Fiscal Consolidation, External Competitiveness and Monetary Policy:

A Reply to the WIIW

Evan Kraft Tihomir Stučka

Fiscal Consolidation, External Competitiveness and Monetary Policy: A Reply to the WIIW

Evan Kraft Tihomir Stučka

Surveys Croatian National Bank May 2002

The views expressed in this paper are those of the authors and do not necessarily represent those of the institutions where the authors are employed.

Published by

Croatian National Bank

Publishing Department

Trg hrvatskih velikana 3, 10002 Zagreb

Phone: 385-1-4564-555

Phone: 385-1-4922-070, 385-1-4922-077

Fax: 385-1-4873-623

Web

http://www.hnb.hr

 $Editor ext{-}in ext{-}Chief$

Evan Kraft

Editorial board

Ante Babić

Igor Jemrić

Editor

Romana Sinković

 $Technical\ editor$

Božidar Bengez

Associate

Ines Merkl

Printed by

Intermark, Zagreb

Those using data from this publication are requested to cite the source.

Printed in 450 copies

ISSN 1332-2184

Evan Kraft and Tihomir Stučka

Fiscal Consolidation, External Competitiveness and Monetary Policy: A Reply to the WIIW

Summary

Recent studies of policy alternatives for Croatia prepared by the WIIW contend that fiscal discipline in Croatia remains weak, and argue for a policy mix of tighter fiscal policy and looser monetary policy aimed at achieving nominal exchange rate depreciation. In this reply, we argue that substantial fiscal adjustment is already taking place and that the goal of sustainable fiscal deficits is achievable in the medium term. In addition, we argue that Croatia's trade problems have a great deal to do with problems such as exclusion from free trade areas and domestic, bureaucratic barriers to domestic investment and FDI. Attempts to achieve substantial nominal depreciation, if technically viable at all, may not even create real depreciation. They may also have unacceptable consequences for inflation and even the current account deficit, given the apparently low elasticity of Croatian exports and high dependency on imported intermediate goods.

JEL: P27; P24; E58; E60

Key words: fiscal consolidation; monetary policy; external competitiveness; Croatia

Contents

1 Introduction	. 1
2 The Budget and GDP Growth	. 1
2.1 Outcomes of the IMF Stand-by Arrangement	. 1
2.2 Fiscal Contribution to GDP Growth	. 2
3 Public Debt Sustainability	. 2
3.1 Simulations of Maastricht Criteria Fulfillment	
3.2 A Practical Quantitative Approach to Fiscal Sustainability	. 4
4 External Sector	. 6
4.1 Sources and Financing of the Current Account Deficit	. 6
4.2 The Merchandise Trade Deficit	. 7
4.3 Trade Competitiveness and Monetary Policy	. 8
5 Conclusion	. 10
References	. 10

Fiscal Consolidation, External Competitiveness and Monetary Policy: A Reply to the WIIW

1 Introduction

In the first half of 2001, the Office of the President of the Republic of Croatia engaged the Vienna Institute for International Economic Studies (WIIW) to provide quarterly monitoring of economic developments in Croatia. The analysis is undertaken in a comparative framework that links Croatia to other CEE transition countries.

In their first two quarterly reports, published in May and November 2001, Vladimir Gligorov and Hermine Vidović of WIIW analyzed recent economic developments and presented some policy dilemmas and prospects for Croatian economic development (Gligorov and Vidović 2001a and b). Their basic findings can be summarized as follows: Croatia still lacks fiscal discipline, faces an unsustainable level of foreign debt and suffers from a lack of external competitiveness due to overly strict monetary policy. They recommend a less restrictive monetary policy aimed at achieving a more flexible exchange rate to support exports, and fiscal adjustment with a view to supporting investment.

Our intention is to contribute to a constructive economic debate by discussing some issues pointed out by the WIIW authors. We focus on two areas: developments in fiscal governance and currency depreciation as means of improving Croatia's trade balance. Regarding the fiscal issue, we argue that the government has undertaken major steps towards fiscal adjustment in the last two years and has not overall, as stated in the WIIW analysis, shown lack of fiscal discipline in 2001. The government is on the right track towards fiscal sustainability. In our view, achievement of the deficit targets in the medium term will probably require a new arrangement with the IMF. Regarding the trade balance, we offer an alternative analysis of Croatia's trade problems and balance of payments situation, and make a case that a depreciation of the domestic currency would do more harm than good to the domestic economy and is an inappropriate tool to support exports in Croatia.

2 The Budget and GDP Growth

2.1 Outcomes of the IMF Stand-by Arrangement

After the elections in 2000, the new government resumed negotiations with the IMF about the implementation of a stand-by arrangement. The basic intention of the government as stated in the Letter of Intent (LOI December 2000) was to lower the deficits of the consolidated central government (CCG) to 5.3% of GDP in 2001, 4.25% in 2002 and 1.25–1.5% in 2003. Austerity measures were set in

November 2000 and agreed with the IMF. They can be divided into structural and quantitative criteria, with a detailed outline of upper limits expressed in absolute and not relative terms (i.e. with respect to GDP). Hence, higher than expected growth of GDP did not have a direct influence on the achievement of the targets. The targets were the deficit of the consolidated central government on an accrual basis, the amount of repaid arrears, net bank lending to 10 public companies, and reduction of the government wage bill by 10%.

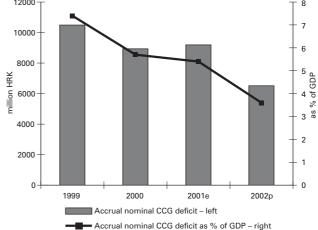
The end-of-year program review of the stand-by arrangement confirmed that three of the four quantitative measures were completely fulfilled (the consolidated central government deficit on an accrual basis, the repayment of arrears and net bank lending to 10 public companies). In this sense, it is difficult to speak of lax fiscal discipline during 2001.

However, some of the data published by the Ministry of Finance may give a false impression of fiscal developments. Since the fiscal accounts continue to be presented on a cash basis, the figures suggest that the deficit rose in 2000 and continued to rise in 2001. But this increase actually reflects the repayment of arrears (i.e. payment of obligations accrued in earlier years). In accrual terms, we see that the fiscal deficit has in fact been decreasing. In 2002, the cash presentation should not differ substantially from the accrual presentation since the bulk of arrears has been repaid.

the cash presentation should not differ substantially from the accrual presentation since the bulk of arrears has been repaid.

Figure 1: Measures of Government Deficit

12000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
1000



Source: LOI, February 2002

While it is true that the government failed to decrease the gross wage bill in the budget by 10% as agreed upon in LOI (the fourth quantitative target), this did not prevent the government from meeting its overall deficit target. Moreover, in addition to the quantitative measures, an extensive set of structural measures was fulfilled according to the agreement. Thus the WIIW authors' conclusion that the austerity measures announced were not implemented is essentially incorrect.

