World Economic and Financial Surveys

Regional Economic Outlook

Europe

Strengthening Financial Systems

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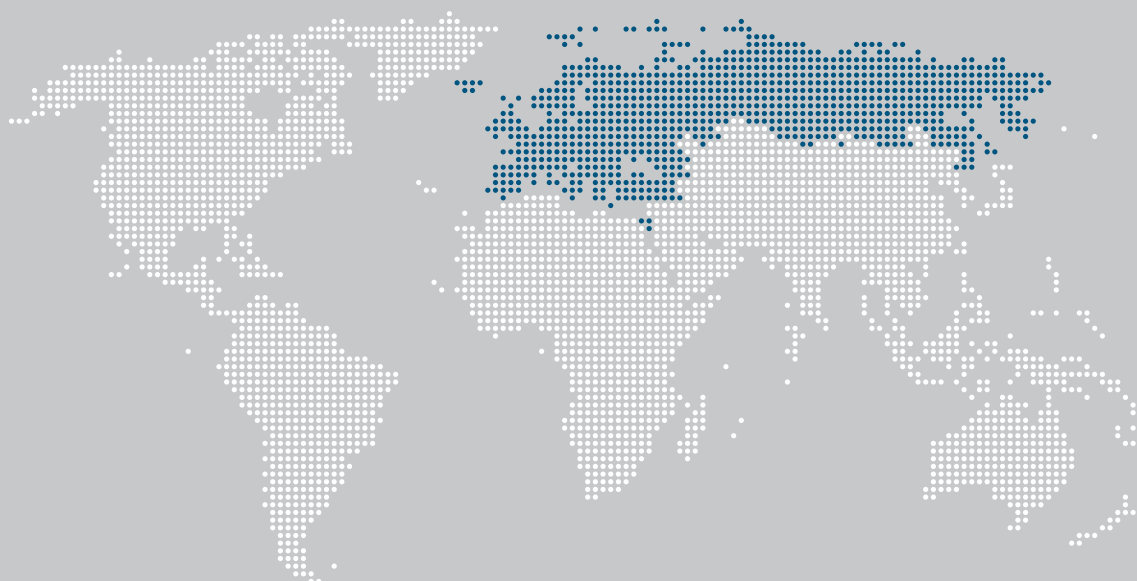

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Foreword

This *Regional Economic Outlook: Europe (REO: Europe)* is the first in what is planned as a periodic publication of the European Department of the International Monetary Fund. The next issue of the *REO: Europe* is scheduled for April 2008, shortly after the IMF's April *World Economic Outlook* (WEO).

Every *REO: Europe* will cover the economic outlook and examine one or more analytical topics. The outlook part is intended to complement the WEO by highlighting economic developments and policy implications that are especially relevant for Europe. This issue's focus is on the implications of recent financial turbulence and the reforms needed to sustain growth over the medium term. With the spotlight on the financial sector, the analytical part of the report discusses ways to further strengthen financial systems in both advanced and emerging economies in Europe.

This *REO: Europe* was coordinated by the Regional Studies Division of the IMF's European Department. It draws extensively on contributions from the staff of the European Department and has benefited from inputs and comments from staff of the IMF's Monetary and Capital Markets and Research Departments. The main authors of the report are Rudolfs Bems, Philip Schellekens, Man-Keung Tang, Athanasios Vamvakidis, and Edda Zoli, under the general guidance of Luc Everaert. Pavel Lukyantsau, Dominique Raelison-Rajaobelina, and Thomas Walter provided research, administrative, and editorial assistance, respectively. Marina Primorac from the External Relations Department oversaw the production of the publication.

The views expressed in this report are those of the IMF staff and should not be attributed to Executive Directors or their national authorities.

Michael Deppler
Director, European Department

Executive Summary

Outlook: Through Financial Turbulence to Sustained Growth

Strong fundamentals should allow the European economy to weather the current financial turbulence relatively well. If the turbulence recedes, the impact on growth should be manageable. A buoyant global economy, combined with generally sound macroeconomic policies and increasing trade and financial integration in Europe, have yielded a buoyant regional economy with clear growth dividends for advanced economies and convergence benefits for emerging Europe. Nonetheless, growth is set to ease in 2008 in nearly all countries.

Protracted credit market tightness constitutes a key downside risk to this outlook, especially for advanced economies. While the broader financial system has continued to function well, money and credit markets remain tight. Direct exposure and the interconnection of money markets caused financial turbulence to spread quickly to advanced economies in Europe. Lack of information on exposures and difficulties in valuing assets triggered a reluctance to trade in money markets, causing difficulties for banks relying on short-term wholesale resources to fund long-term assets. A continuing tightness of credit would have downsides for the real economy.

Despite relatively high external vulnerabilities, emerging Europe has so far remained largely unscathed by the financial turbulence, owing to its limited reliance on interbank markets and complex financial products. Nonetheless, risks for emerging Europe have also risen, especially for those countries that have been funding large current account imbalances with foreign bank borrowing. In this regard, the financial turbulence may herald a healthy correction to past exuberance, bringing risk spreads closer to fundamentals, improving credit discipline, and helping to reduce external imbalances in emerging countries.

The unexpected uncertainty associated with unsettled credit markets has complicated policymakers' task of steering their economies to maintain growth without overheating, especially in advanced economies. While their response has been broadly effective so far, central banks will have to continue to stand ready to provide liquidity to deal with systemic risks. In the euro area and several other advanced economies, monetary policy has been appropriately kept on hold in view of the downside risks associated with the financial turmoil. Looking further forward, the baseline forecast presumes these risks to dissipate gradually, and a further tightening may then be required. Such a stance would of course need to be reconsidered if the risks materialized and the slowdown became protracted. In the emerging economies, inflationary pressures and external vulnerabilities will then warrant further interest rate increases in the central scenario. In those cases where monetary policy tools are ineffective or unavailable, the tightening will need to be achieved through fiscal restraint. Strong banking supervision will be critical throughout emerging Europe.

Recent events have underscored the need for financial sector reform. They reveal that private and public prudential frameworks have not kept up with developments in financial innovation and will need to do a better job going forward. Moreover, the tendency of new financial products to exploit gaps in prudential frameworks can prove problematic and needs to be guarded against. As argued in the analytical part of this paper, financial innovation has been and will remain an important source of strengthened performance over the medium term and must be encouraged. At the same time, a balanced review of prudential arrangements, financial safety nets, and crisis resolution mechanisms is necessary to strengthen their overall effectiveness.

Looking beyond the immediate turbulence, Europe faces major challenges if it is to sustain reasonably robust growth. To deal with expenditure pressures from population aging, fiscal consolidation—based on expenditure reduction—needs to return to a more ambitious track. For several advanced economies, this is also needed because deficits remain too high to deal comfortably with eventual downturns. In emerging Europe, more fiscal consolidation is desirable to mitigate convergence-related demand pressures and insure against risks posed by the rapidly rising indebtedness of the private sector. Consolidation, however, also needs to be aimed at and complemented by structural reforms to strengthen supply and deliver on the promise of income convergence, including measures to advance economic and financial integration.

Analytical Focus: Strengthening Financial Systems

Rapid financial deepening, innovation, and financial integration have substantially transformed the financial landscape in Europe. Consumers and businesses are benefiting from an ever-widening range of financing and investment options. The benefits are particularly apparent in the rapid income convergence enjoyed by many countries in emerging Europe. But rapid financial innovation and integration engender risks, and, as the turbulence has brought home, adverse shocks tend to be swiftly transmitted across borders. So what should policymakers do?

Current turbulence notwithstanding, advanced economies still stand to reap considerable efficiency gains by further expanding the range of financial activities offered by their financial systems (Part II, Chapter 1). Competitive and more diversified financial systems are better at distributing risk and allocating resources to sectors with high growth potential. The countries that have progressed most in exploiting the complementarities of bank- and market-based financing have benefited overall. In most economies, further reforms are needed to level the playing field for the various forms of financial intermediation and take advantage of their synergies.

But recent events warn that financial innovation can heighten risks stemming from gaps in prudential frameworks. Putting matters in perspective, though, all traditional forms of financial intermediation have gone through similar tests and bounced back: their benefits are no longer questioned. In response to the current turbulence, market participants and policymakers will need to develop safeguards to allow these benefits to accrue without incurring excessive risk. From this perspective, it will be important to improve risk assessment models, market and liquidity risk management, due diligence, and transparency regarding the loan origination process and counterparty risk exposure.

For the emerging economies, meanwhile, the prime challenge is to effectively manage rapid financial deepening in the context of convergence (Part II, Chapter 2). The blistering pace of credit growth and the rapid increase in private indebtedness in many of these economies have heightened risks and raised questions about sustainability. Policies have been unable to stem this tide, underscoring the importance of reducing vulnerabilities and building safety margins. These objectives can be achieved by removing fiscal and other distortions affecting bank lending, improving the implementation of prudential and supervisory measures, and promoting better disclosure and understanding of risks. Where convergence has been associated with large external imbalances, the medium-term challenge will be to turn these imbalances around without painful adjustment. This will require that resources flow without hindrance to productive investments, particularly in the tradables sector. To assist this process, policymakers will need to strengthen their financial systems and make labor and capital markets more flexible.

Building on recent progress, all economies in emerging Europe can reap important benefits from sustained development of their financial systems in terms of efficiency, risk diversification, and resilience in coping with possibly volatile external capital flows (Part II, Chapter 3). For EU members, the integration process provides a unique opportunity to expedite financial development, as harmonization requirements, competition pressure, and supervisory risks make further comprehensive reforms more compelling. The emerging economies outside the European Union should focus on reinforcing the foundations of financial development: low and stable inflation, good institutional quality, and the rule of law. Creating a well-functioning government securities market, establishing strong corporate governance and creditor rights protection, and promoting the emergence of institutional investors would also be beneficial.

Part I

Outlook: Through Financial Turbulence to Sustained Growth

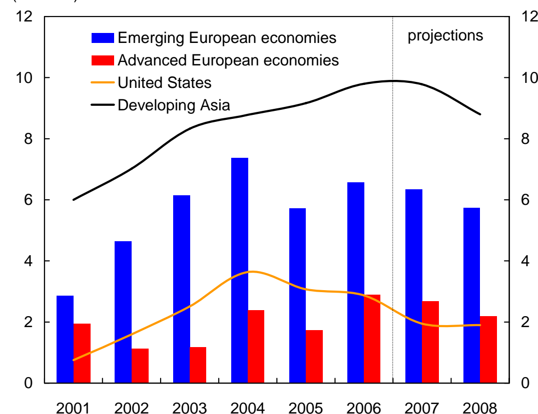
Outlook: Through Financial Turbulence to Sustained Growth

Strong underlying fundamentals should allow the European economy to weather the current financial market turbulence relatively well. If the turbulence recedes, the impact on growth should be manageable. Emerging Europe has so far remained largely unscathed by the financial market turbulence. Nonetheless, growth is set to ease in 2008 in nearly all of Europe. In addition, uncertainty and downside risks have increased, and protracted credit market tightening could push growth below the baseline. The immediate challenge for policymakers is to restore confidence in key financial markets, support real activity, and keep inflation low. More fundamentally, however, there is a continuing need to address vulnerabilities and sustain growth over the medium term, which requires further progress in fiscal consolidation, economic integration, and structural reforms.

Strong Fundamentals Should Help Overcome Financial Turbulence

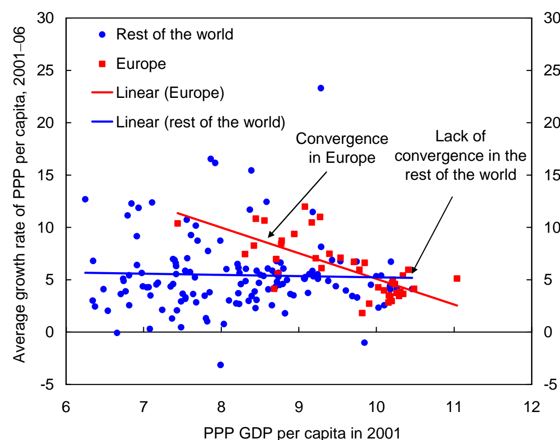
Economic activity has remained strong in 2007, with the euro area expected to outpace the United States and the top-performing European emerging economies posting growth rates second only to developing Asia (Table 1 and Figure 1).[1] Europe stands apart from the rest of the world in that convergence within the continent in recent years has been much faster (Figure 2). Growth has been

Figure 1. Europe and the Rest of the World: Real GDP Growth, 2001–08
(*Percent*)



Source: IMF, *World Economic Outlook*.

Figure 2. Convergence in Europe and in the Rest of the World, 2001–06



Source: IMF, *World Economic Outlook.*
Note: PPP is purchasing power parity.

Note: The main author of this chapter is Athanasios Vamvakidis.

[1] In what follows, the group of emerging European economies comprises Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, FYR, Malta, Moldova, Montenegro, Poland, Romania, Russia, Serbia, the Slovak Republic, Slovenia, Turkey, and Ukraine. All other European economies are included in the group of advanced economies.

Table 1. European Countries: Real GDP Growth and CPI Inflation, 2006–08

	Real GDP Growth			CPI Inflation		
	2006	2007	2008	2006	2007	2008
Europe 1/	**3.8**	**3.7**	**3.2**	**3.5**	**3.3**	**3.1**
Advanced European economies 1/	2.9	2.7	2.2	2.2	2.0	2.0
Emerging European economies 1/, 2/	6.6	6.3	5.7	7.2	6.8	6.0
European Union 1/	3.2	3.0	2.5	2.3	2.3	2.3
Euro area	2.8	2.5	2.1	2.2	2.0	2.0
Austria	3.3	3.3	2.5	1.7	1.9	1.9
Belgium	3.0	2.6	1.9	2.3	1.8	1.8
Finland	5.0	4.3	3.0	1.3	1.5	1.8
France	2.0	1.9	2.0	1.9	1.6	1.8
Germany	2.9	2.4	2.0	1.8	2.1	1.8
Greece	4.3	3.9	3.6	3.3	3.0	3.2
Ireland	5.7	4.6	3.0	2.7	2.5	2.1
Italy	1.9	1.7	1.3	2.2	1.9	1.9
Luxembourg	6.2	5.4	4.2	2.7	2.2	2.2
Netherlands	3.0	2.6	2.5	1.7	2.0	2.2
Portugal	1.3	1.8	1.8	3.0	2.5	2.4
Slovenia	5.7	5.4	3.8	2.5	3.2	3.1
Spain	3.9	3.7	2.7	3.6	2.5	2.8
Other EU advanced economies						
Denmark	3.5	1.9	1.5	1.9	1.9	2.0
Sweden	4.2	3.6	2.8	1.5	1.9	2.0
United Kingdom	2.8	3.1	2.3	2.3	2.4	2.0
New EU countries 1/	6.4	6.1	5.2	3.2	3.9	4.0
Bulgaria	6.1	6.0	5.9	7.3	8.2	7.9
Cyprus	3.8	3.8	3.7	2.5	2.0	2.4
Czech Republic	6.4	5.6	4.6	2.5	2.9	4.4
Hungary	3.9	2.1	2.7	3.9	7.6	4.5
Malta	3.3	3.2	2.6	2.6	0.6	2.0
Poland	6.1	6.6	5.3	1.0	2.2	2.7
Romania	7.7	6.3	6.0	6.6	4.3	4.8
Slovak Republic	8.3	8.8	7.3	4.4	2.4	2.0
Estonia	11.2	8.0	6.0	4.4	6.0	7.0
Latvia	11.9	10.5	6.2	6.5	9.0	8.9
Lithuania	7.5	8.0	6.5	3.8	5.2	4.6
Non-EU advanced economies						
Iceland	2.6	2.1	-0.1	6.8	4.8	3.3
Israel	5.2	5.1	3.8	2.1	0.5	2.5
Norway	2.8	3.5	3.8	2.3	0.8	2.5
Switzerland	3.2	2.4	1.6	1.0	1.0	1.0
Other emerging economies						
Albania	5.0	6.0	6.0	2.4	2.5	3.3
Belarus	9.9	7.8	6.4	7.0	8.1	10.0
Bosnia and Herzegovina	6.0	5.8	6.5	7.5	2.5	1.9
Croatia	4.8	5.6	4.7	3.2	2.3	2.8
Macedonia, FYR	3.0	5.0	5.0	3.2	2.0	3.0
Moldova	4.0	5.0	5.0	12.7	11.2	8.9
Russia	6.7	7.0	6.5	9.7	8.1	7.5
Serbia	5.7	6.0	5.0	12.7	6.4	8.8
Turkey	6.1	5.0	5.3	9.6	8.2	4.6
Ukraine	7.1	6.7	5.4	9.0	11.5	10.8

Source: IMF, *World Economic Outlook*.
1/ Average weighted by purchasing power parity GDP.
2/ Montenegro has not yet been included in the World Economic Outlook database.

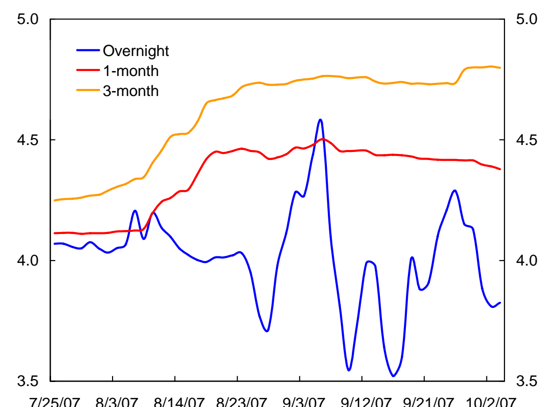
especially buoyant in the Baltic countries, several European Union (EU) member states in Central Europe, and the oil producers, notably Russia and Norway. Strong domestic demand—particularly investment, including buoyant construction activity—has combined with a favorable external environment to drive Europe's growth in recent years. Wage moderation and labor market reforms in the European Union's advanced economies have supported job creation, lowered unemployment, and increased participation. Inflation remains under control in the advanced economies, and is projected to average close to the 2 percent target of both the European Central Bank (ECB) and the Bank of England, but energy and food prices contributed to an uptick in September (Table 1). However, inflation remains well above this level in most emerging economies, especially those with pegged exchange rate regimes; in some cases, this reflects overheating.

Recent financial turbulence has dampened the near-term outlook. While growth was set to ease somewhat, most countries are now expected to see a more pronounced slowing in 2008, as discussed in the October 2007 WEO. The projected lower growth for the United States and the fallout from financial turbulence are expected to reduce growth temporarily in advanced European economies. The direct impact on emerging Europe is projected to be quite muted, but the slowdown is expected to foster the beginning of a gradual correction of the external imbalances and easing of the overheating pressures apparent in a number of these economies. The baseline forecast assumes a gradual resumption of normal financial market functioning and liquidity conditions over the coming months.

Direct exposure to the U.S. subprime mortgage market and the interconnection of money markets caused the financial turbulence to spread quickly to the advanced economies of Europe (Box 1). Several European banks were exposed to the shock either directly, through their holdings, or indirectly, through off-balance-sheet special investment vehicles (SIVs or conduits). These vehicles often had contingent credit lines with the banks and were receiving short-term financing by issuing commercial paper. When the subprime crisis hit, lack of information on related exposures and difficulties in valuing collateral triggered a general reluctance to trade in money markets. Reflecting the liquidity freeze, volatility in interbank money rates rose sharply (Figure 3). Liquidity problems were further aggravated by investors' general retrenchment from asset-backed commercial paper (ABCP), which required banks to fund the underlying assets directly.

Money and credit markets in advanced economies are still returning to normal operating conditions, but the fallout for individual financial institutions has so far been contained. Stock prices

Figure 3. Euro Area: Average Interbank Offer Rates, July 25, 2007–October 3, 2007
(*Percent*)



Source: Datastream.

Box 1. Why Was Europe Affected by the Collapse of the U.S. Subprime Mortgage Market?

The recent financial market turbulence is unprecedented in a number of ways. In contrast with other regional or global economic crises in recent decades, it originated in advanced economies and has affected their financial markets—particularly in Europe—much more than others, including emerging economies that are usually considered to be more vulnerable. It was the first test of structured finance and related credit derivatives and instruments traded globally. The shock drained liquidity in the usually highly liquid interbank money markets of several countries.

The origin of the shock was a reassessment of subprime mortgage risk in the United States and its implications for complex derivatives pricing worldwide.[1] Several European banks exposed to the U.S. subprime mortgage market started reporting substantial increases in provisions for bad loans during the first half of 2007. Concerns about credit quality in the U.S. subprime real estate market in July and early August translated into concerns about asset-backed commercial paper (ABCP), which was used to fund collateralized debt obligations. As a result, financial institutions began a retrenchment of their holdings of related assets.

Several large European banks found themselves exposed to the shock, either directly as holders of ABCP or indirectly through conduits and structured investment vehicles with similar holdings that had ensured open credit lines with banks.[2] The ABCP market came to a sudden stop and forced exposed banks to step in with funding, causing a liquidity squeeze in the global money market through the interbank market. Concerns that conduits would have to draw further on banks with which they had open credit lines and, in some cases, be forced to sell assets in a declining market followed. Sections of the money and swap markets effectively shut down as transactions were refused owing to price uncertainty.

Uncertainty about the size and scope of the losses has magnified the impact of the shock. Many conduits that were investing in subprime mortgage securities had deferred the risk assessment of the underlying long-term assets to the rating agencies while receiving short-term funding using ABCP. As risk-averse investors in ABCP, most of which were money market funds, became wary about their uncertain exposures to the subprime mortgage fallout, the market for ABCP dried up. With banks committed to providing liquidity to their conduits and suspect about the exposure of their competitors to ABCP conduits, confidence plunged, and liquidity in the interbank money market and the financial system tightened. Furthermore, banks that are exposed to further future rollover failures of ABCP have started building precautionary cash reserves, reducing market liquidity further. Retained liquidity and a "wait–and-see" and "flight-to-quality" approach by investors and banks have affected other asset classes, such as leveraged buyouts, which also depend on banks for funding.

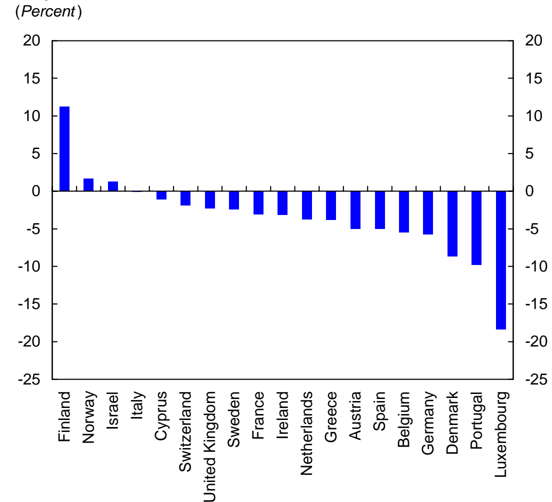
The problem was exacerbated in Europe by the reliance of many European conduits on U.S. dollar funding. Because U.S. banks were reluctant to provide liquidity to European borrowers with uncertain exposures, the shortage of U.S. dollar funding spilled over to the European money market. The problem was compounded by the reliance of many financial firms on the foreign exchange swaps market, which is intermediated in U.S. dollars.

