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Middle East and Central Asia Department

Building Resilient Banking Sectors in the Caucasus and Central Asia

*Mercedes Vera-Martín, Tarak Jardak,
Robert Tchaidze, Juan Trevino,
and Helen Wang Wagner*

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Executive Summary

External shocks since 2014—lower oil prices and slower growth in key trading partners—have put banking sectors in the eight Caucasus and Central Asia (CCA) countries under stress.¹ Even before the shocks, CCA banking sectors were not at full strength. Asset quality was generally weak, owing in part to shortcomings in regulation, supervision, and governance. The economies were highly dollarized. Business practices were affected by lack of competition and, in most countries, connected lending, which undermined banking sector health. Shortcomings in financial regulation and supervision allowed the unsound banking practices to remain unaddressed. The external shocks exacerbated these underlying vulnerabilities. Strains in CCA banking sectors intensified as liquidity tightened, asset quality deteriorated, and banks became undercapitalized. These challenges have required public intervention in some cases.

All CCA countries have taken policy actions in response to the shocks. Foreign exchange liquidity was provided at the cost of lower external buffers. Exchange rates were adjusted and, in most cases, became more flexible. Fiscal policy supported domestic demand. To address liquidity pressures in the financial sector, central banks eased monetary conditions and used buffers to limit the negative impact on lending. In countries in which banks were most affected, initial policy actions focused on ensuring that financial sectors remained operational, with more comprehensive programs for enhancing financial stability announced only later. In contrast, banking sectors in countries that better withstood the shocks have been able to support credit

¹The CCA countries are Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.

with the rebound in global economic activity. This reflects not only those countries' stronger financial sectors before the shocks, but also the authorities' proactivity in strengthening regulation and supervision.²

But more needs to be done to restore the health of CCA financial sectors, so that CCA banking sectors are in strong shape to support much-needed economic diversification and more inclusive and sustainable economic growth over the medium term. Notwithstanding policy actions, credit growth slowed throughout the region, and it has remained subdued in many CCA countries. Indeed, in some cases there is still the risk that financial instability could trigger macroeconomic instability, with severe and persistent consequences, including a long-lasting loss of confidence in financial intermediaries. Therefore, further actions are needed.

Fully addressing these vulnerabilities will require a comprehensive strategy and strong commitment from the authorities. The exact strategy will depend on country specifics and will require prioritizing objectives, depending on the financial health of banks.

Countries in which risks to financial stability remain elevated should put immediate focus on accurately assessing banks' health. A proper diagnosis will help the authorities formulate a strategy to address nonperforming loans, assess provisioning and capitalization needs, and prepare resolution strategies for nonviable banks. In this context, bank resolution frameworks need to be strengthened to ensure that support will be provided only to viable banks and under strict conditions, and that insolvent institutions will be closed in an orderly manner, while protecting retail customers through deposit insurance schemes. This strategy will facilitate timely intervention, help contain fiscal costs and support a swifter recovery in financial intermediation and economic growth.

All CCA countries need to strengthen bank governance and regulatory and supervisory frameworks. A strong governance structure would emphasize transparency, include clear responsibility at the banks' executive and board levels, limit public sector influence in banks' operations, and establish independent risk management, compliance, and internal control units. The focus in making regulation and supervision more effective should be on improving risk-based and consolidated supervision, implementing macroprudential frameworks, and improving credit risk valuation. These actions would support development of a better functioning financial system and allow the financial sector to do more to promote greater and more inclusive economic growth.

²The assessment of the financial sectors in Turkmenistan and Uzbekistan is hindered by limited availability of data.

1 Introduction

In the two decades leading up to 2014, the Caucasus and Central Asia (CCA) region made considerable progress in strengthening its financial sectors. This included improving financial regulation and supervision, increasing banks' regulatory liquidity and capital buffers, and enhancing financial oversight. These steps, in many cases, allowed banks to increasingly support economic activity by mobilizing savings for productive investment.

Nevertheless, banking sectors had vulnerabilities when the 2014 shocks hit CCA countries. The 2008–09 global financial crisis had exposed vulnerabilities that were not fully addressed afterward. Amid fixed or quasi-fixed exchange rates, many banks across the region had borrowed heavily in foreign currency to finance pre-crisis lending booms. Unhedged borrowing in foreign currency, combined with weak business practices and insufficient regulation and supervision (including at times noncompliance with prudential standards and provisioning), laid the basis for a substantial weakening of banks' balance sheets. Insufficiently prudent lending practices, weak monitoring and loan collection processes, and shortcomings in accounting and reporting resulted in a buildup in credit risk. Lending to related parties exacerbated the deterioration in credit quality in some countries,¹ resulting in significant loan concentration in cyclically sensitive sectors such as trade, construction, and households.²

¹Local banks are those with majority domestic shareholders. This finding is in line with many studies that found that state ownership is associated with a higher rate of nonperforming loans (NPLs) in developing countries (Iannotta, Nocera, and Sironi 2007; Farazi, Feyen, and Rocha [2013]) and resource misallocation, since they are exposed to political interference and tend to increase lending to politically strategic sectors or regions near elections (Khwaja and Mian [2005] for Pakistan; Cole [2009a, 2009b] for India; and Carvalho [2014] for evidence on Brazil).

²In Tajikistan, at the end of 2014, loans were concentrated in the commercial sector (46 percent of total NPLs) or made to government entities (30 percent of total NPLs). Concentration also exacerbated credit risk in Kazakhstan and Azerbaijan.

The severe and long-lasting external shocks in 2014—lower oil prices and lower demand from key trading partners—negatively affected CCA economies (Figures 1 and 2), weakening medium-term prospects. The steep decline in oil prices hit export receipts in oil exporters and erased account surpluses. In oil importers, the slowdown in trading partners contributed to a sharp decline in remittances, while lower commodity prices weighed on exports. The weaker external position prompted exchange rate adjustments and, in many cases, a switch to more flexible exchange rate regimes amid market turbulence (Horton and others 2016). Monetary policy was tightened to address rising inflationary pressures. Although some countries curtailed public investment, fiscal policy was, in general, accommodative to help mitigate the effects of the external shocks and support economic activity and jobs. However, fiscal vulnerabilities increased—public debt has risen (especially among oil importers) and fiscal buffers have dropped, in part owing to public support given to the banking sector in oil exporters (Kazakhstan, Azerbaijan) (Gemayel and others 2018; IMF 2015b, 2016b, 2016c). Growth has recovered only gradually, and for the medium term it is expected to remain well below the levels in the high-oil-price period, reflecting the long-lasting nature of the shocks (IMF 2017a, 2017b).

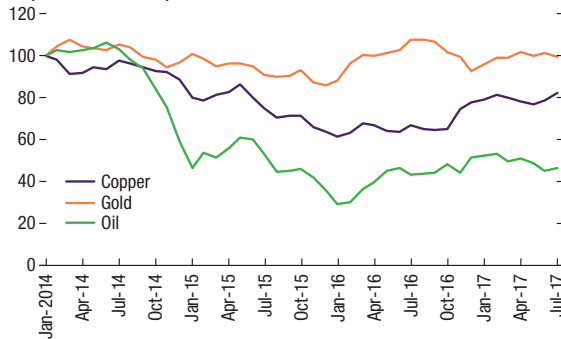
Following the 2014 shocks, the banking sectors came under heightened stress, and their ability to support the recovery was impaired. Net foreign exchange (FX) positions generated imbalances in banks that relied on external financing. The deterioration in credit quality resulted in higher provisioning and capital requirements. In many instances, capital was eroded below regulatory minimum requirements. The authorities intervened, providing emergency liquidity support to some banks, supporting the restructuring of external liabilities, and increasing write-offs. In some countries, capital and liquidity injections helped repair banks' balance sheets, but weak lending standards, rising numbers of NPLs, and lack of competition continued. With the economic recovery and actions taken by the authorities, banks in the CCA are now in a better position, but more needs to be done to build resilience in the banking sector and enable banks to better support the real sector.

This paper outlines the actions already taken to support the financial sectors in response to the shocks and further actions needed for CCA banking sectors to contribute fully to sustained high growth. Section II discusses the effects of the 2014 shocks and the actions taken to address pressures on the financial sector. Section III focuses on the need to establish proper diagnostics to optimize policy priorities. Section IV discusses how to address high NPL rates and problem banks, while Section V focuses on strengthening prudential regulation and supervision.

Figure 1. CCA Countries: Real and Fiscal Effects of the 2014 Shock

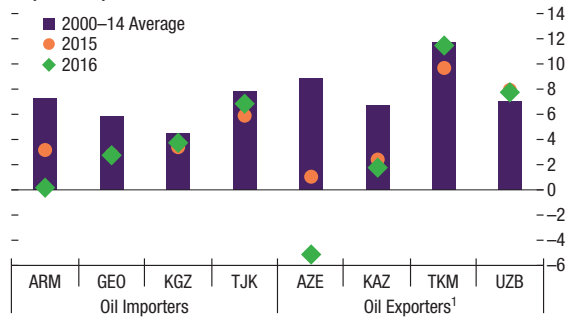
Commodity prices tumbled, ...

1. CCA Main Commodity Exports (Jan-2014 = 100)



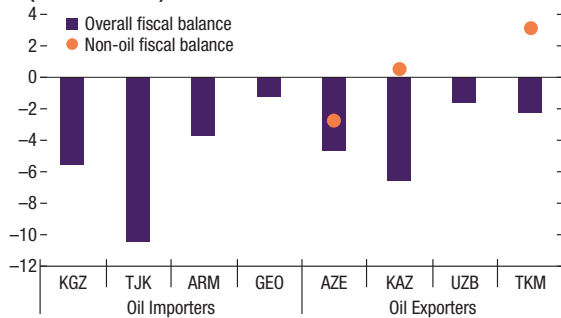
... causing real GDP to fall significantly compared with the historical average.

