

# Developments in Credit to the Private Sector in Central and Eastern European EU Member States: Emerging from Financial Repression – A Comparative Overview

*This article provides an overview of developments in credit to the private sector in Central and Eastern European EU Member States in the period from 1999 to 2004. It discusses the main determinants of credit expansion, explores its impact on economic developments and examines policy implications. The paper also reviews how the issue of credit growth has featured in the monetary integration process of new Member States so far. The analysis shows that (i) lending to the private sector has grown dynamically in most but not all countries under review, (ii) loans to households have risen dynamically in all countries and (iii) foreign currency lending has been sizeable, in particular in countries with pegged exchange rates. Credit growth has been promoted by macroeconomic stabilization, comprehensive reforms and privatization in the financial sector and by the introduction of market institutions and legal reforms. Financial depth in most new Member States continues to be comparatively low, which suggests that credit growth will tend to be high, especially over the medium term. In those countries that have recorded fast and persistent private sector credit growth in recent years, current account deficits have moved above levels that can be deemed sustainable over a longer period of time. Our analysis thus corroborates the case for keeping macroeconomic vulnerabilities in check by containing domestic demand growth and current account deficits to sustainable levels over the medium term in the countries concerned.*

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## 1 Introduction

In many of the new Member States of the European Union, domestic credit to the private sector has been growing at high rates in recent years. This development has attracted considerable attention, highlighting the need to better understand the underlying factors driving credit dynamics in the new EU Member States and to explore their effects on macroeconomic and financial stability at a stage in which these countries are preparing for their prospective integration into the euro area. Against this background, this article provides a succinct overview of developments in domestic credit to the private sector in Central and Eastern European (CEE) EU Member States.<sup>2</sup> It identifies the main determinants of domestic credit expansion and briefly discusses the latter's impact on economic developments and some policy implications that arise at the present juncture.<sup>3</sup> The paper also provides a concise account of how the issue of credit growth has featured in the monetary integration process of new Member States so far.

Specifically, the article reviews the developments in credit to the private sector on the aggregate level in these countries for the period from 1999 to 2004.<sup>4</sup> In doing so, we use data that are based on the ECB definition of credit to the private sector, which is a broad measure of the financing that the MFI

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<sup>2</sup> In this paper we focus on lending by domestic monetary financial institutions (MFIs). While lending from foreign MFIs has been an important source of financing for the private sector in several countries, this article does not cover the latter aspect as regards direct borrowing from abroad by nonfinancial corporations and households. However, in dealing with the sources of lending by domestic MFIs, it does include the intermediation of foreign funds to domestic nonfinancial corporations and households.

<sup>3</sup> The article does not cover the two new Member States from Southern Europe, Cyprus and Malta, both of which have a long-standing history of being financial centers in which a large share of services is extended to nonresidents. This particular feature has strongly determined financial sector development in these two countries and clearly sets them apart from the Central and Eastern European new Member States.

<sup>4</sup> For the Czech Republic and Slovakia, comparable data on credit to the private sector are available from the beginning of 2002 and 2000, respectively.

sector provides to the non-MFI sector, excluding general government.<sup>5</sup> Further on, the analysis is selectively extended to the sectoral level as well to the currency structure of loans to the private sector, using nonharmonized data from national sources (as no disaggregated ECB data are available yet). Consequently, these segments of the analysis should be treated with particular caution and understood as a tentative illustration of interesting aspects that need further examination in the future.

The main motivation of the paper is to give an up-to-date account of the topic and thus provide a comparative perspective across the new Member States from Central and Eastern Europe. To our knowledge, the only study with a similar focus is Cottarelli et al. (2003). However, we use a new dataset (ECB data) and cover two additional years, namely 2003 and 2004, which display very interesting lending dynamics in a number of countries under review.<sup>6</sup> In this article, we discuss the subject mostly informally. Undoubtedly, it would be desirable to examine the factors that drive credit dynamics in the new Member States with econometric estimation methods. Yet limited data availability, short time series and the comprehensive transformation process the new Member States have undergone in the recent past severely constrain such an analysis, and consequently any serious modeling and estimation effort would certainly exceed the bounds of this survey article. Moreover, there is already some empirical work on selected issues which can be examined more straightforwardly with econometric techniques, such as the estimation of expected long-term levels of private sector credit in CEE countries, and the results of these estimations are duly reported in the literature survey (section 2) of this article.

## 2 A Brief Literature Overview

Several strands of literature are of relevance to the topic at hand. Naturally, this includes studies on the determinants of credit demand and supply. As credit growth can be a manifestation of financial development, the literature on the finance-growth nexus also has a bearing. Within the literature on credit growth, finally, work on lending booms and busts is of importance, together with those parts of the financial crisis literature that explore the role of credit growth in and for periods of high financial volatility.

A look at the *theoretical literature* in these areas yields four main findings. First, there is a variety of theoretical models on credit demand, typically featuring real GDP, price indices or interest rates as explanatory variables. Yet there appears to be no widely used “standard” credit demand model which would readily offer itself for an examination (estimable specification) of credit dynamics and their macroeconomic implications in new EU Member States. Similarly, a variety of credit channel models consider how changes in the financial positions of banks (bank lending channel) and borrowers (balance sheet channel) affect the supply of credit in an economy (see Hall, 2001, for a succinct overview). Second, as regards the finance-growth nexus, some theoretical

<sup>5</sup> Credit includes MFI loans to residents and MFI holdings of securities issued by residents.

<sup>6</sup> Their study covers private-sector credit developments in Central and Eastern Europe and in the Balkans until 2002 using data from national sources; at the time, ECB data on credit developments in CEE countries were not yet available.

arguments have been made that would underpin a positive link between financial sector development and GDP growth (see Terrones and Mendoza, 2004, box 4.1, for a concise overview; compare also Mooslechner, 2003, for a survey of relevant economic theory on this issue across history). Third, on lending booms, leading theories highlight several triggers, in particular (i) real business cycles caused by technological or terms-of-trade shocks (with highly procyclical output elasticity of credit demand), (ii) financial liberalization of an initially repressed financial system, (iii) capital inflows triggered by external factors, and (iv) wealth shocks originating e.g. from comprehensive structural reforms (see Gourinchas et al., 2001, for a concise survey). In addition, less-than-fully credible policies (notably exchange rate-based stabilizations) can also play a role in spurring credit booms by setting off an unsustainable consumption boom (see Calvo and Vegh, 1999, for a review).

Moreover, one can find some theoretical insights into the mechanisms that drive or amplify credit dynamics. In this context, the financial accelerator literature is of particular relevance (which argues that positive real shocks, by raising asset prices, impact on the net worth of agents holding these assets, in turn affecting their ability to borrow).<sup>7</sup> Yet if changes in asset valuations become based on overly high expectations about future earnings (or if the initial positive shock reverts), lending expansions will turn out to be unsustainable and thus ultimately involve a correction.

*Empirical work* on credit growth provides evidence on the following key aspects. First, studies investigating credit demand are mostly on high-income industrialized countries. Their common finding is that income and interest rates can satisfactorily explain credit demand, although supply factors, if important, may reduce the reliability of the estimation results, due to difficulties in distinguishing demand and supply for credit in econometric estimation.<sup>8</sup> More generally, there are strong indications that the demand for credit is positively related to output, usually with elasticity higher than one in the long run. This implies that credit-to-GDP levels rise as per capita GDP increases, a process which is denoted as financial deepening. As regards the empirical literature on credit supply, there is a large body of studies that have investigated the existence and the importance of the credit channel for a range of countries, using both macro and micro data. While results are diverse, a number of studies – including some initial papers on CEE countries – find evidence in support of the credit channel.<sup>9</sup>

<sup>7</sup> *The financial accelerator literature intersects with the literature on the role of credit in monetary transmission, in particular the balance sheet channel, which rests on the inverse relationship between a borrower's net worth and the external finance premium he or she faces.*

<sup>8</sup> *It should be noted that most of the empirical studies estimating the demand for credit distinguish between households and nonfinancial corporations. Only a limited number of studies investigate demand of aggregate credit to the private sector (see for example a study on the euro area by Calza et al., 2001).*