We say essentially incorrect, because the deficit reduction was not in fact achieved in exactly the planned manner. Since the target for wage reduction was not met, a decline in capital spending provided the bulk of deficit adjustment. The lower wage bill in public administration played a smaller role (the wage bill decreased 4.0%), along with reduced subsidies and transfers to households. Reducing those positions in the consolidated budget in 2002 will represent a great challenge for the government.

Some measures were undertaken at the end of 2001. For example, legislation on child benefits was changed, aiming at a strong cutback. In 2001, child benefit transfers were approximately twice as large as the initial target. Pension reform is under way, as well as health reform, although the latter is still somewhat lethargic. The strong reduction in capital expenditure during 2001 might create additional capital costs in 2002, which will have to be strictly controlled.

2.2 Fiscal Contribution to GDP Growth

Taking into account the fact that total CCG expenditures were 0.17% lower in nominal terms in 2001 than in the previous year, we find it hard to agree with the WIIW opinion that "one obvious reason of higher than expected

growth is higher than projected public expenditure" (WIIW 2001b, p.1). Estimates demonstrate that government consumption contributed negatively to GDP during 2001 at a rate of -1.0% (Table 1). In other words, government consumption in real terms was lower in 2001 by 3.9%.

The main generators of GDP growth were domestic consumption, capital investment and growth in inventories. Private consumption grew 4.6% and capital investment some 9.7%, of which private capital investment accounted for an estimated $12.3\%^1$.

The strong growth of imports in 2001 can partly be attributed to an increase in machine imports. They grew by 32% in USD terms, accounting for 20% of total imports. In addition, a one-off increase in car purchases caused by the announcement of abandoning certain fiscal benefits for war veterans amounted to 24% in the first eleven months of 2001 compared to the previous year. A trade deficit induced by a substantial magnitude of capital goods imports does not necessarily represent a negative economic development. Increased capital goods imports should mean increased potential output and higher productivity in the future.

3 Public Debt Sustainability

When discussing the issue of debt sustainability, we focus on the fiscal sector since this issue represents the major policy concern. High government debt, if financed domes-

Table 1: GDP by Expenditure, in 1997 prices, in million HRK

	2000		2000	2001				0004 -		
	Q1	02	03	Q 4	2000	Q 1	02	03	0.4	2001e
Constant prices (1997), mil. HRK										
GDP	30,332	32,450	35,132	33,241	131,156	31,602	33,976	36,555	34,372	136,506
Final consumption	26,840	27,664	26,499	29,452	110,455	27,601	28,664	26,313	30,113	112,691
Households	18,560	19,428	18,304	21,223	77,514	19,543	20,749	18,685	22,065	81,042
Government	8,280	8,236	8,195	8,229	32,941	8,058	7,915	7,628	8,048	31,649
Gross fixed capital formation	6,177	8,164	7,799	7,157	29,298	6,892	8,793	8,097	8,351	32,133
Changes in inventories	1,094	713	-2,818	2,396	1,386	2,109	3,570	-3,533	603	2,748
Exports of goods and services	10,610	13,411	21,204	12,614	57,838	11,066	13,756	24,254	13,989	63,066
Imports of goods and services	14,389	17,503	17,551	18,378	67,821	16,066	20,806	18,576	18,684	74,133
Contributions (percentage points)										
GDP	3.7	4.5	4.1	2.4	3.7	4.2	4.7	4.0	3.4	4.1
Households	3.3	3.5	0.8	2.2	2.4	3.2	4.1	1.1	2.5	2.7
Government	0.5	-0.3	-0.3	-0.6	-0.2	-0.7	-1.0	-1.6	-0.5	-1.0
Gross fixed capital formation	-1.0	-0.8	-0.3	-1.3	-0.8	2.4	1.9	0.8	3.6	2.2
Changes in inventories	0.3	1.4	-0.9	2.4	0.8	3.3	8.8	-2.0	-5.4	1.0
Exports of goods and services	1.7	3.8	7.2	1.6	3.7	1.5	1.1	8.7	4.1	4.0
Imports of goods and services	-1.1	-3.1	-2.4	-2.0	-2.2	-5.5	-10.2	-2.9	-0.9	-4.8

Source: CNB database

¹ Source: LOI, March 15, 2002, Table 3, p. 22.

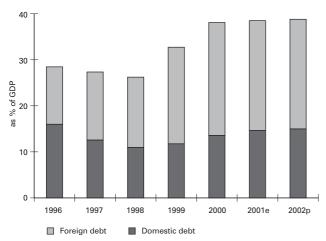
tically, could lead to tax increases or, through interest rate increases, to crowding out. If financed externally, high government debt could force drastic macroeconomic adjustment, upsetting stability.

One might also focus on the sustainability of the overall foreign debt. However, in the Croatian case, private foreign borrowing is not a major factor at the moment. Banks and other sectors account for 44% of total foreign debt, whilst the government's share is 45%. Relatively few non-financial firms have access to international capital marks. Banks do have access, but trends in bank borrowing are not such as to cause great concern at present. Furthermore, since foreign banks control nearly 90% of the assets of the Croatian banking system, their "parent" banks support (if not exactly guarantee) their borrowing. Of course, we recognize that foreign borrowing by the private sector in the mistaken belief that the exchange rate will not change has been a factor in recent financial crises, for example in Indonesia and Thailand. However, this does not seem to be a major issue in Croatia as yet.

Public debt sustainability can be defined as the level of public debt that can remain unchanged in the long run and does not imply the need for a change in fiscal policy². Croatia's debt is not sustainable in this sense, and fiscal reforms are being implemented with the aim of reducing the deficit. Hence the proper question is not whether sustainability has been achieved, but whether the government's policies are headed in the direction of sustainability.

Before discussing the issue of government debt sustainability in more detail, it may be useful to look at the recent past. The history of the Croatian government's access to international financial markets is not long. Foreign debt exceeded domestically-raised debt for the first time in 1997 (Figure 2). Foreign debt provided cheaper financing, given that domestic interest rates were extremely high, and avoided fears of crowding-out. From 1998 to 2000, total consolidated central government debt grew constantly, reaching 38.1% of GDP in 2000, mainly externally financed. From 2001, total debt stagnated in

Figure 2: Domestic and Foreign Borrowing



Source: CNB Bulletin, Table 13

kuna terms (38.6% of GDP), predominantly due to a reduced government deficit and, to a lesser extent, to a stronger domestic currency. The stagnating trend is expected to continue in 2002.