2. Real GDP Growth (Percent)



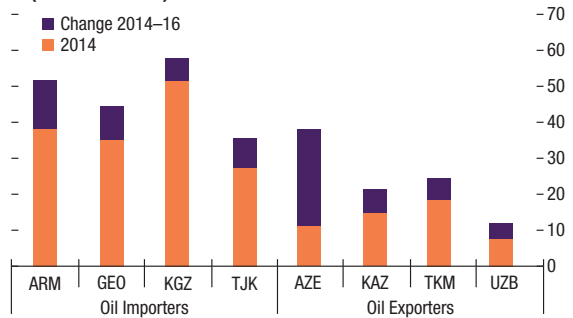
Deficits have been exacerbated by the commodity shock, ...

3. Change in Fiscal Balance, 2014-16 (Percent of GDP)



...with subsequent increases in public debt.

4. Public Debt (Percent of GDP)

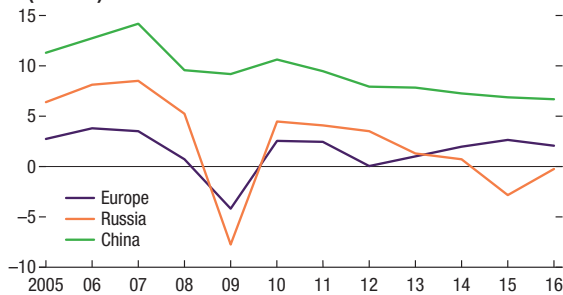


Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
 Note: Country abbreviations are International Organization for Standardization country codes.
¹Non-oil GDP growth, except Uzbekistan.

Figure 2. CCA Countries: External Sector Developments after the 2014 Shock

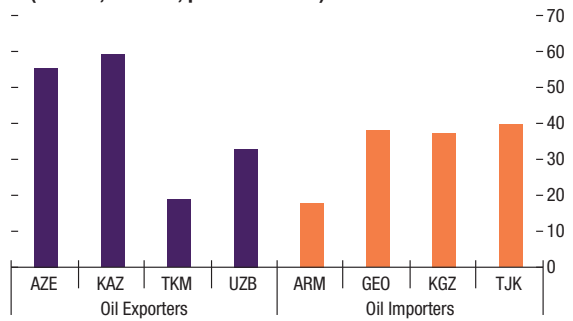
A slowdown in key trading partners' growth, ...

1. Trading Partners Real GDP Growth (Percent)



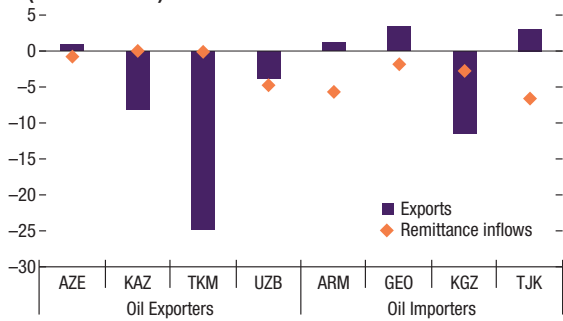
... led to exchange rate adjustments, ...

2. Exchange Rate Accumulated Depreciation (Percent, 2013-16, peak-to-bottom)



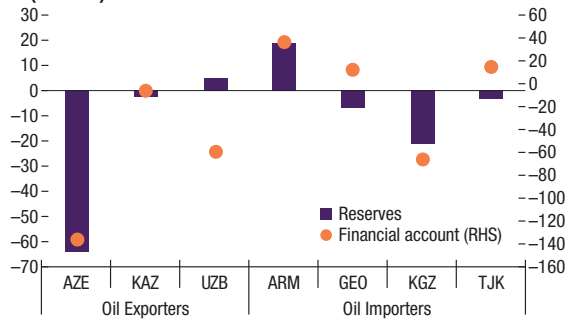
... and a decline in exports and remittances.

3. Change in Exports and Remittances, 2014–16 (Percent of GDP)¹



Reserves and financial flows fell in some countries.

4. Change in Financial Account and Reserves, 2014–15 (Percent)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
 Note: Country abbreviations are International Organization for Standardization country codes.
¹Remittance data are for 2015.

State of Play: CCA Financial Sectors in the Aftermath of the 2014 Shocks

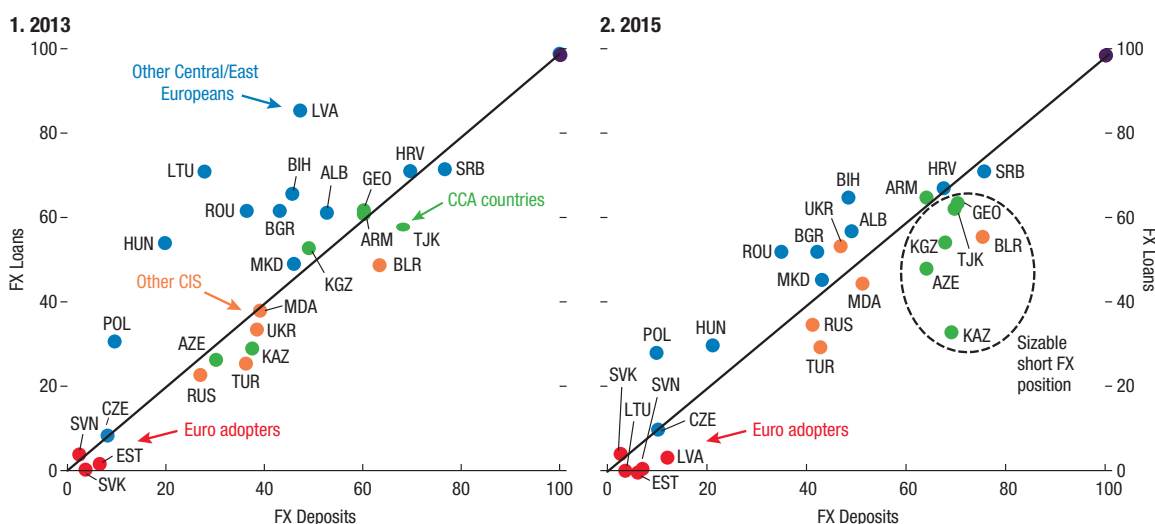
The 2014 shocks exposed banking vulnerabilities and heightened financial stability risks, although the impact was uneven across the CCA countries. The banking sectors in Armenia, Georgia, and the Kyrgyz Republic proved more resilient, reflecting a more favorable starting point; in particular, a lower level of NPLs before the shock and proactivity in strengthening regulation and supervision.¹ In other CCA countries, high dependence on oil (Azerbaijan, Kazakhstan) and remittances (Tajikistan) resulted in a significant cyclical downturn. This, combined with exchange rate adjustments, revealed significant open foreign exchange positions in banks and increased structural vulnerabilities (Figure 3).²

Asset quality deteriorated significantly, although the exact magnitude is difficult to assess (Figure 4). Lower growth and large exchange rate devaluation weakened the capacity of unhedged borrowers to service debt. Official data show a general increase in the NPL ratio, with NPLs ranging at their peak from 7 percent in Georgia and Armenia to 54 percent in Tajikistan. However, a broader definition of problem loans—including watch loans, restructured loans, write-offs, and transfers to special purpose vehicles (SPVs)—suggests a larger effect on asset quality. This is especially the case in Kazakhstan, where past due loans peaked at 34 percent in May 2017. Watch loans, a leading indicator for NPLs, increased across all CCA countries; most prominently, in the Kyrgyz Republic, where they exceeded 25 percent of total loans at the end of 2016. Shortcomings in regulation may have generated incentives

¹According to the 2014 Financial Sector Stability Assessment report, the National Bank of Georgia has introduced an advanced risk-based supervisory regime while maintaining a conservative approach aimed at detecting vulnerabilities at an early stage and allocating supervisory resources in the most efficient and effective manner.

²The expectation of public support (based on the response during the global financial crisis in 2008–09) also increased moral hazard.

Figure 3. Banks' Foreign Exchange Position in a Cross-Country Perspective, 2013–15



