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Debt Sustainability and Growth in Croatia

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Abstract

Croatia's external debt has been growing steadily since the exchange rate stabilization in 1994. It reached almost 85% of GDP at the end of 2003. The level and the trend raise questions of sustainability and thus of an appropriate policy response.

The current trend of debt accumulation is not sustainable. In the past five years, the debt to GDP and to exports of goods and services ratios have been growing by 8 percentage points on average. The horizon of sustainability, however, is not easy to determine. If high growth rates could be sustained and there are no adverse external shocks, stability could be extended over the medium term but probably not longer.

The main policy challenge stems from the nature of the external debt problem that Croatia faces. It is more supply- than demand-driven: low exports and high imports point to an exchange rate misalignment. If that is the case, then monetary and fiscal policies that restrict demand tend to trade growth for debt in the short run, i.e., slower growth of debt is achieved with lower growth rates. The supply side problem, however, needs to be addressed through measures that increase competitiveness. In the absence of exchange rate flexibility, incomes policy is the alternative. Its feasibility and effects should be studied carefully.

Keywords: *Croatia, external debt, sustainability, economic policy mix*

JEL classification: *F34, P27.*

Executive summary

Croatia's external debt has been growing steadily since the exchange rate stabilization in 1994. It reached almost 85% of GDP at the end of 2003. The level and the trend raise questions of sustainability and thus of an appropriate policy response.

Indicators of debt show an ambiguous picture. While the debt to GDP and the debt service to exports of goods and services ratios are rather high, debt and interest payments to exports of goods and services are moderate or low. The tentative conclusion may be that solvency is more of a problem than liquidity. This conclusion should be qualified by the fact that savings are rising with investments, which is usually a positive development.

The vulnerability of the external debt exposure is higher if stocks are affected rather than flows. Thus, exchange rate depreciation increases the debt to GDP ratio significantly, while an interest rate hike has only a moderate effect on the burden of debt service.

The current trend of debt accumulation is not sustainable. In the past five years, the debt to GDP and to exports of goods and services ratios have been growing by 8 percentage points on average. The horizon of sustainability, however, is not easy to determine. If high growth rates could be sustained and there are no adverse external shocks, stability could be extended over the medium term but probably not longer.

In that context, the dominant exit strategy should be assessed. The Croatian economic policy seems to be presumed on an early EU and euro accession. In that case, it is believed, nominal exchange rate adjustment may not be necessary as opposed to the real one.

To evaluate this strategy, two issues are important. First, the causes of the debt accumulation should be assessed. Clearly, those are to be found in the persistent current account deficit, which tends to be between 6% and 7% of the GDP on average. That deficit is mainly driven by the high trade (of goods) deficit and lately by the deficit in the income account. Second, real exchange rate adjustment, when the nominal one is not available, requires an effective incomes, i.e. wage, policy. That points to the necessity of a fiscal reform, because public expenditures are high (about 50% of GDP) and public sector wages have a tendency to increase.

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[1] More on competitiveness and on Croatia's economic development in general see H. Vidovic and V. Gligorov, 'Croatia's Delayed Transition: Competitiveness and Economic Policy Challenges', *wiiw Research Reports*, No. 304, March 2004.

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Debt Sustainability and Growth in Croatia

Introduction

The rapid increase in Croatia's external debt has prompted policy responses in 2003. Their efficiency depends on the assessment of the seriousness of the external debt accumulation, on its causes and on its possible developments. In this report, these questions will be looked at comparing current developments in Croatia with the experience of the other countries in transition. Before that, a brief overview of the macroeconomic developments will be given.[2] The report ends with a brief discussion of macroeconomic strategies for sustained growth in Croatia.

Recent developments

Last year saw a modest slowdown of GDP and industrial production growth. The trade balance (of commodities) worsened too, with the deficit reaching more than 8 billion dollars (exports were somewhat above 6 billion dollars). Exports of goods and services were by about 2.2 billion dollars lower than imports. The deficit of the current account was put at above 7 per cent of GDP or somewhat more than 2 billion dollars.[3] Usually, initial estimates are revised upwards later on. Thus, the initial estimate of a 6.9 per cent deficit was revised to 8.5 per cent in 2002. In any case, a current account deficit between 6 and 7 per cent of GDP is around the average for Croatia in the post-1994 period.

The slowdown of growth is attributed to the restrictive monetary policy which was the reaction of the central bank to the explosion of the external debt. It jumped from about 15.5 billion dollars in 2002 to close to 24 billion at the end of 2003. As a percentage of GDP, the rise is also quite remarkable, from 67.9 to 84.5 (and from 144 to 156 as a percentage of exports of goods and services). It is projected that the external debt will reach 28 billion dollars in 2004. In Figure 1 the average increase in the debt to GDP and exports of goods and services ratios in the 1997-2003 period are extended for three more years. At the end of 2006, the debt to GDP ratio climbs up to 108 per cent, while the debt to exports of goods and services ratio jumps to 182 per cent.

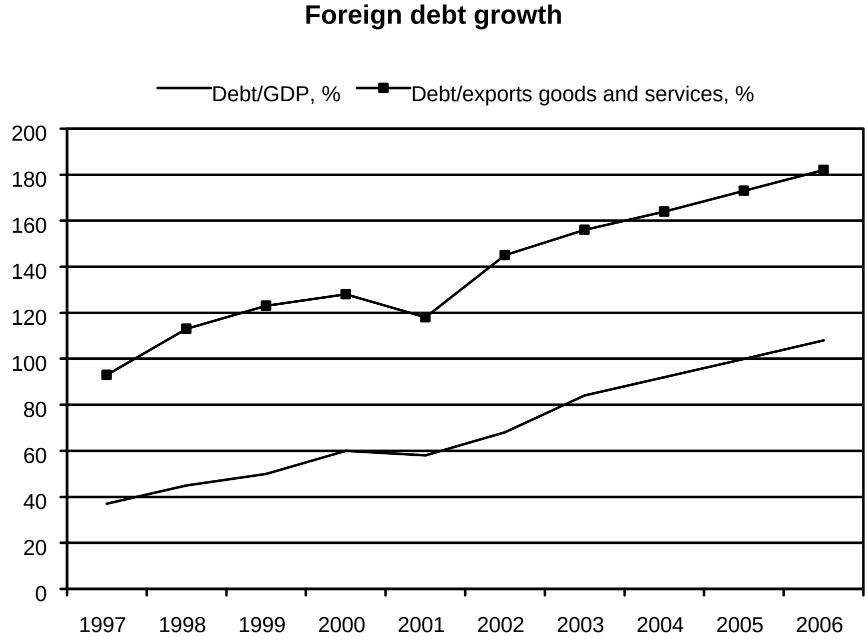
The recent fast growth of the external debt was judged to have been partly the consequence of the fast growth of private consumption, which was fuelled by similarly fast growth of consumer credits. Thus, the central bank introduced various restrictive measures

2 For detailed analysis see H. Vidovic and V. Gligorov, 'Croatia's Delayed Transition: Competitiveness and Economic Policy Challenges', *wiiw Research Reports*, No. 304, March 2004.

3 See Bilten 2001, Hrvatska naroda banka, March 2004.

in order to decrease the growth of money and of credit. This has had some effect on the growth of GDP and of industrial production, but the effect on the growth of imports is not yet clear.

Figure 1



Source: wiiw Database.

Another worry has been the fiscal deficit. The figures are also bound to be revised, but it seems that it topped 5 per cent of GDP in 2003. The deficit has remained high despite the high growth rate in 2002 and in 2003. This is the consequence of two influences. On the one hand, discretionary spending has increased with investments in infrastructure. On the other hand, other expenditures, especially on subsidies and transfers and on wages and salaries, have not decreased as planned. In addition, significant increases in public sector wages have been agreed on ahead of the parliamentary elections in 2003. Thus, fiscal consolidation is still a task. It is also the main sticking point in the relationship with the IMF.

Inflation has been subdued and has not been a serious worry practically since the stabilization in 1994. The main anchor has been the exchange rate, which has been rather stable, with seasonal fluctuations. As long as the stability of the exchange rate is maintained, price stability should be maintained as well. Thus, the key issue is that of the vulnerability of the exchange rate, which of course depends on the developments in the external sector.

Employment has remained mostly constant in the past year, while unemployment has shown a tendency to increase in the second half of the year. The data on the labour market are not altogether easy to interpret, so it is hard to tell how much the growth recovery of the past two years has been translated into growth of employment. In any case, Croatia remains a country with a rather high unemployment rate.

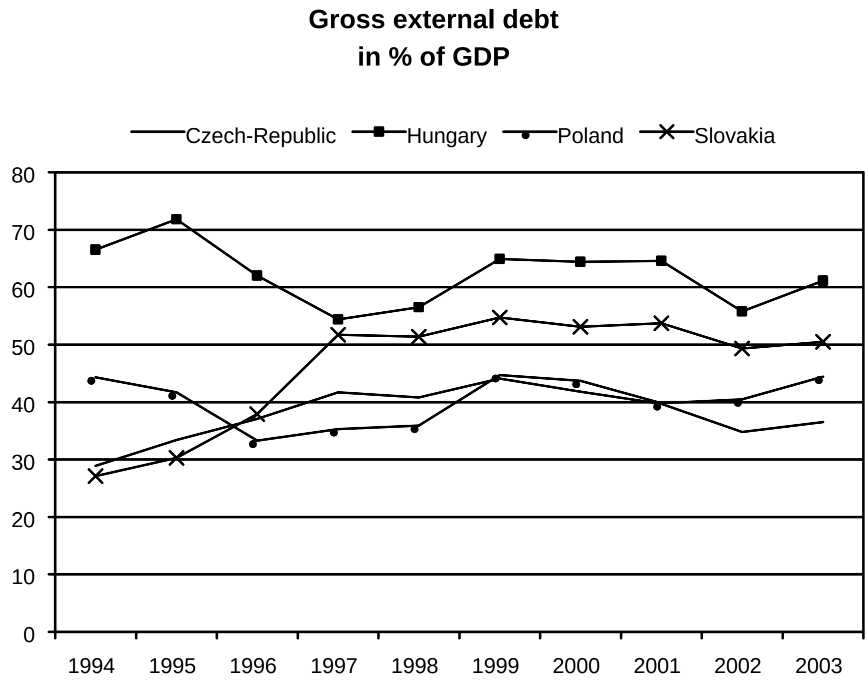
In conclusion: the high growth rates in the period 2001-2003 have been accompanied by persistent macroeconomic imbalances and by price and exchange rate stability. The issue of sustainability is being raised primarily in view of the rapid growth of foreign debt. That challenges both the fiscal and the monetary policies and indeed raises the question of the appropriate policy mix to stabilize the foreign debt. Here, first the issue of sustainability will be discussed and then the challenges will be reviewed.

