Decomposition of external capital inflows and outflows in the small open transition economy (The case analysis of the Slovak republic)

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Summary: The main objective of the proceeding is to perform a logical decomposition of the structure of external capital inflows and outflows in the Slovak republic in order to analyze the main trends in the external financial integration and its development through the period of 1994-2006. In order to fulfill our objective we observe the changes in the structure of external financial assets and liabilities in order to provide the explanation of main trends in the external capital portfolio of the Slovak republic. Finally, we explore the implications of the accumulated stock of external capital for future trade and current account balances.

Key words: financial integration, external capital structure, foreign financial assets, foreign financial liabilities, transition economies

JEL: F15, F36, F41

1. Introduction

Capital flows liberalization is one of the main determinants that formed the development of the external financial openness of the Slovak economy in the beginning of the transition process. The crucial changes in the external economic relations of the country toward the western European economies forced country to the well expected position of the net foreign borrower, as a result of the massive capital inflows. The process of the internal capital base (especially of a real capital base) reproduction emphasized a disequilibrium between the internal financial resources (savings) and real demand for the capital investments in the first half of the 1990s. The transition process is typically heavy dependent on the availability of sufficient stock of capital that together with the high potential of a future economic growth stimulated the inflows of the foreign capital. Among the other determinants that attracts the foreign investors to allocate their capital (in the different forms as it will be discussed later) in the transition countries we can also mention skilled labor force (working capital) and the institutional guarantee of the further European Union accession of those countries. While the overall economic performance in the beginning of the transition period was still significantly affected by the initial economic shock, the real economic growth rates in the selected transition economies were surprisingly high and still persist.

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A dynamic accumulation of the foreign stock of capital helps to intensify the convergence process that allows the dynamically developing transition country to take more advantages from the existing investment opportunities and still increase consumption expenditures. On the other hand it is important to mention two logical implications that dynamic capital inflows imply for the transition countries.

Firstly, as a burden of the foreign investments and a debt service (reflecting higher principal repayments) increases over time, borrowing country should endeavor to stabilize its external financial position via trade surpluses. The height of trade surpluses required to stabilize external position depends not only on the volume of accumulated stacks of external capital and the rate of the economic growth but also on the expected rates of return on a country's foreign assets and liabilities, which will be influenced by the composition of the foreign capital inflows and outflows.

Secondly, an indebted economy that faces the strong inflows of the foreign capital should assess its vulnerability to financial shocks. For example, international financial crisis of the 1990s highlighted potential macroeconomic volatility related to the heavy reliance on certain types of external finance, especially short-term foreign-currency debt capital. From this point of view it is important to observe the overall risk included in the different types of country's external financial liabilities.

In the proceeding we concentrate on the analysis of the external capital inflows and outflows structure in the Slovak republic in the period 1994-2006 in order to examine the main trends in the character of the international financial integration of the Slovak republic. We also emphasize one of the most important aspects of the external financial openness – the relative importance of debt investments, portfolio investments and foreign direct investments. This approach helps us to highlight the main implications of the accumulated stock of foreign liabilities on the expected future development of the trade balance as well as current account of the balance of payments in the Slovak republic.

2. External capital inflows and outflows structure

2.1. Problem description and the methodology

International financial integration of a selected transition economy is closely related to the capital flows liberalization in terms of restrictions it applies to the international capital flows.

International financial integration also helps to improve the functionality of the financial systems the way it increases the availability of the financial resources and it stimulates the risk sharing among the countries. For example Obstfeld [15] emphasizes that international capital markets provides higher efficiency in allocating national savings without necessity to observe the location of potential beneficiary of the resources. Stutz [20] and Mishkin [13] claim that financial liberalization helps to increase the transparency and responsibility of the agents in allocating the financial resources by reducing the inappropriate investment alternatives and the moral hazard, while at the same time it eliminates the liquidity problems on the financial markets. They suggest the international capital markets support stronger fiscal discipline of the national governments that would otherwise negatively affect domestic capital market. There are also other well known suggestions that emphasize the key role of the financial integration [11], financial development [19] and financial deepening [5] [20] [22] in stimulating the economic growth.

