debt sustainability. The authorities should be commended for undertaking an ambitious tax reform package. While there are risks that revenue gains may not materialize in full, the authorities have demonstrated a strong commitment to manage budget execution tightly to meet program fiscal targets. Staff looks forward to further tax measures in the authorities' upcoming tax strategy paper. Without these, continued spending restraint will be needed in 2013 and beyond. In light of uncertainty about other financing, staff supports the authorities' request for further Fund support for external budgetary payments in 2012. This financing supports the authorities' fiscal consolidation, and the 2012 tax package and lower amount relative to 2011 are consistent with exit. The Fund staff has voiced concern, together with the World Bank staff, about possible large-scale borrowing or guarantees for the troubled Nairit chemical company, and welcomes efforts to strengthen preparations and consider options that limit state involvement and risk.

- 28. **External pressures may reemerge if the global economic environment deteriorates**. In this case, the authorities will need to be prepared to allow sufficient exchange rate flexibility to support the necessary external adjustment and safeguard an appropriate level of reserves. While the external consolidation has so far been supported by fiscal adjustment, strong commodity prices, and remittance inflows, over the medium term, a broadening of the export base, supported by further structural reforms, will be essential.
- 29. The monetary policy framework remains appropriate, supported by efforts to improve transmission. The CBA should continue to improve communications and enhance transparency, particularly with regard to inflation projections and policy responses. With enhanced commitment to inflation targeting, the CBA should become more responsive to interest rate volatility and less concerned with exchange rate movements. To this end, the change of the liquidity management strategy since April is welcome, but greater effort will be needed to reduce interest rate volatility and strengthen this monetary policy channel.
- 30. The banking sector remains sound, but the CBA should be vigilant to vulnerabilities arising from high credit growth. The currently high CARs will likely continue to fall, as credit portfolios expand, albeit at a slower pace. The central bank will need to carefully balance the objectives of encouraging greater financial deepening and safeguarding financial stability, given the dollarized environment. Staff welcomes the CBA's efforts to enhance its stress-testing and also looks forward to the results of the upcoming FSAP Update.
- 31. While growth has accelerated, broad-based business environment should be further advanced. These include the reduction of excessive regulation, improved transparency to reduce arbitrary application of rules, and strong control of corruption. Fairer internal market competition should be promoted. These actions would help make headway in an economy widely viewed as dominated by a handful of "oligarchs."

32. **Staff recommends completion of the Third Review**, along with approval of the request for a waiver of the missed PC on NDA of the CBA at end-June, modification of end-December 2011 PCs, and establishment of new PCs for end-June 2012.

Table 1. Armenia: Selected Economic and Financial Indicators, 2006–13

	2006	2007	2008	2009	2010	2011		2012	2013
						Country			
						Report No.			
	Act.	Act.	Act.	Act.	Act.	11/178	Proj.	Proj.	Proj.
National income and prices									
Real GDP (percent change)	13.2	13.7	6.9	-14.1	2.1	4.6	4.6	4.0	4.0
Gross domestic product (in billions of drams)	2,656	3,149	3,568	3,142	3,502	3,837	3,871	4,219	4,583
Gross domestic product (in millions of U.S. dollars)	6,384	9,206	11,662	8,648	9,371	10,037	10,126	10,472	10,857
Gross domestic product per capita (in U.S. dollars)	1,982	2,853	3,606	2,647	2,840	3,012	3,039	3,112	3,194
CPI (period average; percent change)	3.0	4.6	9.0	3.5	7.3	9.4	7.8	3,112	4.2
CPI (end of period; percent change)	5.4	6.7	5.3	6.7	8.5	6.7	4.7	4.7	4.0
GDP deflator (percent change)	4.6	4.2	5.9	2.6	9.2	6.0	5.7	4.8	4.5
Poverty rate (in percent) 1/	26.5	25.0	27.6	34.1					
• • • •	20.5	25.0	27.0	34.1	•••	***		•••	
Investment and saving (in percent of GDP)									
Investment	35.9	37.8	40.9	34.7	33.4	33.2	33.0	32.7	33.5
National savings	34.1	31.4	29.0	18.9	18.7	21.7	20.8	21.8	23.9
Money and credit (end of period)									
Reserve money (percent change)	41.1	50.9	5.3	13.8	-0.8	10.9	17.4	10.4	
Broad money (percent change)	32.9	42.3	2.4	16.4	10.6	14.0	19.0	13.5	
Velocity of broad money (end of period)	5.5	4.6	5.0	3.8	3.8	3.7	3.6	3.4	
Commercial banks' 3-month lending rate (in percent)	17.1	18.6	17.9	19.1	17.7				
Central government operations (in percent of GDP)									
	18.0	20.1	20.5	20.9	21.0	21.7	21.7	21.1	21.2
Revenue and grants	14.5	16.0	20.5 16.8	20.9 16.1	16.2	16.4	16.3	16.8	17.0
Of which: tax revenue									
Expenditure 2/	20.0 -2.2	22.4 -2.2	22.2	28.6 -7.9	25.9 -4.5	25.6 -3.9	25.3 -3.6	24.2 -3.1	23.5 -2.3
Overall balance on a cash basis Government and government-quaranteed debt (in percent of GDP)	-2.2 21.1	-2.2 17.8	-1.2 16.1	-7.9 40.2	39.2	-3.9 45.2	-3.6 42.0	-3.1 43.1	-2.3 41.8
	89.5	88.2	84.0	88.9	39.2 87.4	45.2 88.5	42.0 87.5	43.1 87.4	85.2
Share of foreign currency debt (in percent)	09.5	00.2	04.0	66.9	07.4	00.5	67.5	07.4	05.2
External sector									
Exports of goods and services (in millions of U.S. dollars)	1,510	1,777	1,757	1,336	1,937	2,207	2,295	2,490	2,699
Imports of goods and services (in millions of U.S. dollars)	-2,536	-3,589	-4,748	-3,683	-4,212	-4,631	-4,639	-4,832	-5,025
Exports of goods and services (percent change)	6.7	17.6	-1.1	-24.0	45.0	18.5	18.5	8.5	8.4
Imports of goods and services (percent change)	19.4	41.5	32.3	-22.4	14.4	9.1	10.1	4.2	4.0
Current account balance (in percent of GDP)	-1.8	-6.4	-11.8	-15.8	-14.7	-11.5	-12.2	-10.9	-9.7
FDI (net, in millions of U.S. dollars)	450	701	940	725	562	641	652	692	762
External debt (in percent of GDP)	31.4	31.6	29.5	57.8	64.6		65.5	66.8	64.5
o.w. public debt (in percent of GDP) 3/	18.9	15.7	13.6	35.7	34.2	36.9	36.7	37.6	35.7
Debt service ratio (in percent of exports of goods and services) 3/	3.9	2.9	3.1	5.4	4.7	4.8	4.7	10.4	15.6
Gross international reserves (in millions of U.S. dollars) 4/	1,072	1,659	1,407	2,004	1,866	1,872	1,806	1,754	1,725
Import cover 5/	3.6	4.2	4.6	5.7	4.8	4.7	4.5	4.2	4.0
Nominal effective exchange rate (percent change) 6/	9.9	14.1	6.3	-8.4	-2.7	• • •			
Real effective exchange rate (percent change) 6/	8.7	14.1	8.6	-7.5	1.5				
End-of-period exchange rate (dram per U.S. dollar)	364	304	307	378	363				
Average exchange rate (dram per U.S. dollar)	416	342	306	363	374				
Memorandum item:									
Population (in millions)	3.2	3.2	3.2	3.3	3.3				

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

^{1/} From 2008, the poverty rate is computed using a different methodology based on the new household survey.

^{2/} Including the gas subsidy in 2006–08.

 $[\]ensuremath{\mathrm{3/}}$ Based on government and government-guaranteed debt.

 $[\]ensuremath{\mathsf{4}}\xspace$ Excluding the special privatization account (SPA), but including the Russian project loan.

^{5/} Gross international reserves in months of next year's imports of goods and services, including the SDR holdings.

^{6/} A positive sign denotes appreciation.

Table 2. Armenia: Balance of Payments, 2008-16

(In millions of U.S. dollars, unless otherwise indicated)

	2008	2009	2010	2011	2012	2013	2014	2015	2016
	Act.	Act.	Prel.			Projec	tions		
Current account	-1,382	-1,367	-1,373	-1,231	-1,137	-1,048	-947	-954	-1,000
Trade balance	-2,664	-2,081	-2,033	-2,128	-2,140	-2,130	-2,136	-2,215	-2,292
Exports, fob	1,112	749	1,175	1,427	1,543	1,677	1,809	1,944	2,079
Imports, fob	-3,776	-2,830	-3,208	-3,554	-3,683	-3,807	-3,946	-4,160	-4,371
Services (net)	-327	-266	-242	-216	-203	-196	-163	-173	-172
Credits	645	587	762	868	946	1,022	1,104	1,170	1,240
Debits	-972	-853	-1,004	-1,084	-1,149	-1,218	-1,267	-1,343	-1,412
Income (net)	471	167	339	413	476	507	552	581	584
Transfers (net)	1,138	814	563	700	729	770	801	853	880
Private	1,062	733	477	587	657	716	774	828	865
Official	75	81	86	113	71	54	27	25	15
Capital and financial account	1,134	1,560	1,058	1,080	1,140	1,065	1,157	1,233	1,331
Capital transfers (net)	149	89	108	113	39	51	60	62	66
Foreign direct investment (net)	940	725	562	652	692	762	854	922	996
Portfolio investment (net)	8	-4	9	10	11	25	32	40	44
Public sector borrowing (net)	145	886	194	237	254	158	136	127	138
Disbursements	160	907	219	266	284	236	218	245	269
Amortization	-15	-21	-25	-29	-31	-78	-82	-118	-131
Other capital (net)	-108	-136	185	67	144	70	76	82	88
Errors and omissions	14	-39	18	0	0	0	0	0	0
Overall balance	-234	155	-298	-152	2	17	210	279	332
Financing	234	-155	298	95	-109	-256	-210	-279	-332
Gross international reserves (increase: -) 1/	252	-597	138	60	52	29	-55	-253	-292
Use of Fund credit, net	-20	442	160	35	-160	-285	-155	-26	-40
Purchases/disbursements	7	466	181	58					
Repurchases/repayments	-27	-23	-22	-23	-160	-285	-155	-26	-40
Exceptional financing 2/	2	0	0	0	0	0	0	0	0
Financing gap	0	0	0	57	106	239	0	0	0
Identified financing IMF ECF/EFF	0	0	0	57	106	87			
Other	0	0	0	0	0	152			•••
Memorandum items:	· ·	ŭ	· ·		ŭ	.02			•••
Financing gap (EBS/11/94)	0	0	0	109	115	97	0	0	0
Current account (in percent of GDP)	-11.8	-15.8	-14.7	-12.2	-10.9	-9.7	-8.3	-7.9	-7.8
Trade balance (in percent of GDP)	-22.8	-13.6	-14.7	-12.2	-20.4	-9.7 -19.6	-18.8	-18.4	-17.9
Gross international reserves (end of period)	1,407	2,004	1,866	1,806	1,754	1,725	1,780	2,033	2,325
In months of next year's imports	4.6	5.7	4.8	4.5	4.2	4.0	3.9	4.2	4.5
Merchandise export growth, percent change	-7.1	-32.7	57.0	21.4	8.2	8.7	7.9	7.5	6.9
Merchandise import growth, percent change	35.0	-25.0	13.4	10.8	3.6	3.4	3.7	5.4	5.1
Nominal external debt	3,442	4,878	6,145	6,545	6,889	6,922	6,980	7,176	7,402
o.w. public external debt	1,577	2,967	3,299	3,631	3,831	3,795	3,777	3,891	4,029
Nominal external debt stock (in percent of GDP)	29.5	57.8	64.6	65.5	66.8	64.5	61.8	60.0	58.3
External public debt-to-exports ratio (in percent)	89.8	222.1	170.3	158.2	153.9	140.6	129.7	124.9	121.4
External public debt service (in percent of exports)	3.1	5.4	4.7	4.7	10.3	15.8	10.2	5.9	6.1

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

^{1/} Gross international reserves include the SDR holdings.

^{2/} Debt relief from the United Kingdom.

Table 3. Armenia: Monetary Accounts, 2008-12

(In billions of drams, unless otherwise indicated)

	2008	2009	2010		201	11		2012				
	Dec.	Dec.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	
	Act.	Act.	Act.	Act.	Prel.	Prel.	Prog. 1/					
Central Bank of Armenia												
Net foreign assets	377.5	515.4	423.8	407.5	392.3	457.5	430.7	402.1	408.8	409.4	401.9	
Net international reserves	390.0	595.8	500.6	488.4	473.8	537.5	492.1	473.9	490.9	499.9	493.1	
Other	-12.4	-80.5	-76.9	-80.9	-81.5	-80.0	-61.4	-71.8	-82.1	-90.5	-91.2	
Net domestic assets	72.2	-3.7	83.8	98.9	127.9	113.1	165.4	175.5	184.9	204.9	256.3	
Claims on general government (net)	-96.5	-152.5	-95.6	-92.1	-83.7	-100.4	-43.8	-39.6	-67.0	-69.9	-6.7	
Of which: central government (net)	-84.4	-138.8	-76.7	-67.1	-57.8	-80.1	-23.5	-19.3	-46.8	-49.6	13.5	
Claims on banks	80.6	66.2	57.4	67.2	86.3	81.8	92.6	94.4	116.0	132.8	113.4	
KfW & IBRD	19.9	39.1	61.5	62.2	75.5	82.3	90.6	91.4	92.0	92.8	93.4	
Monetary instruments (net) excluding CBA bills	60.7	27.1	-4.1	5.0	10.8	-0.5	2.0	3.0	24.0	40.0	20.0	
CBA bills 2/	-1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other items (net)	89.5	82.6	122.0	123.8	125.3	131.7	116.7	120.7	135.9	142.0	149.6	
Reserve money	449.7	511.7	507.6	506.3	520.2	570.6	596.1	577.6	593.7	614.3	658.1	
Currency issue	344.5	320.7	348.2	312.4	338.9	359.6	414.5	393.7	404.4	419.3	456.2	
Deposits	105.2	191.0	159.4	193.9	181.3	211.0	181.6	183.8	189.3	195.0	202.0	
Deposits in drams	39.3	42.3	61.4	104.6	101.3	106.3	120.5	121.3	125.0	125.9	126.8	
Deposits in foreign currency	65.9	148.7	98.0	89.3	80.0	104.7	61.1	62.5	64.3	69.1	75.2	
Banking system												
Net foreign assets	229.2	379.1	193.8	149.9	60.2	70.1	30.7	-0.9	-2.1	-6.6	-79.1	
Net domestic assets	479.0	444.9	717.4	780.1	907.1	951.9	1,053.6	1,098.2	1,124.3	1,161.4	1,309.8	
Claims on government (net)	-37.3	-125.3	-50.9	-51.1	-48.4	-51.6	8.2	12.8	-16.7	-9.4	65.3	
Of which: claims on central government (net)	-25.3	-111.6	-32.0	-26.2	-22.5	-31.3	28.5	33.1	3.6	10.9	85.6	
Claims on rest of the economy	638.6	728.3	922.9	998.3	1152.9	1152.0	1209.2	1249.2	1304.7	1334.6	1408.3	
Other items (net)	-122.3	-158.0	-154.5	-167.1	-197.5	-148.5	-163.8	-163.8	-163.8	-163.8	-163.8	
Broad money	708.2	824.0	911.2	930.0	967.3	1022.0	1,084.3	1,097.4	1,122.1	1,154.8	1,230.7	
Currency in circulation	316.1	282.7	304.5	278.5	301.9	320.5	358.5	339.7	356.4	378.3	419.2	
Deposits	392.2	541.3	606.7	651.5	665.5	701.5	725.9	757.6	765.7	776.5	811.5	
Domestic currency	219.5	170.7	216.7	227.5	239.5	268.3	280.3	287.0	292.3	303.2	328.0	
Foreign currency	172.6	370.6	389.9	424.0	426.0	433.2	445.5	470.7	473.4	473.4	483.5	
Memorandum items:												
Exchange rate (in drams per U.S. dollar, end of period)	306.7	377.9	363.4	369.7	368.9	372.1						
NIR, program definition, at program exchange rates (in millions of U.S. dollars)	1,057	1,019	892	833	800	878	835	785	802	812	764	
12-month change in reserve money (in percent)	5.3	13.8	-0.8	8.9	19.7	30.2	17.4	14.1	14.1	7.7	10.4	
12-month change in broad money (in percent)	2.4	16.4	10.6	12.7	21.6	24.9	19.0	18.0	16.0	13.0	13.5	
12-month change in private sector credit (in percent)	48.6	14.0	26.7	29.4	46.7	37.3	31.0	25.1	13.2	15.8	16.5	
Velocity of broad money (end of period)	5.0	3.8	3.8	3.8	3.8	3.7	3.6	3.6	3.6	3.6	3.4	
Money multiplier	1.6	1.6	1.8	1.8	1.9	1.8	1.8	1.9	1.9	1.9	1.9	
Dollarization in bank deposits 3/	44.0	68.5	64.3	65.1	64.0	61.8	61.4	62.1	61.8	61.0	59.6	
Dollarization in broad money 4/	24.4	45.0	42.8	45.6	44.0	42.4	41.1	42.9	42.2	41.0	39.3	
Currency in circulation in percent of deposits	80.6	52.2	50.2	42.7	45.4	45.7	49.4	44.8	46.5	48.7	51.7	
Stock of foreign currency deposits (in millions of U.S. dollars) 1/	562.8	980.8	1,012.9	1,101.4	1,106.5	1,125.2	1,157.3	1,222.5	1,229.7	1,229.5	1,256.0	
Banking system financing of the central government (cumulative) 5/	-9.6	-86.4	79.6	5.8	9.5	0.7	60.5	4.6	-24.9	-17.6	57.1	

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

^{1/} At the program exchange rate.

^{2/} Following the agreement between the CBA and the Ministry of Finance, the issue of new CBA bills was terminated in 2008.

^{3/} Ratio of foreign currency deposits to total deposits (in percent).

^{4/} Ratio of foreign currency deposits to broad money (in percent).

^{5/} Discrepancy between the fiscal and monetary accounts in 2009Q3-Q4, 2010, and 2011 is exp lained by government lending to the economy through commercial banks.

Table 4. Armenia: Financial Soundness Indicators for the Banking Sector, 2008–11

(In percent, unless otherwise indicated)

	2008		200	9			201	0		2011				
	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep		
	Dec.	iviai.	Juli.	оер.	Dec.	iviai.	Juli.	оер.	Dec.	iviai.	Juli.	Зер		
Capital adequacy														
Total regulatory capital to risk-weighted assets	27.5	26.1	28.0	28.3	28.3	28.6	28.9	26.9	22.2	21.3	20.0	19.6		
Capital (net worth) to assets	23.0	21.2	22.3	21.0	21.0	20.6	22.1	21.6	20.4	20.2	19.3	18.5		
Asset composition														
Sectoral distribution of loans (in billions of drams)														
Industry (excluding energy sector)	66.2	78.0	76.0	89.6	115.3	121.2	127.7	136.7	156.7	164.9	165.6	172.		
Energy sector	19.7	17.3	18.6	26.7	31.7	32.0	24.3	37.0	47.2	56.3	65.4	72.		
Agriculture	36.5	44.6	45.9	45.2	44.2	48.1	48.7	50.0	52.4	57.3	66.4	75.		
Construction	39.5	43.3	44.0	48.9	54.1	57.5	58.8	65.3	74.8	78.8	87.3	85.		
Transport and communication	10.2	10.3	9.8	14.7	15.4	17.8	22.2	26.0	25.7	30.2	38.2	47.		
Trade/commerce	132.0	140.4	131.0	143.6	145.5	161.0	164.7	174.1	184.8	200.1	222.1	248.		
Sectoral distribution of loans to total loans (percent of total)														
Industry (excluding energy sector)	10.7	12.2	12.5	13.7	16.5	16.2	16.9	17.0	17.7	17.1	15.9	14.		
Energy sector	3.2	2.7	3.1	4.1	4.5	4.3	3.2	4.6	5.3	5.9	6.3	6.		
Agriculture	5.9	7.0	7.6	6.9	6.3	6.4	6.4	6.2	5.9	6.0	6.4	6.		
Construction	6.4	6.8	7.3	7.5	7.7	7.7	7.8	8.1	8.4	8.2	8.4	7.		
Transport and communication	1.7	1.6	1.6	2.2	2.2	2.4	2.9	3.2	2.9	3.1	3.7	4.		
Trade/commerce	21.4	22.0	21.6	22.0	20.8	21.6	21.8	21.6	20.9	20.8	21.3	21.		
Foreign exchange loans to total loans	38.7	48.7	51.5	54.3	54.0	54.3	55.4	56.4	58.0	59.6	59.6	60.		
Asset quality														
Nonperforming loans (in billions of drams)	27.9	50.2	64.6	64.5	36.3	43.9	38.5	37.9	28.6	35.7	37.4	56.0		
Watch (up to 90 days past due)	21.8	36.6	38.8	27.0	14.9	23.2	18.3	18.9	11.3	20.7	19.3	35.		
Substandard (91-180 days past due)	3.4	11.4	19.3	23.2	10.1	16.0	13.8	13.8	11.3	8.5	13.9	13.		
Doubtful (181-270 days past due)	2.7	2.1	6.5	14.3	11.3	4.7	6.4	5.2	6.1	6.5	4.2	7.		
Loss (>270 days past due)	10.2	12.7	14.3	20.9	26.2	32.3	32.0	34.0	34.6	36.4	36.6	42.		
Nonperforming loans to gross loans	4.4	7.6	10.2	9.3	4.8	5.6	4.8	4.5	3.1	3.5	3.4	4.		
Provisions to nonperforming loans	38.2	26.9	26.6	33.1	46.7	36.2	41.4	41.9	56.7	51.0	50.9	41.		
Spread between highest and lowest rates of interbank borrowing in AMD	3.0	4.5	5.0	7.0	2.5	3.0	2.8	4.3	4.0	4.0	3.0	2.		
Spread between highest and lowest rates of interbank borrowing in foreign currency	1.0	8.0	11.3	5.8	3.0	4.0	7.6	2.8	5.0	2.0	5.0	4.		
Earnings and profitability														
ROA (profits to period average assets)														
ROE (profits to period average assets)	3.1	-0.1	-0.1	0.0	0.7	1.3	1.8	2.0	2.2	2.0	2.3	1.		
Interest margin to gross income	13.6	-0.7	-0.3	0.1	3.4	6.1	8.5	9.5	10.2	10.0	11.7	9.8		
Interest income to gross income	45.9	47.1	44.4	42.2	42.2	43.5	44.1	44.3	43.8	43.6	43.4	42.		
Noninterest expenses to gross income	72.7	86.2 45.3	83.0	79.5 41.5	78.3	79.0	78.9	78.2 38.9	77.0	78.9 36.9	78.9 36.6	78.		
· · · · ·	42.0	40.3	44.1	41.5	40.7	39.4	39.6	30.9	39.2	30.9	30.0	35.		
Liquidity														
Liquid assets to total assets	23.8	29.1	32.0	35.2	34.2	33.9	30.1	30.1	29.5	28.9	26.8	28.		
Liquid assets to total short-term liabilities	103.1	135.4	145.3	146.2	142.1	140.4	128.8	129.3	131.5	137.2	132.0	125.0		
Customer deposits to total (non-interbank) loans	81.4	92.1	96.3	100.7	96.4	96.5	86.8	86.5	87.2	87.1	85.3	89.:		
Foreign exchange liabilities to total liabilities	55.1	69.4	70.9	68.9	67.6	70.3	67.4	66.2	64.9	65.3	65.5	66.		
Sensitivity to market risk														
Gross open positions in foreign exchange to capital	11.5	13.8	8.4	7.1	3.4	3.1	3.8	3.6	2.9	3.0	3.2	3.4		
Net open position in FX to capital				4.3	1.9	0.4	-0.1	0.2	-0.2	0.5	0.4	-0.2		

Source: Central Bank of Armenia.

