EXECUTIVE SUMMARY

ix years after the start of the crisis, the global economic recovery continues to rely heavily on accommodative monetary policies in advanced economies to support demand, encourage corporate investment, and facilitate balance sheet repair. Monetary accommodation remains critical in supporting the economy by encouraging economic risk taking in advanced economies, in the form of increased real spending by households and greater willingness to invest and hire by businesses. However, prolonged monetary ease may also encourage excessive financial risk taking, in the form of increased portfolio allocations to riskier assets and increased willingness to leverage balance sheets. Thus, accommodative monetary policies face a trade-off between the upside economic benefits and the downside financial stability risks. This report finds that although the economic benefits are becoming more evident in some economies, market and liquidity risks have increased to levels that could compromise financial stability if left unaddressed.

The best way to safeguard financial stability and improve the balance between economic and financial risk taking is to put in place policies that enhance the transmission of monetary policy to the real economy—thus promoting economic risk taking—and address financial excesses through well-designed macroprudential measures.

Economic risk taking is advancing but uneven

The October 2014 World Economic Outlook (WEO) projects the global recovery to strengthen modestly this year and continue into 2015, supported by accommodative monetary policies in advanced economies and declining headwinds from tighter fiscal policy. However, growth is not yet robust across the globe, and downside risks have risen. Business and consumer confidence remains fragile in many areas, reflecting uncertainties about the recovery of private demand and concerns about incomplete balance sheet repair in banks and corporations. This shortfall in confidence continues to impede greater economic risk taking, making corporations in advanced economies reluctant to ramp up capital investment, despite reasonable

earnings growth and access to funding at very low interest rates. Balance sheet repair and monetary policy are now combining to support greater economic risk taking and a brighter outlook for capital expenditure. But prospects are uneven, reflecting a variety of impediments.

On the brighter side is the United States, where business fixed investment has been picking up, although at a slower pace than in previous recoveries. Capacity utilization is returning to precrisis levels and banks are loosening lending standards, as companies are increasingly focusing on investment rather than equity buybacks. In the euro area, however, growth in business fixed investment remains weak. Capacity utilization is still below precrisis levels, banks have only recently stopped tightening corporate lending, and economic policy uncertainty remains elevated. A number of major emerging market economies are facing weakening export growth and slowing credit expansion. In those countries, capital expenditures in major nonfinancial firms declined across the board in 2013.

The WEO expects the strongest rebound in overall growth in the United States, whereas the brakes on recovery in the euro area will ease only slowly, and growth in Japan will remain modest. For emerging markets, the scope for macroeconomic policies to support growth varies across countries and regions, but space remains limited in several countries with external vulnerabilities.

Easy money continues to increase global financial stability risks

Accommodative policies aimed at supporting the recovery and promoting economic risk taking have facilitated greater financial risk taking. This has resulted in asset price appreciation, spread compression, and record low volatility, in many areas reaching levels that indicate divergence from fundamentals. What is unusual about these developments is their synchronicity: they have occurred simultaneously across broad asset classes and across countries in a way that is unprecedented.

Capital markets have become more significant providers of credit since the crisis, shifting the locus of risks to the shadow banking system. The share of credit instruments held in mutual fund portfolios has been growing, doubling since 2007, and now amounts to 27 percent of global high-yield debt. At the same time, the fund management industry has become more concentrated. The top 10 global asset management firms now account for more than \$19 trillion in assets under management. The combination of asset concentration, extended portfolio positions and valuations, flight-prone investors, and vulnerable liquidity structures have increased the sensitivity of key credit markets, increasing market and liquidity risks.

Emerging markets are more vulnerable to shocks from advanced economies, as they now absorb a much larger share of the outward portfolio investment from advanced economies. A consequence of these stronger links is the increased synchronization of asset price movements and volatilities.

These structural changes in credit markets, together with the expected normalization of monetary policy in the United States, have raised market and liquidity risks in ways that could compromise financial stability if left unaddressed. The increased sensitivity of credit markets could make the exit process more volatile, potentially undermining the ability of the financial system to support the recovery.