There are several approaches to evaluating government debt sustainability. The dominant approach is primary deficit analysis. The World Bank used this methodology to show that fiscal policy up to 2000 was not sustainable³. In that period, the government ran accrual primary deficits of 4.7% of GDP (in 1998) and 2.7% (in 1999). The approximate long-run sustainable level of the primary deficit in the baseline scenario was estimated at 0.3% of GDP. If the initial debt is adjusted for central bank's reserve assets, likely future privatization revenues and contingent liabilities, the sustainable primary deficit rises to 0.5% of GDP. This primary deficit level would ensure no-Ponzi financing.

IMF estimates of the primary deficit differ to a certain extent from those of the World Bank. According to their assessment, the accrual primary deficit-to-GDP ratio has declined from 5.8% in 1999 to 3.5% in 2001. The primary deficit is projected to decline further to 1.4% of GDP in 2002. So, even though a sustainable level has still not been achieved, the government is on the right path towards sustainable fiscal policy.

3.1 Simulations of Maastricht Criteria Fulfillment

Another way of analyzing fiscal policy is to simulate the Maastricht criteria, which Croatia will have to fulfill in the next six to eight years. Such simulations can be carried out using difference equation models⁴. According to the Maastricht Treaty, which sets preconditions for entry into the European Monetary Union, the maximum debt-to-GDP ratio is 60%, the maximum budget deficit-to-GDP ratio is 3%, and inflation is allowed to exceed the inflation of the three countries with the lowest inflation rates in the EMU by 1.5% points.⁵ Let's assume that inflation rates in the countries with the three lowest inflation rates in the EMU are going to remain at around 1.5% forever. Hence, Croatia should maintain an inflation rate of no more than 3.0% in the long run⁶.

There are three types of simulations one can undertake. The first simulation encompasses fixing the debt-to-GDP ratio and calculating the effects of different trend growth rates of GDP on the budget deficit. In particular, we simulate an approximate trend real growth rate of 4%, 3% and 2% of GDP. For a trend real growth rate of 3% of GDP, Croatia could "afford" an average deficit of 3.4% of GDP and stay within the Maastricht debt level. In the second simulation, we fix the debt-to-GDP ratio and assume three different outcomes of the budget deficit in order to distinguish the implied trend real growth rate of GDP. Applying both Maastricht criteria (debt ratio and average deficit), it turns out that Croatia

² Brümmerhof (1996).

 $^{3 \}quad \text{World Bank, 2001, Annex A1, pp. } 91-95.$

⁴ If trend growth of GDP is a%, and the average deficit-to-GDP ratio is b%, then the stock of debt will trend towards b% + b%/a%.

⁵ The treaty also stipulates that long-term interest rates must be no more than 2% above those in the countries with the three lowest inflation rates, and that the exchange rate must have been stable in the previous two years.

⁶ In 2001, the inflation rate was 2.6%.

needs at least a 2.3% trend real growth rate of GDP to meet the criteria. If the average deficit is managed at a level of 2%, as planned in the medium term, the corresponding minimum trend real growth rate of GDP is only 0.4%. The third scenario contains a fixed budget deficit and different trend real growth rates of GDP. The simulation results suggest that if the government sticks to the average deficit level of 3% of GDP and the economy experiences a trend real growth rate of 3%, then the stock of debt would tend towards 53% of GDP.

To summarize, simulation results for a constant inflation rate of 3% show that Croatia does already fulfil the debt ratio criterion. The government intends to achieve a budget deficit of 3% of GDP by 2003. In order to achieve the Maastricht criteria, a 5.3% trend nominal growth rate of GDP is the minimum requirement. This implies a real growth trend of only about 2.3%, a figure that we consider being comfortably achievable.

Table 2: Simulations of Outcomes to Achieve Maastricht Criteria, in %

		GDP growth	Budget deficit	Stock of debt
	Scenario 1	7.0	3.9	60.0
1	Scenario 2	6.0	3.4	60.0
	Scenario 3	5.0	2.9	60.0
	Scenario 1	5.3	3.0	60.0
2	Scenario 2	4.3	2.5	60.0
	Scenario 3	3.4	2.0	60.0
	Scenario 1	7.0	3.0	45.9
3	Scenario 2	6.0	3.0	53.0
	Scenario 3	5.0	3.0	63.0

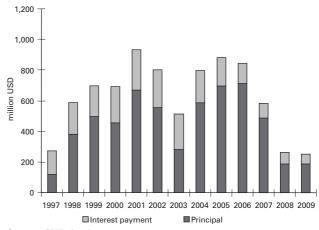
Source: authors' estimates

In short, these simulations suggest that Croatia can relatively easily meet the Maastricht criteria even with a modest rate of growth. Faster rates of growth, of course, would give more room for larger fiscal deficits, but it would certainly not be prudent to project a real growth rate above 4%.

One might still say: very well, Croatia can meet the Maastricht criteria, but these criteria are somewhat arbitrary and may not apply to transition countries in the way that they applied to current EU members. But there are in fact several further arguments to be made about debt sustainability. In particular, we do not consider the government debt projection to be alarming because of the favorable debt maturity profile. 2001 was a difficult year from a fiscal point of view, with very large principal payments and the bulk of arrears to be repaid. During the next four years, there is enough space for refinancing the old debt and, hence, lowering the cost of financing. Apart from that, foreign investors' confidence has improved, allowing Croatia to borrow at longer maturities. This provides a budget with a smooth repayment path.

At the same time, Croatia expects considerable privatization revenues during 2002 and 2003. These revenues will be generated by privatizing the national electric utility and petrol company (25% to 35% of HEP and INA), the Janaf pipeline, the national insurance company Croatia osiguranje, the remaining government shares in the

Figure 3: Foreign Debt Maturity Profile and Debt Servicing Costs



Source: CNB database

banking sector and an IPO of its remaining shares in Croatian Telecom. This should provide the government with some "breathing space" and give room to further consolidation of the public finances in 2002 and 2003. Privatization revenues are targeted at 1.4% of GDP in 2002.

3.2 A Practical Quantitative Approach to Fiscal Sustainability

An alternative, practical approach looks into public finance sustainability from the perspective of controllability⁷. In that sense, net government liability flows are the most important issues rather than levels of deficit and debt. Increasing flows of net government liabilities can have a severe impact on currency stability through disruptive adjustment in terms of rising interest rates, strong cuts in spending and higher taxation, as already mentioned above. Perotti, Strauch and von Hagen (1998) suggest a practical tool for defining whether a country is on the right track to regaining fiscal sustainability. These quantitative measures were suggested for evaluating the readiness of all EMU candidates to join the EMU.

