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***Highlights in this issue:***

- **The Czech banking sector has developed rapidly since transition**
- **Postponed banking privatisation may have contributed to the recession of the late nineties**
- **The stock market and private equity sector could be further developed**

# Liberalisation and development of the Czech financial sector: more to come

*By Neil Kay**

***Summary***

*The Czech financial sector has changed dramatically since transition. In fifteen years, it has developed from a state-owned mono-bank into a privatised bank-based financial system with developing capital and private equity markets. This country focus analyses the development of the financial sector including its impact on economic growth. While the sector has advanced considerably in scale and efficiency, there is clear room for further development to support future growth.*

## *Development of the financial sector*

*Privatization of the enterprise sector preceded privatization of the banking sector.*

Following transition, commercial lending responsibilities were transferred from the central bank to five state-owned banking entities which had hitherto undertaken specialised banking functions. At the same time, new smaller banks were allowed to enter the market. All banks were licensed as commercial banks on the German model (Nollen et al 2005), with a view to playing a major role in shaping the enterprise sector, including participation in corporate decision making. The transfer revealed many non-performing loans and capital shortages which gave rise to the first government clean-up programme in 1992. In the programme, the burden of bad loans was shouldered onto a newly created government-owned Consolidation Bank. Further capital was injected into the four main commercial banks while the fifth, smaller commercial bank, Zivnostenska Banka, was privatised and new private entrants were allowed into the market. Due to concerns over a sufficient supply of capital, the four main commercial banks remained under government control, with full privatisation postponed until five years later. Under these terms, relatively soft lending practices, due in part to soft budget constraints, were allowed to continue. As a consequence, Czech firms built up on average double the amount of debt compared with firms in Poland and Hungary (World Bank 1999). While external factors also played a part in the ensuing recession from 1997-1998, the impact on growth was harsher in the Czech Republic than in other neighbouring economies, such as Hungary[1], which opted for alternative privatisation schemes (see Chart 1).

The recession forced a shake-out of the financial sector. Many new smaller banks suffered insolvency and the stock market lost a third of its value in three years. The government responded to the recession by introducing a second programme of reforms in 1997, including the completion of the privatisation of the main four commercial banks.

*Bank lending tightened after privatization.*

In economic terms, the result was to tighten lending, increase competition and efficiency in banking, and encourage better regulation of the financial sector as a whole. It also signalled the end of many uncompetitive newly created small and

*** Directorate for the Economies of the Member States.**

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medium sized enterprises. While the banking sector has expanded steadily since the recession, credit to enterprises has actually fallen as a share of GDP since 2000 due to the legacy and write-down of non-performing loans (EBRD 2006).

**Chart 1: Real GDP growth in the Czech Republic, Poland and Hungary**

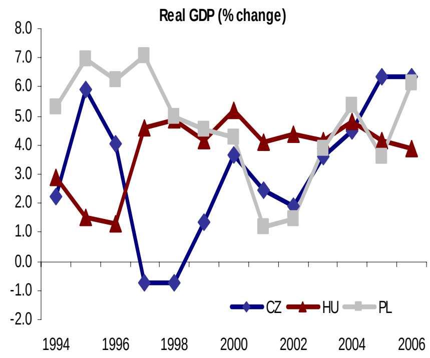
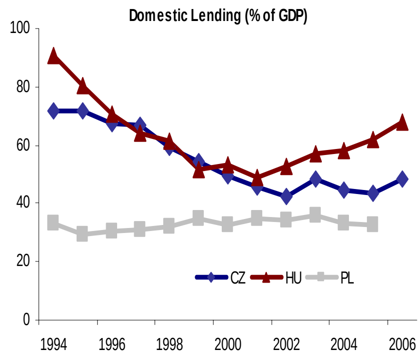



**Chart 2: Bank lending in Czech Republic, Poland and Hungary**




Source: Commission Services

*The stock market expanded rapidly from mass voucher privatization*

Following the second consolidation programme and privatization of the main banks, the banking sector rapidly passed into foreign ownership. Over ninety per cent of banking assets are estimated to be foreign owned (EBRD 2006). The development of the stock market was hindered by the effects of the recession which had a lasting impact. The size of the stock market shrunk by over a third, from 1996 to 1998, and mass voucher privatisation led to thinly spread shareholdings which have constrained liquidity relative to the level of capitalisation.