Debt level and trend

The development of Croatia's external debt can be seen in detail in the figures in the text while other relevant data can be found in the statistical appendix. When compared to other relevant countries in transition, it can be seen that external debt grows continuously not only in absolute terms, but also as a share of GDP and of exports. In Figures 2 and 4, the external debt development in Central European countries is shown. In Figures 3 and 5 the development of former Yugoslavia and Southeast European economies is given. A similar breakdown is followed throughout the discussion of the issue of external debt. The reason is that former Yugoslavia states inherited the same history of debts and of monetary policy. Also, comparisons with Bulgaria are interesting and enlightening for Croatia. On the other hand, the Central European economies have some similarities and some diversity, but are also all joining the European Union and have had to follow similar convergence paths. Of course, cross-comparisons across these sets of countries can also be useful, which is also done in this report. Finally, various criteria of indebtedness are discussed and all of those are important to form a comprehensive picture of the sustainability of the debt and of its influence on the growth prospects of Croatia. As will become clear in the sequel, the picture is more complex than it may appear if only one indicator is considered or only one trend is followed. Issues of fiscal balance and of monetary policy are also discussed. Finally, the sustainability of the debt depends also on the general strategy of economic policy and especially on the speed of EU integration and of the adoption of the euro.

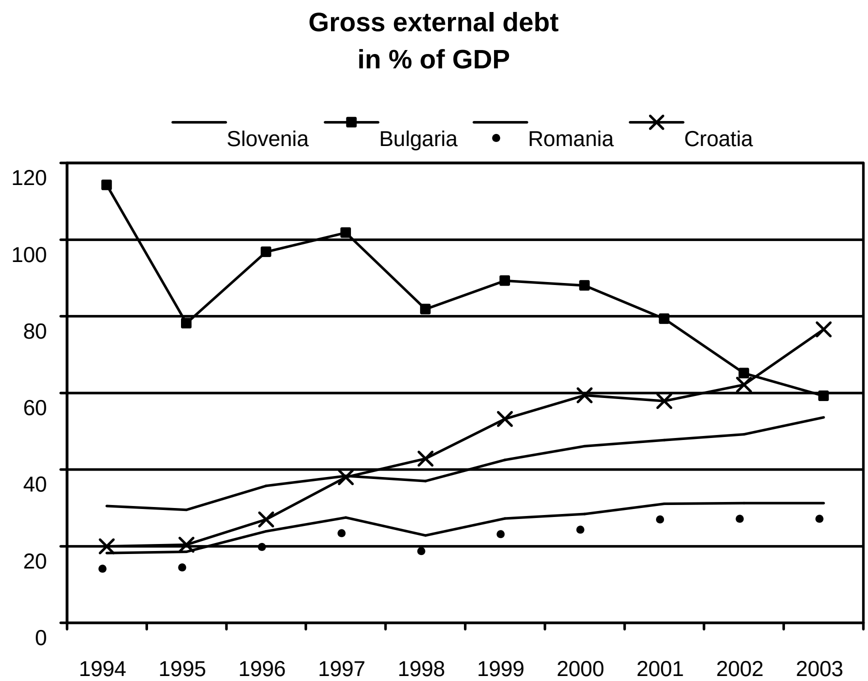
As can be seen in the first set of figures, some countries in transition show stable debt levels and developments, while Croatia, together with some other countries, exhibits a rising level of external debt. This is true both in terms of the debt to GDP ratio and also of the debt to exports of goods and services ratio.

Figure 2



Source: wiiw Database.

Figure 3



Source: wiiw Database.

Figure 4

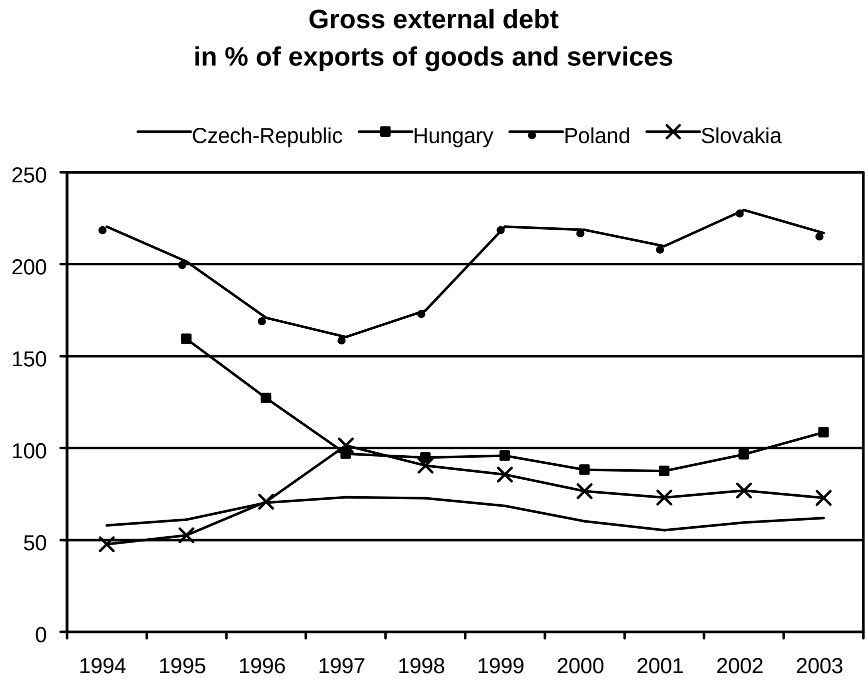


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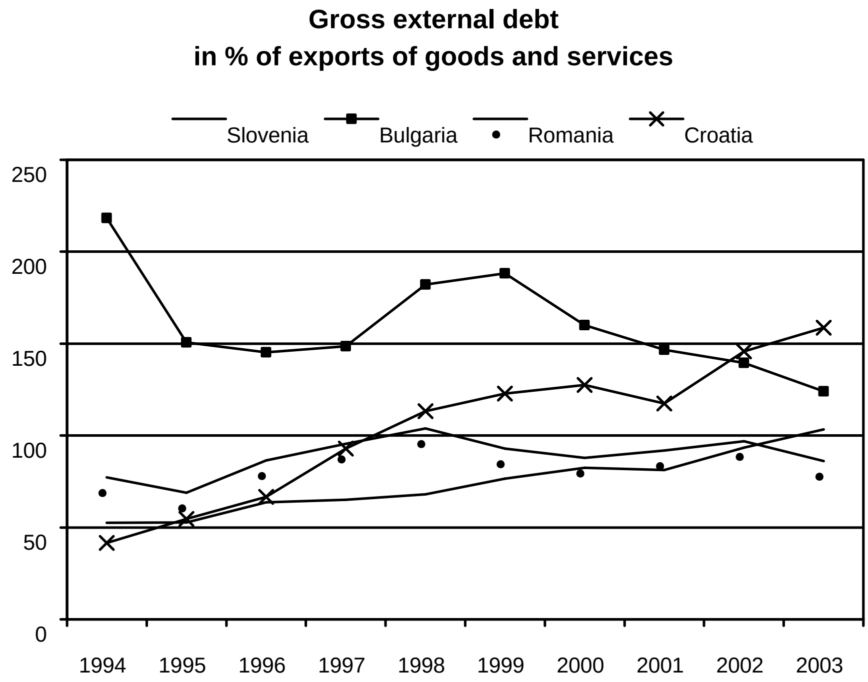
Figure 5



Source: wiiw Database.

It is evident from these figures that some countries in transition have managed to stabilize their external debt, and some have managed to decrease it. Experience points to the existence of the following stylized facts:

(1) Countries with low initial debt tend to accumulate it, sometimes at a rapid rate (for instance the Czech Republic and Slovakia, see Figure 2). This is understandable because that is the way to support consumption and to finance the process of transition.

(2) Countries that have inherited a high external debt tend to maintain a stable debt to GDP ratio, perhaps after an initial period of debt restructuring or debt write-off that enables them to take on some new debt (for instance Hungary and Poland, see Figures 2 and 4).

(3) Some countries with a worrying or unsustainable inherited external debt have to restructure it and still try to lower it in order to reach a level of debt that can be considered to be sustainable (for instance Bulgaria, see Figures 3 and 5).

(4) Some countries show a tendency to accumulate debt in an unsustainable manner. This is, to an extent, characteristic of some of the former Yugoslavia states. The reasons for that can, however, be different. Still, in most cases, growth of external debt will be accompanied by persistent current account and fiscal deficits and certain characteristics of the money and foreign exchange markets (on which more later).

Croatia falls in the category of countries that have inherited a relatively low level of external debt and have shown a tendency to accumulate new debt in a way that raises the issues of its sustainability. An interesting comparison is between Croatia and Bulgaria (see Figures 3 and 5). The latter country started with a very high level of inherited foreign debt. Over the period of transition, it has managed to lower or stabilize its debt to GDP ratio and debt to exports of goods and services ratio. Croatia, on the other hand, started with a low external debt and has arrived at a level which is comparable to that of Bulgaria and indeed surpassed it in 2003.

It is also clear from the figures that Croatia has the highest debt to GDP and debt to export of goods and services ratios (except for Poland) in this group of countries. This is true in comparison with countries that have had higher growth rates and higher rates of growth of exports than Croatia on average and also with those that have not.

In any case, Croatia has revealed a tendency to accumulate external debt and has now come to a point when this tendency has to be stabilized or the issue of sustainability may become a pressing one. It is also clear from Figure 5 that the tendency of a rise in indebtedness has not been discontinued with the growth of exports of services, that is with the growth of tourism. Indeed, the ratio of debt to exports of goods and services has continued to grow in the past two years, i.e., 2002-2003, even though tourism has also grown significantly. This development has been driven by the ever widening trade deficit.

This in turn has been driven by the rise in private and public consumption, on which more will be said later in this report. All in all, clearly external debt is growing faster than both the GDP and the exports of goods and services. Indeed, these indicators of indebtedness put Croatia at the top, or close to the top, of these two sets of countries. Of these two indicators, the first one, the debt to GDP ratio, can be considered as worrisome. The other one is still below the levels that are usually considered high. Even in the case of the debt to GDP ratio, the level itself may not be too high, at least when it is taken in conjunction with other indicators. It is the tendency of growth and the underlying causes of the growing indebtedness that are in fact causing some concern.