Three quantitative stages for a practical evaluation of sustainability are defined. In the first stage, one assesses whether there has been a movement towards a lower primary deficit-to-GDP ratio of at least 0.5 percentage points of GDP. In the second stage, one evaluates whether the relative contribution of the share of spending cuts in the reduction of the deficit during the consolidation is at least 2/3 of the initial contribution to the fiscal deterioration. The third and final stage requires an assessment of whether steps have been undertaken to reverse the increase in spending items that led to the deterioration of the deficit. Hence, if a country passes the final stage of assessment, it has succeeded in reversing expenditure growth in the actual source of deficit deterioration.

We assume that fiscal deterioration (on an accrual basis) started in 1997. Before that period, data on arrears do not exist. From 1997 to 1999, the primary deficit⁸ deterio-

This paragraph draws on Perotti et al (1998).

⁸ The data in the example is not cyclically adjusted.

Table 3: Change in the Consolidated Central Government Deficit, as % of GDP

	1997	1998	1999	2001	(1999-97)	(1999-98)	(2001-99)
Revenues	42.5	45.6	42.8	38.9	0.3	-2.8	-3.9
Primary expenditure	42.9	47.1	48.5	42.1	5.6	1.4	-6.4
Primary balance	-0.4	-1.5	-5.7	-3.2	-5.3	-4.2	2.5

Source: LOI, February 14, 2002

rated by 5.3 percentage points. By 2001, the primary deficit had decreased 2.5 percentage points. Hence, the first sustainability test is fulfilled since the deficit adjustment is above the limit of 0.5 percentage points of GDP.

In the second stage, the budget is broken down into its basic components, as shown in Table 3. Based on empirical evidence, the authors suggest that a country can move to the third stage if the following condition is fulfilled:

$$\frac{PE_t - PE_T}{PB_t - PB_T} \geq 2/3 \frac{PE_T - PE_\tau}{PB_T - PB_\tau}$$

where PE represents primary expenditures and PB the primary balance. In the formula, t denotes the current period (in the case of Croatia the year 2001), T is the year when fiscal adjustment started to take place (from 1999 onwards) and τ is the year when fiscal expansion commenced (1997).

Table 4: Contributions to Fiscal Deterioration and Fiscal Adjustment

	Deterioration	Actual outcome	Required outcome
Contributions	(1999–97)	(2001–99)	(2/3 of 1997 expansion)
Revenues	-6	-156	-4
Primary spending	106	256	70

Source: Table 3

During the fiscal expansion period, the primary deficit deterioration was mainly caused by an increase in the primary expenditures ratio. In the recovery period (2000 – 2001), the revenues ratio decreased by 3.9 percentage points and the primary expenditures ratio by 6.4 percentage points. According to the "2/3 criterion", at this level of disaggregation, Croatia passes the second stage test. However, revenues under-performed the target set. We conclude that fiscal consolidation has been achieved through spending cuts rather than revenue increases.

The question remains whether the appropriate measures have been undertaken on the expenditure side to regain fiscal sustainability. The final quantitative stage encompasses a further disaggregation of the source of the fiscal deterioration.

The increase in the primary deficit can be attributed to increases in transfers and subsidies and an increasing wage bill. On the disagregated level, the requirement for adjustment decreases from 2/3 to 1/2. In that respect, Croatia does not fully pass the final quantitative stage since transfers and subsidies have not decreased sufficiently to satisfy the proposed practical rules-of-thumb. However, the lack of adjustment in transfers and subsidies was more than compensated for by a decrease in wages and investment. Thus it seems that Croatia is on the right path to regaining fiscal sustainability.

Increasing pressure on the budget in 2002 will stem from the pension reform, which will lower tax revenues by around 1.3% of GDP⁹. This will be financed through

Table 5: Contribution to Fiscal Deterioration by Expenditure Positions, as % of GDP

	1997	1998	1999	2001	(99-97)	(01-99)
Transfers and subsidies	16.7	17.0	19.8	20.2	3.1	0.4
Consumption	21.1	23.3	22.1	18.3	1.0	-3.8
Wages	10.3	10.7	11.7	10.3	1.4	-1.4
Purchases	10.8	12.6	10.4	7.9	-0.4	-2.5
Investment	4.6	5.8	5.6	3.3	1.0	-2.3

	Deterioration	Actual outcome	Required outcome
Contributions	(99-97)	(01-99)	(1/2 of 97) expansion
Transfers and subsidies	58	-16	29
Consumption	19	153	9
Wages	26	54	13
Purchases	-8	98	-4
Investment	19	91	10

Source: LOI, February 14, 2002

⁹ LOI, February 14, 2002.

bonds with 10-year maturity, most likely indexed to the euro, increasing government debt, but at the same time improving the term structure of domestic debt. Also, ambitious government capital investment plans involving housing and motorway construction will stretch the public finances, the latter through the newly founded agencies HAC and HC¹⁰. Finally, the debt servicing costs are projected to increase from 3.6% of current revenues in 1999 to 5.2% in 2002. Interest payments are vulnerable to exchange rate shocks since 55% represents for eign debt servicing. Needless to say, substantial capital investments aimed at boosting employment such as the Zagreb-Split highway, which all of Croatia's governments since the 1990's have promised and failed to deliver, do represent a potential risk for the budget targets, if costs are not strictly controlled.

The question remains of how the government is going to respond to growing unemployment pressures. Growing fiscal interventionism via increased transfers and subsidies and large capital investment projects will lower the ability of the government to decrease the tax burden. However, lowering the tax burden is a key to improving exporters' competitiveness through lower production costs. Private investment has grown substantially in 2000 and 2001, and it would be a pity to stamp out the tender shoots of private investment with the heavy boot of taxation.

To summarize, the view that Croatia is still pursuing an unsustainable fiscal policy is rather unconvincing in the light of the ongoing reforms. We have argued that the budget is on a path to meet sustainability as defined by primary deficit analysis and to achieve the Maastricht criteria under plausible scenarios. Furthermore, favorable repayment schedules and substantial expected privatization revenues strengthen the case. At the same time, a second arrangement with the IMF is vital for strengthening the government's determination and credibility in pursuing prudent fiscal policy in the light of forthcoming elections and relatively high unemployment.

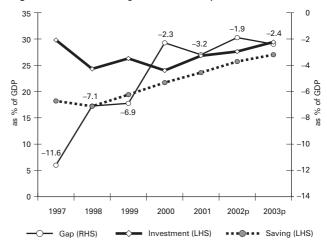
4 External Sector

4.1 Sources and Financing of the Current Account Deficit

Croatia's current account deficit exploded in the immediate postwar years, peaking at a frightening 11.6% of GDP in 1997. The deficit has fallen substantially since then, reaching a low of 2.3% in 2000 and rising to an estimated 3.3% in 2001. The size of the current account deficit in the last two years does not seem especially large, especially given that it has been financed substantially by FDI (see below). In addition, the country has run substantial balance of payments surpluses on combined current and capital account through the whole period.