<sup>9</sup> *The Eurosystem Monetary Transmission Network undertook comprehensive empirical work on monetary transmission in the euro area, which also covers the credit channel (see ECB Working Papers Nos. 91–114 and Angeloni et al., 2003). Empirical work on the credit channel in new Member States has been e.g. done by Juks (2004) on Estonia; by Hurlin and Kierzenkowski (2002) as well as Wróbel and Pawłowska (2002) on Poland; by Pruteanu (2004) on the Czech Republic; furthermore, by Schmitz (2004) on all eight new Member States from CEE. Research on the credit channel in Hungary by Horváth et al. (2005) is currently ongoing. Compare also OeNB (2001) reporting on an East Jour Fixe seminar in the fall of 2001 dealing with "The Monetary Transmission Mechanism in Austria, the Eurosystem and in Central and Eastern Europe."*

Second, on the positive interaction between finance and growth, empirical studies have examined the direction of causality, with most results suggesting that it is financial deepening which spurs economic development (see e.g. Beck et al., 2000). These studies usually focus on the size of the banking sector as a proxy for the degree of financial sector development, measured as credit to the private sector extended by banks and as banks' liabilities. While the results of this literature are appealing, it goes without saying that establishing genuine causality is intricate – with nonlinearities in the relationship between financial development and growth as well as country heterogeneity adding to the analytical problems in this area (see discussion in Favara, 2003). This, in turn, suggests that the impact of private sector credit expansion on economic growth is difficult to estimate and even more so to predict, as it is likely to be different across countries, and this also holds for countries with similar levels of economic and financial development.

Third, in the empirical literature on financial crises and, in particular, in the strand of papers that explore their predictability, rapid credit growth has emerged as a main leading indicator for financial crises. However, one cannot conclude from this literature that lending booms typically lead to financial crises. As Gourinchas et al. (2001) point out, while the conditional probability of a lending boom occurring before a financial crisis may be quite high, this does not tell much about the converse, i.e. the conditional probability that a financial crisis will follow a lending boom.

Within the empirical literature on credit growth, several studies have dealt with lending booms, in particular in non-European emerging market economies, exploring their stylized features, driving forces, macroeconomic effects as well as possible policy implications. It is noteworthy that the concept of credit/lending booms has been used in different ways in this literature. Some studies have defined lending booms in broad terms, capturing periods of rapid and sustained credit expansions as well as episodes in which credit expansions were followed by reversals. Other research has focused more narrowly on excessive cyclical expansions of credit that eventually collapse of their own accord. As one could expect, the way credit booms are defined has a strong bearing on results, i.e. on the macroeconomic and financial conditions that are found to be associated with such episodes. This relates above all to the degree of output volatility and financial vulnerability related to lending booms. Apart from these differences, a fairly uniform finding of these empirical studies is worth being reported: Credit booms in non-European emerging market economies have typically not had a major impact on inflation (compare Terrones and Mendoza, 2004; Gourinchas et al., 2001).

The empirical literature on credit growth in CEE countries is fairly limited. The main study in this area is Cottarelli et al. (2003), who examine bank credit growth to the private sector in 15 countries of Central and Eastern Europe and the Balkans. Looking at credit-to-GDP developments since the mid-1990s, the authors discern three country groupings (early birds, late risers and sleeping beauties). Based on econometric estimates of the expected long-term credit-to-GDP ratios they conclude that bank credit levels in 2002 were

not inconsistent with the structural characteristics of the economies under examination.<sup>10</sup> While credit growth to the private sector should thus be seen as a welcome structural development, the authors call on policymakers to evaluate its macroeconomic and financial stability implications carefully. A few other studies also deal with the finance-growth relationship in CEE transition economies. Coricelli and Masten (2004) present tentative empirical evidence which suggests that financial market development in CEE countries, including rising credit-to-GDP ratios, can have a positive impact on GDP growth, while also helping reduce output volatility.<sup>11</sup> Drakos (2002) reports empirical evidence for a positive link between the degree of competition in the banking sector and economic growth based on data from 21 transition economies. Koivu (2002) also finds that financial development in qualitative terms (captured by changes in interest rate margins) is positively associated with GDP growth, while quantitative indicators of financial development, namely bank credit to the private sector, did not help output growth in 25 transition economies in the period from 1993 to 2000. A possible explanation for this result is, in her view, that credit developments in that period (which, for the most part, precedes the period under examination in this article) had not always been sustainable and in some cases may have led to a decline in growth rates.

Furthermore, echoing actual developments, credit growth has become an increasingly important issue in the regular publications of central banks in the region on financial stability issues, with much of the analysis focusing on loans to households (see financial stability reports or report series of Magyar Nemzeti Bank, Narodowy Bank Polski, Česká národní banka, Eesti Pank, Banka Slovenije, Národná banka Slovenska as well as special studies in these reports or separate publications, in particular Bethlendi and Nagy Vas (2004), Czinege et al. (2004), Kask (2003); compare also Jankov and Kraft (2005) for the EU candidate country Croatia; furthermore, see as well the financial stability reports of the Oesterreichische Nationalbank, which cover Central and Eastern Europe quite extensively, given the strong involvement of Austrian banks in that region).<sup>12</sup> Likewise, credit growth has received added attention in the regular IMF surveillance of Central and Eastern European countries in the recent past.<sup>13</sup>

### 3 Key Features of Credit Growth

To place credit developments in the new Member States (MS) into context, it is useful to recall that financial systems in the countries under review are bank-based – about 85% of financial sector assets are bank assets – and that capital markets (in particular corporate bond and stock market segments) are generally

<sup>10</sup> The authors estimate a model of the long-term relationship between the private sector credit-to-GDP ratio and a set of variables (per capita GDP, public debt-to-GDP, inflation, financial liberalization, legal origin) for a panel of nontransition economies. Subsequently, they produce out-of-sample estimates for private sector credit-to-GDP ratios of CEE and Balkan countries.

<sup>11</sup> While this paper provides some provisional indications, further work would be highly useful to underpin the robustness of the results.

<sup>12</sup> Further useful information can be found in the Senior Loan Officer Surveys that are regularly published by some NCBs of new Member States (Narodowy Bank Polski, Magyar Nemzeti Bank).

<sup>13</sup> Actually, the IMF has a long-standing focus on domestic credit dynamics, the main argument being that credit developments can provide a more appropriate picture of monetary conditions than changes in money supply, in particular for economies with an external payments deficit. Consequently, limits on domestic credit expansion have played and continue to play an important role in adjustment programs supported by the IMF.

not very developed. This implies that bank credit is the main source of external financing in these countries, although also foreign direct investment (FDI) has been important in some countries. Banking sectors in the new Member States from CEE have undergone a comprehensive transformation in the past one-and-a-half decades, including a complete overhaul of the regulatory framework, bank consolidation schemes and – in almost all countries – sweeping privatization, mainly to foreign strategic owners (mostly financial institutions based in “old” EU Member States). Consequently, the governance of banks has greatly improved, and the performance and the health of banking sectors have advanced substantially, as standard prudential indicators on capitalization, asset quality, profitability and liquidity show (see ECB, 2005; Barisitz, 2005; EBRD, 2004; Bruckbauer et al., 2004; or also IMF, 2005).

The key facts about the developments in credit to the private sector in the new MS, which will be analyzed in more detail in subsequent sections, can be summarized in three main points. First, in most countries one can observe dynamic growth in credit to the private sector, well above the pace seen in the euro area (see charts 1a and 1b). Nominal growth rates of credit to the private sector (displayed in chart 1a) have been especially high in the Baltic countries and Hungary, and also high, though to a somewhat lesser extent, in Slovenia. It is noteworthy that the Baltic countries recorded very high nominal credit growth rates in an environment of rather low inflation, while in Hungary and Slovenia credit dynamics have to be seen to some extent in the context of higher and only gradually falling inflation, implying less rapid growth rates of credit in real terms (see chart 1b). In some other countries growth in credit to the private sector has picked up recently (Czech Republic and Slovakia). In Poland, on the other hand, growth in credit to the private sector has moderated in recent years from relatively high levels recorded previously. Although growth in credit to the private sector has varied across countries, lending to households, especially for home purchases, has been dynamic in all new Member States of Central and Eastern Europe.