To illustrate these potential risks to credit markets, this report examines the impact of a rapid market adjustment that causes term premiums in bond markets to revert to historic norms (increasing by 100 basis points) and credit risk premiums to normalize (a repricing of credit risks by 100 basis points). Such a shock could reduce the market value of global bond portfolios by more than 8 percent, or in excess of \$3.8 trillion. If losses on this scale were to materialize over a short time horizon, the ensuing portfolio adjustments and market turmoil could trigger significant disruption in global markets.

Managing risks from an ongoing overhaul in bank business models to better support economic risk taking

The policy challenge is to remove impediments to economic risk taking and strengthen the transmission of credit to the real economy. Banks have come a long way since the global financial crisis. Adjustment has proceeded at different stages, with the first stage focus-

ing on emergency stabilization measures. In the second phase, banks have strived to adapt to new business and regulatory realities. Since the start of the crisis, banks hold significantly more capital and have accelerated balance sheet repair. But progress has been uneven across banks and many institutions need to do more to achieve a sustainable business model.

Today, low profitability raises concerns about some banks' ability to build and maintain capital buffers and meet credit demand. Reflecting the size and breadth of the challenge, 80 percent of assets of the largest institutions have a return on equity that does not cover the cost of capital required by shareholders. These banks are entering a third phase, in which they will need a more fundamental overhaul of their business models. This will include a combination of repricing existing business lines, reallocating capital across activities, restructuring, or retrenching altogether.

Based on a sample of 300 advanced economy banks, this report finds that many banks have the potential capacity to supply credit, although there is a group of institutions, mostly from the euro area, that would require a high level of repricing to generate sustainable profits and rebuild capital buffers. Such a repricing may not be feasible, especially if done on a stand-alone basis and not followed by other market participants. This could limit these banks' capacity to meet credit demand, particularly in those countries that are in greatest need of a recovery in credit, and create headwinds for the economic recovery.

Strengthening the transmission of credit means, in part, encouraging the prompt and orderly exit of nonviable banks. This would help relieve competitive pressures in a context of excess capacity and allow viable banks to build and maintain capital buffers and meet credit demand. Regulators can further assist that process by encouraging banks to move away from old practices of cross-subsidizing products and adopt more flexible and transparent business models with product pricing that reflects risks and regulatory requirements.

The credit transmission mechanism will also be aided, particularly in Europe, by greater market-based access to credit, including through safe securitization. This will take time, particularly for financial systems that have traditionally been reliant on bank lending. Removing impediments to nonbank participation in credit origination will require solid regulatory frameworks for nonbanks. As discussed further in Chapter 2, policymakers need to closely monitor the risks

that could develop as the financial system evolves in the coming years—with some activities moving from banks to nonbanks—and ensure that these risks are effectively mitigated and managed.

Improving the balance between economic and financial risk taking with policies to safeguard financial stability

Monetary policy should remain committed to achieving the central banks' mandate of price stability and—where relevant—output stability, while macroprudential policies should be the first line of defense against financial excesses that can threaten stability. Improving the monetary policy trade-off and containing the financial stability risks identified in this report require the effective deployment of a suite of microand macroprudential policy tools. This will reduce the need to tighten interest rates earlier than warranted by the needs of the economy. It will also make systemic institutions more resilient, help contain procyclical asset price and credit dynamics, and cushion the consequences of liquidity squeezes when volatility returns.

Macroprudential measures depend on three steps. First, policymakers must have the data necessary to *monitor* the build-up of financial stability risks. Second, they must *prepare* to ensure they have the statutory authority and analytical capacity to use the macroprudential policy tools that may be needed. This is particularly important in the nonbanking sector, where the regulatory framework is not yet fully in place and needs to be extended to tackle emerging risks. Third, policymakers must have an explicit mandate to *act* when needed and, equally important, the courage to act, even when measures are highly unpopular. Effective and balanced communication of the measures undertaken will also be needed.