**Chart 3: Stock market in the Czech Republic, Poland and Hungary**

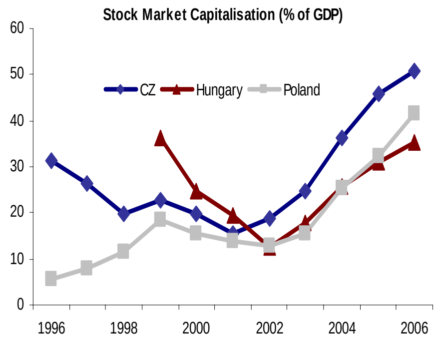
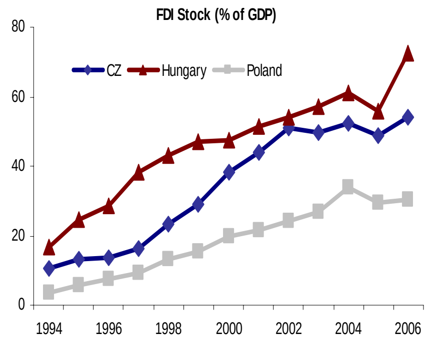



**Chart 4: FDI stock in the Czech Republic, Poland and Hungary**




Source: Commission Services

*Enterprise investment was boosted by high FDI inflows*

Given the high levels of FDI received by the Czech Republic, some degree of substitution might be expected between stock market growth and foreign direct investment, as has been suggested with respect to the early years following transition in central and eastern European transition economies (Deutsche Bundesbank 2003). There is mixed evidence of this with regard to the Czech Republic (see Charts 3 and 4). FDI stock started to increase markedly from 1998, after the government's second consolidation programme and about five years after transition. Stock market capitalisation started to gain momentum from 2002 due mainly to a spate of privatisations. Up to 2005, overwhelmingly the largest proportion of overall FDI, about forty percent, went into financial intermediation (CNB 2006).

*Despite early difficulties, the Czech Republic has one of the largest financial sectors*

Despite the early problems, in terms of scale the Czech Republic has one of the largest financial sectors in the Visegrad countries. The total capitalisation, as a sum of financial system deposits, stock market, private bond market and public bond market, was 140% of GDP compared to about 90% of GDP in Slovakia and Poland in 2006 (World Bank 2007). In this respect, and taking into account the substantial FDI received by the Czech Republic, the economy could not be said to have suffered from underinvestment. Capital deepening has been by far the largest contributor to GDP growth since 1996.

## *Link between financial sector development and growth*

*Few studies have analyzed the link between financial sector development and growth in central and Eastern Europe.*

In endogenous growth theory (Levine 1997), the financial sector engenders growth through two main channels: the accumulation of human and physical capital, and technological progress. By providing financial intermediation, the sector performs size, risk and maturity transformations through which resources are transferred from lenders to borrowers. In economic terms, the sector efficiently allocates financial resources to enterprises delivering the highest rate of return. As the sector becomes more competitive, the spread between borrowing and lending rates narrows and transaction costs decline, ensuring that a greater proportion of savings is channelled into investment. The impact of this process on the factors of growth is to raise the level of human and physical capital and, as many projects require technological innovation, the degree of technological progress; both of which raise productivity and thereby growth. The impact of the process is complementary as growth in the real economy fosters further savings and investment. Market discipline and regulation also tend to improve with increasing competition.

*The financial sector stimulates growth through a range of channels*

The theory of financial intermediation can be applied to all types of financial services. On a macroeconomic level, there is a continuing debate about the relative benefits of bank-based versus market-based systems on economic growth (Allen and Douglas 2000). More recently, it has been considered that the level of legal protection offered to investors and market regulation are more important than whether a financial sector is bank-based or market-based. It is also important to consider that the financial sector provides only a minority of enterprise investment. In general, enterprises' internal cash flows have been found to be the most common source of finance for working and fixed capital investments (Allen and Douglas 2000), including in the transition of economies of central and eastern Europe (EBRD 2006). In addition, the high volumes of FDI in proportion to GDP have also provided a further channel for enterprise finance.

A number of econometric studies have affirmed a link through regression analysis between financial sector development and economic growth (e.g. Goldsmith 1969; King and Levine 1993). In econometric studies, the level of financial sector development has typically been determined by the ratio of bank lending to GDP and the size of stock market capitalization. In addition, the interest rate spread between borrowing and lending rates has been used as a measure of efficiency in the banking sector. Qualitative factors such as the level of market regulation and monitoring; investor protection and level of corruption, have also been linked to increased growth (Levine, Loayza and Beck 2000).