Table 5. Armenia: Central Government Operations, 2009–13 (In billions of drams)

			(III L	ollions of ara	aiiis)									
	2009	2010			2011						2012			2013
					Q1	Q2	Q3	Q4	_	Q1	Q2	Q3	Q4	
				Country Report No.										
	Act	Act.	Proj.	11/178	Prel.	Prel.	Prel.	Proj.						
Total revenue and grants	655.6	734.3	840.4	832.5	176.6	215.6	226.1	222.0	888.4	192.6	230.6	232.0	233.2	972.8
Total revenue	634.4 505.9	706.1 568.9	775.9 629.5	774.2 627.8	170.6 136.1	204.3 166.4	201.6 165.2	199.4 161.8	872.5 709.6	191.2 152.5	227.8 185.9	226.0 185.2	227.6 185.9	959.5 780.0
Tax revenues VAT	239.2	278.1	306.2	307.3	64.1	73.4	83.6	85.1	709.6 342.6	71.7	82.2	93.5	95.2	381.4
Profits, simplified and presumptive	104.9	99.7	109.7	108.7	31.8	46.3	32.7	28.9	124.8	36.2	52.2	37.4	-0.8	135.6
Personal income tax	60.2	73.9	82.7	82.0	17.6	19.8	21.6	23.6	90.1	19.2	21.6	23.5	25.8	97.9
Customs duties	25.1	29.4	32.8	32.6	6.6	10.3	9.2	6.7	35.8	7.2	11.3	10.0	7.3	38.9
Other	76.5	87.8	98.1	97.3	16.0	16.6	18.2	17.4	116.2	18.2	18.8	20.8	58.4	126.2
Social contributions	102.9	105.3	123.4	123.4	29.9	31.0	31.7	30.9	142.1	34.4	35.6	36.5	35.5	156.5
Other revenue	25.6	31.8	23.0	23.0	4.7	6.9	4.7	6.8	20.9	4.2	6.3	4.2	6.2	22.9
Grants	21.2	28.2	64.5	58.3	6.0	11.4	24.5	22.6	15.9	1.5	2.8	6.0	5.6	13.3
Total expenditure	897.1	906.6	980.9	980.9	190.5	225.6	237.8	327.1	1019.9	214.5	236.0	250.6	318.9	1076.3
Expense	712.0	727.9	818.8	818.8	161.9	195.3	197.9	263.7	875.2	175.5	210.6	212.8	276.4	904.7
Wages	83.5	82.5	91.0	91.0	17.3	22.1	21.9	29.8	95.6	18.1	23.2	23.0	31.3	96.6
Pensions Subsidies	4.6 18.4	4.5 17.4	5.4 19.0	5.4 19.0	0.8 3.9	1.1 4.7	1.1 4.4	2.3 5.9	5.9 24.7	0.9 6.6	1.2 7.7	1.2 7.2	2.5 3.2	5.2 26.0
										8.3			3.2 19.3	
Interest	16.2 239.9	30.2 241.7	42.6 268.2	42.6 268.2	7.5 62.6	10.1 64.5	7.6 63.3	17.3 77.8	47.4 294.8	68.9	11.3 70.9	8.5 69.7	85.3	49.2 334.0
Social allowances and pensions Pensions/social security benefits	239.9 176.0	241.7 176.8	196.9		46.6	47.8	63.3 47.2	55.3	294.8 199.1	47.1	70.9 48.4	69.7 47.7	55.9	215.4
•								22.5						100.6
Social assistance benefits Employer social benefits	64.0 0.0	64.9 0.0	71.3 0.0		16.0 0.0	16.7 0.0	16.2 0.0	0.0	83.8 12.0	18.8 3.0	19.6 3.0	19.0 3.0	26.4 3.0	12.0
Goods and services	150.7	155.6	168.2	168.2	29.7	42.8	41.2	54.5	171.2	30.2	43.7	42.0	55.2	186.1
Grants	62.0	66.6	69.6	69.6	14.4	17.2	18.6	19.4	75.9	15.7	18.8	20.3	21.1	57.7
Other expenditure	136.6	129.5	154.9	154.9	25.7	32.7	39.7	56.7	159.7	26.7	33.9	40.8	58.4	149.9
Transactions in nonfinancial assets	185.1	178.7	162.0	162.0	28.5	30.3	39.9	63.4	144.7	39.0	25.4	37.8	42.6	171.5
Acquisition of nonfinancial assets	195.7	179.2	162.1	162.1	28.6	30.4	41.2	62.0	146.5	41.2	28.1	38.2	39.1	171.5
Disposals of nonfinancial assets	10.6	0.5	0.1	0.1	0.1	0.1	1.3	-1.4	1.8	2.2	2.7	0.3	-3.5	0.0
Overall balance (above-the-line)	-241.5	-172.3	-140.5	-148.3	-13.8	-9.9	-11.7	-105.1	-131.5	-21.8	-5.3	-18.6	-85.7	-103.5
Statistical discrepancy	-6.2	13.2	0.0	0.0	4.8	-8.0	-14.9	18.2	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance (below-the-line)	-247.7	-159.1	-140.5	-148.3	-9.1	-18.0	-26.6	-86.8	-131.5	-21.8	-5.3	-18.6	-85.7	-103.5
Financing	247.7	159.1	140.5	148.3	9.1	18.0	26.6	86.8	131.5	21.8	5.3	18.6	85.7	103.5
Domestic financing	-108.5	96.5	63.1	68.6	5.5	14.2	-4.5	48.0	63.1	4.9	-29.8	10.1	77.8	49.8
Banking system 1/	-40.0	95.6	65.7	78.0	6.8	5.9	-14.0	67.0	57.1	4.6	-29.5	7.3	74.7	44.4
CBA	-54.4	62.1	53.1	56.1	9.5	9.4	-22.3	56.6	37.1	4.2	-27.4	-2.9	63.2	0.4
Commercial Banks	14.4	33.5	12.5	21.9	-2.8	-3.4	8.3	10.4	20.0	0.4	-2.1	10.2	11.5	44.0
Nonbanks	-68.5	0.9	-2.6	-9.4	-1.3	8.2	9.5	-19.1	6.0	0.3	-0.3	2.8	3.1	5.4
Privatization proceeds	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
T-Bills	8.7	5.5	11.9	5.0	-0.3	6.3	3.0	2.9	6.0	0.3	-0.3	2.8	3.1	10.0
Promissory note/other	-3.2	-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
Net lending	-74.0	-2.6	-14.4	-14.4	-1.0	2.0	6.5	-21.9	0.0	0.0	0.0	0.0	0.0	-4.6
External financing	356.2	62.5	77.4	79.8	3.6	3.8	31.1	38.9	68.4	16.9	35.1	8.5	7.9	-10.5
Gross inflow 2/	395.6	105.3	123.2	125.6	9.7	15.2	43.4	55.0	132.8	24.1	51.9	24.7	32.1	99.5
Amortization due	-6.3	-9.7	-10.7	-10.7	-3.3	-1.9	-3.3	-2.2	-28.7	-7.2	-7.2	-7.2	-7.2	-73.3
Net lending	-33.1	-33.1	-35.1	-35.1	-2.8	-9.5	-9.0	-13.8	-35.7	0.0	-9.5	-9.1	-17.0	-36.7
Unidentified financing									0.0	0.0	0.0	0.0	0.0	64.2
Memorandum items:														
Nominal GDP (in billion of drams)	3,142	3,502	3,871	3,837	3,871	3,871	3,871	3,871	4,219	4,219	4,219	4,219	4,219	4,583
Program balance 3/	-354.8	-124.4	-180.3	-186.9	-3.2	-25.5	-29.1	-122.6	-167.1	-21.8	-14.9	-27.6	-102.8	18.9
Budget support loans	290.9	35.0	65.8	65.7	0.0	9.4	24.2	32.2	34.6	0.0	27.5	0.0	7.1	31.3
T-bill issuance	45.4	30.2	30.0	30.0	3.6	-0.1	12.2	14.3	30.0	1.7	-1.3	14.0	15.7	50.0

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

^{1/} Discrepancy between the fiscal and monetary accounts in 2009Q3-Q4, 2010, and 2011 is explained by government lending to the economy through commercial banks.

^{2/} Includes IMF budget support.

^{3/} The program balance is measured as below-the-line overall balance minus net lending, except from 2010 to 2011Q1, where project financing is also subtracted.

Table 6. Armenia: Central Government Operations, 2009-13

(In percent of GDP, unless otherwise specified)

	2009	2010			2011						2012			2013
					Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4	
				Country					_					
				Report No.										
	Act	Act.	Proj.	11/178	Prel.	Prel.	Prel.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj
Total revenue and grants	20.9	21.0	21.7	21.7	4.6	5.6	5.8	5.7	21.1	4.6	5.5	5.5	5.5	21.2
Total revenue	20.2	20.2	20.0	20.2	4.4	5.3	5.2	5.2	20.7	4.5	5.4	5.4	5.4	20.9
Tax revenues	16.1	16.2	16.3	16.4	3.5	4.3	4.3	4.2	16.8	3.6	4.4	4.4	4.4	17.0
VAT	7.6	7.9	7.9	8.0	1.7	1.9	2.2	2.2	8.1	1.7	1.9	2.2	2.3	8.3
Profits, simplified and presumptive	3.3	2.8	2.8	2.8	0.8	1.2	8.0	0.7	3.0	0.9	1.2	0.9	0.0	3.0
Personal income tax	1.9	2.1	2.1	2.1	0.5	0.5	0.6	0.6	2.1	0.5	0.5	0.6	0.6	2.1
Customs duties	0.8	8.0	8.0	0.8	0.2	0.3	0.2	0.2	8.0	0.2	0.3	0.2	0.2	3.0
Other	2.4	2.5	2.5	2.5	0.4	0.4	0.5	0.4	2.8	0.4	0.4	0.5	1.4	2.8
Social contributions	3.3	3.0	3.2	3.2	8.0	8.0	0.8	0.8	3.4	8.0	8.0	0.9	8.0	3.4
Other revenue	8.0	0.9	0.6	0.6	0.1	0.2	0.1	0.2	0.5	0.1	0.1	0.1	0.1	0.8
Grants	0.7	0.8	1.7	1.5	0.2	0.3	0.6	0.6	0.4	0.0	0.1	0.1	0.1	0.3
Total expenditure	28.6	25.9	25.3	25.6	4.9	5.8	6.1	8.4	24.2	5.1	5.6	5.9	7.6	23.5
Expense	22.7	20.8	21.2	21.3	4.2	5.0	5.1	6.8	20.7	4.2	5.0	5.0	6.6	19.7
Wages	2.7	2.4	2.4	2.4	0.4	0.6	0.6	0.8	2.3	0.4	0.5	0.5	0.7	2.1
Pensions	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Subsidies	0.6	0.5	0.5	0.5	0.1	0.1	0.1	0.2	0.6	0.2	0.2	0.2	0.1	0.6
Interest	0.5	0.9	1.1	1.1	0.2	0.3	0.2	0.4	1.1	0.2	0.3	0.2	0.5	1.1
Social allowances and pensions	7.6	6.9	6.9	7.0	1.6	1.7	1.6	2.0	7.0	1.6	1.7	1.7	2.0	7.3
Pensions/social security benefits	5.6	5.0	5.1	***	1.2	1.2	1.2	1.4	4.7	1.1	1.1	1.1	1.3	4.7
Social assistance benefits	2.0 0.0	1.9 0.0	1.8 0.0	***	0.4 0.0	0.4 0.0	0.4 0.0	0.6 0.0	2.0	0.4 0.1	0.5 0.1	0.5	0.6 0.1	2.2
Employer social benefits Goods and services	4.8	4.4	4.3		0.0	1.1			0.3	0.1	1.0	0.1 1.0	1.3	0.3 4.1
Grants	2.0	1.9	1.8	4.4 1.8	0.6	0.4	1.1 0.5	1.4 0.5	4.1 1.8	0.7	0.4	0.5	0.5	1.3
Other expenditure	4.3	3.7	4.0	4.0	0.4	0.4	1.0	1.5	3.8	0.4	0.4	1.0	1.4	3.3
Transactions in nonfinancial assets	5.9	5.1	4.0	4.2	0.7	0.8	1.0	1.6	3.4	0.0	0.6	0.9	1.0	3.7
Acquisition of nonfinancial assets	6.2	5.1	4.2	4.2	0.7	0.8	1.1	1.6	3.5	1.0	0.0	0.9	0.9	3.7
Disposals of nonfinancial assets	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	-0.1	0.0
Overall balance (above-the-line)	-7.7	-4.9	-3.6	-3.9	-0.4	-0.3	-0.3	-2.7	-3.1	-0.5	-0.1	-0.4	-2.0	-2.3
Statistical discrepancy	-0.2	0.4	0.0	0.0	0.1	-0.2	-0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance (below-the-line)	-7.9	-4.5	-3.6	-3.9	-0.2	-0.5	-0.7	-2.2	-3.1	-0.5	-0.1	-0.4	-2.0	-2.3
Financing	7.9	4.5	3.6	3.9	0.2	0.5	0.7	2.2	3.1	0.5	0.1	0.4	2.0	2.3
Domestic financing	-3.5	2.8	1.6	1.8	0.1	0.4	-0.1	1.2	1.5	0.1	-0.7	0.2	1.8	1.1
Banking system 1/	-1.3	2.7	1.7	2.0	0.2	0.2	-0.4	1.7	1.4	0.1	-0.7	0.2	1.8	1.0
CBA	-1.7	1.8	1.4	1.5	0.2	0.2	-0.6	1.5	0.9	0.1	-0.7	-0.1	1.5	0.0
Commercial Banks	0.5	1.0	0.3	0.6	-0.1	-0.1	0.2	0.3	0.5	0.0	0.0	0.2	0.3	1.0
Nonbanks	-2.2	0.0	-0.1	-0.2	0.0	0.2	0.2	-0.5	0.1	0.0	0.0	0.1	0.1	0.1
Privatization proceeds	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
T-Bills	0.3	0.2	0.3	0.1	0.0	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.2
Promissory note/other	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net lending	-2.4	-0.1	-0.4	-0.4	0.0	0.1	0.2	-0.6	0.0	0.0	0.0	0.0	0.0	-0.1
Of which: financed with the Russian loan	-2.5	0.1	-0.4	-0.4	-0.1	0.0	-0.1	-0.2	0.0	0.0	0.0	0.0	0.0	0.0
External financing	11.3	1.8	2.0	2.1	0.1	0.1	0.8	1.0	1.6	0.4	0.8	0.2	0.2	-0.2
Gross inflow 2/	12.6	3.0	3.2	3.3	0.2	0.4	1.1	1.4	3.1	0.6	1.2	0.6	8.0	2.2
Of which: Russian project loan	5.9	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
Amortization due	-0.2	-0.3	-0.3	-0.3	-0.1	0.0	-0.1	-0.1	-0.7	-0.2	-0.2	-0.2	-0.2	-1.6
Net lending	-1.1	-0.9	-0.9	-0.9	-0.1	-0.2	-0.2	-0.4	-0.8	0.0	-0.2	-0.2	-0.4	-0.8
Unidentified financing									0.0	0.0	0.0	0.0	0.0	1.4
Memorandum items:														
Nominal GDP (in billion of drams)	3,142	3,502	3,871	3,837	3,871	3,871	3,871	3,871	4,219	4,219	4,219	4,219	4,219	4,583
Program balance 3/	-11.3	-3.6	-4.7	-4.9	-0.1	-0.7	-0.8	-3.2	-4.0	-0.5	-0.4	-0.7	-2.4	0.4
Budget support loans	9.3	1.0	1.7	1.7	0.0	0.2	0.6	0.8	8.0	0.0	0.7	0.0	0.2	0.7
T-bill issuance	1.4	0.9	0.8	0.8	0.1	0.0	0.3	0.4	0.7	0.0	0.0	0.3	0.4	1.2

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

^{1/} Discrepancy between the fiscal and monetary accounts in 2009Q3-Q4, 2010, and 2011 is explained by government lending to the economy through commercial banks.

^{2/} Includes IMF budget support.

3/ The program balance is measured as below-the-line overall balance minus net lending, except from 2010 to 2011Q1, where project financing is also subtracted.

 ${\bf Table\ 7.\ Armenia:\ Medium\hbox{-}Term\ Macroeconomic\ Framework,\ 2008-16}$

(In percent of GDP, unless otherwise specified)

<u>-</u>	2008	2009	2010	2011	2012	2013	2014	2015	2016
	Act.	Act.	Act.			Project	tions		
National income and prices									
Real GDP (percent change)	6.9	-14.1	2.1	4.6	4.0	4.0	4.0	4.0	4.0
Gross domestic product (in millions of U.S. dollars)	11,662	8,648	9,371	10,126	10,472	10,857	11,377	12,039	12,783
Gross national income per capita (in U.S. dollars)	3,752	2,698	2,943	3,163	3,253	3,343	3,475	3,640	3,817
CPI inflation, period average (percent change)	9.0	3.5	7.3	7.8	3.6	4.2	4.0	4.0	4.0
Investment and saving									
Investment	40.9	34.7	33.4	33.0	32.7	33.5	34.2	34.9	35.6
Private	36.9	28.8	28.3	28.8	29.3	29.8	30.3	30.8	31.3
Public	4.0	5.9	5.1	4.2	3.4	3.7	3.9	4.2	4.3
National savings	29.0	18.9	18.7	20.8	21.8	23.9	25.9	27.0	27.8
Private	26.8	20.7	18.5	20.2	21.5	22.4	23.9	24.8	25.5
Public	2.2	-1.8	0.2	0.6	0.3	1.5	1.9	2.2	2.3
Central government operations									
Revenue and grants	20.5	20.9	21.0	21.7	21.1	21.2	21.5	21.7	21.9
Of which: tax revenue	16.8	16.1	16.2	16.3	16.8	17.0	17.2	17.4	17.6
grants	0.4	0.7	0.8	1.7	0.4	0.3	0.2	0.2	0.2
Expenditure	22.2	28.6	25.9	25.3	24.2	23.5	23.5	23.7	23.9
Current expenditure	18.3	22.7	20.8	21.2	20.7	19.7	19.6	19.5	19.6
Capital expenditure	4.0	5.9	5.1	4.2	3.4	3.7	3.9	4.2	4.3
Overall balance on a cash basis	-1.2	-7.9	-4.5	-3.6	-3.1	-2.3	-2.0	-2.0	-2.0
Domestic financing	0.7	-3.5	2.8	1.6	1.5	1.1	2.1	1.9	1.7
External financing	0.5	11.3	1.8	2.0	1.6	-0.2	-0.1	0.1	0.3
Unidentified financing				0.0	0.0	1.4	0.0	0.0	0.0
Government and government-guaranteed debt	16.1	40.2	39.2	42.0	43.1	41.8	40.4	40.0	40.3
External sector									
Exports of goods and services	15.1	15.4	20.7	22.7	23.8	24.9	25.6	25.9	26.0
Imports of goods and services	40.7	42.6	44.9	45.8	46.1	46.3	45.8	45.7	45.2
Current account (in percent of GDP)	-11.8	-15.8	-14.7	-12.2	-10.9	-9.7	-8.3	-7.9	-7.8
Current account (in millions of U.S. dollars)	-1,382	-1,367	-1,373	-1,231	-1,137	-1,048	-947	-954	-1,000
Capital and financial account (in millions of U.S. dollars)	1,134	1,560	1,058	1,080	1,140	1,065	1,157	1,233	1,331
Of which: direct foreign investment	940	725	562	652	692	762	854	922	996
public sector disbursements	160	907	219	266	284	236	218	245	269
Change in gross international reserves (in millions of U.S. dollars) 1/	252	-597	138	60	52	29	-55	-253	-292
Arrears and debt relief (in millions of U.S. dollars)	2	0	0	0	0	0	0	0	0
Financing gap (in millions of U.S. dollars)	0	0	0	57	106	239	0	0	0
Of which: IMF	0	0	0	57	106	87	0	0	0
Other	0	0	0	0	0	152	0	0	0
Gross international reserves in months of imports	4.6	5.7	4.8	4.5	4.2	4.0	3.9	4.2	4.5

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

^{1/} A negative figure indicates an increase.

Table 8. Armenia: Fund Disbursements and Timing of Reviews Under a Three-year EFF/ECF Blend

Date of Availability	Conditions	Amount (millions of	SDRs)	Percent of Quota			
	- -	ECF	EFF	Total	ECF	EFF	Total	
June 28, 2010	Board approval of the arrangement	18.70	17.50	36.20	20.33	19.02	39.35	
December 1, 2010	Observance of end-June 2010 performance criteria and completion of first review	18.70	17.50	36.20	20.33	19.02	39.35	
March 30, 2011	Observance of end-December 2010 performance criteria and completion of second review	18.70	17.50	36.20	20.33	19.02	39.35	
December 12, 2011	Observance of end-June 2011 performance criteria and completion of third review	18.70	17.50	36.20	20.33	19.02	39.35	
March 30, 2012	Observance of end-December 2011 performance criteria and completion of fourth review	16.00	17.50	33.50	17.39	19.02	36.41	
September 30, 2012	Observance of end-June 2012 performance criteria and completion of fifth review	16.00	17.50	33.50	17.39	19.02	36.41	
March 30, 2013	Observance of end-December 2012 performance criteria and completion of sixth review	26.60	28.40	55.00	28.91	30.87	59.78	
	Total	133.40	133.40	266.80	145.00	145.00	290.00	

Source: Fund staff estimates and projections.

