WP/07/245

IMF Working Paper

Financial Development in Emerging Europe: The Unfinished Agenda

Edda Zoli

INTERNATIONAL MONETARY FUND

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IMF Working Paper

European Department

Financial Development in Emerging Europe: The Unfinished Agenda

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Authorized for distribution by Luc Everaert

October 2007

Abstract

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This paper assesses the status of financial development in Emerging Europe, analyzes the factors that have shaped it, and discusses policy priorities. Financial development has progressed to varying degrees across the region. Macroeconomic stability and institutional quality have been important factors. Going forward, the EU integration process is likely to propel further reforms and shape financial development in EU members. In non-EU emerging economies the focus should be on maintaining macroeconomic stability and strengthening law enforceability. Creating a well-functioning government securities market, reinforcing corporate governance and creditor rights protection, and promoting the emergence of institutional investors would be beneficial.

JEL Classification Numbers: E44, G2, G3
Keywords: Financial development, emerging economies, Europe
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[1]The author is with the European Department of the IMF. This paper provides analytical background to the November 2007 Regional Economic Outlook: Europe. I thank Zsofia Arvai, Rudolfs Bems, Michael Deppler, Luc Everaert, Simon Gray, Daniel Hardy, Allison Holland, Christian Mulder, İnci Ötker-Robe, Ceyla Pazarbasioglu, Iva Petrova, Andrea Schaechter, Philip Schellekens, Man-Keung Tang, Athanasios Vamvakidis, and seminar participants in the European Department for helpful comments. We also thank Pavel Lukyantsau, Dominique Raelison-Rajaobelina, and Thomas Walter for excellent research, administrative, and editorial assistance, respectively.

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I. Introduction

Financial development is often associated with improved economic performance, as deep, liquid, diversified, and stable financial markets allow efficient intermediation of funds, facilitate risk diversification, and tend to favor growth in the long run. Moreover, strong local markets can offer a stable source of financing for private and public sectors, helping them cope with possibly volatile external capital flows.

Although European emerging economies have come a long way in terms of financial development since the early 1990s, financial development differs significantly across countries, and the process of creating diversified and mature financial systems is far from complete anywhere in the region. This paper tries to identify the factors that have shaped financial development, and the reforms still needed to advance it further.

First, section II documents the extent of financial development in emerging Europe, with a focus on selected market segments (debt securities and equities market), and key institutional players (banks, pension funds, mutual funds, and insurance companies). Section III, reviews the literature on the determinants of financial development, and provides new evidence on the factors that have driven financial development in emerging Europe. Against this background, section IV presents a broad overview of the reforms needed to foster further financial development. To provide country specific examples, section V discusses two case studies. One is on Hungary which has successfully established a government securities market. The other is on Ukraine, where a number of reforms would help create sound and well-functioning securities markets. Finally, section VI concludes and summarizes the policy implications.

II. Indicators of Financial development in Emerging Europe

Bank credit remains the most important form of financial intermediation in emerging Europe, while nonbank financial institutions are mostly just beginning to emerge. Securities market development varies significantly 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 market segments are still in their infancy.

After the dramatic expansion of the past few years[2], bank credit it is now roughly in line with the ranking implied by per capita income levels in most countries (Figure 1). In 2006 credit to the private sector reached an average level of 45.9 percent of GDP, higher than the average in Latin America emerging markets (30.1 percent), but lower than that of Asian emerging

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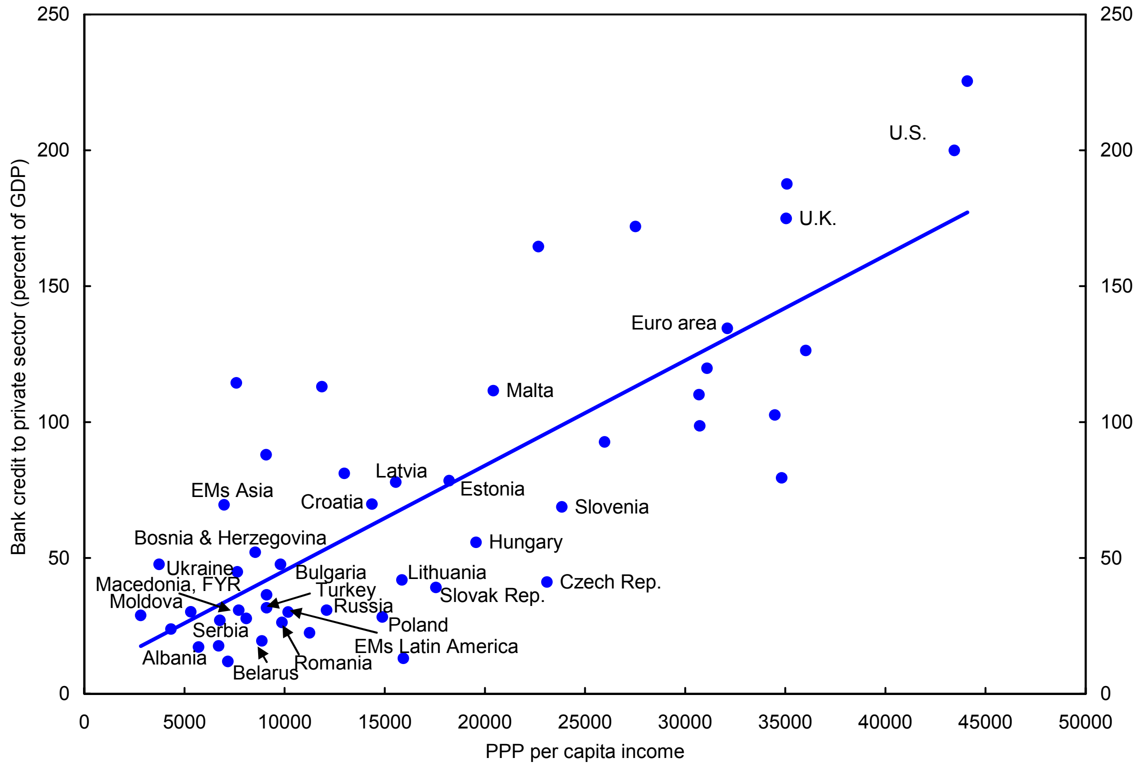
[2] The latest credit surge has raised concerns about financial stability, and prompted a number of policy interventions (Hilbers et al., 2005). Several studies have tried to assess whether this credit expansion is a benign catching-up phenomenon or a excessive lending boom (Cottarelli et al. ,2003; Schadler et al., 2004; Duenwald, Gueorguiev, and Schaechter, 2005; Brzoza-Brzezina 2005, Kiss-Márton, and Vonnák, 2006; Backé et al., 2006).

economies (69.5 percent), and very far behind that observed in advanced economies (Figure 2).

Figure 1. Bank Credit To The Private Sector And Per Capita Income, 2006



Sources: IMF, *International Financial Statistics*; and IMF, *World Economic Outlook.*
Note: Euro area average excludes Luxembourg and Slovenia.

Other financial institutions, including pension funds, mutual funds and insurance companies, are just starting to emerge. In countries that introduced pension and regulatory reforms early on, pension fund assets are high by regional standards, and even in comparison to some advanced economies. For instance, pension fund assets in percent of GDP are higher in Croatia, Hungary and Poland than in Germany and Italy. Mutual fund assets, although growing rapidly, remain below 5 percent of GDP in all countries with the exception of the four largest central European countries, Croatia, and Estonia. Similarly, insurance premiums exceed 3 percent of GDP only in five economies[3] (Figure 3).

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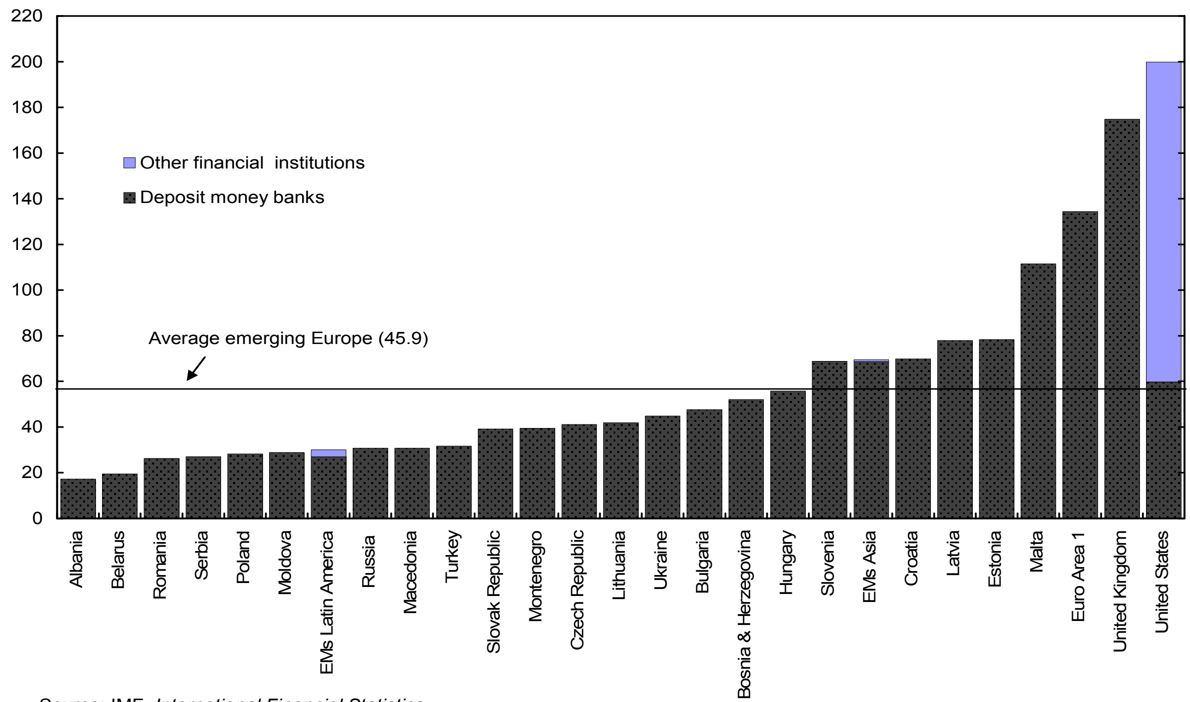
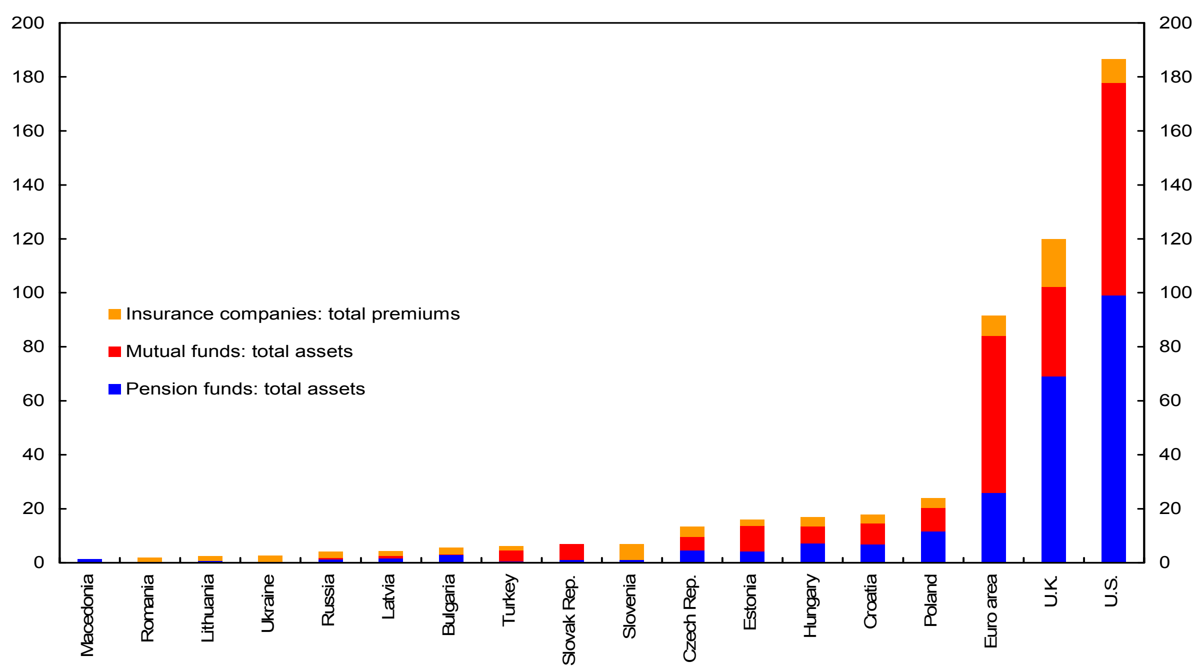
[3] Croatia, Czech Republic, Hungary, Poland and Slovenia.