[1] The October 2007 *Global Financial Stability Report* (IMF, 2007a) contains an extensive discussion of the evolution of the financial turmoil and its policy implications.
[2] ABCP vehicles (or conduits) are usually backed up by lines of credit from banks. About 90 percent of them have access to bank credit lines for 100 percent of their assets.

of the banking sector in advanced economies suggest continuing uncertainty (Figure 4). Two German banks with direct exposure to subprime losses had to be bailed out, while the United Kingdom's fifth-largest mortgage lender, which relied substantially on money market liquidity, faced a run on deposits that prompted an intervention by the authorities. Some banks and mortgage lenders in other European countries also felt the shock. But banks with large retail networks and diversified portfolios have not been greatly affected so far. A few large European banks have had to book losses, but the amounts, while sizable in absolute terms, have up to now been small relative to the banks' balance sheets.

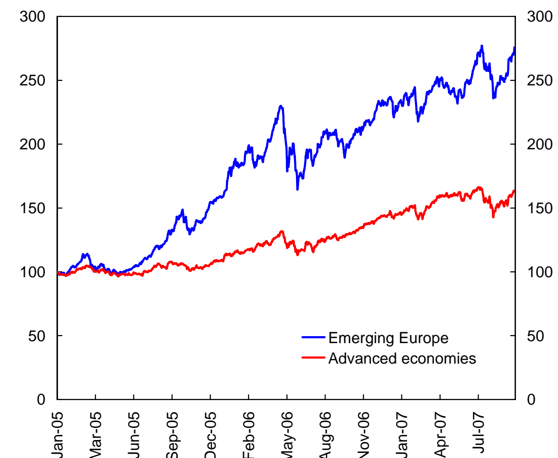
Remarkably, emerging Europe has so far weathered the turbulence well, despite vulnerabilities linked to fast credit growth and, in some cases, high external debt. In addition to prospects for continued rapid growth, other factors seem to have provided shelter from financial turbulence to date. With strong demand for prime loans in recent years limiting the need to seek profits in riskier assets, direct exposure to ABCP has been virtually nonexistent. Exposure to complex financial products has been substantially smaller than in advanced economies, interbank markets have been relatively thin, and, for some countries, the exchange rate has been playing a larger role in the transmission mechanism of monetary policy. Money market conditions initially tightened appreciably in a few countries, and floating currencies came under pressure, especially in Turkey, Hungary, and Romania. However, these tensions eased quickly, except in Russia, where difficulties of some medium-sized banks in obtaining liquidity lingered for some time, and Romania, where exchange rate pressures continued. Exchange rate peggers have so far been less affected than floaters. Stock markets initially fell sharply in several other countries, most notably Turkey and Poland, but have recovered since (Figure 5). However, external credit spreads have remained wider in most emerging economies, notably Serbia, Ukraine, and Croatia (Figure 6).

Figure 4. Change in Banking Sector Stock Prices, July 25, 2007–October 3, 2007
(*Percent*)



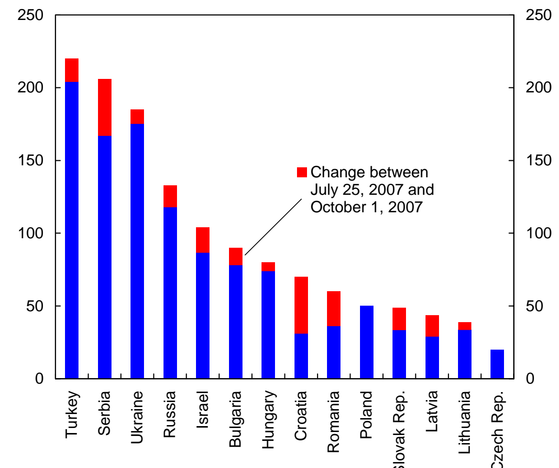
Source: Datastream.

Figure 5. Daily Stock Market Indices, January 2005–October 2007



Source: Datastream.

Figure 6. Sovereign Spreads, July 25, 2007–October 1, 2007
(*Basis points*)



Sources: Bloomberg L.P.; and IMF staff calculations.

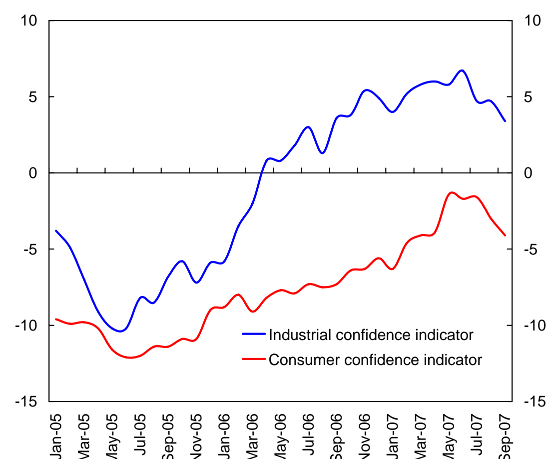
Protracted Credit Market Tightening Would Add Downside Risk

The turbulence in financial markets has heightened downside risks. Besides risks that have been around for some time, including a disorderly unwinding of global imbalances, developments in energy and commodity prices, and political uncertainty in some parts of emerging Europe, a sustained deterioration in financial conditions may push the European economy below the baseline projections. Financial turbulence has also amplified the risk of a disruptive unwinding of global imbalances.

Advanced economies appear to be vulnerable to confidence effects and credit tightness in particular. A sharper slowdown of the U.S. economy would dampen exports, but the effect would likely be relatively contained unless it were associated with a disorderly unwinding of global imbalances and a further sharp appreciation of the euro. More important, a lasting deterioration of business and consumer sentiment, which has been considerably dented by the financial turbulence (Figure 7), would weaken domestic demand. As regards credit tightness, corporate borrowing for investment and construction activity in the housing sector would be affected the most. In the latter case, countries that experienced rapid house price increases (notably Belgium, France, Ireland, the Netherlands, Spain, and the United Kingdom) would be most exposed. Together with reduced profitability, the drying up of demand for securitized assets could induce an expansion of bank balance sheets and strain capital positions. Such a scenario could lead to a sustained tightening of credit conditions, with a dampening impact on domestic demand.

Emerging Europe could be affected through two channels: an overall increase in risk aversion and a slowing of foreign demand. A prolonged deterioration in financial conditions in mature markets could lead to a cutback in lending to emerging markets, especially if parent banks reassess their exposures to subsidiaries in emerging Europe. Mortgage and housing markets would be the first to

Figure 7. EU-27 Confidence Indicators, January 2005–September 2007



Source: European Commission.

feel the impact of tight credit conditions, as several emerging economies in Europe have experienced housing booms in recent years, sometimes fueled by substantial foreign borrowing. Even so, a broader rise in risk premiums would need to be substantial to significantly increase the debt-service burden in most emerging European economies: according to IMF staff estimates, a 100-basis-point increase in interest rates (well in excess of that experienced so far) would raise external debt service on average by 0.4 percent of GDP. However, countries with high levels of private sector debt (most of which is at variable interest rates), such as Bulgaria, Croatia, Estonia, Hungary, and Latvia, would be more affected. As to the second channel, a growth slowdown in the advanced European economies would hit exports in emerging Europe, hurting short-term growth prospects. In combination, the operation of both channels could pose particular adjustment problems for countries that have been running large current account deficits (including the Baltics and several economies in Southeastern Europe).

On the positive side, financial turbulence may well herald a healthy correction from past exuberance, thus strengthening the foundations for future growth. Asset markets tend to overreact, especially when opacity of information is a key factor, as is the case now. While some markets remain under stress, others have continued to

function well, suggesting that the impact on the real economy could be transitory. The market turbulence may set in motion a process that brings risk spreads and asset prices closer to fundamentals, improves credit discipline, and gradually diminishes external imbalances in emerging economies.

Policymakers Are Facing Unexpected Uncertainty

Financial turbulence has complicated policymakers' task of steering their economies to maintain growth without overheating, especially in advanced European economies. Monetary policy faces a delicate balancing act of responding to liquidity disruptions, while guarding against the buildup of inflationary pressures. In addition, lessons will need to be drawn from the current episode of turbulence for financial sector policies. Meanwhile, in several emerging economies in Europe, dealing with inflationary pressures and external vulnerabilities remains the dominant policy concern.

Central bank action seems to have been effective so far in calming market sentiment, but some money markets remain tight. While overnight money market rates were reduced following the central bank interventions, one- to three-month funding rates are taking longer to normalize (Figure 3). Most major European central banks have responded to the financial turbulence by providing liquidity support to the money market and by lending against riskier collateral, including mortgages. The ECB has injected large amounts of liquidity in the interbank money market a number of times since early August. The Bank of England offered resources beyond one-month maturity after the run on deposits of a mortgage bank in late September, though no bids were received for these funds. The Bank of Russia provided liquidity during the shock to support a return to smooth functioning of the money market.

The European central banks are also reappraising their monetary policy stance in view of the likely impact of tightened credit conditions on growth and inflation. The ECB kept its policy rate constant in early September, although it had earlier signaled its intention to hike rates. The Central Bank of Turkey brought forward a cut in its policy rate to September, noting that the turbulence would lessen external and domestic demand. In Hungary, domestic factors induced the central bank to lower interest rates. However, the central banks of Norway, Sweden, and Switzerland increased interest rates in response to continued strong domestic demand and emerging capacity constraints. Similarly, concerns about inflationary pressures prompted the central banks of Poland and the Czech Republic to raise interest rates at the end of August.

In dealing with the current uncertainty, central banks will need to continue to stand ready to provide liquidity support to money markets as needed, while keeping interest rate policy focused on inflation and the real economy. Liquidity support should be designed to ensure a smooth functioning of money markets, while problems at individual institutions need to be resolved in ways that minimize the risk of moral hazard. In the euro area, monetary policy has been appropriately kept on hold in view of the downside risks associated with the financial turmoil. Looking further forward, the baseline forecast presumes these risks to dissipate gradually, and a further tightening may then be required. Such a stance would of course need to be reconsidered if the risks materialized and the slowdown became protracted. In the United Kingdom and other advanced European economies, similar considerations will need to guide monetary authorities.

In terms of financial sector policies, recent events indicate that private and public prudential frameworks have not kept up with developments in financial innovation—they will need to do better going forward. As argued in the analytical part of this REO, financial innovation is an important source of strengthened performance over the medium term, and as such must be allowed—and indeed encouraged—to flourish. But new financial products often exploit gaps in existing prudential arrangements that can prove problematic. As discussed in the October 2007 *Global Financial*

Stability Report, a balanced review of these arrangements is therefore necessary, focused on improving transparency and strengthening the effectiveness of financial regulation. In addition, the recent market turmoil has drawn attention to the need to secure effective financial safety nets and swift crisis resolution mechanisms.

In the Baltics and Southeastern Europe, meanwhile, policymakers will need to focus on steering the economy toward a soft landing. Countries with floating exchange rates could further raise interest rates as needed to stem inflationary pressures. Fiscal restraint will have to contribute, too, and will be crucial for countries with fixed exchange rates (e.g., the Baltics and Bulgaria) or tightly managed floats (e.g., Croatia). Throughout emerging Europe, strong bank supervision will be critical to manage rapidly expanding balance sheets.

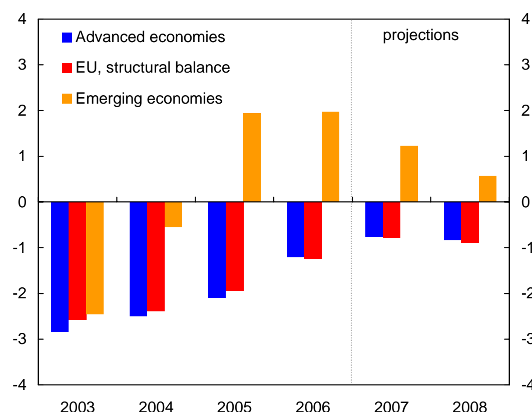
Reforms Are Key to Sustaining Growth

To reduce vulnerabilities and raise medium-term growth prospects, Europe needs to continue fiscal adjustment and pursue structural reforms proactively. Recent fiscal consolidation has made inroads, but deficits remain too large in many advanced and emerging economies to deal comfortably with shocks and secure sustainability, in light of expenditure pressures from population aging. Structural reforms have paid off but, on average, Europe's advanced economies are still failing to make notable progress in closing the transatlantic divide in per capita GDP. Yet Europe's most successful performers have demonstrated that comprehensive reforms pay clear dividends. Emerging Europe has made great strides compared with the advanced economies, but viewed over a decade it is not doing as well as better-performing peers, notably in Asia, and its vulnerabilities are higher. For Europe's emerging economies, it will be essential to deliver the higher growth potential that investors are anticipating.

Fiscal Policy Needs to Return to the Consolidation Track

Fiscal consolidation, which had proceeded at a reasonable pace in 2004–06, is expected to stall during 2007–08 (Figure 8 and Table 2). In spite of the favorable outlook, fiscal policies are set to loosen in half of the European countries, and the pace of fiscal consolidation to slow in most of the rest. For the most part, these developments reflect policies that have used cyclically driven and, therefore, temporary revenues to slacken the pace of adjustment or raise spending. As a result, fiscal balances already deteriorated in 2006 in several cases (Serbia, Hungary, Romania, and the Slovak Republic). In the euro area, fiscal consolidation has continued in 2007 but is projected to stop in most countries in 2008. France and Italy, for example, are moving ahead with tax cuts and postponing further consolidation. Norway and Russia are unwinding large, oil-driven surpluses, reversing part of the earlier consolidation. At the other end of the spectrum, Hungary, which has had Europe's largest deficit, is expected to deliver significant fiscal adjustment.

Figure 8. European Regions: General Government Balance, 2003–08
(*Percent of GDP*)



Source: IMF, *World Economic Outlook.*

Table 2. European Countries: External and Fiscal Balances, 2006–08

	Current Account Balance to GDP			General Government Balance to GDP		
	2006	2007	2008	2006	2007	2008
Europe 1/	**0.4**	**-0.2**	**-0.5**	**-0.4**	**-0.2**	**-0.5**
Advanced European economies 1/	0.5	0.2	0.0	-1.2	-0.8	-0.8
Emerging European economies 1/, 2/	0.1	-1.9	-2.9	2.0	1.2	0.6
European Union 1/	-0.7	-1.0	-1.2	-1.8	-1.2	-1.2
Euro area	0.0	-0.2	-0.4	-1.6	-0.9	-1.1
Austria	3.2	3.7	3.7	-1.2	-0.8	-0.6
Belgium	2.0	2.5	2.5	0.1	-0.2	-0.2
Finland	5.2	5.0	5.0	3.7	4.3	3.8
France	-1.2	-1.6	-1.8	-2.5	-2.5	-2.7
Germany	5.0	5.4	5.1	-1.6	-0.2	-0.5
Greece	-9.6	-9.7	-9.6	-2.1	-2.1	-1.9
Ireland	-4.2	-4.4	-3.3	2.9	0.8	0.2
Italy	-2.4	-2.3	-2.2	-4.4	-2.1	-2.3
Luxembourg	10.6	10.5	10.3	0.1	0.4	0.4
Netherlands	8.6	7.4	6.7	0.7	-0.6	0.5
Portugal	-9.4	-9.2	-9.2	-3.9	-3.3	-2.4
Slovenia	-2.5	-3.4	-3.1	-0.8	-0.9	-1.1
Spain	-8.6	-9.8	-10.2	1.8	1.4	0.8
Other EU advanced economies						
Denmark	2.4	1.3	1.3	4.7	3.9	3.8
Sweden	7.2	6.0	5.7	2.1	2.3	2.2
United Kingdom	-3.2	-3.5	-3.6	-2.7	-2.5	-2.3
New EU countries 1/	-6.0	-7.2	-7.7	-3.4	-2.8	-2.4
Bulgaria	-15.8	-20.3	-19.0	3.5	3.0	2.5
Cyprus	-5.9	-5.5	-5.6	-1.4	-1.0	-0.6
Czech Republic	-3.1	-3.4	-3.5	-3.4	-3.8	-3.2
Hungary	-6.5	-5.6	-5.1	-9.1	-6.2	-4.2
Malta	-6.1	-9.4	-8.2	-2.4	-2.0	-1.9
Poland	-2.3	-3.7	-5.1	-3.9	-2.7	-2.9
Romania	-10.3	-13.8	-13.2	-1.7	-2.8	-2.1
Slovak Republic	-8.3	-5.3	-4.5	-3.4	-2.7	-2.3
Estonia	-15.5	-16.9	-15.9	3.3	3.0	2.0
Latvia	-21.1	-25.3	-27.3	-0.4	0.8	0.6
Lithuania	-10.9	-14.0	-12.6	-1.2	-1.9	-1.0
Non-EU advanced economies						
Iceland	-27.3	-11.6	-6.0	5.3	3.2	-1.3
Israel	5.6	3.7	3.2	-1.8	-3.4	-2.8
Norway	16.4	14.6	15.1	18.0	15.2	15.9
Switzerland	15.1	15.8	15.0	0.8	0.6	-0.3
Other emerging economies						
Albania	-5.9	-7.4	-6.5	-3.2	-3.9	-3.9
Belarus	-4.1	-7.9	-8.1	0.5	0.5	0.5
Bosnia and Herzegovina	-11.5	-15.3	-15.0	3.0	-0.5	-0.9
Croatia	-7.8	-8.4	-8.8	-3.0	-2.6	-2.3
Macedonia, FYR	-0.4	-2.8	-5.9	-0.5	-1.0	-1.5
Moldova	-12.0	-8.0	-7.3	0.3	-0.5	-0.5
Russia	9.7	5.9	3.3	8.4	6.4	4.4
Serbia	-11.5	-14.7	-15.0	-1.4	-2.3	-2.1
Turkey	-7.9	-7.5	-7.0	0.2	-0.8	-0.5
Ukraine	-1.5	-3.5	-6.2	-1.4	-1.8	-2.5

Source: IMF, *World Economic Outlook*.
1/ Weighted average. Government balance weighted by purchasing power parity GDP; external account balance, by dollar-weighted GDP.
2/ Montenegro has not yet been included in the World Economic Outlook database.

There are compelling reasons to pursue fiscal consolidation:

- More fiscal room would become available to manage possible significant downturns, which is especially relevant in several advanced economies. In the euro area, the commitment to reach specific medium-term objectives by 2010 is welcome, but countries that are significantly short of these objectives need to step up the pace of adjustment beyond current intentions.

- Convergence-related demand pressures in emerging Europe would be mitigated. Despite efforts to tighten monetary conditions, they have been loose in a number of emerging economies because monetary policy has been overwhelmed by large capital inflows in many countries, particularly those where its use is restricted by pegged exchange rate regimes (Figure 9). As a result, monetary tightening has been providing little help in curbing domestic credit growth (see Figure 10). Fiscal restraint needs to go beyond mere cyclical stabilization to offset exuberant private sector demand. In this context, policymakers should also remove tax-induced distortions that have contributed to the blistering pace of credit growth.

- Insurance would be provided against the risks posed by the external vulnerabilities that the private sector has generated. While Europe's overall external current account is close to balance, this masks an unprecedented dispersion, with large deficits in the Baltics, Greece, Portugal, Spain, and most emerging economies in Southeastern Europe (Figure 11 and Table 2). Foreign bank borrowing has funded a large share of these deficits, boosting external indebtedness in several countries to levels much higher than in emerging economies outside Europe (Figure 12). Given the risk of external shocks, whether unrelated to country fundamentals or otherwise, prudence argues for building up safety margins, with increases in public savings mitigating the increases in private dissaving.

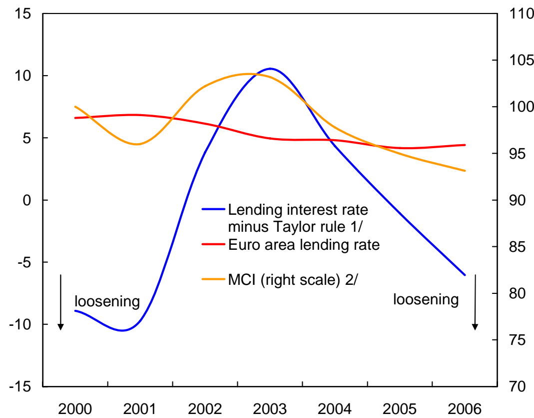
- Fiscal sustainability concerns in some emerging economies (e.g., the Czech Republic, Hungary, and Poland) and spending pressures from aging populations throughout Europe would be addressed. Given the already heavy tax burden in most countries, spending reforms seem to be the only option for consolidation. In many countries, further reforms of social security and health care systems seem necessary to establish the long-term fiscal sustainability of these systems.

With the baseline prospects still favorable for advanced economies and buoyant for emerging Europe, proceeding with fiscal consolidation within a framework that allows full play to the automatic stabilizers is unlikely to dent the short-term outlook and is well worth the strengthened medium-term prospects it would open.

Economic Integration and Structural Reform—Paths to a Strengthened Performance

Europe stands to gain considerably from continuing economic integration. Although the recent financial turbulence underscores that financial integration also comes with some perils, there is little doubt that Europe has benefited greatly from the ongoing multifaceted process of economic integration (Box 2). The main channels have been trade integration, a long-standing pedigree of the European Union; financial integration, which has taken off over the past decade; and cross-border labor migration, which is also on the rise. There is strong evidence that economic integration has improved living standards in Europe. Emerging Europe has become Europe's fastest-growing market, contributing on some estimates between 0.2 and 0.4 percent annually to advanced economies' growth in recent years. And financial integration has been key for the income convergence of

Figure 9. Emerging Europe: Monetary Conditions, 2000–06

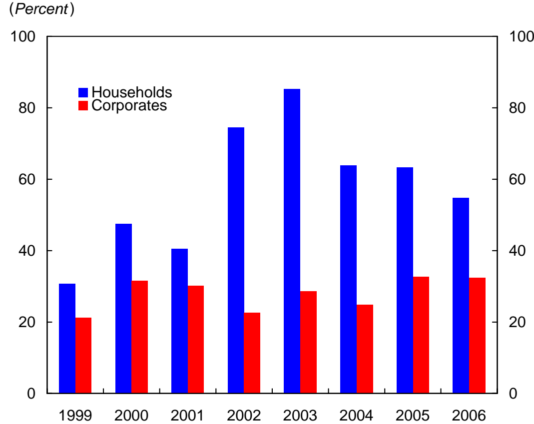


Sources: IMF, *International Financial Statistics*; and IMF staff calculations.