According to estimates made by the IMF and accepted by the Croatian government¹¹, Croatia's current account deficit originates in recent years from the investment side rather than a consumption boom. This view is supported by an increasing savings rate. The domestic savings-investment gap has decreased from a 1997 high of 11.9% of GDP to an estimated level of 3.2% of GDP in 2001. The bulk of investment is carried out by the private sector. However, the picture is not clear-cut, since the non-government sector in the statistics includes public enterprises and lower levels of government. Furthermore, there is reason to believe that a high proportion of investment is undertaken in the non-tradable sector, such as housing and infrastructure construction. These investments are less likely to be associated with a sustainable current account deficit through improvements in competitiveness, nor do they increase production capacities.

Figure 4: Domestic Saving - Investment Gap



Source: LOI, March 26, 2002

Both the trends in the current account deficit and the presence of an overall BOP surplus suggest that, from a financial point of view, Croatia does not actually have a BOP problem. However, recent experience around the world has made it clear that a large current account deficit, even if comfortably financed with a resulting BOP surplus, can be a problem when capital flows are subject to sudden reversals. In the Croatian case, there is little doubt that privatization-based FDI will roughly cover the current account deficit in 2002 and 2003. Just for illustration, FDI in 2001 was about USD 1.2 billion, almost double the current account deficit of USD 0.65 billion.

Looking beyond that, there is more uncertainty. We believe that it is plausible to argue that, over the rest of the decade to 2010, a current account deficit of 3-4% of GDP can be largely financed by FDI and portfolio investment. We believe that Croatia's deepening economic development and the run-up to EU membership will attract FDI. Portfolio investment will be attracted by continued interest-rate differentials in favor of Croatia. With this combination of FDI and long-term (above 5-year) international bond financing, Croatia is not especially vulnerable to capital account reversals. These forms of capital inflow are much less reversible than short-term loans or foreign holdings of domestic securities, which are extremely limited in the Croatian case. It should be noted that half of Croatia's long-term financing is currently provided by international financial organizations that, unlike private

¹⁰ HAC – Croatian motorway company, HC – Croatian roads.

¹¹ LOI, March 26, 2002.

creditors, are not prone to withdraw unexpectedly. Thus, we do not see any signs of BOP financing problems in the foreseeable future, due to the availability of more "lukewarm money" than "hot money".

4.2 The Merchandise Trade Deficit

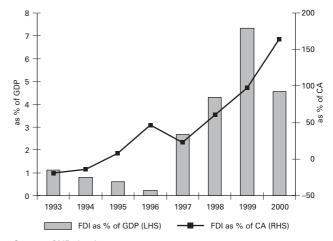
The WIIW report focuses on the merchandise trade deficit as a cause of Croatia's economic problems. This suggests to us (there is no explicit justification in the text) that the main motivation for the WIIW's focus on the merchandise trade deficit is the belief that merchandise trade has a strong effect on employment and overall competitiveness. We are not entirely convinced that this argument holds water. It could well be argued that a substantial merchandise trade deficit is entirely acceptable for Croatia, given its strong service orientation and favorable international liquidity. Large merchandise trade deficits allow Croatia to import needed capital goods for restructuring along with consumer goods badly wanted by the population. Note that countries such as Ireland and New Zealand have experienced very large trade deficits and current account deficits at a certain phase of their development without major negative effects.

At the same time, we are inclined to accept the argument that, on the whole, manufacturing exports lead to better paid, more stable jobs than services' exports (tourism). Employment in tourism is highly seasonal, with jobs often lasting less than six months; in addition, tourism flows are highly sensitive to regional instability and reversals in "tourism fashion". For this reason, we will accept that the merchandise trade deficit might be a problem (although probably not to the extent that the WIIW would argue). In this section, we will sketch the nature of the merchandise trade deficit and its causes, and then comment on the WIIW's proposed solution.

Croatian merchandise exports have grown slowly in recent years, rising unsteadily from USD 4.2 billion in 1997 to about USD 4.7 billion in 2001. At the same time, imports have risen from USD 7.8 to USD 8.8 billion. Recently, the merchandise trade deficit has been largely compensated by exports of services (tourism), decreasing the deficit for goods and services together below USD 1 billion. In countries such as Croatia, with a strong diaspora population, the goods and service deficit is further offset by the net current transfer inflow in the balance of payments. Over the past few years, this net inflow has ranged between USD 0.2 billion and USD 1.0 billion.

Since 1998, the financing of the current account deficit has changed character. Foreign direct investment and portfolio investment rather than loans have become the primary form of financing the current account deficit. However, foreign direct investment has been mainly a consequence of privatization. During the past nine years, greenfield investment has accounted for only around 10% of total FDI. Unfortunately, the vast majority of the FDI projects thus far has been oriented to the domestic market and not export-oriented.

Figure 5: FDI as % of GDP and Current Account



Source: CNB database

The unfavorable merchandise trade development can be explained to a large extent by the political framework rather than price competitiveness. The long-lasting war and the subsequent political isolation of Croatia did not encourage export-oriented FDI investment, which certainly must be sensitive to the barriers to Croatian trade. The extent of this problem becomes clear when we note that, while the Czech Republic, Slovakia, Poland, Hungary and Rumania joined CEFTA in 1993, and Slovenia joined in the beginning of 1996, Croatia only signed bilateral trade agreements with CEFTA countries in 2000 and will join in July 2002. Full CEFTA membership is expected to be effective as of January 2003. Furthermore, Hungary in 1994, the Czech Republic, Slovakia and Poland in 1995, and Slovenia in 1996 signed EU Accession agreements, while Croatia signed its Stabilization and Association Agreement (a rather weaker contract) in October 2001. Therefore, a comparison with Slovenia and other advanced transition countries is inappropriate in this respect.

This exclusion from free trade zones certainly had many important effects. These effects included limitation of demand for Croatian exports. On the supply side, what Croatia missed can be seen from the example of Slovenia. Slovene companies succeeded in preserving and further developing strong ties with EU companies dating from co-operation in the pre-transition period, and there is little doubt that the Accession Agreement played an important role in cementing these ties.

Furthermore, Bevan and Estrin (2000) have shown that accession announcements for CEEC countries not only influenced country credit ratings but also had a direct impact upon FDI, which in turn improved credit ratings. This feedback relationship contributed towards an increasing differential between accession countries and countries lagging in accession. Croatia was an accession laggard until 2001. In the meantime, market dynamics feeding on spillover effects from export-oriented FDIs influenced competitiveness in the domestic market.

