European Bank Deleveraging: Implications for Emerging Market Countries

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Just before the 2008–9 global financial crisis, policy makers were concerned about the rapid growth of bank credit, particularly in Europe; now, worry centers on a potential global credit crunch led by European banking institutions. While recognizing that concrete evidence is limited by significant data gaps and lags, this note discusses the dynamics of European bank deleveraging and possible implications for emerging market economies (EMEs). Overall, the information available as of early 2012 shows a marked deterioration of credit conditions across Europe. Data also suggest that spillover effects are already being felt around the globe and imply significant channels through which deleveraging could have disruptive short- and long-term consequences for credit conditions in EMEs, particularly in Central and Eastern Europe (CEE). However, the significant liquidity support provided by the European Central Bank (ECB) since December may be a “game changer,” at least in the short term, because it has helped revive markets and limited the risk of disorderly deleveraging. The extent, speed, and impact of European bank deleveraging will henceforth depend largely on the evolution of market conditions, which in turn are guided by the ultimate impact of ECB liquidity support, attainment of sovereign debt sustainability and fiscal convergence within the euro zone, and credibility of the European rescue fund as an effective firewall against contagion.

Scope and Drivers of European Bank Deleveraging

Just before the 2008–9 global financial crisis, policy makers were concerned about the rapid growth of bank credit in Europe that uncovered serious fault lines in the financial system. The 2008–9 financial crisis demonstrated that European banks had been operating under an unsustainable business model that relied on thin layers of capital (that is, high leverage) and short-term wholesale funding to support rapid credit expansion both domestically and across borders. As regulators around the world launched extensive reforms to create more resilient financial systems, European banks responded by increasing equity (on average by about 20 percent) to ease market concerns about their solvency and to prepare for Basel III. At the same time, they cleaned up their balance sheets and reduced assets by an average of 10–15 percent by selling non-strategic assets, exiting from businesses subject to higher capital requirements, and reducing lending across virtually all regions.

The significant funding and solvency pressures that European banks have been facing since last fall have raised concerns that a simultaneous and disorderly adjustment in bank balance sheets could result in massive deleveraging and a credit crunch with global spillover effects. Notwithstanding the ongoing process of balance sheet adjustment, European banks remain high-
ly leveraged, with their median asset values at almost 19 times equity (figure 1). Although many European banks have reduced their loan-to-deposit (L/D) ratios (by about 36 percentage points on average from 175 percent in the first quarter of 2007), their reliance on wholesale funding remains high (figure 2). As such, gradual deleveraging is needed. However, while plans to scale back activities may be justified at an individual bank level, they become a concern if they occur simultaneously and induce fire sales and an adverse cycle of liquidity and solvency problems that could impede the provision of productive credit. Damaging spillover effects could further diminish global economic prospects at a time when flexibility of fiscal or monetary actions in some countries is limited.

A number of recent developments heightened concerns about the risk of acceleration in the deleveraging process. First, a negative feedback loop between bank, sovereign, and real sector risks, combined with large bank and sovereign refinancing needs in 2012–15, is keeping funding conditions tight and putting pressure on banks to reduce balance sheets. European banks also face dollar shortages, as illustrated by a sharp re-

trenchment of U.S. money market funds in the latter half of 2011 and elevated dollar-euro swap costs. Second, the EBA’s recapitalization requirement introduced in late 2011 required European banks to raise core tier 1 capital ratios to 9 percent by June 2012. A number of national regulators (Austria, Sweden, United States, and United Kingdom) also introduced country-specific measures that would effectively tighten or bring forward the implementation time table of Basel III capital requirements. While the European Banking Authority (EBA) has taken mitigating measures to limit the extent of deleveraging and avoid retrenchment of banking groups from host countries, preliminary capitalization plans submitted end-January 2012 are still undergoing a validation process by the EBA and national supervisors. Last, further deepening of the euro debt crisis and deterioration of the economic outlook would reduce bank earnings and raise nonperforming loans (NPLs), which would restrain banks from strengthening capital through retained earnings, inducing further deleveraging.