1/ The Taylor rule is defined as the sum of the output gap, the equilibrium interest rate (assumed to be equal to potential growth estimated using the Hodrick-Prescott filter), expected inflation (assumed to be equal to actual inflation in the past three years), and the inflation gap (assumed to be equal to actual inflation minus an inflation target, which is taken to be the 2 percent European Central Bank target plus 1.5 percent from Balassa-Samuelson effects). The figure shows the average for all emerging European economies.

2/ MCI is the monetary conditions index (equal to 100 in 2000) and is the weighted sum of the changes in the real lending interest rates and in the real effective exchange rates. The figure shows the average for all emerging European economies.

Figure 10. Emerging Europe: Credit Growth, 1999–06
(*Percent*)

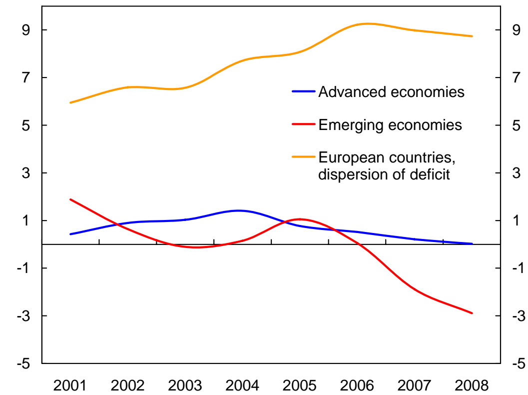


Source: Country central banks.

emerging Europe (Part II, Chapter 2). With integration far from complete for most emerging economies, substantial economic benefits still lie ahead.

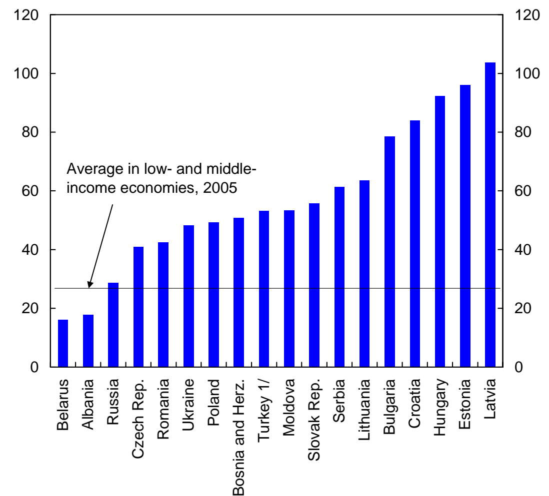
To fully reap the benefits from integration and reduce vulnerabilities to shocks, Europe needs to push ahead with structural reforms, building on

Figure 11. European Regions: Ratio of Current Account Balance to GDP, 2003–08
(*Percent*)



Source: IMF, *World Economic Outlook.*

Figure 12. External Debt, 2006
(*Percent of GDP*)



Sources: Country central banks; and IMF staff calculations.
1/ Percent of GNP.

recent progress. Europe's structural rigidities remain its Achilles' heel, inhibiting growth and making adjustment to shocks protracted and difficult. Germany's recovery took hold only after five years of slow growth and significant reforms, while Portugal has yet to rekindle its convergence bid, which faltered in the late 1990s.

Box 2. Europe's Economic Integration

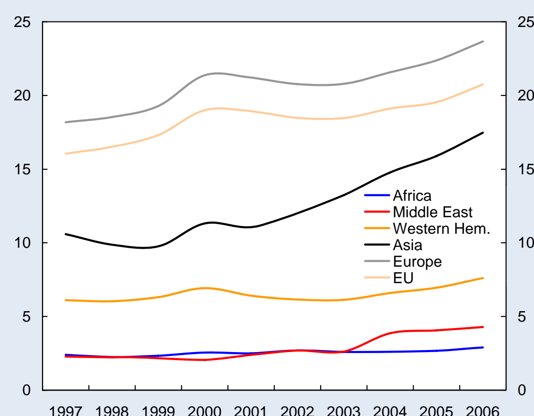
Although the foundations of Europe's economic integration were put in place by the Treaty of Rome in 1957, the collapse of communism and EU enlargement provided a big push, increasingly encompassing countries that are not (yet) members of the European Union.[1] Already much more advanced than regional integration in the rest of the world, economic integration within Europe has accelerated in recent years, underpinning improved economic performance. As documented below, Europe's economic integration is manifested in three areas: intra-European trade, financial market integration, and labor market integration.

Intra-European Trade

Both in levels and as a share of GDP, European economies trade more with each other than do economies within all other continents. Moreover, trade within Europe has been expanding rapidly since the 2004 EU enlargement, although not as fast as in Asia (first figure).[2] The expansion in European trade has not been at the expense of trade with the rest of the world, as the openness of the European economy has kept increasing: the ratio of exports plus imports to GDP has risen from 48 percent in the early 1990s to 82 percent today.

Intraregional Trade, 1997–06

(Percent of GDP)



Source: IMF, *Direction of Trade Statistics*.

Most intra-European trade is among developed economies, but the share of trade with emerging Europe has been increasing (table). The advanced European economies sent 11 percent of their exports to emerging Europe in 2006, compared with 8 percent in 2000. Moreover, their exports to emerging Europe have been growing by double the rate of their exports to each other in the past two years.

Intra-European Exports, 2000–06

(Percent of total intra-European exports)

	2000	2006
Advanced to emerging economies	8	11
Advanced economies to each other	81	71
Emerging economies to Europe	11	18

Trade integration in Europe has led to faster economic growth. Exports to emerging economies in Europe contributed 0.6 percent to the growth of advanced European economies in 2006, compared with just 0.1 percent at the beginning of the decade. Using an empirical growth model measuring cross-border spillover effects, the acceleration of growth in emerging Europe in the past five years (by 3.8 percentage points) and the increase of the share of imports coming from advanced European economies (by 3 percentage points) have raised annual growth in advanced European economies between 0.2 and 0.4 percent, keeping everything else constant.[3] Estimates from the literature on the links between trade and growth, and

[1] A thorough discussion of the history of Europe's economic integration is provided in Eichengreen (2007).

[2] States within the United States trade more with each other than European countries do, even within the European Union, but this is an improper comparison, because countries tend to trade more within than across borders. Furthermore, free trade is historically much more recent within Europe than within the United States, and trade liberalization outside the European Union has not yet been completed.

[3] The econometric model was estimated in Arora and Vamvakidis (2005).

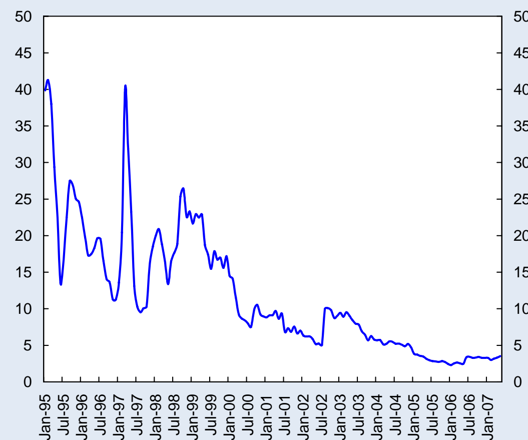
controlling for other standard growth determinants, suggest that the increase in intra-European trade in the last 10 years is expected to have accelerated Europe's annual GDP growth by 0.3 percent.[4]

Financial Market Integration[5]

European financial market integration has progressed significantly in recent years with emerging Europe integrating faster than the rest of Europe. In a novel approach, integration is defined here using price-based rather than volume-based measures. An imperfectly integrated region undergoing financial integration is expected to experience convergence of the cost of capital across countries. Empirical analysis indeed finds strong evidence of a declining trend in cross-country dispersion of equity premiums (taken as a proxy for firms' cost of capital) across advanced and emerging economies (second figure). Moreover, this process is faster in emerging Europe than in other countries included in the study, thereby significantly contributing to convergence within the region.[6]

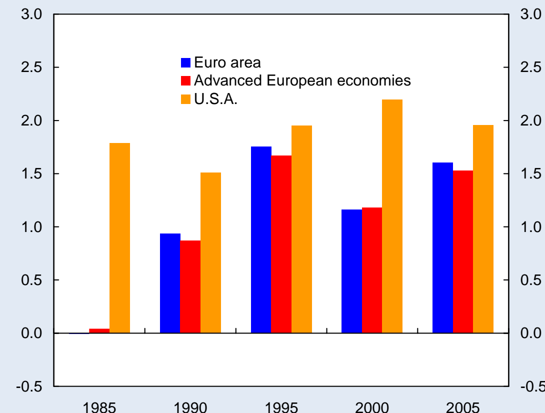
In addition, the analysis suggests that Europe has been experiencing a virtuous circle wherein progress in financial integration and improved real prospects have been mutually reinforcing. Measures of a country's speed of integration (proxied by the distance of a country's cost of capital from the group average) predict subsequent increases in its risk-adjusted growth opportunities (proxied by the ratio of market price-to-earnings ratios to their volatility). Similarly, improvements in risk-adjusted growth opportunities predict future advances in financial integration. Adjusting for risk is especially important when looking at welfare implications. Countries with high, but very uncertain, growth prospects are unlikely to be as well off as countries with a more favorable risk-return trade-off. From this perspective it is reassuring that most emerging countries in the sample are experiencing an improvement, though a few seem to have increased growth at the expense of a proportional increase in risk.

Cross-Country Dispersion of Equity Premiums



Source: De Nicolò (2007).

Net Migration/Population, 1985-2005
(Percent)



Source: World Bank, *World Development Indicators*.

Labor Market Integration

Labor migration within Europe has increased considerably since the early 1990s. As a share of population, net migration to the euro area has risen to 82 percent of that to the United States,

[4] For a discussion of this literature see Baldwin (2003).
[5] Gianni De Nicolò contributed this section, based on De Nicolò (2007).
[6] The countries included are 16 advanced economies (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom) and 13 emerging economies (the Czech Republic, Hungary, Poland, Romania, Russia, Bulgaria, Croatia, Estonia, Latvia, Lithuania, the Slovak Republic, Slovenia, and Ukraine).

Box 2 *(concluded)*

from negligible levels in the 1980s (third figure).[7] Although bilateral flow data are not available, anecdotal evidence suggests that most labor movement within Europe is from emerging to advanced economies. Furthermore, the recent waves in net migration in Europe coincide with the liberalization of the Eastern European economies in the early 1990s and the EU enlargement process in recent years. Indeed, according to Article 18 of the Treaty of Rome, all EU citizens have the right to apply to work in any position in the union (including national civil services, with the exception of sensitive positions), although after a short transition period in some cases for the new members.

The impact of migration on growth is an open empirical question, but seems to be positive in advanced European economies. According to IMF staff calculations, migration explains 8 percent of the increase in the euro area's labor force since the beginning of this decade, which by itself is expected to lead to faster growth. The fact that unemployment has been falling at the same time suggests that imported labor is not replacing domestic labor. Therefore, labor migration may explain part of Europe's fast economic growth in recent years, although more research is needed to determine how much.

The economic impact of migration on emerging Europe, which is a net supplier, is a more complex issue. Both pull and push factors—high demand for cheap labor from receiving economies and a difficult business environment in supplying economies—explain large labor outflows relative to population size in some emerging European economies. Although these countries benefit from significant remittances, human capital drain is a concern for their long-term growth prospects. However, structural reforms that improve the business environment could limit or even partly reverse the outflows.

[7] Labor movements within the United States are much larger than within Europe or even within the European Union. However, the comparisons in this box refer to migration to the United States rather than within labor reallocations.

Structural reforms have progressed during recent years in most European economies, but gaps with the rest of the world remain large for most countries (Table 3). Labor market reforms in advanced economies have increased employment rates, and the recent reinvigoration of the European Union's Lisbon Agenda is encouraging. France's ambitious structural reform plan is also welcome. But further steps are needed to narrow tax wedges and relax excessively strict employment protection regulations, and to increase contestability in the market for services, by implementing the EU Services Directive.[2] Financial integration and further reforms of financial systems (Part II, Chapter 1) will also be essential.

Table 3. Index of Economic Freedom: Ranking Compared with the Rest of the World, 2005

Country	Rank	Country	Rank
Switzerland	4	Portugal	38
United Kingdom	5	Israel	44
Estonia	8	Spain	44
Ireland	9	Czech Republic	52
Finland	11	France	52
Iceland	11	Italy	52
Luxembourg	11	Bulgaria	56
Denmark	15	Greece	56
Netherlands	15	Poland	56
Austria	18	Moldova	76
Germany	18	Croatia	82
Cyprus	22	Romania	82
Hungary	22	Macedonia	86
Latvia	22	Slovenia	91
Lithuania	22	Turkey	91
Norway	22	Albania	97
Sweden	22	Bosnia and Herzegovina	97
Malta	32	Russia	112
Slovak Republic	32	Ukraine	112
Belgium	38		

Source: Fraser Institute.
Note: The index of economic freedom is the average of five subindices measuring the size of the government, legal system and property rights, sound monetary policy, freedom to trade, and regulation (including labor market regulation and business regulation).

[2] The Services Directive aims at creating a free market for services within the European Union.

With the pace and sustainability of convergence at stake, emerging Europe will need to push ahead with structural reforms. Although progress in recent years has been significant, this was from a low starting point in most cases. The Baltic countries are outliers, with structural reforms progressing well beyond what has been seen even in advanced economies. But these economies, together with others in the region, also feature relatively vulnerable external positions, and structural reforms aimed at strengthening contestability in the domestic economy are a major avenue toward strengthening the tradable goods and services sector and sustainability.

Economic transition in Central Europe has also progressed, improving competition and increasing potential growth, but an element of post-accession reform fatigue, easily available foreign financing, and expectations in some cases that eventual euro adoption will shield the economy from external shocks seem to have weakened the reform drive.[3] The challenge now is to move beyond the minimum standards prescribed by the EU *acquis*,[4] and focus on strengthening productivity and transparency, including by improving the business environment and strengthening financial systems (Part II, Chapters 2 and 3).

The countries in Southeastern Europe and the Commonwealth of Independent States (CIS) have lagged behind and will need to step up the pace.[5] There is still significant room for reforms to reduce the role of the state in the economy, increase labor market flexibility, reduce red tape, progress with judiciary reform, and, in a number of countries, complete land registries.[6] Although preparation to join the European Union in some cases will lead to reforms in these areas, more ambitious steps will be needed for these countries to be able to compete successfully within the European Union.

[3] For recent empirical evidence, see Vamvakidis (2007).

[4] The EU *acquis*, or *acquis communautaire*, refers to the total body of EU law.

[5] Commonwealth of Independent States (CIS) countries covered by the IMF's European Department are Belarus, Moldova, Russia, and Ukraine.

[6] A recent IMF Working Paper has estimated that such reforms could increase potential growth substantially in Croatia (see Moore and Vamvakidis, 2007).

PART II

Analytical Focus: Strengthening Financial Systems

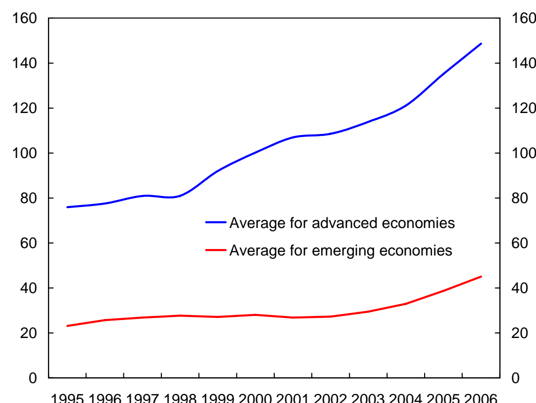
Analytical Focus: Strengthening Financial Systems

Following a period of sustained progress in financial deepening, innovation, and integration, turbulence has recently been testing Europe's financial systems. The transformation of these systems has generally been beneficial, but financial sector efficiency still has considerable upward potential, and new policy challenges and risks have surfaced. Against this background, strengthening financial systems has become more important than ever. Each of the following chapters focuses on a priority area of reform: advanced economies need to tune up the efficiency and resilience of financial systems; converging economies in emerging Europe need to manage rapid financial deepening; and all emerging economies need to sustain development of their financial systems.

While much attention has been paid recently to the speed of financial deepening in emerging economies and its attendant risks, the financial systems of advanced economies have undergone a similar expansion already since the mid-1990s, and, as it turned out, not without risk (Figure 13). Clearly, common factors have been at work, such as the low-interest-rate environment and the search for yield. In the process, households have gained greater access to financial resources across Europe, especially through mortgage lending. The corporate sector too has rapidly increased its use of external financing in the form of credit and securities, and has done so more in advanced than in emerging economies.

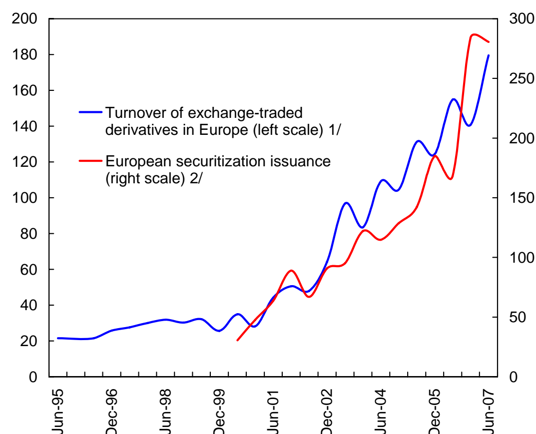
Financial innovation has been transforming the face of intermediation (Figure 14). Derivatives, structured finance, and securitization products have proliferated, allowing a broader menu of risk-return choices and altering the distribution of risks. In advanced economies, banks have increasingly embraced these innovations, producing synergies between bank- and market-based intermediation. In emerging economies, banks are expected to remain focused on their traditional intermediation function, but

Figure 13. Bank Credit to the Private Sector in Europe, 1995–06
(*Percent of GDP*)



Source: IMF, *International Financial Statistics.*

Figure 14. Financial Innovation in Europe, June 1995–June 2007



Source: European Securitization Forum; Bank for International Settlements, *Quarterly Review*, Table 23A.
1/ Notional principals in trillions of U.S. dollars.
2/ Billions of euros.

consolidation triggered by foreign bank penetration may quickly lead to the adoption of new products as well.

At the same time, financial integration in Europe has been proceeding at a sustained pace. The rising scale and persistence of cross-border capital flows have allowed current account deficits (and surpluses) to be larger and sustained for much longer than previously thought possible.

Moreover, gross holdings of assets and liabilities across borders have expanded even faster than net flows (Figure 15), with continuing cross-border consolidation and expansion of the banking system playing a key role.

The dynamic evolution of the financial system is generally having positive effects. Better access of households to the financial system is welfare improving, and allows a greater diversification and sharing of risk. Effective financial intermediation fosters efficient resource allocation and speeds its reallocation across sectors. And financial integration exports technology and skills and contributes to the better management of risks and lower macroeconomic volatility. However, benefits have not been distributed uniformly, reflecting the uneven state of development of financial systems across Europe and their still-limited cross-border integration. Hence, more flexible and more integrated financial services sectors could appreciably boost productivity in Europe.[7]

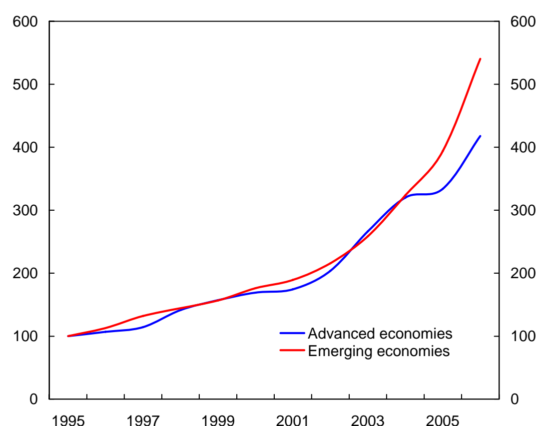
In addition, as brought home by the recent subprime mortgage turbulence, risks need to be well managed to reap the benefits of financial innovation. Even with less sophistication, financial systems may exacerbate rigidities and distortions, and raise the costs of policy mistakes. And increasing financial integration may propagate external shocks more strongly and quickly across borders.

Against this background, to enjoy the benefits of financial development without incurring excessive risk, advanced and emerging economies in Europe need to further strengthen their financial systems. Recognizing country differences in the level of financial development, the following chapters highlight three priority items on the reform agenda:

- Chapter 1, "Tuning the Financial Systems of Advanced Economies," examines what is needed for advanced economies to better exploit their financial depth for greater efficiency while safeguarding the resilience of the financial system. It looks at the economic benefits of financial systems that offer a wider range of financing options and discusses the reforms needed to move financial systems in that direction. At the same time, it identifies key risks posed by increasing financial sophistication and the required policy response.

Figure 15. Financial Integration in Europe, 1995–06

(Cross-border holding of gross assets; U.S. dollar index, 1995 = 100)



Source: Lane and Milesi-Ferretti (forthcoming).
Note: Excluding financial centers (Ireland, Luxembourg, Switzerland, and the United Kingdom).

- Chapter 2, "Managing Rapid Financial Deepening in Emerging Europe," focuses on how finance has been contributing to the economic convergence of emerging economies and which aspects of the financial system affect the sustainability of this process. It identifies financial sector policies to safely manage the boom associated with convergence and prepare emerging economies for a smooth reallocation of productive resources to the tradable sector.
- Chapter 3, "Sustaining Financial Development in Emerging Europe," takes stock of the financial system in emerging economies, identifies the factors that contribute to financial development, and lays out the unfinished policy agenda. It complements the chapter that precedes it, with many of its policy recommendations also pertinent for making rapid financial deepening a success.

[7] See Decressin, Faruqee, and Fonteyne (2007).

1. Tuning the Financial Systems of Advanced Economies

Though Europe has made great strides in financial innovation and integration, many advanced European economies still need to level the playing field for the various forms of financial intermediation. Competitive and more diversified financial systems are better at distributing risk and identifying and supporting industries with high growth potential. These systems allow the complementarities of bank- and market-based financing to be fully exploited. At the same time, as the recent financial market turbulence underscores, both private and public prudential frameworks need to keep up with financial innovation if the benefits are to be reaped without incurring excessive risks. To secure the resilience of financial systems in advanced economies, it will be important to improve the management of market and liquidity risk, implement more advanced risk assessment models, and increase transparency of underwriting standards and counterparty risk exposures.

Overview

Financial systems in advanced European economies have been undergoing an unmistakable transformation. No longer is the European financial landscape dominated by a handful of large banks wielding considerable monopolistic power. Instead, competition among banks has been intensifying, and banks have been engaging in a wider variety of business than only traditional lending. Meanwhile, capital markets have been gaining importance, both as a source of funding and as a distributor of risks. And nonbank financial institutions have been rapidly emerging as another key intermediary of financial resources. As another sign of growing sophistication, the various forms of intermediation have also become less segmented, and—through an increasing use of innovative financial instruments—complementary relationships among them have been strengthening.

