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Stability and Security.

F O C U S O N
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Contents

Imprint	2
Editorial	5
<hr/> RECENT ECONOMIC DEVELOPMENTS <hr/>	
Developments in Selected Countries <i>compiled by Antje Hildebrandt</i>	10
<hr/> STUDIES <hr/>	
The Euro Changeover in the New Member States – A Preview <i>Thomas Gruber, Doris Ritzberger-Grünwald</i>	52
Exchange Rate Regimes, Foreign Exchange Volatility and Export Performance in Central and Eastern Europe <i>Balázs Égert, Amalia Morales-Zumaquero</i>	76
Financial Globalization, Capital Account Liberalization and International Consumption Risk-Sharing <i>Gabriel Moser, Wolfgang Pointner, Johann Scharler</i>	98
Albania – Country Profile and Recent Economic Developments <i>Anton Schautzer</i>	107
<hr/> HIGHLIGHTS <hr/>	
What’s New on the CEEC Website <i>Silvia Kirova</i>	128
Selected Abstracts	129
The Croatian Banking System – <i>Thomas Reiningger, Zoltan Walko</i>	
Austria’s EU Accession and Trade – <i>Jarko Fidrmuc</i>	
Presentation of an OeNB Anniversary Fund Project	130
Democracy in Southeastern Europe – <i>compiled by Anton Schautzer</i>	
The “East Jour Fixe” of the Oesterreichische Nationalbank	133
Economic Geography / Fiscal Consolidation – <i>compiled by Peter Backé and Jarko Fidrmuc</i>	
Olga Radzyner Award for Scientific Work on European Economic Integration	135

STATISTICAL ANNEX

Compiled by Maria Dienst, Angelika Knollmayer and Andreas Nader

Gross Domestic Product	138
Industrial Production	138
Average Gross Wages	138
Unemployment Rate	139
Industrial Producer Price Index	139
Consumer Price Index	139
Trade Balance	140
Current Account Balance	140
Net Foreign Direct Investment	140
Reserve Assets Excluding Gold	141
Gross External Debt	141
Central Government Balance	141
Gross General Government Debt	142
Broad Money	142
Official Key Interest Rate	142
Three-Month Interbank Rate	143
Exchange Rate	143

NOTES

Legend, Abbreviations and Definitions	146
List of Studies and Special Reports Published in Focus on European Economic Integration	150
Periodical Publications of the Oesterreichische Nationalbank	151
Addresses of the Oesterreichische Nationalbank	153

The views expressed are those of the authors and need not necessarily coincide with the views of the Oesterreichische Nationalbank.

Dear reader,

EU enlargement celebrated its first anniversary a short while ago. One would have thought that immediately following the enlargement on May 1, 2004, things would be settled for a while. Instead, the region of Central and Eastern Europe is still one of the quickest-changing, fastest-growing and most fascinating areas in the euro area neighborhood. Especially from a central banker's view, it is good to see that the benefits of an environment which is more and more stability-oriented are being reaped.

Concerning future enlargement, several noteworthy decisions have recently been made. The EU has signed an Accession Treaty with Bulgaria and Romania, which will join the EU in 2007 or 2008 at the latest. Therefore the EU will comprise 27 members relatively soon. Whereas talks with Croatia have been postponed because of insufficient cooperation with the International Criminal Tribunal for the Former Yugoslavia in The Hague, negotiations with Turkey are set to start this autumn. Brussels has also sent quite clear signals to the rest of Southeastern Europe, stating that in the long run, these countries stand a good chance of becoming EU members. In some circles, the speed of the enlargement process has raised concerns, and the "widening versus deepening" debate is continuing. The rejection of the ratification of the Treaty establishing a Constitution for Europe in the referendums in France on May 29 and in the Netherlands on June 1 clearly indicated the lack of deepening and the need to fill this gap in the future. Nevertheless, the EU enlargement process should continue for the basic reason that enlargement represents a historic chance to establish a more homogeneous area, to overcome differences and to reduce economic gaps and divergences in Europe.

ERM II activity has been quite animated as well. Just after the EU enlargement round, the first three of the new members – Estonia, Lithuania and Slovenia – joined ERM II in June 2004. Recently, in April 2005, another group of countries – Latvia, Cyprus and Malta – followed. Not surprisingly, all of these countries are small open economies, which had in effect given up running an independent monetary and exchange rate policy years ago. Instead they pegged their currencies to a stable anchor, generally the Deutsche mark and later on the euro. This echoes the strategy Austria followed for many years – the so-called hard-currency policy in which the Austrian schilling was pegged to the Deutsche mark.

All in all, six of ten new Member States are thus approaching euro introduction quite rapidly. Still, there are some concerns that the pace may be too quick in one case or the other. Especially structural convergence takes time, but there is also the challenge of achieving and maintaining macroeconomic balance. The clear position of the Eurosystem that major imbalances should be corrected before countries enter ERM II provides guidance. The good news is that the exceptionally high GDP growth rates in 2004 and the bright growth prospects for the future will ease the adjustment process.

If the national governments abide by their schedules and if, in addition, all convergence criteria are fulfilled, the euro area will be enlarged in the medium term. That is why practical changeover issues are becoming more and more pressing. The first contribution to this publication deals with precisely this issue.

In their study on the euro changeover, Thomas Gruber and Doris Ritzberger-Grünwald define challenges which are similar to, or even identical with, those which had to be tackled in the “first round”. It is definitely worthwhile for the euro aspirants to look at the experience of today’s euro area countries. Other challenges they face will be quite different, either because the euro has already been established, or because the starting point of the new EU member countries is a very specific one as they are still catching up. While the already existing euro can make e.g. the implementation of new technologies easier, it can also make things more difficult, as people and institutions have more alternatives. The most important conclusion is that although the euro is a widely used currency, there is still much left to do, so that starting preparations in time will be key for a successful introduction of the euro in the new EU Member States.

A paper by Balázs Égert and Amalia Morales-Zumaquero continues the exchange rate policy theme. The authors analyze the direct impact of exchange rate volatility on the export performance of ten Central and Eastern European transition economies and the indirect impact via changes in exchange rate regimes. Aggregate as well as bilateral and sectoral export flows are studied. The results suggest that the size and the direction of the impact of exchange rate volatility and of regime changes on exports vary considerably across sectors and countries and that they may be related to specific periods. These findings are of special relevance because, as we know, Central and Eastern Europe plays a crucial role for the growth of the euro area via close trade links.

A much broader topic is analyzed by Gabriel Moser, Wolfgang Pointner and Johann Scharler, who ask whether international risk-sharing has improved along the same lines as the process of financial globalization. International financial markets allow investors to efficiently diversify their risks, and agents can protect themselves against fluctuations in their incomes through trading in assets with specific payoff structures. The study confirms the usual finding in the literature, which is that international risk-sharing is quite limited even though capital accounts have been liberalized and various legal barriers to capital mobility have been removed. This result gives food for thought in the context of financial market supervision.

Last but not least, you will find an analysis of a Southeastern European country, namely Albania. Anton Schautzer provides a comprehensive overview of the transition process and recent economic developments in this country. Promisingly, the Albanian economy has also embarked on the dynamic catching-up process that characterizes the region. But the study also confirms the huge gap between the legal and institutional status of this country and EU requirements.

Summing up, we hope that this edition of the Focus on European Economic Integration provides you with new insights on several important economic questions, and with some useful information about the little-known Southeastern European (SEE) region, which has not been deeply analyzed in the literature. Finally, let me announce a forthcoming event: the OeNB’s 2005 Conference on European Economic Integration will take place on November 14 and 15 in Vienna and will be organized jointly with the ECB and the Center for Financial Studies. The topic will be “Financial Development, Integration and Stability

in Central, Eastern and South-Eastern Europe.” If you are interested in coming to this year’s conference, please contact us via our website at ceec.oenb.at, as participation will be by invitation only.

If you have further comments or are looking to exchange ideas, please do not hesitate to contact us at
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Klaus Liebscher
Governor

RECENT ECONOMIC DEVELOPMENTS

Stephan Barisitz,
Balázs Égert,
Antje Hildebrandt,
Silvia Kirova,
Thomas Reininger,
Zoltan Walko

1 Introduction

In 2004, economic growth in the Czech Republic, Hungary, Poland, Slovakia and Slovenia ranged between 4.0% and 5.5%. Economic performance thus remained strong and was generally more dynamic than in 2003. GDP in the two candidate countries, Bulgaria and Romania, as well as in Russia grew even more strongly. Croatia, however, lagged behind and furthermore reported a lower growth rate in 2004 than in 2003. Growth accelerated most in Slovenia (+2.1 percentage points) and in Romania (+3.5 percentage points).

Private consumption growth developed unevenly across the region. In Slovakia, private consumption growth soared from -0.6% in 2003 to +3.5% in 2004; in Romania and Russia, private consumption accelerated to double-digit growth rates (from around 7% in 2003 to around 11% in 2004). In several countries, namely Bulgaria, Croatia, the Czech Republic and Hungary, private consumption growth decelerated, with the strongest reduction taking place in Hungary (from 8.0% in 2003 to 3.5% in 2004).

Within the set of countries under review in this report, the growth rate of gross fixed capital formation accelerated in most countries and, in the case of Poland and Slovakia, turned from negative rates in 2003 to positive ones in 2004. Only Croatia had to cope with a noticeable slowdown of gross fixed capital formation growth (2003: +16.8%, 2004: +4.4%).

The contribution of net exports to GDP was mixed: In Bulgaria, the Czech Republic and Slovenia, the contribution of net exports to GDP growth remained negative but became smaller, whereas in the case of Romania the negative contribution became larger. In the Slovak Republic and Russia, by contrast, the contribution of net exports to GDP growth turned from positive to negative figures, while turning from a negative to a slightly positive value in Hungary and Croatia. In Poland, the positive contribution of net exports to GDP growth declined marginally.

Table 1

Gross Domestic Product (Real)

Annual change in %

	1999	2000	2001	2002	2003	2004	Q4 2004
Czech Republic	1.2	3.9	2.6	1.5	3.7	4.0	4.3
Hungary	4.2	5.2	3.8	3.5	3.0	4.0	3.8
Poland	4.1	4.0	1.0	1.4	3.8	5.4	3.9
Slovakia	1.5	2.0	3.8	4.6	4.5	5.5	5.8
Slovenia	5.6	3.9	2.7	3.3	2.5	4.6	4.3
Bulgaria	2.4	5.4	4.1	4.9	4.5	5.6	6.2
Croatia	-0.9	2.9	4.4	5.2	4.3	3.8	3.6
Romania	-1.1	2.0	5.7	5.2	5.2	8.7	9.7
Russia	6.3	9.0	5.1	4.7	7.3	7.1	6.7

Source: Eurostat, national statistical offices, wiw.

In 2004, the inflation rate (measured by annual average changes of HICP inflation in all countries but Russia and Croatia, where reference is made to CPI inflation) surged in most countries, ranging from 2.6% in the Czech Republic to 7.4% in Slovakia among the new EU Member States (NMS) in Central Europe. Of all countries under study, only Romania and Russia reported double-digit inflation rates, with year-on-year inflation in Romania declining to single-digit rates in December 2004. As already analyzed in FEEI 2/04, the

upward pressure on price levels in 2004 was largely attributable to rising international energy prices, and in the NMS also to hikes in indirect and excise tax rates and adjustments of agricultural prices related to EU membership. In most countries inflation peaked in the third quarter and began to decelerate thereafter. Price growth decelerated significantly in the first quarter of 2005, as the main inflation drivers of 2004 no longer had an impact and as no substantial second-round effects were recorded. Among other factors, the disinflation process was furthermore supported by strong currencies, falling unit labor costs in industry and a moderation of inflation expectations. In Russia, however, inflation picked up largely because of accelerating industrial producer prices as well as strong wage and private consumption growth.

Table 2

Consumer Price Index (here: HICP)

Annual change in %

	2000	2001	2002	2003	2004	Q4 2004	Q1 2005
Czech Republic	3.9	4.5	1.4	-0.1	2.6	2.7	1.4
Hungary	10.0	9.1	5.2	4.7	6.8	5.9	3.5
Poland	10.1	5.3	1.9	0.7	3.6	3.4	3.5
Slovakia	12.2	7.2	3.5	8.5	7.4	6.0	2.6
Slovenia	8.9	8.6	7.5	5.7	3.6	3.5	2.8
Bulgaria	10.3	7.4	5.8	2.3	6.1	4.7	3.8
Croatia ¹	6.4	5.0	1.7	1.8	2.1	2.3	3.1
Romania	45.7	34.5	22.5	15.3	11.9	10.0	8.9
Russia ¹	20.8	21.6	16.0	13.6	11.0	11.6	12.9

Source: Eurostat, national statistical offices, *wiiv*.
¹ CPI.

In 2004, budget deficits in all Central European NMS except for the Czech Republic (deficit of 3.0% of GDP) and Slovenia (deficit of 1.9%) exceeded the well-known threshold of 3% for an excessive deficit procedure under the Treaty establishing the European Community. Within this group, Hungary (-4.5% of GDP) and Poland (-4.8%) reported the largest deficits, but all countries with the exception of Poland managed to reduce their budget deficit in 2004 compared to 2003. In all countries except for Hungary, the budget deficit turned out to be lower than the deficit envisaged in the convergence program prepared by the NMS governments in May 2004 and updated in late 2004. Better-than-expected economic growth leading to revenues above targets, some spending restraint and changes in fiscal accounting were the major factors behind the positive outcome.

With regard to the exchange rate development in Central and Eastern Europe, the Polish zloty, the Hungarian forint, the Czech koruna and the Slovak koruna were on an appreciating path against the euro, with a nominal annual appreciation of around 15%, 7%, 6.5% and 6%, respectively, for the year 2004. The Romanian leu appreciated by 6% to 7% from October to the end of 2004. This trend continued into 2005 until massive capital withdrawals from the stock and fixed income markets triggered a correction in March 2005. Political uncertainty and increased risk aversion of global investors, possibly coupled in some countries with concerns about economic imbalances, led to a moderate weakening of some currencies against the euro from March onward (by between 3.3% and 7.0% in the Czech Republic, Hungary, Poland and Slovakia). By con-

trast, the Romanian leu remained broadly stable in this period, while the Croatian kuna has gradually appreciated since the beginning of 2005 (by around 4%), correcting the weakening which had occurred in the last quarter of 2004. In line with the other currencies in ERM II, the Slovenian tolar continues to display the remarkable stability it has shown since its entry in ERM II. The Russian ruble depreciated by some 10% against the euro from April 2004 to January 2005 but then regained territory slowly.

Stock markets in the CEECs received massive foreign investment inflows in the course of 2004, which boosted stock indices in all countries except Russia. Romania is the country with the highest gains measured by stock index changes (around 90%), followed by the Czech Republic, Hungary and Bulgaria with increases of above or slightly below 50%. The official stock index grew by around 30% in Croatia, by 25% in Slovenia and by roughly 15% in Poland and Slovakia. The continuing upward trend at the beginning of 2005 came to an end in early March 2005 when investors' global risk perception changed, leading to capital outflows also from emerging equity markets; large corrections have taken place since then. Between early March and mid-May 2005, Romania (-19.2%), Hungary (-14.8%), the Czech Republic (-13.3%), Croatia (-12.4%) and Poland (-11.4%) suffered large equity price losses.

Broadly in line with the turn in inflation developments, local currency-denominated government bond yield spreads (ten-year segment) versus euro area benchmark yields started to decrease in the Czech Republic, Hungary, Poland and Slovakia from September 2004 onward. By early March 2005, yield spreads had dropped to slightly below 300 basis points in Hungary and to around 170 basis points in Poland; they were modestly negative in the Czech Republic and Slovakia. This marked fall in yield spreads was then followed by a moderate rise (in the Czech Republic, Poland and Slovakia by 20 to 40 basis points, in Hungary by 75 basis points until late May 2005) as a consequence of the global change of investor sentiment toward emerging markets.