Figure 2. Bank Credit To The Private Sector, 2006 (Percent Of GDP)



Source: IMF, *International Financial Statistics.*
Note: Euro area average excludes Luxembourg and Slovenia.

Figure 3. Institutional Investor Size, 2006 (Percent Of GDP)

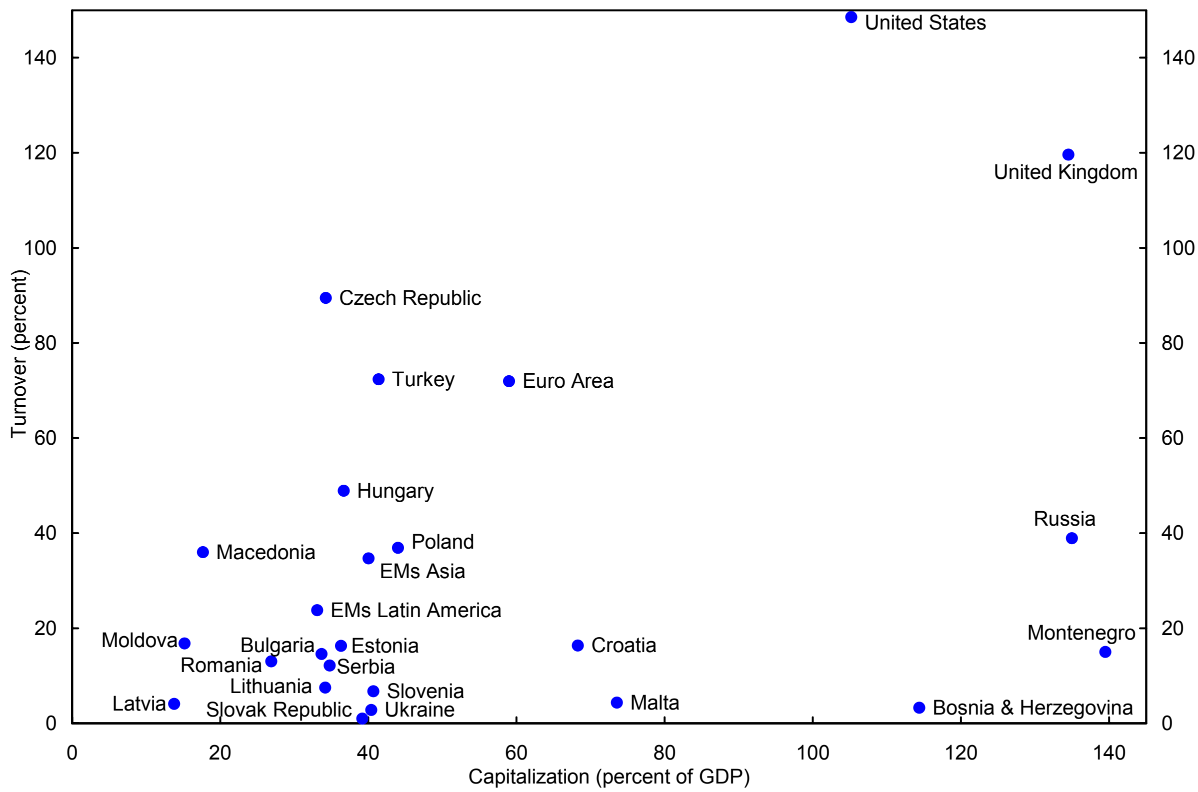


Sources: National authorities; OECD; Investment Company Institute; Swiss Re; IMF, *World Economic Outlook*.
Notes: 2005 or 2006 based on data availability. Euro area average excludes Luxembourg and Slovenia.

Equity markets have grown rapidly in the past few years, especially in Southeastern Europe and Russia, where market capitalization has reached surprisingly high levels. If we exclude

Bosnia-Herzegovina, Montenegro, Croatia, Malta and Russia, the average market capitalization is 31.4 percent of GDP, almost half that of the Euro area average (59 percent of GDP), but in line with that of Latin America and Asian emerging markets. With few exceptions, liquidity—as measured by the turnover ratio[4]—is generally low throughout the region (Figure 4). 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—like the Czech Republic, Hungary, Poland, and Turkey—with relatively well developed markets. Market activity is largely driven by foreign investors, which account for over 50 percent of equity holdings in several countries in the region.

Figure 4. Equity Market Turnover And Capitalization, 2006



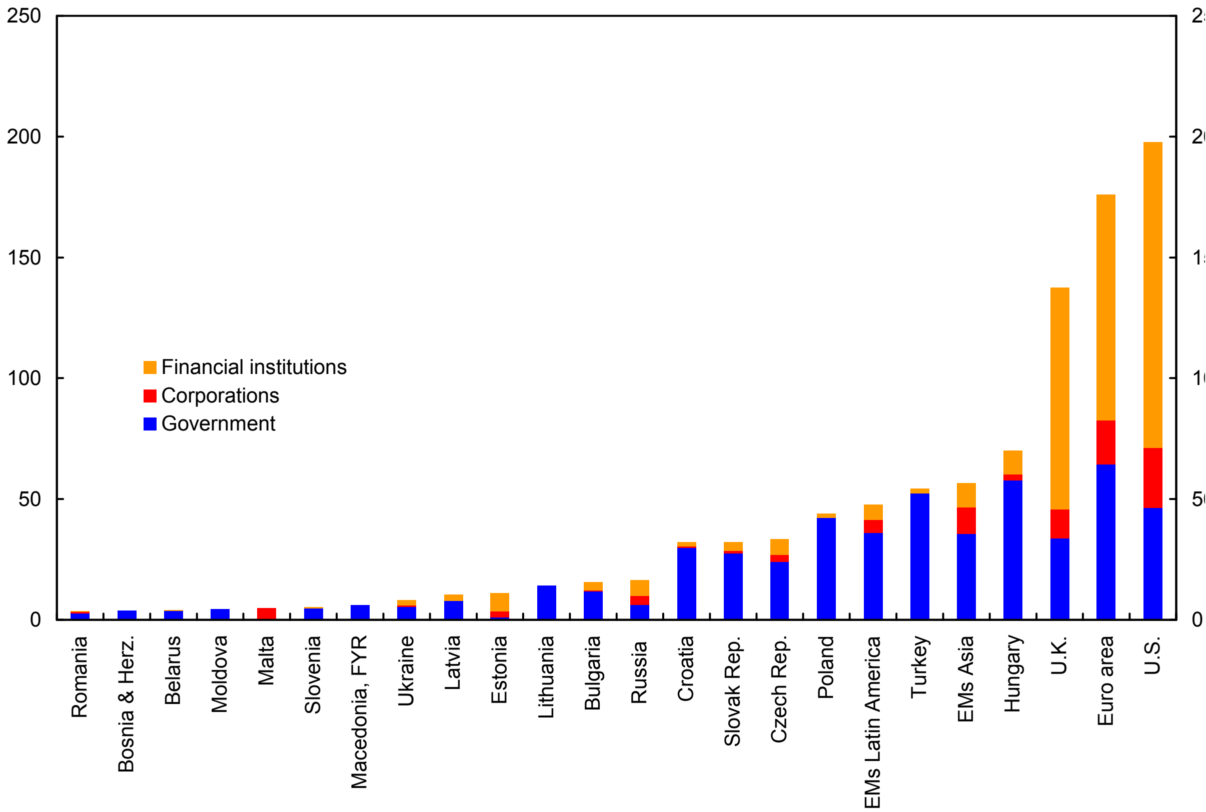
Sources: Standard & Poor; Bloomberg; and IMF, *World Economic Outlook*.
Note: Euro area average excludes Luxembourg and Slovenia.