Ambiguous picture of external debt burden

Data on Croatia's external debt give an ambiguous picture. Some indicators point to the debt burden being quite heavy. Others paint a different picture of a more moderate debt burden. The next four figures should be compared with the previous four to get a complete picture of the overall debt burden. From these eight figures it can be concluded that:

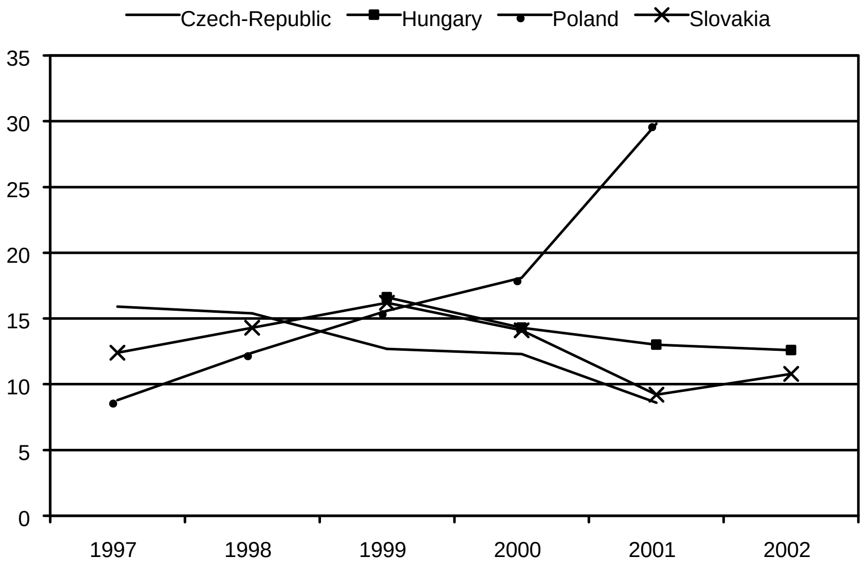
- in terms of the debt to GDP ratio (above 80 per cent) and in terms of debt service to exports of goods and services (between 25 and 30 per cent), Croatia's debt is significant, while
- in terms of the debt to exports of goods and services ratio (around 150 per cent) and the ratio of interest payments to exports of goods and services (between 5 and 6 per cent), Croatia's debt burden is moderate by conventional measures.

As a consequence, both policy makers and investors tend to look more benignly on the accumulation of Croatia's external debt. It is considered that some of the indicators of sustainability, which perhaps show the solvency of the country, are worrisome, but that others, which perhaps point to the liquidity of the country, are not such as to let alarms bells ring.

It is hard to formally determine whether indeed it is the case that solvency is a problem while liquidity is not. There are some signs that an ambiguous situation of that sort is developing, in which case the vulnerability of Croatia's external position may be more serious than it might appear from the conventional indicators of indebtedness. However, there are some difficulties in determining the extent to which liquidity is not a problem, as the level and the development of short-term debt is not altogether known.

Figure 6

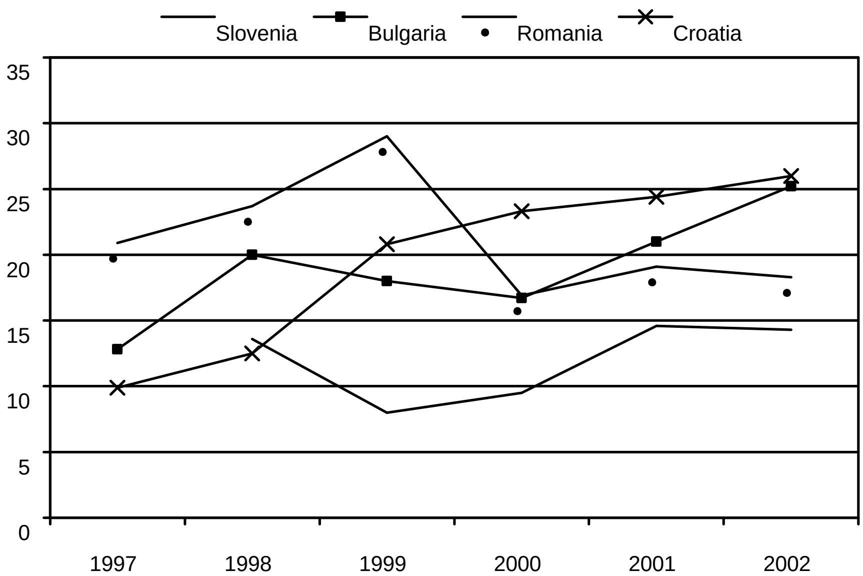
Debt service
in % of exports of goods and services



Source: IMF.

Figure 7

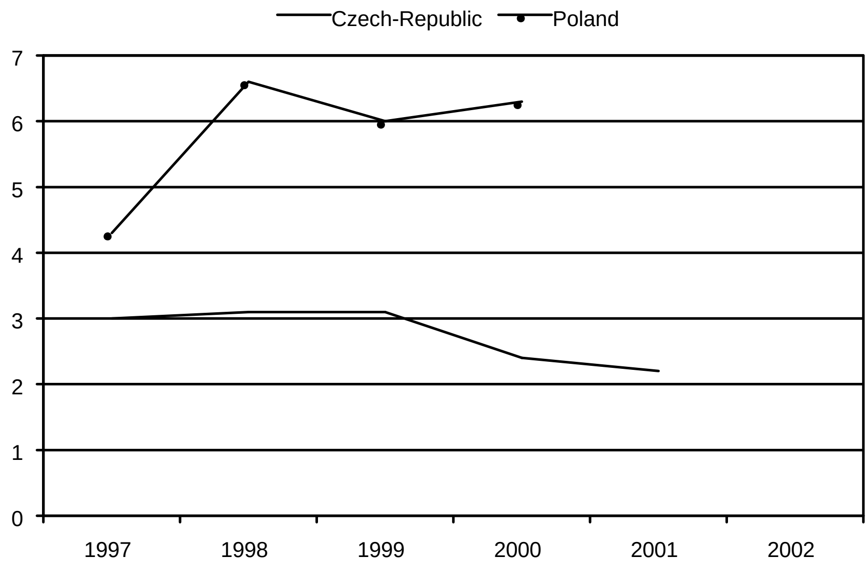
Debt service
in % of exports of goods and services



Source: IMF, Croatian National Bank.

Figure 8

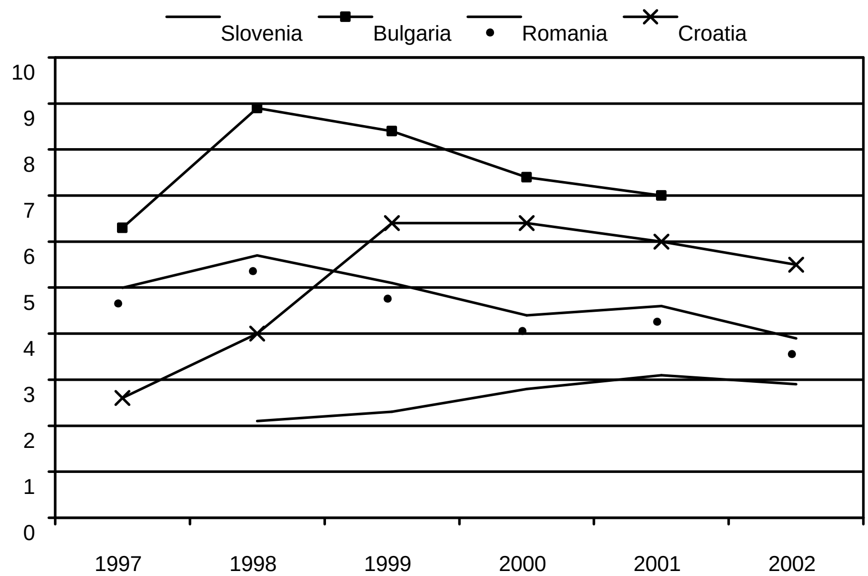
Interest payments
in % of exports of goods and services



Source: IMF.

Figure 9

Interest payments
in % of exports of goods and services



Source: IMF, Croatian National Bank.

If the experience of the other countries in transition is considered, it becomes evident that there is no clear picture of when a crisis precipitated by the non-sustainability of the external sector can be expected.[4] For instance, Hungary had to devalue and reconsider its whole macroeconomic strategy in 1995 when its debt indicators were not worse than the Croatian ones are now. The Czech Republic had a much lower debt burden than Croatia has now when the koruna collapsed in 1996. Bulgaria's debt indicators were also more or less similar to the Croatian ones now when the lev collapsed and a currency board was established in 1997. Most other countries have in fact managed to avoid an exchange rate crisis though not necessarily other types of crises.

Invariably, however, in all the cases the ensuing exchange rate crisis was precipitated by a fast accumulation of foreign debt. Thus, it is the dynamic that is as important as the actual level of the debt burden.

Other indicators

Often, when external debt is accumulating, one looks at the development of savings and investments.[5] It is conventionally accepted that, if the debt is increasing because investments are growing, this is better than if the debt is a consequence of falling savings. In Croatia, the picture is better than in some other cases. The shares of savings and investments in GDP have both grown in the past several years. In that sense, the increase in debt is a sign of economic recovery rather than of an opposite development.

Of course, the growth of external debt is mostly a reflection of the current account deficit. Though it is important whether the deficit is the consequence of a growth of investments or of a fall in savings, its level is still important for the sustainability of the debt. Indeed, in rather rough terms, it could be argued that persistently high current account deficits will present a problem almost irrespective of their underlying causes.

Thus, the logic behind the more benign view on current account deficits that are a consequence of a rise in investments is the expectation that these investments will generate output that will then lead to a decrease in the current account deficit. Thus, if it does not, then the sustainability of the external debt becomes a problem.

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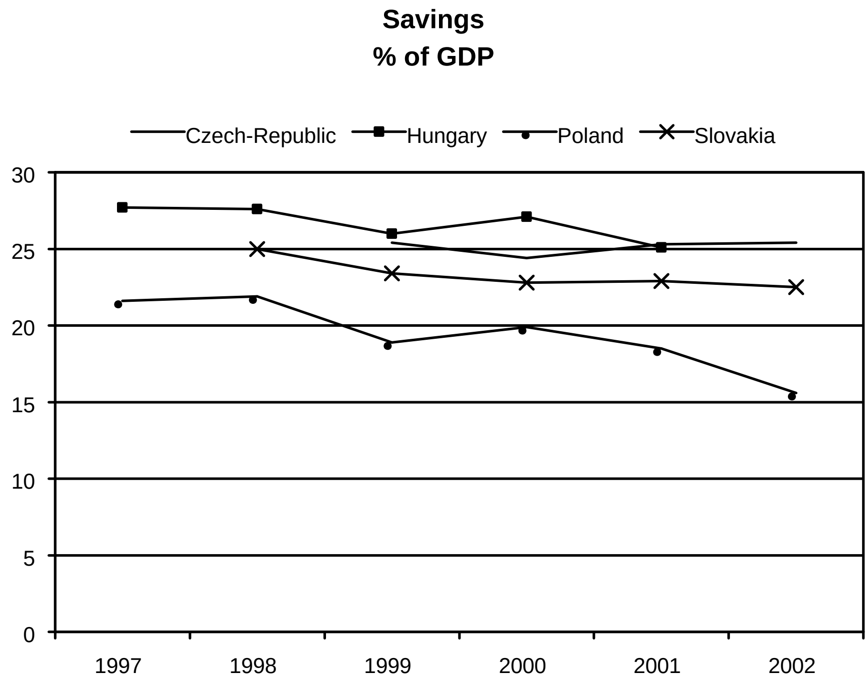
4 The literature on the causes of exchange rate crises and on the signs of vulnerability has become quite voluminous. One perhaps relevant summary in the context of the issue of sustainability is in IMF, *Assessing Sustainability*, May 2002. See also C. M. Reinhart, K. S. Rogoff and M. A. Savastano, 'Debt Intolerance', *NBER Working Paper* 9908, 2003.

