3. Caucasus and Central Asia: Economic Activity
Resilient, but Uncertainty Remains

The CCA countries continue to do well at safeguarding their recovery from the global crisis, and their economic outlook remains broadly favorable. This positive outlook reflects the region’s moderating direct exposure to Europe, the benefits of high oil prices for hydrocarbon exporters, and, for the oil importers, still-supportive commodity prices and robust remittances. Headwinds come from a slowdown of world commodity demand and rising global food prices. Growth is projected to slow marginally in 2012–13, mainly on account of lower growth in oil and gas production, and inflation is likely to remain muted. The authorities should continue to rebuild policy space, address vulnerabilities, and tackle deep structural obstacles to inclusive growth. Ensuring that all businesses, not just connected firms, can thrive, remains vital for job creation.

Oil and Gas Exporters

Exporters See Solid Growth and Moderating Inflation

Overall growth in 2012–13 is projected to moderate slightly for CCA oil and gas exporters following its strong post-Lehman rebound in 2010–11. Growth is projected at about 5½ percent in both 2012 and 2013. Lower aggregate growth for the oil and gas exporters reflects mainly continued limited growth in the energy sector, particularly in the two largest oil economies of the region, Azerbaijan and Kazakhstan (Figure 3.1). Growth in the oil and gas sector is projected to increase marginally to 1.7 percent in 2012 from 1.4 percent in 2011, and then fall back to about 1 percent in 2013. However, the Turkmen gas sector is expected to continue to expand strongly via a new pipeline to China, with Uzbekistan’s link becoming operational in September 2012 (Figure 3.2).

Growth in the non-oil sectors of these countries is also projected to moderate, partly reflecting reduced crops in 2012 following the exceptional harvest of 2011. Overall non-oil growth in the oil and gas exporters, driven by continued public spending, is projected to decelerate to 6.6 percent in 2012 and 2013, from 9.2 percent in 2011 (Figure 3.3).

Prepared by Gabriel Sensenbrenner with input from country teams.
Inflation has been brought down from the elevated levels of 2011, although abundant local harvests in 2011 and lower global food prices during the first half of 2012 also played a part (Figure 3.4). Average consumer price inflation is projected to fall from 8.9 percent in 2011 to 6.3 percent in 2012, mainly on account of successful policies in Azerbaijan and Kazakhstan, where headline inflation has fallen to record low levels. Inflation is forecast to pick up to 7.3 percent in 2013, reflecting the expansionary fiscal stances in place for 2012, tariff increases in Kazakhstan, and possible pass-through of global food prices that started to increase in mid-2012. Governments continue to act through public enterprises to control local food prices, and global developments had limited impact on local prices in 2011. Inflation in Uzbekistan will likely remain in double digits as the authorities raise administered prices. Across this group of countries, monetary policy remains neutral to accommodative, partly reflecting inflexible exchange rate regimes, with Kazakhstan having lowered policy rates four times in 2012.

**Comfortable External and Fiscal Buffers**

Overall current account balances are projected to post continued surpluses in 2012 and 2013, although at lower levels than in previous years, owing mainly to lower projected global energy prices (Figure 3.5). Turkmenistan’s sustained public investment program, including its investments in the gas sector, will, however, result in small deficits in both years. All countries are likely to record further increases in reserves and/or foreign assets in sovereign wealth funds (Figure 3.6), but gross external debts of the public and private sectors will remain minimal, with the notable exception of Kazakh private debt. Assessments of exchange rate levels indicate neutral to mild undervaluation in Azerbaijan, Kazakhstan, and Uzbekistan, and neutral to mild overvaluation in Turkmenistan.

Overall fiscal surpluses in the CCA oil and gas exporters are projected to decline, owing mainly to lower global oil prices; Turkmenistan is the main exception, with growing gas exports to China. Non-oil fiscal deficits are expected to remain at multiyear highs of about 20 percent (of non-oil GDP) in 2012,
before falling in 2013 to about 17 percent across the board (Figure 3.7). Although—with the exception of Azerbaijan—these countries’ deficits are much lower than those of the MENA oil exporters, the recent pace of public spending may pose overheating risks, with very high rates of public investment raising questions about economic returns.