Public sector financing needs largely explain the depth and liquidity of the government securities market. Hence, central European countries and Turkey have well established government securities markets. Conversely, the market for securities issued by corporations and financial institutions is thin virtually everywhere. As of 2006, the outstanding stock of non-financial corporate debt securities was less than 5 percent of GDP in all countries, lower than the average for Latin America and Asian emerging markets, and extremely small

[4] The turnover ratio is defined as the value of trading relative to market capitalization.

compared to advanced economies. Furthermore, corporate bond secondary market activity is limited, and even in countries where primary corporate issues have grown more significantly in the past few years, such as Russia and Ukraine, they are concentrated in a few sectors. The market for securities issued by financial institutions is somewhat deeper and expanding faster than the nonfinancial corporate securities segment (Figure 5).

Figure 5. Outstanding Debt Securities, 2006
(Percent of GDP)



Sources: Bank for International Settlements; Standard & Poor; Bloomberg; natioanal authorities; and IMF, *World Economic Outlook*.
Note: Euro area average excludes Luxembourg and Slovenia.

III. Determinants of Financial Sector Development

A. Literature Review

One of the basic pre-requites for financial market development is macroeconomic stability. In countries with high and volatile inflation, demand for financial assets typically collapses at some point, due to uncertainty on returns (Huybens and Smith, 1999; Boyd, Levine, and Smith 2001). The relationship between inflation and financial development may be nonlinear: as long as inflation remains above a certain threshold, its adverse consequences prevail (Azariadas and Smith, 1996, Choi, Smith and Boyd, 1996, Khan, Senhadji, and Smith, 2001). Financial depth also tends to grow with rising income, and the associated increasing complexity of economic structure (see, for example, De la Torre, Gozzi, and Schmukler, 2007).

Besides favorable macroeconomic conditions, economic institutions are important determinants of financial development. To begin with, financial intermediation can flourish only after property rights provide some minimum acceptable level of security, and law enforcement by the judiciary and other legal institutions is adequate (Johnson, McMillan and Woodruff , 2002; Acemoglu, Johnson, and Robinson, 2004). Measures of law enforcement and institutional quality that have been found to be associated with higher capital market development include control of corruption, rule of law, and bureaucracy quality (La Porta et al., 1997; Baltagi, Demetriades, and Law, 2007).[5]

Growing recent empirical research emphasizes also the role of corporate governance and creditor protection in fostering financial development.[6] Investor protection, through company laws and commercial codes, disclosure of corporate activities, and proper accounting rules and practices, is considered to be an important deterrent of expropriation of outside investors, and, as such, a key determinant of the development of corporate securities markets (La Porta et al. 1997, 1998, 2000, 2002; Djankov et al., 2005).[7] Creditor protection, through collateral and bankruptcy laws, as well as credit information disclosure through private and public registries, are found to be an important determinant of development of credit and debt securities markets (La Porta et al. 1997, 1998; Djankov, McLiesh, and Shleifer, 2005; Djankov et al., 2006; De Serres et al., 2006).

The development, and particularly the liquidity, of financial markets depend also on the existence of a diversified class of institutional investors. Mutual and pension funds, and insurance companies act as a stable source of demand for equity and debt securities, and foster competitiveness and efficiency in primary markets, and create the incentive for the establishment of a robust regulatory and supervisory framework (Impavido, Musalem, and Tressel, 2003; Claessens, Klingebiel, and Schmukler , 2003).

The access to international markets can also play an important role in fostering local financial markets development. Capital account liberalization mitigates financial repression, by forcing the real interest rate to rise to its competitive market equilibrium (McKinnon, 1973; Shaw, 1973), broadens the investor base, enhances efficiency by weeding out inefficient institutions, and creates more pressure for reforms (Claessens, Demirgüc-Kunt, and

[5] Property rights protection and rule of law have also been found to have a significant impact on the cost of bank credit, as measured by lending spreads (Laeven and Majnoni, 2003).

[6] Corporate governance can be broadly defined as the system governing the relationship between a company's management, its board, majority shareholders and minority stakeholders.

[7] La Porta et al. (1997, 1998) also argue that the national legal origin (whether English, French, German, or Scandinavian) strongly affects the legal and regulatory environment in financial transactions and explains cross-country differences in financial development. For a comprehensive survey of this "law and finance" literature, see Beck and Levine (2005).

Huizinga, 2001). Indeed, a recent paper by IMF (2007), finds that *de jure* financial openness and domestic financial sector development are significantly correlated, controlling for a range of other determinants.

Nevertheless, views differ about the optimal timing and sequencing of trade opening, capital account liberalization, and domestic financial liberalization.[8] Some argue that countries need to liberalize their goods market prior to liberalizing the financial sector (McKinnon, 1991), and that, in order for financial systems to reap the benefit of financial liberalization, the domestic systems themselves need to be developed up to a certain level (Martell and Stulz, 2003). Others, instead, maintain that the simultaneous opening of both the trade and capital account would weaken opposition to financial development from interest groups—the industrial and financial incumbents who fear increased competition and rent loss—as the new opportunities created by trade and financial openness would outweigh the negative effects of greater competition (Rajan and Zingales, 2003). While the empirical evidence on the optimal timing and sequencing of trade and capital account liberalization is scant,[9] there is some support to the view that a higher level of financial openness contributes to the development of domestic financial markets only if a threshold level of general legal systems and institutions is first attained (Chinn and Ito, 2002, 2005).[10]

B. Determinants of financial development in emerging Europe

Few studies have tried to assess the determinants of financial development in emerging Europe. Pistor, Raiser and Gelfer (2000) find that the lack of effective law enforcement has been the most important constraint to financial development in the region during the 1990s, although many countries have made considerable progress in terms of reforming the "law on the books" in the area of shareholder and creditor right protection. Claessens, Djankov, and Klingebiel (2000) conclude that stock market development in emerging Europe over 1994-99 has been negatively affected by high inflation rates, weak minority shareholder rights, and the limited a size of institutional investors.[11] Our own study on the determinants of equity market development over the 1999-06 period, however, could not confirm their findings.[12]

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[8] For a comprehensive discussion of financial sector reforms sequencing, see Karacadag, Sundararajan, and Eliott, 2003.

[9] Baltagi, Demetriades, and Law (2007) find little empirical support for the Rajan and Zingales's simultaneous openness hypothesis. Chinn and Ito (2002, 2006) find that the liberalization in cross-border goods transactions is a precondition for capital account liberalization to contribute to financial development.

[10] Chinn and Ito (2005) find that, in emerging market countries, greater bureaucracy quality, rule of law and control of corruption amplify the effect of financial opening in fostering equity markets development. They also find that these institutional variables enhance the effect of capital account opening more than strong creditor protection and corporate governance.

[11] These two studies cover all countries transitioning from a central planned economy including some non European CIS countries. Two more recent papers, Brzoza-Brzezina (2005), and Égert, Backé and Zumer (2006) estimate the determinants of private credit growth in a sub-set of European emerging economies.

This suggests that recent equity market developments may have been driven by idiosyncratic factors, including investor euphoria in anticipation of future growth prospects.

The results of our own econometric analysis of the determinants of private sector credit in emerging Europe over 1995-2006 can be summarized as follows:[13]

- Simple cross-country correlations suggest that per capita income and measures of law enforcement and institutional quality, namely bureaucracy quality, control of corruption, rule of law, and property rights, have been positively associated with deposit money bank (DMB) credit to the private sector (Table 1).

- Cross-country and panel regressions indicate a positive and significant relation between indicators of institutional quality and DMB credit, even controlling for reverse causality (Tables 2 and 3).[14]

- In cross-country regressions, a measure of creditor protection at the beginning of the period is also associated with higher private credit over 1999–2006.

- Cross-country estimates, and especially panel regressions suggest that inflation has had a negative impact on private credit in emerging Europe, in line with Égert, Backé and Zumer's (2006) findings on a smaller group of European emerging economies. Moreover, the panel analysis indicates that single digit inflation, as opposed to higher inflation rates, has favored bank credit to the private sector over the 1995-2006 period (Table 3).

- Rising per capita income has had a positive impact on bank credit (Tables 2 and 3).

- There is indication of a negative and significant relation between a measure of international interest rates (the LIBOR on euro-denominated deposits) and bank credit (Table 3).

- The coefficients on additional explanatory variables, including measures of financial integration and trade openness, an indicator of financial liberalization, domestic interest

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[12] We estimated equations for market capitalization and turnover, including among the regressors inflation and other macroeconomic variables, institutional quality indicators, measures of institutional investors' size, an index of shareholder protection, indicators of privatization reforms, as well as variables accounting for external conditions, such as international interest rates and international financial integration. The results, however, were not satisfactory, as the findings were not robust to alternative specifications.

[13] For variable definitions, data sources, and descriptive statistics, see Appendix.

[14] Cross-country regressions were estimated by two-stage least squares, using initial values of per capita income and institutional variables as instruments. Lags were introduced in panel estimates. Given that some indicators of institutional quality are highly correlated with per capital income, the latter variable was excluded in some equations.

rates, international interest rates, GDP growth, and institutional investor size were not significant.

Table 1. Correlation Coefficients, 1999–2006

	Bureaucracy quality	Law and order	Property rights	Control of corruption	Per capita income	Inflation	Creditor protection 1998
DMB Credit[1]	0.8	0.6	0.3	0.7	0.7	-0.5	0.5
Bureaucracy quality		0.5	0.8	0.8	0.8	-0.6	0.2
Law and order			0.4	0.4	0.4	-0.1	0.4
Property rights				0.6	0.7	-0.2	0.1
Control of corruption					0.8	-0.2	0.3
Per capita income						-0.4	0.2
Inflation							-0.3

[1] In percent of GDP
[2] Bureaucracy quality, law and order, property rights, control of corruption, and creditor protection have been rescaled to assume values between 0 and 1.

Source: International Country Risk Guide, Heritage Foundation, Pistor, Raiser and Gelfer (2000), WEO, and staff estimates.