There is strong evidence in favor of the notion that FDI has a major positive effect on competitiveness: FDI firms tend to be more efficient than domestic firms, and there are spillovers of know-how and technology to domestic firms¹³. In Croatia, the main obstacles preventing

¹² There are some high-paid services jobs, such as business consulting and computer services. The WIIW report ignores these jobs and the measures needed to create them. We owe this observation to Mia Mikić.

a better flow of foreign as well as domestic investment are bureaucratic procedures for obtaining numerous licenses, which are non-transparent and time-consuming. The problem areas include labor entry (immigration procedures, work permits), business establishment (company registration and various licensing procedures), and location procedures (land acquisition and registration), which introduce uncertainty and encourages bribery and corruption. Note that none of this has anything to do with the exchange rate.

4.3 Trade Competitiveness and Monetary Policy

The WIIW analysis argues that the exchange rate was not supportive of exports and growth and that a more flexible monetary policy should be conducted, presumably implying a depreciation of the domestic currency. As we have already tried to show, there have been other very important barriers on both the demand and supply side. While a weaker exchange rate might have partially offset some of the demand side barriers, it would not have helped the supply side problems. Nevertheless, there are three arguments against the WIIW's approach to monetary policy.

The first argument is that real exchange rates rather than nominal exchange rates reflect the price competitiveness of exporters. The euro (61%) and the US dollar (35%) dominate Croatia's currency structure of exports. Dollar trade mainly encompasses shipbuilding, a very important export sector, trade in oil derivatives, pharmaceuticals and electrical equipment. It should be noted that the sharp depreciation of the kuna against the dollar since the mid-1990's (similar to the depreciation of the Euro against the dollar) should have substantially increased the price competitiveness of shipbuilding, pharmaceuticals and electrical equipment. At the same time, a weak kuna vis-à-vis the dollar increases Croatia's oil import bill (oil demand is rather price inelastic). In addition, one should not ignore the fact that most trade is undertaken in differentiated manufacturing goods operating in imperfectly competitive markets, where the price (i.e. real exchange rate) is only one of the decisive attributes. Other factors such as reliability, quality and repairs can also be decisive for these products. This partly explains the results of many studies, which show that the response of trade to movements in real exchange rates is limited.

If we now turn to the real effective exchange rate at producer prices, which is the most widely accepted overall indicator of the real prices facing producers, we see that things were not so bleak. On average, the real exchange rate index depreciated by 5.6% in 1999 and a further 2.0% in 2000. During 2001, the trend was reversed, and the real exchange rate appreciated by 2.5%. The sustained depreciation of 1999–2000 does not appear to have produced any major effects on exports. While it is theoretically possible that a J-curve effect exists, neither the WIIW study nor other studies offer any evidence of this with regard to Croatia.

A further, related point that is often forgotten is the high import dependence of Croatian manufacturing (Table 6). A depreciation would increase the cost of imported inputs and machinery, much of which simply cannot be replaced by domestic substitutes. If, as we believe, demand for many Croatian exports is rather price inelastic, and input prices are closely linked to the exchange rate, depreciation may be more harmful than beneficial to quite a few exporters¹⁴.

The second argument is connected to the implications of the more "flexible" monetary policy advocated by the WIIW. To begin with, it should be noted that the natural tendency of the Croatian foreign exchange market is currently towards appreciation, not depreciation. This is due to strong capital inflows, generated by government borrowing (hence the centrality of fiscal restraint), private sector (mainly bank) borrowing and FDI. These capital inflows are joined by strong current account flows generated by worker remittances and tourist revenues. In practice, the Croatian National Bank intervenes far more frequently to prevent appreciation than to prevent depreciation. This is witnessed by the rapid growth of the CNB's international reserves from almost nothing in 1992 to USD 4.7 billion at the end of 2001. During 2001 alone, the CNB has bought a net amount of 3.2 billion kunas (close to USD 400 million), and by doing so lessened the appreciation pressure on the kuna.

The WIIW authors would presumably like to see even

Table 6: Imports by Main Industrial Groupings, by intended use, in million USD and %

	In million USD			As % of total		
	1999	2000	2001	1999	2000	2001
Total	7,777	7,887	9,044	100	100	100
Energy	858	1,144	1,171	11	15	13
Intermediate goods, except energy	2,439	2,609	3,041	31	33	34
Capital goods	2,503	2,325	2,700	32	29	30
Durable consumer goods	323	352	442	4	4	5
Non-durable consumer goods	1,128	1,213	1,382	15	15	15
Not classified in other activities except industry	528	244	307	7	3	3

Source: CBS, number 4.2.5 and 4.2.1/12

¹³ Barell and Pain (1997), Bloström and Kokko (1997), Babić, Pufnik and Stučka (2001).

¹⁴ Ekonomski Institut, Zagreb (1995).

more intervention, and greater monetary creation. But when one looks at the growth of monetary aggregates in recent years, it becomes hard to believe that anyone would want to increase them. For example, M1 has grown by 30.7% in 2000 and 29.8% in 2001, and M4 (the broadest monetary aggregate including all foreign exchange deposits) by 28.9% and 45.2%.

Of course, the monetary aggregates per se are not the point. Demand for money has certainly grown in Croatia, as confidence was restored following the 1993 stabilization. A long-term process of financial deepening is also taking place in which one would expect monetary aggregates such as credit/GDP or broad money/GDP to grow. The key question is not whether monetary aggregates have grown rapidly but what the consequences of even faster growth would be. Further monetary loosening could potentially create critical problems in several areas.

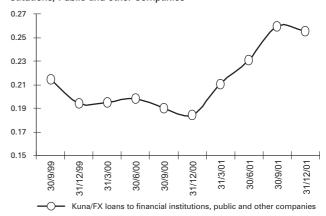
- The growth of lending has accelerated substantially since the crisis-induced low in late 1998 and 1999. In 2001, lending to households grew by 29.3% and to enterprises by 21.3%. Cross-country evidence suggests that a lending growth that is above two times the nominal GDP rate of growth (about 9% in 2001) leads to a substantially higher probability of banking crisis. This is true partly because rapid lending growth is usually associated with less rigorous underwriting standards.
- Further monetary expansion could easily endanger the accomplishment of low inflation. Although there are relatively large reserves of labor in the Croatian economy, structural rigidities in the labor market intuitively suggest a high NAIRU. The specific qualifications needed are often quickly exhausted when a large project is undertaken (witness the need to import skilled labor for highway construction and shipyard projects). Furthermore, labor mobility is limited, so that it may be impossible to find workers needed for projects in certain regions, even though workers are unemployed in other regions. In other words, there are important potential bottlenecks and structural problems in the economy, and it is not at all clear what the non-inflationary rate of unemployment might actually be. Demand management must be rather cautious under these circumstances.
- Further monetary expansion is likely to have an immediate effect on imports and thereby the current account balance. These income effects are immediate and virtually certain, whereas the price effects from currency depreciation would be slower to materialize and would depend on price elasticities. We do not believe that the price elasticity of imports is likely to be very high. The only way to be sure that depreciation did not result in a surge of imports would be to dramatically tighten fiscal policy, something that we suspect few of the advocates of depreciation are really willing to contemplate.