The steady increase in breakeven fiscal oil and natural gas prices also makes budgets vulnerable to sustained declines in global energy prices (Figure 3.8). However, rising levels of government financial wealth, in the form of deposits in the local banking system or sovereign wealth reserves held abroad, translate into significant capacity to act countercyclically in the presence of an adverse oil shock (Figure 3.9).
Governance Constrains Inclusive Growth, Social Stability

Measurement of fiscal balances and the fiscal policy stance is subject to large margins of error, given generally opaque public financial management systems, sizable revenues from mineral commodities in some cases, and poor transparency in the management of resource wealth; Azerbaijan stands out for its highly transparent oil fund. Other symptoms of weak governance include the widespread reliance on quasi-fiscal activities by national nonrenewable resource companies and other state-related businesses, use of government-controlled banks or funds to direct lending and investment to connected borrowers and strategic enterprises, and bailouts of private bank shareholders. Improved governance would help reduce the size of the informal sector of the economy, extend the social safety net to the most vulnerable, and ensure a fairer distribution of resource wealth (Annex 3.1).

Financial Sector Repair a Lingering Issue

The region has not been immune to banking sector risks. High credit growth in the period leading up to the global financial crisis, as well as directed credit by state-related banks, has impaired the banking system in Azerbaijan and Kazakhstan. Forbearance has allowed some banks to continue operating, but resilient economic growth has helped mask the underlying stress on weak banks. In Turkmenistan, credit to the private sector, which excludes state enterprises, has grown in excess of 70 percent per year since 2007, potentially compromising bank soundness.

Oil and Gas Importers Economic Activity Resilient, but Policy Space Insufficient

Overall growth in CCA oil and gas importers will remain firm at about 5 percent in 2012 and increase to 5.8 percent in 2013, notwithstanding the softness in global commodity markets (Figure 3.10). Georgia, the group’s largest economy, is expected to continue to perform strongly, fueled by healthy activity in services and manufacturing and strong investment. But the wide current account deficit and uncertainties associated with the political transition remain a risk. Weaknesses in real estate will continue to constrain growth in Armenia, the second-largest CCA oil importer. The Kyrgyz Republic will underperform in 2012 on account of delays in gold production (representing about 12 percent of GDP) and lower agricultural output; a rebound is projected for 2013 (Box 3.1). Remittances from Russia to CCA oil importers have grown in excess of 25 percent year over year, and are a major driver of CCA growth (Figure 3.11).
The Kyrgyz economy is one of the most open in the region and depends on gold exports, remittances, and intermediating trade between China and the Commonwealth of Independent States. Rising international gold prices and an increase in mining volumes have tripled the share of gold exports in total exports over the past five years (Figure 1). Relative to its size, the Kyrgyz economy is one of the largest recipients of remittances in the world—remittances (mostly from Russia) are 20 times what they were a decade ago.

In 2010, a popular uprising—the second after independence—led to a temporary drop in growth and exacerbated financial sector problems. Political unrest led to a deterioration of the security situation, particularly in the south of the country. The economy, which had grown at an annual average rate of 6 percent in 2006–09, shrank by 0.5 percent. Asia Universal Bank (AUB), which accounted for 50 percent of banking system deposits, experienced a massive outflow of nonresident deposits. AUB's assets also shrank sharply as loan performance deteriorated, mainly because of connected and insider lending. Subsequently, AUB was nationalized. The central bank also introduced temporary administration in six other banks to prevent capital flight and limit contagion.

More recently, greater political stability and the authorities’ efforts have restored growth. In 2010–11, an interim government introduced constitutional reforms that strengthened the role of parliament and reduced the powers of the executive. Subsequent elections, which gave the voters a choice of political alternatives, led to the formation of a multiparty parliament and a coalition government. Economic growth recovered to 5.7 percent in 2011, supported by a favorable external environment and timely involvement of the international donor community. The crisis prompted the central bank to embark on comprehensive legal reforms and resolve the remaining problem banks to address weaknesses and restore confidence in the financial sector. Although the collapse of the ruling coalition in August 2012 created uncertainty, it was short-lived as a new government was swiftly formed. Temporary delays in gold production are the main reason behind the expected decline in growth to about 1 percent in 2012; the pace of economic activity is expected to rebound rapidly in 2013–14 (Figure 2).

The Kyrgyz authorities are keen to achieve sustainable and inclusive private sector-led growth. To this end, strengthening governance and combating corruption, along with improving the business climate, will be key. Fiscal consolidation will play a pivotal role in safeguarding macroeconomic stability and rebuilding policy buffers. Finally, restoring the health of the country’s financial sector will foster a more effective allocation of scarce resources, thereby supporting growth.