The financial integration deepening motivates the capital to flow from the country with relatively sufficient stock of the capital (and correspondingly less suitable investment opportunities) to the country seeking external source of financing its capital requirements. The rate of return on the invested capital in the target economy is usually higher in comparison with the investment opportunities in the source economy of the capital. The capital inflows to the less developed economy usually supplement the shortage of the domestic capital base. Overall decrease in the purchasing costs of a new borrowing capital usually accelerates domestic investments. Certain types of the capital inflows to the domestic economy also support the future development in the technology progress.

Another crucial aspect of the international financial integration is the expected impact on the overall macroeconomic stability. Theoretical approaches do not clearly emphasize the implications of the international financial integration on the price stability and the total national output development.

The international financial integration provides the opportunity to the low capital country (in case of transition economies it is a typical situation in the beginning of the transition period) to diversify its relatively small capital base that usually reflects the natural resources availability or the national output production structure. Such a situation may result in the lowering of the overall macroeconomic volatility. The increased international financial integration of the country usually leads to the changes in the external capital inflows and outflows portfolio in the later phases of the transition process. As a result of such a trend we usually observe a decrease in the relative share of debt investments (especially long-term) an increase in the relative share of equity investments (especially foreign direct investments).

The international financial integration of the transition countries results from the global and regional integration. The intensity of the international financial integration is usually described by the simple unit indicators or by the complex regression models.

The traditional approaches to the measuring of the international financial integration (financial openness) consider the existence of the capital flows limitations and the barriers among the countries. The capital regulation can be put into practice using the different methods (direct capital inflows and outflows controls, volume or price controls, time limitations defining the period for the domestic or foreign equity shares ownership, etc.).

The measuring of the capital account openness was a challenge for the national governments for a long period of a time. Nowadays many traditional approaches use the ratio indicators and the intensity indicators based on the date from AREAER[1]. More sophisticated methods are based on the financial openness indexes that utilize the data from the disaggregated current account and the capital account of the balance of payments considering the restrictions from the AREAER.

The crucial criteria for the financial integration ratio indicators classification is the dynamics of the main volume categories development. Considering this approach the financial openness indicators are divided into the static indicators and the dynamic indicators. The static indicators consider the value of the selected financial assets or liabilities in the specific date. The intensity of the international financial integration is then expressed as a share of the selected financial assets or liabilities indicator and the country's GDP. On the other hand the dynamic indicators consider the change of the selected financial assets or liabilities during the specific period of time. The intensity of the international financial integration is then expressed as a share of the selected financial assets or liabilities indicator annual change and the country's GDP.

2.2. Overview of the main trends

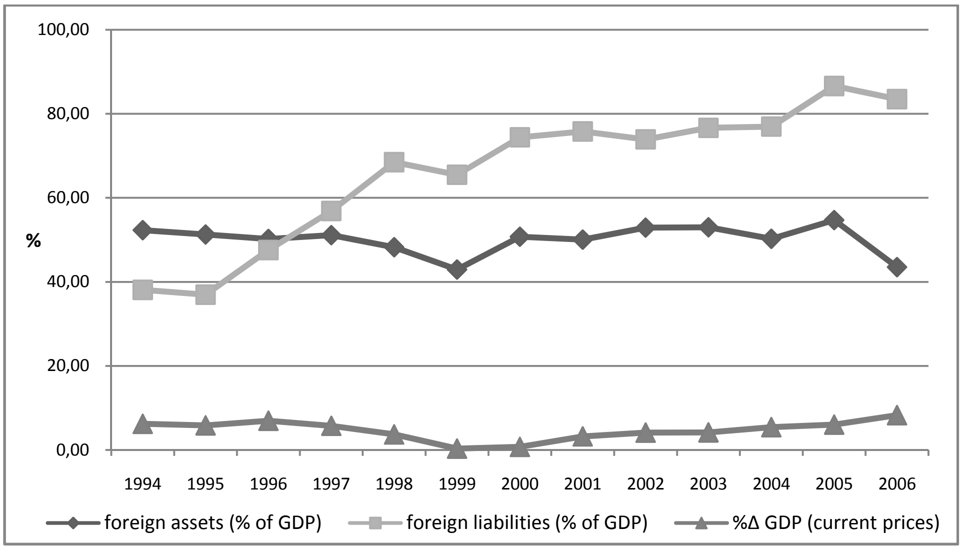
High trade openness (calculated as a share of a sum of the overall exports and imports of the goods and the country's GDP) together with the other particular assumptions that has revealed during the initial phase of the transition process formed the general framework for the international financial position development in the transition countries. The typically low initial stock of a capital, the investment severity of the transition process together with the consistent capital flows liberalization led to the intensive increase in the external financial openness of the Slovak economy, especially as a result of the substantial capital inflows. Considering the conditions in the beginning of the transition process (determined especially by the initial economic shock and the following real output slump) it was obvious, after the initial period of macroeconomic stabilization, to expect the substantial net capital inflows stimulated by the higher rate of return on the capital and the process of a real convergence acceleration in the transition economies.