For the whole year of 2004, the average Emerging Markets Bond Index (EMBI) spread on sovereign euro-denominated currency debt (eurobonds) fell by 74 basis points as a result of the emerging markets' improving fundamentals, the low risk aversion of investors and the ongoing search for higher yields. Among the countries monitored in this report, Bulgaria and Romania recorded a higher-than-average fall in the spread as compared to that of the average Euro EMBI, while Poland, Hungary and Slovakia had displayed low spreads already before. Capital flowed out of other asset classes, as sentiments regarding these asset classes deteriorated since mid-March 2005. The average Euro EMBI spread widened by 30 basis points until mid-May. The spreads of Latin American and Asian issuers' eurobonds widened most, while bonds from Central and Eastern European issuers posted significantly smaller upward movements. Most likely, favorable economic developments, such as falling current account and fiscal deficits, cushioned bond market developments in the CEECs; these improvements have also been reflected in rating upgrades. In addition, the prospect of EU accession also seems to be making especially Bulgaria and Romania less vulnerable to risk spillovers from emerging markets in other regions of the world.

Both Moody's and Standard & Poor's continue to award Slovenia (Aa3/AA-) the highest rating for sovereign long-term foreign currency debt among the countries discussed in this contribution. The Czech Republic and Hungary share the second-highest rating by both agencies (A1/A-). Standard & Poor's ranks Slovakia equal to the Czech Republic and Hungary. Moody's still ranks Poland third and upgraded Slovakia to this level (A2) in January 2005. At present, both agencies rank Croatia right after the NMS (Baa3/BB) and higher than Bulgaria (Ba1/BBB-) and Romania (Ba1/BB+), since Standard & Poor's upgraded the rating for Croatia in December 2004 while Moody's lifted Romania's rating in March 2005.

Table 3

Ratings of Sovereign Long-Term Foreign Currency-Denominated Debt

Currency	Moody's			Standard & Poor's		
	Former rating	Last change	Current rating	Former rating	Last change	Current rating
CZK	Baa1	12.11.02	A1	A	05.11.98	A-
HUF	A3	12.11.02	A1	BBB+	19.12.00	A-
PLN	Baa1	12.11.02	A2	BBB	15.05.00	BBB+
SKK	A3	12.01.05	A2	BBB+	13.12.04	A-
SIT	A2	12.11.02	Aa3	A+	13.05.04	AA-
BGN	Ba2	17.11.04	Ba1	BB+	24.06.04	BBB-
HRK		27.01.97	Baa3	BBB-	22.12.04	BBB
ROL	Ba3	02.03.05	Ba1	BB	14.09.04	BB+
RUB	Ba2	08.10.03	Baa3	BB+	31.01.05	BBB-

Source: Bloomberg.

Note: CZK = Czech koruna, HUF = Hungarian forint, PLN = Polish zloty, SKK = Slovak koruna, SIT = Slovenian tolar, BGN = Bulgarian lev, HRK = Croatian kuna, ROL = Romanian leu, RUB = Russian ruble.

Bulgaria and Romania signed the EU Accession Treaty on April 25, 2005, with entry into the European Union scheduled for January 1, 2007, provided that all EU Member States ratify the treaty. Furthermore, the treaty contains safeguard clauses which allow the EU Member States to decide to postpone the accession of Bulgaria and/or Romania by one year if the countries do not comply with the implementation of the agreed reforms. In the case of Bulgaria, the decision must be unanimous, whereas in the case of Romania, the decision can be invoked by qualified majority voting if the country is found to have failed to implement reforms in specific key areas, e.g. the field of competition policy. Furthermore, the EU Member States agreed to postpone the start of negotiations with Croatia in mid-March 2005 because Croatia's efforts to fully cooperate with the International Criminal Tribunal for the Former Yugoslavia were not considered to be fully sufficient. The 25 EU Member States need to decide unanimously on the start of accession negotiations with Croatia; they have signaled that negotiations could start as soon as the remaining obstacle has been removed.

2 Czech Republic: Favorable External and Inflation Developments

In the Czech Republic real GDP growth was 4.0% year on year in 2004, slightly above growth in 2003 (3.7%). Growth accelerated from 3.8% year on year in the first quarter of 2004 to 4.3% in the last quarter. Compared to 2003, the composition of growth changed considerably. The growth rates of private and public consumption declined in the course of 2004, to 1.9% and -5.8%, respec-

tively, in the fourth quarter, resulting in full-year growth rates of 2.5% and –3.2%, respectively (after 4.9% and 4.2% in 2003). Growth of gross fixed capital formation, in contrast, accelerated strongly to almost 10% year on year in the first three quarters of 2004, but moderated to 7.5% in the fourth quarter of 2004. The full-year growth rate of gross fixed capital formation reached 9.1%, after just 4.8% in 2003. In the second quarter of 2004, the growth rates of exports and imports jumped to around 27% year on year as remaining trade barriers with major trading partners were eliminated after EU accession. In the following quarters of 2004, growth of exports and imports moderated slightly, but full-year growth turned out to be significantly higher than in 2003. In the full year 2004, the negative contribution to GDP growth of net exports declined to just –0.5 percentage point against –1.5 percentage points in 2003. Remarkably, the contribution of net exports was strongly positive in the last quarter of 2004. According to the spring forecast 2005 of the European Commission, GDP growth is expected to remain at 4.0% in 2005 and to accelerate slightly to 4.2% in 2006.

Table 4

Gross Domestic Product and Its Demand Components							
	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Real year-on-year change in %</i>							
Gross domestic product	1.2	3.9	2.6	1.5	3.7	4.0	4.3
Private consumption	2.1	2.9	2.6	2.8	4.9	2.5	1.9
Public consumption	5.4	0.2	3.8	4.5	4.2	–3.2	–5.8
Gross fixed capital formation	–3.5	4.9	5.4	3.4	4.8	9.1	7.5
Exports of goods and services	5.5	16.5	11.5	2.1	7.3	20.9	22.2
Imports of goods and services	5.0	16.3	13.0	4.9	7.9	18.5	15.8
<i>Contribution to GDP growth in percentage points</i>							
Domestic demand	1.3	5.0	4.9	4.2	5.3	4.6	1.7
Exports	3.4	10.8	8.5	1.7	6.0	17.7	20.0
Net exports	–0.1	–1.1	–2.2	–2.7	–1.5	–0.5	2.7

Source: Eurostat, OeNB.

In 2004, robust economic growth was not reflected in the labor market. At 8.4%, the 2004 unemployment rate (ILO definition) was even somewhat higher than that of the previous year (7.9%); the employment rate (based on the population aged between 15 and 64 years) decreased slightly from 64.7% to 64.2%. Last year, industrial production growth was outstanding, reaching almost 13% in the second quarter. For the full year, industrial production increased by 9.8% compared to just 5.9% in 2003 largely due to strong foreign demand in particular of other EU Member States. Industrial employment remained almost constant in 2004, whereas industrial labor productivity accelerated by 9.7% (2003: 7.9%). Nominal wages in the industrial sector grew faster than in 2003, but industrial unit labor cost declined by 2.5% in 2004. In 2004, industrial wages deflated by the CPI augmented by 4.9% year on year (2003: 6.0%).

After annual average HICP inflation of –0.1% in 2003, inflation increased in 2004 and reached its peak in August at 3.2% year on year. Thereafter, inflation started to decline. In April 2005, HICP inflation came in at 1.4% (after 1.2% in March, which was the lowest year-on-year rise since December 2003). The disinflation process was mainly driven by a further fall in food prices. The contin-

Table 5

Productivity, Wages, Prices, Exchange Rate and Key Interest Rate

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Year-on-year change of period average levels in %</i>							
Gross production of industry (real)	-3.1	5.4	6.7	4.9	5.9	9.8	9.1
Labor productivity of industry (real)	3.6	9.1	6.1	6.8	7.9	9.7	9.0
Gross average wage of industry (nominal)	6.6	7.1	6.4	6.7	5.9	7.0	6.0
Unit labor cost of industry (nominal)	3.0	-1.8	0.3	-0.1	-1.9	-2.5	-2.8
Producer price index (PPI) of industry	0.9	4.8	2.9	-0.5	-0.4	5.7	8.1
Consumer price index (here: HICP)	1.8	3.9	4.5	1.4	-0.1	2.6	2.7
Exchange rate (nominal):							
CZK ¹ per 1 EUR, + = EUR appreciation	2.3	-3.5	-4.3	-9.5	3.3	0.2	-3.0
EUR per 1 CZK, + = CZK appreciation	-2.2	3.6	4.5	10.6	-3.2	-0.2	3.1
<i>Period-average levels</i>							
Unemployment rate (ILO definition, %)	8.8	8.9	8.2	7.4	7.9	8.4	8.2
Key interest rate per annum (%)	6.7	5.3	5.1	3.6	2.3	2.2	2.5
Exchange rate (nominal):							
CZK ¹ per 1 EUR	36.89	35.60	34.07	30.81	31.84	31.90	31.13
EUR per 1 CZK	0.0271	0.0281	0.0294	0.0325	0.0314	0.0313	0.0321

Source: Bloomberg, Eurostat, national statistical office, national central bank, OeNB, wiw.
¹ CZK: Czech koruna.

uous disinflation process encouraged Česká národní banka to cut its key interest rate in January and March by 25 basis points each to 2.00%; another cut in April to 1.75%, i.e. below the ECB's key rate of 2%, came as a surprise to some market participants. In line with the justification for this decision, namely an improving inflation outlook, the central bank revised its inflation forecast for the next 18 months down from between 2.0% and 3.4% to between 1.4% and 2.8%, pushing the lower threshold below the inflation target band of 2% to 4% for 2006 and beyond. This move took account of decreasing import prices due to the appreciation of the currency and a less favorable economic outlook for the country's main trading partners.

In 2004 and into early 2005, the Czech koruna appreciated sharply by around 10%, reaching its strongest nominal value in more than two and a half years at 29.3 CZK/EUR. In March, however, the currency weakened to

Table 6

Monetary Developments

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Nominal year-on-year change of the annual average stock in %</i>							
Broad money (including foreign currency deposits)	8.9	6.5	10.8	7.1	5.2	10.3	11.5
<i>Contributions to the nominal year-on-year change of broad money in percentage points</i>							
Net foreign assets of the banking system	13.0	8.0	8.0	7.9	1.2	2.9	3.4
Domestic credit (net) of the banking system	-3.2	-1.1	0.2	-9.7	7.7	7.1	9.4
<i>of which: claims on the private sector</i>	-3.8	-5.0	-5.6	-12.3	0.9	6.0	6.0
<i>claims on households</i>	0.1	0.3	1.1	1.7	3.3	4.4	4.3
<i>claims on enterprises</i>	-4.0	-5.3	-6.7	-14.0	-2.5	1.5	1.8
<i>net claims on the public sector</i>	0.6	3.9	5.8	2.5	6.8	1.2	3.4
Other domestic assets (net) of the banking system	-0.9	-0.4	2.6	8.9	-3.7	0.3	-1.3

Source: National central bank, OeNB.
 Note: Data since 2003 according to ECB methodology.

30.5 CZK/EUR. The depreciation of the currency has apparently been due to external factors, i.e. a change in global risk assessment, whereas internal factors, such as the political crisis which led to the resignation of prime minister Stanislav Gross and the appointment of Jiří Paroubek as the new Czech premier, seem to have had only a minor impact on the markets. In mid-May, the currency stood at around 30.3 CZK/EUR.

With a budget deficit of 3.0% of GDP, the fiscal situation of the country improved compared to 2003,¹ and the 2004 deficit turned out to be significantly below the expected deficit. In its autumn forecasts, the European Commission expected the deficit to run to 4.8%; the government's convergence program of December 2004 forecast a deficit of around 5.2%, in line with the original target. For the most part, the positive outcome was influenced more by higher government revenues than by lower-than-planned expenditures. Enhanced revenues were the result of more vigorous economic growth and the possibility of rolling over unspent funds into the next year for the first time. Furthermore, the reclassification of state guarantees resulted in a reduction of the deficit by almost 1 percentage point of GDP. The government targets a deficit of 4.7% of GDP for 2005 and of 3.8% for 2006 (convergence program of December 2004). In mid-2004 the Ecofin Council decided that an excessive deficit existed and advised the Czech Republic to correct the deficit by 2008. On January 18, 2005, in its assessment of the updated convergence program, the Ecofin Council recommended the use of higher-than-planned revenues to reduce the deficit and, furthermore, emphasized the need to push forward pension and health care system reforms. The European Commission expects a budget deficit of 4.5% in 2005 and 4.0% in 2006 (2005 spring forecast). Government debt stood at 37.4% of GDP in 2004 and is forecast to come to 36.4% in 2005 and 37.0% in 2006.

Table 7

Government Budget							
	1999	2000	2001	2002	2003	2004	2005f
	% of GDP						
General government							
Revenues	39.2	38.5	39.1	40.2	41.6	42.7	41.8
Expenditures	42.9	42.1	45.0	46.9	53.3	45.7	46.3
of which: interest payments	1.0	0.9	1.1	1.5	1.3	1.3	1.3
Balance	-3.6	-3.7	-5.9	-6.8	-11.7	-3.0	-4.5
Primary balance	-2.6	-2.8	-4.8	-5.2	-10.3	-1.8	-3.2
Gross public debt	16.0	18.2	27.2	30.7	38.3	37.4	36.4

Source: European Commission.

On the back of high export growth, last year's trade deficit was reduced to 0.8% of GDP (2003: -2.7%). However, the current account deficit dropped by only 1.1 percentage points to 5.2%, as the deficit on the income account increased strongly due to foreign investors' profit repatriations after large inflows of FDI in recent years. The capital account was balanced in 2003,

¹ In 2003, however, the record high deficit of 11.7% emerged because the government had to account fully for a partially realized one-off state guarantee which amounted to 6.3% of GDP.

Table 8

Balance of Payments

	1999	2000	2001	2002	2003	2004	Q1–3 2003	Q1–3 2004
<i>EUR million</i>								
Merchandise exports	24,651	31,509	37,271	40,713	43,053	53,787	31,677	39,080
Merchandise exports: year-on-year change in %	6.9	27.8	18.3	9.2	5.7	24.9	5.2	23.4
Merchandise imports	26,448	34,918	40,705	43,034	45,235	54,493	32,811	39,536
Merchandise imports: year-on-year change in %	4.1	32.0	16.6	5.7	5.1	20.5	4.4	20.5
Trade balance	–1,797	–3,409	–3,434	–2,322	–2,182	–706	–1,134	–455
% of GDP	–3.2	–5.6	–5.0	–3.0	–2.7	–0.8	–1.9	–0.7
Services balance	1,130	1,536	1,706	706	416	389	328	347
Income balance (factor services balance)	–1,265	–1,490	–2,450	–3,760	–3,757	–4,393	–2,505	–3,418
Current transfers	552	403	524	934	494	191	341	171
Current account balance	–1,379	–2,960	–3,653	–4,442	–5,029	–4,518	–2,970	–3,355
% of GDP	–2.5	–4.9	–5.4	–5.7	–6.3	–5.2	–5.0	–5.2
Capital account balance	–2	–6	–10	–4	–3	–450	–2	128
% of GDP	0.0	0.0	0.0	0.0	0.0	–0.5	0.0	0.2
Direct investment flows (net)	5,879	5,356	6,121	8,870	1,694	3,142	2,528	2,746
% of GDP	10.6	8.9	9.0	11.3	2.1	3.6	4.2	4.3

Source: Eurostat, national central bank, OeNB.

but turned negative, slipping to –0.5% of GDP in 2004. In 2004, the net inflow of FDI almost doubled compared to 2003 and covered almost 70% of the current account deficit. In April 2005, the sale of the government stake in Český Telekom (CT) to Spain's Telefonica was finally approved.