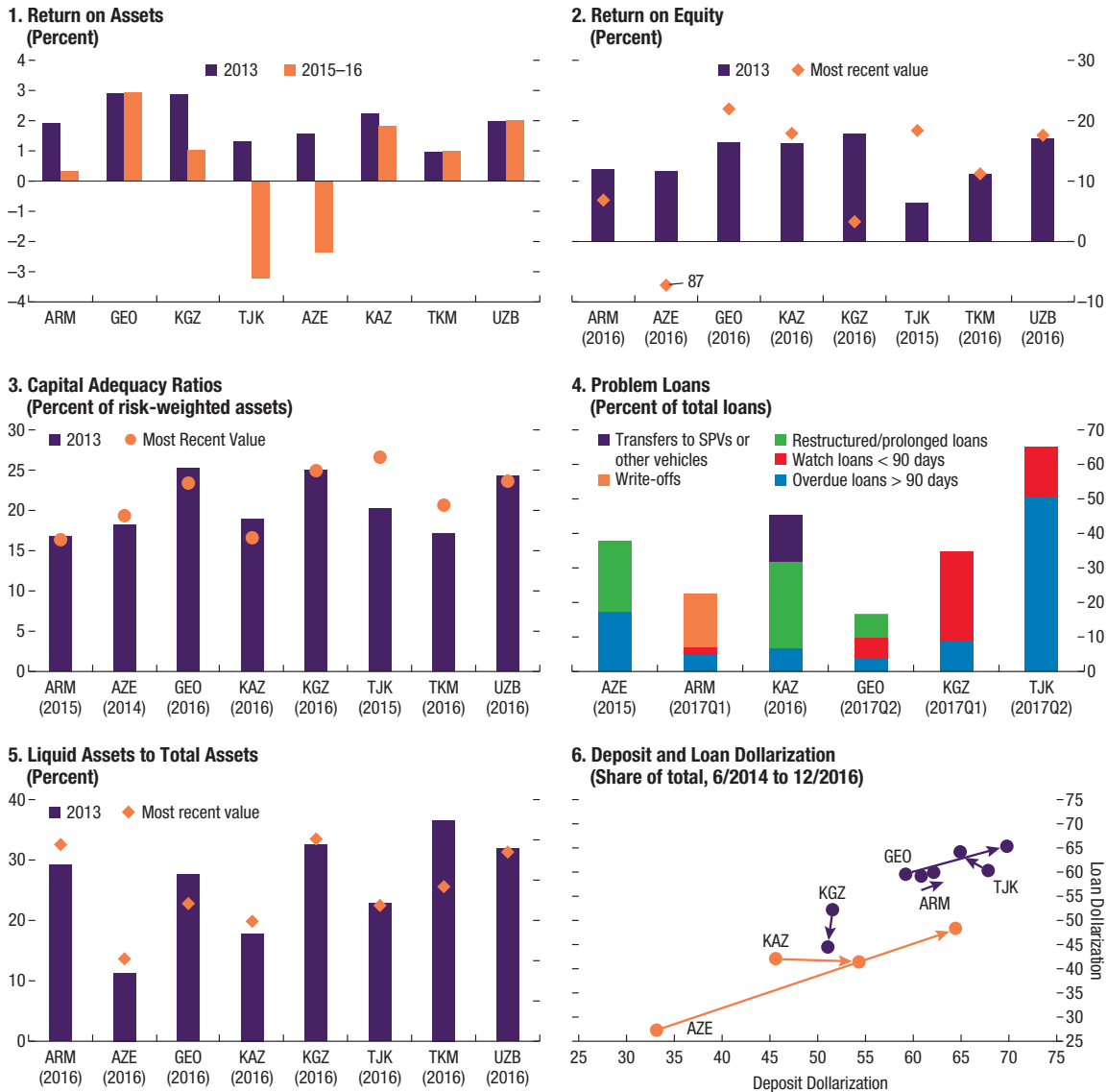
Source: Geng, Scaturro, and Wiegand 2018.
 Note: Country abbreviations are International Organization for Standardization country codes.

to mask deteriorating asset quality.³ For example, official regulatory ceilings on NPLs (such as in Kazakhstan, where NPL ratios were to be kept below 10 percent) have likely encouraged banks to underreport NPLs, resulting in under-provisioning.

Bank profitability and capital eroded, leading to bank solvency problems and public intervention in some CCA countries (Figure 4). Revaluation of open FX positions and higher provisioning and funding needs led to losses and eroded capital. Some small banks were liquidated, and higher capital requirements encouraged mergers in Armenia, Azerbaijan, Georgia, and Kazakhstan. In some cases, systemic banks were affected, leading to public intervention. Authorities in Kazakhstan and Azerbaijan took important steps to resolve large banks in 2017 with sizable bad-loan buyouts. The publicly owned International Bank of Azerbaijan (IBA), the country’s largest bank, has received the equivalent of \$530 million through several capital injections since 2014. After it recorded a loss equivalent to 3.1 percent of GDP in 2016, the IBA filed for bankruptcy in May 2017 and underwent a debt restructuring (9 percent of GDP). In Kazakhstan, the two largest banks merged, with state sup-

³NPLs require higher capital and raise funding costs and loan loss provisions. Banks may understate them with optimistic valuations. There may also be regulatory shortcomings or reluctance to show high NPLs because of political pressures and contagion risks. In addition, NPL indicators may not reflect NPLs that have been transferred outside banks’ balance sheets to special purpose vehicles (SPVs), as in the case of Azerbaijan and Kazakhstan.

Figure 4. CCA Countries: Selected Financial Indicators



Sources: National Authorities; and IMF staff calculations.
 Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

port (4 percent of GDP). In Tajikistan, the government also aided the two largest banks (6 percent of GDP). Problems remain at other lenders.

CCA authorities took action in response to the shocks. Facing external financing pressures, foreign exchange liquidity was provided at the cost of lower external buffers—either international reserves or public buffers held abroad (for example, sovereign wealth funds). Exchange rates were adjusted

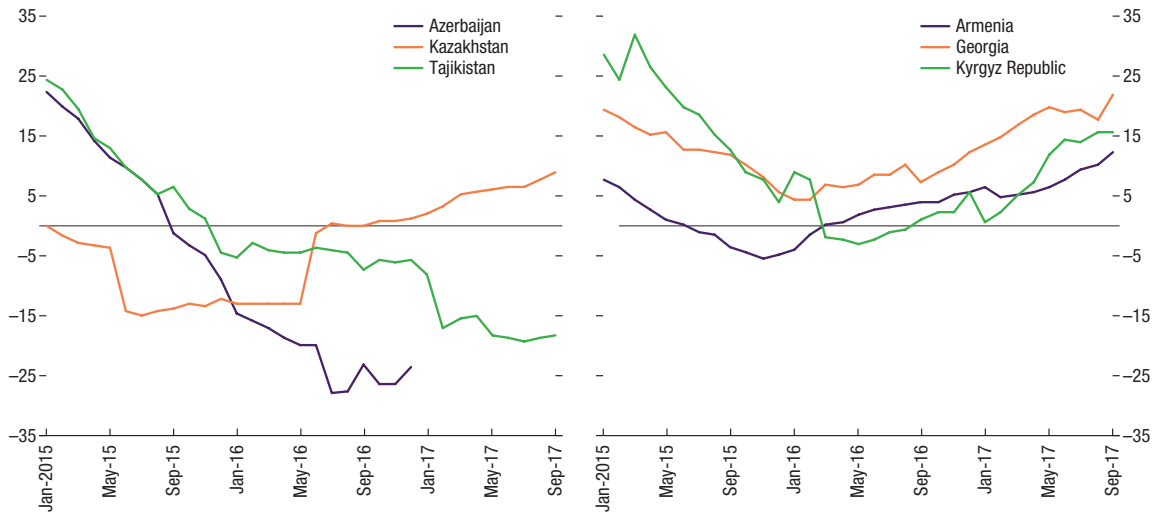
and, in most cases, became more flexible. Fiscal policy was relaxed to support domestic demand. To address liquidity pressures in the financial sector, central banks eased monetary conditions and used liquidity buffers to limit the negative impact on lending to the private sector. In countries in which banks were most affected, initial policy actions focused largely on ensuring that financial sectors remained operational, with more comprehensive programs for enhancing financial sustainability announced only recently.

The initial increase in dollarization resulted in countries introducing tighter prudential measures and more proactive measures to address higher NPLs. The policy responses involved increased reserve requirements for foreign currency deposits, higher provisioning for foreign currency lending, and tightening of consumer and mortgage lending. In some countries, the removal of tax, accounting, and other legal obstacles to write-offs and transfers to SPVs initially helped mitigate the effect of increasing NPLs on banks' balance sheets. However, poor reporting practices led to a proliferation of SPVs in several countries. In some cases, the policy response did not prevent a deterioration in confidence in the banking sector. To support confidence, some countries provided blanket guarantees to household bank deposits. Other actions included capital injections, restructuring and closing of troubled banks, and administrative interventions.

Credit growth declined in all CCA countries, though it has started to recover in some (Figure 5). Credit growth (at constant exchange rates) declined 30 to 40 percentage points in Azerbaijan, Tajikistan, and the Kyrgyz Republic during 2015–16, with a less pronounced decline in Armenia, Georgia, and Kazakhstan. Credit growth remains subdued or on a negative trend in Azerbaijan, Kazakhstan, and Tajikistan. It is difficult to assess whether this reflects lower credit demand, lower supply, or both, as the slowdown could be due to the closure of banks, write-offs, or transfers to SPVs.

Financial dollarization has been contained but remains elevated. Following the shocks, deposit dollarization increased—especially among oil exporters that maintained their pegs longer. Greater exchange rate flexibility, higher interest rates, and macroprudential measures (such as higher reserve requirements on FX deposits and deposit insurance premiums) succeeded in restoring some confidence in domestic currencies and curtailing further dollarization. Loan dollarization did not increase (except for in Azerbaijan), partly because of higher risk weights for loans in foreign currency and mortgage conversion programs (Georgia, Kyrgyz Republic). In Kazakhstan, deposit de-dollarization has increased (although dollarization has remained high at about 55 percent), while loan dollarization has stabilized at about 35 percent as past exchange rate depreciation has partially reversed and banks have unwound foreign exchange swaps provided by the central bank in 2014.

Figure 5. Credit Growth Has Shown Diverging Trends across the Region
(Percent, year-over-year, adjusted for exchange rate effects)



Sources: National authorities; and IMF staff calculations.
 Note: These values are adjusted for exchange rate effects.