As we have observed the debt capital inflows helped the transition economies to solve the problems with the financing the current account deficits especially during the first decade of the transition process (so that the overall balance of payment was cleared or in the surplus). On the other hand, the equity capital

[1] Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER).

inflows helped the transition economies to share the risk with the foreign investors more effectively, in comparison with the debt capital inflows. We may assume, that the profitability of foreign direct investments in a way reflects the overall performance of a certain economy. The rate of return on foreign equity investments is expected to be higher than the interest rate paid on the foreign borrowings or the securitized debt because foreign investors usually require equity premium.
Substantial capital inflows, especially in the first part of the selected period 1994-2006 (Figure 1) together with not negligible capital outflows induced the significant increase in the international financial integration of the Slovak republic. Apart from the a global trend towards an increased cross-border asset allocation it was also result of the capital account liberalization and the policy reforms that that have increased the financial deepening [22].

Figure 1 Foreign financial assets and liabilities (% share of GDP) (1994-2006)

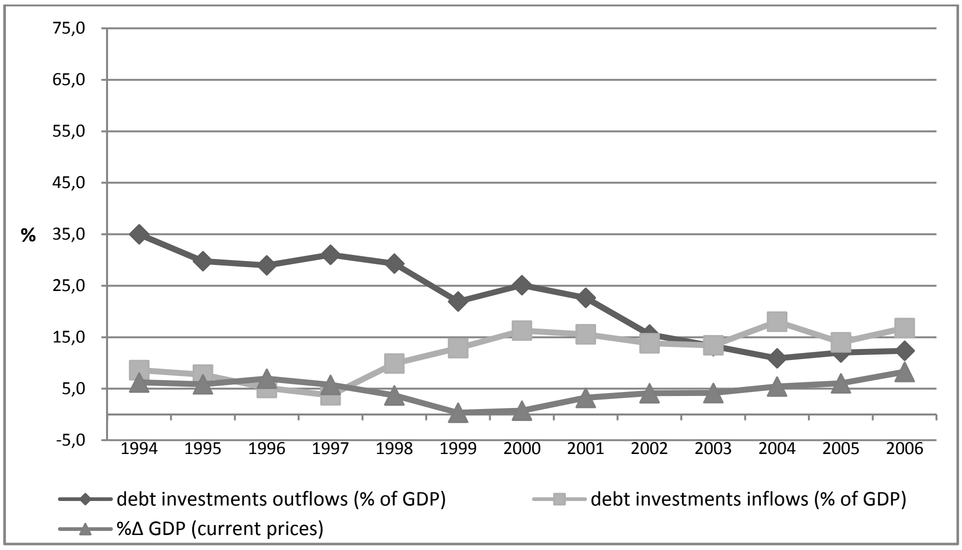


Source: authors calculation based on the [14], [16]

2.3. Decomposition of the external capital flows development

In the beginning the main source of the external financing of the transition process was in the form of foreign debt (especially borrowings). High interest rates margins stimulated the inflows of the debt investments (Figure 2) while a fragile macroeconomic and policy stability decreased the interest of the equity investors from allocating their available capital in the Slovak republic.