But, as the financial turbulence triggered by the meltdown of the U.S. subprime mortgage market has brought home, financial innovation comes with risks. Specifically, financial innovation often exploits interstices in existing prudential arrangements that can prove problematic. Moreover, in the context of financial globalization, turbulence spreads swiftly around the globe, sparing few countries from its adverse effects on confidence and real economic activity.

While it may be tempting for policymakers to try to slow financial innovation in view of such risks, a more productive policy approach would be to adopt reforms that simultaneously boost the efficiency of the financial system and tackle its vulnerabilities. Therefore, it will be important to clearly identify the benefits and causes of risks associated with a more sophisticated financial system before rushing to tighten regulation. In this respect, the initial reaction to the recent turbulence is encouraging, indicating a willingness by policymakers to preserve the benefits of financial innovation while confronting the prudential vulnerabilities.

The benefits of stronger competition, greater diversity, and closer integration among different intermediaries in the European financial systems are becoming increasingly evident. Households and firms enjoy a greatly expanded set of investment and borrowing options at a significantly lower cost, thanks to stronger competition and better risk distribution. Empirical analyses suggest that the considerable financial depth of advanced European economies is more effectively transformed into economic gains when the financial systems are more sophisticated.

Note: The main author of this chapter is Man-Keung Tang. The underpinning analytical work is presented in Tang (2007).

However, despite much progress made to date, European financial systems can still become far more efficient. The substantial remaining obstacles are restricting the full play of competitive forces and stunting the development of financing channels. Hence, the directly measured economic contribution of the financial sector to growth in advanced Europe has been lagging, and there is considerable scope to further strengthen this sector's role in mobilizing resources to productive use. Lower productivity growth of the financial sector accounted for about half of the economy-wide productivity growth gap between the euro area and the United States during 1996–2003.

At the same time, the recent financial market turbulence has helped pinpoint weaknesses and provide some preliminary lessons to help buttress the prudential foundation of the more market-based financial systems. In general, the increasing sophistication and complexity of financial transactions should be accompanied by an upgrading of private and public prudential frameworks. Recent events further highlight the need for better management of market and liquidity risk, upgrading of risk assessment models and due diligence, and greater transparency regarding the loan origination process and counterparty risk. Supervisory capacity may need to be boosted and the effectiveness of crisis management reviewed.[8]

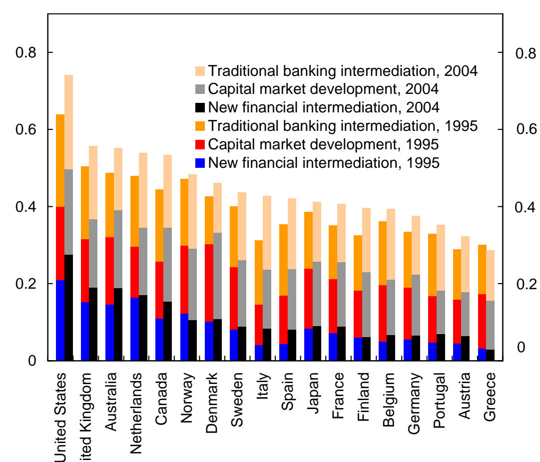
Evolution of Financial Systems

While starting points and speed of evolution differ, financial systems in advanced European economies have generally been moving toward stronger competition, greater diversity of financial activities, and closer integration among different intermediaries.

The financial index developed in the September 2006 WEO[9] provides one useful summary look at the composition of the financial systems in advanced Europe and their recent changes (Figure 16). In the remainder of this chapter, a higher score on the financial index will be described as a higher degree of sophistication of financial systems. The index quantitatively captures (1) the reliance of the system on traditional bank lending and the degree of competition among banks, (2) the extent of development of capital markets, and (3) the degree of new financial intermediation—including the prevalence of nonbank financial institutions and use of financial innovations. Nearly all advanced economies have made progress on all three fronts covered by the index. But the landscape remains uneven across Europe.

Competition and diversity of intermediation have increased. Competition in bank lending has strengthened, as illustrated by narrowing interest spreads (lending minus money market rates)

Figure 16. Financial Index by Subindices, 1995 and 2004

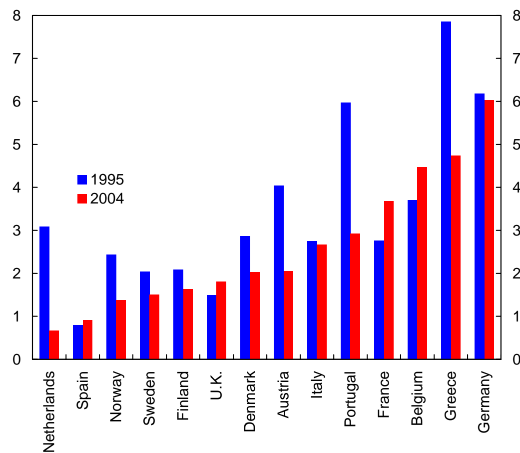


Source: IMF, *World Economic Outlook.*
Notes: traditional bank intermediation: a higher score indicates less reliance of the financial system on traditional bank lending and a greater degree of competition among banks; capital market development: a higher score indicates more developed stock and private bond markets; new financial intermediation: a higher score indicates a stronger presence of nonbank financial institutions and more prevalent use of financial innovations.

[8] For further details see International Monetary Fund (2007a).

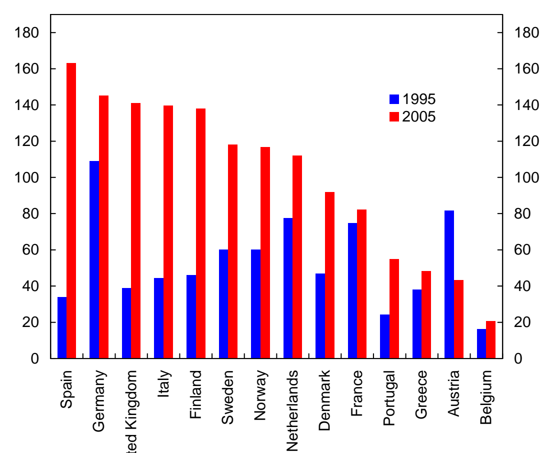
[9] "How Do Financial Systems Affect Economic Cycles?" Chapter 4 in IMF (2006b).

Figure 17. Interest Spread, 1995 and 2004
(*Lending rate less money market rate, percent*)



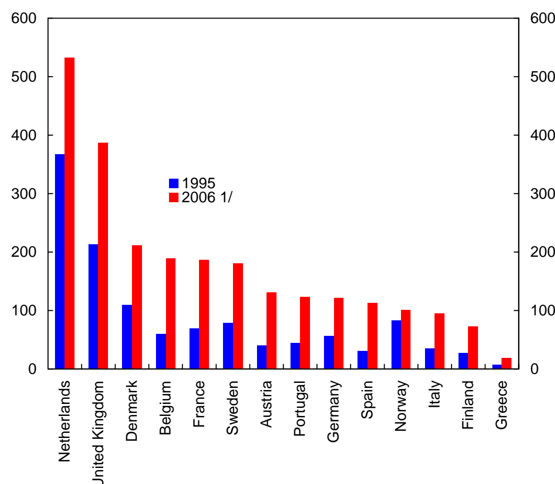
Source: IMF, *World Economic Outlook.*

Figure 19. Stock Market Turnover, 1995 and 2005
(*Percent of market capitalization*)



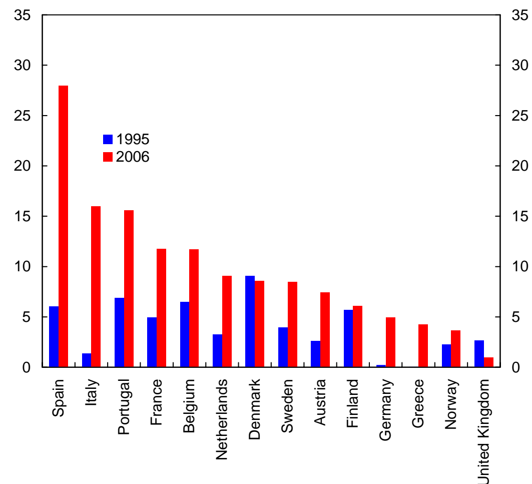
Source: World Bank, A New Database on Financial Development and Structure.

Figure 18. Assets of Nonbank Financial Institutions, 1995 and 2006
(*Percent of GDP*)



Source: Eurostat.
1/ Data for Denmark, Germany, and the Netherlands extend through 2005.

Figure 20. Outstanding Amount of Domestic Debt Securities Issued by Nonfinancial Corporations, 1995 and 2006
(*Percent of GDP*)



Source: Bank for International Settlements.

(Figure 17). The amount of funds under management by various nonbank financial institutions (e.g., insurance companies, pension funds, and investment funds) has risen substantially (Figure 18). Partly reflecting this rise, stock markets have gained in liquidity (Figure 19), and debt securities have increasingly become a potent funding source (Figure 20).

At the same time, banks have become more integrated with markets and continue to play a prominent role in the financial system. While competition for household savings from nonbank financial institutions has increased, the banks' practice of more intensely sourcing funds from other intermediaries through the wholesale markets allows them to expand without being constrained by the amount of deposits they attract. Various off-balance-sheet activities, such as sales of securitized bank loans to the market and trading of derivatives, have also been increasingly pursued by banks. In general, such activities have decreased the segmentation of banks, markets, and nonbank financial

intermediaries, enabling funds and risks to be more flexibly transferred.[10]

Traditional relationship-based lending continues to be highly relevant even though the changing nature of intermediation and widening range of lenders and financing options have reduced its dominance. The main advantage of relationship-based lending—facilitating flows of finance in cases where there is serious information asymmetry—appears to remain a key dimension in the evolving financial systems. In particular, a study of Italian firms shows that the financing of small enterprises, which tends to be opaque and heavily reliant on relationship-based loans for funds, has not been significantly affected by the rapid increase in sophistication of the Italian financial system (Box 3).

Drivers of Change

The evolution of Europe's financial systems has been driven in good part by domestic financial sector reforms. Large-scale privatization and deregulation of the banking sector in the 1980s and 1990s have increased competition and efficiency. Similarly, the substantial tightening of stock-listing requirements and corporate governance regulations has raised corporate disclosure standards and increased protection of investors from frauds, thus rendering equity more attractive.

Advances in information and communication technology have also contributed to this evolution. For instance, more timely availability and easier processing of borrower credit records encourage open competition among banks for potential borrowers (Petersen and Rajan, 2000), while increased access to the Internet and the proliferation of web-based trading channels promote wider and deeper investor participation in the stock markets (Choi, Laibson, and Metrick, 2002).

Financial integration—hastened by the harmonization of financial sector regulations and the adoption of a single currency among the euro area countries—may have been the most important factor underlying the transformation of the financial system (Decressin, Faruqee, and Fonteyne, 2007):

- The lowering of barriers to integration of European banking has encouraged foreign entry and strengthened the contestability of the domestic banking sectors, prompting banks to expand into various off-balance-sheet activities (e.g., securitization, derivatives trading, and sale of risk management services). Moreover, the broadening of the client base across borders encourages banks to grow and benefit from economies of scale. The ensuing consolidations have further fostered banks' capacities to engage in market transactions.

- Integration across stock exchanges has promoted capital market development. In particular, the mergers and joint ventures of several European stock exchanges, most notably Euronext,[11] have standardized the trading platforms and lowered market fragmentation, thereby reducing cross-border stock trading costs and improving market liquidity (McAndrews and Stefanadis, 2002).

Quality of the Financial System Matters

As discussed, the evolution of the European financial systems has led to significant changes in the way finance is intermediated. Why are such changes important to the wider economy?

[10] In other words, the number of times savings are intermediated ("change hands") on their way to the end borrowers has increased, and the possibility of slicing and bundling risks in ways that better cater to different intermediaries and investors has expanded.

[11] OMX Nordic Exchange, which consolidates exchanges in Denmark, Sweden, Finland, and Iceland, and Virt-X, which offers trading in pan-European blue-chip stocks, are two other notable examples.

Box 3. Continued Relevance of Relationship-Based Lending in an Evolving Financial System

As financial systems evolve, competition among banks and the diversity of financial intermediation increase, leading to a decline in the dominance of relationship-based lending. The expansion of borrowing alternatives benefits relatively transparent firms, as they get access to more competitively priced finance and become less vulnerable to the supply of funds from any one single lender.

However, an examination of the financing of Italian firms indicates that relationship-based bank lending appears to remain important where its main advantage counts most. Long-term interactions underlying relationship-based lending allow the lender to more effectively gather information about the borrower and thus facilitate flows of finance even in cases in which the borrower generates little publicly available information. Such mitigation of information asymmetry associated with opaque firms represents the main advantage of relationship-based lending. The study presented here, focusing on small enterprises—which tend to be opaque and rely heavily on loans from local banks—in Italy shows that their access to funds has not been significantly affected over the past 10 years, suggesting that the main advantage of relationship-based lending remains relevant even as the financial system is becoming increasingly sophisticated.

Italy is chosen for the case study for two main reasons. First, the transformation of its financial system has been one of the most rapid among the advanced economies (according to the September 2006 WEO's financial index). Therefore, any effect of the change in the financial system on the financing of the major beneficiaries of relationship-based lending should be most readily detectable in Italy's data. Second, small enterprises make up a large part of the corporate universe in Italy. Their significant representation should provide more confidence in the precision of the empirical results.

The empirical analysis examines the level of leverage of small enterprises (relative to larger enterprises) as a function of the financial system's sophistication—of which a measure is constructed for each year of the sample period using the methodology for the September 2006 WEO's financial index—controlling for fundamental factors found in the literature to be important determinants of the equilibrium leverage.[1] In addition to the countrywide measure of the financial system, regional variation in the breadth of choice of lenders is measured as the number of lenders per firm in the region. Firm-level data used in the analysis cover more than 44,000 firms between 1995 and 2004.[2] The sample includes small firms (with fewer than 50 employees), but excludes micro firms.[3]

Small-Firm Financing in a Transforming Financial System

Dependent variable: Leverage level

	coeff est	z-stat	coeff est	z-stat
Small firm dummy*Financial index			-0.22	-0.50
Financial index	0.14	1.10	0.16	1.20
Dummy: small firms (<50 employees)	-0.59	-0.51	0.65	0.24
Regional financial index: No. of bank relationships per firm	1.92	0.71	1.94	0.71

Notes: Estimation method: Generalized least squares random firm effect for all regressions. Number of observations: 400,000+ for each regression. Control variables included in the regressions but not reported: profitability, tangibility, lagged research and development (R&D) expenditure, lagged growth of exports, lagged growth of revenue, and constant. No reported coefficient estimates are statistically significant at the 10 percent level.

Regression results suggest that the increase in financial sophistication during the sample period—measured either for the country as a whole or across regions—does not significantly affect the financing of small firms (table). Although the positive effect of increasing financial sophistication on the equilibrium level of leverage seems to be lower for small firms (negative coefficient estimate on the interaction term), the differential effect is far from statistically significant. The results for all firms indicate that the increase in financial sophistication has a small positive effect on the equilibrium level of leverage.

Note: The main author of this box is Iryna Ivaschenko.

[1] Control variables include profits, tangibility (see Campello, 2006, for a definition), past growth, and past business strategies aimed at improving performance (e.g., marketing and research and development expenditures).

[2] Data were graciously provided by the Bank of Italy. See Ivaschenko (2007) for details.

[3] Micro firms are those that do not produce even simplified balance sheet data.

Theory

Financial systems featuring stronger competition, greater diversity, and closer integration among intermediaries are more likely to direct finance to its most productive use. In such systems, flows of finance are more closely guided by market signals, and financial resources are more competitively priced. The strong presence of a multitude of different intermediaries and financing options also expands the opportunities for both borrowers and lenders to meet their specific needs. Moreover, an intermediary's capacity to originate claims is less constrained by its ability to bear the risks involved in these claims by the increased tradability of risks via various innovative financial instruments—e.g., asset-backed securities (ABSs), collateralized debt obligations (CDOs), and credit default swaps. Consequently, each intermediary's natural advantages are better exploited, the costs of risks are lowered, and the dispersion of risks becomes more optimal.[12]

This efficiency benefit is likely to be especially noticeable for advanced economies. These economies already have in place many elements of the fundamental infrastructure—e.g., strong tradition of rule of law, well-defined judicial systems, and good availability of information to the public—that are crucial for the effectiveness of sophisticated financial transactions. Furthermore, positioned at the technological frontier where opportunities can be fast-changing and uncertainties are high, advanced economies would certainly benefit more than less developed economies from a system where finance flows flexibly and risks are widely distributed.

[12] There are many other suggested benefits of more sophisticated financial systems. Competitive financial markets encourage innovations (e.g., Holmstrom and Tirole, 1993) and facilitate aggregation of diffuse information (e.g., Boot and Thakor, 1997). The smaller vested interest the creditor has in the borrower and the borrowing firm enhances the latter's corporate governance (e.g., Dewatripont and Tirole, 1994) and encourages competition in product markets (e.g., Cestone and White, 2003).

Evidence

The presence of such an efficiency benefit is supported by empirical work. For instance, cross-country macroeconomic analyses[13] find that more sophisticated financial systems are associated with faster reorientation of the corporate sector to global growth opportunities, and more voluminous cross-border portfolio investment inflows and outflows.[14]

New research based on cross-country industry-level information confirms that the economic value of finance is enhanced in more sophisticated financial systems, that is, systems with a wider array of financial activities.[15] The evidence suggests that two channels through which finance benefits the economy—the general reduction in costs of external finance and improvement in resource allocation in the corporate sector—work more effectively in such financial systems. Specifically, the positive effect of a greater availability of finance on the value-added growth of industries that are likely to be subject to the tighter financial constraints is larger in more sophisticated systems. Likewise, increased financial depth seems to strengthen the relative development (both value-added growth and productivity growth) of rising industries more in financial systems that are more sophisticated. In other words, more sophisticated financial systems appear able to derive larger efficiency gains from finance. Analyzing an even more detailed data set for Denmark suggests that the efficiency benefit applies also at the firm level (Box 4).

[13] See International Monetary Fund (2006b).

[14] A more sophisticated financial system here refers to one that has a higher score on the financial index developed in the September 2006 WEO.

[15] To explicitly address possible endogeneity, rather than studying the simple correlation between finance and macroeconomic performance, the analysis exploits cross-country industry-level data to examine the mechanisms underlying finance's contribution to the economy. For details of the analysis, see Tang (2007).

Box 4. Financial Intermediation at Work in Denmark

Cross-country industry-level analysis in Tang (2007) suggests that under the right conditions (i.e., a high degree of sophistication in the financial system and a flexible labor market), finance would tend to flow to firms with tighter financial constraints and greater growth potential. Denmark ranks high on financial sophistication (as measured by the September 2006 WEO's financial index) and has one of the most flexible labor markets in Europe. Moreover, its corporate sector has considerably expanded its recourse to external finance in recent years. Zooming in on a panel of firm-level data of Denmark provides an ideal test to see whether finance indeed flows as hypothesized.

The test consists of verifying how a firm's growth potential and the natural tightness of its financial constraint affect the amount of finance it attracts. Growth potential is measured by lagged sales growth, and the financing constraint is proxied by lagged cash flows and whether the industry it operates in has a high dependence on external finance. Reverse causality is dealt with by lagging the independent variables. Growth of debt finance is regressed on these variables of interest, along with current sales growth and total assets as controls. The panel data run from 2001 to 2006 and include roughly 1,000 Danish firms in each year (see the table).

Two main points emerge. First, the results confirm that more finance tends to flow to rising firms and firms in industries with high dependence on external finance. While the coefficient estimate on lagged cash flow is not statistically significant, it is of the expected sign.

Second, the regressions show that the information content embedded in the flows of finance seems in fact greater than suggested by the cross-country results. Finance not only flows to high-growth industries, it also seeks out the high-growth firms within each industry.

Determinants of Flows of Finance

Dependent variable: Growth of debt

	Estimation Method							
	Fixed industry effect		Fixed industry effect		GLS Random industry effect		GLS Random industry effect	
	coeff est	*z-stat*	*coeff est*	*z-stat*	*coeff est*	*z-stat*	*coeff est*	*z-stat*
Dummy: industry w/ high dependence on external finance					0.02	2.52**	0.02	2.51**
Lagged cash flows	0.00	-0.79	0.00	-0.85	0.00	-1.30	0.00	-1.35
Lagged growth of revenue	0.06	2.84***	0.05	2.28**			0.04	2.07**
Growth of revenue			0.12	5.44***			0.11	5.30***
Total asset	0.00	1.96**	0.00	1.98**	0.00	2.44**	0.00	2.47**

Notes: Year fixed effects are included in all regressions. Number of observations: 5,500+ for each regression. ** and *** denote statistical significance at 5 percent and 1 percent level, respectively.

Garnering Benefits without Incurring Excessive Risks

Financial innovation is an important source of strengthened economic and financial performance over the medium term, but it is bound to pose challenges to private and public prudential arrangements, as highlighted by recent events. It is important that these challenges be met without undue costs to the greater availability of finance that innovation brings. Thus, a productive policy approach would be to implement measures that facilitate the move toward greater financial sophistication, while ensuring that prudential frameworks keep up with these developments to minimize the risks of financial crises. What does

moving forward entail and how should risks be guarded against?

Moving toward Greater Sophistication

Competitive forces are likely to intensify financial integration and continue to push the European financial systems toward greater sophistication. While there have been major advances in integrating wholesale banking, there is still much room for further integration on the retail front. In addition, the delivery of numerous EU directives in the pipeline (notably the Markets in Financial Instruments Directive, or MiFID) will further facilitate capital flows and development of integrated financial services.

Nevertheless, the transformation of the financial systems is certainly not guaranteed and in fact does not appear to converge across countries. Specific domestic policy reforms are likely to be the main factor determining the ultimate extent and speed of the transformation, as illustrated by the experience of Italy (Box 5).

In certain cases, reducing involvement—whether direct or indirect—of the public sector in banks will be desirable. State intervention in bank management undermines the sector's efficiency by distorting the bank's decisions and jeopardizing the growth of other competitive banks.[16] Public sector divestment would remove such distortions and clear the way to list the banks publicly and subject them to greater market scrutiny and discipline.

Improving the corporate governance of many large nonlisted private banks by stepping up disclosure requirements would yield efficiency gains. A particular risk of insufficient disclosure is that managers of these banks might engage in channeling finance to where it produces personal gains but perhaps little economic value. Stronger oversight of the nonlisted banks' corporate governance would strengthen the role of price signals as a basis of their lending decisions.