The country's gross external debt increased from 34.5% of GDP at the end of 2003 to 38.5% at the end of 2004.

Table 9

Gross Official Reserves and Gross External Debt

	1999	2000	2001	2002	2003	2004
<i>End of period, EUR million</i>						
Gross official reserves (1999 including, from 2000 excluding gold)	12,771	14,043	16,269	22,483	21,189	20,746
Gross external debt	22,765	23,285	25,368	25,738	27,624	33,258
<i>% of GDP¹</i>						
Gross official reserves (1999 including, from 2000 excluding gold)	23.1	23.2	23.9	28.7	26.4	24.0
Gross external debt	41.1	38.5	37.3	32.8	34.5	38.5
<i>Import months of goods and services</i>						
Gross official reserves (1999 including, from 2000 excluding gold)	4.8	4.1	4.2	5.4	4.9	4.0

Source: Eurostat, national central bank, OeNB, wiw.

¹ Q1 2004: As a percentage of rolling four-quarter GDP.

3 Hungary: Weakening Domestic Demand Reduces Inflation Pressure

Hungarian GDP growth accelerated to 4.0% year on year in 2004, up from 3.0% in 2003. The growth rate gradually decreased during the first three quarters of 2004 and stabilized at somewhat below 4.0% in the fourth quarter. Domestic demand growth slowed down significantly from 5.5% in 2003 to

3.0% in 2004, and its structure changed significantly, with consumption growth declining (from 7.3% in 2003 to 2.2% in 2004) and investment growth accelerating (from 3.4% to 8.3%). Within domestic consumption, private consumption grew by 3.5%, while public consumption decreased compared to 2003. Consumption remained weak into the final quarter of 2004, with private consumption growth decelerating to 1.8% and public consumption contracting by 3.3% year on year. Investment growth came to a rather unexpected standstill at the end of the year, registering a growth rate of 0.3% year on year following 18.9% in the first, 10.0% in the second and 12.7% in the third quarter. Both export and import growth accelerated in full-year 2004, with import growth continuously decelerating from the second quarter, while export growth gathered strength again in the fourth quarter following a weak performance in the third quarter. As a result, net exports contributed 0.8 percentage point to the 2004 GDP growth rate, a considerable improvement following the negative contribution of 2.6 percentage points in 2003. In particular in the last quarter of 2004 GDP growth was primarily driven by net exports. In its 2005 spring forecast, the European Commission expects GDP growth to slow modestly to 3.9% in 2005 and 3.8% in 2006, with investment and net exports remaining important motors of growth. The envisaged moderate increases in real disposable income and households' slowing credit demand suggest that the deceleration of consumption activity may last, while fiscal tightening plans may continue to have a negative impact on public investment activity.

Table 10

Gross Domestic Product and Its Demand Components

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Real year-on-year change in %</i>							
Gross domestic product	4.2	5.2	3.8	3.5	3.0	4.0	3.8
Private consumption	5.6	5.5	5.7	10.2	8.0	3.5	1.8
Public consumption	1.5	1.9	6.2	5.0	5.4	-1.3	-3.3
Gross fixed capital formation	5.9	7.7	5.0	8.0	3.4	8.3	0.3
Exports of goods and services	12.2	21.0	7.8	3.7	7.6	15.7	14.0
Imports of goods and services	13.3	19.4	5.1	6.2	10.4	14.0	9.5
<i>Contribution to GDP growth in percentage points</i>							
Domestic demand	5.1	4.7	1.7	5.6	5.6	3.2	0.2
Exports	7.9	14.6	6.3	3.1	6.3	13.7	12.8
Net exports	-1.0	0.5	2.1	-2.1	-2.6	0.8	3.6

Source: Eurostat, OeNB.

At the beginning of 2005, industrial output figures indeed suggested an economic slowdown, showing a deceleration of growth to 1% year on year in February 2005, down from 8.3% in 2004.

Despite the recovery of output growth, the unemployment rate (labor force survey) remained broadly unchanged (2003: 5.9%; 2004: 6.1%). Employment decreased by 0.6% year on year, and the employment rate (based on the population aged between 15 and 64 years) eased modestly to around 57%, persisting at a rather low level compared to that of the other NMS. Net real wages decreased by 1% in 2004, reversing the trend of high wage dynamics between 2001 and 2003. The slowdown resulted from the acceleration of inflation, which was coupled with a deceleration of nominal wage growth. The latter

was driven by wage restraint in the public sector, but private sector nominal wage dynamics also lost momentum in the course of 2004 and early 2005.

Annual average HICP inflation rose to 6.8% in 2004 from 4.7% in 2003. After peaking at 7.8% year on year in May 2004, inflation started to decline, with disinflation accelerating in the fourth quarter of 2004 and, in particular, at the beginning of 2005. In March 2005, HICP inflation stood at 3.3% year on year before rising to 3.8% in April. In addition to base effects, disinflation has been supported by the slowdown of domestic consumption, high real interest rates, the stronger currency and the decline in unit labor cost dynamics. In parallel to falling inflation, inflation expectations have also moderated, with the market consensus expectation² in April 2004 anticipating year-end inflation of around 3.5% in 2005 and 2006. This is in line with the inflation target of the Hungarian central bank, 3.5% ± 1 percentage point for end-2006, and its inflation projection of 3.4% for end-2006.

Table 11

Productivity, Wages, Prices, Exchange Rate and Key Interest Rate

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Year-on-year change of period average levels in %</i>							
Gross production of industry (real)	10.1	18.5	4.1	2.9	6.3	8.3	6.6
Labor productivity of industry (real)	5.1	17.0	5.6	4.7	8.4	10.6	9.4
Gross average wage of industry (nominal)	13.4	15.0	14.5	12.6	9.3	10.0	8.8
Unit labor cost of industry (nominal)	7.9	-1.7	8.4	7.5	0.8	-0.6	-0.6
Producer price index (PPI) of industry	5.0	11.4	5.7	-1.1	2.5	3.6	2.1
Consumer price index (here: HICP)	10.0	10.0	9.1	5.2	4.7	6.8	5.9
<i>Exchange rate (nominal):</i>							
HUF ¹ per 1 EUR. + = EUR appreciation	5.2	2.9	-1.3	-5.3	4.3	-0.7	-5.3
EUR per 1 HUF. + = HUF appreciation	-4.9	-2.8	1.4	5.6	-4.2	0.7	5.6
<i>Period-average levels</i>							
Unemployment rate (ILO definition. %)	7.1	6.4	5.8	5.9	5.9	6.1	6.3
Key interest rate per annum (%)	15.2	11.5	11.1	9.1	8.6	11.4	10.3
<i>Exchange rate (nominal):</i>							
HUF ¹ per 1 EUR	252.76	260.07	256.60	242.95	253.51	251.73	245.94
EUR per 1 HUF	0.00396	0.00385	0.00390	0.00412	0.00394	0.00397	0.00407

Source: Bloomberg, Eurostat, national statistical office, national central bank, OeNB, wiw.

¹ HUF: Hungarian forint.

Encouraged by the decline in inflation and inflation expectations, the improvement in the structure of GDP growth and the strengthening of the currency until mid-March 2005 (+9.4% between January 2004 and February 2005), Magyar Nemzeti Bank (MNB) continued its gradual reduction of key interest rates, lowering them by a total of 525 basis points to 7.25% between the beginning of 2004 and end-May 2005. The MNB has repeatedly cited the still large external imbalance and the need for more ambitious fiscal tightening as factors which prevent bolder interest rate cuts. In addition, since mid-March 2005 – amid a diminishing global risk appetite – increased uncertainty with

² Trimmed mean of the individual forecasts in the monthly Reuters poll.

regard to portfolio capital flows, which play a significant role in financing Hungary's current account deficit, and some weakening of the Hungarian forint against the euro have called for a cautious approach to monetary easing.

Table 12

Monetary Developments							
	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Nominal year-on-year change of the annual average stock in %</i>							
Broad money (including foreign currency deposits)	17.4	17.7	16.3	10.1	14.2	11.4	10.7
<i>Contributions to the nominal year-on-year change of broad money in percentage points</i>							
Net foreign assets of the banking system	10.3	10.3	9.2	2.2	-1.0	-2.0	-1.9
Domestic credit (net) of the banking system	6.0	6.0	10.7	12.3	22.4	17.9	14.9
<i>of which: claims on the private sector</i>	8.8	16.2	17.2	15.4	18.7	21.8	17.4
<i>claims on households</i>	1.6	2.7	4.2	6.3	10.6	9.9	8.0
<i>claims on enterprises</i>	7.1	13.4	13.0	9.1	8.1	11.9	9.3
<i>net claims on the public sector</i>	-2.7	-10.2	-6.5	-3.1	3.7	-3.9	-2.5
Other domestic assets (net) of the banking system	1.1	-5.8	-3.6	-4.5	-7.2	-4.4	-2.3

Source: National central bank, OeNB.

In 2004, Hungary posted a general government budget deficit of 4.5% of GDP, excluding the costs of the pension reform. Including these costs, the deficit stood at 5.4% of GDP. The public debt ratio increased to 57.6% of GDP (60.7% including pension reform costs). The budget deficit was hence reduced compared to 2003 (6.2% excluding, 7.1% including pension reform costs), but exceeded the target set in the May 2004 convergence program (4.6% including pension reform costs). Consequently, the Ecofin Council concluded that Hungary had not taken effective action to correct its excessive deficit and in March 2005 issued a new recommendation to Hungary to take additional measures until early July 2005 to comply with its convergence program targets. According to its updated convergence program of December 2004, Hungary is targeting a budget deficit of 3.8% of GDP excluding the costs of the pension reform (4.7% including) in 2005, hence envisaging a deficit reduction by 0.7% of GDP. Nevertheless, developments over the first four months of the year suggest that without additional measures, the 2005 deficit target could be overshoot. For 2006, a further deficit reduction to 3.1% (4.1%) is planned. While the 2005 target is broadly in line with the European Commission's 2005 spring forecast,

Table 13

Government Budget							
	1999	2000	2001	2002	2003	2004	2005f
<i>% of GDP</i>							
General government							
Revenues	..	45.3	45.0	44.1	44.5	47.5	44.0
Expenditures	..	47.6	48.7	52.6	50.8	52.0	47.8
<i>of which: interest payments</i>	..	5.6	4.7	4.0			
Balance	..	-2.4	-3.7	-8.5	-6.2	-4.5	-3.9
Primary balance	..	3.2	1.0	-4.5	-2.2	-0.2	0.0
Gross public debt		60.9	55.4	52.2	55.5	56.9	57.6

Source: European Commission.

Table 14

Balance of Payments

	1999	2000	2001	2002	2003	2004	Q1-3 2003	Q1-3 2004
<i>EUR million</i>								
Merchandise exports	24,059	31,278	34,697	36,821	38,377	44,516	27,813	32,331
Merchandise exports: year-on-year change in %	14.3	30.0	10.9	6.1	4.2	16.0	1.4	16.2
Merchandise imports	26,102	34,457	37,193	39,024	41,274	46,907	30,100	34,479
Merchandise imports: year-on-year change in %	14.8	32.0	7.9	4.9	5.8	13.6	5.1	14.5
Trade balance	-2,044	-3,180	-2,496	-2,203	-2,898	-2,391	-2,287	-2,148
% of GDP	-4.5	-6.3	-4.3	-3.2	-4.0	-3.0	-4.3	-3.7
Services balance	816	1,234	1,661	587	-378	-10	-157	191
Income balance (factor services balance)	-2,713	-2,792	-3,192	-3,838	-3,682	-4,929	-2,713	-3,571
Current transfers	408	385	450	525	594	206	494	117
Current account balance	-3,531	-4,352	-3,577	-4,929	-6,364	-7,123	-4,663	-5,411
% of GDP	-7.8	-8.6	-6.2	-7.1	-8.7	-8.9	-8.7	-9.3
Capital account balance	31.2	299.9	357.9	202.3	-32.5	317.6	-70.7	187.5
% of GDP	0.1	0.6	0.6	0.3	0.0	0.4	-0.1	0.3
Direct investment flows (net)	2,872	2,334	3,992	2,889	443	2,940	-9	2,216
% of GDP	6.4	4.6	6.9	4.2	0.6	3.7	0.0	3.8

Source: Eurostat, national central bank, OeNB.

the Commission expects a deficit widening to 4.1% of GDP in 2006. The government is currently contemplating a tax reform to take effect from the beginning of 2006; it is aimed at attaining the 2006 budget deficit target and overhauling the tax system.

Despite the weakening of domestic demand, Hungary's current account deficit widened from 8.7% of GDP in 2003 to 8.9% in 2004. The deterioration in the income and transfer balances was the main reason for the deterioration of the overall deficit; the deficit on the goods and services account narrowed from 4.5% to 3.0% of GDP, supported by the deceleration of domestic demand. The capital account posted a surplus of 0.4% of GDP, reducing the country's overall external financing requirement. Net FDI inflows recovered compared to 2003 (from 0.6% to 3.7% of GDP) and covered around 40% of the overall financing requirement. In addition, the role of portfolio capital in deficit financing intensified, increasing the country's exposure to changes in international investor sentiment.

Table 15

Gross Official Reserves and Gross External Debt

	1999	2000	2001	2002	2003	2004
<i>End of period, EUR million</i>						
Gross official reserves (excluding gold)	10,722	12,038	12,164	9,887	10,108	11,671
Gross external debt	29,231	32,572	37,387	38,559	46,036	54,925
<i>% of GDP¹</i>						
Gross official reserves (excluding gold)	23.8	23.8	21.0	14.3	13.8	14.5
Gross external debt	64.9	64.4	64.5	55.9	62.9	68.3
<i>Import months of goods and services</i>						
Gross official reserves (excluding gold)	4.3	3.6	3.4	2.6	2.5	2.5

Source: Eurostat, national central bank, OeNB, wiiv.

¹ Q1 2004: As a percentage of rolling four-quarter GDP.

The country's gross external debt continued to increase and reached 68.3% of GDP at the end of 2004, up from 62.9% a year earlier.

4 Poland: Higher Average Growth in 2004, but Deceleration in the Course of the Year

GDP growth accelerated to 5.4% in 2004 (2003: 3.8%), but decreased over the year from nearly 7% year on year in the first quarter to about 4% in the fourth quarter. Private consumption rose by 3.4%, moderately more strongly than in 2003 (3.1%) and still clearly less than GDP growth. The more robust year-on-year growth of private consumption in the first half of 2004 was probably boosted by effects related to EU accession. The main contribution to the acceleration of GDP growth in 2004 stemmed from gross fixed capital formation, which expanded (at a rate of 5.3%) for the first time after four years of contraction. Real export growth at 11.4% decelerated from the high level of 2003 (14.7%), although foreign demand was more powerful and the year-average exchange rate was roughly unchanged when deflated by industrial producer prices and significantly weaker when deflated by industrial unit labor costs. At the same time, real import growth was nearly unchanged at 8.7% (2003: 9.3%), but remained below export growth. Less dynamic export growth (combined with the impact of export production on imports) and the weaker average unit labor cost-deflated exchange rate seem to have compensated for the impact of stronger domestic demand growth on real imports. With export growth exceeding import growth, net exports improved further in 2004, contributing 1.0 percentage point to GDP growth, somewhat less than in 2003.

Table 16

Gross Domestic Product and Its Demand Components							
	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Real year-on-year change in %</i>							
Gross domestic product	4.1	4.0	1.0	1.4	3.8	5.4	3.9
Private consumption	5.3	2.8	2.1	3.3	3.1	3.4	1.8
Public consumption	1.0	1.1	0.6	0.6	0.2	1.4	0.5
Gross fixed capital formation	9.2	-1.9	-8.8	-5.8	-0.5	5.3	7.2
Exports of goods and services	-3.2	32.4	3.1	4.8	14.7	11.4	0.3
Imports of goods and services	1.1	15.5	-5.3	2.6	9.3	8.7	-2.1
<i>Contribution to GDP growth in percentage points</i>							
Domestic demand	5.4	0.1	-1.6	0.8	2.5	4.4	3.1
Exports	-1.0	9.1	1.1	1.7	4.4	3.9	0.1
Net exports	-1.3	3.9	2.6	0.6	1.3	1.0	0.8

Source: Eurostat, national statistical office, OeNB, wiiv.