Figure 2 Debt investments (% share of GDP) (1994-2006)

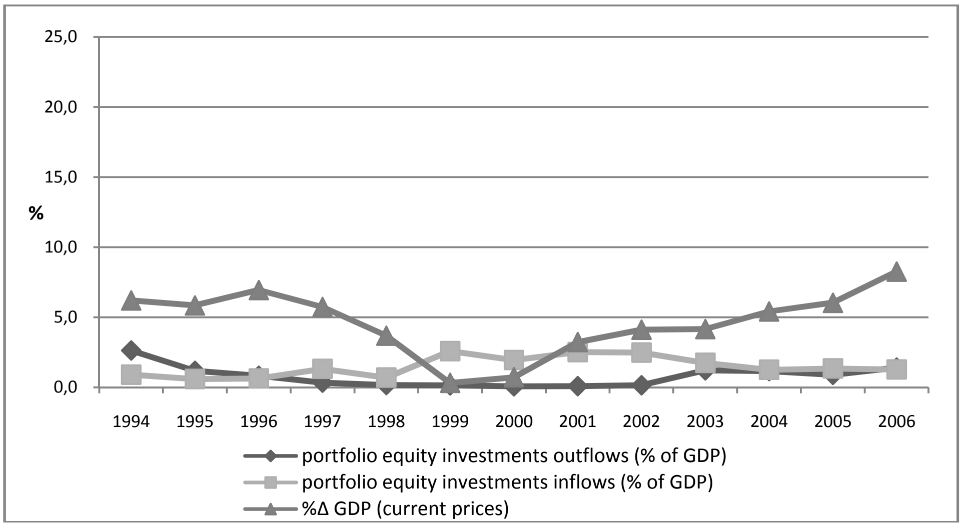


Source: authors calculation based on the [14], [16]

The share of debt capital inflows in the Slovak republic has been decreasing since 1998 especially because of the rapid increase in the foreign direct investments inflows.

Since the 1994 the development of foreign portfolio equity investments (Figure 3) reflects the negligible role of this kind of a capital in the external capital portfolio of the Slovak republic, particularly because of a low capitalization and liquidity of the Slovak capital market. During this period there was not any significant change toward the increased role of foreign portfolio equity investments so that this area of the international financial integration still remains the challenge for the Slovak republic.

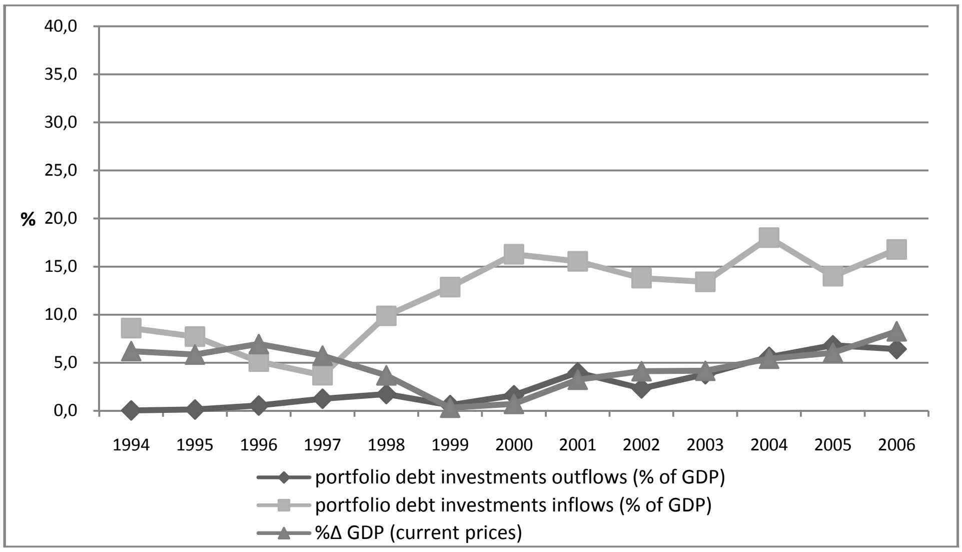
Figure 3 Portfolio equity investments (% share of GDP) (1994-2006)