Charts 1a and 1b

**Growth of Credit to the Private Sector, 1999–2004**

Average annual changes in nominal terms, %



Average annual changes in real (CPI-deflated) terms, %

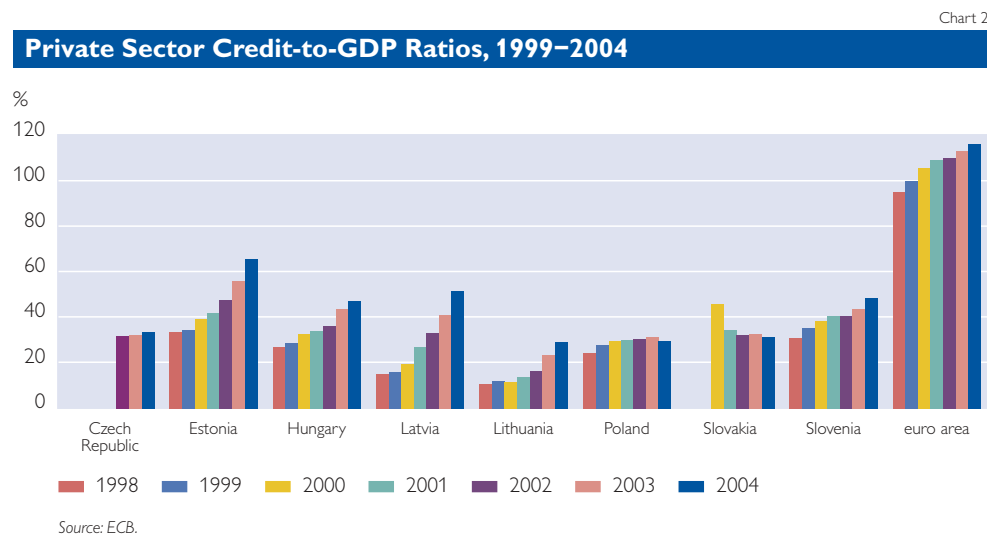


Source: ECB.

Note: The contraction in 2001 and 2002 in Slovakia is due to bank rehabilitation measures (see section 4).

Second, credit-to-GDP ratios have increased (or are beginning to increase) in most new Member States of CEE, while still remaining well below those of the euro area (chart 2). The rise was particularly pronounced in the Baltic countries. In Central Europe, the expansion of credit relative to GDP was noticeable in Hungary and Slovenia, while it was much more moderate in the

Czech Republic and in Poland. Slovakia, in turn, has recorded marginal falls in its credit-to-GDP ratios, though starting from levels that were above those of the other countries under review.



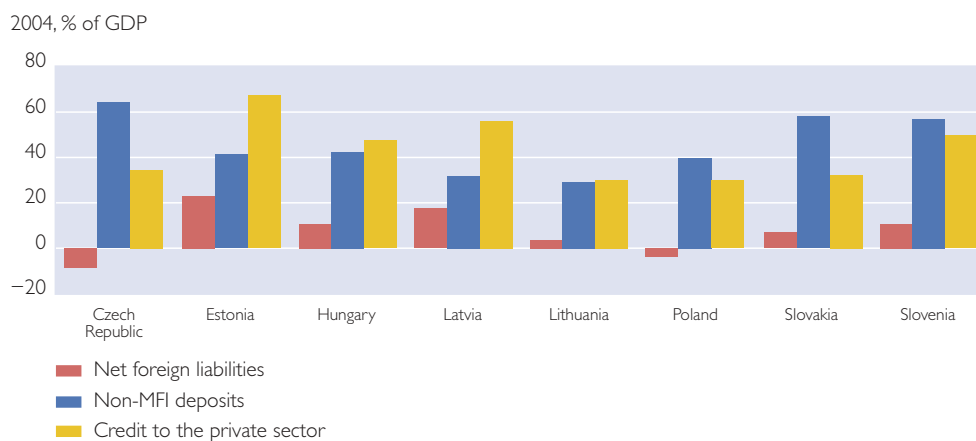
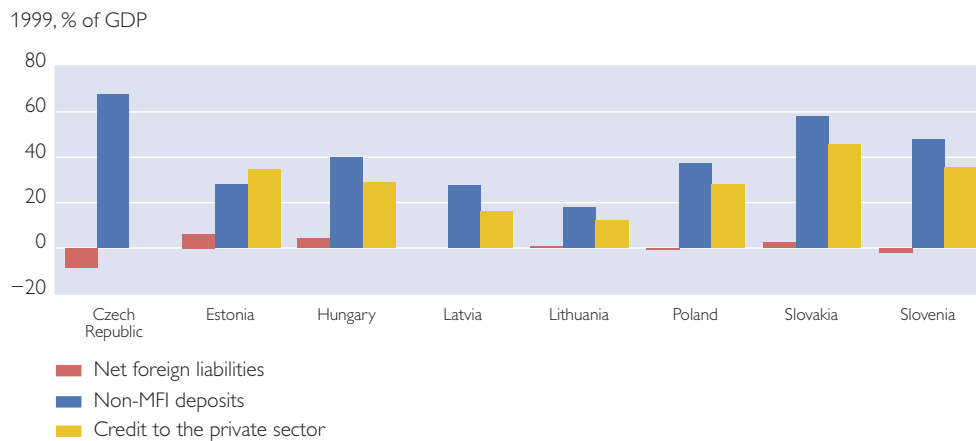
Third, credit expansion in the most of the new Member States in CEE has been financed by both domestic and foreign sources (see charts 3a and 3b). While deposits of domestic residents played the main role in funding credit growth until 2001–02 and are still the largest item on the liability side of banks, foreign borrowing has become an increasingly important source of financing the expansion of domestic credit in these countries, particularly in those new MS which have recorded rapid credit dynamics.<sup>14</sup> Whereas the banking systems of most new Member States were net lenders to the rest of the world at the beginning of this decade, the net foreign position of banks in those countries that have recorded high and rising credit growth has deteriorated noticeably more recently (as net foreign liabilities increased or net foreign assets turned into net foreign liabilities). Still, net foreign liability positions of CEE banking sectors continue to be moderate; only in Estonia and Latvia have they reached more sizeable levels (of about 23% and 17% of GDP, respectively, at the end of 2004), in part driven by borrowing from foreign parent banks. In Poland and the Czech Republic, where aggregate credit growth has remained moderate, banking systems continue to be net creditors to the rest of the world.

<sup>14</sup> In Hungary in recent years banks have also financed the credit expansion by issuing domestic debt securities, thus taking less recourse to net foreign borrowing than other new Member States recording high credit growth.



Charts 3a and 3b

### Selected Banking Sector Assets and Liabilities



Source: National central banks.

## 4 Developments across Countries, Sectoral Allocation and Currency Structure

Since 1999, credit growth has been most dynamic in the Baltic countries, Hungary and Slovenia, accelerating particularly in Latvia (especially until 2001) and in Lithuania (throughout the sample period), i.e. the two countries where credit growth started from the lowest base (relative to GDP). Estonia, Hungary and Slovenia, in turn, displayed steadier growth rates. The annual growth rates of credit to the private sector differ substantially within these five countries, ranging – in 2004 – from around 20% in Slovenia to just above 50% in Lithuania.

In the Czech Republic and Slovakia, growth in credit to the private sector picked up more recently after a period of rather moderate or, at times, negative growth before 2004 (Czech Republic) and 2003 (Slovakia). In 2004, credit growth in these two countries amounted to around 10%, picking up dynamically especially in the Czech Republic. It should be noted that in the Czech Republic and Slovakia the interpretation of credit data before 2002 is difficult due to the consolidation of the banking sector and the cleaning of the credit

portfolios of selected banks at the time. In any case, banking sector “rehabilitation” facilitated the subsequent acceleration of banks’ lending activity in these countries since 2002. In addition, the fact that more dynamic credit expansion took place only recently can be attributed to the cautiousness of banks to finance longer-term capital projects in the business sector and, in the Czech Republic, also to relatively moderate real GDP growth in past years. Moreover, FDI (which also includes credit transactions between affiliated enterprises) has been a particularly important source of financing in these two countries and has thus substituted for bank credit.

In Poland, lending to the private sector decelerated from relatively high rates recorded in the period up to the end of 2000, to average annual growth rates of around 5% in 2004. This was related to the economic slowdown and, in particular, the severe contraction of gross fixed capital formation during the earlier years of this decade. In the more recent economic upswing since 2003, the ample profit situation of the enterprise sector has promoted internal financing of corporate sector activities and thus curbed overall credit demand in the economy. Household borrowing in contrast expanded dynamically.