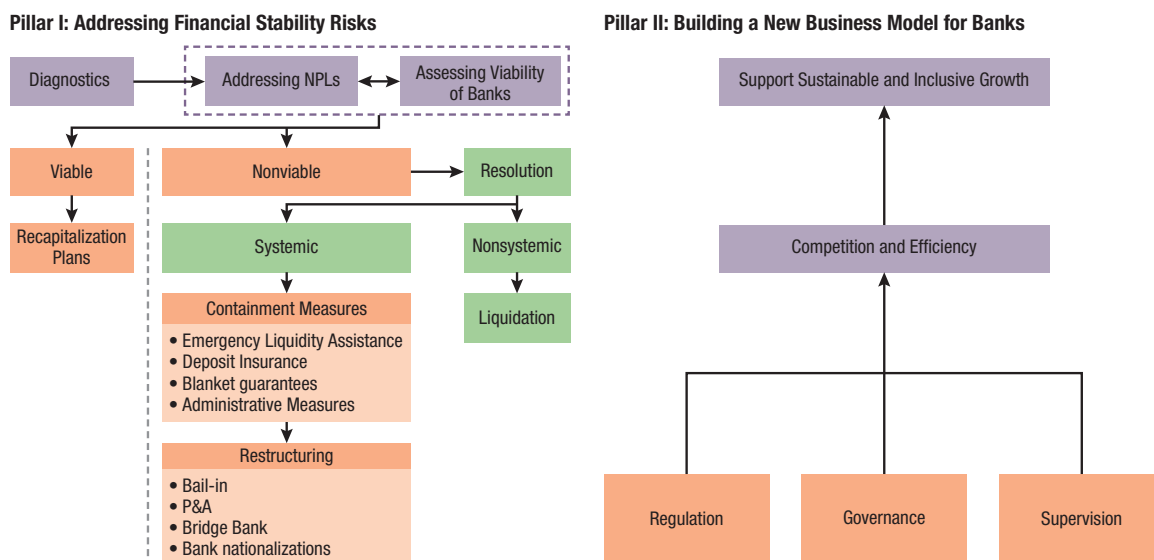
An increase in growth momentum in CCA countries provides an opportunity to accelerate efforts. A more favorable external environment should enable banks across the region to improve performance, but the provisioning of legacy problem exposures will continue to weigh on lenders. The focus should be on addressing the remaining financial stability risks and on developing a new business model for banks to enable them to play a more supportive role in promoting greater and more inclusive growth.

Where to Go from Here: Strategy for Building Resilient and Growth-Supporting Banking Sectors in CCA Countries

Given country-specific differences, no single strategy to strengthen financial resilience can be applied uniformly in the CCA. Decisive actions are needed on various fronts. Solving financial sector challenges and fostering financial sector resilience depend heavily on country-specific circumstances. A comprehensive strategy, with defined sequencing and priorities, is needed. Countries that face ongoing financial stability risks should concentrate on resolving asset quality backlogs and nonviable banks. Otherwise, the banking sector could remain a drag on growth, with risks to macroeconomic stability in cases of systemic weaknesses. Countries in which banking sectors have proved to be more resilient should focus on continuing to strengthen their regulatory and supervisory frameworks. The overarching strategy should consider the role of banking supervision in identifying and evaluating the size of the problem and measures to prevent a resurgence of an asset quality deterioration, including strengthening governance and control practices. The IMF will continue to support CCA countries in their efforts through policy advice, technical assistance, and training.

Successfully addressing ongoing financial stability risks comprises several steps (Figure 6). Priorities should be identified according to asset quality and banks' solvency conditions. The first step is to develop accurate diagnostics on the magnitude of the challenge these banks face. This will set the stage for cleaning banks' portfolios. Recognizing problem loans will also help identify solvency problems. At the same time, country authorities need to identify (1) banks that are sound, (2) banks that are viable but undercapitalized, and (3) nonviable banks. Nonviable banks need to be resolved, but the strategy will depend on whether the bank is a systemic institution or not, and whether the financial sector is facing systemic stress. Resolution of systemic banks and those under systemic stress can be achieved through bail-ins, purchase and assumption operations, bridge banks, or recapitalization (see later sections).

Figure 6. Building Resilient and Growth-Supporting Financial Sectors



Source: IMF staff.
 Note: P&A = purchase and assumption; NPL = nonperforming loan.

The banking system needs a different business model. No single business model exists for all banks in all banking systems; models will depend on country-specific circumstances (among others, the size of the market, the funding structure, and the investment opportunities). Country authorities should set the stage for banks to be able to support sustained and inclusive growth by efficiently channeling resources to productive investment opportunities. In this regard, excessive corporate debt will need to be resolved, if it is a problem, so that credit can pick up again. This will take time and should be achieved through strengthening regulation (including governance) and supervision. Authorities should ensure compliance with the regulations to create incentives for banks to operate in an increasingly transparent environment that fosters competition.

CCA country authorities have taken some steps toward meeting these goals. Despite temporary strains in the wake of the external shocks, liquidity in domestic currency has improved in several CCA countries, supported by some recovery in the price of oil and other commodities, better economic conditions in key trading partners, and recent exchange rate stabilization. Blanket guarantees (Azerbaijan), a stronger deposit insurance fund (Georgia, Tajikistan), direct capital support from the authorities (Azerbaijan, Tajikistan), FX swaps (Kazakhstan), and higher capital requirements (Kazakhstan) have helped build confidence. In addition, deposit dollarization may have

prevented capital flight from exerting more pressure on overall liquidity in the banking system.

Countries that face financial stability risks could find their banking sectors dragging economic activity. Disruptions in the financial sector may have resulted in public intervention in a premature manner. Some government actions were taken without adequately assessing the appropriate response and without a comprehensive strategy to safeguard public funds and minimize losses. In some cases, the policy response has led to larger and potentially more complex and fragile institutions (owing to bank mergers without prior loss recognition or restructuring) and increased moral hazard. Troubled financial sectors could amplify and prolong the impact of external shocks on the real economy (Box 1). Not only might they reduce credit to the economy, but they could also foster a misallocation of credit from productive sectors, hindering diversification efforts, slowing the recovery, and lowering fiscal revenues. This situation might require additional direct state intervention, which would constitute an opportunity cost on the use of public funds. Some of these effects have started to materialize in the CCA countries, but the total impact will not be apparent until the legacy of the shocks is fully addressed (Box 2).

The current financial stress may be increasingly costly for some countries in the region. Public funding so far was estimated at 28 percent, 10 percent, and 5 percent of GDP for Azerbaijan, Tajikistan, and Kazakhstan, respectively, in 2017. A piecemeal initial approach may have forestalled deep distress but also may have exacerbated losses to be incurred by the public sector. The timing and type of state intervention matters; for example, transfers to public SPVs (Azerbaijan, Kazakhstan) have been at book value rather than at the expected recovery value, which may amplify moral hazard and fiscal costs. State intervention complicates fiscal consolidation and reduces fiscal space to maintain social and investment spending, which is the most important driver of growth in the non-oil sector. For oil importers such as Tajikistan, with limited policy space, a deeper banking crisis could call macroeconomic stability into question.

Immediate Policy Priorities to Deal with Financial Stability Risks

CCA countries that are facing financial stability risks should focus on diagnosing the size of the problem and defining strategies to address high levels of NPLs and problem banks. The exact strategy will depend on country specifics. Undertaking independent AQRs will help diagnose the health of banks. To address NPLs, banks should recognize losses and establish NPL targets. Any transfers of NPLs to a public asset management company should be done at expected recovery values. When facing undercapitalized banks, the supervisor should determine recapitalization needs within a specific timeline. Nonviable, nonsystemic banks should be resolved. Public funds for solvency support should be used only as a last resort and only for a systemic institution. Systemwide liquidity stress may require containment measures. The IMF will continue to support CCA countries in their efforts through policy advice, technical assistance, and training.

Step 1. Getting the Diagnostics Right

AQRs are the key to obtaining an accurate picture of the level of NPLs and capital. AQRs are strongly recommended when the quality of supervision and bank data are inadequate and when asset quality deterioration becomes systematic and threatens the long-term viability of the banking system (Monaghan 2013). Some of these conditions are evident in some CCA countries. AQRs apply existing requirements to portfolio valuations and assess the quality of collateral and bank claims, making the independent process support rigorous enforcement. AQRs may also assess structural aspects of banking practices, such as internal procedures and credit risk management frameworks. AQRs should initially target systemic banks, with smaller banks examined in follow-up reviews. AQRs need to consider both on-balance-sheet and off-balance-sheet items on a consolidated basis, as well as the quality of accounting rules, financial statement data, and disclosures, as these are instrumental to understanding the health of the financial sector. Given the business

model in CCA countries, bank lending policies, practices, and controls, and lending to related parties merit special attention.

The success of an AQR hinges on its credibility. This can be achieved through a rigorous design and transparent disclosure of procedures and results. Engaging credible, independent third-party experts to conduct or oversee the exercise and publishing the review's methodology are recommended. Care should be taken in disclosing results to avoid contagion risks, especially when the AQRs show high impairment. AQRs should set the stage for a comprehensive action plan involving bank and supervisory measures to improve asset quality and setting the stage for political support, especially when major legal, regulatory, and institutional reforms and bank recapitalization are needed.¹

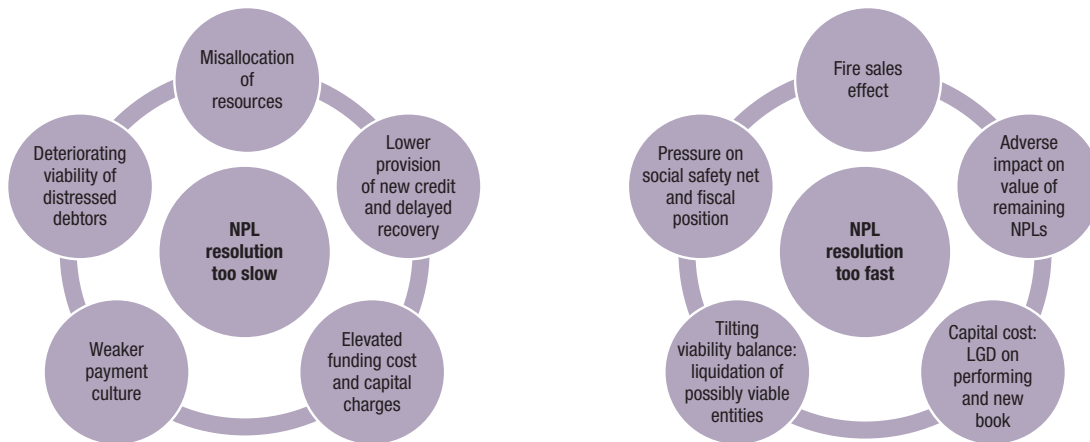
The supervisor needs to provide clear rules on loan classification, provisioning, and restructuring. Specifically, it should ensure that banks adequately classify loans, use all legal means to rigorously and promptly enforce loan contracts, and monitor loan restructuring, evergreening, and write-offs. In the Kyrgyz Republic and Tajikistan, limited documentation was required to show that revised payment schedules could be met, with no limit on the number of times a loan could be modified. Since March 2017, the Kyrgyz Republic has tightened regulations on NPL definitions, provisioning, and restructuring. In some countries, contract enforcement has proved to be challenging because of uncertainty about the duration and outcome of court cases.