Table 2. Determinants Of DMB Credit In Emerging Europe, Cross-Country Regressions, 1999–2006[1]

Dependent variable	DMB Credit[2]	DMB Credit[2]	DMB Credit[2]	DMB Credit[2]	DMB Credit[2]
Log (per capita income)	12.4***	13.3***	10.5***		
	(3.6)	(4.4)	(3.2)		
Law and order	58.7**	42.1*	54.9**		
	(2.8)	(2.1)	(2.9)		
Control of corruption				55.5**	
				(2.2)	
Bureaucracy quality					45.3***
					(4.9)
Creditor protection 1998		22.1*			
		(2.2)			
Inflation			-0.2**	-0.3**	
			(2.2)	(2.2)	
Adj. R^2	0.7	0.8	0.8	0.53	0.6
No. of observations	17	16	17	17	17

[1] Two-stage least squares, using initial values of per capita income and institutional variables as instruments.

[2] In percent of GDP.

A constant was included in all the regressions.

t statistics in parenthesis. *, **, *** indicates that the coefficient is significant at 10, 5, and 1 percent, respectively.

Source: International Country Risk Guide, Pistor, Raiser and Gelfer (2000), WEO, and staff estimates.

Table 3. Determinants of DMB Credit In Emerging Europe,
Panel Regressions, 1995–2006.

Dependent variable	D(Ln(DMB Credit)[1]	D(Ln(DMB Credit)[1]	D(Ln(DMB Credit)[1]
D(Ln(Per capita income)), lagged	8.9***	8.8*	13.0*
	-2.5	(1.7)	(1.8)
Inflation	-0.002***		
	(5.4)		
Inflation <10 percent		0.1**	0.1***
		(2.3)	(2.8)
D(Property rights), lagged	0.3***	0.6**	
	(3.5)	(2.2)	
D(Bureaucracy), lagged			0.3*
			(1.7)
Libor euro	-0.03***		
	(2.4)		
Time effects	No	Yes	Yes
Country effects	Yes	Yes	Yes
Adj. R^2	0.5	0.2	0.2
Sample period	1999-2006	1997-2006	1995-2006
No. of observations	147	187	168

[1] D represents the first difference operator.
A constant was included in all regressions.
Absolute value of t statistics, computed using robust standard errors, in parenthesis.
*, **, *** indicates that the coefficient is significant at 10, 5, and 1 percent, respectively
Source: International Country Risk Guide, Heritage Foundation, Pistor, Raiser and Gelfer (2000), WEO, *International Financial Statistics*, and staff estimates.

IV. WAY FORWARD

While all emerging European economies have made important progress in setting the foundations for financial development, achievements in this respect vary across countries. Looking forward, two different country groups can be identified.

- The members of the European Union (EU), 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 in 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 EU 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, their focus should be on reinforcing the foundations for financial development, establishing stronger corporate governance and creditor rights protection, creating a well-functioning government securities market, and promoting a favorable environment for the emergence of institutional investors.

A. Financial development in EU emerging economies: the role of integration

The emerging economies that joined the EU have carried out comprehensive reforms to comply with the *aquis communautaire*. Nevertheless, there is still scope for strengthening institutional quality further, improving the legal framework, and implementing financial regulations more thoroughly. In fact, in none of the EU emerging economies has institutional quality reached the levels observed in advanced economies (Figure 6). Creditor rights protection through collateral and bankruptcy laws, as well as information disclosure could be reinforced (Figures 7 and 8). Some deficiencies remain in the area of corporate governance regulation and practice[15] (Figure 9). The regulatory and supervisory frameworks for banking, insurance and securities, albeit stronger than in non-EU emerging economies, are less compliant to international standards than in EU advanced economies (Cihak and Tieman, 2007).

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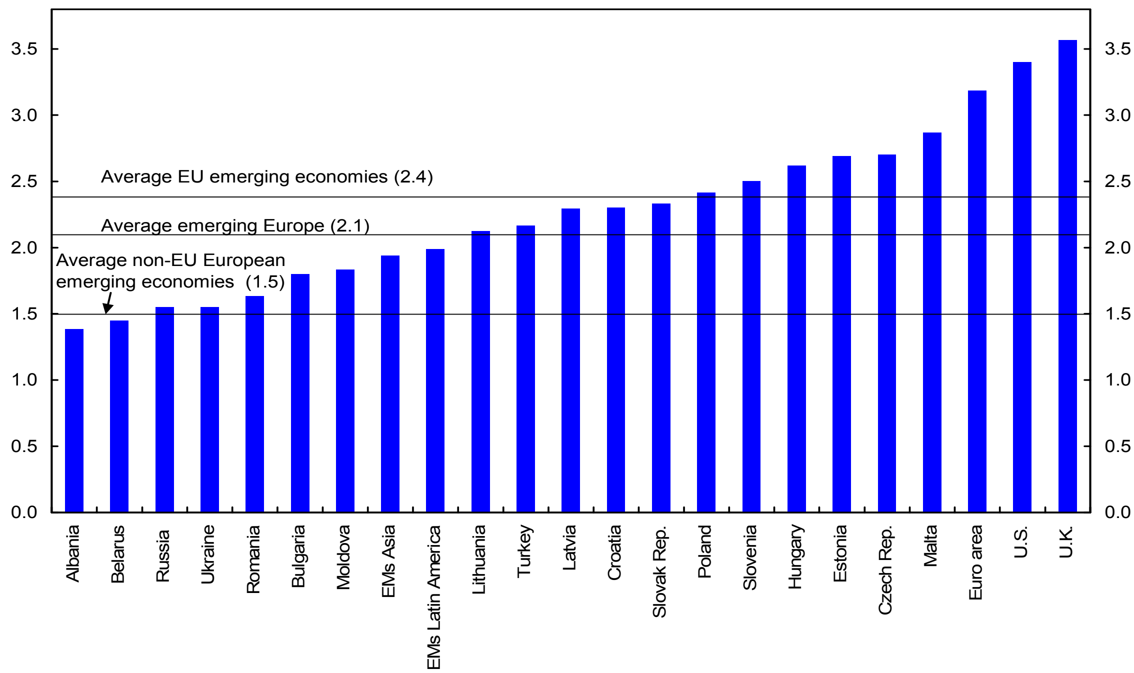
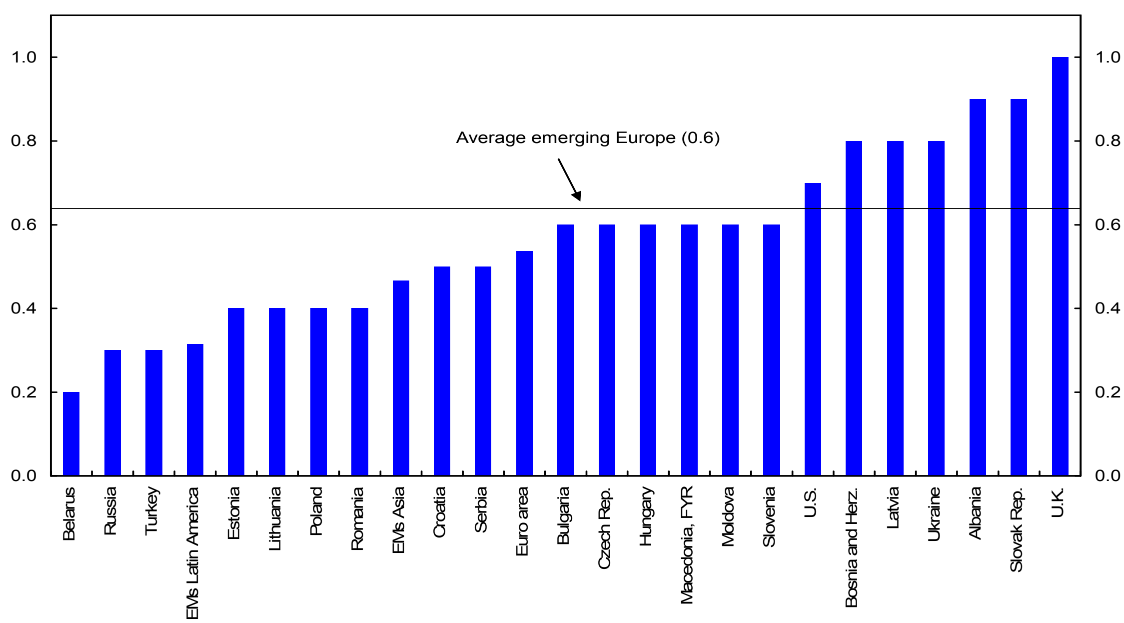
[15] Rules relating to corporate governance are mixed in nature. The basic regulations are usually laid down in company laws and securities legislation. In addition, governance practices are often imposed by stock exchanges, the board of directors, and even traditions. Recently, there has been a move to streamline and coordinate these informal sources of corporate governance into codes (see the web site of the European Corporate Governance Institute at www.ecgi.org).

Figure 6. Institutional Quality Index, 2006



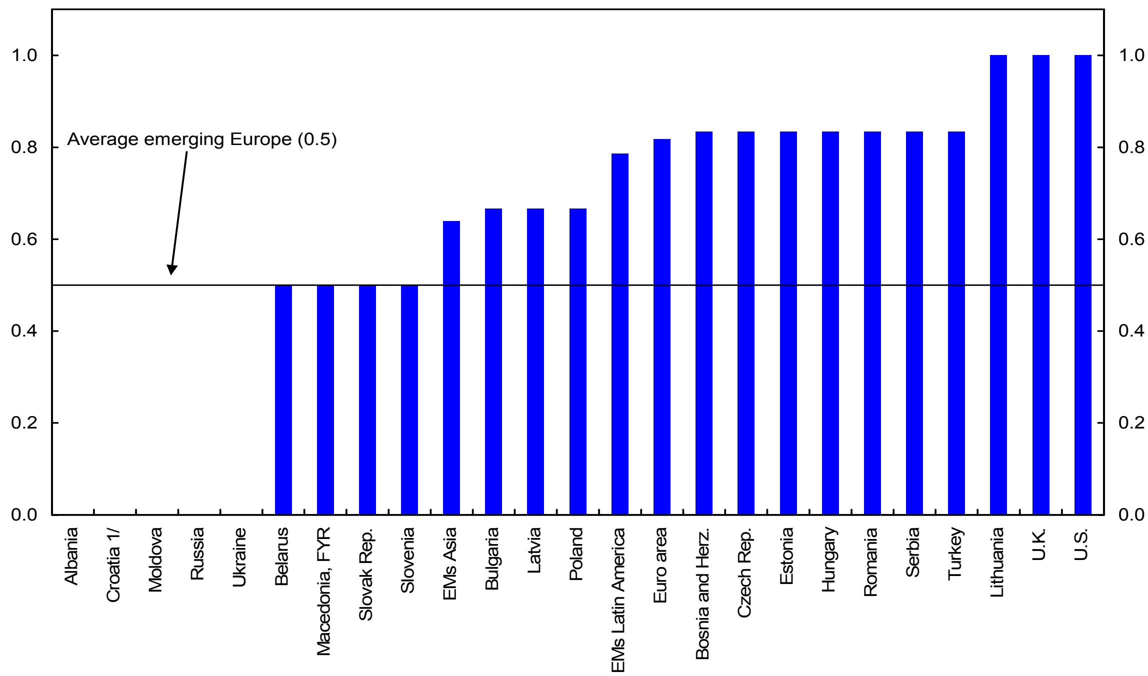
Source: Freedom House; and International Country Risk Guide.
Note: Institutional quality index is the sum of property rights, control of corruption, bureaucracy quality, and rule of law indices. It ranges from 0 to 4. Euro area average excludes Luxembourg and Slovenia.