Similarly, there is still much room for further reforming the banking regulations to foster efficiency. For instance, loosening the restrictions on bank consolidation would facilitate greater economies of scale and improve the contestability of the overall banking sector. Imposing stricter limits on banks' industrial participation, meanwhile, would weaken banks' vested interest in the borrowing firms and give them more incentives to finance product market entrants.

Beyond bank lending, a level playing field should be established for all types of financial activities, to encourage diversity and integration among intermediaries. In this regard, abolition of state-administered preferential deposit schemes and relaxation of the ceilings on interest rates and fees charged on financial services would induce creation of a wider range of investment vehicles. In a similar vein, modification of the legal and regulatory frameworks facilitating the issuance of financial innovations such as ABSs and CDOs—which has been lagging in many advanced European economies[17]—as well as of complex corporate securities (e.g., convertible bonds) would be helpful.

Finally, removal of impediments to financial integration—including by expediting harmonization of the regulatory regimes and tax treatment, standardizing the clearing and settlement systems, and relaxing national authorities' restrictions on cross-border mergers of financial intermediaries—would certainly make

[16] Germany's Landesbanken, for instance, significantly underperform their EU peers, and their high ratings, bolstered by the public sector ownership, give them an artificial advantage on the wholesale market over their privately owned counterparts (Brunner and others, 2004).

[17] Europe's covered bond market, though, is very well developed. However, as the underlying assets of covered bonds remain on banks' balance sheets (and hence have to be supported by a corresponding amount of regulatory capital), securitization represents a more effective way for banks to raise funds and manage risks.

Box 5. Upgrading a Financial System: Italy's Experience

The financial index of Italy's financial system rose considerably between 1995 and 2004, showing great improvement in all three main components: the traditional banking intermediation, the new financial intermediation, and the financial markets.[1] In part, this development reflects Italy's lower starting base, as its financial markets still remain undersized and dominated by banks.[2] Domestic reforms specifically geared at the banking sector, firms' corporate governance, and the securities markets have, however, prominently contributed to the transformation of the financial system during the period.

Organizational Reforms: Privatizing the Major Financial Intermediaries

A large-scale privatization program was carried out in the banking sector in the 1990s, leading to more intense competition among Italian banks and a more efficient and less concentrated banking sector. In addition, many of the privatized banks became listed on the stock exchange, making it possible for them to raise funds from a diverse spectrum of investors and becoming subject to market discipline. Incidentally, the public trading of banks' equity also benefited the development of the stock market by increasing the market's liquidity.

The organization of the equity market has also been revamped. Following the stock exchange's privatization in 1998, Borsa Italiana was created and charged with the responsibility to manage and develop the exchange. To complement the mandatory frameworks imposed by the state regulators, Borsa Italiana introduced a voluntary code of conduct (Preda Code) in 1999 to flexibly address some corporate governance issues that the formal requirements could not adequately deal with. Hoping to attract the listing of firms of various sizes and funding needs—especially salient given the predominance of small firms in Italy—Borsa Italiana introduced three separate exchange segments with different listing requirements. It is important that the segmentation allows smaller firms to access equity financing on the public market without incurring prohibitively high listing and compliance costs.

Upgrading the Legal and Regulatory Frameworks: Bolstering Investor Protection and Facilitating Financial Innovations

At the heart of greater nonbank intermediation lies investor confidence in the system's ability to protect their investment, which was significantly boosted by the implementation of the Consolidated Law (Draghi Law) in 1998 and the Savings Law in 2005, the latter in response to corporate scandals. Along with the regulations introduced by Consob (a supervisory body of the stock exchange), the new law went a long way toward transforming corporate governance practices in Italy, particularly through a series of requirements aimed at improving the balance of power between the biggest shareholders and minority investors. Furthermore, self-dealing was made less attractive to the biggest shareholders by requiring mandatory bids and disclosure of material related-party transactions.

To make it easier for banks to securitize and sell their loans into capital markets, the Securitization Law was enacted in 1999. The increased ease of securitization expanded banks' funding sources and enhanced their risk management capabilities. Last, but not least, the groundwork has been laid out for the implementation of many EU banking and financial market directives—notably the Capital Requirement Directive (Basel II provisions) and MiFID (Markets in Financial Instruments Directive).

[1] Italy's ranking among the 18 sample countries improved in all three components between 1995 and 2004. It rose from 7 to 4 in traditional banking intermediation, from 17 to 11 in new financial intermediation, and from 18 to 14 in capital market development.
[2] See International Monetary Fund (2006a; 2007b).

Box 5 *(concluded)*

Strengthening Enforcement: Empowering Regulators

Modalities of cooperation between the two supervisory authorities (Consob and Bank of Italy) charged with securities regulation have been clearly established, so as to facilitate exchanges of information and expertise while reducing the possible confusion of responsibilities. Moreover, regulators have been endowed with greater investigative and sanctioning authorities, thus ensuring stricter adherence to the regulations.

Unfinished Business

Although much effort has been made to modernize the financial system, the road ahead to catch up with the most advanced financial systems is still long. Notwithstanding low concentration, there is further scope to strengthen competition among banks, as the average price of basic banking services in Italy appears to be one of the highest in Europe (EFMA, Capgemini, and Ing, 2005). Similarly, there is room to reduce stock market listing costs; strengthen and streamline corporate governance, accounting, and disclosure requirements for all corporations, especially groups; and further enhance minority shareholder protection, mainly by permitting class action lawsuits and enhancing the effectiveness of the civil judicial system. Development of the private pension pillar and further public divestment might also help.

the environment more competitive and conducive to efficient financial transactions.[18]

Guarding against the Risks

The increasing sophistication and complexity of the financial system need to be accompanied by an upgrading of regulatory and supervisory frameworks to promote risk assessment and management capabilities, and transparency, while the threat to financial stability stemming from any inadequacies should be minimized. The recent financial market turbulence triggered by the meltdown of the U.S. subprime mortgage market highlights the need for prudential frameworks—whether adopted by market participants or enforced by regulators—to keep up with the financial innovations. Indeed, insufficient risk assessment and risk management capabilities, and lack of transparency regarding the counterparties' risk exposures and the origination process, constitute interrelated vulnerabilities that culminated in the recent turbulence.

Managing liquidity and market risks by financial institutions deserves heightened attention. To the extent that these institutions become more reliant on highly procyclical and volatile wholesale funding, their liquidity should be closely regulated (e.g., with respect to the concentration of funding sources) and monitored. In general, as market transactions become more widely used for both liquidity provision and profit generation, prudential risk assessment should focus on not only default risks, but also market risks that can undermine the liquidity and solvency positions of financial institutions. One clear lesson from the recent events is that liquidity risks had not been fully taken into account and had been poorly managed by many market participants.[19]

Financial institutions, especially nonbanks, need to be encouraged to upgrade their *risk assessment* models as financial systems grow in complexity and to perform more rigorous *due diligence*. The tendency of many financial institutions to rely on ratings by external agencies for risk assessment

[18] See Decressin, Faruqee, and Fonteyne (2007).

[19] In particular, legal factors and concerns about reputational risks may force banks to reintegrate off-balance-sheet vehicles and fulfill contingent funding commitments.

could prove to be risky itself. Ratings by such agencies typically reflect only their assessment of the financial products' default risks, and not market or valuation risks. Even then, their models on default risk assessment tend to be highly sensitive to certain assumptions grounded in limited historical information (e.g., regarding correlation of defaults on the various underlying assets). Combined with lack of information on underwriting standards, excessive reliance on rating agencies could give rise to systemic and persistent mispricing of risks, as illustrated by recent events.[20] While rating agencies should improve and add to their tool kit in light of recent experience,[21] financial institutions need to build up their own due diligence capacity as well.

Risk assessment would be facilitated by *improving transparency* concerning *the underwriting standard* in the loan origination process. Extending prudential oversight to encompass the loan originators not currently regulated could be considered. Alternatively, the underwriting standard could be verified by a truly independent third party.

Raising the information standard governing the *counterparties' risk disclosure* would also be beneficial. Inadequate information about market participants' risk exposures—especially through their contingent and off-balance-sheet activities—increases uncertainty faced by potential lenders and can cause funding channels to seize up in times of strain. More comprehensive and uniform accounting and regulatory treatment of illiquid financial instruments and contingent and off-balance-sheet items may be necessary.

Finally, authorities' *supervisory capacity* may need further boosting. There is scope for greater cooperation among supervisors across sectors and borders. Insurance companies and pension funds have been increasingly assuming the risks transferred from banks via complex financial instruments. Hence, where still insufficient, more sharing of expertise by the prudential supervisors of the insurance and pension industries and their bank colleagues would be highly desirable. The effectiveness of *crisis management* by the regulators and central banks may need to be reviewed, in particular in dealing with individual problem institutions and system-wide liquidity strains. Overall, central bank responses have been effective, but European authorities may need to strengthen their capacity to enforce early remedial action and to intervene rapidly in troubled institutions in order to preserve overall confidence.

[20] The lack of transparency on the origination process may, in turn, encourage the originators to adopt a laxer underwriting standard.

[21] For instance, there have been recent discussions on creating measures of valuation risks in the rating agencies' assessments.

2. Managing Rapid Financial Deepening in Emerging Europe

Income convergence in emerging Europe has been accompanied by rapid financial deepening. Financial intermediaries have played a primary role in channeling capital flows into the region, benefiting consumers, producers, and investors alike. But the resulting high speed of convergence is engendering short-term risks and medium-term challenges. To ensure "safe driving" at considerable speed, and thus smooth convergence, policymakers will need to adopt a cautious approach. Faced with the uncertainties involved, reducing vulnerabilities and building buffers will be essential. Where convergence has been associated with large external imbalances, the challenge is to "prepare for the curve ahead," which is to turn around these imbalances without painful adjustment. This will require that resources flow without hindrance to productive investments, particularly in the tradables sector. Policymakers will need to strengthen their financial systems and raise the flexibility of labor and capital markets.

For a number of years, the financial systems of Europe's emerging economies have been playing a key role in these economies' convergence and integration with advanced economies. Along with foreign direct investment (FDI), financial systems have been the principal conduits for the vast flow of capital into the region. Financial intermediaries have sparked in most recipient countries a rapid, if not blistering, pace of financial deepening.[22]

Rapid financial deepening has brought both benefits and risks to borrowers and investors. The benefits have come in the form of consumption smoothing, diversification, and risk sharing, but they have not accrued uniformly. The pace of financial deepening differs markedly across countries. And there are concerns that its speed is too high in some countries, posing risks to macroeconomic and financial stability.

Policymakers have struggled with the question of whether and how to manage fast-paced financial deepening. Some observers have taken the view that countries are on a one-way road to prosperity and that the risks pale in comparison to the benefits. Some, however, have interpreted the risks as high and rising, as evidenced by the swelling of imbalances. And those who have tried to slow capital inflows and credit expansions have been thwarted because the available policy options turned out to be either limited or ineffective.

Against this background, this chapter, after reviewing finance's role in the convergence process, advocates a two-pronged approach to addressing the policy challenges associated with rapid financial deepening:

- *Driving safely at high speed.* With policies having had limited success in slowing the speed of credit growth, policymakers need to focus on reducing vulnerabilities and building safety margins. Such caution is desirable because of uncertainty about the extent to which the observed pace of convergence is an equilibrium phenomenon. In addition, it provides a buffer against sudden shifts in market sentiment that may be unrelated to country fundamentals.
- *Preparing for the curve ahead.* An often-overlooked aspect is that the ongoing convergence process will entail a fundamental reorientation of the economies involved. Protracted current account imbalances will have to change course, and resources will need to shift to productive investments, particularly in the tradables sector

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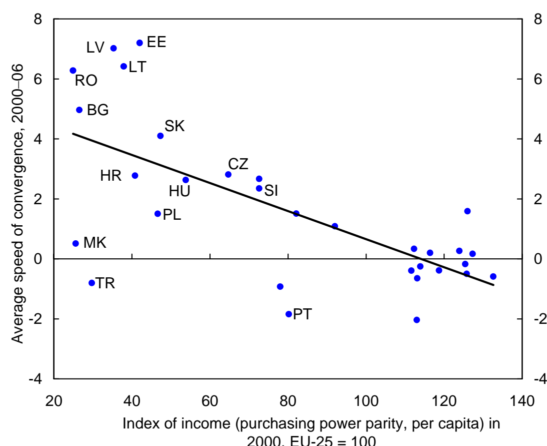
Note: The main authors of this chapter are Rudolfs Bems and Philip Schellekens. The analytical underpinnings of this chapter and the details of the simulations are presented in Bems and Schellekens (2007).

[22] Financial deepening will be interpreted here narrowly as the expansion of credit to resident nonfinancial corporations and households.

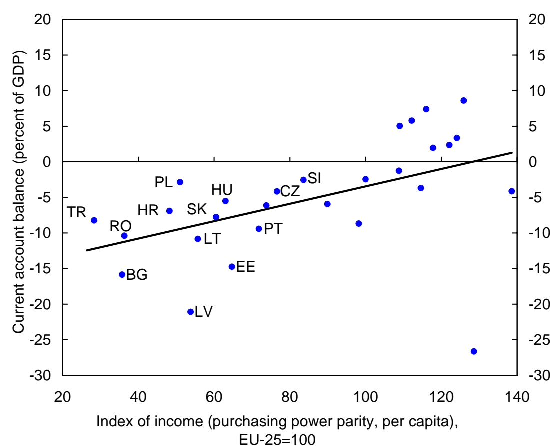
to help boost exports; otherwise, an abrupt correction or a prolonged period of slow growth may follow. Private sector agents will need to be aware that such a turnaround is inevitable. Policymakers would do well to focus on reforms that will facilitate the smooth rebalancing of the sources of growth.

Figure 21. Convergence in Europe, 2000–06



Sources: Eurostat; and IMF staff calculations.
Note: In each period, income levels of individual countries are indexed so that the average of the EU-25 is normalized to 100. Income levels are based on purchasing power parity–adjusted income per capita data from Eurostat. The average speed of convergence is measured as the geometrically averaged change in the index over the period 2000–06. The sample consists of the EU-25, Croatia, Iceland, Macedonia FYR, Romania, Switzerland, and Turkey. Country names are abbreviated according to the ISO standard codes.

Figure 22. Current Account Balances and Income Levels in Europe, 2006



Sources: Eurostat; and IMF staff calculations.
Note: In each period, income levels of individual countries are indexed so that the average of the EU-25 is normalized to 100. Income levels are based on purchasing-power-parity-based income per capita data from Eurostat. The sample consists of the EU-25, Croatia, Iceland, Macedonia FYR, Romania, Switzerland, and Turkey. Country names are abbreviated according to the ISO standard codes.

Finance's Role in Convergence

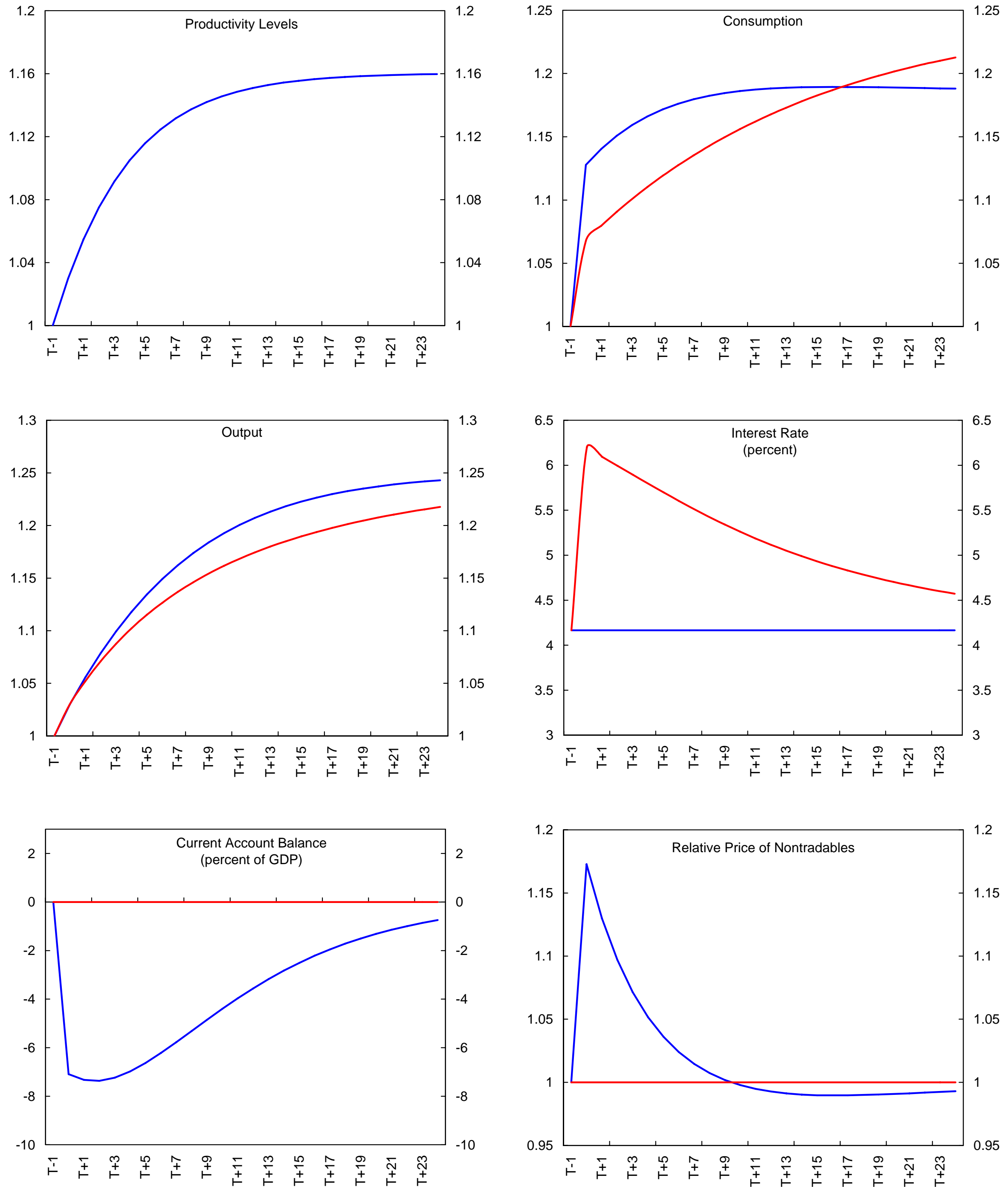
Capital Inflows and Financial Deepening

Convergence in emerging economies has been greatly helped by massive inflows of capital. Over the last two decades, it has become clear that the growth potential in these economies is very large. As the economies have opened up, and their financial systems have reached a basic threshold of development, investors have taken advantage by injecting capital, thereby accelerating the convergence process. Income levels have been catching up quickly, with the fastest progress observed in the Baltics, Bulgaria, and Romania (Figure 21), countries that started from low levels. Not surprisingly, these countries have also been experiencing the largest current account deficits in the region (Figure 22).

Conceptually, the quickest way to prosperity involves some degree of capital inflows (Figure 23). Where capital does not flow in—perhaps because lenders are worried about a country's ability to repay—consumption and investment will grow more slowly. Savings will need to be set aside to fund the expansion, and higher interest rates will provide this incentive. Capital inflows fast-forward this process: consumption can accelerate more quickly and increase well before production rises.

Financial systems have played a vital role in intermediating the capital inflows into emerging Europe, quickening the pace of financial deepening. Initially, finance arrived in large quantities, with FDI providing the lion's share. As financial development and bank consolidation progressed with the help of foreign investors, however, financial systems came to play a paramount role.

Figure 23. Convergence with and without Capital Inflows



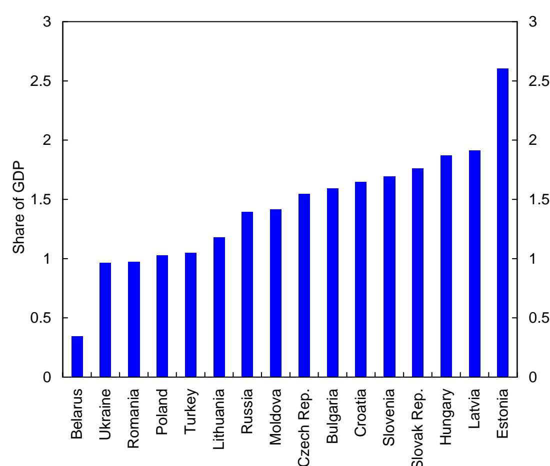
Source: IMF staff calculations.
Note: Cases with/without capital flows are represented by the blue/red lines. The productivity shock is the same for both cases. The time intervals are expressed in years. For simulation details, see Bems and Schellekens (2007).

Table 4. Credit to Nonfinancial Corporations and Households, 2000-06
(*Percent of GDP*)

	2000	2001	2002	2003	2004	2005	2006	Average Yearly Change
Bulgaria	14.9	16.3	21.4	28.5	41.4	50.1	62.1	6.7
Croatia	49.9	52.4	63.6	66.7	70.1	83.5	96.6	7.8
Czech Republic	…	34.2	31.1	33.2	34.5	38.5	45.0	1.8
Estonia	28.5	30.4	33.0	37.6	48.1	67.4	95.4	9.6
Hungary	35.6	35.5	36.3	42.9	45.6	50.8	55.6	2.9
Latvia	19.5	25.8	31.8	40.6	51.1	70.8	93.1	10.5
Lithuania	14.8	15.0	16.7	23.0	28.6	38.3	54.0	5.6
Poland	24.3	25.3	26.5	28.2	26.9	28.8	34.7	1.5
Romania	12.4	13.5	15.3	18.6	21.5	25.9	34.6	3.2
Russia	15.7	18.8	20.9	24.8	27.4	30.6	33.6	2.6
Serbia	…	12.0	14.9	14.4	18.1	23.3	24.3	2.1
Slovak Republic	…	…	…	32.3	29.7	35.3	40.1	2.0
Slovenia	44.4	46.9	49.0	51.7	54.9	67.4	76.9	4.6
Ukraine	12.2	14.6	19.5	27.4	28.9	37.1	51.7	5.6
Turkey	30.7	32.8	25.0	24.9	27.8	34.4	43.2	1.8

Sources: Bank for International Settlements; national authorities; and IMF staff calculations.
Notes: Data include direct cross-border credit. Average yearly change is applied to the percentage point change in the credit-to-GDP ratio over the sample period of each country.

Figure 24. Share of Foreign Assets and Liabilities in GDP, 2005
(*Percent*)



Source: IMF, *International Financial Statistics.*

Financial deepening has been driven almost exclusively by the large expansion of bank-intermediated credit (Table 4). This expansion is, however, by no means uniform across countries, in part because starting points have differed. While the pace of financial deepening in the Baltics and the Balkans has been very fast, others, such as the Czech Republic and Poland, have experienced a much more subdued pace, at least until very recently.