Given higher economic growth on average in 2004, year-average employment growth was recorded for the first time since 1998. Expanding by 1.3%, the employment performance implied a decline in the year-average unemployment rate (ILO definition, based on the labor force survey) to 19.3% (2003: 20.0%) despite an increase in the labor force by 0.5%. In industry, labor shedding nearly came to a halt (-0.4% against -2.5% in 2003). Coupled with robust industrial output growth, labor productivity growth (13.5%) far exceeded the slightly rising nominal wage growth (4.5%), implying an even more pronounced fall in nominal unit labor costs in industry in 2004 (7.9%) than in 2003 (7.5%).

While industrial producer prices mounted by 7.1% on average in 2004 (2003: 2.7%), their rise slowed from a peak of 9.6% year on year in May 2004 to only 2.2% year on year in March 2005, supported by the sharp fall in unit labor costs. In the whole economy, real wages (HICP deflated) declined by 1.4% year on year in the first quarter of 2005, after having been more or less stagnant in 2004 (+0.6). Inflation (HICP) peaked at 4.9% in August 2004 and started to decline thereafter. By March 2005, HICP inflation had reached 3.4% year on year, within the monetary policy target band (2.5 ± 1 percentage point). In response to disinflation and an improving inflation outlook, the Monetary Policy Council of Narodowy Bank Polski lowered the key interest rate (two-week rate on central bank bills) by a total of 1 percentage point to 5.5% in two steps at the end of March and April 2005.

Table 17

Productivity, Wages, Prices, Exchange Rate and Key Interest Rate

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Year-on-year change of period average levels in %</i>							
Gross production of industry (real)	4.7	7.8	0.6	1.4	8.6	13.1	16.6
Labor productivity of industry (real)	9.6	17.9	6.1	7.4	11.4	13.5	17.0
Gross average wage of industry (nominal)	34.1	10.9	6.9	3.7	3.0	4.5	4.8
Unit labor cost of industry (nominal)	22.3	-5.9	0.8	-3.4	-7.5	-7.9	-10.5
Producer price index (PPI) of industry	5.7	7.8	1.7	1.1	2.7	7.1	8.9
Consumer price index (here: HICP)	7.2	10.1	5.3	1.9	0.7	3.6	3.4
Exchange rate (nominal):	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PLN ¹ per 1 EUR. + = EUR appreciation	8.0	-5.2	-8.4	5.0	14.1	3.0	7.6
EUR per 1 PLN. + = PLN appreciation	-7.4	5.5	9.2	-4.7	-12.4	-2.9	-7.1
<i>Period-average levels</i>							
Unemployment rate (ILO definition. %)	..	16.4	18.6	20.3	20.0	19.3	19.4
Key interest rate per annum (%)	13.7	17.9	16.0	8.8	5.6	5.8	5.3
Exchange rate (nominal):							
PLN ¹ per 1 EUR	4.23	4.01	3.67	3.85	4.40	4.53	4.69
EUR per 1 PLN	0.2365	0.2495	0.2725	0.2595	0.2274	0.2207	0.2133

Source: Bloomberg, Eurostat, national statistical office, national central bank, OeNB, wiw.

¹ PLN: Polish zloty.

After the real key interest rate (12-month moving average) had fallen continuously from 4.3% in December 2003 to 0.5% in August 2004, it increased to 2.9% by March 2005.³ Both the recent increase of real interest rates and the real appreciation of the zloty by 22% (CPI-deflated) and 20% (PPI-deflated) from February 2004 to March 2005 had a tightening effect on monetary conditions. In 2004, annual average real money growth was 3.6% year on year and remained below GDP growth. Both net foreign assets and lending to households expanded, making an equally large contribution to money growth. On the other hand, net credit to government and bank lending to enterprises declined even in nominal terms. In the first quarter of 2005, this pattern was even more pronounced, as household credit expanded by 15% year on year while corporate credit contracted by 5% year on year in nominal terms, partly reflecting the

³ Ex post real key rate per annum as measured by the real (CPI-deflated) key rates per month compounded over the past 12 months. The similarly measured PPI-deflated key rate per annum declined from 2.1% in December 2003 to -3.8% in May before recovering to -0.9% by November and reaching 3.9% in March 2004.

decline in unit labor costs and the resulting high profitability of the sector. At the same time, the strong currency appreciation moderated the increase of net foreign assets by 24% year on year in euro terms to only 4.5% as measured in Polish złoty.

Table 18

Monetary Developments							
	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Nominal year-on-year change of the annual average stock in %</i>							
Broad money (including foreign currency deposits)	24.7	15.4	12.1	2.0	1.5	6.9	8.2
<i>Contributions to the nominal year-on-year change of broad money in percentage points</i>							
Net foreign assets of the banking system	7.8	7.0	4.5	0.9	0.0	4.2	2.5
Domestic credit (net) of the banking system	25.1	13.5	7.2	7.1	5.2	3.7	2.8
<i>of which: claims on the private sector</i>	18.5	15.7	8.3	3.4	3.8	4.1	3.9
<i>claims on households</i>	6.2	7.0	4.2	2.8	2.5	4.7	5.7
<i>claims on enterprises</i>	12.3	8.7	4.1	0.5	1.3	-0.6	-1.8
<i>net claims on the public sector</i>	6.7	-2.1	-1.1	3.7	1.4	-0.5	-1.1
Other domestic assets (net) of the banking system	-8.3	-5.1	0.4	-6.0	-3.8	-1.0	2.9

Source: National central bank, OeNB.

According to the March 2005 fiscal notification, the public deficit was 4.8% of GDP in 2004, lower than the deficit ratios envisaged in the government's convergence programs of May (-5.7%) and December 2004 (-5.4%), which were based on real GDP growth of 5.0% and 5.7%, respectively. Thus, the deficit was only slightly higher than in 2003 (4.5%), despite the negative fiscal impact of EU accession. According to the Ecofin Council recommendation under the excessive deficit procedure in July 2004, Poland should take effective action to achieve the 2005 deficit target set in May and reach a deficit of below 3% by 2007. The December program set the deficit target for 2005 at 3.9% of GDP (against 4.2% in the May program) and at 2.2% of GDP for 2007 (against 1.5% in the May program). However, all these deficit figures are based on classifying the defined-contribution funded pension schemes inside the government sector, while the Eurostat ruling of 2004 that these schemes have to be classified outside the government sector has to be implemented by the March 2007 fiscal notification. The full reclassification would imply an upward revision of the deficit figure by about 1.8 percentage points of GDP in 2006 and 2007. Moreover, the public debt-to-GDP ratio envisaged at 47.3% in 2007 will rise as well.

Table 19

Government Budget							
	1999	2000	2001	2002	2003	2004	2005f
<i>% of GDP</i>							
General government							
Revenues	44.9	42.5	43.8	43.9	44.3	43.8	44.2
Expenditures	47.0	45.2	47.7	47.5	48.8	48.7	48.6
<i>of which: interest payments</i>	2.0	3.1	3.2	2.9	2.9	2.6	2.6
Balance	-1.4	-1.6	-3.9	-3.6	-4.5	-4.8	-4.4
Primary balance	0.6	1.6	-0.7	-0.7	-1.6	-2.2	-1.9
Gross public debt	40.1	36.8	36.7	41.2	45.4	43.6	46.8

Source: European Commission.

Accordingly, the Ecofin Council stated in its opinion on the December convergence program on February 17, 2005, that Poland should lower the deficit target for 2007.

Corresponding to further improving real net exports, the deficit in the goods and services account in the balance of payments continued to shrink to 1.9% of GDP in 2004 (2003: -2.5%). In parallel, the current account deficit contracted to 1.5% of GDP (2003: -2.2%). The current account shortfall was fully covered by a capital account surplus of 0.4% of GDP and by net direct investment inflows of 2.1% of GDP (2003: 1.9%).

Table 20

Balance of Payments

	1999	2000	2001	2002	2003	2004	Q1-3 2003	Q1-3 2004
<i>EUR million</i>								
Merchandise exports	28,215	39,028	46,487	49,324	53,814	65,638	39,255	47,931
<i>Merchandise exports: year-on-year change in %</i>	-2.5	38.3	19.1	6.1	9.1	22.0	8.4	22.1
Merchandise imports	42,361	52,359	55,075	57,036	58,890	70,144	43,030	51,416
<i>Merchandise imports: year-on-year change in %</i>	4.9	23.6	5.2	3.6	3.3	19.1	2.8	19.5
Trade balance	-14,146	-13,331	-8,588	-7,712	-5,076	-4,506	-3,775	-3,485
<i>% of GDP</i>	-9.2	-7.4	-4.1	-3.8	-2.7	-2.3	-2.8	-2.5
Services balance	1,297	1,551	905	852	430	701	120	110
Income balance (factor services balance)	-948	-1,609	-1,585	-1,990	-3,189	-3,683	-2,385	-2,694
Current transfers	2,078	2,595	3,226	3,433	3,726	4,539	2,653	3,032
Current account balance	-11,719	-10,794	-6,042	-5,417	-4,109	-2,949	-3,387	-3,037
<i>% of GDP</i>	-7.6	-6.0	-2.9	-2.7	-2.2	-1.5	-2.5	-2.2
Capital account balance	51.0	41.0	81.0	-8.0	-40.0	803.0	-32.0	616.0
<i>% of GDP</i>	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4
Direct investment flows (net)	6,795	10,253	6,457	4,147	3,508	4,198	2,518	2,342
<i>% of GDP</i>	4.4	5.7	3.1	2.0	1.9	2.1	1.8	1.7

Source: Eurostat, national central bank, OeNB.

Other investment inflows (net) resulting partly from the prepayment of Paris Club debt were negative and exceeded sizeable portfolio net inflows, while gross official reserves hardly changed in absolute terms. The expansion of total gross foreign debt in percent of GDP resulted exclusively from higher official gross foreign debt.

Table 21

Gross Official Reserves and Gross External Debt

	1999	2000	2001	2002	2003	2004
<i>End of period, EUR million</i>						
Gross official reserves (excluding gold)	26,224	28,555	29,031	27,367	26,000	25,904
Gross external debt	65,123	74,672	81,461	81,046	84,003	92,881
<i>% of GDP¹</i>						
Gross official reserves (excluding gold)	17.0	15.8	14.0	13.5	14.0	13.2
Gross external debt	42.2	41.3	39.3	40.0	45.4	47.4
<i>Import months of goods and services</i>						
Gross official reserves (excluding gold)	6.4	5.5	5.4	4.9	4.6	3.9

Source: Eurostat, national central bank, OeNB, wiw.

¹ Q1 2004: As a percentage of rolling four-quarter GDP.

5 Slovak Republic: Recovery of Private Consumption

In 2004, real GDP in the Slovak Republic posted solid growth of 5.5% year on year after 4.5% in 2003. Growth in 2004 was volatile over quarters, coming in highest at the end of the year and lowest in the third quarter. The sources of growth changed substantially from 2003. In 2004, GDP growth was increasingly driven by domestic demand. Private consumption accelerated by 3.5% after a decline of 0.6% in 2003, and gross fixed capital formation turned from negative (2003: -1.5%) to positive (2004: +2.5%). Gross fixed capital formation advanced fastest in the third quarter (+5.5%) but dropped to just 0.1% growth in the last quarter of 2004. The public consumption growth rate declined from 2.7% in 2003 to 1.2% in 2004. Overall, the contribution of domestic demand to GDP growth amounted to 6.3 percentage points in contrast to a negative contribution of 2.1 percentage points in 2003. On the external side, real import growth in 2004 turned out to be only slightly lower than in 2003, whereas export growth diminished significantly from 22.5% in 2003 to 11.4% in 2004. The contribution of net exports to GDP switched from positive to negative (from 6.5 percentage points in 2003 to -0.8 percentage point in 2004). In its 2005 spring forecast, the European Commission expects a slowdown of the growth dynamics to 4.9% in 2005 and to 5.2% in 2006.

Table 22

Gross Domestic Product and Its Demand Components

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Real year-on-year change in %</i>							
Gross domestic product	1.5	2.0	3.8	4.6	4.5	5.5	5.8
Private consumption	3.2	-0.8	4.7	5.5	-0.6	3.5	4.3
Public consumption	-7.1	1.6	4.6	4.9	2.7	1.2	0.2
Gross fixed capital formation	-19.6	-7.2	13.9	-0.6	-1.5	2.5	0.1
Exports of goods and services	5.0	13.7	6.3	5.6	22.5	11.4	9.5
Imports of goods and services	-6.7	10.5	11.0	5.5	13.6	12.7	12.3
<i>Contribution to GDP growth in percentage points</i>							
Domestic demand	-7.0	0.1	7.5	4.7	-2.1	6.3	8.4
Exports	3.3	9.4	4.8	4.3	17.7	10.6	9.4
Net exports	8.4	1.9	-3.7	-0.1	6.5	-0.8	-2.6

Source: Eurostat, national statistical office, OeNB.

The boom of the Slovak economy was not reflected in the labor market. The already very high unemployment rate (ILO definition) accelerated further from 17.6% in 2003 to 18.3% in 2004. The employment rate (based on the population aged between 15 and 64 years) dipped from 57.7% in 2003 to 57.0% in 2004. In industry, employment edged up by just 0.4% year on year in 2004, and labor productivity growth declined continuously in the course of the year, sinking from 7.4% in the first quarter to -1.0% in the last quarter of 2004. This resulted in an overall labor productivity growth rate of 3.9%. Weak industrial output growth was largely due to low output in the car industry related to production line upgrades. Industrial wage growth (nominal) accelerated to 10.1%, leading to a further rise of unit labor costs (+6.0%) above producer price inflation (3.4%). In 2004, industrial wages deflated by the CPI went up by 2.6% year on year (2003: -1.1%).

In 2004, the HICP still amounted to 7.4% compared to 8.5% in 2003. However, since mid-2004, the inflation rate has been declining continuously. The rate of price increase in 2004 was mainly supported by changes in administered prices and indirect taxes. These inflation drivers were much less important in 2005, leading to a pronounced slowdown in inflation in the first quarter of 2005. In addition, nominal effective exchange rate developments underpinned the moderation of inflation in 2004 and early 2005. In April 2005, the HICP inflation rate stood at 2.5% year on year. The inflation target measured by Národná banka Slovenska's HICP has been set to 3.5% ±0.5 percentage point at the end of 2005 and to below 2.5% at the end of 2006.

Table 23

Productivity, Wages, Prices, Exchange Rate and Key Interest Rate

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Year-on-year change of period average levels in %</i>							
Gross production of industry (real)	-2.0	8.3	7.6	6.7	5.5	4.3	1.2
Labor productivity of industry (real)	1.0	11.8	6.6	6.5	4.9	3.9	-1.0
Gross average wage of industry (nominal)	7.9	9.1	10.2	7.3	7.3	10.1	9.3
Unit labor cost of industry (nominal)	6.8	-2.4	3.4	0.7	2.3	6.0	10.4
Producer price index (PPI) of industry	3.9	10.8	6.5	2.0	8.3	3.4	4.5
Consumer price index (here: HICP)	10.4	12.2	7.2	3.5	8.5	7.4	6.0
Exchange rate (nominal):							
SKK ¹ per 1 EUR. + = EUR appreciation	11.7	-3.4	1.6	-1.4	-2.8	-3.5	-4.2
EUR per 1 SKK. + = SKK appreciation	-10.5	3.6	-1.6	1.4	2.9	3.6	4.4
<i>Period-average levels</i>							
Unemployment rate (ILO definition, %)	16.4	18.8	19.3	18.7	17.6	18.3	17.3
Key interest rate per annum (%)	..	..	8.8	7.9	6.4	4.9	4.3
Exchange rate (nominal):							
SKK ¹ per 1 EUR	44.12	42.60	43.30	42.68	41.49	40.03	39.45
EUR per 1 SKK	0.0227	0.0235	0.0231	0.0234	0.0241	0.0250	0.0253

Source: Bloomberg, Eurostat, national statistical office, national central bank, OeNB, wiw.