Figure 7. Borrowers And Lenders Legal Rights Index, 2006



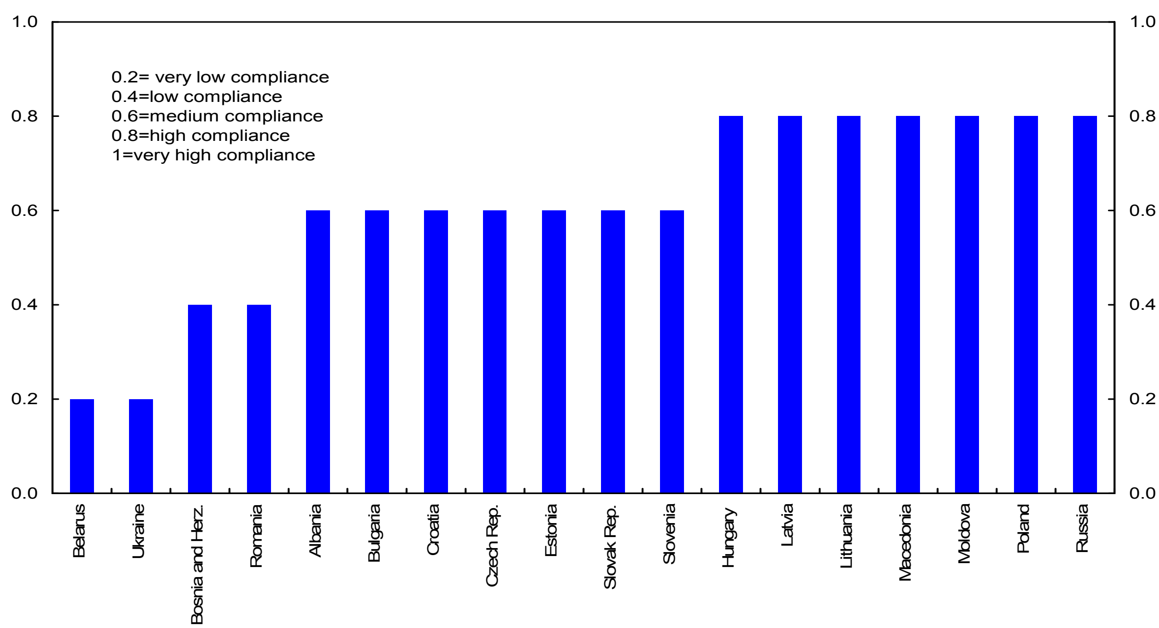
Source: Doing Business Database.
Note: The index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders. The index has been rescaled to assume values between 0 and 1. Euro area average excludes Luxembourg and Slovenia.

Figure 8. Credit Information Index, 2006



Source: Doing Business Database.
Note: 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.
1/ In Croatia a bank credit registry began operations in May 2007.

Figure 9. Corporate Governance (Compliance With OECD Principles), 2004



Source: European Bank for Reconstruction and Development, *Transition Report,* 2005.

For EU emerging economies, the EU financial integration process is likely to be the main force propelling and shaping financial development. The EU is heading toward a single market in financial services,[16] which creates both an opportunity and a challenge for emerging economies. On one hand, it will allow better diversification of financing and investment options and exacerbate 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 accomplishing further progress in terms of laws, regulations and practices, strengthening the financial sector, securing domestic and foreign investor confidence, and making emerging economies 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 securities markets. For small countries, in particular, increased competition associated with the financial integration process imposes a very strong pressure to find niche markets with a local comparative advantage. For them, joining regional markets, rather than developing national ones, might be the most sensible option, especially with respect to certain segments, like the securities market. Indeed, different forms of collaboration and consolidation among trading platforms have already started. For instance, the merger of the Nordic-Baltic exchanges has created the regional OMX market. The Warsaw Stock Exchange signed an agreement with the multinational exchange Euronext. The Vienna stock exchange has entered in a cooperation project with the Budapest Stock exchange.[17]

B. Fostering financial development in non-EU emerging economies

Reinforcing the foundations

Continued macroeconomic stability will be essential for financial development. Growth has been steady and per capita income has been rising everywhere in the region since the early 2000s. All economies have also made great progress toward price stability. Nevertheless, 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 (Figure 10). For these economies, attaining low inflation in a durable manner will be critical to encourage demand for local currency financial assets and lengthen the yield curve beyond short maturities, thus allowing wider diversification of financial instruments.

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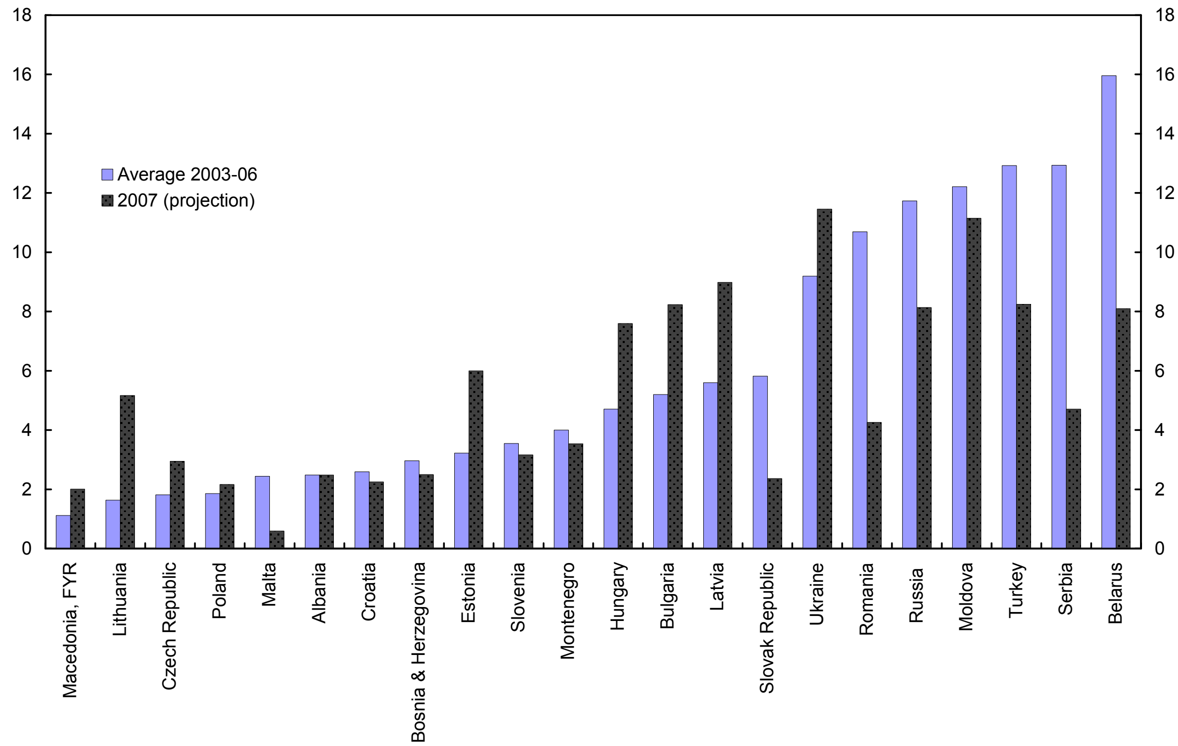
[16] Major steps in this direction were taken with the Financial Services Action Plan (FSAP), the Lamfalussy process, and the Commission White Paper on Financial Services Policy. The FSAP was launched in 1999 with the objective of removing barriers to the cross-border flow of financial services and capital within the EU. 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 2005-2010 (Haas, Francois, 2007).

[17] For a discussion of national versus regional exchange markets, see Iorgova and Ong (2007).

Figure 10. CPI Inflation

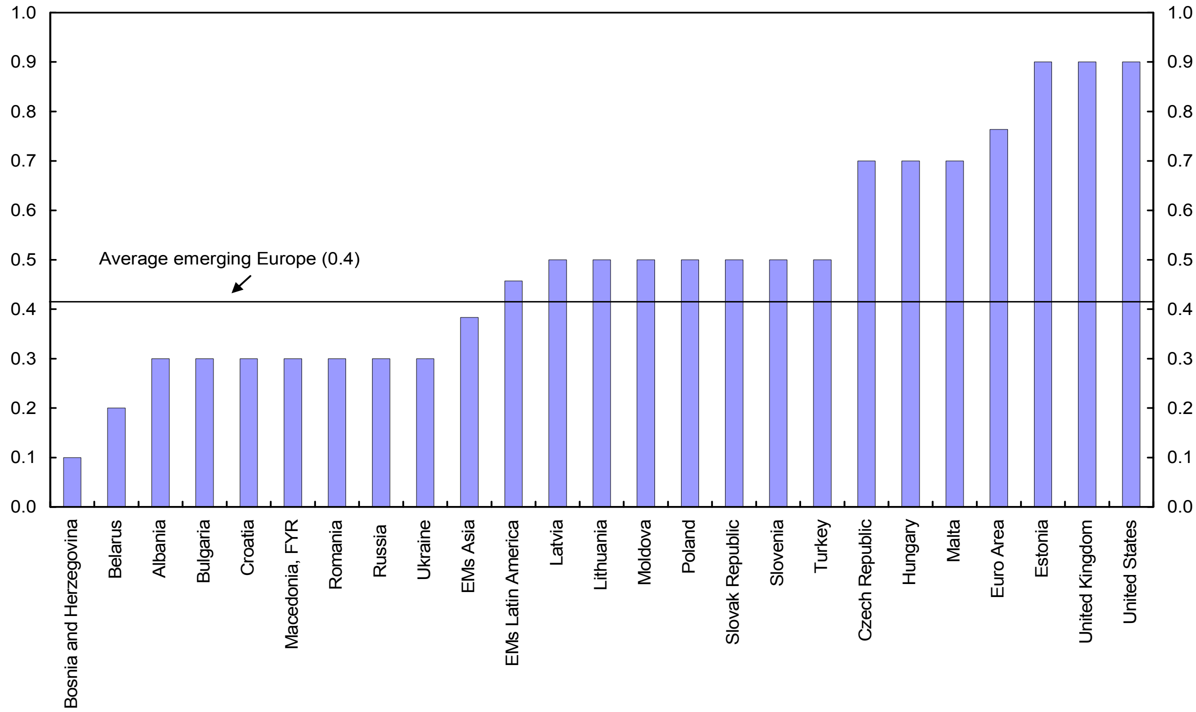


Source: WEO

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 is below the EU average. Institutional quality appears to be particularly poor in Albania and Belarus where it stands even below the average for non-EU emerging economies (Figure 6). Also in Bosnia and Herzegovina and Macedonia, property rights protection—the only indicator of institutional quality available—appears to be low (Figure 11).