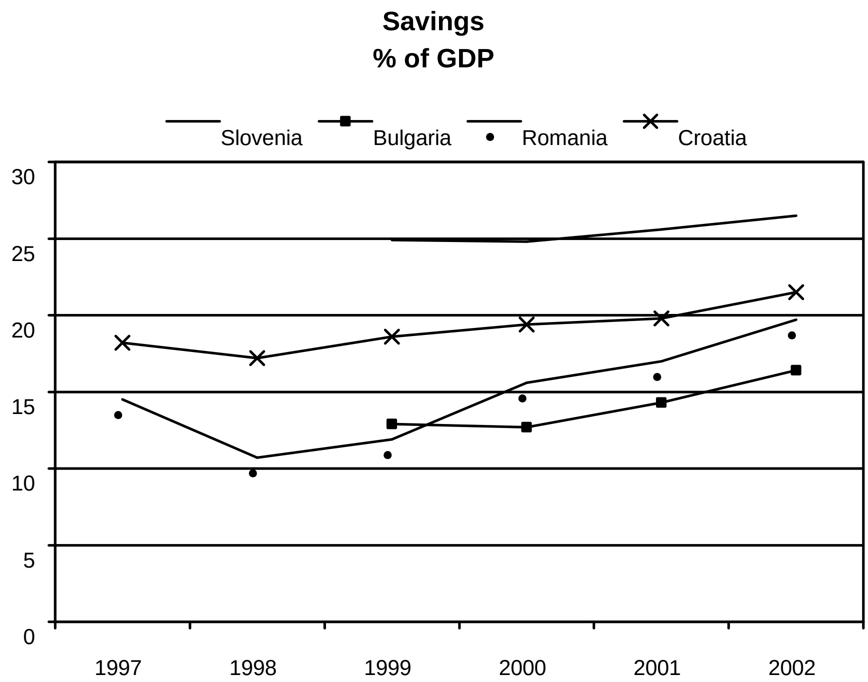
5 A good early overview of current account sustainability is in Gian-Maria Milesi-Ferretti and Asaf Razin, *Current Account Sustainability*, Princeton Studies in International Finance, No. 81, 1996.

Figure 10



Source: IMF, WDI 2003.

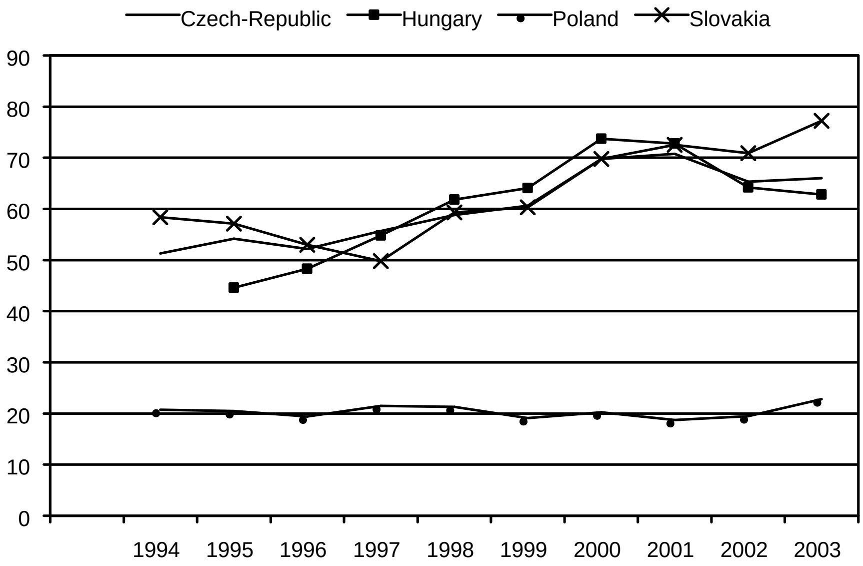
Figure 11



Source: IMF.

Figure 12

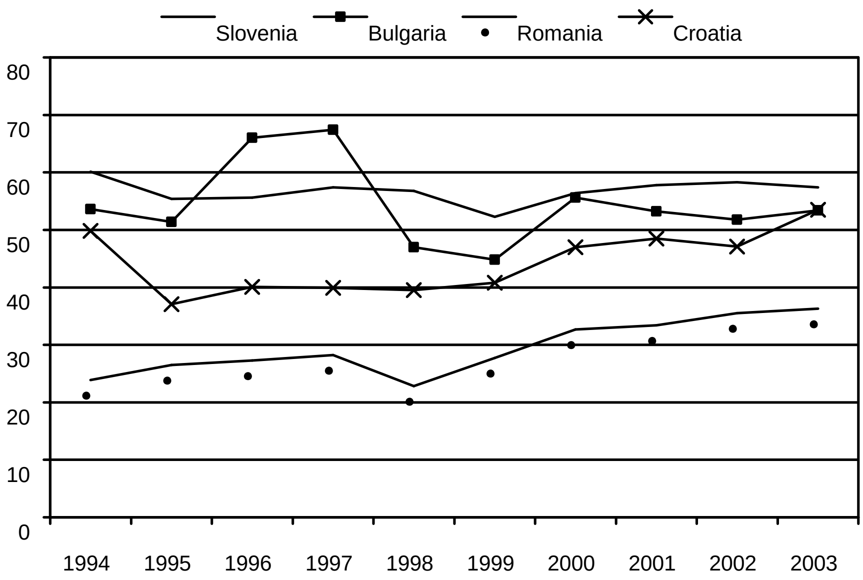
Exports of goods and services in % GDP



Source: wiiw Database.

Figure 13

Exports of goods and services in % GDP



Source: wiiw Database.

Figure 14

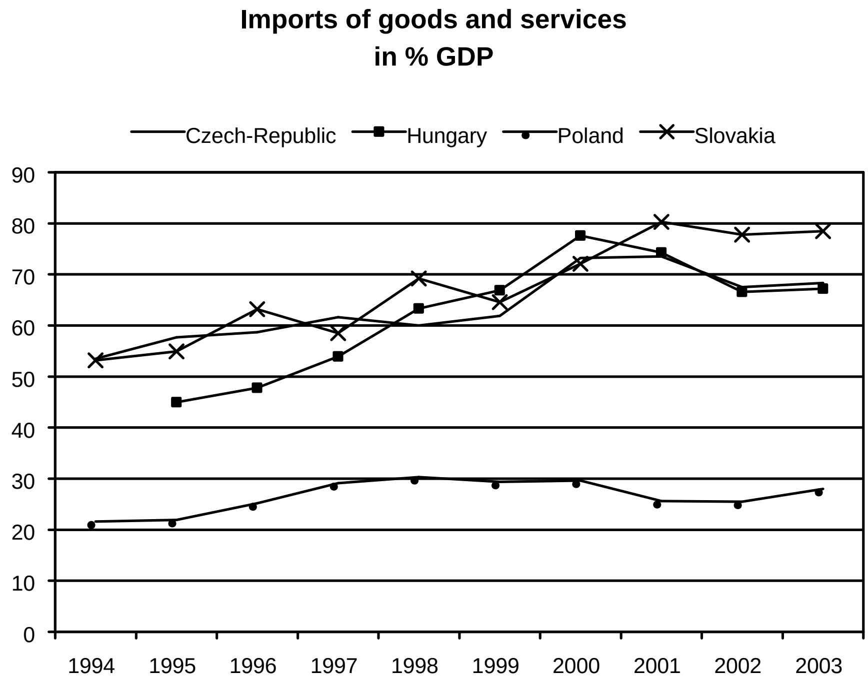


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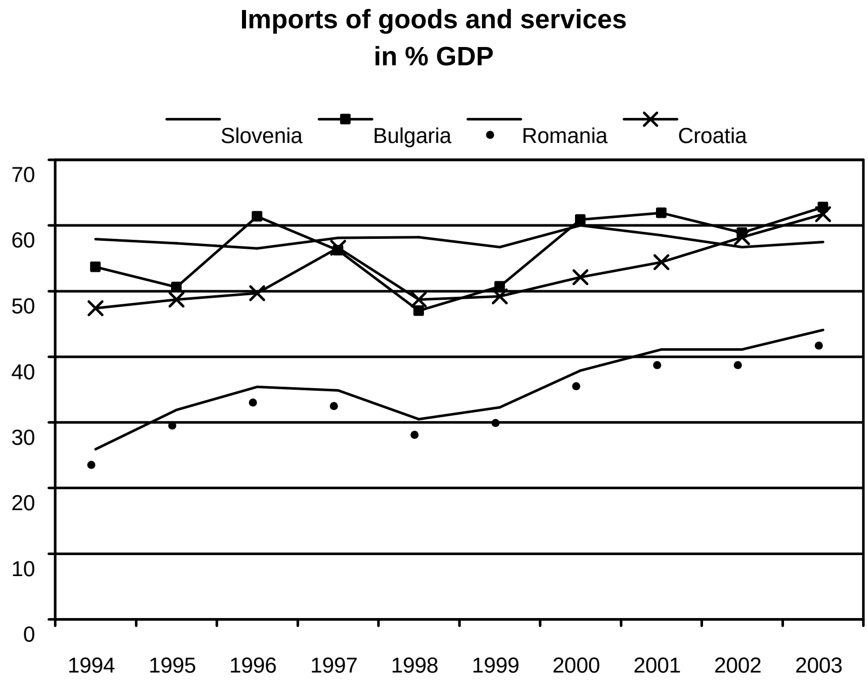
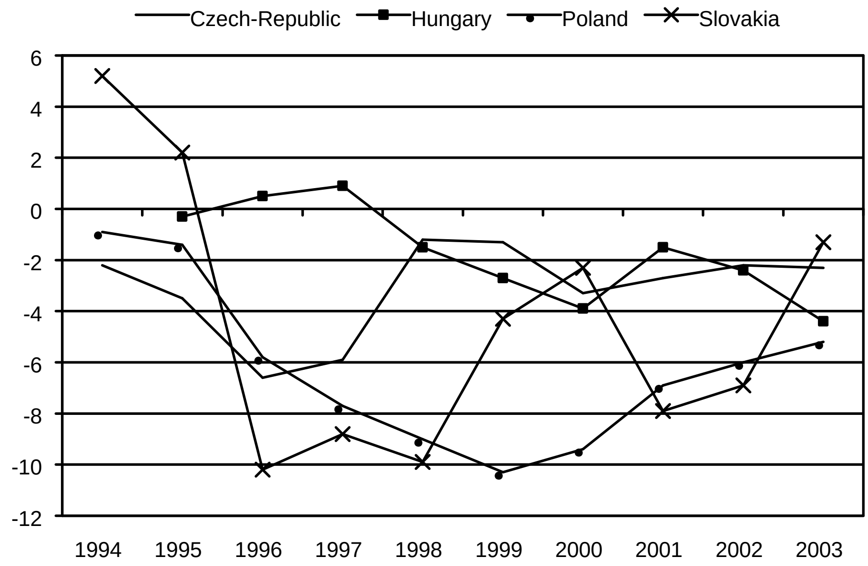
Figure 15



Source: wiiw Database.