Prepared by Christian Beddies, David Amaglobeli, and Bahrom Shukurov.
Inflation Low, but Sensitive to Global Food Prices

Rapidly falling food inflation and appropriate monetary policy have pulled average inflation down from 10.7 percent in 2011 to 2.6 percent in 2012 in the CCA oil and gas importers (Figure 3.12). Average annual inflation for 2012 is projected at less than 3 percent in Armenia and the Kyrgyz Republic, and virtually zero in Georgia. Average inflation is expected to rebound to 6.5 percent in 2013, as recent increases in global food prices begin to spill over in light of the high sensitivity of local food prices to global prices, although Armenia’s inflation will stay low on account of a strong 2012 harvest. Core inflation remains elevated in the Kyrgyz Republic and Tajikistan.

Exchange Rate Flexibility Needed to Shore Up External Buffers

Prices for commodity exports, though lower than in 2011, have so far not widened current account deficits, except in Georgia, where strong growth and currency appreciation have prompted a surge in imports (Figure 3.13). The much larger external deficit in the Kyrgyz Republic reflects...
an unusually high oil bill and temporary delays in gold production. Current account deficits are projected to remain elevated in Armenia and Georgia; some overvaluation of exchange rates is likely to have played a role. With foreign direct investment not having recovered to precrisis levels, financing gaps in 2012–13 will be mainly covered by a drawdown of international reserves and official sources in Armenia and eurobond financing in Georgia. Tajikistan stands out in this group as having achieved current account positions in broad equilibrium over the past few years, as large remittance flows (one-half of the labor force works abroad) offset trade deficits. In the Kyrgyz Republic, progress in compiling external debt statistics has disclosed an almost 30 percentage point higher external debt-to-GDP ratio, primarily owing to lending intermediated by offshore vehicles.

**Fiscal Space Insufficient to Accommodate Large Shocks**

Efforts to rebuild fiscal buffers are proceeding, but fall short of what is needed to enable countercyclical action in the event of a serious downturn in commodity markets (Figure 3.14). Some deterioration in overall fiscal balances is projected for 2012, but this reflects mainly the circumstances of the Kyrgyz Republic (gold-related revenues expected in 2012 will materialize in 2013) and Tajikistan (wages and social spending). In all four countries, fiscal deficits are projected to narrow in 2013 through tighter control over spending and some delays in public investment projects (Armenia, Tajikistan). Accordingly, government debt-to-GDP ratios are expected to remain on declining paths, particularly in Georgia, where fiscal consolidation was rewarded with rating upgrades in November 2011.

Quasi-fiscal liabilities, including those relating to weak state banks, cloud the debt outlook in Tajikistan, and potentially in the Kyrgyz Republic. Governance issues remain high on the policy agenda in both countries, where, as in Armenia, the playing field for large and small businesses is not level. Better governance would help promote the formal economy, contribute to greater sharing of economic gains, and improve productivity.

**Downside Risks: Moderate Impact from Euro Area Crisis**

Downside risks to the economic outlook across the CCA region are largely related to developments in global commodity and energy markets, though substantial tail risks remain with respect...
practices (Figure 3.15). More recently, remittances from expatriates working in Russia have become a significant driver of economic activity in Armenia, the Kyrgyz Republic, and Tajikistan (IMF, 2011d). To a large extent, the synchronicity of economic cycles reflects hydrocarbon revenues as a common factor driving these economies; as such, it includes inward investments and remittances that fluctuate with Russia’s own hydrocarbon revenues. Synchronicity between the economies of Armenia and Russia, on the one hand, appears to have strengthened somewhat since the global financial crisis, possibly on account of greater remittance linkages (Box 3.3). On the other hand, the synchronicity of CCA economies with advanced Europe is not significant, with correlation coefficients quite unstable, particularly before 2008.

The interconnectedness of the CCA with Russia through Nontrade Links

The economic cycles of CCA countries have been intertwined with the Russian economy and among themselves as a result of supply chains, free trade agreements with Russia, and affinity of business practices (Figure 3.15). More recently, remittances from expatriates working in Russia have become a significant driver of economic activity in Armenia, the Kyrgyz Republic, and Tajikistan (IMF, 2011d). To a large extent, the synchronicity of economic cycles reflects hydrocarbon revenues as a common factor driving these economies; as such, it includes inward investments and remittances that fluctuate with Russia’s own hydrocarbon revenues. Synchronicity between the economies of Armenia and Russia, on the one hand, appears to have strengthened somewhat since the global financial crisis, possibly on account of greater remittance linkages (Box 3.3). On the other hand, the synchronicity of CCA economies with advanced Europe is not significant, with correlation coefficients quite unstable, particularly before 2008.