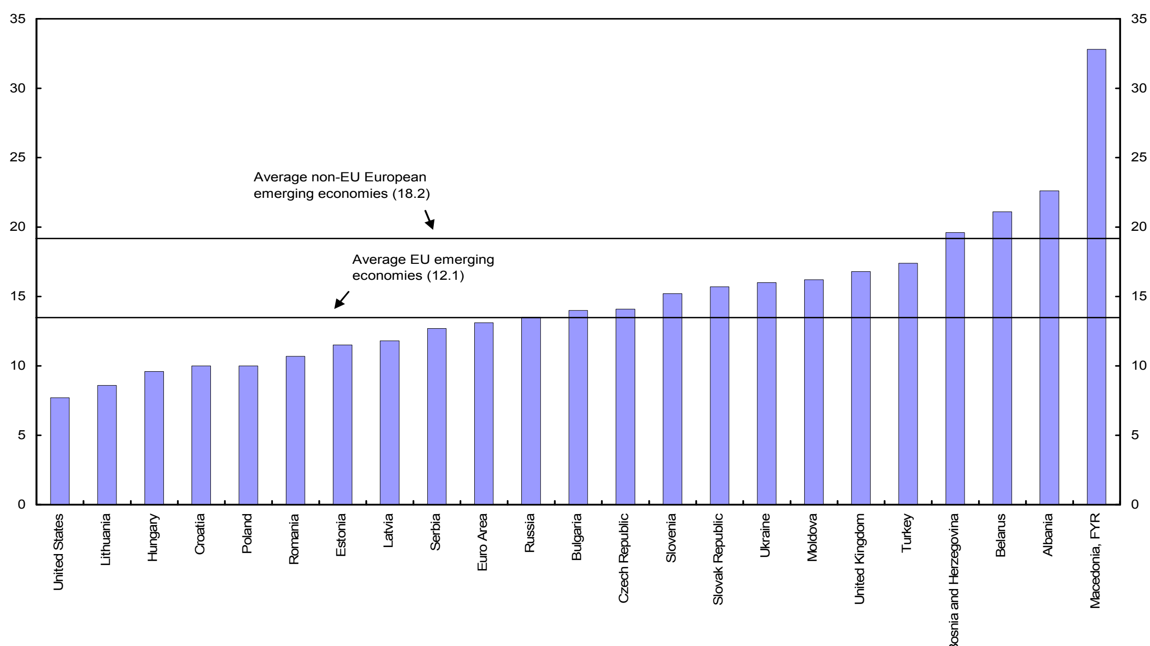
Enforcing contracts needs to be made less costly and time consuming by improving the efficiency of court systems and unburdening the judicial processes. For example, enforcing a debt contract costs on average 50 percent more in non-EU than in EU emerging economies (Figure 12). Furthermore, as firms tend to distrust the courts, judicial and related institutional reforms are needed to establish confidence in the court system and the enforceability of contracts (Anderson and Gray, 2007).

Figure 11. Property Rights Index, 2006



Source: Heritage Foundation.
Note: The index has been rescaled to assume values between 0 and 1. The Euro area average excludes Luxemburg and Slovenia.

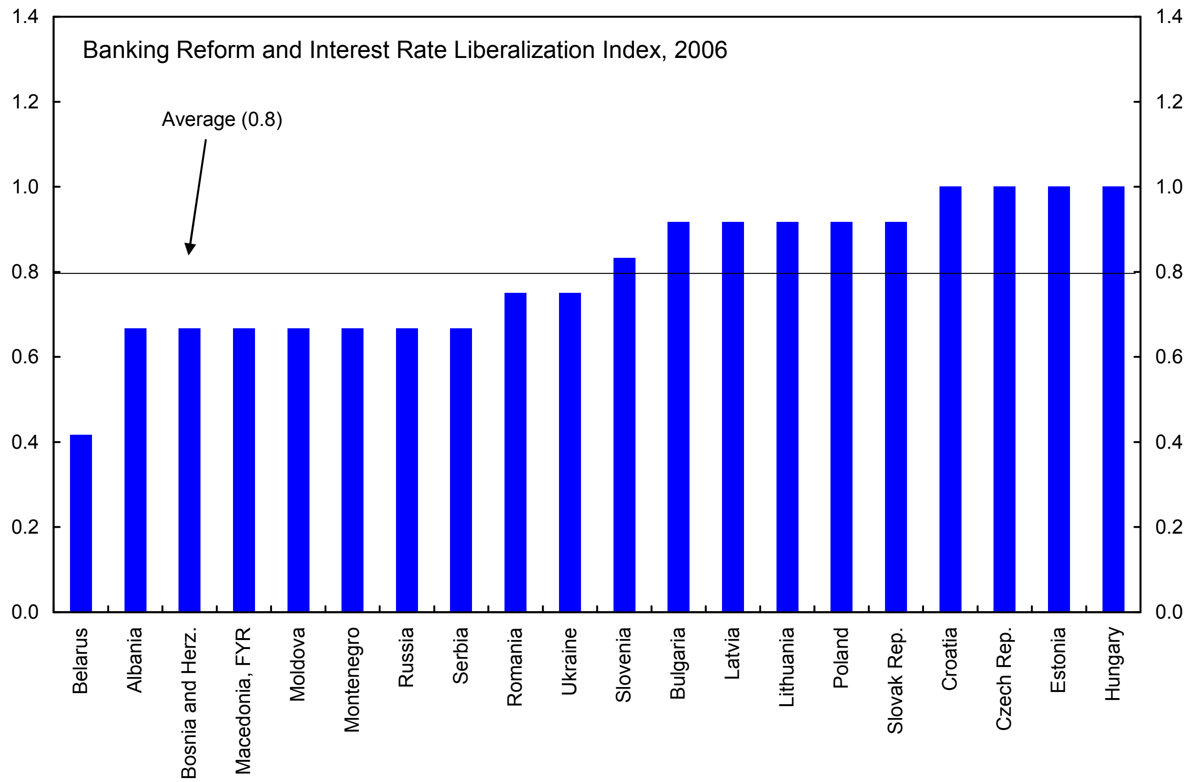
Figure 12. Cost Of Enforcing A Contract (Percent of Debt), 2006



Source: World Bank, Doing Business database.
Note: The index has been rescaled to assume values between 0 and 1. Euro area average excludes Luxemburg and Slovenia.

Non-EU emerging economies have taken major steps to develop a sound and efficient banking sector. Indeed, only Belarus has yet to liberalize interest rates and credit allocation (Figure 13). All countries in this group have functioning payments and settlement systems, put in place fairly good accounting and disclosure standards. In all countries, regulatory requirements regarding the amount and composition of bank capital, and the extent to which official supervisory authorities have the power to take actions to prevent or correct problems in the banking sector were broadly in line with advanced countries standards as of 2003 (Figure 14).[18]

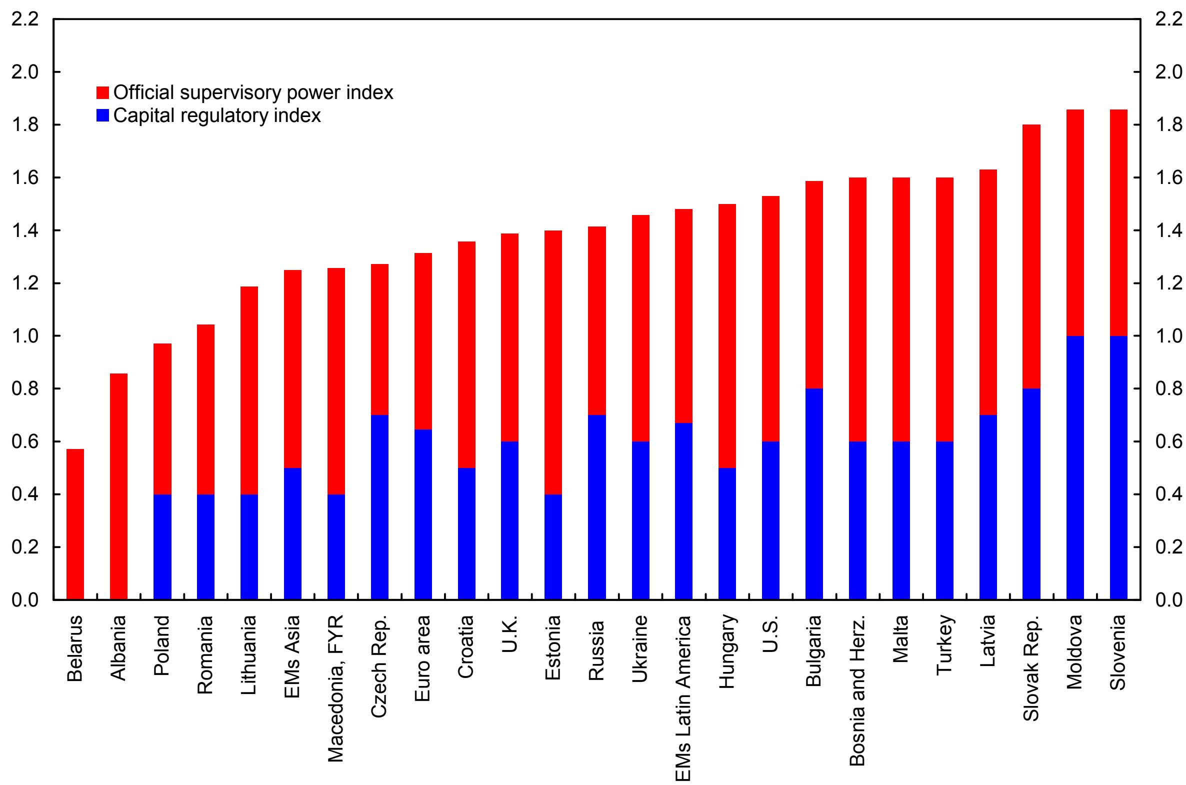
Figure 13. Banking Reform And Interest Rate Liberalization, 2006



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

[18] Unfortunately, more recent comparable data on banking regulation and supervision across countries is not available. It is important to note that several European emerging economies have introduced even more stringent regulation and enhanced supervision in the past few years in response to concerns about excessive credit growth (Hilbers et al., 2005).