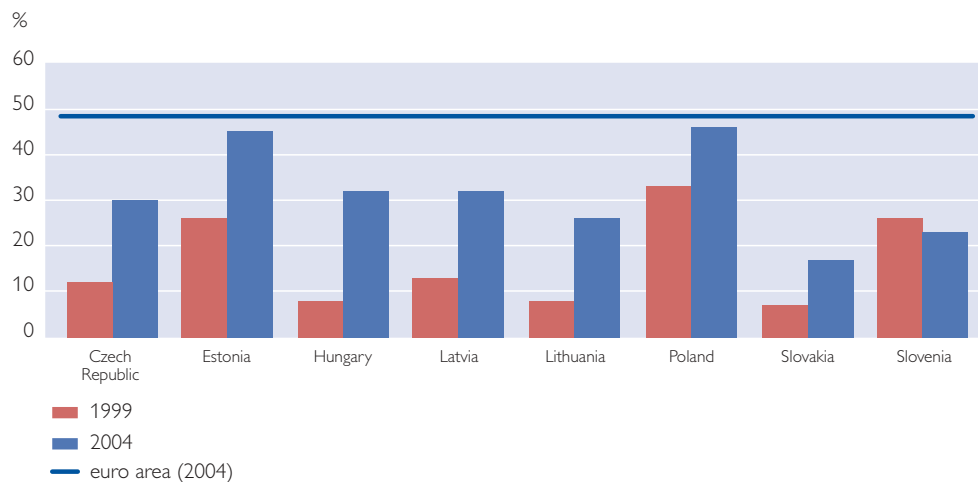
With regard to sectoral allocation, the trend of strong growth of loans to households, primarily mortgage-based housing loans, in general continued in most of the countries throughout the period from 1999 to 2004.<sup>15</sup> However, housing loan dynamics have recently started to decelerate in a few countries, reflecting the tightening of mortgage scheme subsidies (Hungary) and base effects after prior spikes in lending (e.g. in Latvia). In Slovakia, by contrast, commercial banks adjusted their interest rate policies to offset lower subsidies, which led to a further strengthening of mortgage loan dynamics. In Slovenia, where the expansion of credit to the private sector has not been based on housing loans, such loans have also begun to pick up considerably more recently. Furthermore, in some countries, consumer loans have also grown dynamically, underpinning buoyant private consumption.

Overall, loans to nonfinancial corporations have grown at a more measured pace than loans to households, so that the share of household lending in total domestic lending increased considerably in most countries during the period under review (see chart 4). However, it should be noted that the available data seem to overstate the difference in the dynamics of lending to these two sectors, mainly for two reasons. First, developments in credit to corporations have been affected by bank restructuring programs, as mentioned earlier. Second, loans to nonincorporated businesses are usually recorded as lending to households. Nevertheless, with the notable exception of Poland, the growth of credit to the corporate sector has tended to accelerate in recent years, benefiting from reduced levels of interest rates, as well as from an improved economic outlook. Based on information by NCBs from new Member States, the variation in the dynamics of lending to the corporate sector across countries can be largely explained by differences in the reliance on foreign sources, including credits from nonresidential banks and FDI, and in the companies’ own internal funds and savings.

<sup>15</sup> The subsequent analysis is based on national sources and uses (more narrowly defined) data on loans to households and nonfinancial corporations.

Chart 4

Share of Household Lending in Total Domestic Lending, 1999 and 2004

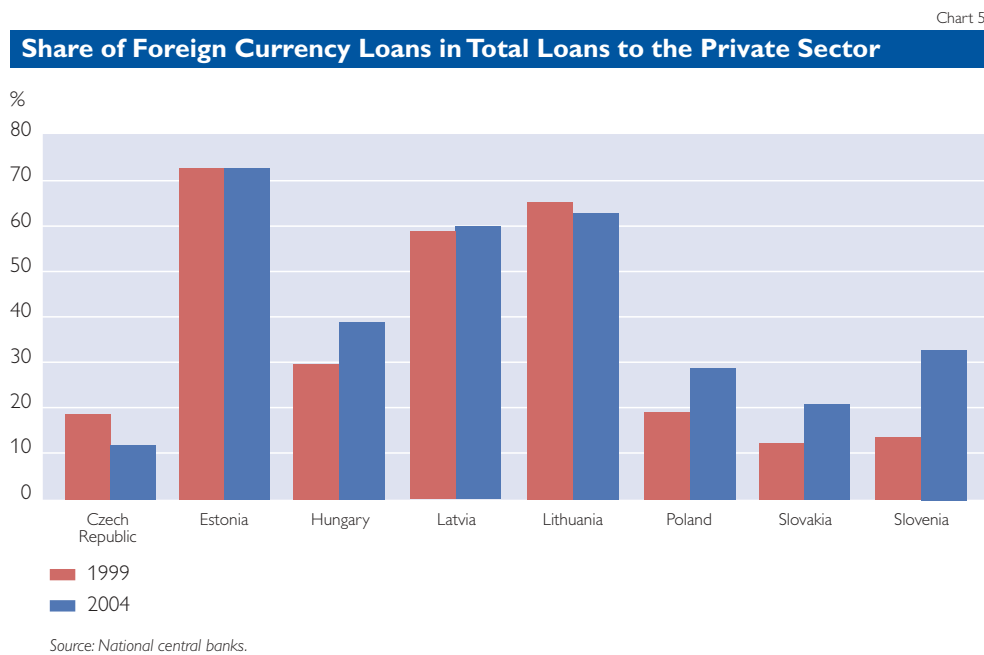


Source: BIS.

Note: The authors are grateful to Dubravko Mihajjek for agreeing to the use of these data compiled by the BIS from the IMF's IFS database and national sources.

In terms of the currency structure of lending to the private sector, foreign currency-denominated or foreign currency-indexed loans have had an important share in total private sector loans in most of the Central and Eastern European new Member States, with their shares in 2004 ranging from 12% in the Czech Republic to 72% in Estonia (see chart 5). It is worth noting that in three of these countries, namely in the Baltic countries, the share of foreign currency-denominated loans was at or above 60% of total loans to the private sector. Furthermore, these shares remained relatively steady between 1999 and 2004, which implies that foreign currency-denominated borrowing had already built up in the Baltics before 1999. Long-standing exchange rate stability and a high degree of foreign ownership in the banking sector may have played a role in these developments. In the other countries, with the exception of the Czech Republic, the share of foreign currency-denominated borrowing increased over the same period, most notably in Slovenia and in Slovakia, where it more than doubled and almost doubled, respectively. The growing importance of foreign currency-denominated borrowing may be attributable to an increased linkage of the currency toward the euro (Slovenia) or emerging appreciation expectations (Slovakia), and, moreover, to interest rate differentials and thus lower borrowing costs. In Slovakia, the strongly increased role of foreign-owned companies may also have played a role. The Czech Republic, by contrast, which has pursued a managed float and enjoyed low domestic-currency interest rates in recent years, was the only country where foreign currency-denominated borrowing contracted compared to 1999. Looking at most recent developments, it is noteworthy that during the course of 2004, foreign currency-denominated loans to the private sector increased considerably in most of the CEE Member States (by between 40% and 50% annually, measured in domestic currency) except in Lithuania and the Czech Republic, where foreign currency-denominated loans

remained broadly unchanged, and in Poland, where they declined by 18%, partially due to valuation changes of foreign currency loans in domestic currency because of exchange rate changes.



Foreign currency-denominated loans in CEE Member States are mainly granted to the nonfinancial corporate sector, and in some countries, in considerable magnitudes also to households. Such loans are mostly euro-denominated. In most countries under review, the euro and its legacy currencies have played a leading role in foreign currency lending from the outset. In the remaining countries, where the U.S. dollar was preeminent, the euro has gained ground, to different degrees, with the reorientation of exchange rate policy to the single currency. However, in some countries, other currencies, in particular the Swiss franc, have begun to gain importance most recently, also in household borrowing. Foreign currency loans to nonfinancial corporations represent an important share in total loans outstanding to this sector in all CEE EU countries, ranging from around 20% in the Czech Republic to 80% in Estonia, whereas for the household sector four of these countries, namely the Baltic countries and Poland, stand out with shares ranging from 25% in Poland to 66% in Estonia.