Figure 16

Balance of goods and services in % GDP



Source: wiiw Database.

Figure 17

Balance of goods and services in % GDP

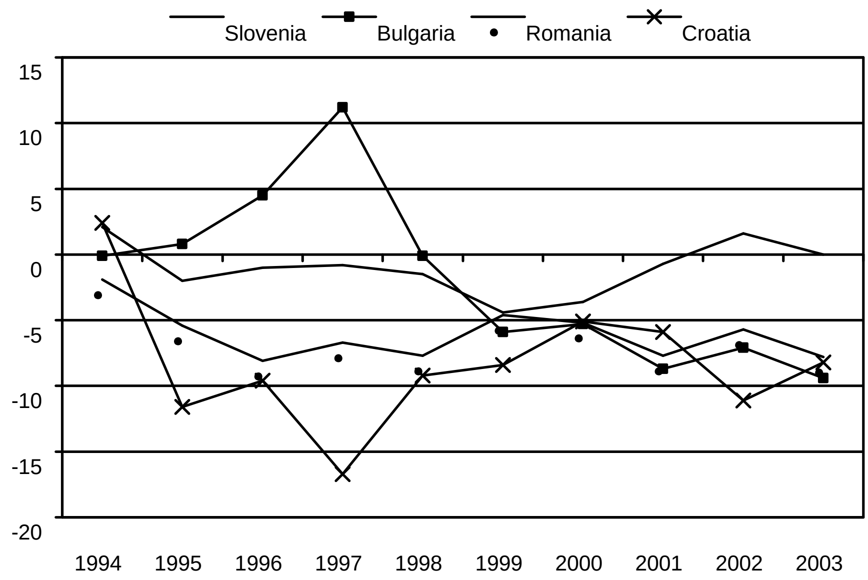


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Figure 18

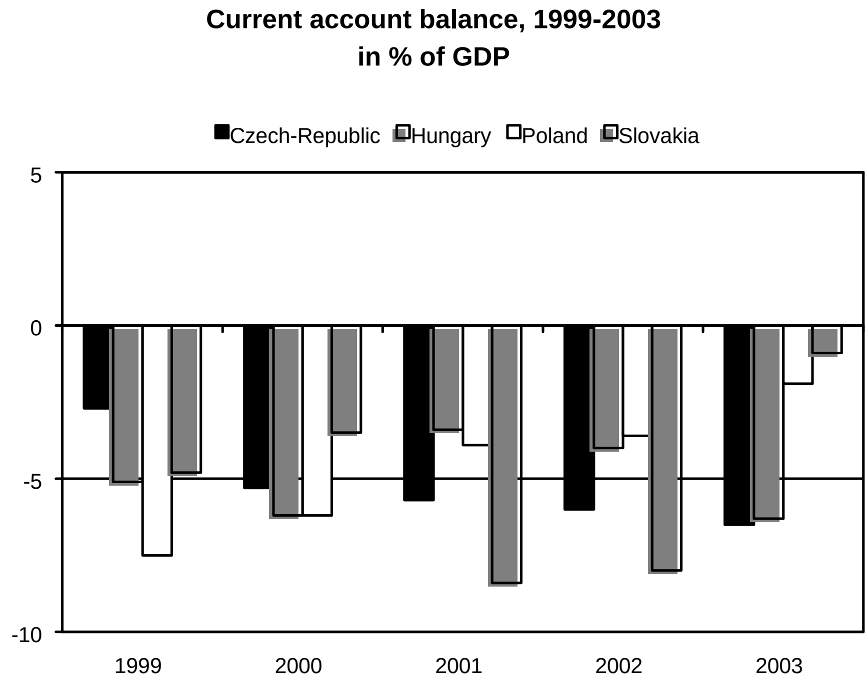

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Figure 19

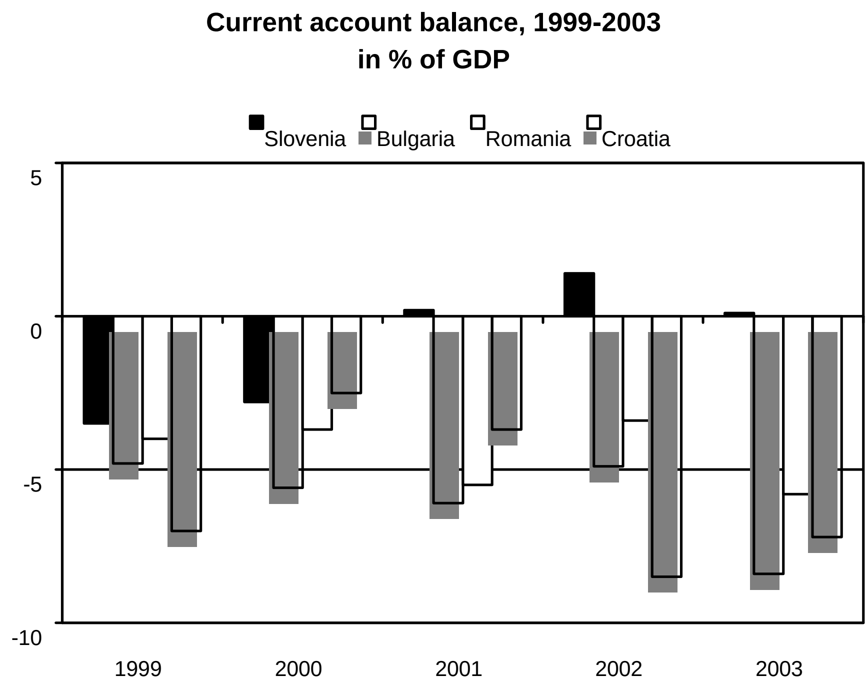

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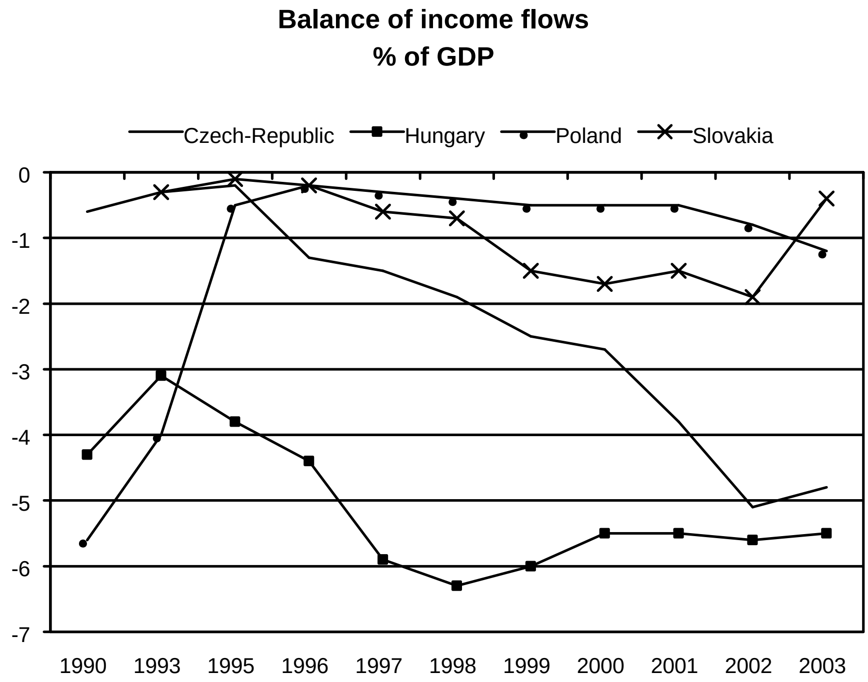
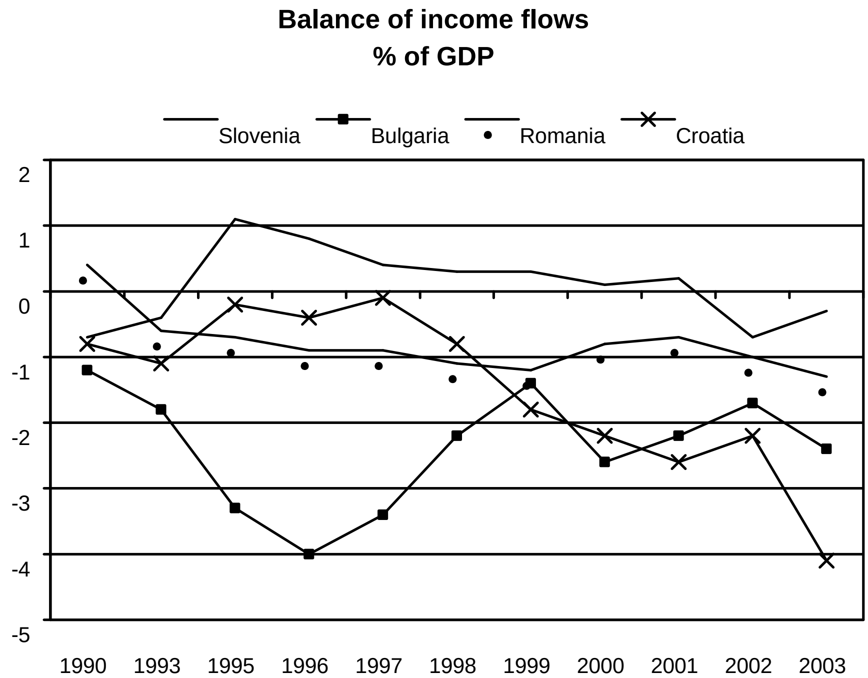
Figure 20



Source: wiiw Database.

Figure 21



Source: wiiw Database.

In Croatia, the current account deficit is persistently high. Perhaps even more importantly, the trade balance (of goods and services) is quite negative, often above 10 per cent of GDP (above 7.5 per cent in 2003 according to the preliminary figures). Finally, the trade in goods deficit is the highest, usually well over 20 per cent of GDP.

Thus, the current account is driven into negative territory by imports of goods and it depends very much on the surpluses in the services and income balances (which, however, have turned negative lately). The degree of volatility of these three balances is not the same. Though data are not altogether reliable, there is no doubt that the trade balance (in goods) is the most stable one, while that of services and especially of incomes are rather more volatile.

Looking at the trade balance (of goods), it is clear that it is very high. Also, it is widening because imports are rising faster than exports. The experience of other countries in transition and also other countries that have gone through an exchange rate crisis is that a crisis is more likely if the trade deficit is widening because of a drop in exports. This is not the case in Croatia, though exports of goods are not growing very convincingly. Clearly, a drop in exports of goods or services or both could expose the Croatian economy to serious vulnerabilities.

Debt vs. investment

Usually, non-debt-creating instruments are preferable to the debt-creating ones. In other words, it is believed to be better for a country to receive more investments rather than credits.[6] Indeed, a number of more indebted countries in transition managed to decrease their debt or at least to stabilize it by using the receipts from foreign direct investments to pay back their debt or to finance their current account deficits.