Figure 14. Regulatory And Supervisory Power Index, 2003



Source: James R. Barth, Gerald Caprio and Ross Levine, *Rethinking Bank Regulation: Till Angels Govern,* (New York: Cambridge University Press, 2006).
Note: Each index has been rescaled to assume values between 0 and 1. Euro area average excludes Luxembourg and Slovenia.

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.

Building the government securities market

A well-functioning government securities market could be the catalyst for further financial market development (International Monetary Fund and World Bank, 2001) A liquid government securities market provides a market-determined term structure of interest rates and, therefore, facilitates the pricing of other financial instruments, including corporate bonds and derivatives. 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. As discussed in Section V, Hungary, for instance, successfully implemented a consistent and integrated approach that helped establish a deep and liquid government securities market. Ukraine would greatly benefit from a strong commitment to build a government securities market.

Developing corporate finance

Stronger creditor protection is essential to establish credit and corporate securities markets. The institutional and legal framework governing the valuation of collateral and the protection of creditor rights would need to be improved particularly in Belarus, Russia, and Turkey (Figure 7). Accessibility and quality of credit information through credit registries could also be enhanced especially in Albania, Moldova, Russia, and Ukraine (Figure 8).

Strong corporate governance is critical for the establishment of a well-functioning securities market, where protection of minority shareholders through equitable treatment and proper information disclosure is ensured. A 2004 assessment of corporate governance laws and regulations compliance to the OECD Principles[19] indicates that three non-EU emerging economies, namely Belarus, Bosnia and Herzegovina, and Ukraine, exhibited major inadequacies when compared with international standards (Figure 9).[20] Assessments of the "laws on the books" alone, however, do not give a complete picture, as law enforcement is as important. As discussed above, law enforcement by the judiciary and other legal institutions is weak in a number of countries. Moreover, a survey on the *effectiveness* of corporate governance conducted by the EBRD in 2005 revealed shortcomings in several countries (Cigna and Enriquez, 2006).[21] Again, the Ukraine provides a good case study of how enhancing corporate governance and institutional quality could benefit corporate finance (see Section V).

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. 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,

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[19] The original "Principles of Corporate Governance" were released by the OECD in 1999, and updated in 2004.

[20] For an evaluation of corporate governance in Turkey, which was not included in the EBRD assessment, see OECD (2006).

[21] In 2005 the EBRD conducted a survey of law firms in emerging Europe to ascertain how difficult it would be for a minority shareholder to obtain disclosure and redress in a typical conflict of interest situation.

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 can contribute to pension fund development.[22] The case of Hungary offers an example of how legislative and regulatory changes as well as pension reforms can promote institutional investors (Section V).

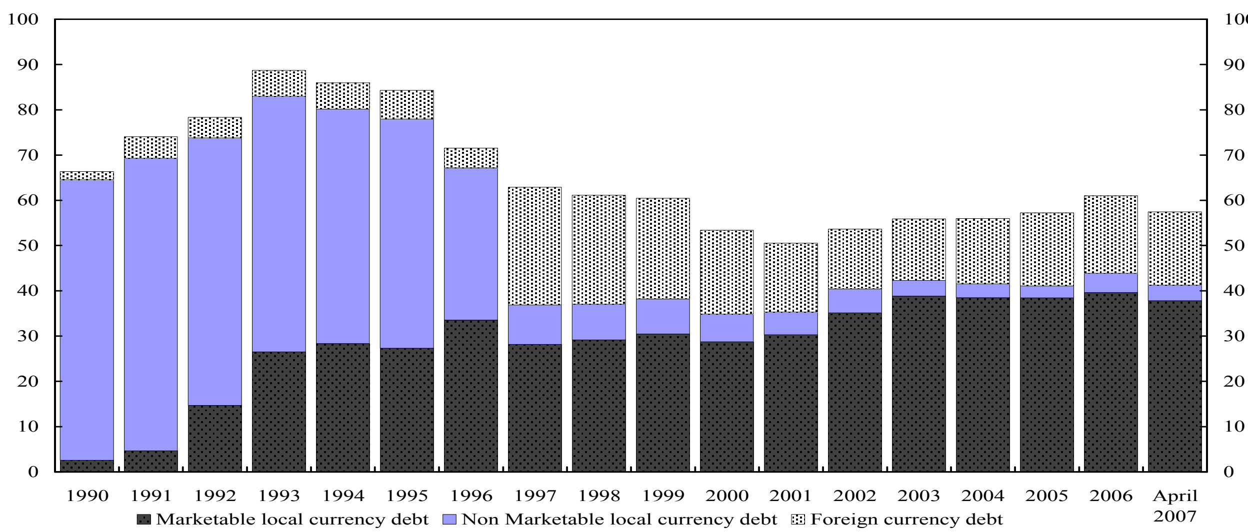
V. Case studies

While the previous sections discussed general areas where reforms would be beneficial, this section provides two specific country examples. The case of Hungary illustrates how a well-functioning government securities market can be established. With the case of Ukraine we discuss a number of specific reforms that would advance securities markets development.

A. Developing the government securities market: the experience of Hungary[23]

Hungary's government securities market is one of the most developed, liquid and sophisticated in the region. Starting with a negligible stock of Treasury bills in 1990, the domestic market has deepened over the years, the range of instruments has been diversified considerably and the maturity extended. Non-marketable debt has been gradually replaced by marketable instruments and liquidity has increased (Figure 15).

Figure 15. Hungary: Central Government Debt (Percent of GDP)



Source: national authorities.

[22] For a study on pension reforms in emerging Europe, see Nickel and Almemberg (2006).

[23] This section is based on Csajbók and Neményi (1998), Sándor (2002), Arvai and Heenan (2007).

In the early nineties the stimulus for the development of the market came from concerns about rollover risk, which required the lengthening of the maturity spectrum of government bonds, as well as exchange rate risk for the Treasury, which called for the issuance of local currency denominated bonds. At later stages, monetary policy and financial market development objectives became more important, as the government securities market facilitated the use of indirect instruments of monetary policy, provided information on inflation expectations, and enhanced the institutional framework for the development of other segments of the financial sector.

The main lesson from the Hungarian experience is that the joint commitment of the government and the central bank is critical for the establishment of a well-functioning government securities market. The key driving force behind market development was a coherent strategy involving (i) the move toward a monetary policy framework relying on market-based instruments; (ii) the creation of a suitable legal and regulatory environment; (iii) macroeconomic stabilization; and (iv) improvements in debt management. Gradual capital account liberalization also contributed to broaden the investor base, and make the market deeper and more liquid.

The first, basic, steps for market development were taken in the early 1990s, with the liberalization of interest rates (Table 4) and the enactment of the Central Bank Act, which created the basis for the complete phase-out of central bank deficit financing.[24] Also, in 1993 the non-interest bearing debt of the budget was swapped into marketable government bonds. Over the 1990s, the monetary authorities gradually adopted indirect instruments of monetary policy. Government securities started being used as collateral in central bank refinancing activities with financial institutions and for open market operations, which contributed to make the government securities market deeper, more liquid, and attractive to investors.

At the same time the basis for the smooth operation of the market was created with new legislation on securities and the stock exchange, as well as the establishment of the Securities Supervisory Agency,[25] the Central Clearing House and Depository, the Treasury, and the Government Debt Management Agency. To broaden the investor base, measures were taken to encourage the development of institutional investors,[26] and long-term forint-denominated government securities were made available to nonresidents in 1994.

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[24] In 1993-95 an upper limit was set on central bank financing of the budget and preferential direct credit lines ceased to exist. In 1997 the Central Bank direct financing of the budget was prohibited.

[25] The Securities Supervisory agency later became the Hungarian Financial Supervisory authority.

[26] Legislation on mutual and pension funds was introduced in the early 1990s. In addition, the government supported mutual funds via personal income tax allowances, and allowed the creation of voluntary pension funds in 1995.

Table 4. Hungary: Selected Indicators

	Average 1990-93	Average 1994-95	Average 1996-99	Average 2000-05	2006
GDP growth (percent)	-4.8	3.2	3.7	4.5	3.9
Inflation (percent)	27.2	23.6	16.5	6.5	3.9
Current account balance (percent of GDP)	-1.9	-6.7	-5.9	-7.4	-6.9
General government balance (percent of GDP)	-5.0	-7.4	-4.1	-6.4	-9.7
General government debt (percent of GDP)	76.9	85.1	64.2	56.7	66.2
Indicator of interest rate liberalization and banking reform (EBRD)	0.5	0.8	0.9	1.0	1.0
Indicator of interest rate liberalization (Abiad, Detragiache and Tressel, 2007)	1.0	1.0	1.0	1.0	1.0

The indicators of interest rate liberalization have been rescaled to assume values between 0 and 1, with higher values indicating greater liberalization.
Source: EBRD, Abiad, Detragiche and Tressel (2007), WEO.