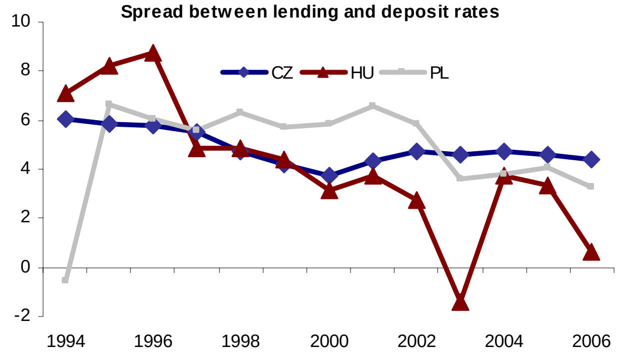
## *Link between financial sector development and growth in the Czech Republic*

While there have been many studies suggesting that financial sector development promotes growth (e.g. London Economics 2002; Giannetti et al 2002), relatively few have been carried out on central and eastern European transition economies, including the Czech Republic. This is probably due to the relatively short time period since transition from which data can be drawn. This has led to most studies been carried out on cross-country panel data with only a minor number of individual country studies.

*Qualitative aspects of the financial sector are likely to be as important as quantitative factors.*

In the banking sector, imperfect competition has been linked with weaker growth in central and eastern European transition economies (Drako 2002). This is consistent with the view that the efficiency of the financial sector can be as important as the volume of lending (Abiad, Leigh & Moody 2007). For example, the interest rate margin between borrowing and lending has been found to be negatively related to economic growth, while the overall amount of lending has not produced a growth dividend (Koivu 2002). In the case of the Czech Republic, this is particularly pertinent given the high level of domestic lending which preceded the recession at a time when the interest rate spread was six percentage points, before the effects of privatization (see Charts 2 and 5). In a rare study focusing specifically on the Czech Republic, efficiency levels were found to have risen considerably during the transition period up to 2000 due to the influence of foreign banks, which were estimated to be six times more efficient than their domestic counterparts (Matousek and Taci 2002).

**Chart 5: Interest rate spreads in the Czech Republic, Poland and Hungary**




Source: Commission Services

*There is room for further development of the stock market.*

There is more mixed evidence linking stock market development to growth in central and eastern European transition economies. In a comparative study of the Czech Republic and Poland, the partial collapse of the Czech stock market during the recession of the late nineties, in comparison to the more steady development of the Polish stock market, was not found to have an adverse effect on overall growth in comparison to Poland (see Charts 1 and 3) (Kominek 2003). However, a wider study on twenty-eight transition countries on the period 1993-2004 found a growth dividend from both stock market capitalisation and bank credit. (EBRD 2006).

In summary, the few econometric studies carried out on central and eastern European transition economies have tended to emphasise a growth dividend from financial sector development. However, the case of the Czech Republic is interesting in that a stock market boom, from mass voucher privatisation, and a period of soft lending to enterprises, due to a partially privatised banking sector, preceded a recession. This suggests that volume alone may be a weak indicator of financial development and that other qualitative indicators should also be considered including market regulation, transparency and monitoring. The weakness of taking purely quantitative data is underlined in particular by the examples of the Czech Republic and Poland, where the accuracy of bank sector credit data is blurred by a large proportion of non-performing loans. Many of these loans originated from a pre-competitive environment and were retained beyond their viability for various reasons, meaning that taking the overall level of credit, as a reflection of economic investment, is unreliable.

## *Further development of the Czech financial sector*

The banking market dominates the Czech financial sector. This is due to a number of factors, including a comparatively high level of bank deposits; a greater usage of banks as a source of corporate financing; the comparatively recent development of other types of financial intermediation; relatively low inflation in the Czech Republic which has preserved the value of banking assets (Ihnat 2002) and a period of low interest rates since transition which has encouraged borrowing. As a whole, the banking sector is highly concentrated with the three largest banks controlling sixty per cent of the market (EBRD 2006). However, despite the sector's relatively advanced state, enterprise lending remains sluggish and is far behind growth in consumer credit and mortgage lending. Non-financial corporations still receive the bulk of bank lending although their proportion of total bank credit has declined from around 80% at the end of the 1990s to currently 45% (CNB 2006). Overall lending to the enterprise sector has fallen as a percentage of GDP since 2000, partly due to the write-down of non-performing loans originating from the early nineties. While lending to smaller enterprises has improved, there is still evidence that small firms lack access to bank loans (EBRD 2006), which is also a region-wide problem.

