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## Article

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## SLOVAKIA: THE CONSEQUENCES OF JOINING THE EURO AREA BEFORE THE CRISIS FOR A SMALL CATCHING-UP ECONOMY

JARKO FIDRMUC\* AND  
ANDREAS WÖRGÖTTER\*\*

### A catching up euro area member in and out of the crisis

With its entry into the euro area Slovakia experienced a significant change in the macroeconomic framework for a small, catching up economy. In the run-up to Slovakia's entry, borrowing costs fell, the exchange rate risk disappeared and the growth outlook for the economy improved (Huefner and Koske 2008). Together with earlier financial sector privatisation and liberalisation, the introduction of the euro reduced barriers for borrowers (Huefner and Koske 2008). However, in the Slovak case, the international financial crisis aborted the expected boom before it could take hold.

For peripheral euro area member economies, the financial crisis worsened access to international financial markets because of perceived liquidity problems and contagion effects, which have only recently been taken into account by enlarging the ECB's toolkit and by establishing a European sovereign debt intervention architecture. As a result, euro adoption did not improve the financial conditions of these economies fully. By contrast, the fact that the exchange rate is no longer available as a macroeconomic stabilisation tool has raised fears that the country cannot adequately deal with adverse external shocks, thereby making it a more likely victim of contagion.

This study describes how Slovakia navigated the crisis and how it returned to strong, albeit jobless, growth. Further insights are provided by a comparison with

Estonia and Slovenia, two other countries which have recently adopted the euro. The combination of a sound financial sector, a stability-oriented macroeconomic policy framework, flexibility-enhancing labour market regulations and competition-friendly product market regulations are of key importance for the ability of a small euro member country to absorb adverse external shocks (Brixiova *et al.* 2009; Berka *et al.* 2012). The specific challenge for Slovakia is to replace its historically important, but now fading, external drivers of growth, which have been dependent on large-scale Foreign Direct Investment (FDI) plants, with domestic sources of growth which emphasise innovation and knowledge-intensive start-ups, while utilising and fostering the opportunities of a transition to green growth. At the same time, public finances will need to be brought back onto a sustainable path.

### Interactions between euro adoption and the crisis worked both ways

Although the 2009 crisis was a common factor, economic developments in Slovakia have been different from other small member countries that recently joined the euro area (Figure 1). Like elsewhere, Slovakia's GDP fell significantly; however, unlike in Slovenia and Estonia, its recovery was strong, bringing GDP back to its pre-crisis level during 2011. The labour market reaction was very strong in Estonia, where the unemployment rate fell. However, it was relatively weak in Slovenia, where unemployment has continued to rise. Developments in Slovakia have been in-between, as unemployment has been stuck at high levels. What is not immediately clear is what caused the occurrence of a jobless recovery with relatively high rates of GDP growth in Slovakia and the nature of the institutional constraints that the coun-

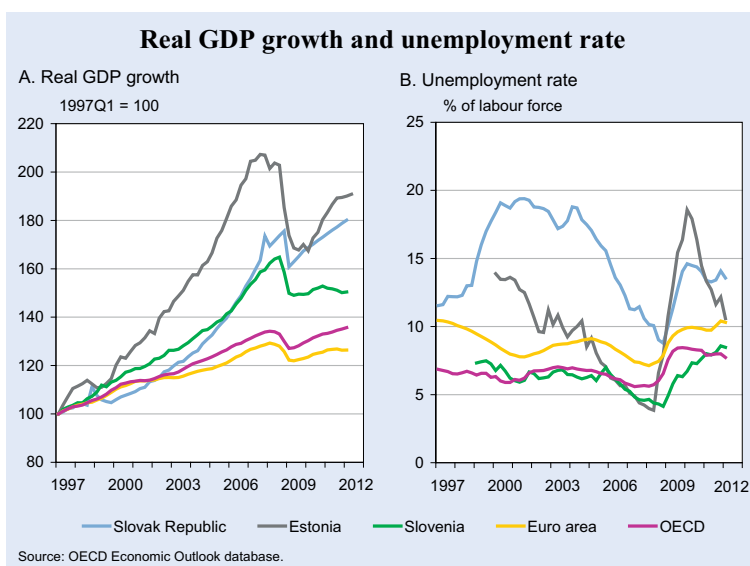


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Figure 1



try faces in terms of increasing the job-richness of the on-going strong recovery.