Source: authors calculation based on the [14], [16]

The development of foreign portfolio debt investments since 1994 particularly reflects the changes in the foreign debt investments development so that the decrease in the direct debt inflows was partially offset by the securitized debt inflows (especially in the period 1998-2000). The outflows of the foreign portfolio debt investments still remained of a minor relevance.

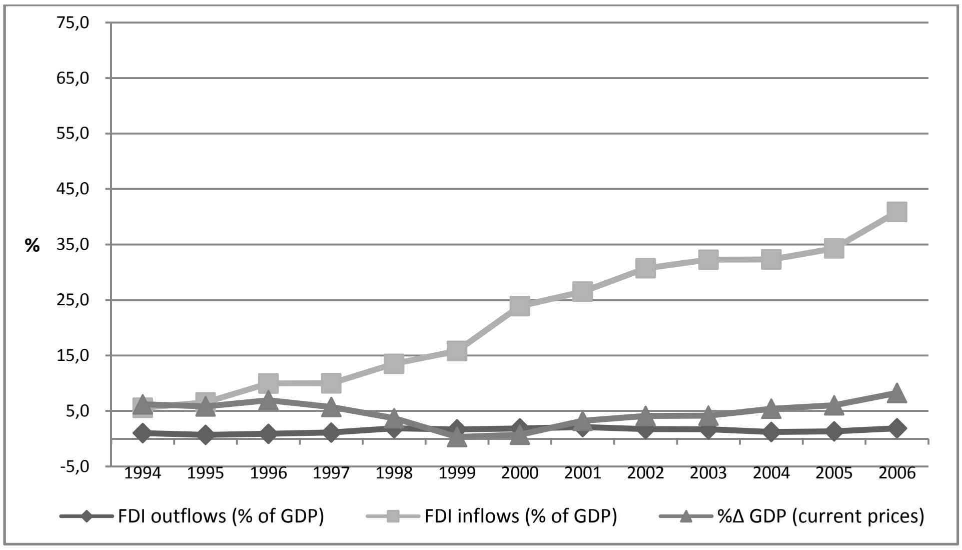
Figure 4 Portfolio debt investments (% share of GDP) (1994-2006)



Source: authors calculation based on the [14], [16]

The outflows of the foreign portfolio debt investments still remained of a minor relevance, especially as a result of higher interest rate on the debt securities in the Slovak republic.
After the initial macroeconomic stabilization (1994-1995) the demand-pulled economic policy of the Slovak government stimulated the economic growth. However the problems on the supply side of the Slovak aggregate market combined with the shortage of the domestic resources and insufficient incentives to implement the structure reforms led to the overheating of the economy (1996-1998). Foreign direct investments inflows (Figure 5) in this period were low (partially as a result of a blind foreign policy of the Slovak government, shortcomings in the corporate governance legislation, etc.).

Figure 5 Foreign direct investments (% share of GDP) (1994-2006)