In that context, it is to be noted that Croatia experienced a drop in foreign investment in 2002, both direct and portfolio investments, though the receipts were again better in 2003 due to the sale of INA (the petroleum company). There are probably three reasons for the relatively weak or volatile performance of foreign investments:

One is the drop in foreign direct investments worldwide. It is true that a number of countries in transition have managed to attract growing amounts of foreign investments, but in general the inflows have gone down in most countries.

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6 See for instance E. Fernando-Arias and R. Hausmann, 'Is FDI a Safer Form of Financing?', Inter-American Development Bank Working Paper 416, 2000.

Second, there is not much left to sell in Croatia. This is what generally happens in all countries with large privatization programmes. After a few years of large investments, they tend to dry out because there is nothing left to sell.

Third, there is no boom in green-field investments. In some countries, e.g. in Hungary, green-field investments have played a very significant role. That also goes for expansions of existing firms and also for an increase in the value of the stocks traded at the stock-markets.

Given these developments, debt financing is what remains. As far as foreign debt is concerned, the growth of public debt has slowed down only to be overtaken by a sharp increase in private debt. In the latter, it is mainly the debt accumulated by households rather than by the corporate sector. It is this boom in household loans that have been translated into the growth of imports and have kept the current account deeply in the red.

This development is also the consequence of the banks' preference to lend to households rather than to businesses. This is mostly due to the loans to the households being more profitable and with shorter maturity. There may exist other more structural reasons for this development. It may be that established businesses can borrow abroad or that the less successful ones are perhaps too risky. As for start-up firms, it might be the case that they cannot supply a collateral because of legal or other problems that relate to the real estate market. It may also be the case that taking possession of the collateral may be difficult because of the inefficiency of the courts. These structural reasons, if they are present, should be looked into in order to see how the burden of debt could be reallocated.

In a more general sense, it should be kept in mind that there is no categorical difference between debt and equity.[7] Though it is important for an indebted country to attract foreign investments, the burden of foreign obligations is not necessarily diminished in that way. Both debt and investments create obligations to foreigners and thus have an influence on the current account, though that influence may be different in terms of its size and maturity. Of course, for a country that has a problem with the stock of debt rather than with its flow (i.e., with the debt service and especially interest payments), investments are preferable to debt because the former increase the flow rather than the stock.

Thus, Croatia should look for ways to increase investments rather than to continue to build up debt.

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[7] They are substitutes in the sense of the Modigliani-Miller theorem. This becomes especially significant once corporate foreign debt becomes more important than public foreign debt.

Figure 22

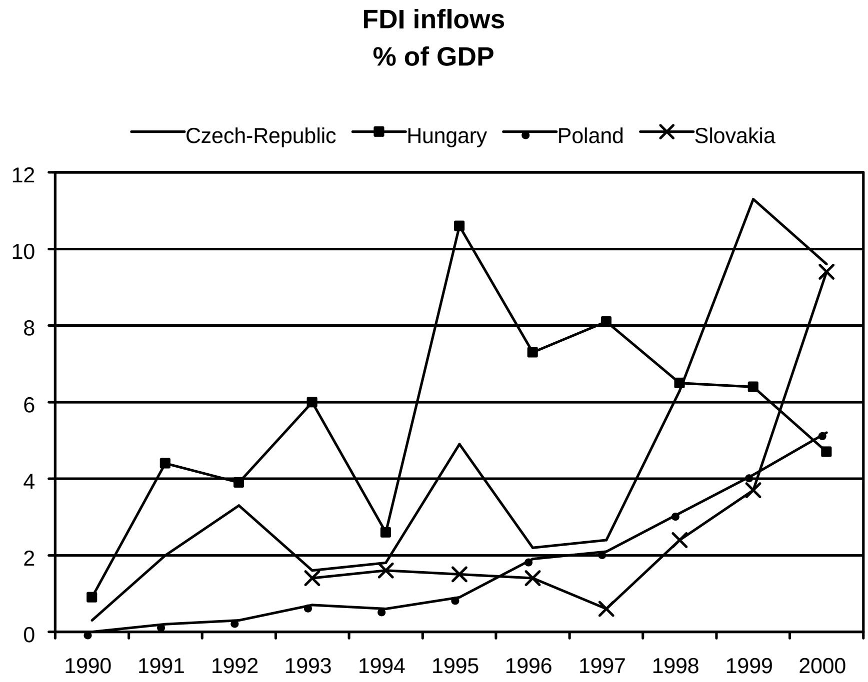

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Figure 23

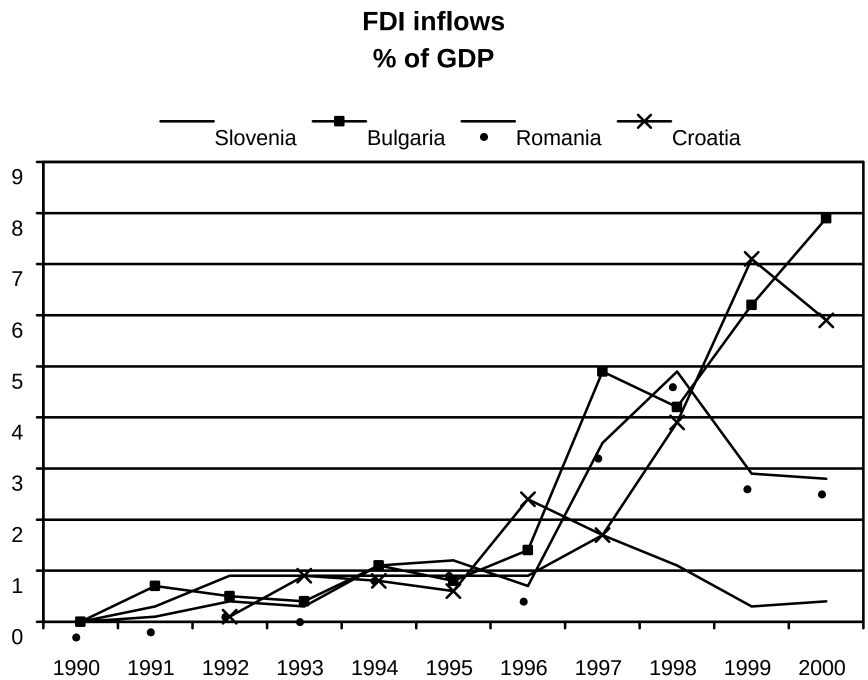

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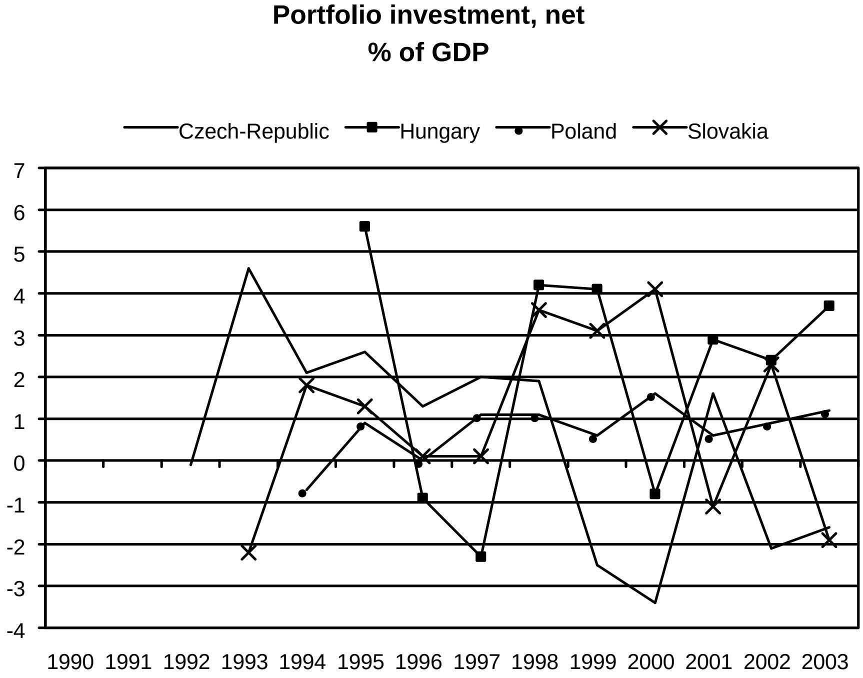
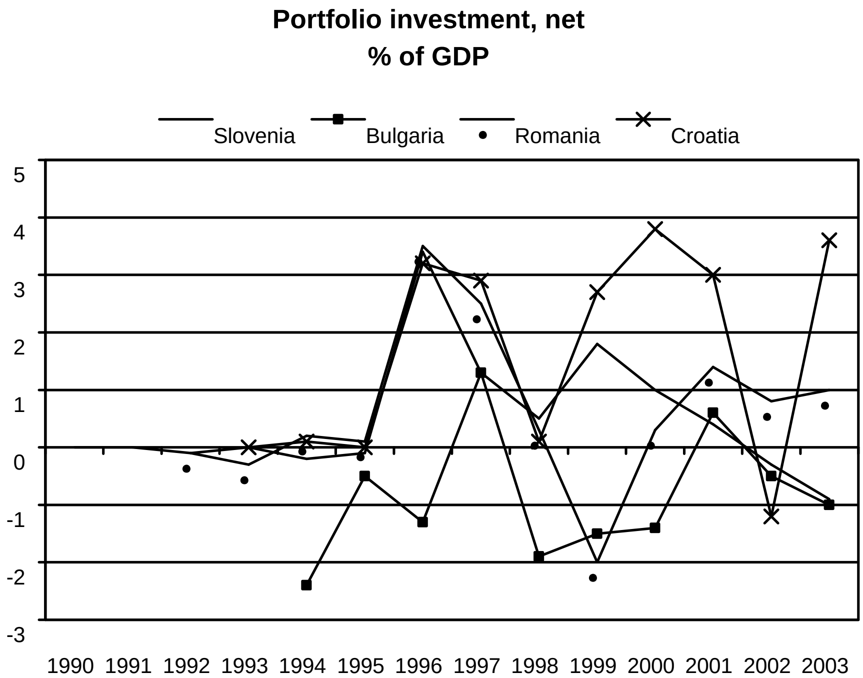
Figure 24



Source: wiiw Database.

Figure 25



Source: wiiw Database.

The exit strategy

The worry with the build-up of foreign debt has prompted some policy responses as already discussed. The question remains, however, why did the reaction not come earlier? One reason may be the belief that euroization is the appropriate exit strategy. It is true that some of the member states of the EU have large current account deficits. This is for instance true of Portugal and Greece.[8] The current account deficit is of course a different problem when a country has its own currency. When it does not have it, then it cannot have a currency crisis and, thus, the current account deficit is not necessarily a direct macroeconomic issue.

The difference is as follows. If a country has a currency, then current account deficits and trade deficits can be corrected via exchange rate depreciation. The reason is that the current account deficit is equal to the difference between savings and investments. Thus, a country imports savings in order to consume and invest more today and repay tomorrow. That means that it will have to export more. And that implies a correction in the exchange rate. If a country has its own currency, the correction may have to be nominal, i.e., its currency will have to depreciate nominally. If it does not have a currency, the depreciation will have to be real, i.e., the wages will have to be corrected downward.