The adoption of the euro in Slovakia happened after a long boom period, but just before the outbreak of the financial crisis. This timing was particularly advantageous in the sense that the accession criteria (in particular the fiscal criteria) were easier to meet than for Estonia, which joined just one year later. Estonia had to implement a 10 percent fiscal consolidation package to keep the general government deficit in line with the euro-accession criterion. At the time of the accession monitoring period in spring 2008, the benchmark Slovak 10-year bond rate was still unaffected by the re-assessment of sovereign risks, fiscal balances were still benefiting from the final stages of the boom and inflation was being restrained by two successive revaluations of the Slovak *koruna*.

The financial crisis radically changed the external environment of the highly export-dependent Slovak economy. Under these conditions, the interaction of the crisis and the strong real appreciation in the run-up to joining the euro area, generated challenges that are still important for recent economic developments. Firstly, the exchange rate was probably locked in at an excessively high level. Secondly, the focus of fiscal policy on nominal targets to meet the Maas-

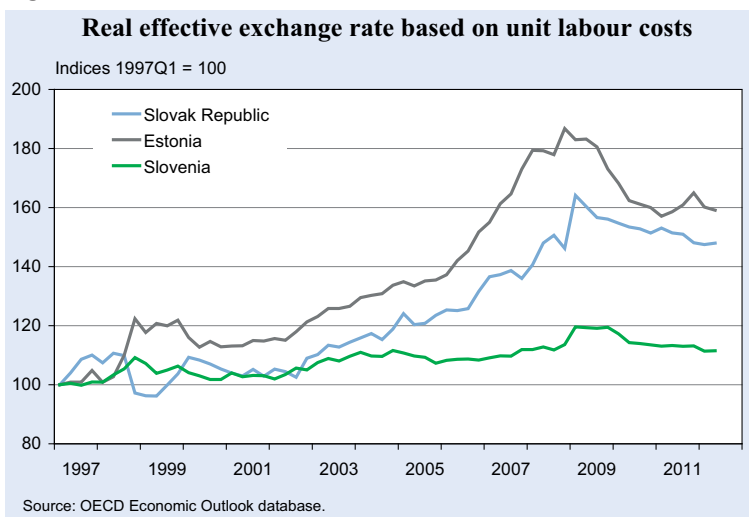
tricht criteria meant that Slovakia possibly missed the opportunity to run a stricter fiscal course during the boom years. As a result, it inherited a pro-cyclical policy bias, which made fiscal expansion during the crisis particularly costly and painful to reverse.

#### **Slovakia entered the euro area with an exchange rate that was probably overvalued**

The decade prior to the crisis was characterised by rapid growth in GDP in Slovakia of around 6 percent, or about three times

the euro area average. Rapid convergence came hand-in-hand with the strongest nominal and real appreciation among OECD member countries, outpacing the safe havens of Switzerland and Japan, as well as resource-rich globalisation winners like Canada and Australia. Inflation and unit labour cost growth above the euro area average contributed to nominal convergence and added to the real appreciation stemming from nominal appreciation. Currency revaluations accelerated this development shortly ahead of the crisis. As a result, the Slovak currency appreciated by nearly 30 percent in real terms between 2006 and 2009 (Figure 2). The financial crisis was also accompanied by an external (price) competitiveness shock for Slovakia as several neighbouring economies in Central Europe reacted to weaker external demand by strong competitive depreciations: the real effective

Figure 2



exchange rate appreciated by a further 9 percent in 2009, after the country had entered the euro area.

While rapidly growing economies also experience real exchange rate appreciations, it nevertheless remains questionable whether the acceleration of appreciation immediately prior to the crisis would not have been reversed if the nominal exchange rate had not been fixed just at the outbreak of the crisis. Considering that regional peers had strongly depreciated their currencies by between 5 percent (Czech Republic), 10 percent (Hungary) and 20 percent (Poland), it is not far-fetched to conclude that Slovakia entered the euro area with an exchange rate that turned out to be overvalued in the face of the crisis. This is not in contradiction with the IMF (2012) assessment that Slovakia is not suffering from an external imbalance, because competitiveness has been restored *via* an endogenous adjustment, which has included wage restraint and productivity-increasing investment.