Table 9. Armenia: Indicators of Capacity to Repay the Fund, 2011–19 1/

	Projections								
-	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fund obligations based on existing credit									
(in millions of SDRs)									
Principal	14.4	101.0	180.2	98.1	16.4	20.9	20.4	20.6	20.0
Charges and interest	7.9	5.2	3.8	1.8	1.0	0.9	0.7	0.6	0.4
Fund obligations based on existing and prospective credit (in millions of SDRs)									
Principal	14.4	101.0	180.2	98.1	16.4	25.3	36.9	46.9	48.9
Charges and interest	8.0	8.7	6.9	3.0	2.2	2.0	1.8	1.5	1.2
Total obligations based on existing and prospective credit									
In millions of SDRs	22.5	109.7	187.1	101.0	18.6	27.3	38.7	48.4	50.1
In millions of U.S. dollars	35.6	174.2	296.3	159.6	29.4	43.0	60.9	76.1	78.8
In percent of gross international reserves	2.0	9.9	17.2	9.0	1.4	1.8	2.3	2.7	2.6
In percent of exports of goods and services	1.6	7.0	11.0	5.5	0.9	1.3	1.7	2.0	1.9
In percent of debt service 2/	34.0	68.9	71.9	57.3	16.7	24.9	33.9	41.6	42.8
In percent of GDP	0.4	1.7	2.7	1.4	0.2	0.3	0.4	0.5	0.5
In percent of quota	24.4	119.2	203.4	109.8	20.3	29.7	42.1	52.6	54.4
Outstanding Fund credit 2/									
In millions of SDRs	539.0	505.0	379.7	281.7	265.2	240.0	203.1	156.2	107.3
In billions of U.S. dollars	0.9	8.0	0.6	0.4	0.4	0.4	0.3	0.2	0.2
In percent of gross international reserves	47.4	45.7	34.9	25.0	20.6	16.2	12.3	8.7	5.6
In percent of exports of goods and services	37.3	32.2	22.3	15.3	13.4	11.4	9.0	6.5	4.1
In percent of debt service 2/	815.1	317.2	145.9	159.7	237.4	218.8	177.9	134.4	91.6
In percent of GDP	8.4	7.7	5.5	3.9	3.5	3.0	2.4	1.7	1.1
In percent of quota	585.8	548.9	412.8	306.2	288.3	260.8	220.7	169.8	116.6
Net use of Fund credit (in millions of SDRs)	58.0	-34.0	-125.2	-98.1	-16.4	-25.3	-36.9	-46.9	-48.9
Disbursements	72.4	67.0	55.0	0.0	0.0	0.0	0.0	0.0	0.0
Repayments and repurchases	14.4	101.0	180.2	98.1	16.4	25.3	36.9	46.9	48.9
Memorandum items:									
Nominal GDP (in millions of U.S. dollars)	10,125.8	10,472.5	10,856.9	11,377.0	12,039.5	12,782.6	13,568.0	14,392.9	15,268.0
Exports of goods and services (in millions of U.S. dollars)	2,294.8	2,489.6	2,698.8	2,913.1	3,114.3	3,318.8	3,555.2	3,808.2	4,080.8
Gross international reserves (in millions of U.S. dollars)	1,805.9	1,754.1	1,724.7	1,779.7	2,033.1	2,324.9	2,602.9	2,839.0	3,028.3
Debt service (in millions of U.S. dollars) 2/	105.0	252.8	412.2	278.7	176.2	172.6	179.6	182.9	184.3
Quota (in millions of SDRs)	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0

Source: Fund staff estimates and projections.

^{1/} Indicators cover both GRA and ECF credit.

^{2/} Total debt service includes IMF obligations.

Table 10. Armenia: Structural Benchmarks for Future Implementation Under the EFF/ECF

Item	Measure	Desired Outcome					
Tax ad	Tax administration						
1 2	Establish the capacity to identify whether the taxpayer has VAT liability by adding a VAT payer identification number to the tax identification number. (end-December 2011) Issue a White Paper detailing the measures and costs to address of addressing mixed cash and accrual accounting and refunding or setting off against future VAT liability excess VAT credits. (end-March 2012, new)	Reduce corruption and increase tax compliance					
Тах ро	Tax policy						
3 4 5	Increase the tax rate structure for up-market luxury vehicles and SUVs for 2012 and adjust the specific tax on cars annually for inflation. (end-December 2011) Approve a Tax Strategy paper that lays out the tax reform objectives and implementation plan for 2012-15. (end-December 2011) Overhaul fiscal regime for the mining sector. (end-December 2011, new) a. Strictly limit the fiscal stability clause in the new mining code to tax rates and to a set period of 5 years. b. Introduce and collect resource rents in terms of a variable royalty regime with the sliding rate depending on the EBIT to sales value. c. Clarification of deductibility of contributions for mine rehabilitation and mine site clean-up.	Enhance revenue collection					
Social 6	Social policy Submit amendments to existing laws to parliament to enable the full functioning of an integrated system for the provision of social protection services. (end-December 2011)						
Moneta 7	Publish the CBA's liquidity forecast that provides projected amount of dram liquidity before CBA's actions with indication of separate components such as currency outside the CBA, net foreign assets, government transactions excluding treasury bill issuances, and treasury bill issuances for liquidity management purposes (end-December 2011).	Strengthen the monetary transmission mechanism					

Appendix I. Armenia: Fiscal Rules, Macroeconomic Shocks, and Debt Sustainability¹

Armenia's public debt increased sharply with the crisis, from 16 percent of GDP in 2008 to above 40 percent. Similarly, the fiscal deficit widened to 8 percent of GDP in 2009, and at 3½ percent of GDP, remains high historically. Armenia benefits from substantial concessional financing, but is expected to move to market funding. Under the current framework, breaching a 50-percent-of-GDP debt ceiling would necessitate large spending cuts to reach a required deficit of 3 percent of GDP.

This Appendix assesses long-term dynamics of budget aggregates and debt under different fiscal rules in the presence of macroeconomic shocks. These include endogenous shocks to the output gap, the real interest rate, and the real effective exchange rate. Russia's output gap is included as an exogenous shock. Four rules are considered: a structural balance rule; an augmented growth-based rule; a nominal deficit ceiling rule; and a limit on the rate of real spending growth.² Most of the rules work on the (implicit or explicit) assumption that a structural deficit level is targeted over the medium-term.³ As such, the overall deficit is allowed to fluctuate around the target level, but deviations cancel out over the cycle.

The selection of an appropriate structural deficit target is key and should ensure that fiscal policy remains anchored in debt sustainability. In practice, the target level is estimated based on the desired path for the debt-ratio over the medium-to-long run, together with assumptions on GDP growth. However, other factors such as initial conditions, deficit persistence, and policy inertia should be taken into account to avoid abrupt and unrealistic corrections.⁴

The simulations consider two scenarios: structural deficit targets of 1 percent and 3 percent of GDP. In the 1 percent case, the debt-ratio follows a clear downward trend (Figure 1, right column), and in the absence of shocks, would decline to 22–23 percent of GDP after 15 years. Volatility around that level depends on both the type of rule and the calibration of the parameters in the implementation of the rule.

The 3 percent structural deficit target would maintain the debt-ratio at current levels over the simulation horizon in the absence of large shocks (Figure 2, right column). ⁵ However, given the historical distribution of shocks in Armenia, there is a high probability (close to 50 percent) that the debt-ratio would follow an upward trend. This not only poses risks to debt

¹ Prepared by Carlos Caceres.

² See Caceres and Ruiz-Arranz (2010; Box 2) for a more detailed description. Examples in practice include: Chile, Switzerland and Germany for the structural balance rule; Turkey for the augmented growth-based rule; the euro area for the nominal deficit ceiling; and the Netherlands, Sweden and Finland for the expenditure rule.

³ In the simulations, the overall deficit under the nominal ceiling rule is assumed to behave as in the structural balance rule when the former rule is not binding (i.e., when the deficit is below the deficit ceiling).

⁴ See Escolano (2010) and Caceres and Ruiz-Arranz (2010; Box 3) for further discussions on this issue.

⁵ This is consistent with a headline deficit of just over 2 percent and external net lending of 0.8 percent of GDP.

sustainability, but would also pose challenges to fiscal policy as the interest rate burdens increases over time, calling for larger—and politically more taxing—primary surpluses over time (Figure 2, left column).

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Figure I.1: Structural Deficit Target of 1 percent of GDP

Primary Balance Gross Public Debt Structural Balance: primary balance (% of GDP) Structural Balance: gross debt (% of GDP) 80 10.0 70 8.0 60 6.0 50 4.0 2.0 0.0 20 -4.0 -6.0 -8.0 2007 2011 2015 2017 2023 2025 2007 2013 2015 2017 2021 2023 2025 2027 2013 2019 2021 -50% 99% 95% **—**50% 12.0 Aug. Growth-Based Rule: primary balance (% of GDP) Aug. Growth-Based Rule: gross debt (% of GDP) 10.0 70 8.0 60 6.0 50 4.0 2.0 40 0.0 30 -2.0 -4.0 10 -6.0 2007 2009 2011 2013 2015 2017 2019 2021 2023 2025 2027 99% -50% 99% 95% 75% ----50% 12.0 Deficit Ceiling: primary balance (% of GDP) Deficit Ceiling: gross debt (% of GDP) 80 10.0 70 60 6.0 50 4.0 2 0 40 0.0 30 -2 N 20 -4.0 10 -6.0 -8.0 2023 2025 2027 2007 2009 2011 2013 2015 2017 2019 2021 2007 2011 2013 2015 2017 2019 2021 2023 2025 2027 -50% 95% Expenditure Rule: gross debt (% of GDP) Expenditure Rule: primary balance (% of GDP) 80 70 60 50 4.0 2 0 40 0.0 30 -2.0 -4.0 10 -6.0 2011 2013 2017 2007 2009 2011 2013 2015 2017 2019 2021 2023 2025 2027 -50% 99% 95% 95% 75% ----50%

Simulations assume a structural balance target of -1 percent of GDP; potential growth of 4 percent; inflation and GDP deflator of 4 percent; elasticity of the overall balance to the output gap of 0.3; elasticity of the revenue ratio to the output gap of 0.1; an adjustment coefficient of 0.6 in the augmented growth-based rule; a nominal deficit ceiling of 3 percent of GDP; and real expenditure growth equal to potential GDP growth (4 percent) for the expenditure rule.

Figure I.2: Structural Deficit Target of 3 percent of GDP

Gross Public Debt

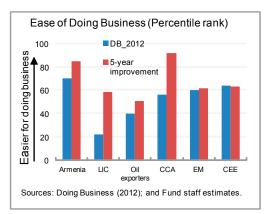
Primary Balance Structural Balance: primary balance (% of GDP) Structural Balance: gross debt (% of GDP) 12.0 80 10.0 70 60 6.0 4.0 50 2.0 0.0 -2.0 20 -6.0 10 2007 2013 2015 2017 2021 2023 2025 99% 95% -50% 99% -50% 95% 75% Aug. Growth-Based Rule: gross debt (% of GDP) 12.0 Aug. Growth-Based Rule: primary balance (% of GDP) 80 10.0 70 8.0 6.0 4.0 2.0 40 0.0 30 -2.0 -4.0 10 -6.0 2007 2013 2015 2017 2019 2021 2023 2025 2027 2011 2021 2023 2025 2027 -50% 99% Deficit Ceiling: primary balance (% of GDP) Deficit Ceiling: gross debt (% of GDP) 80 10.0 70 6.0 4.0 2.0 0.0 30 -6.0 2007 2009 2011 2013 2015 2017 2019 2021 2011 -50% 99% 95% **7**5% ----50% 99% 95% 75% Expenditure Rule: gross debt (% of GDP) Expenditure Rule: primary balance (% of GDP) 12.0 10.0 70 8.0 60 4.0 50 2.0 0.0 -2.0 20 -4.0 10 -6.0 2009 2011 2015 2017 2021 2025 2007 2019 2007 2009 2011 2013 2015 2017 2019 2021 2023 2025 2027 99%

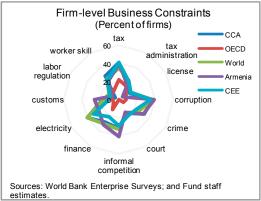
Simulations assume a structural balance target of -3 percent of GDP; potential growth of 4 percent; inflation and GDP deflator of 4 percent; elasticity of the overall balance to the output gap of 0.3; elasticity of the revenue ratio to the output gap of 0.1; an adjustment coefficient of 0.6 in the augmented growth-based rule; a nominal deficit ceiling of 4.5 percent of GDP; and real expenditure growth equal to potential GDP growth (4 percent) for the expenditure rule.

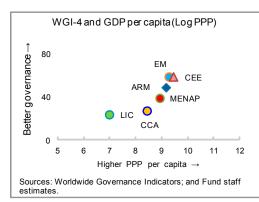
Appendix II. Armenia: Governance and Transparency Indicators

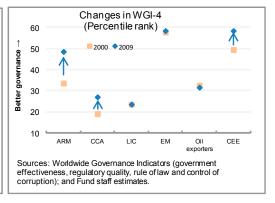
Armenia's scores on various business environment and governance indicators have improved over the past several years and are broadly in line with rankings for Central and Eastern European (CEE) countries and emerging market economies (EMs), although rankings for customs, corruption, and competition lag somewhat in World Bank enterprise surveys. Armenia's rankings are generally significantly higher than the scores of other Caucasus and Central Asian (CCA) countries and low-income countries (LICs).

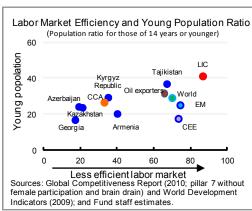
Armenia: Business environment and governance

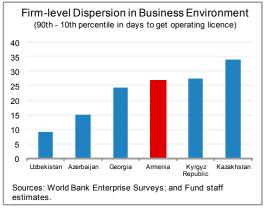












Armenia's labor market is more efficient than the average CEE or EM country, and does not face the acute challenge of absorbing young labor market entrants that many LICs face. Access to business licenses by the fastest and slowest decile of firms is broadly in line with other countries in the CCA region (see the Fall 2011 MCD Regional Economic Outlook at http://www.imf.org/external/pubs/ft/reo/2011/mcd/eng/mreo1011.htm for more discussion). Finally, Armenia also does well in terms of selected transparency indicators, with longstanding participation in the Special Data Dissemination Standard (http://dsbb.imf.org/Pages/SDDS/home.aspx), and publication of IMF reports and fiscal and monetary and financial sector data.

Armenia -- Selected Transparency & Effectiveness Indicators

SDDS/GDDS subscriber Regularly publish IMF Staff Reports Most recent FSAP/Update Fiscal ROSC

Data ROSC

AML/CFT ROSC

Sovereign credit rating Doing Business ranking

WB World Governance Indicator Composite 1/ WEF Global Competitiveness Indicator Ranking

WEF Labor Market Composite 2/

SDDS, since November 2003

May 2005 (Update); published March 2002; published

January 2002, February 2009; published

January 2010; published

2012: 55 (out of 183); five-year progress: 27 (out of 174). 2009: 49 (0-100, higher is better); 2000: 34 (0-100).

2010: 98 (out of 139); 2006: 80 (out of 122).

2010: 40 (out of 139).

Yes; www.mfe.am

Central government only

Fiscal sector

Comprehensive coverage of public finance statistics Timely public availability of public finance statistics

Comprehensive medium-term forecasts published

Government reports on performance versus objectives Major decisions taken as part of annual budget process

Financial sector

Timely and regular reporting on major developments of the financial sector

Timely and regular reporting of aggregate data on the financial sector

Public availability of financial sector regulations and guidelines

Availability of financial sector regulators to report before a designated public authority

Public disclosure of regulatory, supervisory, and other policy actions

Annual publication of financial stability report Yes: www cha am

Yes

Yes Yes

Yes

Yes

Yes

Notes:

1/ Combines rankings from government effectiveness, regulatory quality, rule of law, control of corruption.

2/ Combines rankings from cooperation in labor-employer relations, flexibility in wage determination, rigidity of employment, hiring and firing practices, redundancy costs, pay and productivity, reliance on professional management

ATTACHMENT I. Armenia: Letter of Intent

Christine Lagarde Managing Director International Monetary Fund Washington, D.C. 20431 Yerevan, November 22, 2011

Dear Ms. Lagarde:

- 1. **Armenia continues its path of stabilization and recovery**. Growth is picking up in 2011, although the construction sector, a key growth driver prior to the crisis, remains strained. With timely policy rate hikes, budgetary spending restraint, a recovery of the agriculture sector in Armenia, and favorable global food and fuel price developments, inflation has come down sharply from high levels reached in February and March. Public finances are improving, and the financial sector is well capitalized and expanding rapidly. At the same time, our external current account deficit remains high, underscoring the need to sustain our efforts to address structural rigidities and improve the business environment, domestic competition, and competitiveness.
- 2. Performance under our program, which is supported by arrangements under the Extended Fund and Extended Credit facilities (EFF/ECF), has been good. The program is on track, with most continuous and quantitative performance criteria (PC) and indicative targets for end-June 2011 met. The end-June PC on net domestic assets (NDA) of the Central Bank of Armenia (CBA) was missed by a small margin, due to temporary factors (delays in donor budgetary support by a few days), while the end-June indicative target on social spending was also missed by a small amount, as targeting of social outlays was being improved in the first half of the year. The program did not incorporate an adjustor for shortfalls in programmed budget support, but such an adjustor will be added going forward. All but one of the structural benchmarks were met (one with a delay). All but one of the indicative targets for end-September 2011 were observed.
- 3. This Letter of Intent (LOI) describes policies that we will implement for the remainder of 2011 and in 2012. Our near-term policies will continue to be geared to containing pressures and limiting disruptions to the recovery. Our reform program aims at enhancing economic growth and poverty reduction, fiscal and debt sustainability, and further developing a sound financial system.

I. RECENT DEVELOPMENTS AND OUTLOOK

4. **Growth is strengthening and inflation is rapidly declining, as agriculture recovers from last year's sharp drop**. Growth has been led by the manufacturing, mining, and service sectors. Agriculture activity picked up significantly in the second and third quarters, suggesting return to a normal harvest season, even though very substantial structural

challenges remain in the sector. Despite some volatility, inflationary pressures from food have receded sharply, and headline inflation has come down from its peak of $11\frac{1}{2}$ percent in March towards the target range (4 ± 1.5 percent). Credit has grown rapidly this year, suggesting increasing economic activity. For the year as a whole, the economy is expected to grow by 4.6 percent, with inflation expected to remain subdued through year end.

5. Growth is expected to moderate to 4 percent in 2012, with inflation remaining within the target range. The slowdown of the global economy is a risk. Due to base effects, inflation is expected to decline below the midpoint of the target band in the first half of 2012, before reaching just over 4½ percent by year-end. Growth should remain at around 4 percent per year over the medium-term. Fiscal consolidation will continue, helping to stabilize and gradually reduce public debt. With continued structural reforms, fiscal consolidation, and a flexible exchange rate, the sizeable external current account deficit should be reduced steadily through 2015.

II. THE PROGRAM FOR 2011–12

A. Fiscal Policy and Debt Sustainability

- 6. We are continuing to reduce the fiscal deficit to ensure debt sustainability and help address external imbalances. We will reduce the deficit to well below 4 percent of GDP this year, and we are targeting a deficit of 3.1 percent of GDP in 2012. We are aiming to improve the tax revenue-to-GDP ratio by 0.6 percentage points in 2012 and remain committed to saving at least half of tax revenue overperformance. If revenues fall short, we will strictly limit non-priority spending. The headline deficit is projected to reach 2.3 percent of GDP in 2013. A modest further consolidation thereafter would keep the debt to GDP ratio on a gradually declining path, and along with further revenue gains would balance the need to ensure a buffer against shocks with providing space for infrastructure and social spending needs.
- Through strict expenditure management. We very cautiously managed spending in the first half of 2011. We also made efficiency gains and better targeted delivery of pension outlays and family benefits. While strict expenditure control should ease in the second half of 2011, we project underspending and overperformance on the fiscal deficit for the year. Still, we expect to meet our social spending targets, and we are considering legislative amendments that will enable the full functioning of the integrated system of social protection services. Another important expenditure initiative—the interest rate subsidy and seed distribution program for the agricultural sector—worked well to moderate price pressures and support recovery in agriculture. Looking ahead, higher tax yields should allow us to ease spending constraints in key areas to protect socially vulnerable segments of the population.
- 8. In 2012, we will implement a set of revenue measures to increase our low tax-to-GDP ratio. The measures will involve a range of actions, including changes to the corporate income tax (including thin capitalization provisions), increased personal income taxes and

social contributions from high-income taxpayers, higher excises on alcoholic beverages (including to harmonize excises on domestic and imported products), higher presumptive taxes on tobacco and casinos, a new excise tax on motor oil, and administrative measures and improvements (e.g., improved enforcement of the new regime for fuel taxation). We were not able to obtain support for automatic indexation of excises (Structural benchmark, August 2011), but we will secure an increase of most excises in 2012 in excess of inflation, so as to generate revenue gains. This includes adjustment of the specific tax on luxury and sport utility vehicles.

- 9. A key tax policy measure for 2012 is overhauling the fiscal regime for the mining sector (Structural benchmark, December 2011). This includes a redesigned mining royalty in line with international best practices, complemented by a strict limit of the fiscal stability clause in the new mining code to tax rates and a set period of 5 years and a transfer pricing rule for the mining sector. Following further study and technical assistance, we will adopt broad transfer pricing legislation for all sectors for implementation in 2013. This will allow the tax authority to adjust prices between related parties, including interest charged on related party loans, to reflect market or arm's length prices. More broadly, we are finalizing a detailed strategy paper to lay our tax reform objectives and implementation plan for 2012–15. The strategy builds on recent IMF TA and will cover the initial changes in 2012 and our plans to address exemptions and tax expenditures (including in the agriculture sector), further reforms for mining, and plans for other taxes.
- 10. We have made further progress in tax administration. We have made tax reporting and payment less frequent, and reduced the number of forms needed. We have extended the e-filing system to over 6,100 taxpayers, and we are expecting to operate electronic processing of tax returns and automated invoice processing by end-2011. All VAT taxpayers must file electronically starting January 2012. We have started to implement a riskbased management approach in VAT refund processing. The system was introduced somewhat later than expected, due to the time required for testing the software system. We have also put in place the key elements for risk-based tax audits (legislation, software, etc.), a long-standing objective, and we will start these in 2012. We have improved the quality of taxpayer services through new taxpayer call and service centers, and we are exploring the concept of a tax ombudsman to improve the accountability and fairness of the tax system for small businesses. The tax appeals committee under the government is working well, and we have recently published a booklet on clarifications of the legislation and regulations. Finally, we have made progress in collecting taxes from large taxpayers (LTPs). LTP collections in terms of total domestic revenues are continuing to increase. This reflects, in part, changes in the criteria for selection of LTPs, and an increase of the number of designated LTPs by 100.
- 11. **Notwithstanding this progress, we will enhance our tax administration reform efforts**. We are making progress to establish within the taxpayer registry the capacity to identify VAT liability for each taxpayer. This capacity requires the addition of a VAT payer identification number to the tax identification number. The registry and the risk-based management audit and refund approaches should help us to begin to make progress with the

large stock of outstanding VAT credits. We will issue a White Paper detailing the measures and costs of addressing mixed cash and accrual accounting and refunding or setting off against future VAT liability excess VAT credits drawing on IMF TA (Structural benchmark, March 2012). Full-fledged implementation of these reforms is strongly dependent on the availability of additional budget resources. We will renew an agreement between the Ministry of Finance and the State Revenue Committee (SRC) on information sharing to strengthen our assessment of tax expenditures and revenue developments and our capacity for tax policy and revenue administration.