A number of transition countries see a solution to their current account problems via euroization. It is possible that Croatia has been following the same strategy. If that is the case, the first question is whether the timing has been calculated properly. Because, if euro introduction is far off in time, the sustainability of the debt and that means of the exchange rate may become a problem before the euro could come to the rescue.[9] At this point, it does not seem realistic that Croatia can join the eurozone before the end of the decade. The current trends in external debt may not be sustainable that long.

The issue of vulnerability

The IMF calculates that devaluation costs are much higher than interest rate costs.[10] This is true in the immediate sense. A devaluation that would make a difference in terms of significant macroeconomic correction would have to amount to 20 to 30 per cent. That would increase the debt to GDP ratio immediately and dramatically. More importantly, it would increase the burden on the budget significantly. Compared to that, an interest rate rise may have less dramatic consequences. The problem is that the sustainability of the debt is best tackled by an increase in exports. And for that, an interest rate hike may not be

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8 See O. Blanchard and F. Giavazzi, 'Current Account Deficits in the Euro Area: The End of the Feldstein Horioka Puzzle?', to be found at http://econ-www.mit.edu/faculty/blanchar/files/draft1f3.pdf.

9 What kind of rescue it is, and is it at all, is a separate issue.

10 In the IMF's 'Second Review' from November 2003.

the appropriate instrument. Rather, that would require an adjustment in the exchange rate. This is the lesson that has come out of all the recent currency crises all over the globe.

Another source of vulnerability is slow fiscal adjustment. According to the IMF, interest payments are around or somewhat above 2 per cent of GDP. That leaves a primary deficit of around 3 per cent of GDP in 2003. Assuming a public debt to GDP ratio of about 50 per cent and a growth rate of 4 per cent, a primary deficit of 3 per cent requires a real interest rate on public debt of around 2.5 per cent for the debt to GDP ratio to remain constant.[11] If growth slows down or if interest rates go up, the debt to GDP ratio will increase. Alternatively, the primary deficit should decline. Indeed, the IMF assesses that the current level of fiscal deficit is unsustainable, i.e., it would cause the public debt to GDP ratio to increase without limit.[12]

The past record points to the Croatian governments having problems to get public spending and thus the fiscal deficit under control. Though the deficit in 2003 was lower than it had been a couple of years before, it was probably at the same level as that in 2002, which was judged to be unsustainable by the IMF and by the then government. If the interest rates go up, the pressure on the budget will increase.

When it comes to the growth of foreign debt, there are some problems with the data. In 2003, foreign debt increased by 8 billion dollars. The current account deficit, however, was just above 2 billion dollars. Reserves grew by about 2.5 billion dollars. There is, thus, a difference of over 3 billion dollars to be accounted for. It would be important to know how it is accounted for to be able to project future increases. In the past five years or so, the debt to GDP ratio has been growing by about 7 to 8 per cent per year, while it has grown by about 17 per cent in 2003. Assuming that the current account is measured correctly, a deficit of around 2 billion dollars per year would require a similar growth of nominal GDP in order for the debt to GDP ratio to stay constant (assuming that the whole deficit is financed by debt). That implies a rate of more than 6 per cent nominal GDP growth (measured in dollars) in the initial years. Otherwise, foreign debt will continue to grow. Of course, if either the current account deficit is higher or the nominal GDP growth slows down, the issue of debt sustainability will be that much more serious.

Another way to look at the sustainability of the foreign debt is to see whether the interest rate on the debt is higher or lower than the growth rate of the GDP. If it is lower, the debt to

[11] The primary deficit to GDP ratio $s = (r-g)*d/(1+g)$ where r is the real interest rate, g is the real growth rate and d is the debt to GDP ratio. I take s to be –0.03, g = 4 and d = 0.50. That gives a real interest rate of about 0.025.

[12] More on the fiscal developments and challenges in H. Vidovic and V. Gligorov, 'Croatia's Delayed Transition: Competitiveness and Economic Policy Challenges', *wiiw Research Reports*, No. 304, March 2004.

GDP ratio will fall. If it is higher, it will grow until an adjustment becomes necessary.[13] These two ways of looking at the foreign debt identify two types of vulnerabilities.

On the one hand, a high current account deficit may induce an exchange rate adjustment that will increase the burden of the debt. On the other hand, a rise in the interest rate will make it more difficult to refinance the debt. Thus, the former is a solvency problem, while the latter is a liquidity problem. It is better if the liquidity problem is run into before that of solvency. However, as already argued, Croatia seems to have more of a problem of solvency than of liquidity.

Policy challenges

The key issue is whether the macroeconomic disequilibria can be corrected without a change in the policy mix or not. The policy mix implemented in the past two to three years has been one of rather loose fiscal and also monetary policy. This policy mix has speeded up growth while keeping the exchange rate and the prices stable. This has been possible because of the growth of imports of goods and the growth of exports of services. In addition, public investments have grown with a similar influence on the trade balance. The rapid growth of foreign debt, however, has prompted discussion about the needed policy adjustments.

One policy adjustment has already been made: monetary policy has become more restrictive. Another has been included in the budget for the year 2004: fiscal adjustment of about half a percentage point of GDP. The aim is to slow down imports via a slowdown of the growth of consumption. The exchange rate and prices should remain broadly stable, with the exchange rate depreciating as much as the prices rise. The overall outcome of this cautious adjustment should be:

– Growth slowdown with slower growth of foreign debt.

This policy mix differs from the one that the previous government followed, which was rather lax, but monetary policy was more lax than fiscal policy. The emerging policy mix is restrictive, with monetary policy being more restrictive than fiscal policy. The former policy led to the acceleration of growth with an acceleration of the accumulation of foreign debt, while the latter should trade growth for debt, i.e., slower growth should also slow down the further build-up of foreign debt. Its success will depend on what is done with other policies, such as incomes policy and that of structural reforms. So far, it has been difficult to do much about both.

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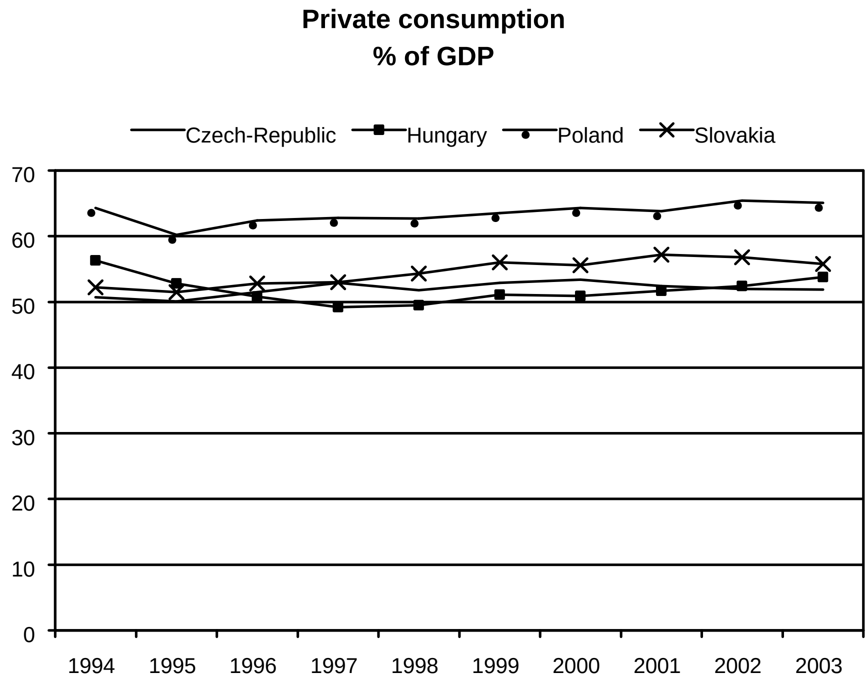
[13] On that see especially Daniel Cohen, ‘How to Evaluate the Solvency of an Indebted Nation’, *Economic Policy* 1, 1985.

Here the key question is how to support exports rather than to just decrease imports. As argued throughout, the appropriate policy instrument would be the exchange rate, but high vulnerability is attached to that. The alternative is incomes policy. So far, the control of wages and salaries in the public sector has not been very successful. It would require a new study to assess whether it could be in the future and what would be required for it.

Appendix: Additional Figures and Tables

Figure A1



Source: wiiw Database.