Overall, borrowing in foreign currency has been more extensive in countries with fixed exchange rate regimes, particularly currency board arrangements, as the perceived exchange rate risk is smaller. In addition, in most of the countries, borrowing in foreign currency has been associated with lower borrowing costs and supported by progressing financial liberalization. Besides that, a sizeable share of borrowing in foreign currency is generally undertaken by larger multinational firms, for which information asymmetries are lower. Furthermore, foreign-currency borrowing by the corporate sector is frequently used for hedging purposes. Large multinational firms play a prominent role in this respect as well, as the greater part of their revenues is in

foreign currency.<sup>16</sup> By contrast, the rationale for household borrowing in foreign currency is much less clear cut, even when and as long as sizeable interest rate differentials to key currencies prevail, as it substantially increases their exposure to exchange rate risk, especially for loans denominated in other foreign currencies than the euro.

## 5 The Main Driving Forces of the Credit Expansion

Lending growth in the new Member States has been promoted by a combination of macro- and microeconomic factors, which have affected both the supply of, and the demand for, private sector credit.

Credit expansion was promoted by macroeconomic stabilization and, in particular, a build-up of confidence in policy frameworks that ensured an environment of moderate or low inflation, which allowed interest rates to decline. For the period under review, interest rates have been at low levels in several new Member States (the Baltic countries and the Czech Republic), while they have come down – in some cases substantially – in the others (Hungary, Poland, Slovakia and Slovenia). Thus, financing conditions have been favorable or improving.

Privatization and restructuring of the banking sector as well as regulatory reforms of financial markets have improved confidence and promoted domestic private sector savings, a particularly important source of banks' financing of the credit expansion in many countries. Banking sector reforms have also led to substantially higher competition and increased the supply of new products (e.g. mortgage loans). The business strategies of the revamped banks have aimed at raising market share and profitability. The banks thus began to focus on those market segments that had been grossly underserved in the earlier stages of the transformation process, notably lending to small and medium-sized enterprises and to households. Sizeable positive margin spreads against the euro area have been an important incentive for banks in this respect (on this particular aspect, see Walko and Reininger, 2004). Raising the previously relatively low level of bank loans in total assets has been one of the strategies of banks to improve profitability.

As a consequence of banking sector reforms and, more generally, advancing economic transformation as well as financial liberalization and integration, the access of banks to foreign funds has greatly eased. Alongside, the cost of foreign borrowing has fallen, as risk premia declined and global interest rates were low. This has allowed banks in a number of new Member States to finance sustained credit expansion increasingly from abroad (see section 3).

It is noteworthy that public sector credit-to-GDP ratios were broadly stable or, in some cases, slightly rising, in the new Member States from 1999 to 2004. Thus, there is no evidence for a crowding-in of private sector credit as a consequence of contracting public borrowing over the period under review.

Improvements of the domestic legal system have reduced uncertainty and credit risk, thereby promoting credit supply. This is particularly true for reforms that have facilitated contract enforcement and the seizure of collateral.

<sup>16</sup> For an empirical investigation of why firms borrow in foreign currency, see for example Keloharju and Niksanen (2001) for Finland and Kedia and Mozumdar (2003) for the United States.

Alongside, robust growth in output and incomes in most new Member States have underpinned credit demand in recent years. This favorable performance also boosted income and profit expectations, thus promoting intertemporal substitution (i.e. borrowing against expected future incomes and profits), which further increased credit demand.

In some country cases, generous subsidy or guarantee schemes for housing loans have spurred credit demand in this segment. At the same time, increasing property prices in the new Member States have also promoted credit demand. As property has become more expensive, the size of individual housing loans has risen. Moreover, in some countries, these price increases have been perceived as the beginning of a price level convergence process in this sector, thus creating expectations of further price increases and encouraging agents to frontload property purchases early in the process. Furthermore, these price increases have raised wealth, in particular household wealth. So far, there is some but overall limited evidence that households indeed borrow against these increases in their net worth.

Looking ahead, Cottarelli et al. (2003) argue that there are two main macroeconomic forces that are likely to support private sector credit dynamics, namely (i) crowding-in, as countries consolidate their fiscal accounts in preparation for a future entry into the euro area, and (ii) capital inflows in the context of nominal convergence and catching-up. Due to the favorable net foreign asset positions of banks in most countries under review, there appears to be further room for financing credit expansion from abroad.

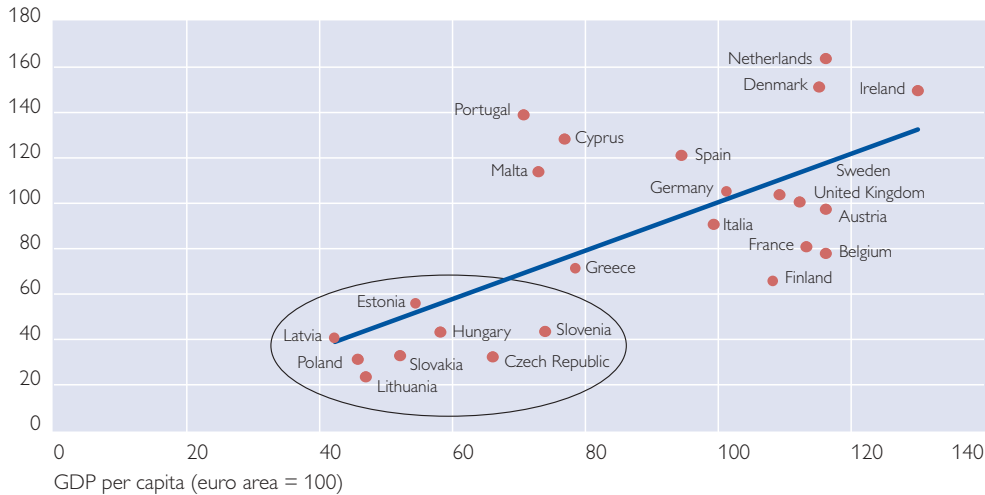
Moreover, despite credit developments in recent years, financial depth and, more specifically, private sector credit-to-GDP levels in most new Member States still remain below average levels in other countries that are at a similar stage of development. While credit to previously underdeveloped market segments has risen rapidly, both driven by demand- and supply-side factors, it seems that this process is still incomplete, in particular in the countries where credit growth has gained momentum only more recently. On the other hand, in those countries which have already experienced a longer period of fast credit growth and low interest rates, saturation effects may kick in earlier, thus dampening credit growth dynamics.

Chart 6

**Private Sector Credit-to-GDP Ratios and Per Capita GDP**

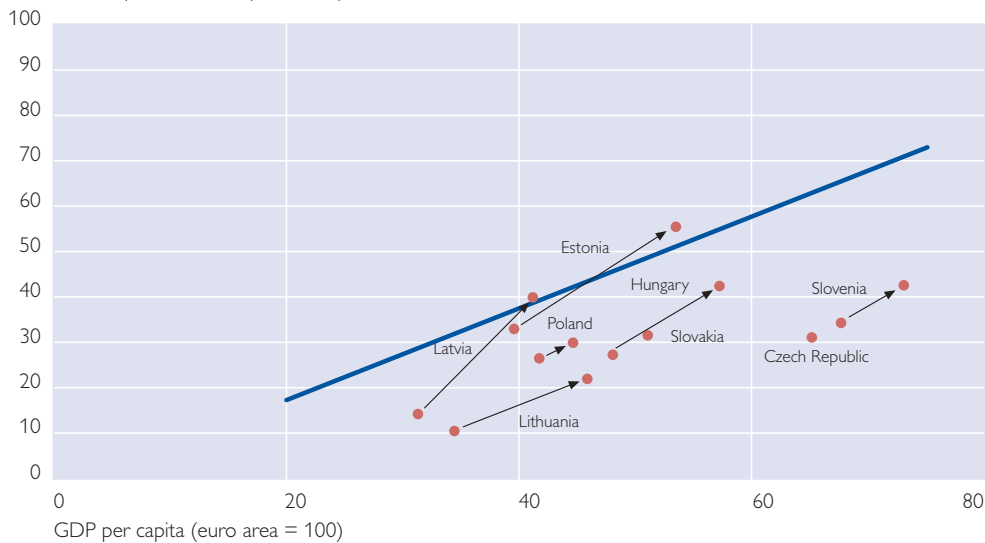
**EU-25, 2004**

Credit to the private sector (% of GDP)



**New MS, 2004 versus 1999**

Credit to the private sector (% of GDP)



Source: ECB.  
Note: Regression line estimated on EU-24 (EU excluding Luxembourg). Based on ECB data, this regression line illustrates for the EU countries the positive correlation between credit-to-GDP ratios and per capita GDP that emerges as a statistically significant empirical regularity in larger samples (estimated on the basis of data from the IMF's IFS database and Penn World Tables); compare e.g. Cottarelli et al. (2003), figure 3, or Terrones and Mendoza (2004), figure 4.1.