Since euro adoption, real exchange rate movements have been determined by inflation and unit labour cost differentials *vis-à-vis* Slovakia's main trading partners. Inflation has actually shown a relatively large degree of fluctuation in this period. Euro adoption arrested the earlier appreciation of the nominal euro exchange rate and related declines in import prices. Thus, domestic inflationary pressures were fully translated into rising inflation in the second half of 2008. However, the financial crisis exerted a strong downward pressure on inflation. Thus, inflation declined to less than 1 percent in 2009 and 2010, below the average Balassa-Samuelson contribution to inflation<sup>1</sup> because of the nominal convergence of non-traded goods prices. It could therefore be concluded that Slovakia came close to a state of 'effective' deflation, with negative consequences for domestic demand. Simultaneously, wage increases decelerated dramatically from around 8 percent before the crisis to less than 1 percent in 2011. Indeed, nominal price level convergence ground to a halt from about mid-2008. Contrary to other countries, labour productivity increased strongly after the crisis – outperformed only by Estonia, helping to keep unit labour costs down and to reverse the excessive pre-crisis real appreciation to some extent.

Euro adoption changed the composition of drivers of growth dramatically. Disinflation, enforced by the large output gap and increased unemployment, contributed to wage moderation and imposed a cap on job-rich domestic demand growth. Together with sizeable productivity increases, wage moderation allowed a modest real exchange rate depreciation of about 2 percent in 2010 and 2011. This helped to prevent employment in manufacturing from falling even more, although it did not generate new employment. However, the pace of exchange rate depreciation was considerably slower than that of the appreciation before the crisis, indicating less capacity for internal devaluation than present in Estonia (Figure 2).

It is interesting to note that the development of the real exchange rate was similar before the crisis in Estonia and Slovakia, although in Estonia it was only driven by differences in unit labour costs and not by changes in the nominal exchange rate. Real exchange rate trends were completely different for Slovenia (Figure 2). This pattern also corresponds to the differing trends in unemployment, which fell strongly in Estonia, stayed high in Slovakia and increased in Slovenia. Domestic demand, in turn, showed healthy growth in Estonia, stagnation in Slovakia and appears to have nose-dived in Slovenia.

#### **Sudden stop in FDI inflows hampers competitiveness improvements**

The adoption of the euro has not improved the attractiveness of Slovakia to foreign investors in the way that it was expected to before the crisis. In fact, it was the active investment promotion policy, business friendly structural reforms, low corporate income taxes and the prospect of euro accession which resulted in a surge in inflows of FDI from the early 2000s. However, the financial crisis reduced the worldwide supply of investment funds, particularly for emerging economies in the EU and euro area. Furthermore, euro appreciation *vis-a-vis* the Central Eastern European Countries outside the euro area has reduced the relative attractiveness of Slovakia as an investment location for export production, while before the crisis it was assumed that the neighbouring free floaters (Hungary, Czech Republic and Poland) would continue to experience with nominal appreciation.

FDI actually fell significantly in 2010 (the remaining inflows concerned mainly equity investment in the financial sector) and remained negligible afterwards.

<sup>1</sup> Égert (2011) estimates that the Samuelson-Balassa effect (related to productivity differences between the traded and non-traded goods sectors) was, at 1.2 to 2.0 percentage points annually, larger in Slovakia than in other new member states of the EU. According to Oomes (2005), a maximum appreciation of up to 3 percentage points annually can be achieved by price changes related to faster productivity improvements in export-oriented manufacturing relative to domestically-oriented services.

Thus, FDI did not contribute to the recovery from the financial crisis, while it was an important building stone of the previous growth model (Fidrmuc and Martin 2011). The successful Slovak business model has thus come under pressure and a new source of stimulus is needed for the rapid catch-up of the Slovak economy to continue.

In addition, the nature of FDI inflows has changed. While FDI flows were dominated by large greenfield investments in the years prior to the crisis, the crisis investment in existing plants has since become more important. These investments have created fewer additional employment opportunities and have been undertaken to defend the viability of existing operations in the face of the strong real appreciation before euro adoption, new competitors in the region and the poorer outlook for Slovakia's main export goods (cars and flat screens).

FDI inflows have exerted a strong influence on the Slovak economy. Employment growth was positively correlated with FDI inflows. The real exchange rate appreciated during the periods of large capital inflows, but the overall effects remained moderate, although positive, up to 2011. Until 2009, FDI inflows and employment growth increased as the real exchange rate appreciated, while from 2009 onwards, the real exchange rate depreciated slightly and employment growth and FDI inflows decelerated. Productivity gains were achieved both by new investments and by reduction in low-productivity employment, both contributing to an acceleration of productivity growth in manufacturing. Actually, while industrial employment was roughly constant throughout the 2000s, it continued to fall after the 2009 crisis. Moreover, productivity and export performance are closely related: FDI inflows (e.g. to sectors such as automobiles) appear to be geared towards productivity increases and maintaining export competitiveness.