¹ SKK: Slovak koruna.

In the light of the ongoing disinflation process, Národná banka Slovenska (NBS) continued to cut its key interest rate (two-week repo tender limit rate), with reductions totaling 2 percentage points in 2004, by another 100 basis

Table 24

Monetary Developments

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Nominal year-on-year change of the annual average stock in %</i>							
Broad money (including foreign currency deposits)	8.1	14.1	12.7	8.7	5.5	4.0	4.7
<i>Contributions to the nominal year-on-year change of broad money in percentage points</i>							
Net foreign assets of the banking system	-4.9	6.6	2.7	13.5	7.7	-2.6	-3.9
Domestic credit (net) of the banking system	13.6	3.7	12.2	0.4	-1.9	10.2	9.9
<i>of which: claims on the private sector</i>	4.9	2.2	-13.9	-1.0	4.9	4.0	3.5
<i>claims on households</i>	1.7	2.0	1.2	1.4	2.2	4.0	4.3
<i>claims on enterprises</i>	3.2	0.2	-15.1	-2.3	2.7	0.0	-0.8
<i>net claims on the public sector</i>	8.7	1.5	26.1	1.4	-6.7	6.1	6.5
Other domestic assets (net) of the banking system	-0.5	3.8	-2.2	-5.2	-0.4	-3.6	-1.3

Source: National central bank, OeNB.

Note: Data after deduction of bad claims written off during bank consolidation.

points to 3% in March 2005. The interest rate decreases were also strongly motivated by the appreciation of the Slovak koruna. The currency appreciated sharply in 2004 and in early 2005, reaching 37.56 SKK/EUR at the beginning of March. The NBS also intervened relatively heavily on the domestic foreign exchange market to stem the appreciation pressure. In March 2005, however, the koruna started to depreciate, bottoming out at 39.84 SKK/EUR at the end of April. The currency resumed its upward trend against the euro and traded close to 39.00 SKK/EUR in mid-May. The appreciation of the Slovak koruna is largely supported by high economic growth, considerable reform progress and by the ongoing strong inflow of FDI, but also by short-term capital inflows.

One year after the implementation of a fundamental tax reform (which comprised the introduction of a 19% flat tax rate on both personal and corporate income as well as the unification of the VAT at 19%) and a simultaneous reform of the system of social benefits, the 2004 budget deficit amounted to 3.3% of GDP compared to an expected deficit of 3.8% (December 2004 convergence program). The better-than-expected outcome is largely the result of spending deferrals e.g. for co-funded EU projects and lower social security expenditures.

At the beginning of 2005, further reforms of the social system entered into force. In particular, the pay-as-you-go pension system was transformed into a multipillar system that includes a compulsory funded pillar. Moreover, in the health sector, a comprehensive system of copayments was introduced. In its spring forecast, the European Commission expects a budget deficit of 3.8% of GDP for 2005 and of 4.0% for 2006. In July 2004, the Ecofin Council decided that an excessive deficit existed and recommended that Slovakia correct the deficit by 2007. In its statement of February 17, 2005, on the updated convergence program (December 2004), the Ecofin Council assessed the program as sufficient to reduce the deficit to 3% by 2007. However, the program does not allow for any safety margins. Government debt is expected to increase from 43.6% of GDP in 2004 to 44.2% in 2005 and to 44.9% in 2006. Debt is negatively affected by the decision of an international arbitration court in Washington D.C. in December 2004 which ruled that Slovakia has to take on and honor the guarantees for the bad loans of the former Czechoslovak bank CSOR on the order of SKK 25 billion (more than EUR 600 million, or nearly 2.0% of Slovak GDP). This obligation originates from the process of property division of the former Czechoslovak Federal Republic.

Table 25

Government Budget							
	1999	2000	2001	2002	2003	2004	2005f
	% of GDP						
General government							
Revenues	49.8	47.6	45.5	45.2	35.4	35.1	36.1
Expenditures	56.9	59.9	51.5	50.9	39.2	38.5	39.9
of which: interest payments	3.4	4.1	4.0	3.6	2.5	2.2	2.4
Balance	-7.1	-12.3	-6.0	-5.7	-3.7	-3.3	-3.8
Primary balance	-3.8	-8.2	-2.0	-2.1	-1.2	-1.1	-1.4
Gross public debt	47.2	49.9	48.7	43.3	42.6	43.6	44.2

Source: European Commission.

The 2004 revival of domestic demand went hand in hand with a widening of the trade and current account deficits. The trade deficit enlarged from 2.0% to 3.6% of GDP, and the current account deficit climbed from 0.8% to 3.6%. The deficit on the income account deteriorated substantially, as high FDI inflows in recent years have led to rising dividend repatriation. The capital account turned from a slight surplus (0.3% of GDP) to being balanced in 2004. In 2004, FDI inflows covered around 86% of the current account deficit.

Table 26

Balance of Payments

	1999	2000	2001	2002	2003	2004	Q1–3 2003	Q1–3 2004
<i>EUR million</i>								
Merchandise exports	9,607	12,866	14,119	15,281	19,370	22,370	13,987	16,413
<i>Merchandise exports: year-on-year change in %</i>	0.5	33.9	9.7	8.2	26.8	15.5	25.9	17.3
Merchandise imports	10,633	13,838	16,494	17,539	19,935	23,553	14,343	17,106
<i>Merchandise imports: year-on-year change in %</i>	-8.8	30.1	19.2	6.3	13.7	18.1	14.6	19.3
Trade balance	-1,027	-971	-2,376	-2,259	-566	-1,183	-356	-693
<i>% of GDP</i>	-5.4	-4.4	-10.2	-8.8	-2.0	-3.6	-1.7	-2.9
Services balance	208	476	536	483	210	230	127	149
Income balance (factor services balance)	-281	-382	-350	-485	-107	-329	-120	-352
Current transfers	184	128	237	206	217	105	172	92
Current account balance	-916	-750	-1,953	-2,054	-245	-1,177	-177	-803
<i>% of GDP</i>	-4.8	-3.4	-8.4	-8.0	-0.8	-3.6	-0.8	-3.3
Capital account balance	148.9	99.5	87.1	113.9	89.4	15.6	63.9	-37.9
<i>% of GDP</i>	0.8	0.5	0.4	0.4	0.3	0.0	0.3	-0.2
Direct investment flows (net)	737	2,048	1,726	4,291	619	1,016	427	851
<i>% of GDP</i>	3.9	9.3	7.4	16.7	2.1	3.1	2.0	3.5

Source: Eurostat, national central bank, OeNB.

The country's gross foreign debt increased from 49.5% of GDP at the end of 2003 to 52.5% at the end of 2004.

Table 27

Gross Official Reserves and Gross External Debt

	1999	2000	2001	2002	2003	2004
<i>End of period, EUR million</i>						
Gross official reserves (excluding gold)	3,781	4,526	5,075	8,497	9,338	10,605
Gross external debt	..	..	..	12,576	14,323	17,396
<i>% of GDP¹</i>						
Gross official reserves (excluding gold)	19.8	20.6	21.8	33.0	32.2	32.0
Gross external debt	..	..	..	48.9	49.5	52.5
<i>Import months of goods and services</i>						
Gross official reserves (excluding gold)	3.7	3.4	3.2	5.1	4.9	4.8

Source: Eurostat, national central bank, OeNB, wiiv.

¹ Q1 2004: As a percentage of rolling four-quarter GDP.

6 Slovenia: Smooth Participation in ERM II

GDP growth in Slovenia accelerated sharply to 4.6% year on year in 2004, from 2.5% in 2003. Output growth was particularly strong around mid-year, while it eased to 4.3% in the last quarter of 2004. Signs of an economic slowdown could be observed at the beginning of 2005, when industrial output growth plunged to 0.5% year on year in February from 5.0% in 2003. Domestic consumption growth accelerated from 2.7% in 2003 to 3.0% in 2004, with private consumption growth quickening from 2.7% to 3.5% and public consumption slowing from 2.6% to 1.7%. Private consumption was supported primarily by an increase in real disposable income (including funds disbursed from the first national housing savings scheme) and went hand in hand with powerful credit growth. Investment growth accelerated to 6.8% (from 6.3% in 2003) in a full-year comparison, but its dynamics moderated in the course of the year, so that growth came to 5.7% in the fourth quarter. The contribution of net exports to the overall GDP growth rate also improved from a negative contribution of 2.4 percentage points in 2003 to –0.3 percentage point in 2004. Both export and import growth rates accelerated sharply to around 12% to 13% year on year, with export growth surpassing import growth in the second half of the year. In its 2005 spring forecast, the European Commission expects GDP growth to slow to 3.7% in 2005, followed by a pickup to 4.0% in 2006. The slowdown in 2005 is expected to stem primarily from the weaker performance of net exports and unchanged inventories (inventories had contributed 0.8 percentage point in 2004). Consumption and investment are expected to stay robust in 2005 and 2006.

Table 28

Gross Domestic Product and Its Demand Components							
	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Real year-on-year change in %</i>							
Gross domestic product	5.6	3.9	2.7	3.3	2.5	4.6	4.3
Private consumption	5.9	0.4	2.3	0.3	2.7	3.5	3.2
Public consumption	2.9	2.3	3.9	1.7	2.6	1.7	2.6
Gross fixed capital formation	21.0	0.6	4.1	3.1	6.3	6.8	5.7
Exports of goods and services	1.6	13.0	6.3	6.7	3.2	12.6	13.3
Imports of goods and services	8.0	7.6	3.0	4.9	6.8	12.4	11.6
<i>Contribution to GDP growth in percentage points</i>							
Domestic demand	9.4	1.5	0.9	2.3	4.9	4.9	3.8
Exports	0.9	7.1	3.7	4.1	2.0	8.0	8.5
Net exports	–3.9	2.4	1.8	1.0	–2.4	–0.3	0.5

Source: Eurostat, national statistical office, OeNB.

Strengthened economic activity in 2004 was also reflected in a decline in the unemployment rate from 6.8% in 2003 (average) to 6.5% in 2004. At the same time, employment grew by 4.4% year on year, leading to an increase in the employment rate (based on the population aged between 15 and 64 years) from 62.6% in 2003 to 65.3% in 2004. Despite tightening labor market conditions, nominal wage growth decelerated almost in parallel to the decline in inflation: real net wages in the whole economy grew by 2.0% year on year in 2004, only

modestly more strongly than in 2003 (1.7%). Such wage developments have been facilitated by further progress with the deindexation of wage settlements and restraint in public sector wage growth.

Inflation (as measured by the HICP) fluctuated between 3.3% and 4.0% during 2004, showing a mildly and unevenly decelerating general trend over the year. Inflation developments remained volatile during the first quarter of 2005, with the HICP plunging to 2.3% year on year in January, the lowest level since the beginning of transition, but climbing back to 3.3% by March. Disinflation has been supported by a stable exchange rate to the euro, a deceleration of unit labor cost growth (from 4.8% year on year in 2003 to 2.2% in 2004) and favorable food price developments. Banka Slovenije attributes the most recent increase in inflation to seasonal factors and expects inflation to fall to 2.4% in the last quarter of 2005. According to Banka Slovenije's projections, however, inflation should pick up modestly to 2.6% by end-2006 and to 2.8% by end-2007, mainly because the negative output gap is set to close and then become positive.

Table 29

Productivity, Wages, Prices, Exchange Rate and Key Interest Rate

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Year-on-year change of period average levels in %</i>							
Gross production of industry (real)	-0.5	6.3	3.1	2.5	1.4	5.0	2.4
Labor productivity of industry (real)	0.9	6.8	2.3	1.4	3.0	6.1	3.3
Gross average wage of industry (nominal)	9.3	11.7	10.8	9.9	7.6	7.1	6.8
Unit labor cost of industry (nominal)	8.3	4.6	8.4	8.3	4.4	1.0	3.3
Producer price index (PPI) of industry	2.2	7.7	8.9	5.3	2.6	4.4	5.2
Consumer price index (here: HICP)	6.1	8.9	8.6	7.5	5.7	3.6	3.5
Exchange rate (nominal):	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIT ¹ per 1 EUR. + = EUR appreciation	4.6	6.3	5.5	3.6	3.5	2.2	1.6
EUR per 1 SIT. + = SIT appreciation	-4.4	-5.9	-5.2	-3.5	-3.4	-2.2	-1.5
<i>Period-average levels</i>							
Unemployment rate (ILO definition. %)	7.6	6.9	6.3	6.5	6.8	6.5	6.6
Key interest rate per annum (%)	7.2	8.1	10.5	8.4	7.0	4.6	4.0
Exchange rate (nominal):							
SIT ¹ per 1 EUR	194.43	206.63	217.98	225.93	233.82	239.07	239.83
EUR per 1 SIT	0.00514	0.00484	0.00459	0.00443	0.00428	0.00418	0.00417

Source: Bloomberg, Eurostat, national statistical office, national central bank, OeNB, wiw.

¹ SIT: Slovenian tolar.

Since Slovenia entered ERM II on June 28, 2004, the exchange rate of the tolar against the euro has fluctuated in a very narrow range of between 0.02% on the strong side and 0.17% on the weak side of the central rate of the euro. Toward the end of 2004 and in early 2005 the exchange rate followed a modestly appreciating trend. Following the increase in the interest rate that Banka Slovenije charges on buy/sell foreign exchange swap operations (through which it temporarily alters tolar liquidity) and in the main refinancing rate (which is linked to the former) by 25 basis points in December 2004, the bank raised this rate by another 25 basis points on April 8, 2005. The interest rate on tolar-denominated Banka Slovenije bills, which are relevant for the money market, have remained unchanged, as have money market rates, which hovered at around 4% at the end of April 2005. Despite a modest increase in backward-

looking real interest rates (i.e. nominal interest rates deflated by the contemporaneous CPI) since mid-2004, credit growth to the private sector has intensified and stood at slightly above 20% in February 2005.

Table 30

Monetary Developments							
	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Nominal year-on-year change of the annual average stock in %</i>							
Broad money (including foreign currency deposits)	..	13.7	19.2	22.8	12.7	5.1	4.4
<i>Contributions to the nominal year-on-year change of broad money in percentage points</i>							
Net foreign assets of the banking system	..	3.1	9.1	11.0	3.3	-8.1	-10.1
Domestic credit (net) of the banking system	..	15.1	14.4	12.2	8.1	14.0	15.1
<i>of which: claims on the private sector</i>	..	15.1	12.6	9.1	8.0	11.5	12.4
<i>claims on households</i>	..	4.4	2.0	1.6	1.5	2.7	3.5
<i>claims on enterprises</i>	..	10.7	10.6	7.5	6.5	8.8	8.9
<i>net claims on the public sector</i>	..	0.0	1.7	3.2	0.1	2.4	2.6
Other domestic assets (net) of the banking system	..	-4.4	-4.2	-0.4	1.3	-0.8	-0.6

Source: National central bank, OeNB.