12. We are assessing options to deal with Nairit, a chemical company and Armenia's largest industrial enterprise. While Nairit has encountered financial difficulties, we believe that it has potential to attain profitability and export markets, particularly in the CIS region and Asia, with new ownership, management, and modernization. We have applied for concessional financing from the EurAsEC Anti-Crisis Fund of up to \$400 million. However, recognizing the complexity and risks of this operation, we will move cautiously to find a private-sector led solution that minimizes exposure of the government and use of public funds, and will assume liabilities (including guarantees) only in consultation with the Fund and the World Bank. In case we are unable to find a relevant private-party solution, we would look forward to IFI assistance in handling Nairit's large scope of concerns (including environmental and safety issues).

B. Monetary and Exchange Rate Policy

- 13. Our monetary policy will continue to aim at price stability. As inflationary pressures are subsiding at a faster pace than expected, we reduced the CBA policy rate by 50 basis points in September, after keeping the rate steady at 8½ percent since April. Under our baseline projection, the output gap is expected to close, and inflation should return to the target band in the second half of 2011. Thus, further policy action is unlikely to be needed. We will, however, remain vigilant against both upside and downside risks to the economy. Should a faster fiscal consolidation and further deterioration in the global economy increase deflationary pressures, we will stand ready to cut the policy rate further.
- 14. We will allow greater exchange rate flexibility going forward. The foreign exchange market has been broadly stable in 2011, and our interventions in the market will continue to aim at smoothing unusually large movements, while not resisting fundamental trends. We also aim to build international reserves as a buffer against exogenous shocks and in view of forthcoming repayments of crisis-related support. We intend to once again lock in strong performance on reserves by significantly increasing our program targets for the remainder of 2011, in comparison with targets set at the time of the Second Review, including by \$16 million for end December. We have set ambitious yet achievable targets for 2012.
- 15. We are enhancing our inflation-targeting framework. To this end, we are strengthening our capacity for model building and forecasting to help guide policy decisions. We are also improving monetary and financial operations to increase the influence of the

policy rate. Since April, we have stepped up liquidity management in dram markets, and as a result, market rates have been moving broadly in line with the policy rate. We will aim to reduce the volatility of interbank rates by conducting more frequent fine-tuning operations. In addition, we will provide more information on future liquidity conditions to market participants by publishing liquidity forecasts. We are also standardizing our standing facilities and supporting efforts of NASDAQ OMX Armenia to develop term interbank instruments that will provide higher flexibility and security than the current interbank repo transactions. These are expected to involve provision of collateral for trades by participants, and not transaction guarantees by the CBA.

C. Financial Sector Stability and Development

- 16. We will continue to safeguard the stability of the banking system, especially in light of rapid growth of loan portfolios. With the credit-to-GDP ratio remaining low, we anticipate credit to grow faster than the economy in the coming years. In addition, with deposits remaining highly dollarized and with banks continuing to enjoy access to relatively cheap funding from abroad, we anticipate that foreign exchange lending will continue to predominate. We have raised risk weights and provisioning for foreign currency loans and Armenian banks have remained well-capitalized. To further strengthen the resilience of the banking system, we will initiate a study on the possible impact of introducing liquidity coverage ratios by major currencies and will prepare a report for discussion during the forthcoming FSAP Update and next review missions. The report will study the feasibility of such coverage ratios, the most effective design, and the timing for enforcement. These ratios are currently imposed on total assets and liabilities of each bank, currency composition notwithstanding. We will take further steps to curb foreign exchange-induced credit risk, if the enhanced stress-testing methodology finds it necessary. The FSAP Update will help shape financial stability policy to increase the resilience of the banking sector.
- 17. **We will further improve our tools to monitor risks in the banking system**. With a view to facilitating a more forward-looking assessment of risks to financial stability, we are enhancing our stress testing methodology to incorporate real sector variables and possible contagion effects from interbank transactions and capture the potential impacts of exchange rate movements on default probabilities. We will share the key elements of the new methodology with banks, so that they can improve their risk management tools.

D. Structural Reforms

- 18. We remain committed to our reform agenda aimed at improving the business environment. We have made key legislative changes, most notably to the laws on inspections and competition and have pursued implementation of a comprehensive action plan covering areas assessed under the World Bank's "Doing Business" rankings.
- The new law on inspections involves a reorientation for inspection agencies to risk-based oversight, for example, in tax, labor, fire and safety, and sanitary inspections, as well as greater transparency in planning and reporting. A key aim is to clarify rules and

- procedures and reduce direct contacts with inspection agency staff, thereby limiting opportunities for corruption.
- The changes to the competition law give greater power and tools to the competition committee to address abuse of market power and influence. In 2011, the committee has initiated a number of cases of abuse of dominance in highly concentrated markets, including in telecommunications, energy, and food processing and marketing.
- Under the Doing Business action plan, electronic systems have been introduced in business registration, tax filing and compliance, customs declaration, legal proceedings, and contract enforcement. Procedures for certificates of origin for exports and custom formulation for imports have been eased, and registration of property titles streamlined. These actions have reduced transaction costs and increased transparency. A new investor protection law was introduced in June 2011 aiming at strengthening the rights of shareholders and preventing conflict of interest in any transaction.
- 19. We will continue our business environment reforms in 2011–12. We will implement a new Doing Business action plan that covers 50 actions, including simplifying tax payments by SMEs, allowing electronic customs payments by small and medium-sized importers via the SRC's website, further improving customs valuation procedures, and reducing the costs of company registration and the number of procedures for resolving contractual disputes. A broader Investment Climate Reform Action Plan is under consideration and will cover corporate governance and commercial dispute resolution. Another important initiative is the "Regulatory Guillotine," which aims at significantly reducing Armenia's 26 thousand regulations over the next 18 months. The project will involve cooperation with the private sector, focus on areas of public interaction with regulators, and aim to ensure revenue neutrality for the state budget. Finally, the competition committee will continue to step up anti-competitive enforcement efforts under its newly enhanced legal framework in 2012.

III. CONCLUSION

- 20. Given our strong program implementation, we request the completion of the Third Review of the EFF/ECF program and the associated disbursement of SDR 36.2 million. We also request a waiver for nonobservance of the end-June 2011 PC on NDA of the CBA and modification of the end-December PCs for NIR and NDA and revision of the NDA PC to include a symmetrical adjustor on external financing. In addition, we request the establishment of PCs for end-June 2012.
- 21. We are requesting further Fund financing under the ECF to meet our external budgetary payment obligations. The program had envisaged that Fund support for external budgetary payments would come to an end in 2011. However, in light of the strength of the program, in particular the important measures to increase tax revenues, and given our difficult financing situation, we request that SDR 27 million be provided for external

budgetary payments in 2012. To make clear our intentions to exit from such support, the 2012 amount is less than the funding provided in 2011. We are in contact with donors and partners to seek additional financing, including to close the remaining gap in 2013.

- 22. We will maintain a close policy dialogue with the Fund and stand ready to take additional measures, as appropriate, to ensure the achievement of our social and economic objectives under the EFF/ECF program. We will continue to consult with the Fund on the adoption of measures, and in advance of revisions of the policies contained in the LOI, in accordance with the Fund's policies on such consultation. We will also provide the Fund with information it requests for monitoring progress during program implementation. The program's quantitative performance criteria and indicative targets, as described in the attached Technical Memorandum of Understanding, and structural benchmarks are set out in Tables 1 and 2. The Fourth Review is expected to be completed on or after March 30, 2012. The Fifth Review is expected to be completed on or after September 30, 2012.
- 23. We authorize the IMF to publish this Letter of Intent and its attachments, as well as the accompanying staff report.

Very truly yours,

/s/ Tigran Sargsyan Prime Minister Republic of Armenia

/s/ Vache Gabrielyan Minister of Finance Republic of Armenia /s/
Artur Javadyan
Chairman of the Central Bank
Republic of Armenia

Table 1. Armenia: Quantitative Targets for 2010–12 1/

(In billions of drams, at program exchange rates, unless otherwise specified)

_	2010						2011							20		
- -	Dec.		Mar. 2/	,	,	Jun.		•	Sep. 2/		De	C.	Mar. 2/	Jun.	Sep. 2/	Dec. 2
		Country Report No.			Country Report No.			Country Report No.			Country Report No.					
	Act.	10/350	Adj. Prog.	Act.	11/178	Adj. Prog.	Prel.	11/178	Adj. Prog.	Prel.	11/178	Prog.	Prog.	Prog.	Prog.	Prog
erformance Criteria																
Net official international reserves (floor, in millions of U.S. dollars)	892	831	748	833	795	761	800	769	766	878	819	835	785	802	812	
Net domestic assets of the CBA (ceiling)	54	99	98	85	109	108	118	143	141	98	155	187	187	186	197	:
Program fiscal balance (floor) 3/	-124	-34	-34	-3	-50	-67	-29	-99	-108	-58	-187	-187	-22	-37	-64	-
External public debt arrears (continuous criterion)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
dicative Targets																
Reserve money (ceiling)	508	515	520	506	522	527	520	538	543	571	563	596	578	594	614	
Average concessionality of newly contracted debt (floor, in percent)	32										30	30				
Social spending of the government (floor) 5/	31	9	9	7	18	18	15	27	27	27	36	36	8	15	28	
lemorandum items: Budget support grants				0	16		3	16		12	31	33	0	6	6	
o.w. EU MFA grant		10		0			0	8		8	19	19	0	0	0	
Budget support loans	37	22		0	25		10	35		35	67	67	0	26	26	
o.w. non-IMF loans	0	22		0	14		10	24		24	45	45	0	17	17	
Project financing	72	6		10			16	42		36	61	58	23	46	70	
KFW and IBRD loan disbursements	2	1		0	1		0	2		0	10	9	1	2	2	

Sources: Armenian authorities; and Fund staff estimates.

^{1/} All items as defined in the TMU.

^{2/} Indicative target.

^{3/} Below-the-line overall balance excluding net lending and project financing until March 2011. Below-the-line overall balance excluding net lending from June 2011. 4/ Assessed on a calendar year basis.

^{5/} Defined as 100 percent of the budgeted amount of the family benefit program and lump-sum financial aid.

Table 2. Armenia: Structural Benchmarks Under the EFF/ECF Arrangement

ltem	Measure	Proposed Time Frame (End of Period)	Outcome	Comment
Tax a	dministration			
1	Issue a government decree stipulating that clarifications and interpretations of laws, regulations, and procedures on taxes, duties, and mandatory fees should be approved by the Ministry of Finance. These clarifications and interpretations will become normative acts to be published and applied consistently across all taxpayers effective September 1, 2010.	July 2010	Met	
2	Set up a Tax Appeals Council under the Government to deal with legal and procedural disputes of taxpayers.	September 2010	Met with delay	
3	Develop manuals in tourism, real estate, transport, and sectors using cash register machines for tax audits for usage starting January 2011.	December 2010	Met	
4	Simplify the reporting system by reducing the frequency of reporting to tax authorities and considerably streamline tax forms for VAT, profits tax, and personal income tax.	December 2010	Met	
5	Adopt a government decree establishing a mechanism for implementing a fully functional risk management approach in VAT refund processing.	December 2010	Met	
6	Implement a fully functional risk-based management approach in VAT refund processing.	June 2011	Met with delay	
7	Establish the capacity to identify whether the taxpayer has VAT liability by adding a VAT payer identification number to the tax identification number.	December 2011		Replaces previous SB ("Set up a taxpayer registry")
8 Tax p	Issue a White Paper detailing the measures and costs to address of addressing mixed cash and accrual accounting and refunding or setting off against future VAT liability excess VAT credits.	March 2012		New
9	Introduce legislative changes that provide for annual automatic indexation of excises for inflation.	August 2011	Not met	
10	Increase the tax rate structure for up-market luxury vehicles and SUVs for 2012 and adjust the specific tax on cars annually for inflation.	December 2011		
11	Approve a Tax Strategy paper that lays out the tax reform objectives and implementation plan for 2012–15.	December 2011		
12	Overhaul fiscal regime for the mining sector	December 2011		New
	a. Strictly limit the fiscal stability clause in the new mining code to tax rates and to a set period of 5 years.			
	b. Introduce and collect resource rents in terms of a variable royalty regime with the sliding rate depending on the EBIT to sales value.			
	 Clarification of deductibility of contributions for mine rehabilitation and mine site clean-up. 			
Socia	al policy			
13	Submit amendments to existing laws to parliament to enable the full functioning of an integrated system for the provision of social protection services.	December 2011		
	l and debt sustainability			
14	Approve a medium-term expenditure framework (2011–13), including a medium-term debt management strategy.	August 2010	Met	
	tary sector	0 ()		
	Approve terms and conditions for deposit auction to enable the CBA to absorb liquidity with greater flexibility.	September 2011	Met	
16	Publish the CBA's liquidity forecast that provides projected amount of dram liquidity before CBA's actions with indication of separate components such as currency outside the CBA, net foreign assets, government transactions excluding treasury bill issuances, and treasury bill issuances for liquidity management purposes.	December 2011		
Finan	<u>cial sector</u>			
17	Issue prudential regulations to specifically address currency-induced credit risk, including increased loan-loss provisioning requirements and higher risk weights in capital requirements for foreign currency loans.	June 2010	Met	
18	Formalize the Committee for Financial Stability in an MOU to set the modalities for main policy makers to coordinate their policies and responses in case of an imminent critical situation in the banking sector.	September 2010	Met	
19	Issue prudential regulation requiring banks to prepare their contingency plans for liquidity and solvency support.	December 2010	Met	

ATTACHMENT II. Armenia: Updated Technical Memorandum of Understanding

- 1. This memorandum sets out the understandings between the Armenian authorities and the IMF staff regarding the definition of performance criteria and indicative targets, their adjusters, and data reporting requirements for the three-year EFF/ECF Arrangement as per the Letter of Intent dated November 22, 2011 (LOI).
- 2. For program monitoring purposes, all foreign currency-related assets, liabilities, and flows in the monetary accounts will be evaluated at program exchange rates. The program exchange rate of the Armenian dram to the U.S. dollar is set at 385 dram per one U.S. dollar. The cross-rates for other foreign currencies are provided in Table 1.

I. Quantitative Targets

- 3. The program sets performance criteria and indicative targets for defined test dates (see Table 1 in the November 22, 2011 LOI). The program sets the following performance criteria:
 - Floor on the net official international reserves (NIR) of the Central Bank of Armenia (CBA);
 - Ceiling on the net domestic assets (NDA) of the CBA;
 - Ceiling on external public debt arrears (continuous); and
 - Floor on the program fiscal balance;

The program sets the following indicative targets:

- Ceiling on reserve money;
- Floor on average concessionality of new debt; and
- Floor on social spending of the government.
- 4. **The net official international reserves** (stock) of the Central Bank of Armenia (CBA) will be calculated as the difference between total gross official international reserves (excluding commercial bank required and excess reserves at CBA in FX) and gross official reserve liabilities.
 - Gross official international reserves are defined as the CBA's holdings of monetary gold (excluding amounts pledged as collateral), holdings of Special Drawing Rights (SDRs), including the August 28, 2009 General Allocation and the September 9, 2009 Special Allocation, the country's reserve position at the IMF, and holdings of

convertible currencies in cash or in nonresident financial institutions (deposits, securities, or other financial instruments). Gross reserves held in the form of securities and other financial instruments are marked to market. Excluded from gross reserves are the balance on the government's Special Privatization Account (SPA), capital subscriptions in foreign financial institutions and illiquid foreign assets, any assets that are pledged, collateralized, or otherwise encumbered, claims on residents, claims in foreign exchange arising from derivatives in foreign currencies vis-à-vis domestic currency (such as futures, forwards, swaps, and options), precious metals other than gold, assets in nonconvertible currencies, and illiquid assets.

Official reserve liabilities shall be defined as the total outstanding liabilities of the
government and the CBA to the IMF and convertible currency liabilities of the CBA
to nonresidents with an original maturity of up to and including one year, as well as
commitments to sell foreign exchange arising from derivatives (such as futures,
forwards, swaps, and options).

NIR is monitored in U.S. dollars, and, for program monitoring purposes, assets and liabilities in currencies other than the U.S. dollar shall be converted into dollar-equivalent values using the exchange rates as specified in Table 1.

- 5. **Reserve money** is defined as the sum of currency issued, required and excess reserves, and current and time deposit accounts of certain resident agents. Liquidity absorbing transactions under reverse repurchase agreements, foreign currency swaps, and securities issued by the CBA are excluded from the reserve money definition. The ceiling will be considered as met if the outcome is within AMD 5 billion of the indicative target sets in Table 1 attached to the Letter of Intent dated November 22, 2011.
- 6. **Net domestic assets** are defined as reserve money minus NIR, minus other assets not included in gross official international reserves, minus commercial bank required and excess reserves at CBA in FX, plus medium and long-term foreign liabilities (i.e., liabilities with a maturity of one year or more) of the CBA, plus other foreign liabilities not included in official reserve liabilities, minus the balance of outstanding Fund purchases credited to the government account at the CBA. NDA is composed of net CBA credit to the general government plus outstanding credit to domestic banks by the CBA (including overdrafts) minus liabilities not included in reserve money and other items net.
- 7. **External public debt arrears** are defined as all unpaid debt-service obligations (i.e., payments of principal and interest) arising in respect of public sector loans contracted or guaranteed, including unpaid penalties or interest charges associated with these obligations

that are overdue beyond 30 days after the due date.¹³ The ceiling on external payment arrears is set at zero.

- 8. **The program fiscal balance** is cumulative from the beginning of the fiscal year and is measured from the financing side as the negative of the sum of net domestic banking system credit to the central government, net domestic nonbank financing, and net external financing to the central government. Should a general subsidy or any other fiscal transaction be introduced off-budget, the overall balance will be measured including the subsidy and other fiscal transactions as part of government spending
 - Net banking system credit to the central government equals the change during the period of net credit to the central government.
 - Net nonbank financing equals the sum of: (1) the change during the period of outstanding treasury bills and bonds to nonbanks (including accrued interest for treasury bills and excluding accrued interest for treasury bonds); ¹⁴ (2) any other disbursement or transaction that increases nonbanks' claims on the central government plus withdrawals from the special privatization account or the treasury sub-account containing privatization proceeds in drams, less amortization paid by the central government to private resident nonbank agents.
 - Net external financing equals total debt-increasing disbursements from non-residents to the central government (including Fund net purchases credited directly to the government accounts at the CBA) less total amortization from the central government to non-residents. All foreign currency-denominated transactions are recorded in drams using the prevailing exchange rate at the time of the transaction.
- 9. External and domestic net lending, which are recorded as financing items, are *excluded* from the calculation of the program fiscal balance. This effectively treats net lending as an expenditure item when loans are made and as a revenue item when the loans are repaid.
- 10. Some project implementation units maintain accounts at the CBA. Grants received by these units are recorded in the fiscal accounts as external grants on the revenue side and as foreign-financed expenditure on the expenditure side. In addition, any loans to finance investments that are intermediated through the banking system are recorded in the financial

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¹³ The public sector is here defined following the *Government Financial Statistics Manual* (GFS 2001) and *System of National Accounts* (1993 SNA). It includes the general government and nonfinancial public enterprises (as defined in paragraph 12).

² Domestic nonbank holdings of treasury bills and treasury bonds are defined as total outstanding treasury bills and bonds less holdings by the banking system and the State Fund for Social Insurance.

accounts as a financing item below the line and are thus excluded from net lending. Under previous Technical Memoranda of Understanding, these activities were excluded from the calculation of the program fiscal balance. This treatment reflected lags in receiving information from project implementation units and on project loans intermediated through the banking system. With the shift to semi-annual program reviews with the EFF/ECF arrangement and consolidation of the accounts of these units in the Treasury, there is no longer a need for such exclusion, and these activities are now fully accounted for in the program fiscal balance.

- 11. Foreign currency proceeds from selling enterprises are deposited into the Special Privatization Account (SPA). The SPA is held at the CBA and the proceeds are invested abroad together with the CBA's international reserves. These proceeds are included in the definition of the monetary accounts of the CBA as part of net foreign assets with a counter entry in other items net. Any budgeted withdrawal from the SPA will be accounted for as privatization proceeds used to finance the budget and will be recorded below the line. Any unanticipated withdrawal from the SPA will be recorded below the line as privatization receipts; these withdrawals, however, will be replenished during the same fiscal year. Domestic currency proceeds from selling enterprises to residents are deposited in a subaccount of the treasury single account and are also treated as a financing item and recorded below the line.
- 12. The program sets an annual indicative floor of 30 percent on average concessionality of new debt on a contraction basis on debt with nonresidents with original maturities of one year or more contracted and guaranteed by the public sector.
 - The grant element is the difference between the present value (PV) of debt and its nominal value, expressed as a percentage of the nominal value of the debt. The PV of debt at the time of its contracting is calculated by discounting the future stream of payments of debt service due on this debt. The discount rates used for this purpose for 2011 onwards are the currency specific commercial interest reference rates (CIRRs), published by OECD. For debt with a maturity of at least 15 years, the ten-year-average CIRR is used to calculate the PV of debt and, hence, its grant element. For debt with a maturity of less than 15 years, the six-month average CIRR is used. The margins for differing repayment periods (0.75 percent for repayment periods of less than 15 years, 1 percent for 15 to 19 years, 1.15 percent for 20 to 29 years, and 1.25 percent for 30 years or more) are added to the ten-year and six-month CIRR averages.
 - The public sector here comprises the general government, the central bank, and nonfinancial public enterprises (enterprises and agencies in which the government holds a controlling stake—typically owns more than 50 percent of the shares, but which are not consolidated in the budget).