Figure A2

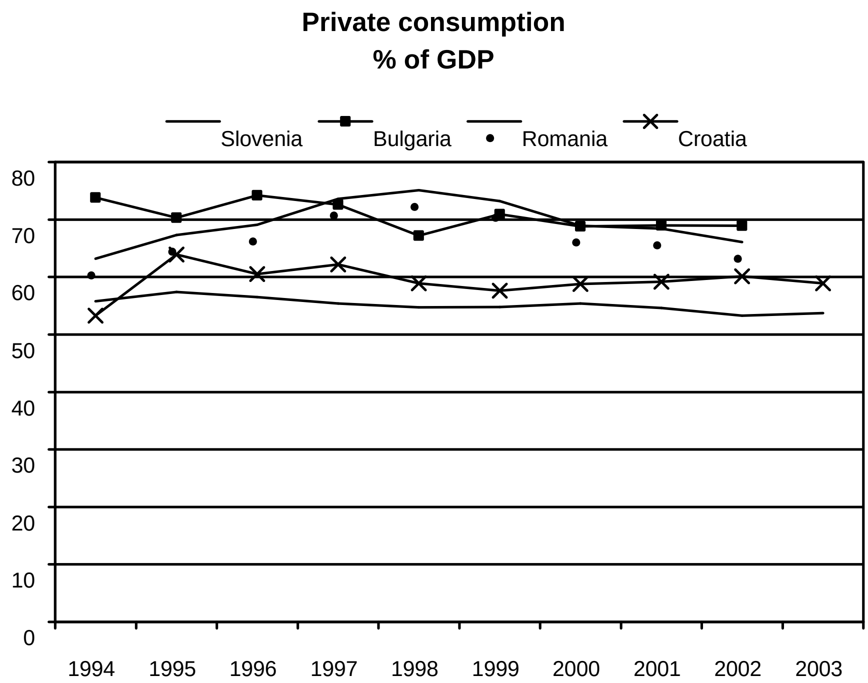


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Figure A3

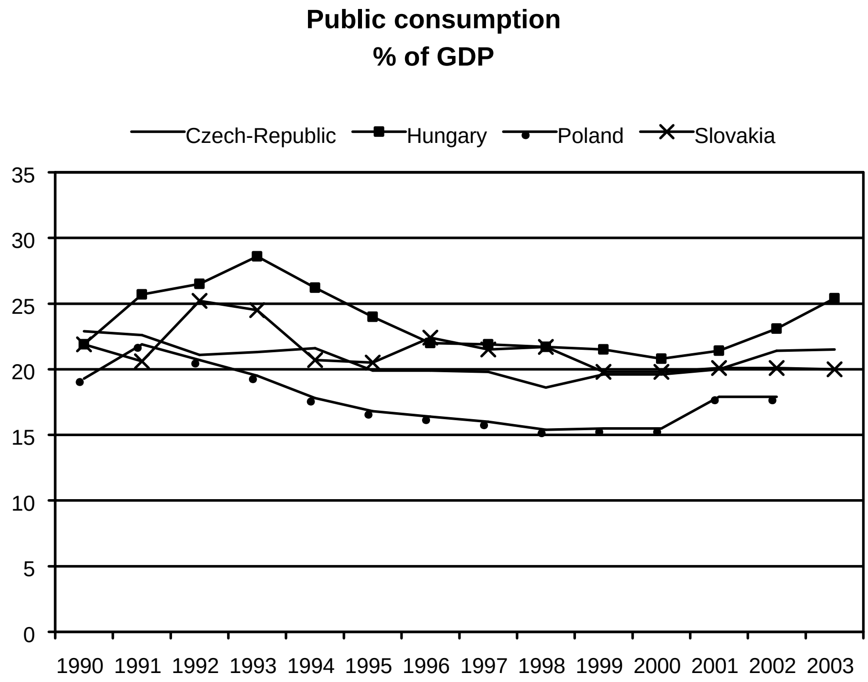

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Figure A4

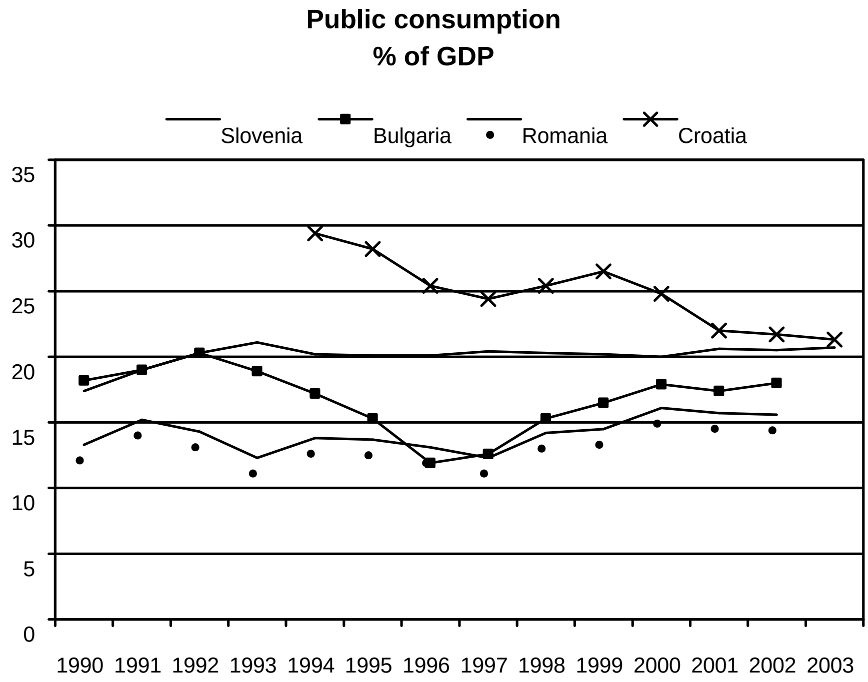

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Figure A5

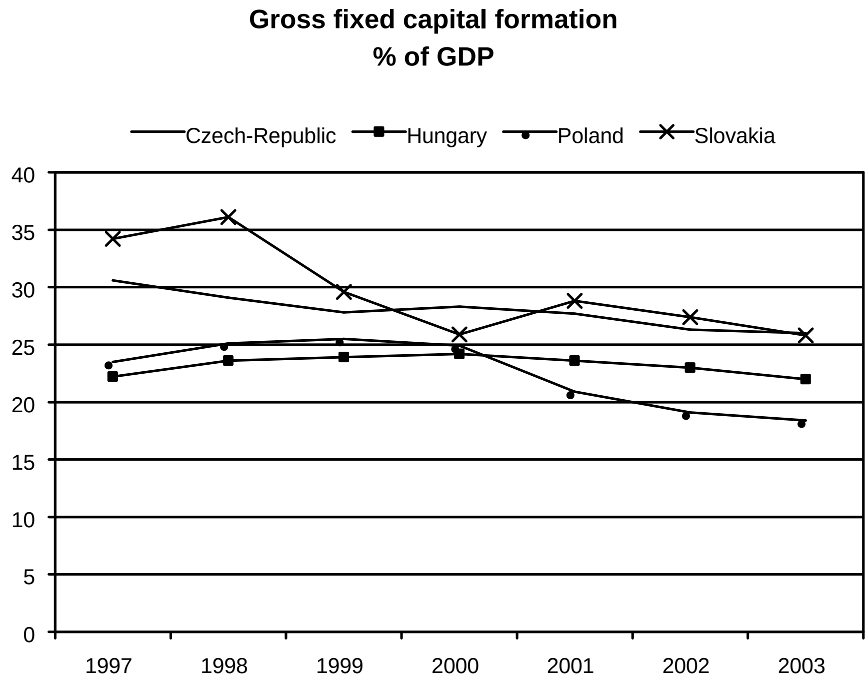

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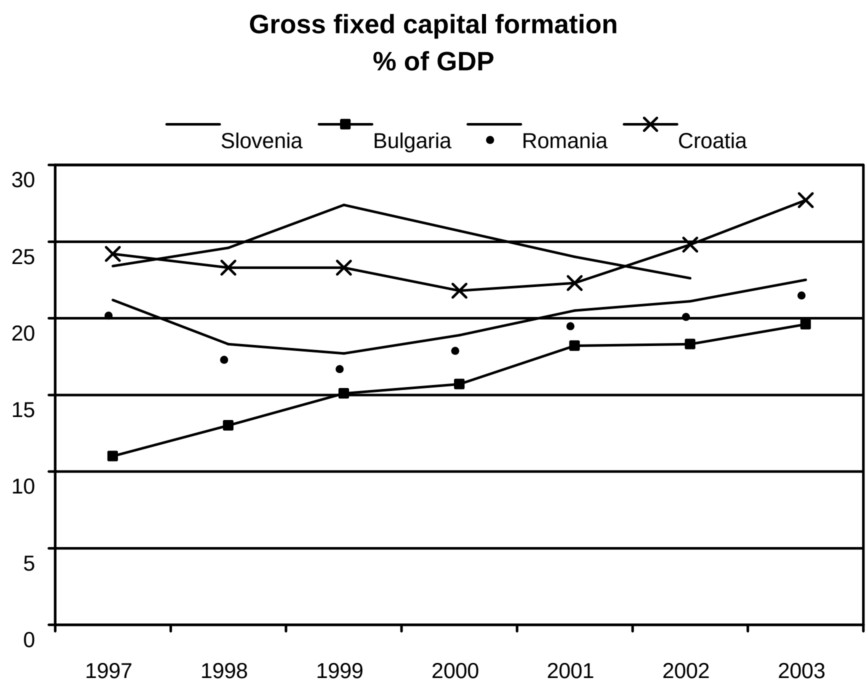
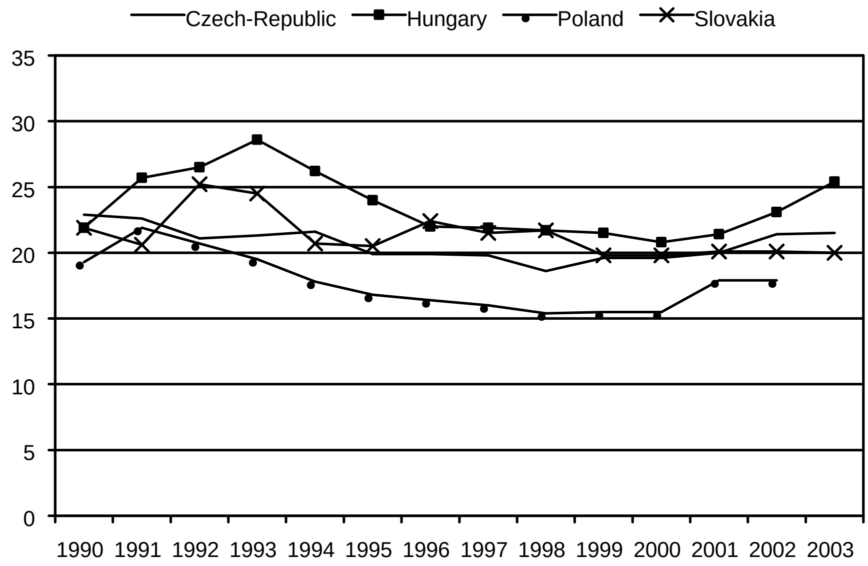
Figure A6



Source: wiiw Database.

Figure A7

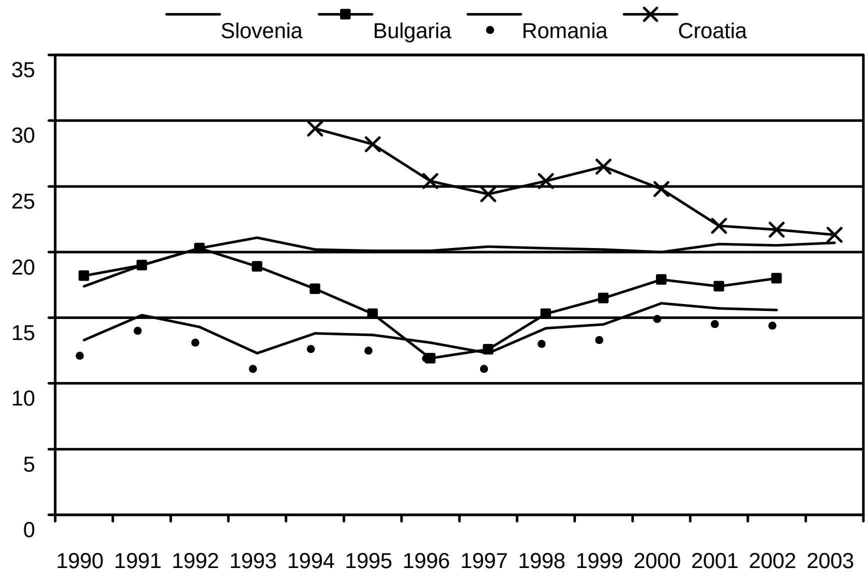
Real exchange rates
(EUR vis-à-vis national currency, PPI-deflated)



Source: wiiw Database.

Figure A8

Real exchange rates
(EUR vis-à-vis national currency, PPI-deflated)



Source: wiiw Database.

Table A1

Moody's Country Rating	**1998**	**2003**
Czech Republic	Baa1	A1
Hungary	Baa2	A1
Poland	Baa3	A2
Slovakia	Ba1	A3
Moody's Country Rating	**1998**	**2003**
Bulgaria	B2	Ba2
Croatia	Baa3	Baa3
Macedonia	.	.
Romania	B1	B1
Slovenia	A3	Aa3
Serbia and Montenegro	.	.

Moody's Rating scale – long term: Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1, Baa2, Ba1, Ba2, B1, B2, B3.

Source: IMF.

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