The third main argument is related to the fact that Croatia's financial system has been unofficially "Euroized" to a very great extent. Some 75% of total deposits are held in foreign currency, mostly Euros. Because of this enormous amount of foreign exchange liabilities,

banks are forced to seek foreign exchange assets. The main such assets available are loans made in kuna but indexed to foreign exchange. Thanks to such loans, the banks generally manage to avoid major currency mismatches in their balance sheets.

But this is not by any means the end of the story. Banks have "solved" the currency mismatch on paper but are now exposed to credit risk. If the currency were to depreciate, their clients would automatically face higher interest rates via the indexation clauses. Without a doubt, a major depreciation would substantially increase default rates on loans. It is all too easy to construct scenarios in which the banking system loses substantial portions of its capital and the balance sheet effects on firms leads the country back into recession.

Figure 6: Foreign Exchange and Indexed Kuna Loans to Financial Institutions, Public and other Companies



Source: CNB database

The fourth main argument regarding the idea of a managed depreciation is the possibility that depreciation will not be manageable at all. In many countries that have had fixed exchange rates or very tight exchange rate bands, attempts to introduce a "little bit" of flexibility or small devaluation have resulted in massive panics and exchange rate crisis. Mexico in 1994 is an excellent example. While Croatia's current account deficits have been much smaller in the last two years than in the second half of the 1990's, its history of instability could easily lead people to massively desert the kuna in a time of stress. The possibility of a small depreciation turning into a currency crash is especially worrisome in Croatia due to the Euroization problem. A massive 25-50% currency fall, as in Mexico, Russia or Brazil, would certainly bring down a substantial part not only of real sector firms but of the banking system as well.

Note that we have not stressed the risks of higher inflation as a result of a substantial depreciation. Recent experience suggests that the pass-through of exchange rate changes onto prices has substantially decreased worldwide. Surprisingly, in most cases of large depreciations following crises in the 1990's, inflation has been relatively subdued. ¹⁶ After the ERM crisis of 1992, for example, nei-

¹⁵ Caprio and Klingebiel (1996); Gavin and Hausman (1996).

¹⁶ Burstein, Eichenbaum and Rebelo (2002).

ther Italy nor Britain faced accelerating inflation, and even Mexico and Brazil experienced relatively restrained inflation compared to the enormous amounts of depreciation. But this experience is none too comforting. While it does suggest that Croatia might manage to survive a major currency crisis without high inflation, it does not mean that other effects would be tolerable. Indeed, in episodes such as the Asian and Tequila crises, output falls were horrific.

5 Conclusion

The WIIW authors argued that fiscal discipline in Croatia remains weak, and they argued for a policy mix of tighter fiscal policy and looser monetary policy aimed at achieving nominal exchange rate depreciation. Our reply has attempted to show that substantial fiscal adjustment is already taking place and that the goal of sustainable fiscal deficits is achievable in the medium term. In addition, we have argued that Croatia's trade problems have a great deal to do with problems such as exclusion from free trade areas and domestic, bureaucratic barriers to domestic investment and FDI. Attempts to achieve substantial nominal depreciation, if technically viable at all, may not even create real depreciation, and may have unacceptable consequences for inflation and even the current account deficit, given the apparently low elasticity of Croatian exports and high dependency on imported intermediate goods.

What then, should be done? We believe that much of what is already being done must be continued. To continue fiscal reforms, it is important that Croatia enters another arrangement with the IMF. By doing so it would gain the credibility to remain on track towards a decreasing role of the state in the economy, especially in the light of the forthcoming pre-election period and the high unemployment rate.

We also believe that the current monetary policy aimed at low inflation and exchange rate stability can continue to deliver strong growth rates of monetary aggregates and credit without allowing inflation to accelerate. Such a prudent monetary policy has also been shown to provide a favorable environment for financial deepening and institutional reform in the financial sector.

Beyond this, important areas include: improving the functioning of the courts and removing barriers to new firm creation and FDI; improving the labor market and labor market flexibility to decrease structural unemployment; creating initiatives to support micro-enterprises and small businesses; fighting against bribery and corruption; and improving the provision of business education and business services. Measures to decrease the unofficial economy and to improve the efficiency of the health service also should be at the center of attention. We stress these micro- or meso-level initiatives because discussions about transition in Croatia often focus one-sidedly on a few macroeconomic parameters without considering the micro problems and barriers that, in our opinion, are often crucial. Government reform programs or World Bank programs are currently addressing many of these areas.

In short, there is much to be done to improve Croatia's economic situation. It is certain that much further discussion will be required to better understand the challenges ahead and to better define appropriate policy responses.

References

Babić, A., A. Pufnik and T. Stučka (2001): Teorija i stvarnost inozemnih izravnih ulaganja u svijetu i u tranzicijskim zemljama s posebnim osvrtom na Hrvatsku, Pregledi Hrvatske narodne banke, P-9, October.

Barell, R. and N. Pain (1997): Foreign direct investment and enterprise restructuring in Central Europe, Economics of Transition, 8(2), pp. 477-504.

Bevan, Alan. A. and S. Estrin (2000): The determinants of foreign direct investment in transition economies, CEPR Working Papers, No. 2638.

Blomström, M. et al. (2000): What explains developing country growth?, NBER Working Paper 4132.

Blomström, M. and A. Kokko (1997): How foreign investment affects host countries, World Bank Policy Research Working Paper 1745, World Bank, Washington D.C.

Brümmerhoff, D. (1996): Finanzwissenschaft, München.

Bubaš et al. (2001): Javni dug u Republici Hrvatskoj, Financijska teorija i praksa, No. 1, March.

Buiter, W. (1997): Aspects of fiscal performance in some transition economies under Fund-Supported Programs, IMF Working Paper WP/97/31.

Burstein, A., M. Eichenbaum and S. Rebelo (2002): Why Are Rates of Inflation So Low After Large Devaluations, NBER Working Paper 8748, February 2002.

Caprio, G. and D. Klingebiel (1996): Bank Insolvency: Bad Luck, Bad Policy or Bad Banking, Annual Bank Conference on Development Economics, World Bank, Washington D.C., pp. 79-114.

Central Bureau of Statistics: Foreign Trade of Goods in the Republic of Croatia, Priopéenje, various issues.

Ekonomski Institut, Zagreb (1995): Projekt: Konkurentnost Hrvatske: Oblikovanje politke restrukturiranja, Ekonomski Institut, Zagreb.