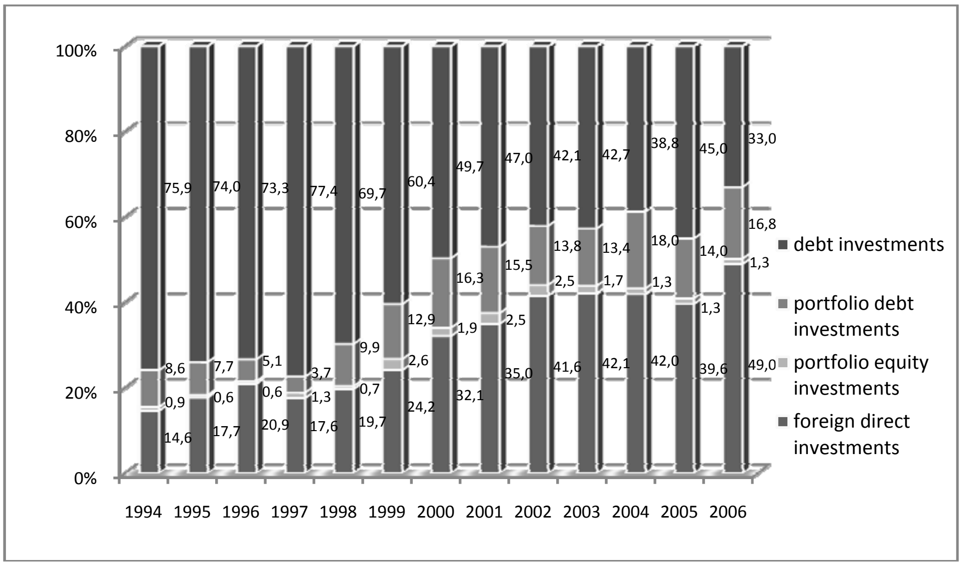
Source: authors calculation based on the [14], [16]

The situation has changed after the parliamentary elections in 1998. Changes since 1999 (moving toward the free float of the Slovak crown, interest rates decrease, economy reforms, foreign direct investments incentives, etc.) stimulates the rapid increase in foreign direct investments inflows. However, the export of foreign direct investments by Slovak enterprises still remains a challenge for the Slovak republic.

2.4. Overall foreign capital structure

In the beginning of the transition process in the Slovak republic debt investments reached the highest share on total foreign financial liabilities (Figure 6). The share of foreign direct investments and portfolio equity investments was only 16 percent, but during the next decade it has increased sharply, especially after the year 1998. As we can see from the figure 6 it was the result of the dynamic increase in the foreign direct investments inflows. In 2006 the share of foreign direct investments and portfolio equity investments inflows has already reached around 50 percent of the total foreign capital inflows.

Figure 6 Foreign financial liabilities structure (1994-2006)

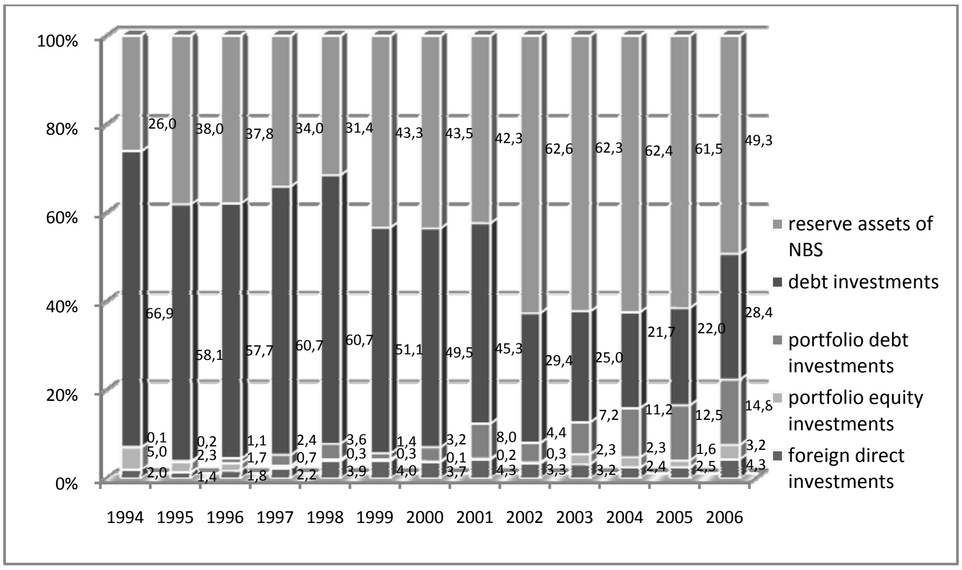


Source: authors calculation based on the [14], [16]