Prior to January 2012, many European banks had announced plans to meet the new capital requirements through means other than raising fresh capital. Arguing that acquiring capital from the market is difficult in an environment with low profitability and weak investor interest in European banks, many banks reported they would meet the capital target with a combination of: retained earnings; management of risk-weighted assets (RWAs), including cutting activities with high risk weights and reassessing the models used to generate risk weights; engaging in asset-liability management; and shrinking balance sheets, including by divesting noncore operations in various jurisdictions to focus on core markets and cutting jobs in certain locations and business units. Only a few banks have so far raised capital through rights issues. A worst-case scenario of meeting the requirement only by shrinking balance sheets would imply shedding €3.6 trillion or 10.5 percent of total bank assets.

Moreover, driven by more prudent risk management practices, European banks have been tightening lending standards. ECB’s latest lending surveys show that in the fourth quarter of 2011, credit conditions worsened significantly across the euro zone (figure 3). Key drivers were a deteriorating economic outlook, limited access to market financing, and tight liquidity conditions (figure 4). Banks expected further deterioration of credit conditions in the first quarter 2012. Indeed, after a record plunge in the last quarter of 2011, bank lending to firms and households improved only marginally. The latest ECB report on monetary and financial developments show that annual lending growth to the private sector has continued its downward path, growing at 0.7 percent in February, compared to 2.6 percent in 2011:Q2, with nonfinancial corporate credit growing by 0.4 percent from a year ago. Unprecedented liquidity provided to banks through the ECB’s long-term refinancing operations (LTROs) in end-December and February is estimat-
down 6 percent in the first nine months of 2011, compared to 2010. Arguably, this was partially a result of European banks’ limited access to U.S. dollar funding: European banks account for about one-third of the trade financing market, with large French banks providing a significant share in emerging Europe, Asia, Latin America, and West Africa. Anecdotal information also suggests that trade financing experienced significant declines in some regions in end-2011 (for example, Hong Kong SAR and Singapore), partially reflecting funding difficulties. European banks also have significant presence in aircraft and car leasing/shipping, which many banks are reportedly seeking to sell.

The latest data from the Bank for International Settlements (BIS) suggest that lending cuts by European banks focused primarily on dollar-denominated loans and loans with higher risk weights. In particular, European banks reduced funding contributions to new syndicated, bilateral leveraged- and project-finance loans between the third and fourth quarter of 2011 (figure 5). Banks with EBA capital shortfalls reduced their lending sharply for all categories—especially leveraged loans, aircraft/ship leasing, and project and trade finance. The BIS also notes, however, that increased financing from other banks, asset managers, and bond market investors largely compensated for the cuts by European banks in the third quarter of 2011, leaving the overall volume of new syndicated and large bilateral loans essentially the same as in the third quarter of 2011. Trade financing seems to have been picked up by Asia-based and other lenders, helping to limit its overall decline.

While only a limited amount of ECB liquidity has so far found its way to the real economy, liquidity operations are believed to have reduced the risk of disorderly deleveraging. The ECB’s two three-year LTROs provided more than €1 trillion of gross loans to banks in the region, and are believed to have

ed to have been used mostly to fund a profitable carry trade to purchase high-yielding bonds, particularly sovereigns, with the full supportive impact on lending expected to take some time to unfold.

Limited information suggests that certain areas of banking are being hit harder than others. Less profitable, capital-intensive projects are disproportionately affected, including infrastructure finance and loans to small and medium enterprises (SMEs). The latest ECB lending survey suggests that SMEs are experiencing difficulties in accessing bank credit across Europe. High lending rates are also discouraging UK SMEs from borrowing from banks, which reportedly failed to meet their SME lending targets. Access to credit is known to be particularly difficult for SMEs in CEE and Central Asia. Similarly, global trade financing volumes were

![Figure 3. Bank Lending Conditions in Europe, January 2003–January 2012](source: European Central Bank Survey)

![Figure 4. Drivers of European Lending Conditions, January 2003–January 2012](source: European Central Bank Survey)

![Figure 5. Changes in New Lending by Type of Lender and Loan](source: Bank for International Settlements Quarterly Review, March 2012. a. The 31 banking groups with capital shortfalls in the EBA exercise plus all Greek banking groups.)
averted an extreme fire sale scenario (or a disorderly shedding of assets) and a subsequent credit crunch in Europe by improving bank funding conditions, boosting market confidence, and jumpstarting lending activity in the interbank market. The improved euro funding conditions, combined with last year’s decision by major central banks to cut the cost of their dollar swap lines, also helped improve dollar funding costs, mitigating the impact on dollar-denominated loans.