*Small firms still lack access to bank finance.*

The Czech stock market is relatively large compared to other central European economies (see Chart 3) but there are many rarely traded companies and large state holdings. The size also still reflects privatisation revenues as in other transition economies. Hence, the total level of capitalization probably overstates its stage of development. Overall, market turnover remains modest due to restricted liquidity and the dominance of the banking sector (Ihnat & Procházka 2002). In terms of technological development, the Czech stock market also still lacks a fully secured transaction system (EBRD 2006), in contrast to the stock markets of neighbouring countries. While the bond market is comparatively large in central European terms, it is not an important source of corporate finance. Trading in government bonds still dominates the market, which account for ninety percent of all debt securities, in part due to the need to finance recent government deficits.

*The level of institutional investment remains low.*

In common with other central European transition economies, the level of institutional investment in the stock market remains low. This could be advanced by improvements in the regulatory structure and enforcement capacity (World Bank 2007). Pension system reform, introducing a fully-funded pillar, would also increase the level of institutional investment by boosting long-term savings. There is room for more active investment strategies as currently private pension funds in the Czech Republic invest around three-quarters of their assets in bonds and only six percent in equities. An overall increase in institutional investment would also inject increased competition into the financial sector as a whole, in particular on commercial banks where interest rate spreads are still above the level of Poland and Hungary (see Chart 5).

Similar to other central and eastern European countries, the private equity market remains undeveloped. Similar to the stock market, this can be attributed to a number of factors: the dominance of the banking sector, a scarcity of IPO (Initial Public Offering) issues on the stock market, which often serve as the exit point of venture capital finance; the small size of start-up Czech enterprises whose potential profits are relatively modest compared with the fixed evaluation costs incurred by venture capital funds (OECD 2006).

*Further development of the venture capital market is essential for future growth.*

Regulatory conditions have probably also played a role, including restrictive rules on investment and taxation; pension and life insurance funds have a low five percent threshold for investing in unlisted shares (OECD 2006); profits from venture capital are heavily taxed: at the enterprise level, the venture capital company level, and the level of the individual investor, and minority shareholders have a relatively low degree of investment protection in the Czech Republic. In addition, bankruptcy legislation has until recently been cumbersome and increased the downside risks for financing, and IPR (Intellectual Property Rights) conditions remain relatively weak (EC 2007). While government and EU supported schemes have helped in partially boosting the supply of venture capital, the many structural issues will have to be addressed for future market development. In addition, the demand for venture capital from Czech entrepreneurs may be subdued due to a lack of business awareness and skills, and a lack of business training at university.

In summary, the Czech banking sector has developed rapidly under the influence of foreign ownership but the financial sector as a whole would benefit from further diversification, in particular, from further development in the stock market and private equity sector. This would better serve the small enterprise sector, in particular, and increase competition within the financial sector as a whole, benefiting the overall economy by reducing transaction costs.

## Conclusion

The Czech banking sector has developed rapidly into one of the largest liberalised banking systems in central Europe. The decision to keep state control over the main commercial banks in the early years following transition lead to the build up of a large amount of debt on Czech enterprises. The subsequent second consolidation programme placed the sector on a firmer footing and led to a period of tighter lending and improved regulation. Openness to foreign competition has made the sector more efficient and reduced transaction costs. There is firm evidence to suggest that in central and eastern European economies, including the Czech Republic, the development of the banking sector produced a growth dividend. More mixed evidence linking stock market development to growth may be partly due to the lesser importance of the stock market relative to the banking sector.

In spite of early difficulties, the Czech financial sector is large compared to that of other central and eastern European transition economies (World Bank 2007), while it would still benefit from greater diversification. Further development of the stock market and market for venture capital would increase the range of available funding. This would be particularly beneficial to small, new and innovative enterprises which often have difficulty accessing finance from the banking sector, and which will be increasingly important for growth as the economy matures. There are a range of structural factors which may be holding up the venture capital sector, without a firm indication of which is the primary obstacle to further development.

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[1] Hungary opted for earlier privatization of the banking sector through the selection of strategic foreign partners.


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**Coordinating Committee:** Gerrit Bethuyne, Heinz Jansen, Elena Reitano.
**Layout:** Yves Bouquiaux, Fabrizio Melcarne.
**E-mail:** ECFIN-CountryFocus@ec.europa.eu
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