- For program purposes, the guarantee of a debt arises from any explicit legal obligation of the public sector to service a debt in the event of nonpayment by the debtor (involving payments in cash or in kind), or from any implicit legal or contractual obligation of the public sector to finance partially or in full any shortfall incurred by the debtor.
- 13. The program sets a floor on **social spending of the government**. For the purposes of the program, social spending of the government is defined as 100 percent of the budgeted amount of the family benefit program and lump-sum financial aid.

II. Adjustors

- 14. The quantitative performance criteria and indicative targets under the program are subject to the following adjusters, calculated, where relevant, using program exchange rates:
 - Changes in reserve requirements: The ceiling on the NDA of the CBA and the ceiling on reserve money will be adjusted downward (upward) by the amount of banks' reserves freed (seized) by any reduction (increase) of the reserve requirement ratio on both domestic currency and foreign currency liabilities relative to the baseline assumption as per the following formula: $\Delta NDA = \Delta rB$, where B denotes the level of liabilities subject to reserve requirements in the initial definition and Δr is the change in the reserve requirement ratio.
 - **KfW and World Bank loan disbursements**: the ceiling on the NDA of the CBA will be adjusted upward (downward) by the full amount of any excess (shortfall) of disbursements from the KfW and World Bank loans directed at SME financing compared to programmed amounts (Table 2). The floor on NIR will be adjusted upward (downward) by the cumulative amount of any excess (shortfall) of these disbursements compared to program amounts.
 - **Budget support grants to the public sector** are defined as grants received by the general government for direct budget support from external donors and not related to project financing.
 - **Budget support loans to the public sector** are defined as disbursements of loans from bilateral and multilateral donors for budget support and Fund purchases credited directly to the government accounts at the CBA.
 - **Project financing to the public sector** is defined as disbursements of loans from bilateral and multilateral donors for public sector projects.
 - The floor on NIR will be adjusted upward (downward) by the cumulative amount of any excess (shortfall) of budget support loans or budget support grants (excluding Fund disbursements to the government) compared to program amounts (Table 3). The

- floor on NIR will be adjusted downward for any external public debt amortization amounts in excess of program amounts.
- The ceiling on NDA will be adjusted downward (upward) by the cumulative amount of any excess (shortfall) of budget support loans or budget support grants compared to program amounts (Table 3).
- The floor on the program fiscal balance on a cash basis will be adjusted upward (downward) by the cumulative total amount of the budget support grants received in excess (to account for a shortfall) of the program amounts (Table 3), subject to a cap of \$25 million in either direction. The floor on the program fiscal balance on a cash basis will also be adjusted downward (upward) by the cumulative total amount of the project financing received in excess (to account for a shortfall) of the program amounts (Table 3), subject to a cap of \$50 million in either direction.

III. Data Reporting

15. The government will provide the IMF the information specified in the following table.

Reporting	Type of Data	Description of Data	Frequency	Timing
Agency				
CBA	CBA balance sheet	Summary	Daily	The following
				working day
	CBA balance sheet	Summary at program exchange rates;	Monthly	Within seven days
		and by chart of accounts at actual		of the end of each
		official exchange rates		month
	Monetary survey	Summary banking system balance sheet	Monthly	Within 25 days of
		for the central bank at both program		the end of each
		exchange rates and by chart of accounts		month
		at actual official exchange rates; the		
		consolidated balance sheet of		
		commercial banks by chart of accounts		
		at actual official exchange rates		
	International reserves	By chart of accounts; at (i) program	Daily	The following
		exchange rates; and (ii) at actual		working day
		official exchange rates		
	Foreign exchange	Official exchange rates (buying and	Daily	Within 1 day
	market	selling); daily trade volume, and		
		weighted average exchange rate of the		
		interbank, intrabank and Nasdaq-OMX		
	Foreign exchange	CBA foreign exchange operations,	Daily	Within 1 day
	market	(exchange rate, volume, counterpart)		
	Foreign exchange	Exchange rate (buying and selling)	Daily	Within 1 day
	market			
	Interest rates	Refinance rate	At least	Within 1 days of
			monthly	the CBA Board

Reporting Agency	Type of Data	Description of Data	Frequency	Timing		
				decision		
	Interbank money market	Daily interbank repo volume and interest rate and number of trades	Daily	Within 1 day		
	CBA operations	Repo (reverse repo) operations, open market operations, Lombard credits, deposit facility, and foreign exchange swaps (volumes, maturity, yields, exchange rates)	Daily	Within 1 day		
	Bank liquidity	Reserves and excess reserves, by currency	Monthly	Within 15 days of the end of each reference period		
	Interest rates and flows of the funds attracted and allocated by commercial banks	By currency and maturity	Weekly	Last working day of the week		
	T-bill and coupon bond financing, CBA securities	Auction data: date, original and remaining maturities, issuance volume, allocation, average yield and coupon yield (if available)	Weekly	Last working day of the week		
	Banking data	Sectoral distribution of loans and deposits; dollarization of loans and deposits; loan maturities; interbank rate, by volume and maturity; T-bill rate, bond yield; deposit and lending rates, by maturity; monthly weighted average interest rate on government bonds	Monthly	Within 25 days of the end of each month		
	Banking indicators	Capital adequacy; asset composition and quality; profitability; liquidity; open FX positions; and compliance with prudential norms	Monthly	Within 30 days of the end of each month		
	Banking sector stress tests	Results of stress tests on exchange rate, liquidity, and credit risk	Monthly	Within 30 days of the end of each month		
	СРІ	Index of core inflation	Monthly	Within 21 days of the end of each month		
	Transfers	Non-commercial transfers of individuals	Monthly	Within 30 of the end of each month		
	Other monetary data	IFS format	Monthly	Within 45 days of the end of each month		
Ministry of Finance	T-bill and coupon bond financing	By holders, i.e., CBA, resident banks, resident nonbanks, and nonresidents	Monthly	Within 7 days of each month		
(MOF)	External debt	Disbursements and stock of outstanding	Monthly	Within 21 days of		

Reporting Agency	Type of Data	Description of Data	Frequency	Timing
, ·		short-term and contracting or guaranteeing and outstanding stock of medium-and long-term external debt of the government, the CBA, and state- owned companies (by company); any stock of arrears on external debt service and outstanding stock of government guarantees and external arrears		the end of each month. For project implementation units, within 21 days of the end of each month (preliminary data) and within 45 days of the end of each month (final data)
	Revenue collection	Total revenue collected separately by the tax administration and customs administration, including revenue by individual tax, and social contributions	Monthly	Within 7 days of the end of each month
	Domestic expenditure arrears	All unpaid claims outstanding at the end of the month which includes wages, social contributions (including for pensions), family allowances, and amortization and domestic interest payments	Monthly	Within 45 days of the end of each month for government arrears
	Privatization receipts	Balance on the SPA; gross inflows into and outflows from the SPA during the month, specifying the nature of each transaction	Monthly	Within 7 days of the end of each month
	Treasury single account (TSA)	Detailed breakdown of central treasury account, including deposits at the central treasury, community budgets, off budget account, monetization account, state budget account and the Republic correspondent account—flows during the month and end of month stocks.	Monthly	Within 7 days of the end of each month
	Consolidated central government	State budget	Monthly	Within 30 days of the end of each month
	Consolidated general government	Central and local governments, and Non-Commercial Enterprises that belong within the general government (NCEs)	Quarterly	Within 60 days of the end of each quarter
	Consolidated general government	Central and local governments, and NCEs that belong within the general government	Annual	Within 180 days of the end of each year
	Budget execution	All cash receipts, cash expenditures, including domestic and external debt-service payments, external and domestic borrowing operations, and inflow of grants to the central	Monthly	Within one month following the end of each quarter.

Reporting Agency	Type of Data	Description of Data	Frequency	Timing
g ,		government; expenditure data will be provided according to both economic and functional classifications, consistent with the GFSM2001 methodology		
NSS	Balance of payments	Detailed export and import data	Monthly	Within 28 days of the end of each month
		Detailed export and import data	Quarterly	Within 45 days of the end of each quarter
		Detailed balance of payments data	quarterly	Within 60 days of the end of each quarter
	СРІ	By category	Monthly	Within 5 days of the end of each month
State Revenue Committee	Tax arrears	By type of tax	Monthly	Within 30 days of the end of each quarter (monthly data provided on a quarterly basis)
		For or the 30 largest debtors and for all major companies in the energy, water, and irrigation sectors	Quarterly	Within 30 days of the end of each quarter
	Tax credits	Detailed data, by type of tax, of outstanding tax credits for all types of tax revenues	Monthly	Within 45 days of the end of each month (monthly data provided on a quarterly basis)
	VAT refund claims in arrears	Detailed data on VAT refunds in arrears which include all outstanding VAT refunds that have not been accepted (and refunded), or offset (in full or in part), or rejected (in full or in part) after the 90 day statutory processing period. Number of refund applications processed per month.	Monthly	Within 45 days of the end of each month (monthly data provided on a quarterly basis)
	Large taxpayers	Data on the number of taxpayers and amount of taxes managed by the large tax inspectorate	Monthly	Within 45days after the end of each month
	Import data	1. Total value of recorded imports, breaking out raw diamond imports; 2. Total value of non-duty free recorded imports; 3. Number of total transactions involving recorded imports; 4. Number of total transactions	Quarterly	Within 30 days of the end of each quarter

Reporting	Type of Data	Description of Data	Frequency	Timing
Agency				
		involving non-duty free recorded imports 5. Value of recorded imports where customs value was assessed using transaction prices, breaking out raw diamond imports; 6. Value of non-duty free recorded imports where customs value was assessed using transaction prices; 7. Number of transactions involving recorded imports where customs value was assessed using transaction prices; 8. Number of transactions involving non duty free recorded imports where customs value was assessed using transaction prices;		
	Automated VAT refunds	Number of refunds that were processed automatically (share of total refunds); total value of automated and automatic refunds and offsets; average waiting time (days) to receive refund	Monthly	Within 45 days of the end of each month (monthly data provided on a quarterly basis)
	Risk-based selection approach	Percentage of selected companies chosen on the basis of risk-based approach, identified revenue from risk-based audits	Monthly	Within 45 days of the end of each month (monthly data provided on a quarterly basis)

Table 1. Armenia: (Program) Exchange Rates of the CBA (As of December 31, 2008 in U.S. dollars per currency rates)

	Drams Per	Dollars Per
Country	Currency	Currency
Australian dollar	266.57	0.6924
Canadian dollar	313.39	0.8140
Swiss franc	365.58	0.9496
Danish krone	73.26	0.1903
Euro	546.00	1.4182
Pound sterling	558.68	1.4511
Japanese yen	4.27	0.0111
Norwegian krone	55.20	0.1434
Russian ruble	13.13	0.0341
Swedish krone	18.21	0.0473
SDR	593.00	1.5403

Table 2. Armenia: KFW and IBRD SME Loan Disbursements, 2010-12 1/ (In millions of U.S. dollars)

Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11		Sep-11 Dec-11		Mar-12	Jun-12	Sep-12	Dec-12	
					Country	Country		Country					
					Report No.		Report No.		Report No.				
Actual	Actual	Actual	Actual	Actual	11/178	Prel.	11/178	Prel.	11/178 Pro	g. Prog.	Prog.	Prog.	Prog.
-													
0.0	0.0	5.0	5.0	0.0	2.0	0.0	4.0	0.7	25.8 23	8 2.0	4.0	6.0	8.0

^{1/} Cumulative from the end of the previous year.

Table 3. Armenia: External Disbursements to the Public Sector in 2010-12 1/ (In millions of U.S. dollars)

	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11		Sep-11		Dec-11	1	Mar-12	Jun-12	Sep-12	Dec-12
	Actual	Actual	Actual	Actual	Actual	Country Report No. 11/178	Prel.	Country Report No. 11/178	Prel.	Country Report No. 11/178	Prog.	Prog.	Prog.	Prog.	Prog.
											-		3.		-
Project financing	63	107	145	193	26	62	42	109	93	158	152	60	121	181	241
Budget support loan	0	38	67	96	0	66	25	91	91	175	175	0	68	68	85
Budget support grant					0	41	7	41	32	82	86	0	15	15	27
of which: EU MFA			0	0	0	20	0	20	20	50	50	0	0	0	0
Total	63	145	212	289	26	168	74	240	216	414	413	60	204	264	353

 $^{1/ \, \}mbox{\sc Cumulative}$ from the end of the previous year.

INTERNATIONAL MONETARY FUND

REPUBLIC OF ARMENIA

Third Reviews Under the Extended Fund Facility and Under the Extended Credit Facility, and Request for Modification of Performance Criteria

Informational Annex

Prepared by the Middle East and Central Asia Department

November 23, 2011

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ANNEX I. ARMENIA: RELATIONS WITH THE FUND

(As of October 31, 2011)

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

II.	General Resources Account:	SDR Million	Percent of Quota
	Quota	92.00	100.00
	Fund holdings of currency	494.93	537.97
	Reserve Tranche Position	0.00	0.00
III.	SDR Department:	SDR Million	Percent of Allocation
	Net cumulative allocation	87.99	100.00
	Holdings	6.97	7.92
IV.	Outstanding Purchases and Loans:	SDR Million	Percent of Quota
	Stand-by Arrangements	350.43	380.90
	PRGF/ECF Arrangements	103.73	112.75
	Extended Arrangements	52.50	57.07

V. Latest Financial Arrangements:

	<u>Approval</u>	Expiration	Amount Approved	Amount Drawn
<u>Type</u>	<u>Date</u>	<u>Date</u>	(SDR Million)	(SDR Million)
Stand-by	03/6/2009	06/27/2010	533.60	350.43
ECF	06/28/2010	06/27/2013	133.40	56.10
EFF	06/28/2010	06/27/2013	133.40	52.50

VI. Projected Payments to Fund

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

		Forthcoming					
	2011	2012	2013	2014	2015	_	
Principal	3.88	101.00	180.22	98.08	16.43		
Charges/interest	<u>2.09</u>	<u>7.90</u>	<u>4.59</u>	<u>1.92</u>	<u>1.12</u>		
Total	5.97	108.90	184.81	100.01	17.55		

VII. Safeguards Assessment

Under the Fund's safeguards assessment policy, an update safeguards assessment of the Central Bank of Armenia (CBA) was completed in November 2010 with respect to the current EFF/ECF arrangements. The update safeguards assessment found that the CBA maintains a sound

safeguards framework and made recommendations to further strengthen oversight arrangements.

VIII. Exchange Rate Arrangement

- (a) The de jure arrangement is "free floating." The de facto arrangement was reclassified to "floating" from a "stabilized arrangement" effective March 3, 2009. The official exchange rate is quoted daily as a weighted average of the buying and selling rates in the foreign exchange market.
- (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 2010 Article IV consultation with Armenia was concluded on December 1, 2010. Armenia is subject to a 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 a 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. An FSAP update is planned for February 2012.

XI. Resident Representatives

Mr. Guillermo Tolosa, since January 2010.

XII. Technical Assistance

The following table summarizes the Fund's technical assistance to Armenia since 2006.

Armenia: Technical Assistance from the Fund, 2002–12

Subject	Type of Mission	Timing	Counterpart			
Fiscal Affairs Department (FAD)						
Tax administration	Short-term	October 5-18, 2006	MFE, STS			
Public financial management reform	Short-term	November 27 – December 8, 2006	MFE			
Tax administration	Short-term	October 31–November 13, 2007	MFE, STS			
Tax administration	Short-term	January 5 – 22, 2008	MFE, STS			
Tax administration	Short-term	April 1–12, 2008	MFE, STS			
Tax administration	Short-term	June 11–17, 2008	MFE, STS			
Tax administration	Short-term	February 2–27, 2009	MoF, SRC			
Tax administration	Short-term	April 28–May 22, 2009	MoF, SRC			
Tax administration	Short-term	September 23–October 6, 2009	MoF, SRC			
Tax administration	Short-term	March 1-May 14, 2010	MoF, SRC			
Tax administration	Short-term	August 30–November 10, 2010	MoF, SRC			
Tax administration	Short-term	September 2010	MoF, SRC			
Tax administration	Short-term	November 2010	MoF, SRC			
Tax policy	Short-term	February 2011	MoF			
Tax administration	Short-term	February–March 2011	MoF, SRC			
Tax administration	Short-term	May–June 2011	MoF, SRC			
Tax policy (mining)	Short-term	June 14–27, 2011	MoF			
Public expenditure management	Short-term	October 11-24, 2011	MoF			
Legal Department						
Legislation Development & FIU	Short-term	July 31–August 7, 2006				
Unified Tax Code	Short-term	June 16–23, 2007	MFE			
Unified Tax Code	Short-term	April 13–18, 2009	MoF, SRC			
AML-CFT National Strategies and Coordination	Short-term	April 19–26, 2010	CBA			
AML-CFT National Strategies and Coordination	Short-term	January–February 2011	CBA			

Subject	Type of Mission	Timing	Counterpart			
Monetary and Capital Markets Department						
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	СВА			
AML/CFT preventive measures	Short-term	April 1, 2006–April 30, 2007				
Inflation Targeting, Foreign Exchange Market Development and Responding to Dedollarization	Short-term	August 29–September 10, 2007	CBA			
Exchange rate and collateral	Short-term	February 23–27, 2009	CBA			
Contingency planning, crisis preparedness	Short-term	October 11–22, 2009	CBA			
Contingency planning, crisis preparedness	Short-term	March 28–April 14, 2010	CBA			
Workshop on Inflation Targeting (with IMF Research Dept.)	Workshop	April 27–May 6, 2011	CBA			
Bank resolution framework	Short-term	June 17–27, 2011	CBA			
Medium-term debt management strategy	Short-term	December 12–21, 2011	СВА			
FSAP update	Short-term	February 2012	CBA			
Inflation targeting	Short-term	February 2012	CBA			
Statistics Department						
Balance of payments: remittances	Short-term	August 22–September 5, 2006	СВА			
Multitopic bundled mission: national						
accounts, balance of payments, monetary and financial statistics	Short-term	January 25–February 5, 2010	National Statistical Service, CBA			
National accounts	Short-term	September 16–28, 2010	National Statistical Service			
BOP and external debt statistics	Short-term	October 3–13, 2011	CBA			
National accounts	Short-term	February 2012	National Statistical Service			

ANNEX II. ARMENIA: WORLD BANK AND IMF COLLABORATION—JMAP IMPLEMENTATION (As of November 1, 2011)

Title	Products	Provisional timing of missions	Expected delivery date (tentative)
1. Bank worl in next 12 m			
	Selected Ongoing and New Operations		
	Public Sector Modernization Project II (US\$9m)	Ongoing	Project implementation started in September 2010
	DPO-3 (Triggers on evenue administration, safety nets, business environment, and mining code) (US\$43m)	Quarterly	January 2012 targeted for board date
	E-Society & Innovation Project (US\$24m)	Ongoing	August 2010
	Community Agricultural Resource Management and Competitiveness Project (US\$16.5m)	Ongoing	Effective since July 2011
	Electricity Supply Reliability and Energy Efficiency Project (US\$39m)	Ongoing	Approved by the board in May 2011
	PFM/Tax project (US\$20m)	Ongoing	March 2012 targeted for board date
	Irrigation Project (US\$40m)	Ongoing	Planned for FY12
	New DPO series (triggers will be informed by ongoing "Sources of Growth" to support competitiveness) (US\$25m)	Quarterly	January 2013 targeted fro board date
	Analytical Work		
	Sources of Growth	Quarterly	Concept Review Meeting scheduled for December 2011 Synthesis and background
	Programmatic fiscal work (fiscal sustainability, revenue performance, and expenditure rationalization)	Next mission scheduled for December 2011	volumes disseminated at a high level meeting in October 2011. TA component is now focusing on tax projection modelling.
	Poverty monitoring and assessment	Continuous	Annual series; 2011 report delivered in September
	Trade analytical and TA work (on FTA. and export diversification/expansion)	Quarterly	Comments provided on the draft export-led industrial
	Institutional and Governance Review	Closing	Final draft to be delivered in December 2011.
	Selected Technical Assistance		
	Public Debt Management IDF	Closing	December 2011
	Tax Audits and Macroprojections IDF	Started in late 2010	Ongoing
2. IMF work in next 12 m			
	Third EFF/ECF Review	September 2011	December 2011
	Fourth EFF/ECF Review	March 2012	May 2012
	Fifth EFF/ECF Review and Article IV Consultation	September 2012	November 2012
	Analyticial work on: Fiscal adjustment and debt reduction; regional linkages and spillovers.	September 2011	December 2011
	Unemployment and inclusive growth	September 2012	November 2012
	Technical Assistance/Training		
	FAD (Public Financial Management—Review of Medium-term budgeting and link of medium-term framework to annual budget)	October 2011	November 2011
	STA (follow up mission on BOP statistics and moving BOP compilation under the central bank)	October 2011	November 2011
	STA (Mapping new chart of accounts to SRFs/FSI data reporting)	January 2012	February 2012
	STA (follow up mission on national accounts)	February 2012	March 2012
	MCM (Assessment of inflation targeting regime)	February 2012	March 2012
3. Joint work	r program		
	Medium-term Debt Strategy	December 2011	January 2012
	FSAP Update	February 2012	May 2012

ANNEX III. ARMENIA: RELATIONS WITH THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT (EBRD)

(As of October 30, 2011)

- 1. As of October 30, 2011, the EBRD had approved 102 projects in Armenia in the power, transport, agribusiness, municipal and infrastructure, manufacturing and services, property, telecommunications and financial sectors. Total commitments amount to around €470 million.
- 2. There are four sovereign projects. First, the EBRD approved a sovereign-guaranteed loan of €54.8 million for construction of the Hrazdan Unit 5 thermal power plant in March 1993. The EBRD had funded technical assistance for the Hrazdan privatization prospectus and followed the privatization process. Second, in November 1994, an agreement on a €21.8 million loan under sovereign guarantee was signed to build an air cargo terminal at Zvartnots International Airport in Yerevan. The airport was transferred under a concession agreement to private management in 2002; the new management has prepared a master plan for development of the airport, which is expected to generate further traffic for the cargo terminal. In April 2007, the EBRD approved a €7 million loan to the State Committee for Water Systems, owner of the water and wastewater assets located in the small municipalities outside of Yerevan. The proceeds of this loan will be used to improve wastewater treatment in five municipalities located near Lake Sevan. In March 2010, EBRDhas signed a €5.0 million sovereign loan with Yerevan Metro Company to provide for immediate rehabilitation needs, safety upgrades, and energy efficiency. The investment is part of a broader plan to improve and reform public transport services in the capital of Armenia.
- 3. Most of the EBRD's projects (93 percent) in Armenia are in the private sector. The EBRD has provided a major loan to Electric Networks of Armenia (see section 5 below). The Bank has also approved an additional loan to Zvartnots airport of €29.6 million, supplemented by investments from the AsDB and DEG. This project follows the successful completion in May 2007 of the first phase of the new passenger terminal, for which the Bank provided a €14.8 million loan together with DEG (\$10 million). The second phase involves construction and purchase of equipment for the passenger terminal and will facilitate completion of terminal development and relocation of all arrival and departure operations from an older building. The loan was a commercial facility with no sovereign support. Other private sector finance includes smaller loans to private companies and equity participation in firms in various sectors of the economy.
- 4. In 2010, the Bank committed €53 million to Armenia through 25 transactions, including the sovereign loan to Yerevan Metro. The portfolio for 2010 comprised sixteen projects with financial institutions, six in agribusiness, one each in manufacturing and property, and the sovereign metro project. Two loans to financial institutions are in dram and two loans were syndicated. During January–October 2011, the Bank committed an additional

€69 million through sixteen transactions: eleven in the financial institutions sector, two in telecoms, and one each in natural resources, agribusiness and municipal infrastructure. In July 2011, the EBRD committed €6.5 million under a sovereign project to improve water supply and sanitation in 17 settlements in Armenia. As part of this project, the EIB will provide a sovereign loan of €6.5 million and the EU NIF will provide a €7 million grant.