At the same time, there are signs that additional risks may be emerging, partly in response to the tightening of regulatory requirements for banks and reduced bank credit. Signs of disintermediation in the euro zone have become evident, with large European companies faced with markedly higher fees and margins on bank loans increasing their reliance on bond and capital markets since the crisis. There is also anecdotal evidence of risk being squeezed out of banks into the shadow banking system as banks are discouraged from engaging in certain (riskier) activities. Banks have also been engaging in deals with private equity and hedge funds to preserve bank capital, by slicing various exposures and repackaging and shifting them from their balance sheets. Despite its growing importance, the shadow banking system is not regulated to the same degree as traditional banking.

Transmission to Emerging Markets

The impact of European bank deleveraging and tighter credit conditions is being transmitted to the rest of the world through various channels, such as:

i. Reduced cross-border claims of European banks on the public, private, and banking sectors of emerging market and developing economies;

ii. Sales or scale-down of noncore, nondomestic businesses in host economies;

iii. Deleveraging by subsidiaries and branches of foreign banks faced with reduced funding flows from parents or parent attempts to transfer dividends, capital, or liquidity to headquarters; and

iv. Increased costs of borrowing for subsidiaries, either as a result of a general worsening of the funding conditions or as increased investor concerns about parents generating anxiety over the banking group’s overall health.

A country’s exposure to the risk of European bank deleveraging depends on a combination of factors: the size of cross-border claims of European banks relative to the recipient’s economy, particularly where local affiliates play a key role in the provision of credit to the private sector but are not systemic to the overall banking group; the maturity (hence reversibility) of the claims; whether the local affiliates rely on a wholesale (cross-border) funding model; and the capacity and willingness of other participants and markets to step in. Parent bank retrenchment could destabilize the local financial system and affect economic activity, particularly where host countries lack well-developed capital markets and alternative sources of nonbank financing.

Notwithstanding the slowdown in their growth, European banks’ foreign claims on EMEs remain large, suggesting that disorderly retrenchment can have adverse consequences. Claims grew rapidly during 2005–8 and are a dominant source of international funding relative to those provided by other BIS reporting banks. In the third quarter of 2011, European banks had US$3.9 trillion in international claims on emerging market and developing countries, down by US$234.5 billion from a quarter earlier—the largest drop since the 16 percent contraction between first quarter 2008 and first quarter 2009. Despite the slowdown, and a corresponding decline in their share, European banks’ foreign claims on EMEs remain high, particularly for the CEE region, where they make up 60 percent of recipients’ gross domestic product (GDP; with large variation within the region; figures 6 and 7). Emerging Europe is particularly exposed to a possible retrenchment, with a high median L/D ratio of almost 120 percent in third quarter 2011 and relatively shallow capital markets. Available information suggests that supply-side problems are so far limited to some countries in Europe. While in other regions European banks play a smaller role in relation to recipients’ economic size, an accelerated and disorderly retrenchment could still affect their economies. Some emerging economies (for example, Chile and Hong Kong SAR) report accelerated loan contraction by European banks since late 2011.

Countries that are heavily dependent on banks from the European periphery—Greece, Ireland, Italy, Portugal, and Spain (GIIPS)—are also exposed. The subsidiaries of GIIPS banks that are active in a number of CEE countries and are having large capital gaps under the EBA stress tests are also particularly vulnerable to parent bank retrenchment. Although GIIPS claims are generally under 1 percent of GDP for most countries, the

![Figure 6. Exposure to All European Banks (median, by region)](source: International Monetary Fund, World Economic Outlook and Bank for International Settlements, Consolidated Banking Statistics, table 9A.)
country median exposures for CEE (to Greek and Italian banks) and for Latin America (to Spanish banks) are relatively significant, at a median 7.9 percent and 5.3 percent of GDP, respectively. The rapid growth of CEE claims of GIIPS banks since 2006 is particularly striking.