Slovenia posted a general government budget deficit of 1.9% of GDP in 2004, slightly below the 2003 deficit and in line with the target of the May 2004 convergence program. The updated convergence program of January 2005 targeted a budget deficit of 2.1% of GDP in 2005, unchanged from the then expected 2004 level. Nevertheless, along with the March 2005 fiscal notification, the government revised the 2005 deficit target to 1.9% of GDP. In its opinion on the updated convergence program, the Ecofin Council stated in March that the government has to undertake measures, specifically with regard to the pension and health care system, to improve the long-term sustainability of public finances. Government debt stood at 29.4% of GDP at end-2004, well below the Maastricht reference value. Euro adoption at the beginning of 2007 has remained the key economic policy goal of the new center-right government which came to power in late 2004. In addition, with effect from the beginning of 2005, the government has modified the personal and corporate income tax system. The changes to the personal income tax system were aimed at reducing the burden for lower-income taxpayers and equalizing the tax burden across different sources of income. The changes in corporate income tax were aimed at broadening the tax base and making tax incentives better tar-

Table 31

Government Budget							
	1999	2000	2001	2002	2003	2004	2005f
<i>% of GDP</i>							
General government	..	44.7	45.1	45.7	46.2	45.8	45.5
Revenues	..	44.7	45.1	45.7	46.2	45.8	45.5
Expenditures	..	48.2	47.9	48.1	48.2	47.7	47.6
<i>of which: interest payments</i>	..	2.4	2.4	2.3	2.1	1.9	1.7
Balance	..	-3.5	-2.8	-2.4	-2.0	-1.9	-2.2
Primary balance	..	-1.0	-0.4	0.0	0.1	0.0	-0.5
Gross public debt	24.9	27.4	28.1	29.5	29.4	29.4	30.2

Source: European Commission.

geted. Currently, the government is considering the introduction of a flat tax (for personal and corporate income tax and VAT), which has been proposed by the Strategic Council for Economic Development, its advisory body.

Slovenia registered a current account deficit of 0.9% of GDP in 2004, up from 0.4% in 2003. The increase stemmed from the balance of goods and services turning into a small deficit, while changes in the income and transfer balance canceled each other out. The deficit on the capital account remained unchanged from 2003 at 0.7% of GDP. Net FDI inflows were insignificant (0.1% of GDP). Given relatively sizeable net portfolio capital outflows, other investment inflows were insufficient to fully cover the external financing requirement, and thus foreign exchange reserves declined by around 1% of GDP. Nevertheless, the level of central bank foreign exchange reserves at the end of 2004 was sufficient, covering around five months of imports of goods and services.

Table 32

Balance of Payments

	1999	2000	2001	2002	2003	2004	Q1–3 2003	Q1–3 2004
<i>EUR million</i>								
Merchandise exports	8,103	9,574	10,454	11,082	11,414	12,736	8,463	9,374
Merchandise exports: year-on-year change in %	0.2	18.2	9.2	6.0	3.0	11.6	2.3	10.8
Merchandise imports	9,267	10,801	11,139	11,351	11,960	13,576	8,799	9,934
Merchandise imports: year-on-year change in %	5.4	16.6	3.1	1.9	5.4	13.5	5.2	12.9
Trade balance	-1,164	-1,227	-684	-269	-546	-840	-337	-559
% of GDP	-5.8	-6.0	-3.1	-1.1	-2.2	-3.2	-1.8	-2.9
Services balance	330	489	536	617	538	672	414	503
Income balance (factor services balance)	58	29	43	-154	-178	-101	-141	-95
Current transfers	112	126	144	142	94	31	60	9
Current account balance	-664	-583	38	335	-91	-239	-3	-143
% of GDP	-3.3	-2.8	0.2	1.4	-0.4	-0.9	0.0	-0.7
Capital account balance	-0.7	4.0	-4.0	-163.6	-165.5	-178.3	-83.4	-101.5
% of GDP	0.0	0.0	0.0	-0.7	-0.7	-0.7	-0.5	-0.5
Direct investment flows (net)	55	77	251	1,582	-115	21	-113	-88
% of GDP	0.3	0.4	1.2	6.7	-0.5	0.1	-0.6	-0.5

Source: Eurostat, national central bank, OeNB.

Table 33

Gross Official Reserves and Gross External Debt

	1999	2000	2001	2002	2003	2004
<i>End of period, EUR million</i>						
Gross official reserves (excluding gold)	3,159	3,436	4,908	6,702	6,798	6,464
Gross external debt	8,012	9,491	10,403	11,483	13,305	15,397
<i>% of GDP¹</i>						
Gross official reserves (excluding gold)	15.9	16.7	22.5	28.5	27.7	25.0
Gross external debt	40.2	46.1	47.6	48.8	54.1	59.5
<i>Import months of goods and services</i>						
Gross official reserves (excluding gold)	3.5	3.3	4.6	6.1	5.9	4.9

Source: Eurostat, national central bank, OeNB, wiw.

¹ Q1 2004: As a percentage of rolling four-quarter GDP.

Slovenia's gross external debt continued to rise in 2004 and reached 59.5% of GDP in December 2004 (up from 54.1% at end-2003).

7 Bulgaria: Strong Export Performance, Better Growth Structure

Real GDP grew by 5.6% in Bulgaria in 2004 (2003: 4.5%), rising from 4.5% in the first quarter to 6.2% in the fourth quarter. The structure of growth became somewhat less imbalanced, as the contribution of domestic demand to GDP growth declined to 9.5 percentage points (2003: 12.1 percentage points) despite continuing high credit growth. Domestic consumption growth moderated to 5.0% in 2004 (2003: 6.6%), mainly due to the stagnation of real (CPI-deflated) wages. However, it accelerated again in the fourth quarter, reaching 6.5% year on year. Gross fixed capital formation growth remained buoyant at 12.0% in 2004 (2003: 13.9%), slowing to 9.9% year on year in the fourth quarter. Thus, real annual import growth also remained high at 14.1% in 2004 (2003: 15.3%) and even accelerated to 16.9% year on year in the fourth quarter of 2004. As real annual export growth augmented continuously throughout the year to an average of 13.2% in 2004 (2003: 7.9%), the deterioration in net exports was less marked than in 2003, resulting in a negative contribution to GDP growth of 3.9 percentage points (2003: 7.6 percentage points).

Table 34

Gross Domestic Product and Its Demand Components							
	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Real year-on-year change in %</i>							
Gross domestic product	2.4	5.4	4.1	4.9	4.5	5.6	6.2
Private consumption	9.6	4.3	5.2	3.5	6.3	5.4	6.8
Public consumption	6.3	18.8	0.3	4.4	8.1	2.8	5.6
Gross fixed capital formation	18.2	25.5	22.6	8.2	13.9	12.0	9.9
Exports of goods and services	-4.6	16.6	9.9	7.2	7.9	13.2	19.8
Imports of goods and services	9.3	18.7	14.8	4.9	15.3	14.1	16.9
<i>Contribution to GDP growth in percentage points</i>							
Domestic demand	11.0	8.7	9.2	4.3	12.1	9.5	10.0
Exports	-2.7	9.3	6.1	4.7	5.3	9.2	11.7
Net exports	-8.6	-3.3	-5.1	0.6	-7.6	-3.9	-3.8

Source: Eurostat, OeNB, wiiv.

Accelerating and high GDP growth improved the labor market in 2004. As the year-average participation rate picked up to 61.8% in 2004 (2003: 60.9%) and the year-average unemployment rate (ILO definition) fell to 12.2% in 2004 (2003: 13.9%),⁴ total employment grew by 3.3%, which lifted the employment rate to 54.2% in 2004 (2003: 52.5%), still among the lowest rates in Europe. In parallel to the total economy, year-average employment in industry increased in 2004, enlarging at a rate of 2.4%. Combined with very high industrial output growth in 2004, labor productivity advances accelerated and remained far above nominal wage growth. Thus, in 2004, year-average nominal unit-labor costs in industry diminished by 7.9%, while producer prices advanced by 5.9%. Year-average inflation (HICP) accelerated to 6.1% in 2004 (2003: 2.3%). After infla-

⁴ Registered unemployment decreased to 13% in the first quarter of 2005, against 14.1% a year earlier.

tion had declined from a peak of 7.6% year on year in July 2004 to a low of 3.3% in January 2005, it rose again to reach 5.1% year on year in April 2005 primarily as a result of higher food and fuel prices.

Table 35

Productivity, Wages, Prices, Exchange Rate and Key Interest Rate

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Year-on-year change of period average levels in %</i>							
Gross production of industry (real)	-9.6	5.3	2.5	4.7	14.1	17.7	19.4
Labor productivity of industry (real)	1.2	10.0	7.6	2.2	10.9	15.0	16.1
Gross average wage of industry (nominal)	8.0	6.6	7.4	3.7	4.5	5.9	5.5
Unit labor cost of industry (nominal)	6.7	-3.1	-0.2	1.4	-5.7	-7.9	-9.1
Producer price index (PPI) of industry	3.2	17.0	3.8	1.4	5.0	5.9	6.9
Consumer price index (here: HICP)	2.6	10.3	7.4	5.8	2.3	6.1	4.7
Exchange rate (nominal):							
BGN ¹ per 1 EUR. + = EUR appreciation	-0.7	-0.2	-0.2	0.1	0.0	0.2	0.3
EUR per 1 BGN. + = BGN appreciation	0.7	0.2	0.2	-0.1	0.0	-0.2	-0.3
<i>Period-average levels</i>							
Unemployment rate (ILO definition. %)	..	17.0	20.5	18.3	13.9	12.2	12.0
Key interest rate per annum (%)	4.7	3.9	4.5	4.0	2.7	2.6	2.4
Exchange rate (nominal):							
BGN ¹ per 1 EUR	1.956	1.952	1.948	1.949	1.949	1.953	1.956
EUR per 1 BGN	0.5113	0.5123	0.5133	0.5130	0.5131	0.5120	0.5113

Source: Bloomberg, Eurostat, national statistical office, national central bank, OeNB, wiw.

¹ BGN: Bulgarian lev.

Broad money increased by 22.3% on average in 2004 (2003: 16.3%), primarily boosted by very robust credit growth to households and companies, while the increase of net foreign assets played a minor role and net credit to government decreased. The growth of credit to the corporate sector continued nearly unabated at a rate of 40.6% on average in 2004 (2003: 42.7%), and the growth of credit to households accelerated to 78.5% (2003: 65.9%). In the first quarter of 2005, average corporate sector credit growth and average household credit growth amounted to 43.6% and 76.1% year on year, respectively. Thus, at the end of 2004 the growth of credit to nongovernment nonbanks also exceeded the year-end target growth rate of 30% to 35% year on year that had been envisaged in the precautionary 25-month Stand-By Arrangement with the

Table 36

Monetary Developments

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Nominal year-on-year change of the annual average stock in %</i>							
Broad money (including foreign currency deposits)	7.9	27.4	27.8	18.3	16.3	22.3	20.6
<i>Contributions to the nominal year-on-year change of broad money in percentage points</i>							
Net foreign assets of the banking system	-0.2	26.1	13.5	7.7	5.4	4.4	6.2
Domestic credit (net) of the banking system	2.0	6.8	15.0	12.1	14.5	21.8	19.8
<i>of which: claims on the private sector</i>	9.5	8.7	8.1	13.6	19.9	26.3	27.2
<i>claims on households</i>	2.6	1.1	2.4	3.3	5.9	10.0	11.1
<i>claims on enterprises</i>	6.9	7.7	5.7	10.3	14.0	16.3	16.1
<i>net claims on the public sector</i>	-7.4	-2.0	6.9	-1.5	-5.4	-4.5	-7.4
Other domestic assets (net) of the banking system	6.0	-5.5	-0.7	-1.5	-3.6	-3.8	-5.5

Source: National central bank, OeNB.

IMF (approved by the IMF Executive Board in August 2004), although the Bulgarian National Bank (BNB) had taken measures to tighten domestic liquidity conditions in the course of 2004.⁵ Since the risk associated with rapid credit growth was again a priority topic in the context of the first review of the Stand-By Arrangement in March 2005, the BNB adopted a new package of measures aiming to cut the growth of credit to nongovernment nonbanks from 48% year on year at the end of 2004 to 25% to 30% year on year at the end of 2005. In particular, any bank whose credit growth exceeds 6%, 12%, 18% or 24% in the 3-, 6-, 12- or 24-month period, respectively, starting on April 1, 2005, will be subject to a specific set of restrictions.

The consolidated fiscal balance amounted to a surplus of 1.7% of GDP in 2004 (2003: 0.0%), overperforming with respect to both the initial 0.7% deficit target envisaged in the Pre-Accession Economic Programme (PEP) 2003 to 2006 in August 2003 and the 1% of GDP surplus target agreed with the IMF in November 2004. Stronger-than-expected economic growth, improved tax collection and reduced interest expenditure (related to the buy-back of public external debt) even left room for the government to undertake extra spending, mainly on education, health care and infrastructure projects. Overall, the consolidated budget revenue-to-GDP ratio increased from 40.7% to 41.7%, while the expenditure-to-GDP ratio decreased slightly from 40.7% to 40.0%. In mid-March 2005, the government agreed on a further tightening of the fiscal target for 2005 from a deficit of 0.5% of GDP envisaged in the PEP for 2004 to 2007 in November 2004 to a fiscal surplus of 1% of GDP, responding to the IMF's insistence during the first review of the Stand-By Arrangement that tight fiscal policy must play an active role in controlling domestic demand pressures. This change in the target was designed to compensate in particular for the 25% increase in minimum wages in January 2005, which was implemented against IMF advice.

Table 37

Government Budget							
	1999	2000	2001	2002	2003	2004	2005f
	% of GDP						
General government							
Revenues	56.6	58.2	53.5	..	..	..	..
Expenditures	56.2	58.7	52.3	..	..	..	..
of which: interest payments	3.8	4.0	3.7	..	..	..	..
Balance	0.4	-0.5	1.2	-0.1	0.6	1.4	-0.5
Primary balance	4.1	3.6	4.9	2.1	2.7	3.2	1.4
Gross public debt	79.3	73.6	66.2	54.0	46.3	38.8	32.5

Source: European Commission.

In 2004, export growth according to the balance of payments accelerated more strongly than import growth, which was driven by high, albeit moderating domestic demand growth. Exports mounted by 19.9% (2003: 10.0%), imports by 20.8% (2003: 14.4%). Thus, the trade deficit continued to deteriorate, albeit at a slower pace, reaching 14% of GDP (2003: 12.4% of GDP). At the

⁵ For more detailed information on measures taken by the BNB to reduce credit growth, please see Focus on European Economic Integration 2/2004.

same time, the current account deficit decreased to 7.4% of GDP (2003: 9.2% of GDP) due to higher surpluses in the services account (in particular thanks to tourism) and in the transfer account and owing to a lower deficit in the income account as a result of a buy-back of public external debt. Net FDI inflows in 2004 remained solid, but decreased to 8.4% of GDP (2003: 10.3% of GDP), which implied a coverage ratio of slightly more than 110% of the current account deficit, similar to that in 2003.

Table 38

Balance of Payments

	1999	2000	2001	2002	2003	2004	Q1-3 2003	Q1-3 2004
<i>EUR million</i>								
Merchandise exports	3,734	5,253	5,714	6,063	6,668	7,994	5,004	5,807
<i>Merchandise exports: year-on-year change in %</i>	-0.3	40.7	8.8	6.1	10.0	19.9	10.9	16.0
Merchandise imports	4,742	6,533	7,493	7,755	8,868	10,712	6,398	7,567
<i>Merchandise imports: year-on-year change in %</i>	16.3	37.8	14.7	3.5	14.4	20.8	16.6	18.3
Trade balance	-1,008	-1,280	-1,779	-1,692	-2,200	-2,718	-1,394	-1,760
<i>% of GDP</i>	-8.3	-9.3	-11.7	-10.2	-12.4	-14.0	-10.9	-12.5
Services balance	305	547	454	486	523	723	616	831
Income balance (factor services balance)	-167	-345	-340	-285	-567	-341	-528	-287
Current transfers	282	316	562	566	613	888	451	655
Current account balance	-587	-762	-1,102	-926	-1,631	-1,447	-855	-560
<i>% of GDP</i>	-4.8	-5.6	-7.2	-5.6	-9.2	-7.4	-6.7	-4.0
Capital account balance	-2.3	25.4	0.0	0.0	-0.2	0.0	-0.2	0.0
<i>% of GDP</i>	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Direct investment flows (net)	850	1,100	893	951	1,827	1,640	1,324	416
<i>% of GDP</i>	7.0	8.0	5.9	5.7	10.3	8.4	10.3	3.0

Source: Eurostat, national central bank, OeNB.