A central concern is the market liquidity risk arising from the mismatch between the liquidity promised to mutual fund owners in good times and the cost of illiquidity when meeting redemptions in times of stress. The policy remedy should seek to address this mismatch, by removing incentives of asset owners to run—by aligning redemption terms of funds with the underlying liquidity in the assets invested—enhancing the accuracy of net asset values, increasing liquidity cash buffers in mutual funds, and improving the liquidity and transparency of secondary markets, specifically for longer-term debt markets. Redemption fees that benefit remaining shareholders are one option;

however, the calibration of such a fee is challenging and to the extent possible, should not be time varying, as this could encourage asset flight. Similarly, gates to limit redemptions appear to solve some incentive problems, but may simply accelerate redemptions ahead of potential imposition and lead to contagion.

Policymakers should also explore contingency measures in cases where illiquidity in markets has the potential for contagion. For advanced economies, bilateral and multilateral swap line arrangements could reduce excess volatility by ensuring access to foreign currency funding in times of stress. For emerging markets, in the event of significant capital outflows, some countries may need to focus on ensuring orderly market functioning. Possible actions include using cash balances, lowering the supply of long-term debt, and conducting switching auctions to temporarily reduce supply on the long end of yield curves. In addition to bilateral and multilateral swap line arrangements to access foreign currency funding in times of stress, multilateral resources such as IMF facilities could provide additional buffers. Keeping emerging market economies resilient calls for an increased focus on domestic vulnerabilities, including weak bank provisioning practices and low loss-absorbing bank buffers in some countries, as discussed in previous reports.

Finally, policymakers need to pursue a vigorous agenda of structural reforms in product and labor markets to increase the return on investment and make the recovery more sustainable.

Growth, risks, and regulatory responses to shadow banking around the world

Chapter 2 shows that in advanced economies, more narrowly defined shadow banking measures indicate stagnation, while broader measures (which include investment funds) generally point to continued growth since the global financial crisis. In emerging market economies, the growth of shadow banking continues to outpace that of the traditional banking system.

Shadow banking varies greatly across and within countries, but empirical results show that some of the key drivers behind its growth are common to all its forms: a tightening of banking regulation, ample liquidity conditions, and demand by institutional investors. Hence, the current financial environment in advanced economies remains conducive to further growth in shadow banking, including the migration of corporate lending from traditional banking to the

nonbank sector. Data limitations prevent a comprehensive assessment, but shadow banking in the United States seems to pose a greater risk to domestic financial stability than shadow banking in the euro area and the United Kingdom.

Policymakers need a more encompassing approach to regulation and supervision that focuses on both shadow banking activities and entities and places a greater emphasis on systemic risk. A critical element of that approach is better data on shadow banking.

Risk taking, governance, and compensation in banks

Chapter 3 empirically investigates the relation of risk taking in banks to banks' ownership structure, governance, and executive pay incentives. The results show that banks with board members who are independent from bank management tend to take less risk, as do banks whose boards have a risk committee and those that have large institutional ownership.

The level of executive compensation in banks is not consistently related to risk taking, but more long-term incentive pay is associated with less risk. As expected,

periods of severe financial stress alter some of these effects, as incentives change when a bank gets closer to default. In particular, when banks are weak, evidence indicates that shareholders (who are protected by limited liability) have an incentive to make risky bets at the expense of creditors—who expect to be bailed out—and society at large.

These results suggest policy measures, including some that have been part of the policy debate but had not previously been empirically validated. These measures include making compensation of bank executives more appropriately risk sensitive (including to the risk exposure of bank creditors), deferring some compensation, and providing for clawbacks. Bank boards should be more independent from management and establish risk committees. In addition, supervisors should ensure that board oversight of risk taking in banks is effective. The potential merits (and possible unintentional consequences) of including representation for debt holders on bank boards should be studied. Finally, transparency is critical to accountability and the effectiveness of market discipline.