 ${\it FIAS}~(2001): Croatia: Administrative~barriers~to~foreign~investment-draft~report,~{\it FIAS},~{\it January}.$

Gavin, M. and R. Hausman (1996): The Roots of Banking Crises: the Macroeconomic Context, in: R. Hausman and L. Rojas-Suarez, editors, Banking Crises in Latin America, Washington, Inter-American Development Bank, pp. 27-63.

Gligorov, V. and H. Vidović (2001a): The Croatian Economy: Overview and Recent Developments 1st Quarterly Report, WIIW, May, www.predsjednik.hr.

—— (2001b): Croatia: Enduring Problems 2nd Quarterly Report, WIIW, November, www.predsjednik.hr.

Government of the Republic of Croatia (2001 and 2002): Letter of Intent (LOI), Zagreb, various issues (available on www.imf.org and www.hnb.hr).

Perotti, R., R. Strauch and J. von Hagen (1998): Sustainability of Public Finances, Bonn/London, ZEI and CEPR.

Roubini, N. and P. Wachtel (1998): Current account sustainability in transition economies, NBER Working Paper 6468.

World Bank (2001): Regaining Fiscal Sustainability and Enhancing Effectiveness in Croatia: A Public Expenditure and Institutional Review, A World Bank Country Study, World Bank, Washington D.C.

The following Surveys have been published since 2000:

No.	Date	Title	Author(s)
S-1	March 2000	Banking Sector Problems: Causes, Solutions and Consequences	Ljubinko Jankov
S-2	April 2000	Banking System in 1998	
S-3	December 2000	The Lending Policies of Croatian Banks: Results of the Second CNB Bank Interview Project	Evan Kraft with Hrvoje Dolenec, Mladen Duliba, Michael Faulend, Tomislav Galac, Vedran Šošić, and Mladen Mirko Tepuš
S-4	December 2000	What Has Been the Impact of Foreign Banks in Croatia	Tomislav Galac and Evan Kraft
S-5	September 2001	Currency Crises: Theoretical and Empirical Overview of the 1990s	Ante Babić and Ante Žigman
S-6	April 2002	An Analysis of the Operation of Building Societies in the Republic of Croatia	Mladen Mirko Tepuš
S-7	April 2002	Ten Years of Transition Central Banking in the CEE and the Baltics	Warren Coats and Marko Škreb

Guidelines to Authors

In its periodical publications *Working Papers, Surveys and Discussion Papers*, the Croatian National Bank publishes scientific and scholarly papers of the Bank's employees, visiting scholars, and other associate contributors.

After the submission, the manuscripts shall be subject to peer review and classification by the Manuscript Review and Classification Committee. The authors shall be informed of the acceptance or rejection of their manuscript for publication within two months following the manuscript submission.

Manuscripts are submitted and published in Croatian and/or English language.

Manuscripts submitted for publication should meet the following requirements:

Manuscripts should be submitted in magnetic or optical storage media (3.5-inch floppy, ZIP, CD) accompanied by three printed paper copies. The acceptable text formats are Word 6 or 97 for Windows/Mac. RTF code page 437 or 852 format is preferred.

Diskettes should be labeled with the type of the word-processor and database used, as well as with the name of the author.

The first page of the manuscript should contain the article title, first and last name of the author and his/her academic degree, name of the institution with which the author is associated, author's co-workers, and the complete mailing address of the corresponding author to whom a copy of the manuscript with requests for corrections shall be sent.

Additional information, such as acknowledgments, may be included in the first page. If this information is extensive, it is preferred to incorporate it within the text, whether at the end of the introductory section or in the special section preceding the list of references.

The second page should contain the abstract and the key words. The abstract is required to be explicit, descriptive, written in third person, consisting of not more than 250 words (maximum 1500 characters). The abstract should be followed by maximum 5 key words.

A single line spacing and A4 paper size should be used. The text must not be formatted, apart from applying bold and italic script to certain parts of the text. Titles must be numerated and separated from the text by a double line spacing, without formatting.

Tables, figures and charts that are a constituent part of the paper must be well laid out, containing: number, title, units of measurement, legend, data source, and footnotes. The footnotes referring to tables, figures and charts should be indicated by lower-case letters (a,b,c...) placed right below. When the tables, figures and charts are subsequently submitted, it is necessary to mark the places in the text where they should be inserted. They should be numbered in the same sequence as in the text and should be referred to in accordance with that numeration. If the tables and charts were previously inserted in the text from other programs (Excel, Lotus...), these databases in the Excel format should also be submitted (charts must contain the corresponding data series).

The preferred formats for illustrations are EPS or TIFF with explanations in 8 point Helvetica (Ariel, Swiss). The scanned illustration must have 300 dpi resolution for gray scale and full color illustration, and 600 dpi for lineart (line drawings, diagrams, charts).

Formulae must be legible. Indices and superscript must be explicable. The symbols' meaning must be given following the equation where they are used for the first time. The equations in the text referred to by the author should be marked by a serial number in brackets closer to the right margin.

Notes at the foot of the page (footnotes) should by indicated by Arabic numerals in superscript. They should be brief and written in a smaller font than the rest of the text.

References cited in the text are listed at the last page of the manuscript in the alphabetical order, according to the authors' last names. References should also include data on the publisher, city and year of publishing.

Publishing Department maintains the right to send back for the author's revision the accepted manuscript and illustrations that do not meet the above stated requirements.

Printed paper copies and diskettes containing manuscript files shall not be returned.

All contributors who wish to publish their papers are welcomed to do so by addressing them to the Publishing Department, following the above stated guidelines.

The Croatian National Bank publications:

Croatian National Bank - Annual Report

Regular annual publication surveying annual monetary and general economic developments as well as statistical data.

Croatian National Bank - Semi-annual Report

Regular semi-annual publication surveying semi-annual monetary and general economic developments and statistical data.

Croatian National Bank - Quarterly Report

Regular quarterly publication surveying quarterly monetary and general economic developments.

Banks Bulletin

Publication providing survey of data on banks.

Croatian National Bank - Bulletin

Regular monthly publication surveying monthly monetary and general economic developments and monetary statistics.

Croatian National Bank - Working Papers

Occasional publication containing shorter scientific papers written by the CNB employees, visiting scholars and associate contributors.

Croatian National Bank - Surveys

Occasional publication containing papers of informative and surveying character written by the CNB employees, visiting scholars and associate contributors.

Croatian National Bank - Discussion Papers

Occasional publication containing discussion papers written by CNB employees, visiting scholars and associate contributors.

The Croatian National Bank also issues other publications such as, for example proceedings of conferences organized or co-organized by the CNB, books and papers or books and papers translations of special interest to the CNB as well as other similar publications.