Financial Globalization and Risk

A striking aspect of the convergence in emerging Europe is that it has been taking place on the back of increasing financial globalization. Financial globalization has created vast opportunities for diversification and risk sharing, further enhancing finance's role in convergence. The degree of financial globalization, as measured by the ratio of total foreign assets and liabilities to GDP, has reached high levels in many emerging European countries (Figure 24). Moreover, as illustrated in Figure 22, capital has been flowing from richer to poorer countries.

In this convergence process, diversification and risk sharing have materialized concretely through the operations of foreign banks and the inflow of FDI. In the search for higher profitability, foreign banks have diversified themselves by endowing affiliates abroad with large amounts of risk capital. This risk capital funds opportunities with higher returns. The risk-sharing nature of FDI is well known: FDI seeks to take advantage of upside profit potential, but also bears part of the downside risk.

Greater risk sharing is, in principle, welfare improving and can further speed the convergence process. Uncertainty about the outcome is an integral part of this process, especially when current developments are driven by expected future gains in productivity and income levels. Financial globalization may allow for the transfer of risk to those most willing to bear it. Thus, from the point of view of borrowers, the opportunities for better risk sharing add to the attractiveness of foreign capital inflows and enlarge the current account deficit.

Two Stages of Convergence

How do the inflow of capital and the process of financial deepening allow economies to converge to higher income levels? It is useful to highlight—in a stylized manner—two stages that pose distinct policy challenges:

- The *expansion stage* features large capital inflows, a growing current account deficit, and an acceleration in spending on tradable and nontradable goods. Whereas tradables can be easily imported from abroad, nontradables need to be produced locally, creating a bottleneck in the expansion stage. Excess

demand will push up the relative price of nontradables, produce a real exchange rate appreciation, and result in a shift of resources to the nontradables sector.

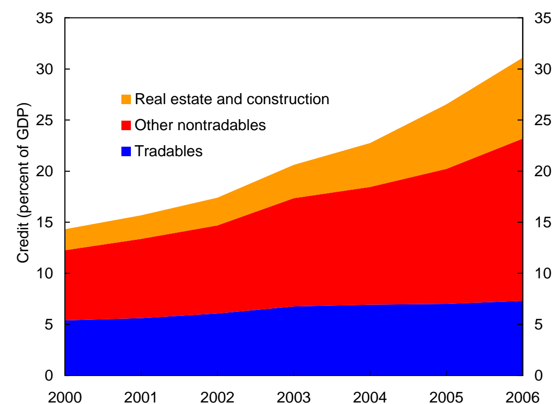
- Barring accidents, this is followed by a *reorientation stage* that is characterized by a rebalancing of the current account. Capacity in the nontradables sector would be built up gradually, dampening the price pressure. The relative price of nontradables would fall, and resources would shift back to the tradables sector. This sector will need to expand so that domestic demand can be satisfied and the foreign debt serviced.

Clearly, most emerging economies in Europe are still in the first—expansion—stage of convergence. This is evidenced by the still-large potential for catching up with the income levels of advanced economies. It is also evident because the ongoing financial deepening still benefits the nontradables sector disproportionately. For example, whereas over 2000–06 credit to the nonfinancial tradables sector stagnated, credit to the nontradables sector more than doubled (Figure 25). Similarly, over the same period, households saw a tripling in credit for housing purposes, whereas consumer credit and other types of credit roughly doubled (Figure 26).

Driving Safely at High Speed

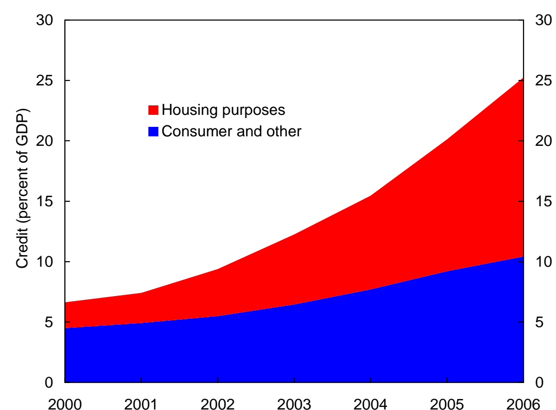
What can be done to ensure the expansion stage goes smoothly and sets the country on a secure path to greater welfare and faster growth? Clearly, the faster convergence is, the more quickly benefits are realized; however, the more likely also that risks appear. The main challenge in the expansion stage will therefore be to "drive safely." But what are the speed limits? Can one tell whether they are being broken? And, what can policymakers do about it?

Figure 25. Credit to Nonfinancial Corporations, 2000–06



Sources: National authorities; and IMF staff calculations.
Notes: Credit measures exclude direct credit from abroad. The sample of countries consists of Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Serbia, the Slovak Republic, Slovenia, Ukraine, and Turkey.

Figure 26. Credit to Households, 2000–06



Sources: National authorities; and IMF staff calculations.
Note: Credit measures exclude direct credit from abroad. The sample of countries consists of Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Serbia, the Slovak Republic, Slovenia, Ukraine, and Turkey.

Do We Know the Speed Limits?

Unsurprisingly, this question offers a fertile ground for debate (Demekas, 2007). The speed limits to the inflow of capital and financial deepening are not only hard to measure, they are also neither unique across countries nor fixed over time. Consider the following three important determinants:

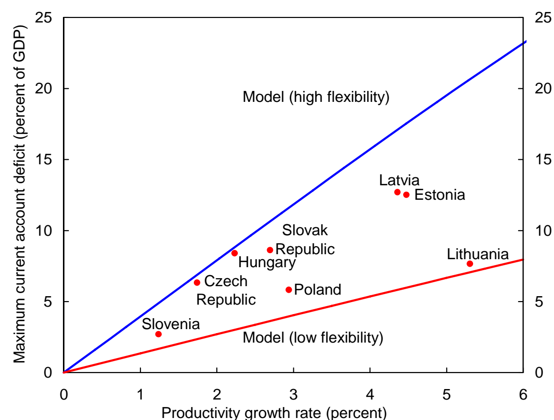
- *Productivity gains.* How bright is the future, really? This will matter much for the optimal speed limit. Greater future productivity will justify higher speed or, in other words, larger current account deficits. But larger deficits will also imply greater shifts in and out of the nontradables sector, producing larger swings in prices.

- *Factor market flexibility.* How flexibly can an economy adapt itself to this bright future? Critical in this regard is the flexibility of labor and capital markets. Greater flexibility means greater compatibility with higher speed limits and larger imbalances.

- *Financial development.* How financially developed is the economy to begin with? Europe's emerging economies still differ significantly from its advanced economies in terms of financial regulation, supervision, and infrastructure. Where further reforms are warranted, convergence and financial deepening will accelerate. However, the speed of financial deepening needs to remain commensurate with the degree of financial development. For example, in the absence of sound arrangements for the liquidation of collateral, a speedy expansion of credit may generate unnecessary systemic risks (Schellekens, 2000).

Theory provides only qualitative guidance. Nonetheless, Figure 27 is suggestive. Conceptually, larger current account deficits are consistent with larger productivity improvements (the positively sloped lines, generated from model simulations), and flexibility in the labor and capital markets allows for greater latitude in borrowing from abroad for a given productivity improvement (the blue versus the red line). Introducing actual data into the figure illustrates that whether the current account deficits are too high depends on a host of factors. If factor flexibility were low (the red line), all countries would appear to be speeding. Conversely, if factor

Figure 27. Productivity, Flexibility, and the Current Account



Source: IMF staff calculations and simulations.

Note: Empirical data: annual geometric average growth rate in total factor productivity over 2000–05 and maximum current account deficit to GDP ratio over 2000–05. Simulated data: shock consists of a persistent increase in productivity growth. For simulation details, see Bems and Schellekens (2007).

markets were highly flexible (the blue line), all of them would appear to be crawling. Thus, speed limits are largely unknowable, but increasing productivity and the flexibility of factor markets are key to strengthening the sustainability of the current account.

Breaking the Speed Limits

When driving becomes unsafe, policymakers have an unmistakable role to intervene. Indeed, if the speed limits are being broken, fast convergence and rapid financial deepening give rise to a litany of concerns that must be addressed. And, the financial sector may exacerbate these concerns. In this regard, the policy challenges faced in Latvia provide an interesting case study (Box 6).

Among the macroeconomic concerns, the significant problem is that breaking the speed limits leads to demand outstripping supply, putting excessive upward pressure on prices and wages and causing overheating. Monetary and fiscal policies are normally expected to be able to control these outcomes, but their effectiveness is

limited in small economies facing strong capital flows. Hence, overheating can be associated with a loss of competitiveness and inflated asset prices. Subsequently, debt-service problems may arise when exchange rates or asset prices adjust, especially if they do so abruptly, as recent emerging market crises have illustrated.

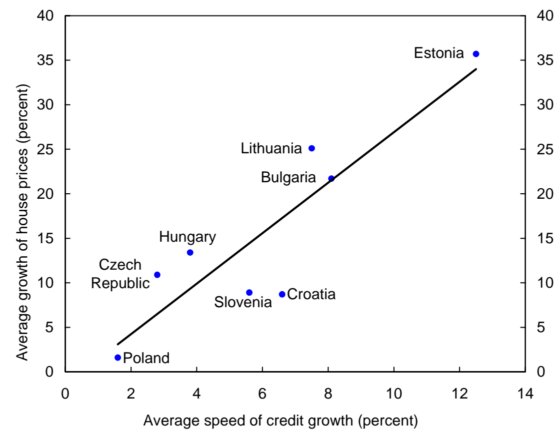
The financial sector may exacerbate these vulnerabilities in several ways:

- The financial sector can raise an economy's *volatility* through the "financial accelerator" (Kiyotaki and Moore, 1997). Banks and financial institutions usually require collateral for lending. When asset prices rise, so do collateral values, thereby "accelerating" the capacity of borrowers to obtain credit. However, it may well be that the initial lending was behind the increase in the asset's price in the first place. The upshot is that prices tend to be more volatile as a result of the interaction between lending and collateral values (Figure 28).

- As financial institutions compete for market share, *lending standards* may deteriorate. Households and corporations could end up with too much debt, or with too much risk, for example by lending in foreign currency or exclusively at variable interest rates. This behavior played an important role in the subprime mortgage crisis in the United States. In emerging Europe, the main concern is the large share of liabilities outstanding in foreign currency (Figure 29).

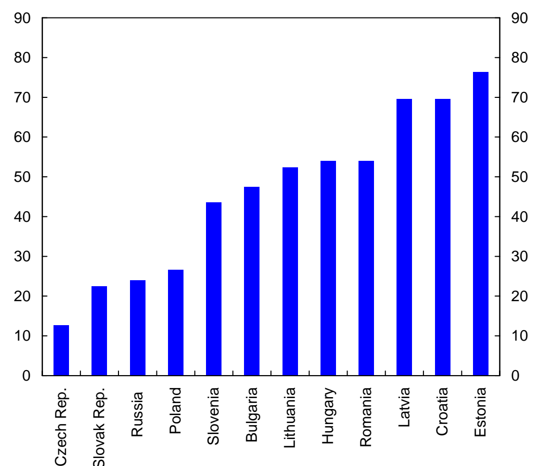
- *Overconfidence* may lay the groundwork for a boom-and-bust cycle. Overconfidence may arise in connection with the prospect of adopting the euro or joining the European Union. Borrowers and lenders may have inflated views about productivity and income. The financial sector may allow overoptimistic agents to borrow, driving prices above

Figure 28. Speed of Credit Growth and House Prices, 2002–06



Sources: Égert and Mihaljek (2007), Table 1; and IMF staff calculations.
Note: The speed of credit growth is defined as the annual percentage-point increase in the credit-to-GDP ratio, averaged over the period 2002-2006. Credit measure includes direct cross-border credit and refers to households and nonfinancial corporations.

Figure 29. Share of Foreign Currency Loans in Total Loans, 2006
(*Percent*)



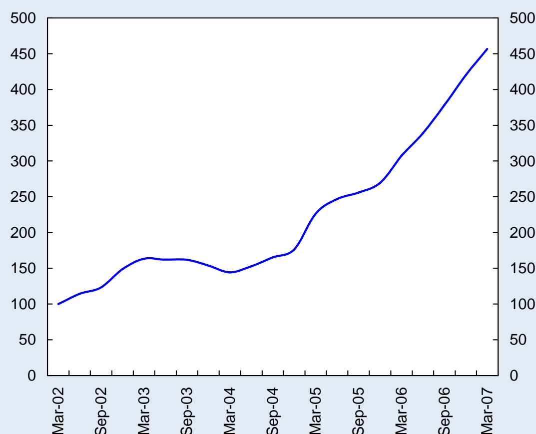
Sources: European Central Bank; and national authorities.

Box 6. Addressing Financial Speeding in Latvia

Latvia, perhaps more than other recent EU entrants, has enjoyed very rapid convergence in income levels over the past decade. Closer integration of goods, capital, and labor markets in the rest of Europe has created favorable investment opportunities and spurred large inflows of foreign financing. Consequently, capital and technology stocks have risen, and new employment opportunities have emerged—both in Latvia and abroad.

But fast credit and wage growth have recently caused Latvia to diverge from a balanced and sustainable growth path. Overheating has intensified, driving the current account to a record deficit and magnifying external indebtedness. Rapid credit growth in euros has left large currency mismatches on the balance sheets of households and corporates. Procyclical macroeconomic and prudential policies have aggravated such trends.

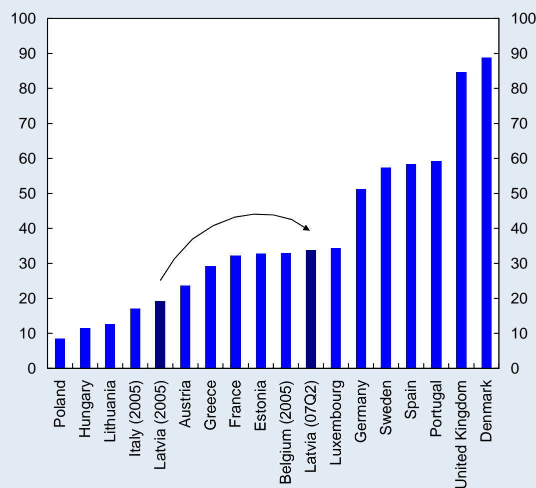
Developments in Real House Prices



Source: Latio real estate broker.
Note: Deflated by Harmonized Iindex of Consumer Prices; 2002:Q1 = 100.

Heavy borrowing for real estate have led to the diversion of resources to the nontradables sector to the detriment of competitiveness (first and second figures). This skewed pattern of development reflects the undertaxation of real estate relative to other sectors and a perception by banks that mortgage lending is less risky than lending to manufacturing. Real estate's attractiveness as a saving vehicle has been reinforced by negative real interest rates, the absence of alternative saving to match instruments, and—until recently—sustained rapid increases in housing prices, all of which have reinforced perceptions of a one-way bet. Latvia's small size and limited workforce have impeded the establishment of large export-oriented manufacturing projects.

Household Mortgages in Latvia and Selected Countries
(*Percent of GDP*)



Sources: Latvian authorities; European Mortgage Federation; Eurostat; and IMF staff calculations.
Note: Household mortgages are for 2006 unless otherwise indicated.

Returning to a balanced growth path will require efforts to curb domestic spending and wage growth:

- Avoiding a procyclical fiscal policy would help directly. By signaling the government's concern about widening imbalances, it would also dampen overly optimistic private sector expectations.
- Efforts to curtail lending and improve the risk profile of new credit would help mitigate macroeconomic and financial stability risks. The issuance of loans only on the basis of legally documented income, the establishment of a comprehensive register for all loans, and a minimum 10 percent down payment requirement will support these objectives.

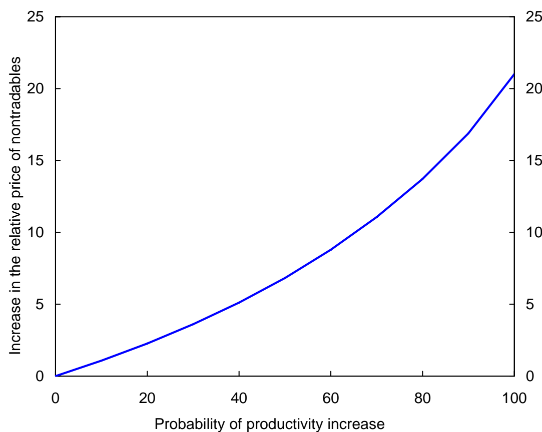
Note: The main author of this box is Gavin Gray.

- Additional financial regulatory measures would help induce banks to internalize systemic risks in real estate and currency markets. The financial regulator could intensify on-site inspections of large banks, ensuring credit risk models are tailored to the Latvian context.

Further efforts are needed to rebalance incentives for investment in the tradables sector:

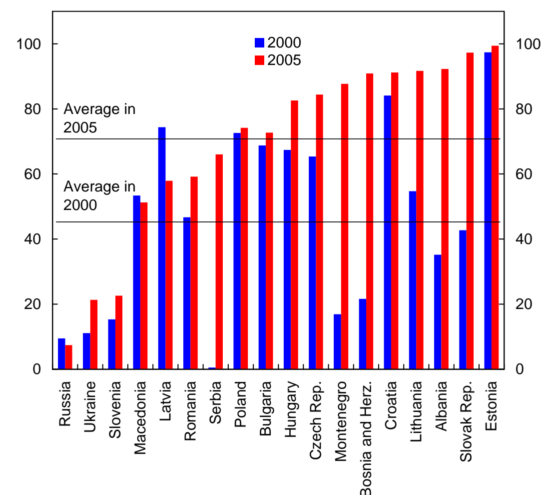
- Incentives for investment in real estate need to be scaled back. Recent increases in real estate taxation and plans for periodic reassessments of cadastral values are steps in the right direction. But, to be effective, enforcement of real estate–related taxation would need to be stepped up.
- Through wage agreements, the public sector could demonstrate its understanding that wage growth should be kept in line with productivity growth. Similarly, social partners could secure a broad consensus for wage restraint.
- More generally, shifting to higher-value-added products entails increasing employer involvement in setting education curriculums, and prioritizing EU structural funds to develop human resources, entrepreneurship, and innovation in traditional and new export sectors.

Figure 30. Impact of Confidence on the Relative Price of Nontradables
(*Percent*)



Source: IMF staff simulations.
Note: Probability measure refers to the probability that a productivity increase is going to take place eventually. The increase in the relative price of nontradables occurs relative to initital pre-shock steady state values. For simulation details, see Bems and Schellekens (2007).

Figure 31. Asset Share of Foreign-Owned Banks, 2000 and 2005
(*Percent*)



Sources: European Bank for Reconstruction and Development; and IMF staff calculations.

fundamental levels (Figure 30). However, if the expectations are not validated, the bust will be even bigger.

- *Foreign bank contagion* raises additional concerns. Certainly, the significant presence of foreign banks (Figure 31) has increased the availability of credit, and promoted financial development and reform more generally. Indeed, support from well-capitalized parents makes banks less vulnerable to local financial conditions. Hence, foreign banks have also been credited with providing a degree of stability. Yet, the concentrated number of international players and the similarity of their activities expose emerging economies to common-lender contagion risks (Table 5). Changes in market sentiments or strategic shifts at the parent level could amplify the impact of foreign shocks on the host country and create ripple effects throughout the region.

Table 5. Banks' Exposure to Emerging Economies, 2006
(*Percent of total exposure*)

	Austria	Belgium	Sweden	Germany	France	Italy	Portugal	Finland
EU-10	34.7	5.6	10.3	2.6	1.9	11.4	6.6	9.9
Bulgaria	0.9	…	…	…	…	0.5	…	…
Czech Republic	8.9	2.6	…	0.2	1.0	0.6	0.1	…
Estonia	0.1	…	3.6	…	…	…	…	3.9
Hungary	6.2	1.2	0.0	0.7	0.2	2.6	0.3	…
Latvia	0.1	…	3.3	0.1	…	…	…	2.6
Lithuania	0.1	…	2.9	0.1	…	…	…	3.2
Poland	2.8	1.0	0.5	0.8	0.2	4.8	6.2	0.1
Romania	8.7	…	…	0.5	0.4	0.8	…	…
Slovak Republic	5.6	0.6	…	0.1	…	2.5	…	…
Slovenia	2.2	0.2	…	0.1	0.1	0.1	…	…
Other emerging Europe	14.6	1.0	0.4	1.7	1.2	7.0	1.0	0.5
Other emerging markets	1.0	0.6	0.5	1.6	1.6	1.0	4.1	0.4
Rest of the world	49.6	92.8	88.7	94.1	95.3	80.5	88.3	89.2

Source: Bank for International Settlements.

Reducing Vulnerabilities and Building Buffers

Faced with considerable uncertainties about speed limits but consensus about the potential cost of vulnerabilities, policymakers in most countries have taken concrete measures to address vulnerabilities. They have undertaken macroeconomic tightening: raising interest rates or reserve and liquidity requirements and reducing fiscal deficits or building up surpluses. Prudential and supervisory regulations have also been tightened, and monitoring has been stepped up to make sure banks uphold sound loan granting standards. In a few cases, marginal reserve requirements have been imposed on foreign borrowing (Hilbers, Ötker-Robe, and Pazarbasioglu, 2007).

While these measures have helped dampen credit growth, rapid credit growth remains a concern in most countries. Countries with relatively tight fiscal policies are still experiencing very large capital inflows and current account deficits (such as Bulgaria and Estonia). Rapid deposit growth or easy access to funding by the parent bank has limited any impact that policies might have had on banks' cost of funds. Significantly tightening reserve requirements seems to have had at best a transitory impact on credit growth, as borrowers and banks have found ways to circumvent these controls (as has happened, for example, in Croatia and Latvia). Where controls result in direct borrowing from abroad, prudential concerns may arise. Finally, the literature shows that capital controls, apart from being largely infeasible in EU member states, may not make a lasting impact (International Monetary Fund, 2007c).

What else can be done? With the boom a reality and policies largely ineffective in stemming the tide, it will be key to focus efforts on further reducing vulnerabilities and building in safety margins. Policymakers will need to be pragmatic and take into account the worse-case scenario. Such an approach would be consistent with strengthening or maintaining the following measures (selective country examples where the IMF has advocated these measures are provided in parentheses):

- *Tightening macroeconomic policies:* tightening fiscal policy, to cool off or not to add to existing demand pressures (the Baltics); eliminating fiscal incentives contributing to the nontradable boom (Latvia); conducting incomes policies that promote wage restraint supported by productivity growth (Romania); tightening monetary policies (Ukraine); and increasing reserve requirements (Bulgaria).

- *Raising prudential standards:* directing prudential efforts to remove distortions in bank lending associated with, for example, risky sectoral allocations, unhedged currency borrowing, imprudent funding behavior by banks, or real estate bubbles; identifying bank-specific capital requirements and raising them where necessary; and establishing risk-based and forward-looking supervision (Bulgaria, Latvia, Romania, and the Slovak Republic).