- 5. In the banking sector, the EBRD's first equity participation, in the Commercial Bank of Greece-Armenia (€1.1 million), was approved in late 1999. At present, there are four local banks where the EBRD participates in equity: Armeconombank, Byblos Bank Armenia, Ararat Bank and Procredit Bank. The EBRD also acquired an equity stake in a non-bank financial intermediary, Cascade Insurance and Reinsurance Company, a subsidiary of Cascade Capital Holding.
- 6. The Armenia Multi-Bank Framework Facility II (AMBFF II) was established to provide loans and equity to commercial banks and leasing companies in Armenia. It was approved by the EBRD's Board on March 8, 2006 for an amount of \$40 million. The facility was extended by an additional \$80 million on November 9, 2007. In late 2009, the EBRD approved a further \$100 million extension to AMBFF II (AMBFF II Extension II) to support increased financial intermediation and financial sector development and to contribute to economic development by providing medium to long-term funding to selected Armenian financial intermediaries. Another extension of the facility is now being discussed. The facility will seek to develop new products for financial institutions, including local currency loans, agricultural credit lines and mortgage financing. Additional technical assistance will be provided to partner banks.
- 7. The EBRD has expanded its partner bank relationships from four to twelve (two EBRD clients, Ameria and Cascade banks, merged in 2010). Nine banks were provided with new credit facilities under the AMBFF. Armeconombank was provided with a mortgage facility, and the first leasing facility in Armenia was signed with ACBA Leasing in 2008 for €5.9 million. A co-financing facility with six local banks was extended, resulting in 14 subloans to Armenian corporates. By co-financing lines, the EBRD has entered new sectors such as healthcare and telecoms and has significantly expanding its portfolio of agribusiness loans. A trade financing facilitation program was also made available to nine Armenian banks.
- 8. Supporting development of renewable energy is another core activity of the EBRD. The EBRD has joined with the World Bank, USAID, and Cascade Credit (a financing arm of the Cafesdjian Foundation) to launch the Armenian Renewable Energy Programme (AREP). The EBRD's participation took the form of a loan to Cascade Credit. The EBRD also continued to finance renewable energy projects on its own through a direct lending facility, with two projects signed. In addition to renewable energy, the EBRD has participated in other segments of the energy sector, seeking to support post-privatization development with a loan to the privately-owned power distribution company. In April 2009, the EBRD signed a

€42 million loan with Electric Networks of Armenia to modernize and upgrade the obsolete low-voltage infrastructure and improve energy efficiency.

- 9. The EBRD launched Turn Around Management (TAM) and Business Advisory Service BAS programs in Armenia in 2003 to support micro, small, and medium-sized enterprises. Since 2003, BAS has completed 828 projects in the amount of €3.162 million, as well as 40 Market Development Activity projects. TAM delivered more than 20 projects. The programs were originally funded by the EU-TACIS program, but are now funded from the ETC Fund.
- 10. Projects identified by the EBRD for future development are well diversified across sectors, and include several larger transactions. Additional opportunities are expected in infrastructure, including public sector projects (mainly municipal). The EBRD is exploring projects in public transport, water, sanitation and solid waste treatment. The Bank has launched a \$25 million program to finance projects for industrial energy efficiency and renewable energy through local banks. In October 2010, the first \$3.0 million energy efficiency credit line was signed with Anelik Bank. Technical assistance has been put in place, financed by the Government of Austria.
- 11. The EBRD is also assisting the government to improve the business environment, including the preparation of a corporate governance code by the Ministry of Economy, the central bank, the stock exchange and the IFC. The EBRD is also providing assistance, financed by the Government of Finland, to the Public Services Regulatory Commission for telecommunications sector regulation.
- 12. The EBRD's current country strategy was approved in 2009. The key priorities for the coming years are: (i) the financial sector; (ii) the enterprise sector, particularly SME and micro enterprise financing through credit lines or direct loans and equity investments; (iii) investment in alternative energy and municipal infrastructure; and (iv) policy dialogue with the government, other multilateral and bilateral donors, and other stakeholders. A new country strategy is being prepared for 2012-2015 and should be approved in early 2012.

ANNEX IV. ARMENIA: RELATIONS WITH THE ASIAN DEVELOPMENT BANK (ASDB) (As of October 27, 2011)

- 1. The AsDB's economic report and the interim operational strategy for 2006–09 for Armenia were approved in 2006. The country operational business plan (COBP) for 2012–13 is expected to be endorsed by AsDB's Board of Governors in November 2011. The 2012-13 COBP will support the government's Sustainable Development Program (SDP—the government's poverty reduction strategy program) and will help the authorities continue to counter the economic vulnerabilities revealed by the crisis. The indicative focus areas under the COBP are: (i) urban development; (ii) regional cooperation; and (iii) private sector development. In early 2012, the AsDB will prepare the first Country Partnership Strategy for the next 5 years.
- 2. As of May 1, 2011, the AsDB had approved nine projects in the transport, municipal infrastructure, and general budget support sectors. Total commitments amounted to \$441.9 million for sovereign and \$40.0 for non-sovereign loans. The single non-sovereign loan was provided to Armenia International Airports (ArIA) for the Zvartnots Airport Expansion Project (Phase 2). The loan finances the construction of a new terminal building and purchase of equipment to supplement the existing concourse building.
- 3. The first AsDB sovereign loan (\$30.6 million), approved in November 2007, financed rehabilitation of 220 km of rural roads. The second was a water supply and sanitation loan (\$36 million) for repair and replacement of water supply infrastructure in small towns and villages, approved in December 2007. The third was a supplementary loan (\$17.3 million) to the rural roads project, approved in November 2008, to finance an increase in project cost from higher construction materials prices, domestic inflation, and appreciation of the dram. The fourth was a crisis recovery support program loan (\$80 million), approved in July 2009, to protect budgetary social expenditures. The next two loans were Tranches 1 (\$60 million) and 2 (\$170 million) of the North-South Road Corridor investment program, approved in October 2009 and December 2010, respectively. Tranche 1 is providing for rehabilitation of 18.4 km of the four-lane Yerevan-Ashtarak highway and safety enhancement of a four-lane road between Yerevan and Ararat. Tranche 2 is providing for upgrading the Ashtarak-Talin road section from two-lane to four-lane, first category road. The final loan was the first tranche (\$48.6 million) of the Sustainable Urban Development Investment Program approved in April 2011. The project provides for construction of two missing road links of the Yerevan inner bypass and strengthening of institutional and management capacity of the Yerevan municipality and urban transport service providers.
- 4. With the exception of the North-South Road Corridor Tranche 2 investment program loan, all approved sovereign loans are from the AsDB concessional window under the Asian Development Fund (ADF). The Tranche 2 loan is from the AsDB's non-concessional window under ordinary capital resources.

- 5. In addition to loan projects, the AsDB is also involved in non-lending operations, mostly advisory services and capacity development technical assistance. This is mostly research-oriented: Armenia's Transport Outlook, a transport-sector master plan for 2011–2020; and Institutional Modernization to Improve the Business Environment, to assist the government with introduction of an online business registry system. Armenia is also included in a number of AsDB regional technical assistance projects aimed at sustained growth. Some of the RETAs provide assessments and development plans in specific areas. The advisory technical assistance may lead to loan projects.
- 6. To increase efficiency and long-term cooperation, the AsDB has offered a new instrument: project funding under the Multi-Finance Facility (MFF). The MFF allows approval of long-term sector assistance with disbursement in tranches. Under the MFF, the AsDB has approved \$500 million for the North-South Road Corridor investment program. Funds will be available for 7 years, and Armenia will request them in tranches. The first and second \$60 million and \$170 million tranches have already been approved. A \$400 million MFF to help the government finance a share of the Sustainable Urban Development Investment Program will be available for a ten-year period from 2011 to 2020. The first \$48.6 million tranche was approved in May 2011.
- 7. In 2011, AsDB signed trade finance agreements under AsDB's Trade Finance Program with six banks in Armenia, a move that is expected to further bolster the country's trade sector and help ensure sustainable economic growth.

ANNEX V. ARMENIA: STATISTICAL ISSUES

(As of November 1, 2011)

Background

1. Data provision by Armenia has shortcomings, but is broadly adequate for surveillance. In November 2003, Armenia subscribed to the Special Data Dissemination Standard (SDDS), and the overall quality, timeliness, and coverage of macroeconomic statistics have improved significantly over the past few years. The Fund has supported this process through technical assistance from the Statistics Department (STA), the Fiscal Affairs Department, and the Monetary and Capital Markets Department. An April 2008 data ROSC mission prepared a detailed evaluation of the quality of the macroeconomic statistics. A multi-topic statistics mission visited Yerevan in February 2010 to review progress with implementation of past recommendations and follow up on outstanding issues in national accounts, balance of payments, and monetary and financial statistics. A follow up STA mission in September 2010 provided further guidance, focusing on improving the accuracy of annual and quarterly GDP estimates. Further improvements in real, fiscal, and external sector statistics would be desirable to facilitate enhanced design and monitoring of economic policies.

Real sector statistics

- 2. The National Statistics Service (NSS) compiles and disseminates annual and quarterly national accounts. The NSS also compiles and disseminates annually a full set of accounts (up to financial accounts) for the total economy and by institutional sectors. The NSS is developing a plan for implementing the *System of National Accounts 2008 (2008 SNA)*.
- 3. The accuracy of the annual estimates of the national accounts is undermined by the lack of exhaustive source data for informal activities and of appropriate price and volume indicators, particularly for construction activities. Construction output volume measures are derived by deflating current values with a price index for output, which uses weights and base year prices from a survey in 1984. To improve volume measures of construction, the NSS should start compiling a new construction output price index based on more sound methodology. Until the new construction price index becomes available, the NSS should use other indicators for deriving construction aggregates at constant prices. The NSS should also implement new surveys to derive a proper benchmark for informal activities.
- 4. The production-side estimates at current prices are derived partially from cumulative source data (from business statistics surveys) and partially from discrete data sources. The NSS validates and reconciles data from different sources, but the underlying problems associated with de-cumulating the cumulative output data distort the quarterly pattern. The NSS is currently working to produce GDP data at current and at constant prices to be fully in accordance of the System of National Accounts. The NSS received IMF technical assistance on estimating quarterly GDP from discrete data sources only and using statistical techniques

that conform to international standards. Recent publications of the NSS have reflected this effort. The NSS discontinued compiling GDP volume measures at the prices of the corresponding quarter of the previous year. The compilation procedures now use only average prices of 2005. The NSS also adopted the recommendation by the IMF statistics mission to compile only one set of quarterly GDP estimates—quarterly GDP at previous-year average prices—and derive time series through chain-linking. These estimates would be conceptually consistent with the annual data. They would also allow comparisons between different periods, which is essential for analysis of business cycle. As of January 2011, the NSS also started compiling a monthly indicator of economic activity (IEA), following international best practices. The monthly GDP compilation was discontinued. The monthly IEA is an implicit volume index compiled by aggregation of monthly volume indices of output using gross output weights.

5. The CPI covers 11 large population centers and Yerevan. Since January 2006, the CPI has been computed using 2005 weights. Concepts and definitions used in the compilation of the CPI are broadly in line with international standards; source data and compilation techniques are generally adequate. The NSS compiles a ten-day and a monthly CPI. The ten-day index and the monthly index are disseminated jointly. The February 2009 ROSC mission recommended development of an approach to include household expenditure on owner-occupied dwellings in the CPI calculations.

Government finance statistics

6. The budget execution reporting system compiles government finance data on a cash basis, 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 and monthly data on central government operations are disseminated one month after the reporting period. The ministry of finance (MoF) is undertaking a comprehensive reform of the treasury system, including the introduction of an internal auditing system in line ministries and their respective budgetary institutions. A treasury single account (TSA) was introduced in 1996, and all bank accounts held by budgetary institutions were closed, except for project implementation units (PIU) that are required by donors to operate with commercial bank accounts. These PIU accounts are being moved gradually to the CBA. 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 since 2003 report data on cash flows and balances to the MoF. The February 2009 ROSC report recommended including NCOs in the government finance statistics data published on national websites. 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.

- 7. The budget presentation and the classification of items under the economic and functional classification of expenditures need to be made more transparent; for instance, the data have been subject to frequent reclassification, and wages for military personnel are reported in the category of "other" goods and services rather than as a wage item. The February 2009 ROSC report recommended using market value rather than face value for financial assets other than loans, and for nonfinancial assets. The reconciliation of central government with general government operations is done by the NSS in cooperation with the MoF.
- 8. Since 2008, government finance statistics meet the classification requirements of the *Government Finance Statistics Manual 2001 (GFSM 2001)* for central government.

Monetary and financial statistics

- 9. Monetary and financial statistics are provided on a timely basis. Data on the accounts of the Central Bank of Armenia (CBA) are provided daily with a one-day lag, while monthly data on the monetary survey are provided with a three-week lag (and preliminary weekly data with a one-week lag). The balance sheets of the CBA and of the deposit money banks follow IAS methodology. Monthly interest rate data are provided with a one-week lag.
- 10. Responding to an IMF 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 since the December 2006 issue of *IFS Supplement* and are used to update IFS. An integrated monetary database has also been established by STA to share the SRF data with the IMF's Middle East and Central Asia Department. The CBA also produces the financial soundness indicator table every month, published both in the IMF Statistics and CBA websites.

External sector statistics

11. In 2009, the Armenian authorities decided to transfer the responsibility for compiling the balance of payments, international investment position (IIP), and external debt statistics from the NSS to the CBA. The February 2010 mission agreed with the authorities on an action plan aimed at ensuring a smooth institutional transfer of responsibility, as well as consistency and continuity in the production of the external sector statistics. The responsibilities of compiling external sector statistics were *de facto* transferred to the CBA in January 2011, and since then, the CBA has compiled balance of payments and IIP data for the first two quarters of 2011. The transfer of responsibilities was smooth and during the short period after the transfer, the CBA undertook a number of important actions aimed at improving the compilation system. A follow up mission took place in October 2011, which undertook a comprehensive assessment of the institutional arrangements, data sources, methodology, and compilation practices for external sector statistics employed by the CBA, and advised on areas for improvement including further developing data sources and compilation practices.

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- 12. 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. Quarterly balance of payments statistics 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. Remittance data obtained from surveys are considerably lower than data obtained through the money transfer system. 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 nonbank sector. There are also concerns with regard to the collection of data on international trade in services, specifically on import of services. The CBA is currently considering the implementation of an international transactions reporting system (ITRS) that would allow for collecting data on all cross-border payments and receipts going through the banking system.
- 13. Quarterly data on the international investment position are published by the NSS within one quarter after the reference period, and the annual data within two quarters; and are also provided for publication in IFS.

Armenia: Common Indicators Required for Surveillance (As of November 10, 2011)

	Date of latest observation	Date received	Frequency of Data ⁷	Frequency of Reporting ⁷	Frequency of publication ⁷
Exchange Rates	Nov 2011	11/10/2011	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities ¹	Nov 2011	11/10/2011	D	D	М
Reserve/Base Money	Nov 2011	11/4/2011	D	D	D
Broad Money	Sep 2011	10/26/2011	М	М	M
Central Bank Balance Sheet	Oct 2011	11/7/2011	D	М	M
Consolidated Balance Sheet of the Banking System	Sep 2011	10/26/2011	М	М	M
Interest Rates ²	Nov 2011	11/10/2011	W	W	М
Consumer Price Index	Oct 2011	10/31/2011	М	М	M
Revenue, Expenditure, Balance and Composition of Financing ³ — General Government ⁴	Q2 2011	9/5/2011	Q	Q	Q
Revenue, Expenditure, Balance and Composition of Financing ³ —Central Government	Sep 2011	10/25/2011	М	М	Q
Stocks of Central Government and Central Government-Guaranteed Debt ⁵	Sep 2011	10/25/2011	М	М	Q
External Current Account Balance	Q2 2011	10/24/2011	Q	Q	Q
Exports and Imports of Goods and Services	Sep 2011	11/2/2011	М	М	Q
GDP/GNP	Q2 2011	10/4/2011	Q	Q	Q
Gross External Debt	Q1 2011	8/16/2011	Q	Q	Q
International Investment Position ⁶	Q1 2011	8/16/2011	Q	Q	Q

¹ Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

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

³ Foreign, domestic bank, and domestic nonbank financing.

⁴ The general government consists of the central government (budgetary funds, extrabudgetary funds, and social security funds) and state and local governments.

⁵ Including currency and maturity composition.

⁶ Includes external gross financial asset and liability positions vis-à-vis nonresidents.

⁷ Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); and Not Available (NA).

INTERNATIONAL MONETARY FUND AND INTERNATIONAL DEVELOPMENT ASSOCIATION

REPUBLIC OF ARMENIA

Joint IMF/World Bank Debt Sustainability Analysis

Prepared by the Staffs of the International Monetary Fund and the World Bank

November 28, 2011

This debt sustainability analysis, drafted by the Fund and Bank staffs, presents joint IMF-World Bank debt sustainability analysis (DSA) for Armenia using the debt Sustainability framework for low-Income Countries (LIC). Armenia is assessed by the Bank and Fund staffs to be at low risk of external debt distress, with all debt indicators below the relevant country-specific thresholds, including when subject to stress tests. Armenia's public sector debt also remains sustainable, as fiscal consolidation has reduced the fiscal deficit from 7.9 percent of GDP in 2009 to a projected 3½ percent in 2011. However, with debt ratios at much higher levels than before 2009, further consolidation and fiscal discipline will be needed to preserve debt and fiscal sustainability over the long term. The DSA suggests that a fiscal deficit significantly in excess of the 2 percent envisaged over the medium term (equivalent to 2.8 percent when net external lending is included) would lead to an unsustainable increase in debt levels.

I. BACKGROUND

As of end-2010, Armenia's nominal external debt stood at \$6.1 billion, 65 percent of GDP. Just under 55 percent was public and publicly-guaranteed (PPG) debt, of which two-thirds was owed to multilateral creditors. Reflecting the significant share of concessional borrowing, the present value (PV) of the external PPG debt stood at \$2.7 billion, 27.6 percent of GDP. Including domestic debt, total nominal public debt increased from 16.1 to 39.2 percent of GDP during 2008–10. Prior to the crisis, World Bank IDA credits accounted for the largest share of public borrowing. Most of the increase of debt during the crisis stemmed from external borrowing, with the IMF and Russia providing almost two-thirds of

¹ Armenia is classified as a strong performer based on its three-year average score of 4.24 on the Bank's Country Policy and Institutional Assessment (CPIA), which measures strength of policies and institutions. For a strong performer (three-year average CPIA above 3.75), the indicative thresholds (for a country with high remittances) are: PV-of-debt-to-GDP + remittances ratio of 45 percent; PV-of-debt-to-exports + remittances ratio of 180 percent; PV-of-debt-to-revenue ratio of 300 percent; debt service-to-exports + remittances ratio of 22.5 percent; and debt service-to-revenue ratio of 35 percent.

² External private debt has been revised significantly since the last DSA, based on new data from the authorities.

the additional debt in 2008–10. Almost 80 percent of private debt is medium and long-term, much of which consists of loans to the banking sector from parent banks and international financial institutions. Short-term private debt amounted to around \$620 million as of end-2010.

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The current DSA macroeconomic assumptions are broadly in line with the last DSA conducted in 2010 (Box 1).³ Key differences are a somewhat stronger initial position stemming from a faster fiscal consolidation as well as a stronger dram. Assumptions on the mix of external borrowing (concessional vs. non-concessional) and the terms of financing have also been revised to take account of Armenia's impending graduation from concessional financing.⁴

Armenia: External Public Debt Stock
(U.S. Dollars, in millions)

(U.S. Dollars, III IIIIIIIOIIs)					
	2008	2009	2010		
STOCK OUTSTANDING	1577	2967	3299		
Multilateral	1235	2014	2254		
IBRD	5	53	106		
IDA	1015	1161	1160		
EBRD	0	1	10		
IFAD	58	60	62		
OPEC	15	25	29		
ADB	8	127	147		
IMF	135	587	741		
Bilateral (Paris Club)	342	953	1044		
Russia	0	500	500		
Germany-KfW	125	143	133		
France	5	5	4		
USA	37	35	33		
Japan - JICA	175	271	374		
Bilateral (Non Paris Club)	0	0	1		

Source: Armenian authorities.

³ See IMF Country Report No. 10/350.

⁴The small increase in the grant element of new borrowing in 2012 reflects expected disbursements from official creditors. The slight fall in the average interest rate over the medium term is driven largely by amortization of the non-concessional debt contracted during the crisis

II. EXTERNAL DSA

Baseline Scenario

The baseline scenario shows that debt should remain manageable (Tables 1 and 3). The PV of external debt would peak at around 59 percent of GDP next year, before declining to 52 percent in 2016 and 37 percent of GDP by 2031. The PV of external debt stood at 281 percent of exports plus remittances in 2010 and is projected to fall to around 200 percent by 2016 and 120 percent by 2031. External debt service is projected to increase from 21.6 percent of exports in 2010 to 29.3 percent in 2013, as crisis support unwinds, and then decrease to under 15 percent in 2031. The baseline assumes a moderation of private sector borrowing that characterized the first half of 2011, as remittances and FDI further rebound.