In 1995, the authorities proved 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 the shift to a crawling band with a preannounced devaluation rate created the basis for sounder macroeconomic development and increased investor confidence. The economic trends prevailing since the adjustment program was launched—notably decreasing inflation rates—provided favorable conditions for further development of the government securities market (Table 4). In fact, as the anti-inflationary commitment of the monetary authorities gained credibility, the yield curve could be extended significantly.[27]

Since the mid-1990s, a number of debt management strategies were implemented to enhance the functioning of the primary market and increase 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

[27] Two- and three-year bonds were launched in 1996. Five- and ten-year bonds were introduced in 1997 and 1999, respectively. The first auction of a 15-year bond – the longest maturity at the moment - was held in 2001.

started being published daily.[28] Liquidity in the secondary market was further enhanced by gradual capital account liberalization, culminating in 2001 with the removal of all foreign exchange restrictions, including those on short-term portfolio transactions.

B. Securities market development in Ukraine

Ukraine's financial development has gone through different phases since the country gained independence in 1991. During the early transition period, associated with severe output contraction and hyper-inflation, demand for financial assets largely collapsed (Table 5). Important financial sector reforms were introduced after 1995, including interest rate liberalization, and the phasing-out of directed credit and credit ceilings (Laurens et al., 2005). The 1998-99 crisis represented a setback in financial development, as inflation doubled, and the country had to restructure part of its government debt and lost access to international markets.

After the 1998-99 crisis, sustained output growth, current account surpluses and prudent monetary and fiscal policies allowed a sharp reduction in public debt ratios, a substantial build-up of foreign reserves, better inflation control and remonetization (Table 5). The 2003 Eurobond issue re-established access to international markets. A number of reforms, including new civil and commercial codes and amendments to the securities law, were introduced to strengthen the legal framework for financial intermediation.

Table 5. Ukraine: Selected Indicators

	Average 1993-1997	Average 1998-99	Average 2000-05	2006
GDP growth (percent)	-12.5	-1.1	7.4	7.1
Inflation (percent)	1219.7	16.6	11.4	9.0
Broad Money, excluding foreign currency deposit (percent of GDP)	12.2[1]	12.4	24.1	35.3
Broad Money, including foreign currency deposit (percent of GDP)	16.0[1]	16.2	30.8	48.4
Current account balance (percent of GDP)	-2.9	1.1	5.9	-1.7
General government balance (percent of GDP)	-6.8	-2.6	-1.7	-1.3
Indicator of interest rate liberalization and banking reform (EBRD)	0.4	0.5	0.6	0.8
Indicator of interest rate liberalization (Abiad, Detragiache and Tressel, 2007)	0.6	1.0	1.0	1.0

[1] Average 1994-1997

The indicators of interest rate liberalization have been rescaled to assume values between 0 and 1, with higher values indicating greater liberalization.

Source: IFS, EBRD, Abiad, Detragiache and Tressel (2007), WEO.

[28] To increase transparency, the annual financing plan for the following year and the auction calendar started being published in advance. Primary dealers were required to submit detailed secondary market data to the debt management agency, and make them public.

As discussed below, to advance financial market development, Ukraine needs to maintain control over inflation, strengthen institutional quality, and introduce reforms in the area of corporate governance. An important step would be the creation of a deep and liquid government securities market, which would facilitate the pricing of other financial assets, provide collateral for the interbank market and help the introduction of new financial products.

The government securities market

Ukraine's government securities market has hitherto remained illiquid and shallow. The stock of debt (including guaranteed debt) has been declining considerably since 1998, falling to 15.8 percent of GDP at the end of 2006, down from 66.7 percent in 1999. Nearly 80 percent is foreign currency-denominated debt. Marketable securities amounted to just over 2.1 percent of GDP at the end of 2006 (Table 6). The term structure of government securities is very fragmented with numerous maturity dates reflecting ad hoc issuance to satisfy demand of individual institutions; auctions on the primary market are conducted irregularly, and often fail to find buyers. Although it has grown in recent years, the secondary market in government securities remains volatile.

The underdevelopment of the domestic government securities market affects the financial sector in several ways. The lack of benchmark issues and a yield curve makes it difficult to price financial instruments, including corporate bonds, and may delay the development of other financial market segments. Also, commercial banks cannot resort to government bonds to diversify their portfolios in an environment where other financial market segments are small and illiquid, which contributes to sustained credit growth and financial dollarization. Moreover, the shortage of government securities to be used as collateral hampers the development of the interbank money market (Schaechter, 2005).

The underdevelopment of the government securities market also hinders the conduct of monetary policy. The lack of a yield curve inhibits the transmission of monetary policy through interest rates across different maturities[29] and deprives the authorities of information on inflation expectations, which would be particularly valuable given their plan to move to an inflation targeting framework. Also, the shortage of government securities deprives the central bank of a tool for open market operations.[30]

[29] Empirical evidence suggests that the transmission mechanism in Ukraine is still weak (Petryk and Nikolaychuk, 2006; Mykhaylychenko and others, 2004).

[30] The central bank has resorted to its own papers (certificates of deposits) to sterilize higher than expected accumulation of foreign exchange reserves.

Table 6. Ukraine: Public Debt, 1999-2006 (Percent of GDP)

	1999	2000	2001	2002	2003	2004	2005	2006
Public sector debt (incl. guarantees and arrears)	66.7	47.0	38.6	35.7	30.6	25.5	18.7	15.8
External	49.9	33.1	26.3	24.1	21.6	19.2	14.1	12.5
Domestic	16.8	14.0	12.3	11.6	9.0	6.3	4.6	3.3
By type								
Direct debt				28.6	25.1	20.2	15.1	13.0
Securities	12.6	13.5	10.9	10.8	10.4	9.5	7.3	7.0
o/w marketable	0.3	0.1	0.3	1.0	1.3	2.0	3.1	2.1
Loans	48.4	31.7	25.6	17.8	14.7	10.7	7.8	6.1
o/w NBU loan	2.7	6.2	5.1	4.6	3.9	2.8	2.1	1.7
Guaranteed debt				5.0	4.3	5.1	3.4	2.7
Arrears	5.7	1.7	2.0	2.2	1.2	0.2	0.1	0.1

Source: national authorities

Developing a deep and liquid government securities market would 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.[31] 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, as inflationary expectations affect the government's ability to extend the yield curve beyond very short maturities. This is particularly critical for Ukraine, where inflation has been volatile and above the levels observed in neighboring countries (Figure 10)[32]. Furthermore, the development of the government securities market could be enhanced by broadening the investor base, and

[31] At the moment the issuance strategy lacks coherence. For example, the Ministry of Finance commenced 2005 with a well-announced issuance strategy and monthly auctions of 2, 3, and 5-year paper. But these first steps were gradually abandoned in April 2005. Since then, the issuance of 4 and 5-year securities was replaced by shorter maturity issues ranging from 3 to 1.1 years, and auctions resumed at irregular intervals, sometimes weekly sometimes with larger gaps. Most of the new issues are very small.

[32] For an analysis of inflation volatility in Ukraine, see Chelsky (2006).

introducing a system of primary dealers once a clear debt-management strategy has been developed and the level of primary issuances increased.

Corporate bond and equity markets

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.[33] 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 due to the scarcity of long-term hryvnia funds for banks, wide interest rate spreads, and the lack of domestic syndicated lending.

Also, 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, as 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 (Figure 4).

A number of reforms could support further healthy development of the corporate debt and equity securities market. First, institutional quality and law enforceability needs to be strengthened, as court proceedings are generally cumbersome and lengthy (Figure 6). It would be important to reinforce also corporate governance, as at the moment the quality of the legislation defining the responsibilities of the board, the rights of shareholders, and disclosure and transparency is below international standards (Figure 9). 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 securities pricing. Enacting a joint stock company law would help equity market development.[34] 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 the pension reform, which could boost the emergence of pension funds.

VI. Conclusions and Policy Implications

Financial development has advanced to varying degrees in emerging Europe. Macroeconomic stability, and good institutional quality and law enforceability appear to have

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[33] Part of all the outstanding corporate bond issues are "non-market issues", placed by low credit quality real estate industry companies, which often settle debt in square meters of property built (Renaissance Capital, 2006).

[34] A new Joint Stock Company Law is currently before Parliament.

been important factors. Building on recent progress, further reforms are needed to complete the establishment of deep, liquid, diversified, and stable financial markets. Going forward, for EU members, the integration process provides a unique opportunity to expedite financial development, as harmonization requirements and competition pressure make further comprehensive reforms more compelling. Other emerging economies can advance financial development by maintaining control over inflation; strengthening institutional quality and enforceability of laws and regulations; creating a well-functioning government securities market; reinforcing corporate governance and creditor rights protection; promoting the emergence of institutional investors.

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DEFINITIONS AND DATA SOURCES

Inflation: annual change in the average CPI index. Source: WEO

Per capital income: PPP per capita income. Source: WEO

Deposit money bank credit (Percent of GDP): Source: International Financial Statistics.

Property rights scores the degree to which a country's law protect private property rights and to which its government enforces these laws. More specifically, this index assesses the likelihood that private property will be expropriated and evaluates the independence of the judiciary, the existence of corruption within the judiciary, and the ability of individuals and businesses to enforce contracts. The index has been rescaled to assume values between 0 and 1. Source: Heritage Foundation.

Bureaucracy quality measures the ability of a country bureaucracy to be somewhat autonomous from political pressure and to operate without drastic shift in policy or interruption in services when governments change. The index has been rescaled to assume values between 0 and 1. Source: International Country Risk Guide.

Rule of law is an indicator of the strength and impartiality of the legal system, as well as the popular observance of the law. The index has been rescaled to assume values between 0 and 1. Source: International Country Risk Guide.

Control of corruption measures the degree to which corruption within the political system is restrained. The index has been rescaled to assume values between 0 and 1. Source: International Country Risk Guide.

Creditor protection index measures the extent to which collateral and bankruptcy laws safeguard lenders rights. Source: Pistor, Raiser and Gelfer (2000).

Libor euro: London Interbank Office Rates on six months deposits in euro. Source: International Financial Statistics.

Financial integration: sum of total financial external assets and liabilities (percent of GDP). Source: "The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970-2004", by Philip R. Lane and Gian Maria Milesi-Ferretti, IMF Working Paper 06/69.

Trade openness: sum of exports and imports (percent of GDP). Source: International Financial Statistics.

Lending rates, Deposit rates: Source: International Financial Statistics.