Step 2. Resolving NPLs

The supervisor and banks should develop plans to tackle NPLs. Country-specific barriers against NPL resolution should be identified and removed. These could include both legal barriers (such as deficient solvency frameworks) and structural barriers (for example, limited capacity of courts), where resolution may require additional loss recognition and provisioning. Most NPLs should be operationally separated from the viable part of the bank, either internally (via dedicated units) or externally (via securitization or sales). Plans should include (1) separating NPL management from managing performing loans, (2) a governance structure within the bank that clearly defines responsibilities at the executive and board levels, and (3) detailed operational targets aimed at increasing capacity and reducing NPLs over the medium term. Banks should agree with the financial supervisor on quantitative targets on cash collection, loan restructurings, and the strategy for disposing of NPLs (for example, hiring special services and collection firms).

¹In addition, the quality of accounting rules, financial statement data, and disclosure practices as well as the quality of supervision are fundamental to understanding financial sector health. AQRs could also be used to address weaknesses in these areas.

Figure 7. Adverse Consequences of Suboptimal Pace of NPL Resolution



Source: European Systemic Risk Board 2017.

The pace of NPL resolution could have important implications for the economy (Figure 7). NPL resolution is a difficult and time-consuming process, which may accelerate only as economic conditions improve. There is also the risk that an increase in the supply of specific assets may trigger a feedback cycle between negatively impacted asset prices, with adverse effects on performing asset values. However, slow NPL resolution could cast doubt on financial stability, weaken investors’ confidence, and damage the real economy.

Resolving high levels of NPLs has proved challenging in the CCA region, consistent with cross-country experiences (Box 3). Political interference has resulted in delays and inaction and hindered prompt loss recognition and reduction of shareholder capital. Azerbaijan and Kazakhstan have taken steps to address high levels of NPLs, but with measures that may have increased costs to the state.²

Step 3. Dealing with Problem Banks³

The authorities need to ensure banks’ medium-term viability. They should develop a comprehensive framework for handling banks in distress. The

²Azerbaijan and Kazakhstan both relied on publicly funded, publicly administered asset management companies (AMCs) to offload sizable NPL portfolios from their biggest banks. Both conducted these transactions at book value, exposing the public sector to potentially large losses. In Azerbaijan, the AMC issued government-guaranteed debt that was purchased by the central bank; in Kazakhstan, the purchase was funded roughly equally by the government and the national sovereign wealth fund.

³Parker (2011) describes the steps and actions involved in closing a failed bank.

strategy should aim to preserve viable undercapitalized banks by requesting time-bound recapitalization with close oversight and prompt actions. This requires action from shareholders to support banks' equity. Insolvent and nonviable banks should be resolved. International experience has found that certain challenges come with problem banks: (1) the inability to assess shareholder capital, (2) limited legal authority for bank sales, (3) a weak mandate to restructure banks, (4) local courts with insufficient knowledge of banking matters, and (5) lack of legal protection to resolution authorities. Addressing these challenges is especially urgent in CCA countries that are under pressure to support banks.

Prompt action would help support viability. When a bank has been assessed as viable but undercapitalized, the supervisor should help move the bank toward rehabilitation through recapitalization to meet prudential requirements. Public sector intervention may be needed if the bank is systemic, although it should be limited as long as shareholders are able to keep the bank operational through the injection of additional capital to meet requirements. Otherwise, public involvement could expose the state to losses and increase pressure for supervisory forbearance, raising concerns about a competitive playing field and moral hazard. Restrictions on dividend distribution and executive compensation could be put in place as bank management rebuilds capital to regulatory levels. Management changes may be needed.

Nonviable banks should be resolved. Resolution regimes should provide a broad range of powers and options to resolve banks that are no longer viable. Not intervening in a timely manner is a critical supervisory failure—deferring action always increases costs. At this stage, one option would be to put the bank under special administration, which would allow for implementing necessary restructuring, preventing asset stripping, and facilitating resolution planning. Since the 2014 shocks, bank failures have occurred throughout CCA countries. While most CCA nations have been able to deal with small, nonviable banks via resolution or mergers, dealing with systemic banks has proved challenging. This is not specific to the region. International experience suggests that bank resolution frameworks worldwide need to be improved to deal with systemic crises. Resolution frameworks should be strengthened in line with the best practices identified in the Key Attributes of Effective Resolution Regimes for Financial Institutions of the Financial Stability Board (FSB) (Box 4).⁴

⁴See FSB (2014) for further discussions. The primary goals are to (1) establish principles for orderly resolution of problem institutions without taxpayer exposure to loss from solvency support from the government, and (2) maintain continuity of the vital economic functions of banks through mechanisms that make it possible for shareholders as well as unsecured and uninsured creditors to absorb losses, observing the hierarchy of claims under liquidation. Any losses to senior debt holders should occur only after equity absorbs losses and there is a full write-off of subordinated debt. These include stabilization options that achieve continuity of systemati-

Nonviable, nonsystemic banks should be resolved without public support. Resolution through purchase and assumption (P&A) is the preferred option, in which an acquiring institution absorbs assets and liabilities, and depositors are protected, including, if necessary, by the deposit guarantee scheme. The residual entity should be liquidated. This approach has distinct advantages: (1) it helps preserve confidence in the banking sector, (2) it minimizes disruption to bank customers, and (3) it preserves financial stability by minimizing the chances of a bank run. P&A provides depositors with prompt access to insured deposits and maintains the value of performing assets via their immediate transfer to a healthy bank.

Special consideration needs to be given to systemic banking crises. These occur when significant stress takes place (for example, systemwide bank runs). The resulting disruptions may include severe effects on the payment system, credit flows, asset values, and economic growth, as well as a loss of confidence in the banking system. Recapitalization typically comes from fiscal sources, in some cases with private participation (for example, Indonesia in 1999 and Greece in 2012). Last resort containment measures, including blanket guarantees and administrative measures, may be needed to limit contagion risks.⁵ Public support may be warranted because of large capitalization needs, the difficulty-to-price risk, and limited private sector participation.

Under systemic stress, bank resolution may require public intervention. Bank restructuring will require rapid intervention, clear rules uniformly applied to all banks, and depositor protection. State intervention would likely come through the use of tools such as the following:

- Bail-in provides the statutory power to recapitalize a distressed systemic institution by writing down its unsecured debt or converting it into equity.⁶ Bail-in avoids the complexity associated with transferring assets and liabilities, and provides incentives to raise capital or restructure debt voluntarily before triggering the bail-in power.

cally important functions—such as critical financial services, payment, clearing, and settlement functions—and liquidation options that provide for the orderly closure and wind-down of all or parts of the business in a way that protects retail customers.

⁵Blanket guarantees can help stop bank runs, but they have had mixed results. They are ineffective if used in isolation, fiscal costs can be substantial, and exit from the guarantee requires careful calibration. Administrative measures (for example, a deposit freeze or capital and exchange controls) may contain the collapse of the banking system by stopping liquidity outflows when confidence is not restored. These should be considered measures of last resort, as they could be disruptive to economic activity and private sector confidence. Azerbaijan limited individual withdrawals to a maximum of AzN 1,000 per day, while companies could withdraw money only to pay salaries and other operational expenses.

⁶For a detailed discussion, see Zhou and others (2012).

- Under P&A, disruptions are minimized by maintaining the value of performing assets via a transfer to a healthy bank. In the context of systemic stress, deposit insurance may require additional public financing.
- A bridge bank assumes all or part of the assets and liabilities of the failed bank within a short period, excluding nonperforming assets, subsidiaries, assets in litigation, and fraud-related and contingent liabilities. Regulators appoint new management for the bridge bank, and the government may contribute additional resources to strengthen the balance sheet. The bridge bank may raise concerns about political interference and unfair competition because of state participation. The bridge bank would be closed within two to three years.
- Bank nationalization uses public funds for recapitalization, resulting in state ownership of financial institutions. Nationalization can raise concerns about political interference and about generating contingent liabilities to the public sector.

Deposit insurance can help maintain confidence and limit contagion risks. Effective deposit insurance, to be called on rarely, requires a clear funding arrangement, depositors' understanding of the compensation scheme, and timely payment to depositors. Ideally, the scheme should be explicit about limited coverage and be financed by the industry through an *ex ante* premium; payouts should take place within the seven-working-day objective recommended by the Basel Core Principles. Most CCA countries do not have an effective deposit insurance mechanism in place, although some measures were taken after the global financial crisis. For example, Azerbaijan covered many deposits from closed banks in 2015–16. Kazakhstan's deposit insurance fund strengthened its funding. Georgia has implemented a newly designed deposit insurance scheme covering deposits in local and foreign currency.

A robust emergency liquidity assistance (ELA) framework would help strengthen depositor and creditor confidence under systemwide liquidity pressures. ELA is targeted toward solvent institutions facing temporary liquidity pressures.⁷ The central bank, as the lender of last resort, may provide emergency liquidity to address banks' idiosyncratic liquidity needs. ELA should be collateralized against high-quality assets, issued at a fee in response to well-defined triggers, and provided at the sole discretion of the central bank. Well-designed lending procedures, clearly laid out authority, accountability, and disclosure rules in the ELA help promote financial stability, reduce moral hazard, and protect the central bank from undue political pressure. There are drawbacks to ELA: it raises monetary aggregates and could generate moral hazard and losses to the central bank if not adequately

⁷See Dobler and others (2016) for a discussion of the central bank's role as a lender of last resort after the global financial crisis. He (2000) discusses operational aspects of official emergency liquidity support to individual institutions under stress.

collateralized. It may also be prone to abuse, as it involves support for ultimately insolvent banks, and it may have limited effects in heavily dollarized economies if no foreign exchange liquidity is provided. To mitigate risks, the central bank should put in place strong safeguards to ensure the appropriate use of ELA funds and timely repayment, sterilize liquidity injections, and enhance the supervision of recipient banks.