PPG external debt remains at sustainable levels. The NPV of external PPG debt is expected to peak next year at 30 percent of GDP, before declining to 26 percent of GDP in 2016 and 19 percent of GDP in 2030. The NPV of public external debt should fall from 134 percent of exports in 2010 to 63 percent in 2030. The PV of public external debt will peak this year at 150 percent of fiscal revenues before declining to 119 percent in 2016 and 79 percent in 2031. PPG debt service ratios peak in 2013 at 16 percent of exports and 19 percent of revenues and decline rapidly thereafter. Armenia's gross international reserves are expected to fall from almost five months of imports this year to a still-comfortable four months in 2013, before recovering gradually thereafter.

Box 1. Armenia: Key Macroeconomic Assumptions for Baseline Scenario (2010–30)

Real GDP growth is projected to be 4.6 percent in 2011, and 4 percent per year (medium-term potential growth rate) thereafter. This is well below the 10-year historical average of 8.7 percent, which reflected strong growth of residential construction, which is unlikely to reoccur. Near-term growth will be supported by robust activity in industry (particularly mining), a rebound in remittances, and gradual recovery in FDI.

Inflation should remain below 5 percent at end-2011 and average 3.6 percent in 2012. Average inflation over the long term is assumed to be around 4 percent, consistent with the CBA's target range.

The **overall fiscal deficit** is projected to decrease to 2.3 percent of GDP by 2013 and remain at 2 percent of GDP thereafter. This is slightly higher than the 1–2 percent assumed in the previous DSA and reflects the need to balance the necessity of a buffer against shocks with providing additional resources for essential infrastructure and social spending. External net lending is assumed to continue at 0.8 percent of GDP over the projection period.

External financing is assumed to average 2.5 percent of GDP over the forecast period, in line with the average in the decade prior to the crisis. However, the composition of new lending will change as Armenia graduates from concessional financing into non-concessional borrowing. The DSA assumes no recourse to non-official commercial borrowing over the medium term, and only gradual access thereafter.

The **external current account deficit** is projected to narrow to under 8 percent of GDP in 2016, as exports and remittances pick up in line with the global recovery. Exports are projected to grow robustly over the medium term, as new investments become operational. The deficit is expected to be largely financed by FDI rather than through debt-creating flows.

Remittances will continue to play an important role in financing the trade deficit, but are expected to decline from around 7 percent of GDP to 4 percent at the end of the projection period.

FDI is expected to average 7 percent of GDP. Initially, FDI will likely be concentrated in mining. Over time, business climate reforms should yield a more diversified FDI structure.

Alternative Scenarios and Stress Tests

The standard set of alternative scenarios and bound tests indicates that the external debt outlook remains vulnerable to a sharp depreciation of the dram (Table 3, Figure 1). Under an adverse scenario of a 30 percent depreciation in 2012, the PV of external debt would increase from 28 percent of GDP plus remittances in 2010 to 39 percent in 2012 and then decrease to 26 percent in 2031. The second-most adverse scenario—lower export growth—would push the PV of external debt to 32 percent of GDP plus remittances in 2013 and back to 19 percent by 2031. Under the 30 percent depreciation scenario, debt service would increase from 4 percent of revenues in 2011 to 27 percent in 2013, coming down to 14 percent by 2031.

An additional scenario considers the impact of the possible borrowing in support of the Nairit chemical plant. This borrowing would add around \$400 million to Armenia's nominal external debt and increase the PV-of-PPG-debt-to-GDP ratio by around three percent, reducing Armenia's borrowing room in the event of an exogenous crisis by the same amount.

Under these standard alternative scenarios and bound tests, external debt ratios remain below the relevant thresholds. However, the thresholds are applied only to PPG debt, and exclude private external debt, which is limited in most LICs. In Armenia, however, the private sector has built up substantial external liabilities, and caution is warranted in interpreting the results.

III. PUBLIC SECTOR DSA

Baseline Scenario

The baseline scenario shows a sustainable position (Table 2 and Figure 2). The PV of public sector debt would peak next year at 36 percent of GDP and remain broadly stable thereafter, reaching around 40 percent of GDP at the end of the projection period. The NPV of debt would increase from 167 percent of fiscal revenues in 2010 to 176 percent in 2011, before dropping to 164 percent at 2030. The public debt indicators would remain at reasonable levels throughout the projection period and below the indicative thresholds. However, given the legal requirement to keep public debt below 50 percent of the previous year's GDP, the debt ratios leave little borrowing space in the event of a major exogenous shock, such as in 2009.

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Alternative Scenarios and Stress Tests

The standard set of alternative scenarios and bound tests indicates that Armenia's public debt outlook would be most adversely affected by a lasting shock to growth (Table.4, Figure.2). Under the adverse growth scenario, which assumes GDP growth of 2.1 percent throughout the projection period without a commensurate cut in spending, public debt ratios would follow a persistent upward trend. The most extreme adverse scenario in the medium term is a 30 percent depreciation in 2012, which would push the net present value of debt to 49 percent in 2012, and the debt ratio would gradually increase thereafter to 56 percent by 2031. This scenario also worsens Armenia's liquidity situation, increasing the debt service-to-revenue ratio to 35 percent in 2013. This result reinforces the importance of maintaining prudent financial policies and preserving macroeconomic stability in order to safeguard the debt outlook. The results of the Nairit simulation (Table 4, A.4), which increases the PV debt-to-GDP ratio by three percentage points, underscore that the debt impact of this large project should also be carefully analyzed.

IV. DEBT DISTRESS CLASSIFICATION AND CONCLUSIONS

In the view of the Bank and Fund staffs, Armenia should be considered at a low level of debt distress, based on external debt burden indicators. The public sector DSA suggests that Armenia's overall public sector debt dynamics are sustainable in light of the current size of the debt stock. The authorities broadly agreed with the findings of the DSA, although they did note that consideration should also be given to analysis of debt sustainability on a net basis to take account of Armenia's gross assets, which include on-lending of a substantial share of the large-scale crisis-related financing from Russia to Armenian companies via the local banking sector.

At the same time, the rapid accumulation of public debt since the onset of the global crisis calls for continuing fiscal consolidation. Public debt was just 16 percent of GDP at end-2008, but reached 39 percent of GDP at end-2010, and is expected to peak at over 43 percent of GDP in 2012 and remain at similar levels over the medium term. While projected debt-to-GDP levels do not breach the indicative thresholds, the ratios remain much higher than prior to the crisis, pointing to a lower resilience to shocks. Moreover, the outlook is subject to risks, particularly if remittances become volatile over the medium term. A cautious approach to new debt contraction is therefore warranted, and further fiscal consolidation will be essential to safeguard Armenia's debt sustainability.

⁵ For the implications of a sudden short-term shock, see also the World Bank's 2011 Public Expenditure Review, which suggested that a one-year, 7 percent contraction in GDP could push debt ratios above sustainable levels (World Bank, "Armenia: Fiscal Consolidation and Recovery," 2011, Report No. 62587-AM).

⁶ Armenia's debt dynamics are in line with the assessment made at the time of the previous DSA.

Table 1. Armenia: External Debt Sustainability Framework, Baseline Scenario, 2008–31 1/
(In percent of GDP, unless otherwise indicated)

	/	Actual		Historical ⁶	Standard 6/			Projec	tions						
	2008	2009	2010	Average	Deviation	2011	2012	2013	2014	2015	2016	2011_16 Average	2021	2031	2017_31 Average
External debt (nominal) 1/	29.5	57.8	64.6			65.5	66.8	64.5	61.8	60.0	58.3	/werage	51.4	38.4	7 Worldge
Of which: public and publicly guaranteed (PPG)	13.6	35.7	34.2			36.7	37.6	35.7	33.7	32.8	31.9		28.8	21.1	
Change in external debt	-0.3	28.2	6.8			0.9	1.3	-2.4	-2.6	-1.8	-1.8		-1.5	-1.2	
Identified net debt-creating flows	-0.5	17.7	4.2			2.9	1.7	0.1	-1.6	-2.1	-2.2		-0.7	-0.9	
Non-interest current account deficit	11.0	14.5	13.1	6.6	5.5	10.5	9.0	7.8	6.5	6.2	6.1		6.8	5.5	6.3
Deficit in balance of goods and services	25.6	27.1	24.3	0.0	5.5	23.1	22.4	21.4	20.2	19.8	19.3		17.8	13.7	0.3
Exports	15.1	15.4	20.7			22.7	23.8	24.9	25.6	25.9	26.0		27.3	30.7	
Imports	40.7	42.6	44.9			45.8	46.1	46.3	45.8	45.7	45.2		45.1	44.3	
Net current transfers (negative = inflow)	-9.8	-9.4	-6.0	-9.2	1.9	-6.9	-7.0	-7.1	-7.0	-7.1	-6.9		-5.9	-4.2	-5.4
Of which: official	-0.6	-0.9	-0.9	0.2	1.0	-1.1	-0.7	-0.5	-0.2	-0.2	-0.1		0.0	0.0	0.4
Other current account flows (negative = net inflow)	-4.9	-3.2	-5.2			-5.8	-6.4	-6.6	-6.6	-6.5	-6.3		-5.2	-4.0	
Net FDI (negative = inflow)	-8.1	-8.4	-6.0	-6.1	1.8	-6.4	-6.6	-7.0	-7.5	-7.7	-7.8		-7.4	-6.6	-7.1
Endogenous debt dynamics 2/	-5.5	11.6	-2.8	-0.1	1.0	-1.1	-0.7	-0.7	-0.6	-0.6	-0.5		-0.2	0.3	-7.1
Contribution from nominal interest rate	0.8	1.3	1.6			1.7	1.9	1.9	1.8	1.7	1.7		1.8	1.8	
Contribution from real GDP growth	-1.6	5.6	-1.1			-2.8	-2.6	-2.6	-2.5	-2.3	-2.3		-2.0	-1.5	
Contribution from price and exchange rate changes	-4.6	4.7	-3.3												
Residual (3-4) 3/	2.3	10.5	2.6			-2.1	-0.4	-2.5	-1.0	0.3	0.5		-0.8	-0.3	
Of which: exceptional financing	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													
PV of external debt 4/			58.2			58.8	59.5	56.9	54.7	53.4	52.2		47.5	36.7	
In percent of exports			281.5			259.4	250.1	229.0	213.5	206.5	200.9		174.0	119.7	
PV of PPG external debt			27.8			30.0	30.3	28.1	26.5	26.1	25.8		24.9	19.4	
In percent of exports			134.6			132.4	127.3	113.1	103.5	101.0	99.3		91.2	63.2	
In percent of government revenues			142.9			149.7	146.3	134.3	124.8	121.8	119.1		110.1	78.6	
Debt service-to-exports ratio (in percent)	15.6	22.3	21.6			19.4	24.6	29.3	23.1	18.4	18.2		18.5	14.8	
PPG debt service-to-exports ratio (in percent)	3.1	5.4	4.7			4.7	10.3	15.8	10.2	5.9	6.1		8.5	7.8	
PPG debt service-to-revenue ratio (in percent)	2.3	4.1	5.0			5.3	11.9	18.7	12.3	7.2	7.4		10.3	9.6	
Total gross financing need (in millions of U.S. dollars)	1078.7					1474.2	1516.1	1599.2	1321.7	1194.9	1226.9		1848.1	2832.5	
Non-interest current account deficit that stabilizes debt ratio	11.3	-13.7	6.2			9.6	7.7	10.1	9.2	8.0	7.9		8.3	6.7	
Key macroeconomic assumptions															
Real GDP growth (in percent)	6.9	-14.1	2.1	8.3	8.8	4.6	4.0	4.0	4.0	4.0	4.0	4.1	4.0	4.0	4.0
GDP deflator in US dollar terms (change in percent)	18.4	-13.6	6.1	9.2	12.1	3.3	-0.6	-0.3	0.8	1.8	2.1	1.2	2.0	2.0	2.0
Effective interest rate (percent) 5/	3.3	3.3	3.1	2.4	1.7	2.8	3.0	3.0	2.9	3.0	3.0	3.0	3.7	4.8	4.0
Growth of exports of G&S (U.S. dollar terms, in percent)	-1.1	-24.0	45.0	17.5	19.6	18.5	8.5	8.4	7.9	6.9	6.6	9.5	7.2	7.4	7.3
Growth of imports of G&S (U.S. dollar terms, in percent)	32.3	-22.4	14.4	17.3	18.1	10.1	4.2	4.0	3.7	5.6	5.1	5.4	5.9	5.9	5.9
Grant element of new public sector borrowing (in percent)						19.6	21.6	16.5	9.1	6.1	5.2	13.0	0.6	-2.3	-0.8
Government revenues (excluding grants, in percent of GDP)	20.1	20.2	19.5			20.0	20.7	20.9	21.2	21.4	21.6		22.6	24.7	23.3
Aid flows (in millions of U.S. dollars) 7/	209.5	965.0	333.1			319.0	211.2	130.4	81.6	72.7	71.1		56.0	30.8	
Of which: grants	49.4		114.1			168.7	39.5	31.4	28.3	27.9	27.5		17.7	10.8	
Of which: concessional loans	160.1	906.7	218.9			150.4	171.7	98.9	53.3	44.9	43.6		38.3	20.0	
Grant-equivalent financing (in percent of GDP) 8/						2.4	1.2	0.8	0.4	0.4	0.3		0.1	0.0	0.1
Grant-equivalent financing (in percent of external financing) 8/						44.3	28.9	24.1	19.9	15.6	14.0		4.6	-0.7	2.3
Memorandum items:															
Nominal GDP (in millions of U.S. dollars)	11662.0	8647.9	9371.2			10125.8	10472.5	10856.9	11377.0	12039.5	12782.6		17181.0	31001.6	
Nominal dollar GDP growth	26.7	-25.8	8.4			8.1	3.4	3.7	4.8	5.8	6.2	5.3	6.1	6.1	6.1
PV of PPG external debt (in millions of U.S. dollars)			2679.7			2966.8	3081.9	2996.5	2978.2	3115.6	3265.6		4235.4	5950.1	
(PVt-PVt-1)/GDPt-1 (in percent)						3.1	1.1	-0.8	-0.2	1.2	1.2	0.9	1.0	0.5	1.0
Gross remittances (in millions of U.S. dollars)	1062.4	733.2	477.1			586.9	657.3	716.4	773.8	827.9	865.2		1007.9	1302.8	
PV of PPG external debt (in percent of GDP + remittances)			26.5			28.4	28.5	26.4	24.8	24.4	24.1		23.5	18.6	
PV of PPG external debt (in percent of exports + remittances)			108.0			105.4	100.7	89.4	81.8	79.8	78.8		75.1	55.6	
Debt service of PPG external debt (in percent of exports + remittances)			3.8			3.7	8.2	12.5	8.0	4.7	4.9		7.0	6.8	
Courses: Armonian authorities: and Fund stoff estimates and projection															

^{1/} Includes both public and private sector external debt.

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

^{3/} Includes exceptional financing (i.e., changes in arrears and debt relief); on-lending activities (especially in 2009); changes in gross foreign assets; and valuation adjustments.

For projections also includes contribution from price and exchange rate changes.

^{4/} Assumes that PV 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 generally derived over the past 10 years, subject to data availability.

^{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 PV of new debt).

Table 2. Armenia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2008-31

(In percent of GDP, unless otherwise indicated)

Public sector debt 1/ 16.1 40.2 39.2 39.2 39.2 39.1 30.1	_		Actual				Estimate	Estimate				Projections					
Public sector debt 1/ 161		-	-			Standard							2011-16			2017-31	
Change in public sector debt 136 367 376 376 376 376 376 376 376 376 376 378		2008	2009	2010	Average	Deviation	2011	2012	2013	2014	2015	2016	Average	2021	2031	Average	
Classified debt-creating flows 0.0 24.0 1.0 2.0	Public sector debt 1/	16.1	40.2	39.2			42.0	43.1	41.8	40.4	40.0	40.3		43.9	42.2		
	Of which: foreign-currency denominated	13.6	35.7	34.2			36.7	37.6	35.7	33.7	32.8	31.9		28.8	21.1		
Primary (peficit	• .																
Result of Grants	•																
Primary (noninterest) expenditure 21 9	•				2.5	2.0							1.8			0.6	
Primary (noninterest) expenditure	· · · · · · · · · · · · · · · · · · ·																
Automatic debt dynamics	•																
Contribution from interest rate (growth differential 1.3 2.7 0.8 0.1 0.0																	
Of which: contribution from average real interestrate	· · · · · · · · · · · · · · · · · · ·																
Contribution from real GDP growth	•																
Contribution from real exchange rate depreciation	<u> </u>																
Other identified debt-creating flows -0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0																	
Privatization receipts (negative)	· · · · · · · · · · · · · · · · · · ·																
Recognition of implicit or contingent liabilities	· ·																
Debt relief (HIPC and other) 0.0	, , , ,																
Other (specify, e.g., bank recapitalization) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.																	
Residual, including asset changes 2/ 10 10 10.6 1.12 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	,																
PV of public sector debt	, , ,	1.0	10.6					-0.5	-1.4	-1.1	0.1			1.2	0.5		
Of which: foreign-currency denominated 0.0 27.8 30.0 30.3 28.1 26.5 26.1 25.8 24.9 19.4 Of which: external 27.8 30.0 30.3 28.1 26.5 26.1 25.8 24.9 19.4 PV of contingent liabilities (not included in public sector debt-to-revenue and grants ratio (in percent)	Other Sustainability Indicators																
Of which : external Continue Continue	PV of public sector debt		4.5	32.7			35.2	35.7	34.3	33.3	33.4	34.2		40.1	40.5		
PV of contingent liabilities (not included in public sector debt)	Of which: foreign-currency denominated		0.0	27.8			30.0	30.3	28.1	26.5	26.1	25.8		24.9	19.4		
Gross financing need 3/ PV of public sector debt-to-revenue and grants ratio (in percent) 21.4 158.3 PV of public sector debt-to-revenue and grants ratio (in percent) 22.1 168.2 PV of public sector debt-to-revenue ratio (in percent) 22.1 168.2 PV of public sector debt-to-revenue ratio (in percent) 22.1 168.2 PV of public sector debt-to-revenue ratio (in percent) 22.1 168.2 PV of public sector debt-to-revenue ratio (in percent) 22.1 168.2 PV of public sector debt-to-revenue ratio (in percent) 22.1 168.2 PV of public sector debt-to-revenue ratio (in percent) 142.9 PV of public se	Of which: external			27.8			30.0	30.3	28.1	26.5	26.1	25.8		24.9	19.4		
PVof public sector debt-to-revenue and grants ratio (in percent) 21.4 158.3 162.4 169.5 161.6 154.9 154.1 156.5 176.3 163.8 PVof public sector debt-to-revenue ratio (in percent) 22.1 168.2 175.9 172.5 163.8 156.7 155.7 158.0 177.1 164.1 Of which : external 4/ 142.9 149.7 146.3 149.7 146.3 134.3 124.8 121.8 119.1 110.1 78.6 Debt service-to-revenue and grants ratio (in percent) 5/ 12.2 15.2 19.6 18.6 19.6 19.6 19.6 19.6 19.6 19.4 26.7 20.9 16.3 17.6 23.0 23.5 Primary deficit that stabilizes the debt-to-GDP ratio 1.4 -16.9 5.6 19.6 19.6 19.6 19.6 19.6 19.6 19.6 19	PV of contingent liabilities (not included in public sector debt)																
PV of public sector debt-to-revenue ratio (in percent) 22.1 168.2 175.9 172.5 163.8 156.7 155.7 158.0 177.1 164.1 Of which : external 4/ 142.9 149.7 146.3 134.3 124.8 121.8 119.1 110.1 78.6 Debt service-to-revenue and grants ratio (in percent) 5/ 12.2 15.2 19.6 11.6 19.4 26.7 20.9 16.3 17.6 23.0 23.5 Debt service-to-revenue ratio (in percent) 5/ 12.5 15.7 20.8 12.5 15.7 20.8 12.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 Primary deficit that stabilizes the debt-to-GDP ratio 1.4 -16.9 5.6 20.8 20.0 2.1 1.0 Exerging the debt-to-GDP ratio 1.4 -16.9 5.6 20.0 2.1 2.1 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	Gross financing need 3/	4.2	11.2	9.8			6.2	7.6	8.3	7.2	6.4	6.8		10.0	12.3		
Of which: external 4/ 1.42.9 149.7 146.3 134.3 124.8 121.8 119.1 110.1 78.6 Debt service-to-revenue and grants ratio (in percent) 5/ 12.2 15.2 19.6 11.6 19.4 26.7 20.9 16.3 17.6 23.0 23.5 Debt service-to-revenue ratio (in percent) 5/ 12.5 15.7 20.8 12.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 Primary deficit that stabilizes the debt-to-GDP ratio 1.4 -16.9 5.6 -0.4 0.8 2.3 2.2 1.2 0.5 0.2 1.0 Key macroeconomic and fiscal assumptions Real GDP growth (in percent) 6.9 -14.1 2.1 8.3 8.8 4.6 4.0 4.0 4.0 4.1 4.0 4.0 4.0 4.0 4.1 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.1 4.0 4.0 4.0 4.0 4.0 4.0	PV of public sector debt-to-revenue and grants ratio (in percent)						162.4										
Debt service-to-revenue and grants ratio (in percent) 5/ 12.2 15.2 19.6 11.6 19.4 26.7 20.9 16.3 17.6 23.0 23.5 Debt service-to-revenue ratio (in percent) 5/ Primary deficit that stabilizes the debt-to-GDP ratio 1.4 -16.9 5.6 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 Primary deficit that stabilizes the debt-to-GDP ratio 1.4 -16.9 5.6 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.6 23.0 23.5 1.7 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.7 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.8 17.0 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.8 17.0 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.8 17.0 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.8 17.0 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.8 17.0 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.8 17.0 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.8 17.0 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.8 17.0 1.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 1.8 1.8 2.1 2.1 2.1 2.1 23.1 23.5 1.8 1.8 2.1 2.1 2.1 2.1 23.1 23.5 1.8 1.8 2.1 2.1 2.1 2.1 23.1 23.5 1.8 1.8 2.1 2.1 2.1 23.1 23.5 1.8 1.8 2.1 2.1 2.1 23.1 23.5 1.8 1.8 2.1 2.1 2.1 23.1 23.5 1.8 1.8 2.1 2.1 2.1 23.1 23.5 1.8 2.1 2.1 2.1 23.1 23.5 1.9 2.1 2.1 2.1 23.1 23.5 1.0 2.1 2.1 2.1 23.1 23.5 1.0 2.1 2.1 2.1 23.1 23.5 1.0 2.1 2.1 2.1 23.1 23.5 23.1 23.5 23.1 23.5 23.1 23.5 23.1 23.5 24.1 2.0 5.5 13.6 24.1 2.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4			22.1														
Debt service-to-revenue ratio (in percent) 5/ 12.5 15.7 20.8 12.5 19.8 27.0 21.1 16.5 17.8 23.1 23.5 Primary deficit that stabilizes the debt-to-GDP ratio 1.4 -16.9 5.6 -0.4 0.8 2.3 2.2 1.2 0.5 0.2 1.0 Key macroeconomic and fiscal assumptions Real GDP growth (in percent) 6.9 -14.1 2.1 8.3 8.8 4.6 4.0 4.0 4.0 4.0 4.0 4.0 4.1 4.0 4.0 4.0 4.0 4.0 4.1 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0																	
Primary deficit that stabilizes the debt-to-GDP ratio 1.4 -16.9 5.6 -0.4 0.8 2.3 2.2 1.2 0.5 0.2 1.0	• • • • • •																
Real GDP growth (in percent) 6.9 -14.1 2.1 8.3 8.8 4.6 4.0 4.0 4.0 4.0 4.0 4.0 4.1 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	, , , ,																
Real GDP growth (in percent) 6.9 -14.1 2.1 8.3 8.8 4.6 4.0 4.0 4.0 4.0 4.0 4.0 4.1 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	Key macroeconomic and fiscal assumptions																
Average nominal interest rate on forex debt (in percent) 0.8 1.7 1.5 0.8 0.6 1.8 2.0 2.0 1.8 1.7 1.8 1.8 2.6 3.7 2 Average real interest rate on domestic debt (in percent) 4.1 6.9 1.9 5.0 2.1 8.5 5.5 5.0 5.6 5.9 6.4 6.2 1.1 -0.5 0 Real exchange rate depreciation (in percent, + indicates depreciation) -17.1 -1.8 24.7 -3.5 13.7 3.9	·	6.9	-14.1	2.1	8.3	8.8	4.6	4.0	4.0	4.0	4.0	4.0	4.1	4.0	4.0	4.0	
Average real interest rate on domestic debt (in percent) 4.1 6.9 1.9 5.0 2.1 8.5 5.5 5.0 5.6 5.9 6.4 6.2 1.1 -0.5 0 Real exchange rate depreciation (in percent, + indicates depreciation) -17.1 -1.8 24.7 -3.5 13.7 3.9																2.9	
Real exchange rate depreciation (in percent, + indicates depreciation) -17.1 -1.8 24.7 -3.5 13.7 3.9	-																
Inflation rate (GDP deflator, in percent) 5.9 2.6 9.2 4.7 2.0 5.7 4.8 4.5 4.0 4.0 4.0 4.5 4.0 4.0 4.0 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) 0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.0 0.0 0.0																	
							19.6	21.6	16.5	9.1	6.1	5.2	13.0	0.6	-2.3		

^{1/} Central government gross debt.