The region’s interconnectedness with Russia appears to rest increasingly on nontrade linkages, as the 2000s saw a strengthening of exports from the CCA to Europe at the expense of Russia (Figure 3.16). This trend reflects mainly a redirection of primary commodity exports, including hydrocarbons and metals, to Europe. Meanwhile, Russia remains the main destination for Armenian spirits, Kazakh machinery, Kyrgyz garments, and Uzbek cars (from a U.S. joint venture). With regard to foreign direct investment...
Box 3.2

**Euro Area Financial Spillovers to CCA Banking Sectors**

Most CCA countries saw significant declines in cross-border lending in the immediate wake of the 2008–09 crisis, thus reducing the potential for further deleveraging (Figures 1 and 2). Deleveraging has been most pronounced in Kazakhstan, the Kyrgyz Republic, Tajikistan, and Turkmenistan, where public-sector deposits have replaced foreign wholesale funding of Kazakh banks. By contrast, global banks have increased their exposure to Azerbaijan (hydrocarbon projects) and also to Armenian banks (long-term lines from parent banks and international financial institutions). The intensification of the crisis in Europe during the second half of 2011 has had a limited impact so far, with only Kazakhstan standing out.

Lending by banks in Greece, Ireland, Italy, Portugal, and Spain (GIIPS) to CCA banks has become negligible—less than 1 percent of total assets. If a GIIPS crisis affects core Europe, potential deleveraging effects would also remain muted. The highest liabilities to European banks amount to 8–13 percent of assets in Georgia and 3–5 percent of assets in Armenia, Azerbaijan, and the Kyrgyz Republic (Figure 3). The limited data available suggest that liabilities to Russian banks are of the same order of magnitude. Cross-border lending to CCA nonbanks would double the above magnitudes.

In contrast to Georgian banks, those in Armenia and Azerbaijan mostly held their foreign assets outside the European Union. Armenian and Georgian banks also held some claims on Russian banks (0.5 percent of assets), whereas Azerbaijan had greater exposure to Russia (about 7 percent of total assets).

A crisis in Europe would have more severe effects on the CCA than suggested by direct linkages: nonperforming loans would increase if growth, exports, and foreign financing are lower, and exchange regimes could come under pressure, given the high dollarization of CCA economies.

Prepared by Mariana Colacelli and Gabriel Srour with support from Kamal Krishna.
Remittances and External Spillovers to MENA and CCA Countries

Until recently, the analysis of international spillovers focused on two primary channels of transmission: those operating through trade and through financial linkages with the rest of the world. In particular, studies have shown that the more open a country (where openness is measured as the ratio of either flows of total trade or foreign direct investment to GDP) the more its business cycle tends to resemble that of the rest of the world.

This characterization does not adequately capture the entire picture for those countries that are large recipients of remittances from abroad. Remittances worldwide have been on an upward trend for the past four decades, increasing from about US$2 billion in 1970 to just under US$440 billion in 2010. For many developing countries, the size of these inflows rivals that of export receipts, and dwarfs that of such flows as official transfers and private capital. To the extent that remittances respond to economic conditions in host countries—where these flows originate—and affect the level of activity in the home country once they are received and absorbed into the domestic economy, an additional channel of transmission of external shocks is in play.

Many MENAP and CCA countries receive a particularly large share of global remittances. Together, the main recipients among MENAP and CCA countries1 accounted for 14½ percent of all remittances sent to developing countries during 2005–10, compared with a share of only 4½ percent in trade and 6½ percent in foreign direct investment flows (Figure 1). Trade is still overwhelmingly the largest source of international flows for Middle Eastern and Central Asian countries; over the same period, it was six times as large as remittances in the CCA and 11 times as large in MENAP countries.

Remittances as Spillover Channel

Recent analytical work has identified a significant and quantitatively important remittance channel, whereby shocks in the host country are transmitted to economic activity in the home country (Barajas and others, 2012). Key findings are:

1. Only countries that are net recipients of remittances are included. The MENAP countries included are Djibouti, Egypt, Jordan, Lebanon, Mauritania, Morocco, Pakistan, Sudan, Syria, Tunisia, and Yemen; the CCA countries included are Armenia, Georgia, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
Box 3.3 (concluded)

- Critically for short-term policy design in the home country, business cycle synchronization is asymmetric; the remittances-based transmission of negative shocks in the host country tends to be stronger than that of positive shocks.