Dependence on cross-border flows from European banks is an important channel of contagion. Cross-border bank flows (foreign claims excluding the claims of local offices of foreign banks in a given host country) are relatively large and have been growing in some regions since 2005, particularly in CEE. The claims have declined since 2008, especially by third quarter 2011, across most regions (CEE by US$27 billion), Latin America (US$20 billion), and Asia (US$35 billion), and rollover risk has increased along with a reduction in the maturities of claims. Flows to advanced European countries have also decreased, driven by a retrenchment from the European periphery. At least 50 percent of median cross-border claims across regions have less than a two-year maturity.

Local affiliates of foreign banks play a large role in many EMEs, but their claims declined sharply recently, with regions that rely on a wholesale cross-border funding model being the most affected. Foreign bank ownership is prevalent in EMEs, and claims of foreign affiliates (that is, branches and subsidiaries) have grown rapidly since 2005, particularly in CEE. The claims have declined since 2008, especially by third quarter 2011, across most regions (CEE by US$27 billion), Latin America (US$20 billion), and Asia (US$35 billion), and rollover risk has increased along with a reduction in the maturities of claims. Flows to advanced European countries have also decreased, driven by a retrenchment from the European periphery. At least 50 percent of median cross-border claims across regions have less than a two-year maturity.

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Economic and financial crises can spread across countries in different sets of principles in the Vienna Initiative-II to avoid disorderly deleveraging in emerging Europe.6

Impact on Emerging Market Credit Conditions

Euro zone problems are already producing ripple effects around the globe. A recent lending survey by the Institute of International Finance suggests that EMEs also faced tighter credit conditions in the fourth quarter of 2011; the deterioration in lending conditions continued for the third consecutive quarter in 2012:Q1, although less drastically than in the last quarter of 2011 (figure 8). Survey respondents in 2011:Q4 explicitly stated that they had been adversely affected by the fallout of the euro debt crisis. While tighter credit standards, reduced loan demand, and rising NPLs have all contributed to the deterioration of credit conditions in EMEs, the most significant factor appeared to be an erosion of local and global funding conditions, most markedly in CEE, Africa, and the Middle East (figure 9). However, policy measures taken by central banks in emerging and mature economies in recent months (especially by the ECB) are believed to have improved funding conditions and helped stem the deterioration, particularly in CEE. Deteriorating NPLs underlying the tightening of lending conditions is most concerning in CEE. A number of CEE, Asian, and Latin America subsidiaries of European and U.S. banks have seen their credit ratings downgraded following rating actions on the parent banks.

Host country banking systems may be vulnerable to parent bank attempts to cut back their host operations and transfer resources from subsidiaries to stem the deterioration, particularly in CEE. Deteriorating NPLs underlying the tightening of lending conditions is most concerning in CEE. A number of CEE, Asian, and Latin America subsidiaries of European and U.S. banks have seen their credit ratings downgraded following rating actions on the parent banks.

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The information contained in banks' submitted capital plans, where only 23 percent of the shortfall comes from asset-reduction measures, suggests a much smaller impact on EME credit in the short term. With only 10 percentage points of total (23 percent) asset-reduction measures covered by asset sales, the impact is much smaller because a large portion of the shortfall is covered by capital-raising measures. A range of scenarios analyzed imply a fall of €11–27 billion (1–2 percent of banks' EME credit), concentrated mainly in Latin America and Europe. The impact would be €27 billion, if deleveraging occurs fully via the loan book. If, as submitted capital plans currently imply, around 40 percent of deleveraging occurs via loan cuts, the impact is an €11 billion cut in credit. The ultimate impact will vary, based on a number of other factors not incorporated in the analysis; for example, the funding models of subsidiaries that supply the local credit, strategic importance of a subsidiary for the host and the parent, and ability of local markets to substitute European bank credit. In all of these respects, Latin America will likely be less affected by European deleveraging, because subsidiaries rely less on parent funding and local markets can offer funds.