One could therefore argue that the financial deepening process in the new Member States has two main dimensions. Over the medium term, one can see a move from a state in which the economy is (or some of its sectors are) financially underserved, to a state in which the depth of financial services corresponds to the structural characteristics of the economies and their level of economic development (move toward an equilibrium level of financial depth). At the same time, the equilibrium level of financial depth itself will rise

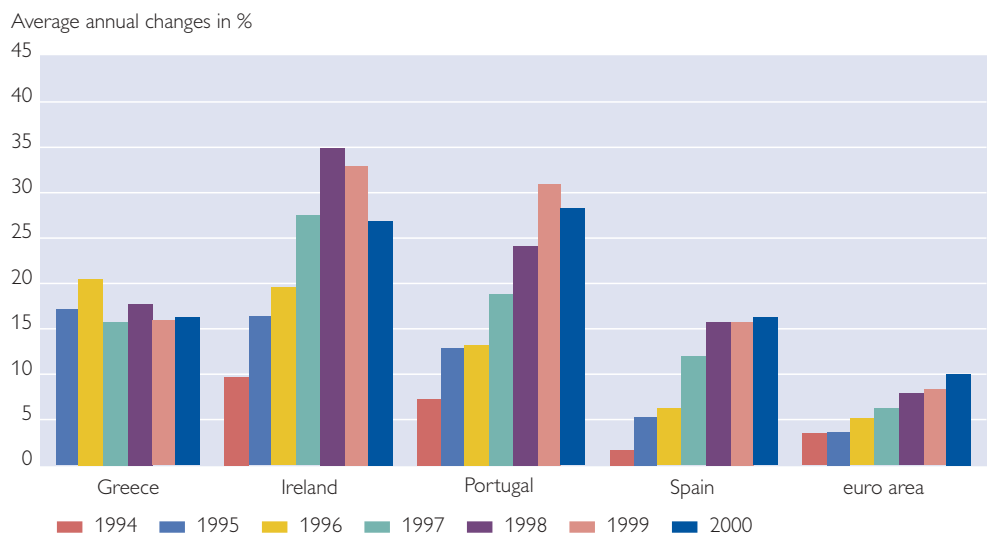


and thus spur credit growth as the Central and Eastern European economies are growing richer. In addition, cyclical movements may temporarily lend further momentum to credit growth dynamics in some periods.

Finally, the experience of the “old” Member States, particularly former catching-up economies like Greece, Ireland, Portugal and Spain, is also supportive of expectations of dynamic credit growth in the new Member States, especially over the medium term. In the run-up to the euro, Greece, Ireland, Portugal and Spain faced low (and, at times, negative) real interest rates, strong income and private consumption growth, rising house prices and, concomitantly, a fast expansion of credit to the private sector (see chart 7). The experience of these countries also suggests that the macroeconomic and financial conditions associated with episodes of fast credit expansion may differ considerably, even if lending dynamics are similar during the boom period.

Chart 7

### Loans to the Private Sector in Selected Euro Area Countries



Source: ECB.

Note: The chart displays loan data, as data on credit to the private sector in these countries are not available on a harmonized basis for the respective period.

## 6 Implications of Fast Credit Growth: Economic Effects and Policy Responses

Episodes of fast credit growth can have potentially substantial effects on macroeconomic developments and financial stability. To a large extent, the economic and financial impact of a lending boom depends on its characteristics, namely whether such a boom reflects a sustained financial deepening process or whether it is the first stage of an “excessive” credit cycle that has no fundamental underpinnings and will eventually collapse in a lending bust. Of course, distinguishing between different kinds of lending booms in real time is notoriously difficult.

Moreover, even a credit boom that is in principle consistent with financial deepening may get out of hand if the process toward a higher degree of financial depth occurs too fast. This could lead to financial fragility and macroeconomic vulnerability. Financial stability could become endangered if the limits of credit risk assessment and monitoring capabilities of financial institutions are overstretched and, consequently, asset quality worsens. Macroeconomic risks, in turn, could emerge if fast credit growth spurs domestic demand to a point at which sizeable positive output gaps arise. Even though the empirical evidence from non-European emerging economies suggests that the relation between credit and inflation developments is not very strong (see section 2), such a situation could still pose risks to achieving or maintaining price stability. While such inflation pressures may be mitigated for countries that display high or very high trade openness, like the new Member States do, small open economies are particularly prone to building up large external imbalances when domestic demand surges. However, if these risks are successfully contained, the effects of a lending boom that brings about financial deepening will be essentially benign, especially in as much as increased financial intermediation promotes output growth.

The discussion in section 5 suggests that there are good reasons to interpret credit developments in the new Member States to date as a manifestation of financial deepening. At the same time, credit expansion in some countries under review has indeed been rapid and persistent. This raises the question of whether the adjustment to the expected longer-term levels of financial depth takes place at an appropriate or possibly at an overly fast pace.

A short review of financial and macroeconomic trends in the new Member States offers some insights on this issue. First, the overall financial stability picture in the new Member States from Central and Eastern Europe is positive and improving (see section 3). Strong credit growth has helped maintain bank profitability amidst narrowing interest rate margins. Nonperforming loan ratios have declined in the past few years (which, of course, is to some extent a consequence of rapid credit growth itself, as a large part of credits has been extended only recently and the denominator of such loan ratios rises fast<sup>17</sup>).

There are, however, three qualifications to this generally positive situation. One relates to foreign currency lending. While the direct foreign exchange risk of banks is small (see OeNB, 2004), there certainly is an indirect credit risk for banks in as much as borrowers are not hedged against exchange rate risk (see section 4). Second, as data on indebtedness, debt-to-income ratios and debt servicing costs at a sectoral level are not or not fully available, there is some uncertainty as to what extent a potential reversal in interest rate convergence or a cyclical downswing could affect the debt servicing ability of the nonfinancial private sector. At the same time, there are some indications that private sector debt levels and debt servicing costs in most new Member States are comparatively low. Yet the relatively large proportion of basic costs of living (such as food) compared to income levels limits households' room for servicing

<sup>17</sup> Moreover, as mentioned above, the removal of nonperforming loans from banks' balance sheets has also played a role in some of the countries under review.

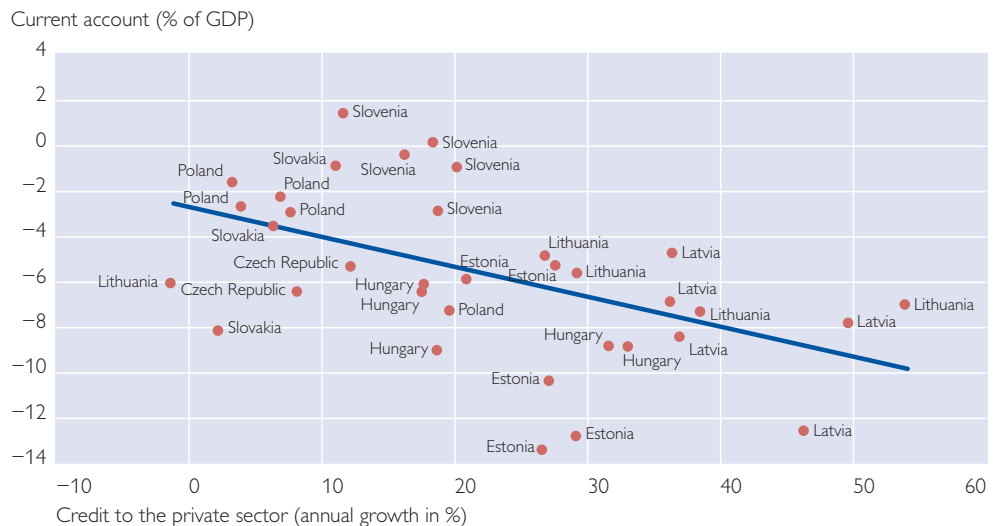
debt in these countries. The third qualification, finally, concerns the rise in mortgage lending, which implies an increasing exposure of banks and households to real estate market developments.