- *Upgrading supervisory cooperation and coordination:* guaranteeing the effective implementation of prudential and supervisory measures by ensuring an adequate enforcement capacity, cross-border cooperation between home and host supervisors, and coordination among supervisors of nonbank financial institutions to avoid loopholes (the Czech Republic, Estonia, Lithuania, Poland, and the Slovak Republic).

- *Enhancing risk disclosure:* supporting a better disclosure and understanding of risks by conducting public awareness campaigns and

strengthening market discipline for banks by tightening disclosure requirements of risk management and internal control policies and practices (the Baltics, Croatia, Hungary, Poland, and the Slovak Republic).

Preparing for the Curve Ahead

Reversing the Current Account Imbalances

Even if driving fast is safe, policymakers will need to take curves carefully to avoid accidents. Converging economies inevitably face the requirement to service their debt and turn around their current account imbalances (Figure 32). The larger the current account deficits, the greater this challenge will be. And the larger the extent to which the inflow of resources has fed the boom in nontradables, the greater the reorientation in the structure of production will have to be. Thus, tradable output will need to rise again relative to nontradable output.

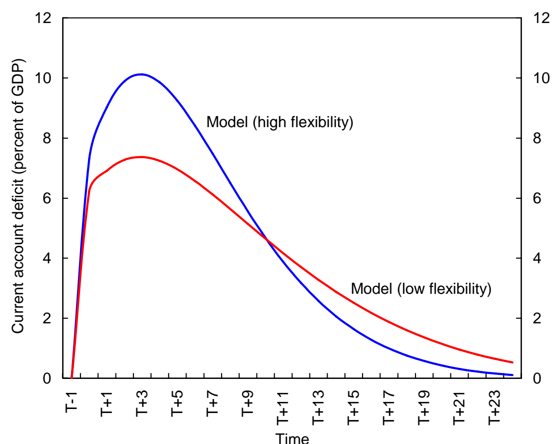
An equally vital policy challenge will be to deliver on the expectations of higher productivity. It is on these expectations that consumption, investment, and borrowing decisions have been made. If they turn out to be invalid, the rebalancing of the current account and the reorientation of production will prove even more difficult and painful. Instructive in this regard is the experience of Portugal, which experienced a large credit boom on the back of expectations that failed to materialize (Box 7).

With the credit-driven expansion of the nontradables sector a reality, and the rebalancing of growth toward exports an eventual necessity, the main issue is how to equip the economies and financial systems of emerging economies with the tools to support such a turnaround. Inevitably, the growth in credit to households will need to slow, in relative terms, and more financial resources will need to flow to productive investments. A key concern is that countries are not implementing sufficient reforms to facilitate these developments. Besides generally pursuing sound macroeconomic policies, bringing supervision and regulation in line with best practice, and avoiding microeconomic distortions, what else can policy makers do?

Fostering Flexibility

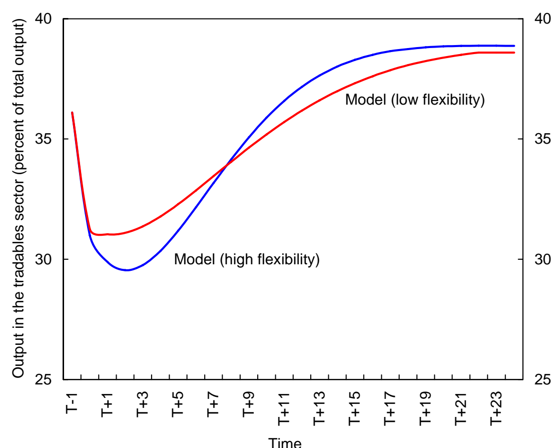
Flexible labor and capital markets are key to support the unencumbered flow of resources from nontradables to tradables (Figure 33). As Portugal's experience exemplifies (Box 7), running large current account deficits is an undesirable proposition when factor markets lack sufficient flexibility.

Figure 32. Two Stages of Convergence



Source: IMF staff simulations.
Notes: Flexibility refers to capital and labor market flexibility. The time intervals are expressed in years. For simulation details, see Bems and Schellekens (2007).

Figure 33. Changing Composition of Production

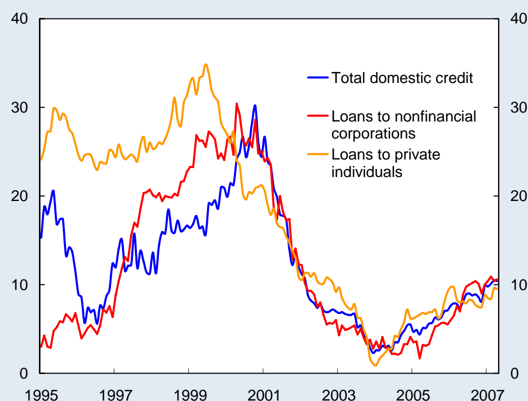


Source: IMF staff simulations.
Notes: Flexibility refers to capital and labor market flexibility. The time intervals are expressed in years. For simulation details, see Bems and Schellekens (2007).

Box 7. Rapid Financial Deepening: Lessons from Portugal

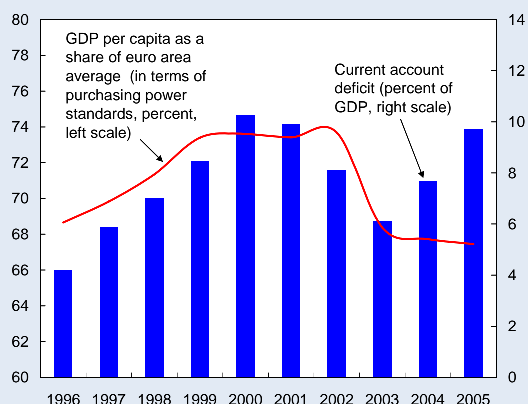
Rapid financial deepening occurred in Portugal during the 1990s, when membership in the Exchange Rate Mechanism (ERM) and the prospect of euro adoption resulted in a sharp drop in risk premiums and interest rates. The resulting credit boom fueled a surge in domestic demand (first figure). With economic agents expecting permanently higher steady-state growth in monetary union, consumption and investment grew rapidly, housing and construction boomed, and income converged rapidly to the EU average (second figure). The corresponding decline in savings and rise in imports helped widen the current account deficit.

Credit Growth
(*Year-on-year percent change*)



Sources: Portuguese authorities; and Eurostat.

Income Convergence and Current Account



Source: Eurostat.

However, the anticipated high productivity growth did not materialize after Portugal adopted the euro in 1999. Consequently, domestic demand growth slowed and turned negative in 2002–03, as firms and households sought to work off the imbalances of the boom years. Cyclical difficulties were compounded by worrying structural developments, as productivity and competitiveness—whose weaknesses were masked by the boom—continued to flag. Real convergence shifted into reverse. In response to this challenging situation, the authorities have been taking decisive action to correct the imbalances accumulated during the 1990s.

Portugal's boom and slump offer interesting lessons for Europe's emerging economies, which are experiencing a phase of rapid financial deepening similar to Portugal's a decade ago:

- A painful adjustment period may ensue if expectations of future high productivity are not fulfilled and financial resources are not channeled into productive investment. During the second half of the 1990s, Portugal's competitiveness declined, as wage growth outstripped productivity. With sticky downward wages and a relatively rigid labor market, reorienting resources to the competitive industries in the tradables sector became a daunting task, resulting in a period of slow growth.

- Vulnerabilities to the financial system can arise when private sector indebtedness reaches unprecedented levels. The household and corporate debt levels in Portugal did not particularly stand out in Europe before the credit boom. However, by 2005, household debt as a percent of disposable income was the second-highest in the European Union, and corporate debt to GDP was also among the highest. These high debt levels can make the financial system vulnerable to credit risks if employment or interest rates evolve adversely. The need for balance sheet adjustment stemming from the high debt levels could also restrain domestic demand during the recovery.

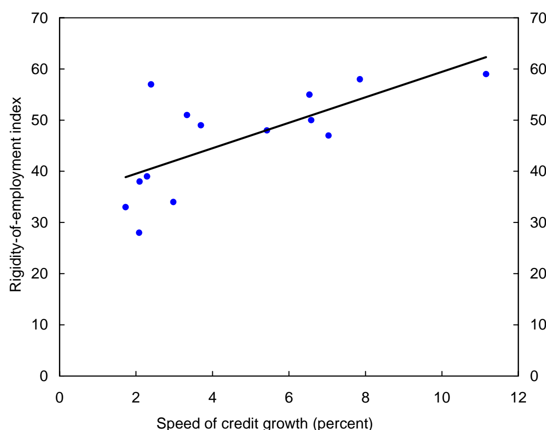
Note: The main author of this box is Yuan Xiao.

- Prudential policies play a paramount role. Rapid financial deepening makes it necessary to sharpen the focus on regulation and supervision conducive to the sound management of typically rising credit risks. Mounting private indebtedness and the concentration of credit in sectors such as real estate were key sources of risk for Portugal. In this regard, its financial system weathered the economic turmoil surprisingly well, helped by successful guidance from the Bank of Portugal.

- Procyclical fiscal policy tends to be harmful. Fiscal policy would be expected to counter the booming demand associated with rapid financial deepening. But Portugal's fiscal policy was mostly procyclical, thereby aggravating the amplitude of the boom. Furthermore, the lack of fiscal consolidation precluded fiscal expansion to help deal with the slump.

There is especially scope for improving labor market flexibility—a particularly pressing objective given that the countries where credit grew quickly also seem to have more rigid labor markets (Figure 34). Against this background, it would certainly be very risky for countries converging rapidly to advanced-economy income levels to also aspire to match the generosity of advanced-economy welfare states. The labor market rigidities often associated with a more generous welfare state may inhibit the smooth transition of resources to the tradables sector, thereby unnecessarily prolonging the reorientation phase.

Figure 34. Labor Market Rigidity and Speed of Credit Growth



Sources: World Bank, Doing Business Database; Bank for International Settlements; national authorities; and IMF staff calculations.
Notes: The rigidity-of-employment index is based on a 2006 survey capturing the difficulty of hiring and firing, and the rigidity in hours. The speed of credit growth is the annual percentage point increase in the credit-to-GDP ratio, averaged over the period 2001–06. "Credit" refers here to households and nonfinancial corporations, and includes direct cross-border credit. The sample consists of Bulgaria, Croatia, the Czech Republic, Estonia, Latvia, Hungary, Lithuania, Poland, Romania, Serbia, the Slovak Republic, Slovenia, Turkey, and Ukraine.

The need for flexible labor and capital markets is particularly important where exchange rate flexibility is limited. With such limited flexibility, domestic factor prices, in particular wages, will need to carry the burden of the price adjustment. Factor market flexibility may alleviate this burden by ensuring that labor and capital are sufficiently responsive to price signals.

Furthermore, the diversification of financial systems in emerging economies will make capital markets more flexible. As these economies catch up and integrate further with the advanced economies of Europe, the financing options provided by their financial systems will broaden. As noted in Chapter 1, more diversified financial systems are able to identify and support rapidly rising industries more quickly, which will improve the flexibility of capital markets.

Improving Financial Infrastructure

To allow financial systems to provide more resources to the corporate sector, building a supportive, enabling financial infrastructure will be essential, as discussed in detail in Chapter 3. Creditors need good protection, provided through strict enforcement of bankruptcy and insolvency laws that meet international best practice standards. Improving corporate governance is essential in a number of emerging economies, and will require changes in legislation and enforcement. In addition, providing more and better credit information will help financial institutions channel resources to the corporate

sector. In this context, fostering the development of credit registries is crucial.

Other parts of the financial system need to be developed as well, especially to fill in missing market segments. This would benefit the mobilization of domestic savings and thereby help rebalance the current account. Under the proper safeguards noted in Chapter 1, the development of securitization and asset-backed securities markets continues to have an important role to play. The development of basic derivatives markets would also be critical in this respect, helping to deepen markets in underlying securities and better allocate risks.

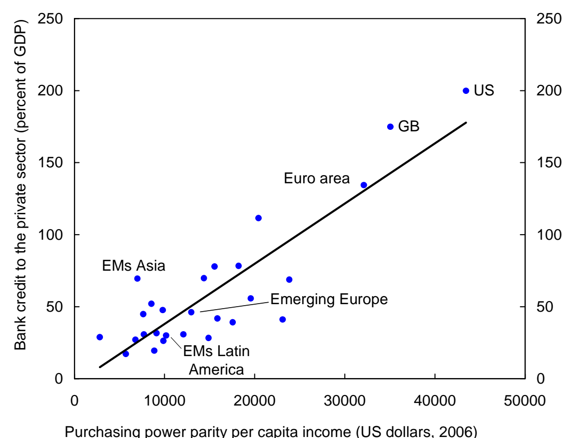
3. Sustaining Financial Development in Emerging Europe

Financial development has advanced to varying degrees in emerging Europe. Macroeconomic stability and good institutional quality and law enforceability appear to have been key forces. Building on recent progress, further reforms are needed to complete the establishment of deep, liquid, diversified, and stable financial markets. This will yield benefits in terms of efficiency, risk diversification, and resilience in the face of possibly volatile external capital flows. Going forward, the EU integration process is likely to drive reforms in EU members. In non-EU emerging economies, the focus should be on reinforcing the foundations of financial development, including the rule of law, creating a well-functioning government securities market, establishing stronger corporate governance and creditor rights protection, and promoting a favorable environment for the emergence of institutional investors. Reforms need to be tailored to specific country circumstances as illustrated in the boxes presented in this chapter.

What Is the State of Financial Development?

Financial development in emerging Europe has progressed considerably since the early 1990s, with banks dominating. Thus bank credit remains the most important form of financial intermediation. After its dramatic expansion of the past few years, bank credit is now roughly in line with the ranking implied by per capita income levels in most countries (Figure 35). Securities markets are less developed, with significant differences across countries. On one side of the spectrum are countries like the Czech Republic, Hungary, Poland, and Turkey, where at least two different segments—government securities and equities—are relatively well developed. On the other side are countries, such as Belarus, where all capital market segments are still in their infancy.

Figure 35. Bank Credit to the Private Sector and Per Capita Income, 2006

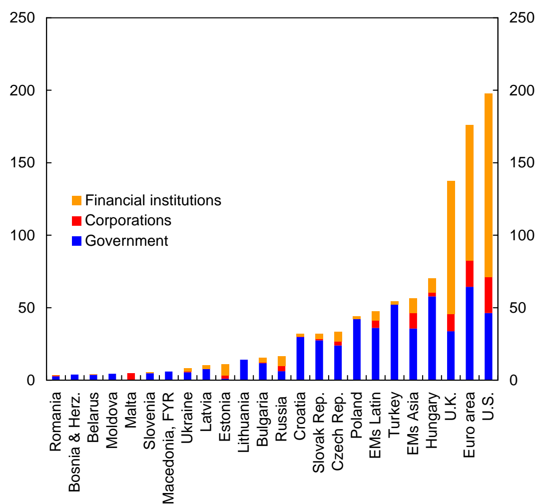


Sources: IMF, *International Financial Statistics*; and IMF, *World Economic Outlook.*
Notes: Euro area average excludes Luxembourg and Slovenia. EM = emerging market. Country names are abbreviated according to the ISO standard codes.

The depth and liquidity of the government securities market mainly reflect current and past public sector financing needs. Hence, Central European countries and Turkey have well-established government securities markets. Improving corporate governance in emerging Europe is only beginning to set the stage for the development of the corporate securities market. The outstanding stock of nonfinancial corporate debt securities has remained below 5 percent of GDP everywhere (Figure 36). Even in countries where corporate issues have grown more significantly in the past few years, such as Russia and Ukraine, they are concentrated in a few sectors. Trading volume in the secondary market is generally too low to provide adequate liquidity and continuous price discovery. The market for securities issued by financial institutions is somewhat deeper and expanding faster than the nonfinancial corporate bond market.

Note: The main author of this chapter is Edda Zoli. The underpinning analytical work is presented in Zoli (2007).

Figure 36. Outstanding Debt Securities, 2006
(*Percent of GDP*)

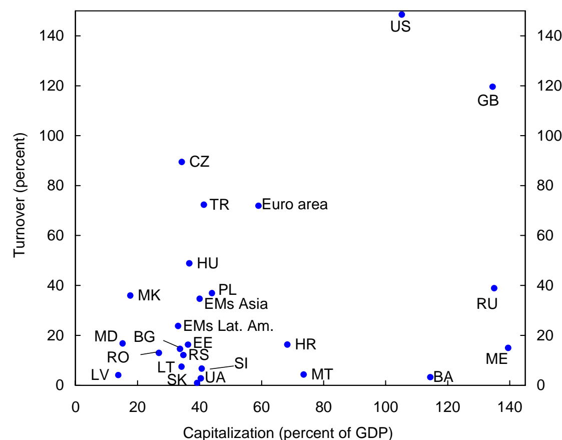


Sources: Bank for International Settlements; Standard & Poor's; Bloomberg L.P.; national authorities; and IMF, *World Economic Outlook.*
Note: Euro area average excludes Luxembourg and Slovenia.
EM = emerging market.

Equity markets have grown rapidly in the past few years, especially in Southeastern Europe and Russia, where market capitalization has reached surprisingly high levels. Nevertheless, liquidity—as measured by the turnover ratio[23]—is typically low throughout the region (Figure 37). The free float—the portion of shares available to the investing public—is often small, and trading is concentrated in a few stocks. Capitalization tends to be concentrated in a small number of companies, even in countries with relatively well-developed markets—like the Czech Republic, Hungary, Poland, and Turkey.

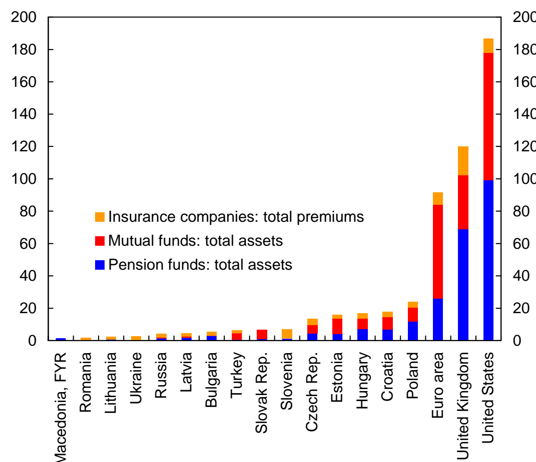
Nonbank financial institutions, including pension funds, mutual funds, and insurance companies, are mostly just beginning to emerge (Figure 38). In countries that introduced pension and regulatory reforms early on, pension fund assets are already high by regional standards, and even in comparison to some advanced economies.

Figure 37. Equity Market Turnover and Capitalization, 2006



Sources: Datastream; Standard & Poor's; Bloomberg L.P.; and IMF, *World Economic Outlook*.
Note: Euro area average excludes Luxembourg and Slovenia. EM = emerging markets. Country names are abbreviated according to the ISO standard codes.

Figure 38. Institutional Investor Size, 2006
(*Percent of GDP*)



Sources: National authorities; OECD; Investment Company Institute; Swiss Re; and IMF, *World Economic Outlook.*
Notes: 2005 or 2006, based on data availability. Euro area average excludes Luxembourg and Slovenia.

For instance, pension fund assets in percent of GDP are higher in Croatia, Hungary, and Poland than in Germany and Italy. The presence of mutual funds and insurance is small virtually everywhere. Mutual fund assets are over 5 percent of GDP only in the four largest Central European countries, plus Croatia and Estonia. Similarly,

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23 The turnover ratio is defined as the value of trading relative to market capitalization.

insurance premiums exceed 3 percent of GDP only in five emerging economies.[24]

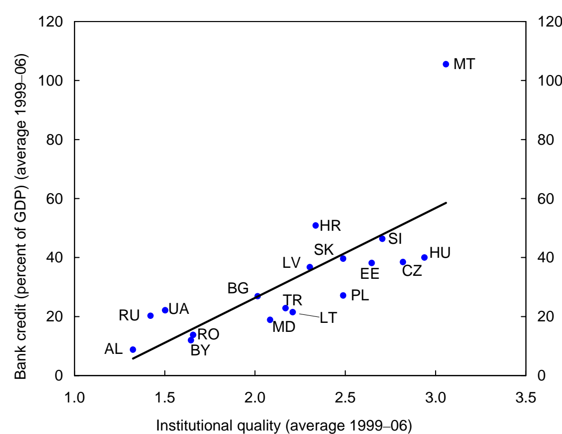
Which Factors Are Key?

A stable macroeconomic environment is essential for financial development. The level and volatility of inflation can be used to gauge overall macroeconomic stability. High and volatile inflation obscures the signaling role of price changes, creates uncertainty about returns on investment, and discourages demand for financial assets.[25] Not surprisingly, therefore, empirical research finds that high inflation rates have a negative impact on financial development. A study on emerging Europe in particular, conducted as background to this chapter, indicates that high inflation was associated with lower bank credit to the private sector during 1995–2006, and that single-digit rates, as opposed to higher rates, favored private credit development. Rising income levels, and the associated increasing complexity of economic structure, also contributed to financial deepening.

Good institutional quality and law enforceability by the judiciary and the entire legal system are the foundations of financial development. Only if property rights are strongly respected can the financial sector effectively trade and intermediate claims on assets and use collateral to extend credit.[26] Conversely, the financial sector can hardly flourish in an environment of corruption, low-quality bureaucracy, and an inadequate rule of law, as these jeopardize investor protection and contract enforceability. Our empirical analysis on emerging Europe confirms a positive and significant relationship between indicators of institutional quality and bank credit (Figure 39).

The development of equity and corporate debt securities markets requires appropriate legislation and strong corporate governance, including adequate disclosure of corporate activities and proper accounting rules and practices.[27] Similarly, the development of private credit intermediation and the debt securities market depends on adequate creditor rights protection through collateral and bankruptcy laws, as well as credit information disclosure.[28] In our empirical study on emerging Europe, a measure of creditor rights protection is found to have been significantly associated with higher bank credit during 1999–2006.[29]

Figure 39. Bank Credit and Institutional Quality



Sources: Freedom House; International Organization of Securities Commissions; and IMF, *International Financial Statistics*; IMF, *World Economic Outloook.*

Notes: Institutional quality index is the sum of property rights, control of corruption, bureaucracy quality, and rule of law indices. It ranges from 0 to 4. Euro area average excludes Luxembourg and Slovenia. Country names are abbreviated according to the ISO standard codes.

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[24] Croatia, the Czech Republic, Hungary, Poland, and Slovenia.

[25] Huybens and Smith (1999); and Boyd, Levine, and Smith (2001).

[26] Johnson, McMillan, and Woodruff (2002); and Acemoglu, Johnson, and Robinson (2004).

[27] La Porta and others (1997; 1998).