Step 4. Authority, Roles, and Responsibilities

For a fully effective resolution, the resolution authority should have sufficient powers, operational independence, sound governance, and adequate resources. Supervisors in the CCA region generally have some powers to resolve banks in distress. However, powers are typically limited in scope and, in some countries, may be reversed by court decisions. Where these powers are incomplete or nonexistent, CCA authorities should take action. Consistent with international standards, judicial review of resolution decisions should be circumscribed to monetary compensation, and the ability of a court to overturn or suspend a resolution decision should be limited.⁸ Preserving the right to monetary compensation is especially important to ensure that no party is rendered worse off under a resolution than it would have been had the bank been liquidated. The resolution authority should also have the expertise, resources, and operational capacity to implement resolution measures. The resolution authority and its staff should be protected against liability for actions taken and omissions in the good faith exercise of their resolution powers. The IMF will continue to support CCA countries in their efforts through policy advice, technical assistance, and training.

Clear roles to address financial stress need to be established. In the face of systemic stress, it is vital to have a coordinating body that brings relevant policymakers to contingency planning and crisis management. This body should be made up of representatives of the central bank, the ministry of finance, the deposit insurance agency, and the supervisory agency and resolution authority (if separate). While some CCA countries have established a financial stability coordinating committee (for example, Azerbaijan and Tajikistan), others have not. Roles and responsibilities need to be sufficiently and clearly defined. The ministry of finance will need to be involved in possible public intervention, and decisions should be formulated with diligence and independence and with minimum political pressure.

The resolution framework needs to ensure access to sufficient funding without exacerbating moral hazard. Public resources, including those in sovereign

⁸Constraints imposed by domestic legal systems have resulted in delays in resolving problem banks in some CCA countries. In the Kyrgyz Republic, proposed limits to judicial reviews were considered unconstitutional.

wealth funds of CCA oil exporters, have been made available to institutions considered too big to fail. However, these actions have not always resulted in smooth resolutions. Also, central banks have taken equity participation in troubled banks, guaranteed liabilities, or provided subordinated loans, despite their conflict of interest as regulators. Moral hazard can be reduced by providing state support only in cases of systemic banks, after NPL losses are recognized and existing shareholders are wiped out, and after private funding resources are exhausted and public funds are needed to preserve financial stability—which would depend on fiscal space. Preferential treatment should not be provided to certain depositors.

Resolution frameworks should also facilitate cross-border coordination. An effective resolution framework needs to provide a mandate for cooperation, information exchange, and coordination with foreign financial authorities, especially in CCA countries with a large presence of foreign banks (for example, Georgia).

Strengthening Prudential Regulation and Supervision

Strengthening prudential regulation and supervision is a priority in all CCA countries. As countries make progress in implementing the Basel principles, regulatory frameworks should be bolstered through (1) better management of FX lending risks, (2) incorporating macroprudential policy to help manage systemic risk, and (3) improving bank corporate governance. It is also essential to strengthen risk-based and consolidated supervision. In turn, banks should improve their risk analysis, management, and governance structures to strengthen business models. These actions would support better functioning financial systems and promote greater and more inclusive growth. Once again, country-specific conditions are important, and the IMF stands ready to support CCA countries through policy advice, technical assistance, and training.

The 2014 shocks demonstrated the need for renewed efforts to strengthen regulatory and supervisory frameworks across the CCA.¹ The prudential framework is the first line of defense in the case of shocks, and it should support the private sector's own defenses (earning capacity, risk management culture, capital cushions). A strong prudential position not only is good for building greater resilience, it also supports banks in their role as intermediaries to support the real economy. Recent Bank for International Settlements work finds that a 1 percentage point increase in the equity-to-total-assets ratio of a bank reduces its cost of debt by approximately 4 basis points and is associated with a faster pace of lending growth of about 0.6 percentage points per year (see Caruana 2017). Efforts are also required to apply prudential norms uniformly and in a transparent manner in the context of good corporate governance.

Strengthening prudential regulation and supervision should be done in coordination with other macro and structural policies. The core principles for

¹For details on the Basel III core principles, see BCBS (2011).

effective banking supervision (BIS 2012a) identify important preconditions: (1) sound and sustainable macroeconomic policies; (2) a well-established framework for financial stability policy formulation; (3) a well-developed financial infrastructure; (4) a clear framework for crisis management, recovery, and resolution; (5) an appropriate level of systemic protection (financial safety net); and (6) effective market discipline. Adequate macro policies and structural reforms, including improving corporate governance, are essential for the financial sector to play its role in reallocating capital to boost long-term growth. Exchange rate flexibility, which is necessary to cope with frequent external shocks, requires a comprehensive policy framework.²

CCA commercial banks should strengthen credit risk assessment practices—particularly given greater exchange rate flexibility—while moving ahead with implementation of the Basel principles. Actions must consider the stage of development in the financial sector. In the context of dollarized lending, banks would need to enhance credit risk assessment tools to better adapt their business model to greater exchange rate flexibility (Box 5). This may call for higher provisioning or capital requirements and stronger stress-testing frameworks. Loans should be adequately provisioned for regardless of the business cycle, as this will help long-term resilience and ensure that capital is sufficient to support risks. For example, Georgia imposes higher risk weights (150 percent) for FX lending, requiring banks to build higher buffers. As CCA countries move to greater exchange rate flexibility, central banks should improve FX risk assessment tools, with stricter rules on open FX positions and FX liquidity requirements (as is done now in Azerbaijan and Georgia). Risk weights for capital buffers and limits on FX loans can also be adjusted. The experience of Georgia and Armenia shows that the effects of large depreciations can be mitigated by stronger rules on open positions, FX liquidity, and FX loans.³ In dollarized economies, FX liquidity requirements are especially important, as the central bank may not act as a lender of last resort in foreign exchange.

Prudential regulation should be enhanced to minimize interconnected lending practices. When bank credit decisions are influenced by government or vested interests, they may increase credit concentration, boost segmentation, and result in excessive risk taking. To enhance resilience, prudential regulation should require the disclosure of bank ownership (up to and including the beneficial owner) and associated economic groups, and establish limits to interconnected lending through higher capital and provisioning requirements. Prudential regulation should also clearly define which persons and entities can be considered to be related to the banks and thus subject to related-party

²For details, see Horton and others (2016).

³The financial supervisor in Azerbaijan issued regulations on responsible lending practices in 2016, setting out conditions for granting foreign and local currency loans.

regulations. These regulations should also establish lending limits, capital charges, and provisioning requirements and, in some cases, consider deleting related-party lending from banks' capital base. Bank management needs to internalize these changes and adjust their business models or face sanction or exit.

Some CCA countries have started incorporating macroprudential policy to limit systemic risk buildup. The global financial crisis demonstrated that neither market discipline nor microprudential policy was sufficient to support financial stability and highlighted the need to monitor the systemwide buildup of risks.⁴ While macroprudential policy is underdeveloped in most CCA countries, some (for example, Armenia, Georgia, and Kazakhstan) have introduced it to help manage the buildup of systemic risk. The National Bank of Georgia recently created a financial stability department responsible for macroprudential policy.

Financial authorities need to monitor the two key dimensions of systemic risk:

- *Interconnectedness.* This requires a better accounting of the systemic relevance of individual institutions in generating spillover effects, preferably using a rule-based approach. Following BIS (2012b), the identification of domestic systemic institutions should take into account the impact of the bank's failure on the domestic economy; to be assessed based on size, interconnectedness, readily available substitutes or financial infrastructure for the services they provide, cross-jurisdictional activity, and complexity. In this context, for example, Georgia has identified domestic systemic domestic banks, for which Basel III principles would require an additional capital requirement (up to 2.5 percent).
- *Aggregate risks across the financial system over time.* Special consideration should be given to leverage procyclicality and to maturity-mismatch positions in the financial system. Risks facing individual intermediaries often depend on systemwide behavior, and the effectiveness of a bank's diversification strategy may depend on other institutions.

In addition to strengthening regulation, supervision should move toward a risk-based approach. The risk-based approach calls for resources being focused on larger, more complex, and riskier banks and portfolios.⁵ Supervisors should rely more on risk assessment tools and a more intensive use of stress test results to assess capital adequacy. As banks improve their internal risk management models (credit scoring models, simulation approaches for interest rate risk, and so on), the supervisor should issue guidelines for the inter-

⁴For details, see IMF (2011, 2012, 2013, 2016a) and CGFS (2010).

⁵See BCBS (2012) for core principles for effective banking supervision.

nal validation of these models. However, offsite supervision cannot replace onsite supervision. Some countries (for example, Turkmenistan and Uzbekistan) will need sustained reforms because they still rely on compliance-based supervision. In contrast, Georgia has adopted a supervisory approach (the General Risk Assessment Program, GRAPE) that combines micro- and macroprudential supervision in one process.⁶

The mandate for financial stability should be explicitly specified in the legislation. Current legal frameworks in some CCA countries do not explicitly define which institution oversees financial stability, despite de facto responsibilities taken by the central bank or a financial supervisory agency. Enforcing prudential standards also requires strengthening the independence of the financial supervisor. The amended law on the National Bank of Tajikistan (NBT) has strengthened provisions related to the appointment and dismissal of the governor and the bank licensing authority of the NBT. However, the NBT is responsible only for banking sector stability and not for fostering stability in the financial system.