- Overall, it is estimated that more than 50 percent of an output shortfall—defined as a negative output gap (that is, output below trend)—in average host country activity is transmitted to the home country. This is an effect quite similar in size to that operating through trade or financial linkages.

- Business cycle synchronization between host and home countries is stronger the larger the remittance flows between the countries. For example, if a home country receives remittances of at least 10 percent of GDP per year, a 1 percentage-point increase in the host country’s output gap will tend to increase the home country’s output gap by more than ½ of 1 percentage point and, beyond remittances of 12 percent of GDP, the transmission approaches a full percentage point (Figure 2). These large estimated effects may include transmission through the financial channel to the extent that some home countries are also linked financially with the home country.

Turning to MENAP and CCA countries in particular, given their reliance on remittance inflows, the corresponding estimated impacts of host country business cycles are substantial: transmission levels range from 83 percent in Armenia, Georgia, and Tunisia to 86 percent in Morocco and Pakistan, and 96 percent in the Kyrgyz Republic and Tajikistan (Figures 3 and 4).

MENAP and CCA Countries Are More Open than Previously Thought

This analysis suggests that Middle East and Central Asian countries are indeed more open internationally, and are therefore more vulnerable to external spillovers, than traditional indicators of trade and financial connectedness would suggest (IMF (2011d), Box 3.2). Knowing this, policymakers should thus pay close attention to the business cycle behavior in the host countries of their outward migrants: the GCC countries (for the Mashreq region); European countries (for the Maghreb region); and Russia (for the CCA).

Figure 3
Effects on MENAP Activity (Output Gap) of Change in Average Migrant Host Countries’ Activity
(Percentage points)

[Graph showing transmission levels across MENAP countries]

Source: IMF staff estimates based on Barajas and others (2012). Note: Effects of one percentage-point change in migrant host countries’ output gap on selected MENAP countries.

Figure 4
Effects on CCA Activity (Output Gap) of Change in Average Migrant Host Countries’ Activity
(Percentage points)

[Graph showing transmission levels across CCA countries]

Source: IMF staff estimates based on Barajas and others (2012). Note: Effects of one percentage-point change in migrant host countries’ output gap on selected CCA countries.

2 Estimated over a sample of 98 developing countries for 1990–2010. For a given home country X, host country real GDP growth is calculated as the average across major destinations for outward migration from X, using migration shares as weights.
linkages, Russian-registered companies top the list of foreign investors only in the relatively small economies of Armenia, Tajikistan, and Uzbekistan, although the widespread use of offshore vehicles may conceal Russian investment in other economies, and, more generally, the nationalities of foreign direct investment investors (Figure 3.17).\(^1\)

\(^1\) The data source is the IMF Coordinated Direct Investment Survey (CDIS) at end-2010 (IMF, 2010a). Many CCA countries did not participate in the survey, so data are stocks reported by originating countries (where investors are nominally registered). Data reported by recipient CCA countries that did not participate in the 2010 survey may show important discrepancies.

**Russia: A Conduit for Global Shocks to the CCA**

Despite its lower trade and investment linkages with the CCA, Russia retains a dominant influence on several of the region’s economies, including as a conduit for spillovers from Europe. This reflects the concomitant collapse of European trade with the CCA and with Russia (and of CCA/Russia trade) in the period immediately following the collapse of Lehman Brothers in 2008, and the subsequent equally marked rebound (IMF, 2011d). Some countries, such as Armenia, Kazakhstan, and Russia, also experienced a concomitant bursting of real estate bubbles that amplified the synchronicity of business cycles. The extreme post-Lehman trade cycle extended far beyond Europe, however, and
Figure 3.17
CCA Oil Importers: Geographic Origin of Foreign Direct Investment, 2010

Armenia
- France: 12%
- Russia: 84%
- Rest of the world: 4%

Kyrgyz Republic
- European Union: 9%
- Rest of the world: 64%
- Kazakhstan: 15%
- China, P.R.: Mainland: 12%

Georgia
- Rest of the world: 5%
- European Union: 11%
- Azerbaijan: 68%
- Russia: 7%
- Turkey: 9%

Tajikistan
- Rest of the world: 10%
- European Union: 10%
- Kazakhstan: 12%

CCA Oil Exporters: Geographic Origin of Foreign Direct Investment, 2010

Azerbaijan
- Turkey: 94%
- European Union: 5%
- Rest of the world: 1%

Kazakhstan
- Rest of the world: 8%
- European Union: 69%
- United States: 18%
- China: 5%

Turkmenistan
- Russia: 26%
- European Union: 47%
- Rest of the world: 2%
- Turkey: 25%

Uzbekistan
- Rest of the world: 27%
- European Union: 47%
- Russia: 73%

Note: Because many CCA countries did not participate in the survey, data are stocks reported by originating countries (where investors are nominally registered).
prominently included the primary commodities that dominate CCA exports.