At the end of 2004, Bulgaria's gross external debt amounted to 59.3% of GDP compared to 61.4% at the end of 2003. A breakdown shows that public external debt declined to 27% of GDP from 37.9% of GDP at the end of 2003 while private external debt rose significantly, reflecting both the corporate sector's access to financing from sources other than domestic banks and the banking sector's foreign funding of domestic credit growth. In parallel, in the course of 2004, gross official foreign exchange reserves

Table 39

Gross Official Reserves and Gross External Debt

	1999	2000	2001	2002	2003	2004
<i>End of period, EUR million</i>						
Gross official reserves (excluding gold)	2,879	3,391	3,734	4,247	4,981	6,445
Gross external debt	10,847	11,997	12,129	10,785	10,876	11,542
<i>% of GDP¹</i>						
Gross official reserves (excluding gold)	23.7	24.7	24.5	25.6	28.1	33.1
Gross external debt	90.9	87.5	79.5	65.0	61.4	59.3
<i>Import months of goods and services</i>						
Gross official reserves (excluding gold)	5.6	4.9	4.8	5.2	5.4	5.8

Source: Eurostat, national central bank, OeNB, wiiv.

¹ Q1 2004: As a percentage of rolling four-quarter GDP.

increased from 28.1% of GDP to 33.1% of GDP, covering about 5.8 months of imports of goods and services.

8 Croatia: Toward a Stabilization of External Debt?

Croatian GDP growth decelerated slightly to 3.8% in 2004 (2003: 4.3%), with growth slowing from 4.2% year on year in the first quarter of 2004 to 3.6% in the last quarter. Domestic demand was the major contributor to GDP growth in the whole year, accounting for 3.3 percentage points. At the same time, net exports made a positive contribution to growth for the first time since 2000. Moreover, in the last quarter of 2004, the contribution of domestic demand to annual GDP growth declined to only 1.2 percentage points, while that of net exports expanded to 2.4 percentage points. This resulted from the sharp decrease of gross fixed capital formation growth from 8.9% year on year in the first quarter of 2004 to 0.9% in the fourth quarter, which led to stagnant growth of real imports in the fourth quarter, whereas real export growth remained stable above 5%.

Table 40

Gross Domestic Product and Its Demand Components							
	1999	2000	2001	2002	2003	2004	Q42004
<i>Real year-on-year change in %</i>							
Gross domestic product	-0.9	2.9	4.4	5.2	4.3	3.8	3.6
Private consumption	-2.9	4.2	4.5	7.5	4.1	3.9	3.8
Public consumption	2.8	-1.5	-6.2	-1.8	-0.3	-0.3	-0.6
Gross fixed capital formation	-3.9	-3.8	7.1	12.0	16.8	4.4	0.9
Exports of goods and services	0.7	12.0	8.1	1.3	10.1	5.4	5.8
Imports of goods and services	-3.5	3.7	9.8	8.8	10.9	3.5	0.0
<i>Contribution to GDP growth in percentage points</i>							
Domestic demand	-3.0	-0.3	5.8	9.4	5.8	3.3	1.2
Exports	0.3	5.1	3.7	0.6	4.6	2.6	2.4
Net exports	2.1	3.2	-1.4	-4.2	-1.5	0.5	2.4

Source: National statistical office, OeNB.

The unemployment rate (ILO definition, based on the labor force survey) decreased to 18.2% on average in 2004 (2003: 19.5%), reflecting the decline in the total labor force, while total employment was stagnant. In the whole economy, average net wages rose by 5.9% (2003: 5.9%) in nominal terms and by 3.7% (2003: 4.1%) in real (CPI-deflated) terms. In industry, average gross wages grew by 5.6% in 2004 (2003: 5.4%). By contrast, productivity growth accelerated to 5.7% (2003: 3.5%) as a result of the 1.9% decline in industrial employment (2003: +0.6%), while industrial output growth weakened to 3.7% (2003: 4.1%). Thus, industrial unit labor costs were nearly unchanged in 2004 (-0.1) against a moderate increase in 2003 (1.8%).

Average annual inflation stood at 2.1% in 2004 (2003: 1.8%). However, headline inflation has accelerated recently, quickening to 3.9% year on year in March 2005, mainly because of rises in food and energy prices. Further upward pressure may come from the pending adjustment of regulated prices. The European Commission expects a moderate further increase in average annual inflation to 2.7% in 2005 and 2.8% in 2006 on the back of administrative price adjustments, higher indirect taxes and price dynamics in the services sector.

Table 41

Productivity, Wages, Prices, Exchange Rate and Key Interest Rate

	1999	2000	2001	2002	2003	2004	Q42004
<i>Year-on-year change of period average levels in %</i>							
Gross production of industry (real)	-1.5	1.8	6.1	5.5	4.1	3.7	4.1
Labor productivity of industry (real)	1.6	4.4	7.8	7.8	3.5	5.7	6.3
Gross average wage of industry (nominal)	5.6	6.1	8.2	6.9	5.4	5.6	5.7
Unit labor cost of industry (nominal)	3.8	1.6	0.4	-0.8	1.8	-0.1	-0.6
Producer price index (PPI) of industry	2.5	9.5	3.4	-0.5	1.9	3.6	5.6
Consumer price index (CPI) ¹	4.3	6.4	5.0	1.7	1.8	2.1	2.3
Exchange rate (nominal):	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HRK ² per 1 EUR. + = EUR appreciation	6.4	0.9	-2.1	-1.0	2.1	-0.9	-1.0
EUR per 1 HRK. + = HRK appreciation	-6.0	-0.8	2.1	1.0	-2.1	0.9	1.0
<i>Period-average levels</i>							
Unemployment rate (registered unemployed. %)	19.1	21.1	22.0	22.3	19.5	18.2	18.4
Key interest rate per annum (%)	7.5	6.5	5.9	5.6	4.5	4.5	4.5
Exchange rate (nominal):							
HRK ² per 1 EUR	7.579	7.643	7.484	7.412	7.569	7.498	7.552
EUR per 1 HRK	0.1320	0.1308	0.1336	0.1349	0.1321	0.1334	0.1324

Source: Bloomberg, Eurostat, national statistical office, national central bank, OeNB, wiivv.

¹ Retail price index until 2001, CPI since 2002.

² HRK: Croatian kuna.

The exchange rate regime in Croatia is a fairly tightly managed float regime, with the central bank intervening rather frequently. The Croatian kuna appreciated by 0.9% in nominal terms against the euro on average in 2004, after it had depreciated by 2.1% in 2003. Moderate appreciation pressure continued in the first months of 2005, which motivated the central bank to sell domestic currency against the euro. Broad money grew by 8.3% on average in 2004 (2003: 11.3%). While net foreign assets contracted to a lesser degree in 2004 (-1.8%) than in 2003 (-20.7), net credit to government declined by 5.5% in 2004, after it had risen by 14.9% in 2003. Moreover, the growth of credit to nongovernment nonbanks fell to 11.8% on average in 2004 (2003: 22.6%).

Due to the importance of foreign currencies in banks' assets and liabilities, interest rate management plays a rather subordinate role in the Croatian monetary policy framework. Instead, the central bank relies heavily on mandatory reserve regulations, foreign currency asset-liability ratios and other quantitative measures. In addition to a mandatory reserve ratio of 18%, Croatian banks have traditionally had to maintain a minimum coverage of their foreign currency liabilities by short-term foreign currency assets. This coverage ratio was lowered from 35% to 32% in February 2005 with the intention of improving banking sector liquidity to facilitate the domestic refinancing of government eurobonds maturing at the end of March 2005, given Croatia's commitment to the IMF to stabilize or reduce its foreign indebtedness. Furthermore, the central bank increased the so-called marginal reserve requirement ratio from 24% to 30% in February 2005 and further to 40% in May 2005. This reserve requirement ratio was introduced in July 2004 and requires banks to deposit (free of interest) a specified percent of the net increase in their foreign liabilities over the level registered in June 2004 with the central bank.

Table 42

Monetary Developments							
	1999	2000	2001	2002	2003	2004	Q42004
	Nominal year-on-year change of the annual average stock in %						
Broad money (including foreign currency deposits)	2.6	14.0	30.9	32.4	11.3	8.3	8.8
	Contributions to the nominal year-on-year change of broad money in percentage points						
Net foreign assets of the banking system	-3.7	20.3	13.4	9.8	-7.7	-0.5	-0.3
Domestic credit (net) of the banking system	9.8	-1.2	21.1	23.2	19.5	9.4	10.5
of which: claims on the private sector	5.9	-2.0	17.0	21.5	17.7	10.1	10.7
claims on households	..	..	..	..	..	..	..
claims on enterprises	..	..	..	..	..	..	..
net claims on the public sector	3.9	0.9	4.1	1.7	1.8	-0.7	-0.3
Other domestic assets (net) of the banking system	-3.4	-5.1	-3.6	-0.5	-0.5	-0.7	-1.4

Source: National central bank, OeNB.

According to the European Commission's spring forecast, the general government posted a deficit of 5% of GDP in 2004, after the deficit had run to 6.3% of GDP in 2003. Apart from hikes of indirect tax rates, this improvement resulted to a significant extent from dividend payments by a partially state-owned company, i.e. a one-off revenue measure. Gross public debt increased to 53.8% of GDP at the end of 2004 from 51.6% at the end of 2003. The fiscal result for 2004 exceeds the 4.5% deficit target laid down in the Stand-By Arrangement with the IMF (approved by the IMF's Board of Governors in August 2004), which the authorities are treating as precautionary. Under the commitment of the Croatian government set out in the PEP for 2005 to 2007, the budget deficit of the general government is envisaged to decrease to 3.7% in 2005 and further to 3.2% in 2007. The PEP expects the continued adjustment to come primarily from measures on the expenditure side, with the expenditure-to-GDP ratio expected to sink from 52.7% in 2004 to 50.8% in 2005 and to 49.7% in 2007. These expenditure-based measures would comprise reforms in the health care system, a reduction in public employment and an enhanced financial discipline imposed on public enterprises, in particular a reduction of the sizeable direct state subsidies to state-owned shipyards. However, the 2005 spring forecast of the European Commission expects the deficit of the general government to come to 4.4% of GDP in 2005.

Table 43

Government Budget							
	1999	2000	2001	2002	2003	2004	2005f
	% of GDP						
General government							
Revenues	..	..	..	..	..	..	..
Expenditures	..	..	..	..	..	..	..
of which: interest payments	..	..	..	..	2.0	2.0	2.2
Balance	..	..	..	..	-6.3	-5.0	-4.3
Primary balance	..	..	..	..	-4.4	-3.0	-2.1
Gross public debt	..	..	..	..	51.6	53.8	53.1

Source: European Commission.

Table 44

Balance of Payments								
	1999	2000	2001	2002	2003	2004	Q1-3 2003	Q1-3 2004
<i>EUR million</i>								
Merchandise exports	4,134	4,969	5,319	5,293	5,572	6,602	4,076	4,836
Merchandise exports: year-on-year change in %	1.8	20.2	7.0	-0.5	5.3	18.5	4.1	18.7
Merchandise imports	7,240	8,469	9,923	11,253	12,546	13,327	9,186	9,850
Merchandise imports: year-on-year change in %	-5.5	17.0	17.2	13.4	11.5	6.2	10.8	7.2
Trade balance	-3,106	-3,499	-4,604	-5,960	-6,974	-6,725	-5,110	-5,014
% of GDP	-16.6	-17.5	-20.8	-24.6	-27.3	-24.3	-26.7	-24.2
Services balance	1,545	2,470	3,303	3,285	5,047	4,906	4,656	4,525
Income balance (factor services balance)	-346	-420	-616	-574	-1,074	-618	-993	-554
Current transfers	594	959	1,099	1,152	1,245	1,160	949	880
Current account balance	-1,313	-490	-818	-2,097	-1,757	-1,277	-498	-162
% of GDP	-7.0	-2.5	-3.7	-8.7	-6.9	-4.6	-2.6	-0.8
Capital account balance	23.4	22.2	154.1	501.2	72.4	23.1	63.8	20.8
% of GDP	0.1	0.1	0.7	2.1	0.3	0.1	0.3	0.1
Direct investment flows (net)	1,315	1,141	1,327	597	1,695	667	977	568
% of GDP	7.0	5.7	6.0	2.5	6.6	2.4	5.1	2.7

Source: Eurostat, national central bank, OeNB.

The current account deficit fell to 4.6% of GDP in 2004 from 6.9% in 2003. This improvement can be traced to a lower deficit in the trade account, which amounted to 24.3% of GDP in 2004 against 27.3% of GDP in 2003, and a smaller deficit in the income account, while the surplus in the services account declined. The decrease in the trade deficit resulted from both accelerating export growth and decelerating import growth. On the other hand, net FDI inflows were markedly lower at only 2.4% of GDP in 2004 (2003: 6.6% of GDP) and thus covered only half of the current account deficit in 2004, unlike in 2003 when net FDI inflows provided for nearly full coverage. As a result, total gross foreign debt continued to rise to EUR 22 billion, which was equivalent to 82.0% of GDP at the end of 2004 (2003: 77.6%), and net foreign debt increased to 38.6% (2003: 28.6%). Public external debt declined to 26.2% of GDP from 27.3%. In fact, the level and dynamics of external debt remain the major weak spot of the Croatian economy. The authorities are aiming for a sta-

Table 45

Gross Official Reserves and Gross External Debt						
	1999	2000	2001	2002	2003	2004
<i>End of period, EUR million</i>						
Gross official reserves (excluding gold)	3,013	3,783	5,334	5,651	6,554	6,436
Gross external debt	10,101	12,109	13,458	15,055	19,811	22,675
<i>% of GDP¹</i>						
Gross official reserves (excluding gold)	16.1	18.9	24.1	23.3	25.7	23.3
Gross external debt	54.1	60.6	60.7	62.2	77.6	82.0
<i>Import months of goods and services</i>						
Gross official reserves (excluding gold)	3.9	4.3	5.3	4.9	5.2	4.8

Source: Eurostat, national central bank, OeNB, wiiv.

¹ Q1 2004: As a percentage of rolling four-quarter GDP.

bilization and subsequent gradual reduction of external debt, a policy objective that also represents the cornerstone of the Stand-By Arrangement with the IMF. As fiscal policy is considered to be the main policy tool to achieve this aim, uncertainties about the fiscal policy approach in recent months have led to the delay of the second review of the arrangement to June 2005, after the first review had taken place in December 2004.

9 Romania: Strong Domestic Demand Accompanied by a Widening of the Trade Deficit

Real GDP growth in Romania accelerated strongly to 8.7% year on year in 2004 compared to 5.2% in 2003. Economic growth increased from 6.2% in the first quarter to 10.0% in the third quarter and declined slightly to 9.7% in the last quarter of 2004. This strong economic performance was driven by domestic demand, with private consumption growth – largely bolstered by rapid real wage growth and strong credit expansion – coming to 11.5% (2003: 7.0%) and gross fixed capital formation climbing by 9.9%. Gross fixed capital formation boomed in the third quarter, surging by 17.3%, but growth fell back to 2.7% in the fourth quarter of 2004. Export and import growth peaked in the second quarter of 2004 at 24.6% and 25.9%, respectively, and decelerated in the third quarter and even more in the fourth quarter, slowing to 8.8% and 10%, respectively. The resulting deterioration in net exports implied a negative contribution to GDP growth of 5.8 percentage points, slightly higher than in the full year 2003.