#### Domestic demand stagnates as a result of imposed institutional constraints and wage restraints

The sources of domestic demand are limited by institutional constraints that were imposed during euro

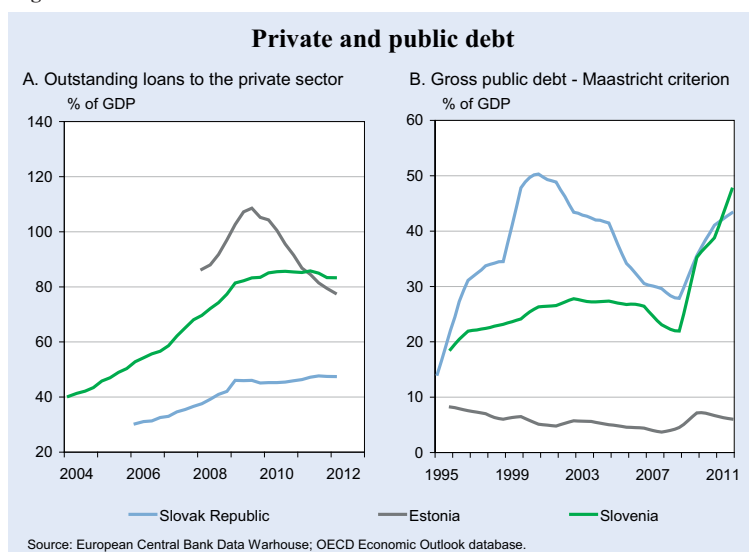
adoption and the financial crisis. This study considers the possibilities of increasing both public and private spending. As a result of budget consolidation, low income growth, stagnating employment, stagnating mortgages and increases in the servicing costs of loans as a percentage of income, growth in domestic demand fell by 6 percent in 2009 and has not yet returned to its pre-crisis level of 2008, when it grew on average by around 6 percent.

Slovakia achieved a substantial reduction in its gross public debt during its preparations for euro adoption (Figure 3B). Starting with a favourable public debt position of around 50 percent of GDP in 2000, Slovakia was able to reduce its debt level to a mere 28 percent of GDP during the conversion process in 2008. However, pressure on fiscal discipline was significantly reduced by the euro adoption. Correspondingly, public expenditure revived as a response to the financial crisis and the debt to GDP ratio almost dropped to its initial level of 43 percent. By contrast, fiscal developments in Slovenia were characterised by a smaller decline in debt prior to the euro adoption, yet a much steeper increase in public debt as a consequence of the crisis. Estonia, which did not enter the euro area until 2010, after the financial crisis, has kept the public finances stable and below 3 percent of GDP during the whole period.

#### Financial constraints increased only moderately after euro adoption

Before the crisis, mortgage loans and other borrowing by private households were facilitated by a large differ-

Figure 3





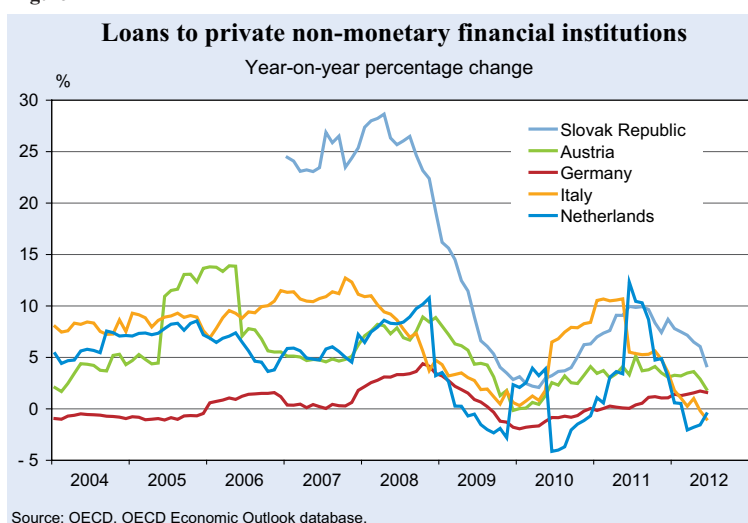
ential between income growth and borrowing costs. Despite soaring real estate prices (Fidrmuc and Senaj 2012), which generated a considerable need for a house price correction after the crisis, loans were easily financeable through income increases, without having to decrease current consumption rates. This has changed dramatically since the crisis; with wages stagnating in 2009 and 2010 and with cloudier income prospects, borrowers (and lenders) have become more cautious, increasing the savings rate. Currently servicing old loans means less money is available for current consumption spending and real estate investments. Consequently, household demand for loans has weakened recently.