**Europe: Mainly an Intermediary in Global Commodity Marketing Chains**

The composition of CCA exports, which is strongly tilted toward commodities, appears as important as the ultimate geographical destination of those exports in understanding likely future spillover risks from an intensification of the crisis in Europe. In many ways, Europe acts as an intermediary in global commodity marketing chains. The CCA’s abundant raw materials, which used to be shipped to Russia for processing and marketing, are increasingly intermediated through Europe to final destinations worldwide. Examples include Armenian cut diamonds shipped primarily to Belgium, or iron ore to Germany and the Netherlands; Kyrgyz gold to Switzerland; and Tajik and Uzbek cotton to Turkey. As a result, spillovers from the intensification of the crisis in Europe via pure export channels are more muted than during 2008–09, as the region has continued to benefit from worldwide demand for its commodities and terms of trade have remained broadly supportive, particularly for oil importers (Figure 3.18).

Looking ahead, downside risks to economic activity and employment will be mainly related to developments in global commodity markets, including oil and natural gas. A scenario in which global commodity markets deflate as a result of tail risks materializing in China, Europe, or the United States, would have immediate and severe consequences for oil importers; oil exporters would have the fiscal buffers to act countercyclically for a while.

**Strengthening Crisis Preparedness**

The CCA economies should take advantage of the still-favorable outlook to continue with efforts to build policy buffers, while renewing their focus on crisis preparedness to manage shocks. For the oil importers, this implies steady, gradual fiscal consolidation, but also greater exchange rate flexibility to protect reserves. Oil exporters should improve the quality and efficiency of public spending (including spending by state enterprises), reduce the share of current spending, and develop a more diversified tax base to ensure the robustness of fiscal policy in the face of sustained low oil or mineral commodity prices. To make growth more inclusive, all countries need to develop budget-based automatic stabilizers through more responsive social safety nets and improved tax and transfers systems while investing in health, education, and infrastructure (including in electricity generation in the Kyrgyz Republic and Tajikistan). The design of social safety nets could consider active labor market policies that promote the hiring of younger workers, which, appropriately targeted, can be effective in boosting employment (IMF, 2012a). Improving the business environment and the governance of the public sector continue to be top priorities for job creation in the private sector (Box 2.7; and IMF, 2011d, Annex 2.2).

Developments in global food prices warrant close monitoring, given their potential spillovers into local inflation in light of the large weight of food in CCA consumption baskets (Annex 2.1). Should inflation remain moderate, several countries should proceed with subsidy reforms commensurate with improvements in their social safety nets. As many Asian countries did a decade ago, Armenia and Georgia should seize the opportunity afforded by low inflation to increase the shock-absorbing role of the exchange rate as an important tool for improving crisis preparedness and supporting growth. The degree of flexibility would depend on the importance of currency mismatches in the
should have the space for relaxing monetary policy by cutting policy rates. In addition, the oil exporters have the important option of drawing down financial assets or increasing borrowing to protect key government capital spending. The management of resource wealth and, more generally, spending on strategic projects or sectors, should be subject to greater accountability and transparency, so as to build the foundation for more inclusive growth in the medium term. Importantly, the various state-sponsored development banks and/or funds being set up across the region as vehicles for diversifying the economy should have well-publicized accountability frameworks (Box 3.4).

**Box 3.4**

**Public Financial Institutions in the CCA: Promoting Financially Sustainable Economic Development**

In recent years, CCA countries have shown a renewed interest in the role that public financial institutions (PFIs)\(^1\) could play in stimulating investment and fostering economic development, including in targeted sectors. Although Azerbaijan’s State Oil Fund and Uzbekistan’s Fund for Reconstruction and Development already played such a role prior to the crisis, four other PFIs have recently been created in the region—the Samruk Kazyna Sovereign Wealth Fund in Kazakhstan (established in 2008); Pan-Armenian Development Bank in Armenia (2009); and Georgia’s Partnership Fund and the State Development Bank of Turkmenistan (both created in 2011). The Kyrgyz Republic and Tajikistan are also considering the establishment of PFIs. Several CCA countries also operate net lending facilities, including to channel sizable crisis-related credit resources (Armenia, Azerbaijan, Kazakhstan) or to target particular sectors (Tajikistan, Turkmenistan). In 2011, assets in PFIs plus lending operations ranged from 2 percent of GDP to 50 percent of GDP (if assets of oil funds, which have domestic investments, are included).