Robust supervision is needed beyond banks. Financial sectors in the CCA countries are currently bank-centered, but reforms are progressing toward developing local capital markets and nonbanking financial channels. Some countries have significant nonbanking financial institutions—for example, financial institutions involved in insurance or leasing, which do not take deposits. This could pose risks to financial stability, because of links to the banking sector or spillover risks to banking stability. Regulation and supervision should be strengthened to address nonbanking financial institution vulnerabilities.

Weaknesses in consolidated and cross-border banking supervision should also be addressed. Some CCA central banks do not have the power to conduct consolidated supervision, which hinders the identification of risks in banking groups. In some countries, legislation allows the supervisor to carry out consolidated supervision over limited activity of the group. Legislation is needed that clearly identifies the relationship between the bank and the rest of the group, to ensure compliance with related-party limits. Going beyond borders, home-host supervisory relationships are underdeveloped in some countries, despite the presence of foreign-owned banks. More frequent contacts and information exchanges with foreign supervisors, through memoranda of understanding, are needed to effectively monitor foreign operations.

Bank corporate governance should be aligned with best international standards. In many CCA countries, weak governance and opaque bank owner-

⁶The stress testing framework under GRAPE is designed to incorporate principles of risk sensitivity, simplicity, and comparability and is an inherent part of the supervisory cycle. For more details, see BCBS (2017).

ship have facilitated elevated related-party lending and excessive risk taking. This situation has been compounded by weak bank management, political interference, and corruption and discretionary actions of regulators (including forbearance). Weak governance has generated credit misallocation and threatens economic diversification and growth. According to Principle 14 of the core principles for effective supervision, the supervisor needs to determine that banks and banking groups have robust corporate governance policies and processes covering, for example, strategic direction, group and organization structure, control environment, responsibilities of bank boards and senior management, and compensation.⁷ A strong governance structure should (1) emphasize transparency; (2) include clear responsibility at the executive and board levels; (3) limit public sector influence in bank administration and operations; and (4) establish independent risk management, compliance, and internal control units. The supervisor should have the power to require changes in the composition of the bank's board if it believes that any individuals are not fulfilling their duties. Shareholders and managers must do their part in supporting efforts to strengthen corporate governance, to promote public confidence and uphold the safety and soundness of the banking system.

To be effective, the supervisor must operate in a manner that reflects strong governance and independence. The authorities should ensure that the supervisor has the necessary legal, organizational, human capital, and financial resources. Institutional supervisory capacity needs to improve. In some CCA countries, insufficient staffing and outdated technical resources have become bottlenecks for effective supervision, and relatively low salaries have led to a loss of experienced supervisory staff. There is a considerable need for training and keeping abreast of supervisory developments. Central banks should periodically review salary levels and increase training budgets and exchanges with foreign supervisory authorities. The supervisors should be fully aware of their capacities, responsibilities, obligations, and limits to protect the integrity of the system.

⁷For details, see BCBS (2012).

Box 1. Financial Feedback Effects to the Economy: Country Experiences

Disruptions in the financial sector can amplify and prolong the impact of external shocks on the real economy through the credit, exchange rate, and fiscal channels.

Credit channel. Poor asset quality can weigh on credit growth, putting a drag on economic growth and hindering financial development. Increasing numbers of non-performing loans (NPLs) and capital erosion may undermine the capacity of the sector to supply credit. Deteriorated balance sheets may raise funding cost (external finance premium), increase lending rates, and possibly exacerbate the NPL problem, which can further dampen growth and worsen the asset quality problem. NPLs also reduce borrowers' creditworthiness and therefore the demand for loans.

An active treatment of NPLs is associated with better economic outcomes. Using matching analysis, Balgova, Nies, and Plekhanov (2016) find that when compared to a scenario of persistent and high NPLs, active reduction of the number of such loans increases GDP growth per capita by 3 to 4 percentage points and investment growth by 13 percentage points. Some countries prefer a passive approach—waiting for growth and credit recovery to reduce the number of NPLs—but this approach is risky, as the situation could worsen rapidly if the recovery does not come promptly.

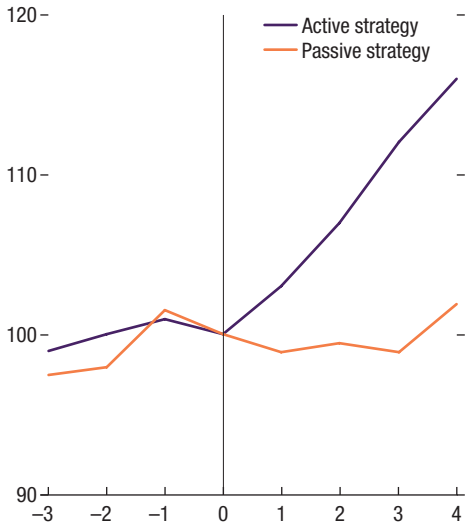
Fiscal channel (direct fiscal costs). Increasing systemic risks may require direct state intervention to maintain financial stability. This may include recapitalization, asset purchases, liquidity support, or loan guarantees. Evidence from banking crises shows that direct costs can be very high, with a median of 7 percent of GDP and an associated public debt increase of 12 percent of GDP. Direct fiscal costs differ significantly across countries; they are typically higher in those with larger and more leveraged banking sectors that rely more on external funding. Strong bank supervision and effective safety nets, including broader deposit insurance schemes, tend to reduce direct costs.

Fiscal channel (indirect fiscal costs). The global financial crisis showed the risks of links between sovereigns and the financial health of banks. High exposure of banks to domestic sovereign debt increased their funding costs in countries with high public debt. On the other hand, sovereign risk increased with higher contingent liabilities arising from financial stress. Lower credit supply and demand and a cut in expenditures associated with large direct costs to bail out the banking system can reduce growth and, therefore, government revenues, creating additional fiscal pressures.

Exchange rate channel. A loss of confidence in the banking system can trigger higher deposit dollarization and capital flight and lead to further exchange rate volatility, hindering growth and investment and possibly destabilizing the financial system. Central bank intervention to smooth exchange rate volatility can put pressure on reserves and lead to a disorderly adjustment.

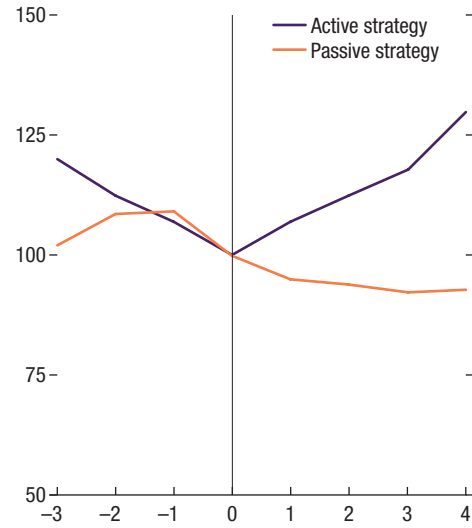
Box 1. Financial Feedback Effects to the Economy: Country Experiences (continued)

Figure 1.1. GDP per Capita Index
(Year 0 = 100)



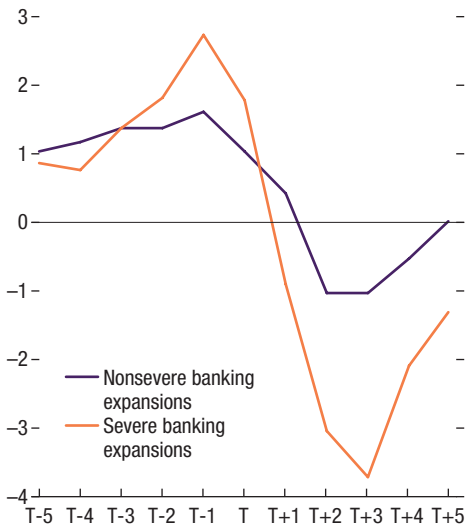
Source: Balgova, Nies, and Plekhanov 2016.

Figure 1.2. Investment Index
(Year 0 = 100)



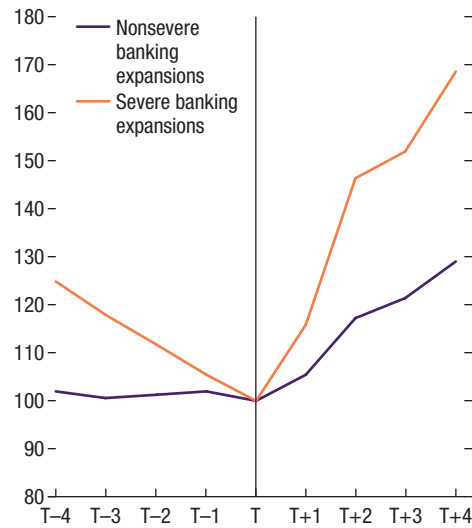
Source: Balgova, Nies, and Plekhanov 2016.

Figure 1.3. Primary Balance
(Percent of GDP)



Source: IMF 2015a.

Figure 1.4. Public Debt
(Percent of GDP, normalized to 100 at T)



Source: IMF 2015a.

Box 2. Impact of Nonperforming Loans on the Real Economy

An elevated number of nonperforming loans (NPLs) undermines the viability of banking sectors. Empirical studies suggest that a 1 percentage point increase in the ratio of NPLs to total loans reduces net lending by 0.8 percent and that a ratio higher than 10 percent has a measurable impact on the long-term viability of the banking sector and even financial stability. Most systemic banking crises have been marked by a high rate of NPLs (28 percent of total loans on average at their peak), and it can take five to six years for NPLs to recover.