Despite its adoption of the euro, Slovakia has avoided a credit boom and bust scenario (Figure 3A). The main reason for this was the outbreak of the crisis simultaneously with euro adoption and the relatively cautious lending policy of banks before that point. Slovenia (euro adoption in 2007) and Estonia (euro adoption in 2010 and currency board since the early 1990s) experienced a rapid credit expansion before the crisis (Brixiova *et al.* 2010). For Estonia, and to a lesser extent Slovenia, strong deleveraging needs imposed a burden on the early phases of the export-led recovery. By contrast, Slovakia recorded a relatively moderate increase in the ratio of credit to GDP, from 30 percent in 2006 to 39 percent in summer 2008 and the credit share hiked further to 46 percent in the first quarter of 2009 immediately after euro adoption. It then stagnated during the financial crisis, avoiding a strong deleveraging episode. Overall, credit development in Slovakia was not characterised by the accumulation of financial vulnerabilities to the same extent as in other emerging economies in Central and Eastern Europe.

#### Financial contagion through parent banks' lending

One reason for weak credit developments is the adverse shocks which affected the multinational banks active in Slovakia. The financial sector is dominated by foreign-owned banks (based especially in Austria and Italy), which acquired stakes in the

Figure 4



privatisation process and established their own networks (IMF 2012). This implies that shocks such as the sovereign bond crisis rapidly spill over to Slovakia. Banking conditions generally improved in 2011, reflecting the improving conditions of the Slovak economy. The direct exposure of the Slovak banks to foreign assets is fairly low, but they can be affected by the impact of sovereign risk crises on their parent banks, which is the case in some euro area countries.

Lending conditions increasingly depend on the situation of the banking sector in countries from which the parent banks originate (mainly Austria, but also Belgium, Germany, Italy, Netherlands). Figure 4 shows the importance of foreign owned banks in the banking system and their impact on economic development. The high degree of co-movement between Austrian, Italian and Slovak credit growth confirms that credit growth is driven by the situation of the parent banks. In particular, credit growth rates reached 30 percent annually before the financial crisis, this being about four times higher than in Austria. However, credit growth rates dropped to about 5 percent in both countries in 2010. The difference between Slovak and source-country credit developments increased only slightly in the past year, which confirms the role of source country factors.

Correlation analysis confirms these findings. Before the financial crisis, Slovak credit growth reported a medium degree of correlation (0.6) with the source countries (except for Italy with negative correlation). After the financial crisis, the correlation increased to 0.9 between Slovakia and Austria, while it remained largely unchanged for the other countries.

### Trade integration declined during the financial crisis

Tight trade linkages with Germany and other euro area countries mean that growth shocks in those countries (often themselves being caused by external shocks, as in the case of Germany) are also transmitted to Slovakia through the slowing of the trade growth. Yet the trade channel is strengthened by strong financial links, including FDI. Slovakia is especially sensitive to developments in Germany and in the euro area (IMF 2012). Figure 5 shows that the weak economic performance of the euro area resulted in declining shares of this region in the exports of Slovakia and other new member states, which had to be compensated by exports to more rapidly growing destinations outside the euro area. As a result, the financial crisis lowered the degree of economic integration of the new member states into the EU.

It is interesting to note that the share of the euro area in Slovak trade started to decline before the country's EU accession in 2005. It confirms that trade between CEECs and the existing EU member states was already at its potential level before EU accession (Bussière *et al.* 2008). Moreover, the declining EU trade shares of Eastern European euro entrants cast doubt on the importance of the trade effects of a currency union, as intensively discussed in the literature (Frankel and Rose 2002), but viewed rather sceptically before the Eastern enlargement of the euro area (Baldwin 2006).