In addition to addressing market failures that hinder investment, PFIs can play a useful macrostabilizing role. PFIs aim primarily at tackling what authorities perceive as a structural lack of long-term project financing for key sectors, such as infrastructure, agriculture, and small and medium-sized enterprises (SMEs). With financial markets relatively underdeveloped in most CCA countries (Figure 1), PFIs have been providing such financing, through

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1 The institutions include development banks, public holding companies, sovereign wealth funds, and other public investment vehicles.
Box 3.4 (concluded)

instruments that include direct equity and debt participation, extension of guarantees, and cofinancing with the private sector. As recent experience in Latin America and Canada shows, PFI operations can be stepped up in response to a crisis to help governments implement countercyclical policies and alleviate the effects of lower private investment and foreign direct investment.

To play such a role, and avoid the pitfalls associated with previous PFIs, the CCA authorities should pursue the following good practices (Figure 2):

- **A clear and regularly reviewed mandate and financial sustainability requirements should ensure that PFIs do not undermine financial or macroeconomic stability.** Identifying a target sector helps focus PFIs’ activities, reduce political interference, enhance accountability, and position PFIs relative to other financial institutions. Cross-country studies suggest that preferred targets for PFIs are SMEs or tradable sectors for their role in growth and employment. Periodic mandate reviews could help reassess the relevance of PFIs, as market failures are likely to dissipate over time. Common financial sustainability requirements include preservation of capital, limiting the leverage ratio, and ensuring minimum return on equity or cost-to-income ratios.

- **Market-oriented funding mechanisms should foster the financial sustainability of PFIs.** In addition to protecting PFIs from political interference, such mechanisms could encourage better planning and risk assessment of projects and higher accountability of PFIs. These mechanisms could include donor and multilateral financing or funds raised in foreign capital markets. Funding through private deposits should not be allowed, and adequate regulation and supervision of PFIs should be ensured.

- **Transparent relations with the government should allow for a reliable fiscal impact assessment.** Hard budget constraints in PFIs could protect governments against losses and foster efficiency. Apart from initial capitalization of PFIs, government support should be channeled through the budget, capped, and targeted to strategic projects with large positive externalities.

- **High corporate governance standards should help limit undue political pressures.** PFIs need to be organized and run as corporations and be clearly accountable to one government body. Their corporate structure should include shareholders, independent boards of directors, and competent managers, whose rights and responsibilities are clearly delineated to prevent government interference in operational decisions. Twinning arrangements with other highly rated PFIs or private-sector participation could help transfer technology and enhance governance and operating standards.

- **Accountability and transparency should ensure the success of PFIs.** Operating frameworks should entail international standards for accounting and reporting practices, internal control and risk management systems, and budgeting. PFIs should also follow publicly listed companies in terms of audit, transparency, and disclosure, including undertaking an annual external audit.
Annex 3.1. Measuring the Informal Economy in the Caucasus and Central Asia

The informal sectors of CCA economies are large, with adverse implications for workers who enjoy little or no social protection and poor career prospects, thereby undermining inclusiveness. To reduce informality and foster inclusive growth, policymakers need to improve the business environment, relax labor market rigidities, reduce the tax burden, provide informal workers with access to skill upgrading, and create an environment that fosters a level playing field for all workers and firms.

The Size of Informality

The measurement of the size of the informal economy has generated considerable interest in academic and policymaking circles. This sector, typically calculated as a share of officially measured GDP, is widespread across the CCA region, with heterogeneous sizes ranging from about 15 percent in Uzbekistan to more than 35 percent in Armenia (Figure 1).

Measuring informality is important given that workers in informal conditions have little or no social protection or employment benefits; and these conditions undermine inclusiveness in the labor market. According to the most recent World Bank World Development Indicators (World Bank, 2011), 65 percent of the labor force in Kazakhstan and 64 percent in Azerbaijan do not contribute to a retirement pension scheme.

In Armenia and the Kyrgyz Republic, more than 58 percent of the labor force lacks pension coverage. Most of the informal activity goes underground to avoid the burden of administrative regulation and taxation, thus harming public finances.

According to data from the Global Competitiveness Report, the most problematic factors for doing business in many CCA countries are corruption, restrictive tax and labor regulations, inefficient bureaucracy, and poor access to finance. These factors, which reflect perceptions of the business environment, can increase the size of the informal economy.