NPLs negatively affect lending through several channels:

- On the supply side, weaker income streams and higher provisioning harm profitability, higher risk weights on impaired assets tie up capital, and heightened risk perceptions increase funding costs.
- On the demand side, high indebtedness holds firms back from expanding and investing. Empirical studies suggest a positive correlation (and a reinforcing loop) between persistently elevated NPLs and corporate debt overhang and investment, with delayed recoveries.
- The resulting lending squeeze tends to disproportionately affect firms that rely heavily on bank financing (dominant in the CCA) as well as firms that are small, concentrate on production of nontradables, or have few tangible assets.

Timely disposal of NPLs could have a positive effect on lending. At least theoretically, disposal of NPLs could free up capital and generate new lending capacity. However, this depends on the extent to which NPLs are provisioned and the size of the discount at which they are liquidated; that is, whether the selling price lies below or above their net book value (the gross value of the NPL after deducting the level of loan loss reserves). Fully provisioned loans can be written off, while a sale of NPLs with low provisioning and a high haircut would result in a loss and have a negative effect on capital.

This box draws on Aiyar and others (2015) on the challenges of resolving nonperforming loans in Europe.

Box 3. Addressing Nonperforming Loans: Cross-Country Experiences

International experience suggests several obstacles to the resolution of nonperforming loans (NPLs). These include deficiencies in supervisory and legal frameworks, complications related to availability of information, and taxation. Deficiencies in accounting standards may weaken incentives to resolve NPLs; for example, backward-looking approaches with excessive discretion on assessing provisioning needs, allowance for accrual of interest income from NPLs, and lack of guidance on collateral valuation and write-off modalities. Weak capital buffers—especially difficulties in realizing collateral—present another issue. Ineffective insolvency regimes, lack of suitable out-of-court workout alternatives, and constraints on information collection and sharing also prevent quick debt resolution.

Resolution of NPLs requires a comprehensive strategy. Three key elements for resolving NPLs are (1) more robust supervision, (2) reforms to insolvency, and (3) development of a distressed debt market. While the first element can be implemented immediately by tightening supervision, the other two require more time, and action should not be postponed. Resolution of NPLs can also be supported by tax incentives and reforms to improve access to debtor information. Finally, if elevated NPLs are widespread, national-level coordination among stakeholders may be required.

Resolving NPLs requires intensive supervision and adequate insolvency frameworks. While the former aims to ensure swift loss recognition and the exit of nonviable borrowers (Sweden, 1994; Korea, 1998; Japan, 2001), the latter facilitates the restructuring of failing businesses and timely settlement of disputes (Korea, 1998; Japan, 1999; Indonesia, 1999; Thailand, 1999; Turkey, 2002; Korea, 2006; Japan, 2008). In several countries (Indonesia, Korea, Malaysia, Sweden, Thailand), private and public asset management companies (AMCs) have been used to facilitate disposal of NPLs and corporate restructuring. For financial institutions, intensive supervision would mean applying conservative methodologies for assessing NPLs—for example, by discounting expected cash flows or separating out nonviable firms altogether. In the case of borrowers, it would mean identifying firms for bankruptcy and liquidation, especially those with low interest-coverage ratios and high leverage.

Effective insolvency systems encourage quick exit and restructuring of nonviable firms by providing incentives for out-of-court agreements. These incentives include enabling the rapid liquidation of nonviable debtors, allowing for ownership changes in debt restructuring agreements, and facilitating expeditious court approvals for debt restructuring plans negotiated out of court. The introduction of temporary, formal, and hybrid (where involvement of the judiciary authorities is less intensive than usual but still an integral part of the procedure) out-of-court workout frameworks has

This box draws on Aiyar and others (2015).

Box 2. Impact of Nonperforming Loans on the Real Economy (*continued*)

enhanced incentives for both creditors and debtors to participate and resulted in better coordination among creditors. Insolvency reforms also could be complemented by introducing specialized courts and insolvency administrators, and removing tax and regulatory obstacles.

Lack of developed markets for distressed debt is an important obstacle to resolving NPLs. AMCs, private or public, could help kick-start a market for distressed debt. They could serve as an attractive instrument to differentiate good from bad assets, allowing banks to focus on financial intermediation and AMCs on asset recovery. AMCs also provide other benefits: they can exploit economies of scale, improve bargaining power, and facilitate better valuation and credit discipline (transfer of NPLs entails a separation of loan administration from credit officers). AMCs were particularly effective in Asia, where they helped eliminate the gap between the price at which banks were willing to sell and the price at which investors were willing to buy.

Box 4. Effective Resolution Regimes for Financial Institutions

I014, the Financial Stability Board of the Bank for International Settlements established 12 key attributes of resolution regimes. These attributes relate to scope; resolution authority; resolution powers; set-off, netting, collateralization, and segregation of client assets; safeguards; funding of firms in resolution; legal framework conditions for cross-border cooperation; crisis management groups; institution-specific cross-border cooperation agreements; resolvability assessments; recovery and resolution planning; and access to information and information sharing.

Specifically, an effective resolution regime should—

- Ensure continuity of systemically important financial services, as well as payment, clearing, and settlement functions;
- Protect (where applicable and in coordination with the relevant insurance schemes and arrangements) such depositors, insurance policy holders, and investors as are covered by such schemes and arrangements, and ensure the rapid return of segregated client assets;
- Allocate losses to firm owners (shareholders) and unsecured and uninsured creditors in a manner that respects the hierarchy of claims;
- Not rely on public solvency support and not create an expectation that such support will be available;
- Avoid unnecessary destruction of value and therefore seek to minimize the overall costs of resolution in home and host jurisdiction and (where consistent with other objectives) losses to creditors;
- Provide for speed and transparency and as much predictability as possible through legal and procedural clarity and advanced planning for orderly resolution;
- Provide a mandate in law for cooperation, information exchange, and coordination domestically and with relevant foreign resolution authorities before and during the resolution;
- Ensure that nonviable firms can exit the market in an orderly way; and
- Be credible and, thereby, enhance market discipline and provide incentives for market-based solutions.

The key attributes apply to financial market infrastructure and to any financial institution that is deemed systemically significant or critical. They extend to holding companies of a bank, nonregulated operational entities within a financial group or conglomerate that are significant to the business of the group or conglomerate, and branches of foreign firms. The resolution regime should require that, at the least, all domestically incorporated global systemically important financial institutions have a

For more details, see FSB (2014).

Box 4. Effective Resolution Regimes for Financial Institutions (*continued*)

recovery and resolution plan in place, are subject to regular resolvability assessment, and are subject to institution-specific cross-border cooperation agreements.

The resolution authorities should have resolution powers, including the power to (1) remove and replace the senior management and directors and recover monies from responsible persons; (2) appoint an administrator to take control of and manage an affected bank with the objective of restoring the bank or parts of its business to ongoing and sustainable viability; (3) operate and resolve the firm, including terminating contracts, continuing or assigning contracts, purchasing or selling assets, and writing down debt; (4) ensure continuity of essential services; (5) override rights of shareholders of the firm in resolution; (6) transfer or sell assets and liabilities, legal rights and obligations to a solvent third party; (7) establish a temporary bridge institution to take over and continue operating certain critical functions and viable operations of the failed firm; (8) establish a separate asset management vehicle and transfer to the vehicle for management any run-down nonperforming loans or difficult-to-value assets; (9) carry out bail-in to achieve or help achieve continuity of essential functions; (10) impose a moratorium with a suspension of payments to unsecured creditors and customers and a stay on creditor actions to attach assets or otherwise collect money or property from the firm; and (11) effect the closure and orderly wind-down (liquidation) of the whole or part of a failing firm. This comprehensive set of resolution powers establishes an important benchmark for CCA regulatory authorities, and the IMF stands ready to assist with policy advice, technical assistance, and training.

Box 5. Dollarization and Related Financial Risks in the CCA Countries

Dollarization in the CCA increased after the 2014 shocks. While dollarization rates declined, economic stability gained ground over the past decade. CCA financial sectors have remained highly dollarized, with average loan dollarization at 43 percent in 2015 and average deposit dollarization at 59 percent, and the downward trend was reversed after the 2014 shocks and nominal depreciation of local currencies.

Dollarization can exacerbate balance sheet losses in the case of sharp exchange rate adjustments. Depreciations may increase the debt service burden of households and small and medium-sized enterprises with foreign exchange (FX) liabilities; an additional vulnerability comes from bank's open FX position. To the extent that the private sector also holds FX deposits, the increased debt burden could be somewhat compensated by the positive wealth effects. Central banks can act as a lender of last resort for domestic currency but are limited in terms of the foreign currency liquidity they can provide to banks.

To better assess credit risks related to dollarization, financial institutions should put in place internal mechanisms to qualify, define, and monitor direct credit in FX. This requires (1) identification and monitoring of clients exposed to FX credit risks, (2) tighter requirements for extending credit in foreign currency and clear criteria for FX credit operations, (3) incorporating exchange rate shocks into stress testing the credit portfolio's capacity to repay, and (4) undertaking corrective action over the credit qualification in cases where borrowers' capacity to repay changes substantially because of their FX exposure. Higher provisioning or capital requirements should be also implemented.

A successful de-dollarization strategy should include incentives and policy signals that favor the use of local currency. Ben Naceur, Hosny, and Hadjian (2015) note that, although there is no unique formula for success, empirical studies and cross-country experiences suggest that credible monetary and exchange rate frameworks, low and stable inflation, and deep domestic financial markets are essential ingredients of any de-dollarization strategy. Policymakers need to consider the sequencing of policies, effective communication, and risks. Maintaining macroeconomic stability is a necessary condition for de-dollarization. Enforcing existing laws and regulations that establish the local currency as a legal tender is an important first step (for example, pricing, tax payments, and listing of equities). Other measures include encouraging banks to issue long-term certificates of deposit in local currency to increase the stability of local currency funding, higher reserve requirements on FX funding, higher risk weighting on FX loans (for capital requirements computation), and higher liquidity ratios for FX assets, liabilities, and so on.

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