The increased share of foreign direct investments in the external capital portfolio structure in the Slovak republic has a number of interesting implications. As we have already noted foreign direct investments provides better risk sharing opportunity, than in case of other forms of the capital inflows. Also the expected profit from the investment for the foreign investor is not fixed but depends on the profitability of the investment. Second implication of the sharp increase in foreign direct investments is that foreign direct investment provides the technology transfer opportunity for the receiving less developed country. Large foreign direct investments inflows also contribute to the raised productivity and economic growth. On the other hand it is also important to mention that the positive effects of the foreign direct investments inflows come at the expense of higher return that foreign investors expect (if the profit is not reinvested in the capital receiving country, it is repatriated to the investors' domestic country).
The effects of the portfolio equity inflows are subject to discussion. The inflows of portfolio equity investments depend on the quality of the institutional framework for the corporate governance as well as the liquidity of the transition

country capital market. If those conditions are not fairly ensured, the foreign investor faces the risk that his profits are diverted either by insider or through political intervention. On the other hand we can assume that foreign portfolio equity investments could play more important role in the future to the extent that the Slovak republic undertakes sufficient corporate reforms to match the governance standards in more developed western economies.
During the last 13 years we have also experienced an interesting development of the foreign financial assets structure (Figure 7) in the Slovak republic. In the beginning of the period most external assets in the Slovak republic were in the form of debt investments. The share of this component was decreasing through the next years. At the same time we have experienced an increase in the share of the National bank of Slovakia reserve assets and portfolio equity investments.
The increase of the reserve assets share in the foreign financial assets structure results from their particular importance in the exchange rate policy (exchange rate interventions) of the country with the sovereign monetary policy. At the same time we highlight the general rule for the reserve assets recommended amount that requires the reserve assets to be able to cover the amount of the three month imports of goods.

Figure 7 Foreign financial assets structure (1994-2006)



Source: authors calculation based on the [14], [16]

Another important trend in the foreign financial assets structure development is the decline in the share of debt investment (similarly as in the case of foreign financial liabilities), while the share of portfolio investments (especially

portfolio debt investments) gradually increases. The relative share of portfolio equity investments increases only at moderate rates.
Finally, we expect the economic growth and greater trade openness in the Slovak republic will be associated with greater levels of external foreign direct investment and portfolio equity investment than is currently observed. As private-sector portfolios become more internationally diversified, the relative size of foreign exchange reserves is likely to decline.

3. Conclusion

The development of the external capital inflows and outflows in the Slovak republic is an interesting example of the potential effects of the international financial integration. High deficits of the current account from the beginning of the 1990s have accelerated the process of the intensive convergence of the national output through the positive effects of the foreign capital inflows. Among other effects of international financial integration we can also mention the international risk sharing, technology progress, etc. From the longer perspective the international financial integration can help to reduce the anticipated risk, support the export of goods increase, and stimulate the income inflows (as the workers migrates to the more developed countries).
From the medium-term perspective it is essential to achieve adjustments in the trade balance. Considering this it is important to mention that foreign direct investments are coupled with the technology and equipment imports that may temporary lead to the higher trade and current account deficits. The change in the negative trade balance development can be achieved by the increased participation in the international division of the labor process through the raising domestic producers’ competitiveness, preferring higher value added production, supporting domestic production diversification, stimulating higher quality of the domestic production, etc.
The crucial determinant in the development of the future foreign financial position of the Slovak republic is the foreign trade development. In the medium-term period we assume the overall improvement in the trade balance. We also expect the future decrease in the surplus of the capital account due to the changes in the foreign investors’ behavior, reflecting their seeking for better comparative advantages offered i.e. by the less developed economies of the South-Eastern Europe. Another challenge for the Slovak enterprises is the opportunity to increase the export of a capital in a form of foreign direct investments or portfolio equity investments.

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