[28] La Porta and others (1997; 1998); and Djankov, McLiesh, and Shleifer (2005).

[29] For emerging Europe, explaining the development of segments of the financial sector other than bank credit is challenging. Econometric studies on the determinants of development of debt securities markets in the region are hampered by data limitations. For the equity market, while earlier empirical work underscored the role of the privatization process, single-digit inflation, rising income, shareholder protection, and institutional investor assets in fostering market capitalization during the 1990s, our recent study could not confirm these findings.

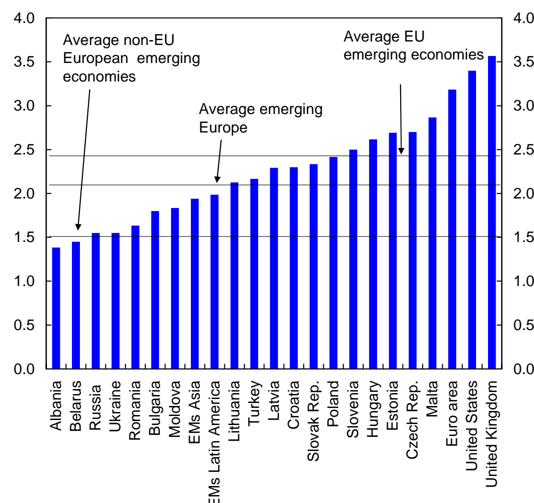
How Can Progress Be Sustained?

While all emerging European economies have made important advances in setting the foundations for financial development, looking forward it is useful to distinguish between two groups of countries:

- *The members of the European Union,* where the ongoing process of creating a single market in financial services can be expected to continue to fuel further comprehensive reforms. Changes in securities market legislation, regulatory and supervisory frameworks for both bank and nonbank institutions, clearing and settlements systems, and other important financial areas are all being driven by the harmonization process across all EU members. Not only that, but EU financial integration is likely to shape overall financial development, providing both opportunities and challenges.

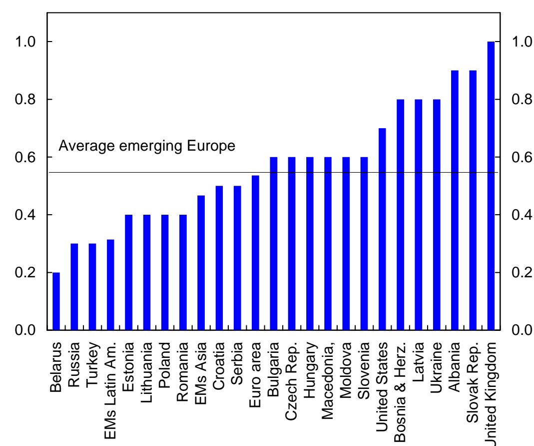
- *The emerging economies that are not part of the European Union,* where reforms will need to be domestically driven, even though European integration and financial globalization more generally can be expected to continue to foster financial development. At this stage, these countries should focus on reinforcing the foundations for financial development, including the rule of law, creating a well-functioning government securities market, establishing stronger corporate governance and creditor rights protection, and promoting a favorable environment for the emergence of institutional investors.

Figure 40. Institutional Quality Index, 2006



Sources: Freedom House; and *International Country Risk Guide, 2006.*
Notes: Institutional quality index is the sum of property rights, control of corruption, bureaucracy quality, and rule of law indices. It ranges from 0 to 4. Euro area average excludes Luxembourg and Slovenia. EM = emerging market.

Figure 41. Borrowers and Lenders Legal Rights Index, 2006



Source: World Bank, Doing Business database.
Notes: The index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders. Index has been rescaled to assume values between 0 and 1. Euro area average excludes Luxembourg and Slovenia. EM = emerging market.

Financial Development in EU Countries: The Role of Integration

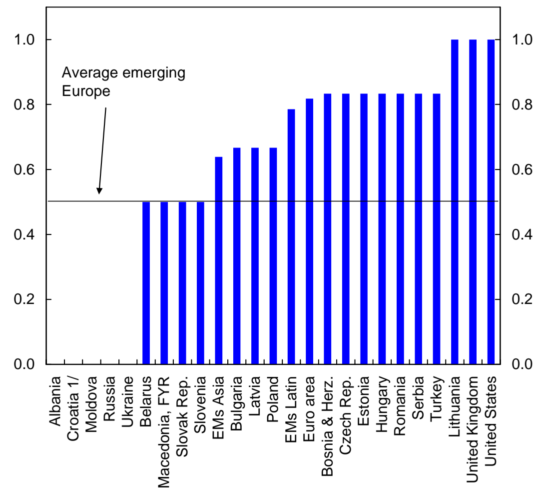
Although emerging economies that joined the European Union have carried out comprehensive reforms to comply with the *acquis communautaire*, much remains to be done. Further strengthening of institutional quality will allow these economies to catch up with advanced economies in this respect (Figure 40). The regulatory and supervisory frameworks for banking, insurance, and securities are already stronger than in non-EU emerging economies, but compliance can be further improved to fully meet international standards (Cihák and Tieman, 2007). It will also be important for financial development to continue to reinforce creditor rights protection through collateral and bankruptcy laws, as well as

information disclosure (Figures 41 and 42), and to upgrade corporate governance regulation and practices (Figure 43).

For EU emerging economies, the EU financial integration process is likely to be the main force propelling and shaping financial development. The European Union is heading toward a single market in financial services,[30] which creates both an opportunity and a challenge for emerging economies. On the one hand, it will allow better diversification of financing and investment options and strengthen competition. On the other, it will raise exposure to the potential risks associated with cross-border movements in capital flows. In this respect, rapid and full implementation of the relevant EU Directives will be key to making further progress in terms of laws, regulations, and practices, strengthening the financial sector, securing domestic and foreign investor confidence, and establishing emerging economies as important players in the EU financial market.

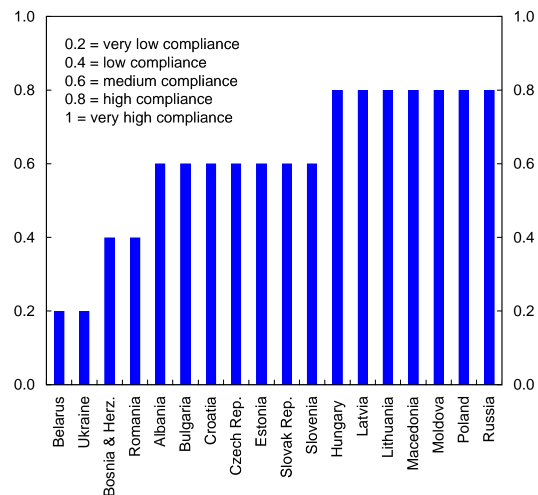
EU members also need to adapt their financial development strategy to take into account the opportunities as well as the constraints created by financial integration. For example, as countries move toward euro adoption, companies' increasing access to foreign resources raises questions about the need for domestic currency–denominated corporate bond markets. For small countries, in particular, the increased competition associated with financial integration imposes strong pressure to find niche markets with a local comparative advantage. For these countries, joining regional markets, rather than developing national ones, might be the most sensible option, especially with respect to certain segments, like the securities market (Box 8).

Figure 42. Credit Information Index, 2006



Source: World Bank, Doing Business database.
Notes: The index measures rules affecting the scope, accesibilty and quality of credit information available through private and public credit registries. The index has been rescaled to assume values betweeen 0 and 1. Euro area average excludes Luxembourg and Slovenia. EM = emerging market.
1/ In Croatia a bank credit registry began operations in May 2007.

Figure 43. Corporate Governance (Compliance with OECD Principles), 2004



Source: European Bank for Reconstruction and Development (2005).

[30] Major steps in this direction were taken with the Financial Services Action Plan (FSAP), the Lamfalussy process, and the Commission White Paper on Financial Services Policy. The FSAP was launched in 1999 with the objective of removing barriers to the cross-border flow of financial services and capital within the European Union. The Lamfalussy process was established in 2001 to facilitate the implementation of the FSAP regulatory framework. The Commission White Paper on Financial Services Policy sets the priorities for EU-level financial sector reforms over 2005–10 (Haas, 2007a).

Box 8. National versus Regional Exchange Markets: Implications for Emerging Europe

The operation of a national financial exchange has traditionally been seen as a sign of financial sector sophistication. A nationally based exchange can have advantages: traded assets are subject to the same legal and tax system, secure and rapid settlement is facilitated, exchange and investment regulations are homogeneous, and, perhaps most important, market participants have ready access to information on listed companies and the macroeconomic context. Many countries in emerging Europe have established national exchanges, some of which are very small.

With increasing financial integration, these markets face more competition and, therefore, need to change strategy if they want to survive, as large local corporations seek listings overseas, investors have free access to all European markets, and trading is diverted abroad.[1] Moreover, the new EU Markets in Financial Instruments Directive, an important step toward the creation of a securities market in Europe, is likely boost competition even further (Haas, 2007b).

Indeed, the globalization of financial markets, technological innovation, and the desire for international diversification of portfolios have already led market operators to consolidate or intensify collaboration, especially in small and medium-sized markets. For example, the merger of the Nordic-Baltic exchanges has created the regional OMX Market. The Warsaw Stock Exchange (WSE) signed an agreement with the multinational exchange Euronext that allows WSE members access to Euronext products and vice versa, and enables dealers to trade products from each exchange on a single screen. In 2004 the Vienna Stock Exchange acquired a stake in the Budapest Stock Exchange and entered into an index cooperation project with it.[2] Although the consolidation process typically takes a few years, the examples of OMX and others offer useful experience. However, because exchanges are largely private sector owned, there are obvious limits to how much policymakers can drive the process or set the timetable.

Even though many of the original reasons for having national exchanges have been weakened by EU integration, as well as by the associated regulatory convergence, combined with improvements in information technology and general financial market globalization, authorities may still be concerned that small and medium-sized firms are unlikely to be able to list overseas and may find it difficult to raise capital in local stock markets amid declining market activity. Thus, perhaps the most fruitful approach may be to concentrate on further improvements in, and homogenization of, the legal and institutional framework in these countries to facilitate smaller companies' access to venture capital or private equity firms, commercial banks, or nonbank financial institutions, and possibly second-tier listing at a regional exchange.

Note: This box is based on Iorgova and Ong (2007).

[1] Berglöf and Bolton (2002); and Claessens, Lee, and Zechner (2003).

[2] Cooperation agreements have since also been signed with the stock exchanges in Zagreb, Belgrade, Sarajevo, Sofia, Montenegro, Banja Luka, and Macedonia.

Financial Development in Non-EU Countries: Priority Reforms

Reinforcing the foundations

Attaining low inflation in a durable manner will be critical for financial development. While all economies have made great progress toward price stability, a few still need to address the threat of high and volatile inflation. Belarus, Russia, Serbia, and Turkey experienced double-digit inflation, on average, during 2003–06, and inflation in Moldova and Ukraine is likely to be more than 10 percent in 2007.

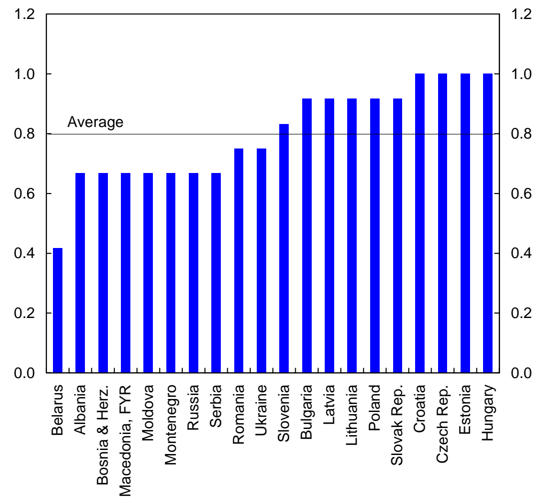
Non-EU emerging European economies have also made significant progress in protecting property rights, creating high-quality bureaucracy, controlling corruption, and establishing the rule of law. Nevertheless, institutional quality and law

enforceability need to be brought closer to the EU average (Figure 40). Enforcing contracts needs to be made less costly and time-consuming by improving the efficiency of court systems and unburdening the judicial processes.[31]

Non-EU emerging economies have also taken major steps to develop a sound and efficient banking sector. Indeed, only Belarus has yet to liberalize interest rates and credit allocation (Figure 44). All countries in this group have functioning payments and settlement systems, put in place fairly good accounting and disclosure standards, and established frameworks for bank prudential supervision and regulation broadly in line with international standards (Figure 45).

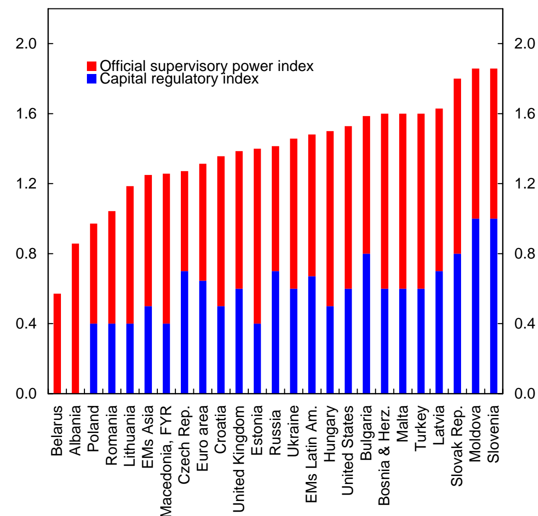
However, weaknesses in implementation of written rules and regulations need to be addressed to minimize risks to financial stability. For example, Moldova could benefit by improving the transparency of the ownership structure of its banks to secure full enforcement of prudential limits for connected lending and large exposures. Further reforms would also be desirable in the areas of bank regulation and supervision. In Russia, risks could be reduced by tightening the regulation and enforcement of large exposure limits and connected lending. In Bosnia, unifying bank supervision into a single, independent country-wide agency is necessary for effective supervision. In Belarus, the banking supervisor should shed its shareholdings in banking institutions to limit actual or apparent conflicts of interest.

Figure 44. Banking Reform and Interest Rate Liberalization Index, 2006



Source: European Bank for Reconstruction and Development.
Note: Index has been rescaled to assume values between 0 and 1.

Figure 45. Regulatory and Supervisory Power Index, 2003



Source: Barth and Levine (2006).
Notes: Each index has been rescaled to assume values between 0 and 1. Euro area average excludes Luxembourg and Slovenia. EM = emerging market.

Building the government securities market

A well-functioning government securities market could be the catalyst for further financial market development.[32] A liquid government securities market provides a market-determined term structure of interest rates and, therefore,

[31] For example, enforcing a debt contract costs on average 50 percent more in non-EU than in EU emerging economies. Furthermore, in several non-EU countries. firms tend to distrust courts (See EBRD–World Bank Business Environment and Enterprise Performance Survey, 2005; and Anderson and Gray, 2006).

[32] International Monetary Fund and World Bank (2001).

Box 9. Developing the Government Securities Market

Hungary's Success . . .

Hungary's government securities market is one of the most developed, liquid, and sophisticated markets in the region. The driving force behind the development of this market was the authorities' commitment to a coherent strategy involving macroeconomic stabilization, the creation of a suitable legal and regulatory environment, the use of government securities for monetary operations, and improvements in debt management. Gradual capital account liberalization also helped make the market deeper and more liquid.

The first steps in market development were taken in the early 1990s with the liberalization of interest rates and the enactment of the Central Bank Act, which laid the foundation for the complete phaseout of central bank deficit financing. In 1993, the non-interest-bearing public debt was swapped into marketable government bonds. Throughout the 1990s, the monetary authorities gradually adopted indirect instruments of monetary policy. Government securities began to be used as collateral in central bank refinancing activities with financial institutions and for open market operations, which helped make the government securities market deeper, more liquid, and attractive to investors.

In the early 1990s, new legislation on securities, as well as the establishment of the Securities Supervisory Agency,[1] the Central Clearing House and Depository, the Treasury, and the Government Debt Management Agency, paved the way for the smooth operation of the government securities market. Measures to encourage the emergence of institutional investors broadened the investor base. Legislation on mutual and pension funds also took effect in the early 1990s. A mandatory funded pillar was introduced with the 1998 pension reform. Long-term local currency–denominated government securities were also made available to nonresidents in 1994.

In 1995, the authorities demonstrated their commitment to macroeconomic stability by implementing a stabilization package in response to widening budget and current account deficits. Fiscal adjustment, a one-time devaluation of the forint, and a shift from an adjustable fixed exchange rate to a crawling band with a preannounced devaluation rate formed the basis for sounder macroeconomic development and greater investor confidence. As the anti-inflationary commitment of the monetary authorities gained credibility, helped by the adoption of an inflation-targeting framework, the yield curve could be extended significantly.

Since the mid-1990s, debt-management strategies have been implemented with a view to enhancing the functioning of the primary market and increasing transparency and liquidity in the secondary market. A system of primary dealers was launched in 1996. Debt instruments were standardized to reduce fragmentation. Benchmark securities were introduced, and their yields started being published daily. Liquidity in the secondary market was further enhanced by the liberalization of the capital account, culminating in 2001 with the removal of all foreign exchange restrictions, including those on short-term portfolio transactions.

. . . Can It Be Transferred to Ukraine?

Ukraine's government securities market has so far remained shallow and illiquid. Marketable securities amounted to just over 2.1 percent of GDP at end-2006. The term structure of government securities is very fragmented, leaving several gaps in the yield curve.

Note: This box is based largely on Csajbók and Neményi (1998) and Arvai and Heenan (2005).

[1] The Securities Supervisory Agency later became the Hungarian Financial Supervisory Authority.

Developing a deep and liquid government securities market will require a strong commitment by the authorities to an integrated and credible debt management and market development strategy. The primary market could be fostered by conducting regular auctions under transparent rules and according to a preannounced issuance program, creating a small number of liquid benchmarks, and issuing securities in sufficient size to achieve adequate liquidity in the secondary market. The price-setting mechanism at the auctions will need to be modified to ensure that yields are not kept artificially low but, rather, reflect market-based outcomes. Discontinuing the use of private placements of government debts would also be beneficial. In addition, it would be useful to deepen the cooperation between the central bank and the ministry of finance including by defining the role of the central bank in the secondary market. Moreover, using government securities for monetary operations would strengthen market liquidity.

Achieving and maintaining low inflation will be essential because inflationary expectations affect the government's ability to extend the yield curve beyond very short maturities. This is particularly critical for Ukraine, because inflation has been volatile and above the levels observed in neighboring countries. Furthermore, the development of the government securities market could be enhanced by broadening the investor base and introducing a system of primary dealers once a clear debt management strategy has been developed and the level of primary issuances increased.

facilitates the pricing of other financial instruments, including corporate bonds and derivatives. In Ukraine, for example, the pricing of corporate securities would be greatly facilitated by the establishment of a yield curve for government bonds. Moreover, government securities can be used as collateral to reduce credit risk and as relatively safe assets to resort to during periods of heightened uncertainty. Also, building the government securities market entails the creation of an extensive legal, informational, and institutional infrastructure that can benefit the entire financial system.

Developing a government securities market requires the joint commitment of the government and the central bank to a coherent strategy. Such a strategy would involve regular issuance of securities; central bank use of government paper for monetary policy operations to enhance liquidity; public debt management practices to create clear benchmarks for different maturities; and adequate market infrastructure, including trading, depository, and settlement systems. Hungary, for instance, successfully implemented a consistent and integrated approach that helped establish a deep and liquid government securities market. Other countries, like Ukraine, for example, would benefit from a strong commitment to build a government securities market (Box 9).

Developing corporate finance

Stronger creditor protection and corporate governance are essential to establish credit and corporate securities markets. The institutional and legal frameworks governing the valuation of collateral and the protection of creditor rights need to be improved, particularly in Belarus, Russia, and Turkey (Figure 41). Accessibility and quality of credit information through credit registries could also be enhanced, especially in Albania, Moldova, Russia, and Ukraine (Figure 42). For corporate governance, progress is needed, especially in Belarus, Bosnia and Herzegovina, and Ukraine (Figure 43). Adequate securities legislation has yet to be put in place in Albania and Belarus. Again, Ukraine provides a good case study of how enhancing institutional quality and corporate governance can help develop corporate finance (Box 10).

Box 10. Institutional Quality, Corporate Governance, and Financial Development: The Case of Ukraine

The Ukrainian corporate debt securities market has grown dramatically in recent years. Corporate debt securities issuance revived in 2001–02, and has accelerated since 2005. In 2006, total issues amounted to 4.1 percent of GDP. However, market liquidity is rather low. The emergence of the market has been encouraged by the increased funding needs of Ukrainian companies, coupled with weaknesses in banking sector intermediation, including the limited capacity to fulfill corporates' long-term funding needs owing to the scarcity of long-term hryvnia funds for banks, wide interest rate spreads, and the lack of domestic syndicated lending.

In addition, the equity market has grown considerably in the past few years. Market capitalization reached 40.4 percent of GDP in 2006, up from less than 4 percent in 1999. However, the number of listed companies is very small, and concentration rather high; the 10 largest companies account for 68 percent of total market capitalization. Moreover, the free float is small (about 5 percent of market capitalization), and market turnover extremely low (see Figure 37 in the main text).

A number of reforms could support further healthy development of the corporate debt and equity securities market. First, institutional quality and law enforceability need to be strengthened, as court proceedings are generally cumbersome and lengthy (see Figure 40 in the main text). It would be important to also reinforce corporate governance, because at present the quality of the legislation defining the responsibilities of the board, the rights of shareholders, and disclosure and transparency are below international standards (see Figure 43 in the main text). Deficiencies could be addressed in the area of securities market regulation and supervision, as well as in the clearing and settlement system. The trading and registrar systems could also be upgraded. Creating a benchmark yield curve on government securities would facilitate corporate bond pricing. Enacting a joint stock company law would help equity market development.[1] Furthermore, the institutional investor base for the securities market could be enhanced through legal, regulatory, and supervisory reforms favoring mutual funds development and by expediting pension reform, which could boost the emergence of pension funds.

Note: Zsofia Arvai contributed to this box.
[1] A new Joint Stock Company Law is currently before parliament.

Expanding the range of players in the financial system

Creating a diverse class of institutional investors (including pension funds, mutual funds, and insurance companies) would greatly contribute to financial market development and liquidity. These investors would provide a stable source of demand for financial instruments, and stimulate competition and efficiency in primary markets. The emergence of institutional investors can be fostered by enhancing the regulatory and supervisory framework for nonbank financial institutions. The supervisory framework could take the form of an integrated supervisory agency or several agencies, provided that cooperation and information flows were secured. In countries that have not yet reformed their pension systems, such as Albania and Belarus, consideration could be given to mandatory or voluntary fully funded schemes that could contribute to pension fund development. The case of Hungary offers an example of how legislative and regulatory changes, as well as pension reforms, can expand the range of institutional investors (Box 9).

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