^{2/} Residuals include changes in gross foreign assets and valuation adjustments. For 2009, the large residual is mainly due to the on-lending activities. For projection also includes contribution from price and exchange rate changes.

^{3/} 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.

^{4/} Revenues excluding grants.

^{5/} Debt service is defined as the sum of interest and amortization of medium and long-term debt.

Table 3. Armenia: Sensitivity Analysis for Key Indicators of Public and Publicly-Guaranteed External Debt, 2011–31 (In percent)

	Projections								
•	2011	2012	2013	2014	2015	2016	2021	2031	
PV of debt-to-GDP+remitt	ances ratio	0							
Baseline	28	28	26	25	24	24	24	19	
A. Alternative Scenarios									
1. Key variables at their historical averages in 2011–31 1/	28	23	18	16	16	16	14	7	
New public sector loans on less favorable terms in 2011–31 2/ Alternative Scenario : Nairit loan	28 28	29 30	27 29	26 28	26 27	26 27	28 25	30 19	
Bound Tests									
Real GDP growth at historical average minus one standard deviation in 2012–31	28	29	28	27	26	26	25	20	
. Export value growth at historical average minus one standard deviation in 2012–13 3/	28	30	32	31	30	30	27	19	
B. U.S. dollar GDP deflator at historical average minus one standard deviation in 2012–13	28	28	27	26	25	25	24	19	
4. Net nondebt creating flows at historical average minus one standard deviation in 2012–13 4/	28	29	30	28	28	28	26	19	
5. Combination of B1-B4 using one-half standard deviation shocks	28	26	24	23	22	22	22	17	
6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	28	39	36	34	34	33	32	26	
PV of debt-to-exports+remi	ittances ra	tio							
aseline	105	101	89	82	80	79	75	56	
Alternative Scenarios									
1. Key variables at their historical averages in 2011–31 1/	105	82	63	56	56	57	49	24	
2. New public sector loans on less favorable terms in 2011–31 2/	105	102	93	87	86	86	90	88	
B. Alternative Scenario : Nairit Ioan	105	106	99	91	88	86	79	56	
Bound Tests									
Real GDP growth at historical average minus one standard deviation in 2012–13 Event value growth at historical average minus one standard deviation in 2012–13 Event value growth at historical average minus one standard deviation in 2012–13	105 105	98 114	88 128	81 119	79 116	78 115	74 102	55 67	
2. Export value growth at historical average minus one standard deviation in 2012–13 3/									
3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2012–13	105 105	98 103	88 100	81 93	79 91	78 90	74 82	55 56	
4. Net nondebt creating flows at historical average minus one standard deviation in 2012–13 4/	105	94	85	93 82	80	79	82 75	56	
5. Combination of B1-B4 using one-half standard deviation shocks 6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	105	98	88	81	79	79 78	75 74	55	
PV of debt-to-revenu	e ratio								
aseline	150	146	134	125	122	119	110	79	
. Alternative Scenarios									
Key variables at their historical averages in 2011–31 1/	150	116	91	79	78	79	63	31	
2. New public sector loans on less favorable terms in 2011–31 2	150	148	140	133	131	130	133	125	
B. Alternative Scenario : Nairit Ioan	150	154	149	138	135	131	116	79	
Bound Tests									
Real GDP growth at historical average minus one standard deviation in 2012–13	150	149	144	134	131	128	119	85	
2. Export value growth at historical average minus one standard deviation in 2012–13 3/	150	153	164	155	151	148	127	79	
B. U.S. dollar GDP deflator at historical average minus one standard deviation in 2012–13	150	146	138	129	126	124	114	81	
4. Net nondebt creating flows at historical average minus one standard deviation in 2012–13 4/	150	151	152	143	139	136	120	79	
5. Combination of B1-B4 using one-half standard deviation shocks	150	136	121	113	111	109	101	72	
6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	150	204	188	176	172	168	155	111	

Table 3. Armenia: Sensitivity Analysis for Key Indicators of Public and Publicly-Guaranteed External Debt, 2011–31 (continued)

(In percent)

	Projections										
	2011	2012	2013	2014	2015	2016	2021	2031			
Debt service-to-exports+remitte	nces ratio										
Baseline	4	8	12	8	5	5	7	7			
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2011–31 1/	4	7	10	6	3	3	3	2			
A2. New public sector loans on less favorable terms in 2011–31 2/ A3. Alternative Scenario : Nairit loan	4 4	8 8	13 13	8 8	5 5	5 5	8 8	11 7			
B. Bound Tests											
B1. Real GDP growth at historical average minus one standard deviation in 2012–13	4	8	12	8	5	5	7	7			
B2. Export value growth at historical average minus one standard deviation in 2012–13 3/	4	9	15	10	6	7	11	8			
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2012–13	4	8	12	8	5	5	7	7			
B4. Net nondebt creating flows at historical average minus one standard deviation in 2012–13 4/	4	8	13	9	5 5	5 5	8 7	7 7			
B5. Combination of B1-B4 using one-half standard deviation shocks B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	4 4	8 8	12 12	8 8	5 5	5 5	7	7			
bu. One-time so percent normal depreciation relative to the baseline in 2012 si	7	O	12	O	3	3	,	,			
Debt service-to-revenue	ratio										
Baseline	5	12	19	12	7	7	10	10			
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2011–31 1/	5	10	14	8	4	4	4	3			
A2. New public sector loans on less favorable terms in 2011–31 2/	5	12	19	13	8	8	12	16			
A3. Alternative Scenario : Nairit	5	12	19	13	7	8	11	10			
B. Bound Tests											
B1. Real GDP growth at historical average minus one standard deviation in 2012–13	5	12	20	13	8	8	11	10			
B2. Export value growth at historical average minus one standard deviation in 2012–13 3/	5	12	19	13	8	8	13	10			
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2012–13	5	12	20	13	8	8	11	10			
B4. Net nondebt creating flows at historical average minus one standard deviation in 2012–13 4/	5	12	19	13	8	8	12	10			
B5. Combination of B1-B4 using one-half standard deviation shocks	5	11	17	11	7	7	9	9			
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	5	17	27	18	10	11	15	14			
Memorandum item:											
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	2	2	2	2	2	2	2	2			

^{1/} Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and nondebt 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.

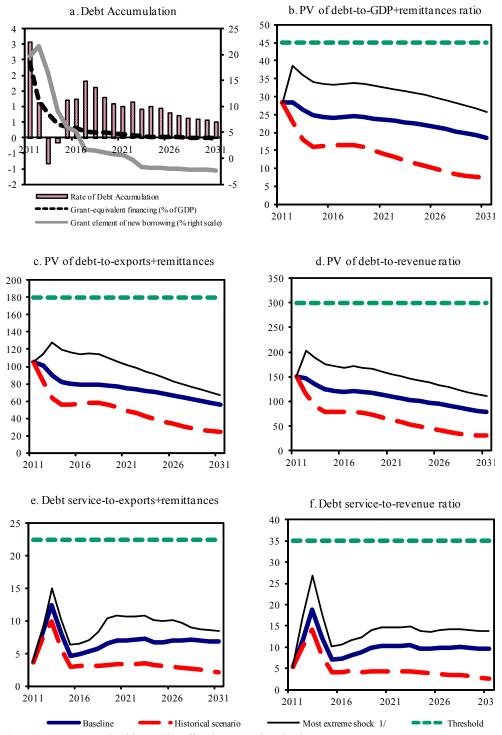
^{6/} Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Table 4. Armenia: Sensitivity Analysis for Key Indicators of Public Debt 2011–31

	Projections									
	2011	2012	2013	2014	2015	2016	2021	2031		
PV of Debt-to-GDP Ratio										
Baseline	35	36	34	33	33	34	40	40		
A. Alternative scenarios										
A1. Real GDP growth and primary balance are at historical averages A2. Primary balance is unchanged from 2011 A3. Permanently lower GDP growth 1/ A4. Alternative scenario: Nairit loan	35 35 35 35	35 36 37 37	34 36 37 37	33 37 38 36	34 38 40 36	35 41 44 37	41 54 72 41	43 69 162 40		
B. Bound tests										
B1. Real GDP growth is at historical average minus one standard deviations in 2012–13 B2. Primary balance is at historical average minus one standard deviations in 2012–13 B3. Combination of B1-B2 using one half standard deviation shocks B4. One-time 30 percent real depreciation in 2012 B5. 10 percent of GDP increase in other debt-creating flows in 2012	35 35 35 35 35	38 38 37 49 46	40 40 38 48 44	41 39 37 46 43	43 39 37 46 43	46 40 38 47 43	61 45 44 53 48	79 45 44 56 47		
PV of Debt-to-Revenue Ratio	2/									
Baseline	162	169	162	155	154	156	176	164		
A. Alternative scenarios										
A1. Real GDP growth and primary balance are at historical averages A2. Primary balance is unchanged from 2011 A3. Permanently lower GDP growth 1/ A4. Alternative Scenario: Nairit loan	162 162 162 162	166 172 174 177	159 170 173 176	155 170 175 168	156 176 184 167	160 185 199 169	180 238 316 182	174 279 655 164		
B. Bound tests										
B1. Real GDP growth is at historical average minus one standard deviations in 2012–13 B2. Primary balance is at historical average minus one standard deviations in 2012–13 B3. Combination of B1-B2 using one half standard deviation shocks B4. One-time 30 percent real depreciation in 2012 B5. 10 percent of GDP increase in other debt-creating flows in 2012	162 162 162 162 162	181 182 177 235 217	190 190 181 224 208	191 183 174 215 200	199 181 173 213 198	210 183 175 214 199	269 199 193 232 213	318 181 179 225 192		
Debt Service-to-Revenue Ratio	2/									
Baseline	12	19	27	21	16	18	23	24		
A. Alternative scenarios										
A1. Real GDP growth and primary balance are at historical averages A2. Primary balance is unchanged from 2011 A3. Permanently lower GDP growth 1/ A4. Alternative Scenario: Nairit loan	12 12 12 12	19 19 20 20	25 27 28 27	19 21 22 21	15 17 18 17	16 19 20 18	19 27 33 24	19 34 65 24		
B. Bound tests										
B1. Real GDP growth is at historical average minus one standard deviations in 2012–13 B2. Primary balance is at historical average minus one standard deviations in 2012–13 B3. Combination of B1-B2 using one half standard deviation shocks B4. One-time 30 percent real depreciation in 2012 B5. 10 percent of GDP increase in other debt-creating flows in 2012	12 12 12 12 12	20 19 19 22 19	29 27 27 35 29	23 22 22 27 23	19 18 17 20 18	21 19 18 22 19	30 26 25 31 27	38 25 25 34 27		

^{1/} Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period. 2/ Revenues are defined inclusive of grants.

Figure 1. Armenia: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2011-2031 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2021. In figure b. it corresponds to a One-time depreciation shock; in c. to a Exports shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock

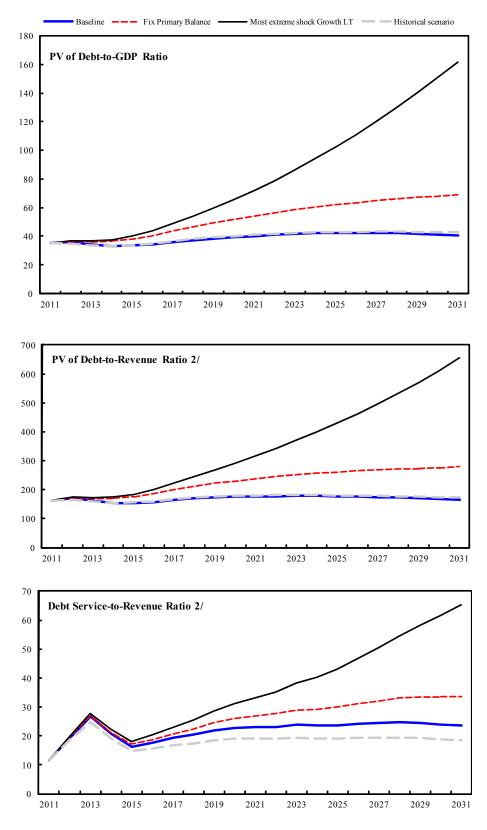


Figure 2. Armenia: Indicators of Public Debt Under Alternative Scenarios, 2011-2031 1/

 $Sources: Country\ authorities; and\ staff\ estimates\ and\ projections.$

 $^{1\!/}$ The most extreme stress test is the test that yields the highest ratio in 2021.

^{2/} Revenues are defined inclusive of grants.

Press Release No. 11/344 FOR IMMEDIATE RELEASE September 22, 2011

International Monetary Fund Washington, D.C. 20431 USA

Statement at the Conclusion of an IMF Staff Mission to Armenia

An International Monetary Fund (IMF) mission led by Mr. Mark Horton visited Yerevan during September 7 - September 20 to conduct discussions for the Third Review of the Extended Fund Facility (EFF)/Extended Credit Facility (ECF) arrangements. At the conclusion of the visit, Mr. Horton issued the following statement:

"Discussions were productive and there was progress on the set of policies and actions for the rest of 2011 and 2012. Further discussions will be conducted in Washington, DC during the Annual Meetings of the IMF and the World Bank later this week.

"Overall macroeconomic conditions have improved. As a result of a rebound in the agricultural sector and dynamic industry and services sectors, growth outturns are set to improve this year in line with our previous projection of 4.6 percent growth. With less supportive external conditions, the growth projection was reduced to 4 percent in 2012 with risks markedly tilted to the downside. Inflation has significantly moderated, driven by falling global commodity prices and the agricultural rebound. Headline inflation reached 4.8 percent in August (year over year), and is expected to remain subdued in the rest of 2011 and 2012.

"Program performance remains broadly satisfactory. The fiscal balance has continued to improve, with the overall deficit expected to come down to below 4 percent in 2011 from 5 percent in 2010. In order to ensure debt sustainability, the deficit is expected to continue to be reduced in 2012. However, the government still expects to create fiscal space to support private sector-led growth and reduce poverty with the implementation of a strong package to increase tax revenues. The package will be based on new legislative initiatives and renewed tax administration efforts.

"The Central Bank continues to show a commitment to a flexible exchange rate and the inflation targeting regime, engaging in limited foreign exchange interventions to smooth volatility. Central Bank also continues to further improving tools to monitor risks in the banking system.

"The structural agenda continues to progress, with signs of improvement in the business environment mainly in the area of inspection, competition legislation, business registration processes, and VAT refunds.

"The mission met with President Serzh Sargsyan, Prime Minister Tigran Sargsyan, Minister of Finance Vache Gabrielyan, Central Bank Governor Arthur Javadyan, Minister of Economy Tigran Davtyan, Minister of Energy and Natural Resources Armen Movsisyan, Minister of Agriculture Sergo Karapetyan, as well as senior government officials, representatives of the international community, the banking and business sectors, and civil society. The mission would like to thank the authorities and the citizens of Armenia for their warmth and hospitality."

Statement by Mr. Yakusha and Mr. Sargsyan on Republic of Armenia Executive Board Meeting December 12, 2011

The Armenian authorities would like to thank staff for their continued and valuable advice on macroeconomic policies. The Fund's long-lasting engagement with Armenia has always been highly appreciated and its support has been crucial for getting the country's economy back on the path of stabilization. The current ECF/EFF arrangement will continue helping Armenia in restoring stability, fostering growth and rebuilding its macroeconomic buffers.

The performance under the program has been good, and all performance criteria except one were met with wide margins. The end-June performance criterion on net domestic assets was missed by a small margin for a few days due to delays in donor budgetary support.

Macroeconomic situation

Economic growth has been strong throughout the year, albeit a little uneven. The agricultural sector, which underperformed last year due in part to bad climatic conditions, has strongly rebounded. The economy, however, remains confronted with challenges. While private remittances from abroad, which were fueling the real estate boom prior to the crisis, have picked up strongly, the construction sector remains weak. On the other hand, mining and services contributed to growth, with the former picking up amid higher global prices on metals in the first half of the year.

The current account deficit continues its downward trend and is projected to reach levels below 8 percent of GDP in the medium term. The Armenian authorities believe that the current account deficit will shrink faster than envisaged by the program. Recently, the government has presented a set of policy initiatives with long-term diversification of exports in various sectors as compared to the current highly concentrated exports. The authorities have also reiterated their commitments to accelerate reforms to start negotiations on Free Trade Agreement (DCFTA) with the European Union.

The Central Bank's recent analysis shows that it is premature to conclude that the exchange rate is under- or overvalued in real and nominal effective terms. A further depreciation in real terms may not necessarily close the current account gap, because of the structural issues in the balance of payments, such as high concentration of imports that hinders imports substitution. The authorities are well aware of these bottlenecks and so far have been successfully addressing these issues through enhanced monitoring and enforcement action of the anti-monopoly commission, as well as through other measures encouraging investments and removing entry barriers.

Monetary policy

Maintaining a low rate of inflation will remain the Central Bank's main priority. As predicted by the authorities, inflation has returned to its target band of 4+/- 1.5 percent and currently

stands at 4.8 percent, after peaking at 11.5 percent in March 2011. This would have not been possible without timely intervention of the Central Bank and structural policy measures taken by the government, including targeted support for interest payments on commercial loans borrowed by farmers and government import and distribution of high-quality seeds. Increased global uncertainties may create challenges for the Central Bank in conducting monetary policy in the future. In its most recent policy meeting in early December, the CBA opted to leave the policy rate at 8 percent, as its projections show that inflation will comfortably stay in the target band in the forecasted period.

While the authorities remain committed to the flexible exchange rate policy, the stability of the dram has been beneficial in anchoring expectations and reducing the output volatility. Foreign exchange interventions have so far been conducted to smooth out unexpected spikes in the exchange rate and have been in small amounts. To improve the transmission mechanism and to lower volatility in the foreign exchange markets, the Central Bank has started to make available to commercial banks its liquidity forecasts in order to facilitate the effectiveness of policy implementation.

The financial sector remains sound. Banks are well-capitalized, while the system overall remains resilient to external shocks due to high reliance on local deposit financing. The authorities look forward to the forthcoming World Bank-IMF FSAP Update.

Fiscal Policy

Committed to ensuring debt sustainability, the authorities have further reduced the fiscal deficit, and currently target a deficit of 3.1 percent of GDP in 2012. However, the revenue performance has lagged behind, and the deficit reduction came mostly at the expense of cuts in expenditures. Therefore, for 2012, the authorities have set a target to increase tax revenues by 0.6 percents in GDP. This increase will come not only from continued progress in tax administration, but also as a result of tax reforms. These tax reforms draw on recommendations by the IMF technical assistance provided in February and June. One of the important tax policy changes is the amendment to the tax code on mining royalties. Other tax policy measures include changes in the personal and corporate income tax, and in excise and presumptive tax rates. A comprehensive Tax Strategy paper that outlines the implementation plan and future measures will be approved by end-December 2011.

The authorities have been considering concessional external borrowing to revive Armenia's chemical industry. The sector once was one of the main drivers of the economy. The Nairit chemical plant, which produces synthetic rubber, has been the engine behind the chemical industry, providing around 3,000 workplaces and jobs in suppliers and other companies in the sector. Reviving this chemical giant remains crucial to the sector in general. A preliminary assessment shows that there is a business case and with proper management and technological modernization the plant can be turned into a profitable venture. However, recognizing the complexity and risks of this operation, the authorities are moving cautiously to find a private-sector led solution that will minimize exposure of the government and use of

public funds. The authorities are committed not to assume any liability without consultations with the IMF and the World Bank.

ECF/EFF arrangement

The ECF/EFF arrangement has helped Armenia restore buffers and prepare for macroeconomic shocks from a possible global downturn. However, the most recent household survey revealed a further elevation of the poverty level in Armenia, reaching 35 percent of population as a result of the recent crisis. While the ECF/EFF arrangement continues to provide a strong framework for sustainable growth and poverty reduction, an abrupt decline in exports, remittances and FDI would place substantial pressures on Armenia, and additional resources may well be needed to avert a further deepening of social vulnerabilities.