In the macroeconomic realm, it is plausible that the recent output growth record indeed benefited from progressing financial sector development, even though it is not easy to quantify this effect.<sup>18</sup> Furthermore, there is no evidence that credit growth has added substantially to inflation pressures so far, as one cannot find significant comovements between domestic credit growth and inflation (compare also Xiao, 2004, for Latvia, based on data up to end-2003). However, one may conjecture that the persistent buoyant demand and credit growth in the Baltic countries may have contributed somewhat to price dynamics in the most recent past. Nevertheless, other factors, in particular supply-side shocks (increases in indirect taxes, upward adjustment in regulated prices, oil price developments and in some countries food price increases), have been much more important drivers of inflation in these country cases.

At the same time, the link between strong demand dynamics, underpinned by fast credit growth, and external imbalances appears to be more significant. In this context, it seems suggestive that the countries with the most dynamic credit expansion (the Baltic countries and Hungary) have also recorded the largest current account deficits (see chart 8).

Chart 8

**Credit to the Private Sector and Current Account Positions, 2000–2004**



Source: ECB.

Note: The chart displays five annual data points each for the Baltic countries, Hungary, Poland and Slovenia (2000–2004), two annual data points for the Czech Republic (2003–2004) and three annual data points for Slovakia (2002–2004).

While current account deficits may well be justified in catching-up economies when viewed from an intertemporal perspective (allowing countries to finance higher investments in a setting of high expected returns on these investments or to smooth consumption), current account deficits in some of these

<sup>18</sup> Compare discussion of this issue in section 2.

countries have moved beyond levels that are sustainable in the medium to longer term (see table 1). This assessment is robust to alternative methods of estimating or calculating sustainable current account positions.<sup>19</sup> External imbalances that exceed sustainable levels for a prolonged period of time may pose risks to macroeconomic stability, especially if they contribute to shifts in market sentiment (e.g. due to rapid debt dynamics). Such changes in perceptions and expectations could be particularly detrimental in a setting in which countries are getting ready to meet the criteria for a future entry into the euro area (section 7 below has a more detailed discussion on this aspect of monetary integration).

Table 1

Current Account Positions								
Actual Outcomes and Estimates of Sustainable Longer-Term Positions								
	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Slovakia	Slovenia
	% of GDP							
<b>Estimates</b>								
Minimum	-7.1	-12.1	-6.2	-9.8	-11.9	-7.1	-10.2	-3.3
Maximum	-2.1	-4.4	-1.4	-0.4	-4.8	2.0	1.9	1.7
Mean	-4.8	-8.0	-4.2	-6.7	-7.8	-3.3	-6.5	-0.5
<b>Actual outcomes</b>								
2000-2004 average	-5.5	-9.4	-7.9	-7.9	-6.0	-3.0	-5.2	-0.5
2004	-5.2	-12.6	-8.8	-12.3	-7.2	-1.6	-3.5	-0.9

*Source: Bussière et al., 2004 (estimates of sustainable positions); ECB (actual outcomes).*

Turning to the issue of policy implications now, the evidence and argumentation laid out in section 5 seems to indicate that credit growth will very likely remain fast in the new Member States or accelerate further in those countries where it is still comparatively moderate. There are only few, if any, reasons which would point to a substantial “endogenous” moderation of credit dynamics over the medium term. Thus, a policy response may be needed to decelerate credit growth and contain vulnerabilities, in particular with respect to external positions.

A set of policy tools can be used to influence credit developments, above all interest rate policy, prudential action, other regulatory measures, moral suasion and fiscal policy. Before discussing these instruments, it is worth recalling that credit developments play a more or less important role in the conduct of monetary policy, depending on the policy framework in place. Central banks with monetary targets or with reference values for monetary aggregates

<sup>19</sup> The various issues that arise in the context of estimating or simulating sustainable current account positions cannot be explored within the confines of this article. The estimates displayed in table 1 are based on an intertemporal current account model that considers the current account from a savings-investment perspective with consumption smoothing over time by lending and borrowing abroad. Two modifications to the standard intertemporal current account model are introduced, namely heterogeneity of agents and habit formation, to capture the persistence of current account deficits and the impact of fiscal policy on the current account. The authors maintain that such a model is particularly well suited to analyze current account balances of catching-up economies (Bussière et al., 2004). For alternative but somewhat outdated estimates of sustainable current account positions see Doisy and Hervé (2001). Compare also various simulations of sustainable current account positions in various IMF country reports (e.g. Burgess et al., 2003, for the Baltic countries).

typically monitor domestic credit and, in particular, credit to the private sector closely, given that it usually is a main counterpart of broad money. In the case of the ECB, “the developments of credit to the private sector and of the most liquid components of M3 [...] are followed with particular attention. This broader analysis is necessary to put developments into perspective to obtain a better understanding of M3 developments and, more generally, to develop a broader insight into monetary conditions and their implications for monetary policy decisions aimed at maintaining price stability” (Issing, 2001). More generally, most central banks, irrespective of their monetary strategies, find it useful to watch credit developments and the indebtedness of the nonfinancial sectors in their overall assessment of economic and financial conditions. Moreover, developments in credit aggregates are important for understanding the monetary policy transmission mechanism, especially since the interest rate and credit channels are likely to strengthen as financial deepening proceeds.

Monetary policy options to curb credit growth depend on the monetary policy and exchange rate strategy in place. However, in the CEE Member States the scope of monetary policy options to deal with rapid credit growth appears to be limited. Apart from the constraints that are posed by explicit or implicit exchange rate targets, a tightening of the policy stance may just lead to a crowding-out of domestic lenders and a shift to borrowing abroad. Likewise, such a policy move may lead to a substitution of domestic currency borrowing for foreign currency borrowing.

Similar limitations possibly emerge with respect to prudential action. Measures to improve banking supervision can help moderate credit growth and are actually often the first best response, as long as regulation and application practice in this area is not yet fully in line with international standards. However, by now, harmonization in the field of prudential supervision is far advanced and, in fact, regulations in the new Member States are even stricter than in the “old” Member States in a few respects. Tightening prudential rules further would have two potential downsides. First, domestic banks would be put at a disadvantage vis-à-vis nonbank intermediaries (if tightening measures pertain only to the banking sector) or foreign intermediaries could gain an undue competitive edge in serving the domestic market (if the whole financial sector is covered). Second, very tight prudential regulations could constitute an incentive for foreign parent banks to transform their subsidiaries in the domestic market into branches, thus “escaping” from the constraining regulatory context and effectively withdrawing these entities from the supervision of the host country. Despite these limitations, there may still be some room for selected prudential measures, in particular dynamic provisioning and capital requirements that are designed to dampen cyclical fluctuations of lending activity. Likewise, temporary changes in liquidity ratios and loan-to-value ratios could be of use in some cases.

Administrative measures such as capital controls and credit ceilings may be temporary stop-gap measures that could help gain a bit of time in critical situations. However, they are not in line with an integrated financial market in the EU, nor would they most likely be effective beyond the very short term.

Moral suasion and communication on the risks related to high lending growth are further tools that are at the disposal of the authorities, in particular the central bank and the financial supervisory agency in countries where such an authority has been established to oversee the financial sector. How effective these instruments are appears to be case- and time-dependent.

Fiscal policy can play a central role in controlling aggregate demand pressures and could thus be used to contain positive output gaps and rapid domestic credit growth. Time lags in policy formulation and implementation may, however, make it difficult to use this instrument in practice. Moreover, the political will to use fiscal policy to contain risks to the external position of an economy may be limited. Apart from its impact on overall demand and credit developments, specific fiscal measures may have significant impact on credit demand in some segments. This pertains especially to the tax regime and to subsidy and guarantee schemes, which can strongly affect incentives to borrow (e.g. mortgage-based housing loans).

Some new Member States have in fact taken measures in recent years to contain credit growth. Apart from changes in tax and subsidy rules (see section 4), moral suasion has been applied by the Baltic countries and Hungary. Furthermore, Latvia tightened its monetary policy stance in the course of 2004, with the explicit motivation to slow lending dynamics. Improvements in prudential regulation and supervision have been taken for prudential reasons in some countries, while the authorities' hope that such measures would also help address the macroeconomic aspects of lending booms were occasionally evident. There was no noticeable recourse to administrative measures to cope with credit dynamics in the new Member States. Fiscal policy has generally not been used very actively to deal with demand and credit booms. In fact, in some instances, fiscal laxity has prevailed, thus aggravating macroeconomic stability problems and the effects of private sector credit growth on external positions.