In the longer-term, European bank leveraging likely needs to decline further, with additional impacts on EME credit. European bank assets are still around 18–20 times equity, which is high internationally (compared to about 10 times in the U.S. banking system). A further fall in leverage could happen through capital increases, but asset reduction may also be needed to reach the desired level, say, 12 times equity. If banks can raise equity by 20 percent—as they have done before—and the residual deleveraging occurs fully through loan reduction, the estimated decline in EME credit could amount to a fairly significant €874 billion (or 46 percent of EME credit).

**Conclusions and Policy Implications**

Policy makers have taken substantial steps toward resolving the euro area debt crisis, but significant risks remain. The ECB's two LTROs have averted a disorderly deleveraging outcome and helped slow the decline in credit provision to the private sector, but only a limited amount of the liquidity injection has so far found its way into the real economy. While this may be a lagged...
response to policy, continued economic and regulatory uncertainties may keep credit demand and supply subdued for some time. Funding conditions are still fragile, with significant tensions surrounding the periphery and continued worries about the adequacy of the firewall against renewed stress and contagion. Banks remain under pressure to boost capital and liquidity buffers, restore and shrink balance sheets to improve access to long-term funding, and adjust business models toward a more sustainable, yet profitable, equilibrium.

Meanwhile, additional risks are accumulating. Reduced funding pressures may reduce incentives for sovereigns to reform and for banks to clean up their balance sheets. The encumbered LTRO collateral has increased risk for senior bondholders, which may hinder unsecured market funding going forward. Systemic risks may be rising as less or unregulated nonbank financial institutions start filling the gap created by deleveraging banks.

The policy prescriptions to guard against these risks are not new. Restoring market confidence on a sustained basis is key, not only to ease funding pressures and phase out ECB liquidity support, but also to reinvigorate credit to the private sector and put fiscal balances on a sustainable path in the region. Commitment to medium-term fiscal prudence, structural reforms, and restructuring of weak institutions is essential, as is strengthening the crisis firewall. Regulatory and supervisory coordination and progress in establishing information and burden-sharing regimes across jurisdictions needs to better align incentives of home-host authorities toward global financial stability. Rapid progress in implementing key reforms, understanding and overseeing the shadow banking system, and deepening financial markets to provide alternative but safe sources of funding to the private sector are essential for reducing regulatory uncertainty and mitigating new risks.

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About the Authors


Notes

1. Some countries introduced additional elements to enhance banks’ resiliency, including capital surcharges based on riskiness of banks’ business models, living wills, and greater reliance on deposit funding in extending credit (Austria); countercyclical capital buffers and ring fencing between retail and investment banking (United Kingdom); and heightened liquidity requirements, greater risk management responsibilities, restrictions on counterparty exposure between large financial companies, and living wills (United States).

2. The plans propose that around 23 percent of the capital shortfall will be covered by deleveraging (asset sales, modeling changes for computing RWAs, and other deleveraging measures, including loan reductions).

3. Assuming total assets are on average 2.8 times RWAs, based on a sample of internationally active European banks, and the estimated aggregate EBA capital shortage of €114.7 billion.

4. For example, for Greece, Austria, and Belgium, 77.5, 30 and 23 percent, respectively, of parent company profits come from profits in the banks’ CEE operations. UK banks obtain 32 percent of parent company profits from Asia, and Spanish banks earn 27 percent of their group profits from Latin America.

5. Including consolidated cross-border claims and local claims of foreign affiliates in foreign and local currencies of banks reporting to the BIS. The claims are on a country’s public, private and banking sectors, with intercompany, parent-affiliate flows netted out.


7. Of the banks surveyed, 63 percent of the banks in emerging Europe reportedly acknowledged a tightening of credit standards due to the financial strains in the euro area (http://www.iif.com/erm/resources1823.php).