Prepared by Yasser Abdih and Leandro Medina.

1 The size of the informal economy is estimated using a Multiple Indicator-Multiple Cause (MIMIC) model, standard in the literature (see Schneider, Buehn, and Montenegro, 2010, and Vuletin, 2009). By looking at measurable indicators and drivers of the informal economy, the MIMIC model obtains an estimate of its size. Based on previous research in this area, measurable indicators of the informal economy include currency as a fraction of broad money (M0/M1), and self-employment as a fraction of total employment; measurable causes used are indices that capture the regulatory burden in product, labor, and financial markets, the tax burden, and institutional quality.

2 See World Economic Forum (2010).
What Are the Causes and Indicators of Informality?

The size of the informal economy depends on a variety of factors. The specialized literature highlights the tax burden, labor market rigidities, lack of institutional quality, and product and financial market rigidities. These factors account for (in 2008) more than 75 percent of the size of the informal economy in the CCA:

- **Tax burden**: The tax and social security burdens are among the main causes of the informal economy. The larger the difference between the total cost of labor in the official economy and after-tax earnings, the greater the incentive to avoid this difference by joining the informal economy. The tax burden contribution is particularly important in Armenia and Georgia, explaining about 10 percent of the overall size of the informal economy (Figure 2).

- **Labor rigidity**: Intensity of labor market regulations is another important factor that reduces the freedom of choice for actors engaged in the official economy. Furthermore, tight labor regulations help increase unemployment. These regulations, which decrease the freedom of both the employer and the employee, reduce the likelihood of formal economy employment, thus generating opportunities in the informal sector. Rigid labor markets are particularly predominant in Armenia and Azerbaijan, explaining almost 15 percent of the overall size of the informal economy.

- **Institutional quality**: Institutional quality has a strong bearing on competitiveness and growth.

- **Regulatory burden in financial and product markets**: Burdensome regulations in product markets, in the form of procedures for starting a business, registering property, and dealing with construction permits, as well as difficulties in the credit market (such as availability and affordability of financial services), on the one hand, increase the size of the informal

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3To compute the contribution of each causal variable (driver) to the size of the informal economy, the estimated coefficient of the causal variable from the MIMIC model is multiplied by its value, and then divided by the estimated size of the informal economy. See also note 1.

4For more detail, see Schneider, Buehn, and Montenegro (2010).


6World Bank, Worldwide Governance Indicators.
economy. On the other hand, any legislation aimed at increasing local competition, and reducing monopolies and the extent of market dominance would contribute to reducing the size of the informal economy. The contributions of these drivers are particularly important in Armenia and Georgia, explaining about 40 percent and 50 percent of the size of the informal economy, respectively (Figure 2).

**Policy Recommendations to Reduce Informal Economies**

To reduce the barriers to business and labor formality, which are also barriers to more inclusive growth, policymakers should:

*Improve the regulatory framework for business.* Entry regulations should be simplified and compliance costs reduced, while at the same time creating an environment that fosters a fairer enforcement of regulation. This approach is conducive to investment and growth, and is inclusive as it allows all firms and workers to compete on a level playing field.

*Reform labor market institutions.* Overly restrictive labor market regulations in the CCA region can impede job creation in the formal sector, contribute to driving firms and workers into the informal economy, and reinforce segmentation in the labor market. As a result, workers in the formal sector enjoy protection while informal workers have little or no protection at all. Policy should aim to relax such rigid regulations to achieve more compliance and improved employment outcomes, while preserving the right to collective bargaining and developing effective social protection systems.

*Reduce tax burden.* Lowering corporate tax rates (where these are excessive) and simplifying tax regulations would increase formality, and could raise tax revenues, as evidence from Brazil and Egypt suggest (Gatti and others, 2011). Such reforms will provide incentives for existing informal firms to formalize and, hence, pay taxes; existing formal firms will have greater incentive to invest; and new firms will have greater incentive to operate in the formal economy.

*Provide informal workers with access to skills upgrading.* Existing training programs in the CCA region typically target the unemployed. However, many informal workers are also vulnerable, and therefore any inclusive growth agenda should provide all vulnerable groups in the society with access to skills upgrading (IMF, 2011d, Annex 2.1).
### CCA: Selected Economic Indicators

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**Consumer Price Inflation**

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**General Gov. Overall Fiscal Balance**

**(Percent of GDP)**

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**Current Account Balance**

**(Percent of GDP)**

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Sources: National authorities; and IMF staff estimates and projections.

1Central government.

2State government.