## **7 Credit Growth and Monetary Integration**

According to their stated policy intentions, the new Member States plan to be ready for the introduction of the single currency between 2007 and 2010. Against this background, macroeconomic and structural policies in the new Member States are increasingly geared toward the prospective adoption of the euro. A number of new Member States have already entered ERM II, which is an important step and stage in the process of monetary integration.

A smooth functioning of ERM II is of common interest to all parties involved in the mechanism. In order to minimize risks during participation in ERM II, policy consistency is of key importance, even though there are no formal criteria and preconditions for joining the exchange rate mechanism (see ECB, 2003). Policy consistency is ensured on three planes. First, major policy adjustments – for example with regard to price liberalization and fiscal policy – are to be undertaken prior to participation in the mechanism, while fiscal policy is to embark on a credible consolidation path (necessary policy corrections at this stage are sometimes referred to as “prior action”). Second, when joining the mechanism, new entrants may undertake jointly defined



commitments that underscore and reinforce the compatibility of their overall policy frameworks. Finally, during participation in ERM II, policy consistency is monitored on a regular basis by the European System of Central Banks.

In all this, credit developments are one of those aspects that are of relevance for policy consistency. A case in point are the policy commitments with respect to credit growth into which Estonia, Lithuania, Slovenia and Latvia entered when joining ERM II.<sup>20</sup> Furthermore, current account imbalances need to be reduced to sustainable levels over the medium term (Estonia, Latvia) or kept at sustainable levels (Lithuania) so as to ensure macroeconomic stability and keep external vulnerabilities in check during the ERM II stage. Latvia faces a twin challenge, as it needs to achieve a sustainable reduction of inflation – which has hovered in the higher single digits since the second half of 2004 – while bringing down the current account deficit to sustainable levels. While fiscal policy represents the key policy instrument to achieve these objectives, other policy tools should also help restrain domestic demand and thus external imbalances, namely effective financial supervision, which should assist in containing domestic credit growth (Estonia and Lithuania). In Latvia, in turn, the authorities should remain vigilant concerning risks of excessive credit growth, while financial supervision will assist in promoting prudent credit policies and in limiting risk in the banking sector. Moreover, in the cases of Estonia and Latvia, also measures promoting wage moderation feature in the policy commitments. In the case of Slovenia, the authorities committed to continue taking the necessary measures to lower inflation in a sustainable way. In this context, fiscal policy is assigned a central role in controlling demand-induced inflationary pressures, while financial supervision will assist in containing domestic credit growth.

Moreover, in a forward-looking perspective, credit growth developments matter in the achievement of a high degree of sustainable convergence, which is required for the prospective adoption of the euro. The ECB 2004 Convergence Report, in which the performance of the new Member States with respect to the Maastricht convergence criteria was examined for the first time (in parallel with a Convergence Report produced by the European Commission), is a useful reference point.

The ECB Convergence Report discusses the issue of credit growth from the angle of both price stability and exchange rate stability. More specifically, it relates the rebound of inflation in some new Member States in 2003–04 to a combination of factors, in particular EU entry-related increases in indirect taxes and administered prices, rising oil prices and, to some extent, also to rapid domestic demand growth, reflected in high wage and credit growth. The report also states that in a setting of strong domestic demand and an expected pick-up in external demand and thus in capacity utilization, there are risks to price stability in the respective countries over the medium term. At the same time, the report points out that in the new MS from CEE the starting level of domestic credit was low, reflecting the relatively low level of financial intermediation.

In its country-specific forward-looking analysis, the report contains references to strong credit growth as one of the factors that implies upside risks to future inflation in the cases of Latvia and Lithuania. For both countries, a

<sup>20</sup> Estonia, Lithuania and Slovenia joined ERM II in June 2004, and Latvia in April 2005, together with Cyprus and Malta.



determination to contain strong credit growth is also perceived as necessary to ensure the sustainability of the sizeable current account deficit (Lithuania) or its orderly reduction to sustainable levels (Latvia). In a similar vein, the containment of credit growth is flagged as one of the key requirements for Estonia to achieve a high degree of sustainable convergence, while it would also contribute to ensuring an orderly reduction of the current account deficit to sustainable levels. Finally, in the case of Slovenia, the report identifies a continued need to control demand-induced inflationary pressures and sees a role for financial supervision in this context to assist by containing domestic credit growth.

The 2004 Convergence Report by the European Commission also refers to credit developments in the new Member States. However, the Commission Report does not explicitly discuss macroeconomic effects of credit dynamics or possible policy implications, as it deals with credit developments when examining the result of financial market integration. It states that in the eight new Member States of Central and Eastern Europe, the level of financial intermediation remains comparatively low and refers in this context to total loan-to-GDP ratios. The Commission Report also presents evidence on foreign currency loans in the countries under review and draws attention to the exchange rate risks involved.

## 8 Conclusions

This article has given an overview on domestic private sector credit developments in Central and Eastern European EU Member States in the period from 1999 to 2004 and has examined their determinants as well as their economic and financial implications. The main findings of the analysis can be summarized as follows:

Lending to the private sector has grown dynamically in most but not in all new Member States from Central and Eastern Europe. Aggregate credit growth to the private sector has been fast in the Baltic countries, in Hungary and, to a somewhat lesser extent, in Slovenia, while having been much more moderate in the Czech Republic, Slovakia and Poland. Lending to households has expanded strongly in all countries under review, rising significantly faster than total lending to the private sector (with the exception of Slovenia), but from a very modest point of departure. Foreign currency lending plays an important role, in particular in countries with explicit exchange rate regime commitments. Banks have financed credit growth by both domestic and foreign sources, with an increasing reliance on the latter in countries recording a rapid expansion of lending to the private sector.

Credit growth has been promoted by macroeconomic stabilization, comprehensive reforms and privatization in the financial sector and the introduction of market institutions and legal reforms (especially contract enforcement and seizure of collateral) throughout the economies of the countries under review. As a consequence, the new Member States have experienced a move from repressed to liberalized financial systems. Robust GDP growth has underpinned credit growth, while rising income and profit expectations have encouraged inter-temporal substitution, thus further boosting domestic lending.

Given that this process is still underway and, in some countries, still at a relatively early stage, credit growth will most likely remain fast in the new Member States or accelerate further in those countries where it is still comparatively moderate. Lending dynamics will presumably be especially high over the medium term, as liquidity constraints on segments that were financially underserved in the past (small and medium-sized enterprises, households) are being removed and these sectors shift to debt levels that are rational from an intertemporal perspective. In the longer run, lending growth will be mainly driven by the convergence process in per capita GDP terms.

Against this background, credit developments in the new Member States to date can presumably be interpreted, by and large, as a manifestation of financial deepening. At the same time, the rapid pace of credit expansion and its persistence in a number of countries does pose risks.

The financial stability picture in the new Member States is generally positive, but the pace of lending growth calls for heightened vigilance so as to ensure that asset quality remains sound. Moreover, specific attention needs to be given to risk elements, in particular as regards foreign currency lending.

On the macroeconomic side, the rapid process toward higher levels of financial depth in some countries and the concomitant credit expansion has fueled demand booms. As a consequence, in some countries recording high and persistent credit growth, current account deficits have moved above levels that can be sustained over a longer period of time.

These macroeconomic risks have been pinpointed in the policy debate. They have also featured in the monetary integration process on which the new Member States have embarked, both in the context of the first entries of new Member States into ERM II and in the latest Convergence Report of the ECB. Our analysis corroborates that there is a case for keeping macroeconomic vulnerabilities in check by containing domestic demand growth and current account deficits to sustainable levels over the medium term in the countries concerned. In doing so, (additional) policy action to decelerate credit expansion may be needed. Designing the appropriate policy response is not an easy task, as the instruments the authorities can use to cope with rapid lending growth may be of limited effectiveness or involve intricate tradeoffs, rendering the attainment of other policy objectives more difficult. At the same time, mitigating risks and stabilizing expectations may be particularly rewarding in a setting in which countries are getting ready to meet the criteria for a future entry into the euro area.

Overall, the issue of credit growth is likely to remain high on the agenda of economic policymakers and financial supervisors in Central and Eastern European EU Member States for quite some time to come.

Cutoff date: April 30, 2005.

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