The export-led growth strategy has also had its particular vulnerabilities for the Eastern European euro members. The Slovak economy has become strongly

dependent on foreign demand, especially from Germany and the euro area. Business cycles in the industries concerned are often more pronounced than in other industries, especially services. For example, during the 2008/9 downturn the drop in demand was especially strong for automobiles, iron and steel, and building materials. Furthermore, the export industries that have expanded are mainly capital intensive, meaning that growth of production translated only marginally into a reduction of unemployment. The focus on large companies increases the mismatch in the Slovak labour market, which is characterized by large regional imbalances. A significant number of the unemployed can be found in more remote, rural regions with a low population density. Lastly, the rapid success of the export-led growth strategy was also achieved by the concentration on mobile industries which, though they could move in quickly, could also leave easily, meaning that a relatively minor worsening of business conditions or cost competitiveness could result in significant capacity outflows.

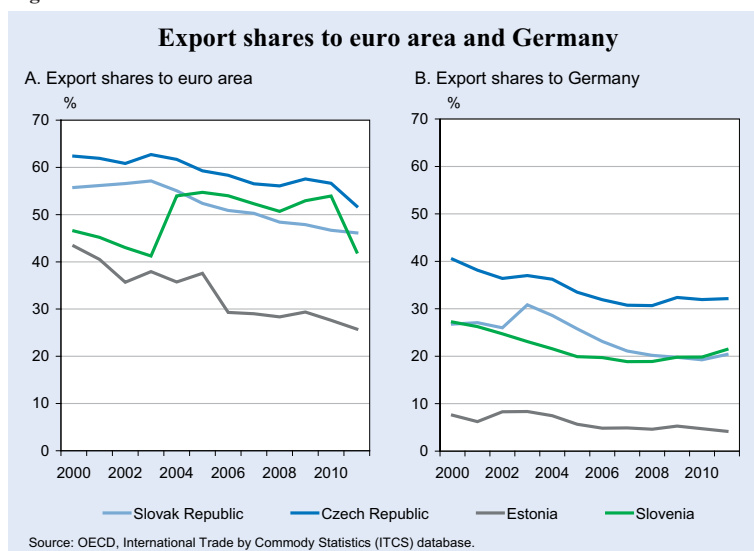
### Policy Implications: what are the domestic and foreign imbalances?

Imbalances are illustrated by a jobless recovery, stalling convergence, and a persistently high unemployment rate. Unemployment reached 20 percent of labour force in the early 2000s. However, strong growth and convergence reduced the unemployment rate to a low of 10 per cent in 2008. Following this, the fall in exports in 2008/9 was associated with a new increase in unemployment to nearly 15 percent. The jobless recovery of 2011 did not succeed in improving

the situation in the labour market. Entrants were strongly affected, particularly by the economic downturn, leading to a youth unemployment rate of 33 percent. A similar situation was observed for unqualified labourers, whose situation had actually worsened during the period of economic convergence. Women, on the other hand, have not been significantly more affected by unemployment than men.

The following imbalances – of domestic and foreign origin – need to be tackled in order to push Slovakia's economy further towards job rich growth that is

Figure 5



high and sustainable enough to underpin a continuation of the successful catch-up process of the early to the late 2000s:

- Foreign investors are increasingly concerned about the inability to combine sound public and private balance sheets with sustainable economic growth. For Slovakia there is a tension between the fading external drivers of growth and the large and growing consolidation needs.
- Export capacity is dependent on the competitiveness of existing FDI plants with little or no integration into local supply networks and a weak outlook for job creation. Competitiveness is driven by wage restraints and productivity increases and less by the development and exploitation of comparative advantages in knowledge intensive operations with a high local value added content and a high job creation capacity.
- Domestic demand depends on the income growth generated by the foreign-owned export sector. Adverse external shocks are therefore not mitigated, but rather propagated by the positive correlation of private consumption and residential investment with income growth in the export sector.

Domestic sources of growth are not well-developed. Spending on innovation is low and the interaction between domestic knowledge producers and the economy is weak. Regional mobility is low and regional differences in labour market performance are large. Social housing is not geared towards regions with a growing employment potential. The capital market financing of business start-ups is underdeveloped. The lending of the financial sector is restricted to the local deposit base, which may become a constraint once a new growth cycle sets in. Consumption and mortgage financing are overrepresented.

The jobless recovery in Slovakia fits well with considerations about the recovery pattern after a financial crisis (Calvo *et al.* 2012). The growing risk aversion of lenders increases the ratio of the collateral value to the loan, which favours capital intensive investment projects in existing enterprises. Maintaining the employment level during a financial crisis would therefore require a larger wage adjustment than that which would follow from the cyclical response of wages to increasing unemployment. The consequence of reduced lending by the financial sector is a combination of wage and job restraint. This underlines the importance of a sound financial sector for the recovery from a financial crisis.

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