Table 46

Gross Domestic Product and Its Demand Components							
	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Real year-on-year change in %</i>							
Gross domestic product	-1.1	2.0	5.7	5.2	5.2	8.7	9.7
Private consumption	-1.9	-0.7	7.4	5.1	7.0	11.5	12.8
Public consumption	..	..	0.8	5.7	4.3	3.4	3.6
Gross fixed capital formation	-5.5	5.6	6.5	7.7	9.1	9.9	2.7
Exports of goods and services	..	21.3	11.6	17.4	11.5	14.1	8.8
Imports of goods and services	..	25.5	18.3	12.2	16.2	17.9	10.0
<i>Contribution to GDP growth in percentage points</i>							
Domestic demand	..	..	11.1	4.8	10.4	14.5	12.9
Exports	..	..	5.2	8.3	6.1	8.0	4.5
Net exports	..	..	-5.4	0.3	-5.2	-5.8	-3.2

Source: National statistical office, Eurostat, OeNB, wiw.

The year-average unemployment rate (ILO definition) increased from 7.5% to 8.5%, and the employment rate (based on the population aged between 15 and 64 years) remained almost constant (2003: 57.6%, 2004: 57.7%). As in 2003, employment in industry (year-average) fell by around 1.6% while real industrial output increased more rapidly in 2004 (+5.4%; 8.0% in the fourth quarter) than in 2003 (+3.2%). The resulting increase in labor productivity of about 7%, however, lagged behind industrial wage growth. In the total economy, net wages deflated by the GDP deflator advanced by 6.1% in 2004 (2003: 5.0%). In industry, nominal wage growth accelerated to 23.0%, leading to a 14.8% rise in nominal industrial unit wage costs, which was, however,

somewhat lower than the boost in industrial producer prices (19.1%). Producer price inflation remained nearly unchanged compared to 2003, while the year-average inflation rate came down from 15.3% in 2003 to 11.9% in 2004. In April 2005 inflation amounted to 10.0%, after having fallen to single digits in the preceding months for the first time since the beginning of transition (bottoming out at 8.7% in March 2005). The increase in inflation in April was largely caused by higher energy prices and higher taxes on tobacco and alcohol, which became effective on April 1, 2005.

Table 47

Productivity, Wages, Prices, Exchange Rate and Key Interest Rate

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Year-on-year change of period average levels in %</i>							
Gross production of industry (real)	-7.9	6.2	8.3	4.4	3.2	5.4	8.0
Labor productivity of industry (real)	7.2	12.5	11.6	5.4	5.2	7.1	8.6
Gross average wage of industry (nominal)	44.0	41.7	51.1	23.6	19.5	23.0	22.1
Unit labor cost of industry (nominal)	34.3	25.9	35.4	17.2	13.6	14.8	12.4
Producer price index (PPI) of industry	41.6	53.8	38.7	23.2	19.6	19.1	18.0
Consumer price index (CPI)	45.8	45.7	34.5	22.5	15.3	11.9	10.0
<i>Exchange rate (nominal):</i>							
ROL ¹ per 1 EUR. + = EUR appreciation	63.8	22.0	30.5	20.1	20.2	7.9	0.3
EUR per 1 ROL. + = ROL appreciation	-39.0	-18.1	-23.4	-16.8	-16.8	-7.3	-0.3
<i>Period-average levels</i>							
Unemployment rate (ILO definition. %)	7.6	7.9	7.3	9.1	7.5	8.5	8.5
Key interest rate per annum (%)	35.0	35.0	35.0	29.6	18.8	20.3	18.5
<i>Exchange rate (nominal):</i>							
ROL ¹ per 1 EUR	16,326.8	19,926.0	26,000.3	31,234.8	37,543.0	40,511.8	39,839.0
EUR per 100 ROL	0.00612	0.00502	0.00385	0.00320	0.00266	0.00247	0.00251

Source: Bloomberg, Eurostat, national statistical office, national central bank, OeNB, wiiv.

¹ ROL: Romanian leu.

Within the 12 months to May 2005, the Romanian monetary authorities reduced the key interest rate significantly step by step from 20.75% (June 2004) to 12.5% (with the latest cut in mid-April 2005). The policy measures were motivated by the continuous disinflation process but also by the need to contain the differential between domestic and international interest rates in the light of the ongoing capital account liberalization connected with the process of accession to the EU.⁶ Despite declining growth rates, growth in domestic lending to the private sector remained very high in 2004, and annual growth in net foreign assets accelerated throughout the year, bringing annual money growth to more than 30% year on year. The disinflation process was supported by the currency appreciation. The Romanian leu appreciated by 6% to 7% from October 2004 to the end of 2004 to 39.390 LEU/EUR and continued to appreciate strongly in the first quarter of 2005 (end of the first quarter of 2005: 36.730 LEU/EUR), as the central bank abandoned the implicit crawling band in November 2004 and announced a more flexible exchange rate policy. The appreciation of the currency was accompanied by heavy interventions of the central bank in the foreign exchange market selling the domestic currency against the euro. The appreciation path slowed down in April to May 2005,

⁶ From mid-April 2005 onward, foreigners are allowed to make leu-denominated deposits and to repatriate gains.

and the currency stood at 36.160 LEU/EUR at the end of May. Despite the recent inflation developments, Banca Națională a României will stick to its inflation target of 7.0% for 2005; it announced that it would shift to an inflation targeting framework from July 1, 2005.

Table 48

Monetary Developments							
	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Nominal year-on-year change of the annual average stock in %</i>							
Broad money (including foreign currency deposits)	52.0	40.4	42.5	40.9	31.2	31.5	35.9
<i>Contributions to the nominal year-on-year change of broad money in percentage points</i>							
Net foreign assets of the banking system	10.8	38.4	44.9	31.8	15.5	12.9	17.6
Domestic credit (net) of the banking system	42.3	14.0	10.2	18.7	23.9	26.0	21.6
<i>of which: claims on the private sector</i>	24.3	3.6	18.3	24.1	28.2	32.2	28.2
<i>claims on households</i>	..	..	..	..	..	..	..
<i>claims on enterprises</i>	..	..	..	..	..	..	..
<i>net claims on the public sector</i>	17.9	10.3	-8.1	-5.3	-4.3	-6.2	-6.6
Other domestic assets (net) of the banking system	-1.0	-12.0	-12.6	-9.6	-8.3	-7.4	-3.4

Source: National central bank, OeNB.

The budget balance amounted to a deficit of 1.4% of GDP (2003: -2.0%), far below the deficit target of 3.3% envisaged in the PEP for 2003 to 2006 of August 2003 and largely in line with the deficit target of 1.3% published in the PEP for 2004 to 2007 in November 2004. The positive outcome is primarily the result of higher revenue collection due to better-than-expected economic growth.

At the end of last year, the new center-right coalition government formed in December 2004 introduced a uniform 16% flat rate for personal income (replacing the progressive rate that ranged from 18% to 40%) and corporate income (previously 25%). The sharp cut in direct tax rates will lead to revenue shortfalls. Therefore, the government introduced various measures (e.g. an increase of the dividend tax rate, a higher corporate tax rate for micro-enterprises, a higher tax rate on interest and capital income and higher taxes e.g. on alcohol and tobacco) to offset the loss of revenues. However, the budget deficit is expected to increase in the next years. In its 2005 spring forecast the European Commission assumes a higher deficit for 2005 and 2006 (2.4% and 2.6% respectively) than in its 2004 autumn forecast (2005: 1.7%, 2006: 2.2%).

Table 49

Government Budget							
	1999	2000	2001	2002	2003	2004	2005f
<i>% of GDP</i>							
General government							
Revenues
Expenditures
<i>of which: interest payments</i>	2.2	1.6	1.3	1.5
Balance	-3.5	-2.0	-2.0	-1.4	-2.4
Primary balance	0.2	-0.4	-0.2	-0.9
Gross public debt	..	23.9	23.2	23.3	21.3	18.5	19.1

Source: European Commission.

In 2004, the current account deficit expanded to 7.5% against 5.7% a year earlier. This deterioration is attributable to a higher trade deficit (9.0% in 2004 compared to 7.9% in 2003) as a result of hefty demand for capital and consumer durables. The service balance turned from a surplus in 2003 into a deficit in 2004, and the shortfall on the income account doubled (in euro terms) during that period. The surplus on the capital account increased from 0.4% of GDP in 2003 to 0.9% of GDP in 2004. Net FDI inflows accelerated considerably from 3.2% of GDP in 2003 to 6.8% of GDP. Large FDI inflows are the result of the ongoing privatization process. An exceptionally large privatization project was finalized at the end of 2004 (acquisition of the majority stake of the Petrom oil company by the Austrian company OMV). Overall, net FDI inflows covered slightly more than 90% of the current account deficit (2003: 55%).

Table 50

Balance of Payments

	1999	2000	2001	2002	2003	2004	Q1-3 2003	Q1-3 2004
<i>EUR million</i>								
Merchandise exports	7,984	11,279	12,719	14,644	15,614	18,935	11,574	13,966
<i>Merchandise exports: year-on-year change in %</i>	7.7	41.3	12.8	15.1	6.6	21.3	7.7	20.7
Merchandise imports	9,169	13,150	16,045	17,392	19,569	24,258	13,964	17,180
<i>Merchandise imports: year-on-year change in %</i>	-5.9	43.4	22.0	8.4	12.5	24.0	10.8	23.0
Trade balance	-1,185	-1,871	-3,326	-2,748	-3,955	-5,323	-2,390	-3,214
<i>% of GDP</i>	-3.6	-4.7	-7.5	-5.7	-7.9	-9.0	-6.9	-8.1
Services balance	-372	-260	-127	6	62	-213	40	-130
Income balance (factor services balance)	-388	-304	-316	-490	-623	-1,363	-506	-583
Current transfers	589	937	1,280	1,614	1,639	2,497	1,205	1,647
Current account balance	-1,356	-1,498	-2,489	-1,618	-2,877	-4,402	-1,651	-2,280
<i>% of GDP</i>	-4.1	-3.8	-5.6	-3.4	-5.7	-7.5	-4.8	-5.8
Capital account balance	41.0	38.0	106.0	97.0	188.0	505.0	172.0	191.0
<i>% of GDP</i>	0.1	0.1	0.2	0.2	0.4	0.9	0.5	0.5
Direct investment flows (net)	948	1,161	1,315	1,193	1,591	4,042	1,113	1,597
<i>% of GDP</i>	2.9	2.9	3.0	2.5	3.2	6.8	3.2	4.0

Source: National central bank, OeNB.

Table 51

Gross Official Reserves and Gross External Debt

	1999	2000	2001	2002	2003	2004
<i>End of period, EUR million</i>						
Gross official reserves (excluding gold)	1,520	2,655	4,445	5,877	6,374	10,712
Gross external debt (medium- and long-term)	8,757	11,113	13,507	14,691	15,683	17,547
<i>% of GDP¹</i>						
Gross official reserves (excluding gold)	4.6	6.7	10.0	12.3	12.7	18.2
Gross external debt (medium- and long-term)	26.6	27.9	30.4	30.6	31.2	29.7
<i>Import months of goods and services</i>						
Gross official reserves (excluding gold)	1.7	2.1	2.9	3.6	3.4	4.7

Source: Eurostat, national central bank, OeNB, wiiv.

¹ Q1 2004: As a percentage of rolling four-quarter GDP.

The strong inflow of foreign capital increased gross official reserves from EUR 6.4 billion at the end of 2003 to EUR 10.7 billion at the end of 2004 and gross official reserves from 3.4 to 4.7 import months of goods and services. The ratio of medium- and long-term gross external debt to GDP decreased slightly to 29.7% in 2004 (2003: 31.2%).

10 Russia: Deteriorated Investment Climate and Competitiveness Problems Have Recently Dampened Growth

Russian GDP expanded 7.1% in real terms in 2004, which is only slightly less than in 2003 (7.3%). However, despite very high world market prices for, and ample revenues from, the country's main export commodities (oil, gas and metals), the economic expansion clearly slowed down in the fourth quarter of 2004 (6.7% year on year as against 7.7% in the fourth quarter of 2003) and further decelerated in the first quarter of 2005, when, according to preliminary estimates, GDP growth came to 4.9%. The slowdown in these two quarters was mainly reflected by industrial production, whose growth rate slackened to 3.9% in the first three months of 2005 (year on year), and by agriculture and construction performance.

Table 52

Gross Domestic Product and Its Demand Components							
	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Real year-on-year change in %</i>							
Gross domestic product	6.3	9.0	5.1	4.7	7.3	7.1	6.7
Private consumption	-2.9	6.0	9.3	8.3	7.4	11.0	12.0
Public consumption	3.1	4.8	-0.8	2.6	2.2	2.3	2.3
Gross fixed capital formation	6.3	31.1	10.3	2.8	12.8	10.8	9.5
Exports of goods and services	11.3	9.6	4.2	10.3	12.5	13.1	14.1
Imports of goods and services	-17.1	30.5	18.7	14.6	17.7	23.9	24.9
<i>Contribution to GDP growth in percentage points</i>							
Domestic demand	-2.0	11.6	7.3	3.8	6.5	8.6	8.8
Exports	4.7	4.2	1.9	4.5	5.7	6.3	7.1
Net exports	9.1	-1.9	-2.6	0.5	0.5	-1.5	-2.1

Source: National statistical office, OeNB.

The slowdown was caused by weakening growth of gross fixed investment, which, although still fair at an estimated rate of 7.6% from January to March 2005, expanded only half as fast as in the same period of 2004. Another element was the contraction of still relatively large net exports caused by a strong acceleration of import volumes (in 2004), while export volumes grew at approximately the same pace in 2004 as in 2003. These developments may be linked to the deterioration of the investment climate triggered by the Yukos affair, the growing number of back tax claims and other recent regulatory interventions of the state bureaucracy. Lingering repercussions of the banking turbulences of the summer of 2004⁷ may also have played a role. Furthermore, the competitiveness of Russian manufacturing goods is hampered by rising production costs, the continuing real appreciation of the ruble and capacity constraints.

⁷ For more detailed information on the banking turbulences, please see Focus on European Economic Integration 2/2004, p. 44.

Table 53

Productivity, Wages, Prices, Exchange Rate and Key Interest Rate

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Year-on-year change of period average levels in %</i>							
Gross production of industry (real)	11.6	12.0	4.9	3.7	7.0	7.4	7.2
Labor productivity of industry (real)	15.4	9.9	5.7	7.5	13.9	13.4	12.8
Gross average wage of industry (nominal)	46.7	42.1	52.0	27.2	25.4	..	..
Unit labor cost of industry (nominal)	27.1	29.3	43.8	18.3	10.1	..	..
Producer price index (PPI) of industry	59.1	46.5	19.1	11.7	15.6	24.0	28.7
Consumer price index (CPI)	85.7	20.8	21.6	16.0	13.6	11.0	11.6
Exchange rate (nominal):							
RUB ¹ per 1 EUR. + = EUR appreciation	137.2	-0.8	0.4	13.5	16.5	3.7	5.8
EUR per 1 RUB. + = RUB appreciation	-57.8	0.8	-0.4	-11.9	-14.2	-3.5	-5.5
<i>Period-average levels</i>							
Unemployment rate (ILO definition, %)	12.6	10.5	9.0	8.0	8.6	8.2	8.3
Key interest rate per annum (%)	57.2	33.1	25.0	22.7	17.3	13.5	13.0
Exchange rate (nominal):							
RUB ¹ per 1 EUR	26.24	26.03	26.13	29.65	34.55	35.81	36.92
EUR per 1 RUB	0.0381	0.0384	0.0383	0.0337	0.0289	0.0279	0.0271

Source: Bloomberg, Datastream, national statistical office, national central bank, OeNB, wiw.
¹ RUB: Russian ruble.

Robust retail sales and private consumption remained the pillar of GDP growth. Retail trade grew by 9.6% in the first quarter of 2005 (year on year); private consumption expanded by 11.0% in 2004, both boosted by surging real average wages (+10.8% in 2004). The unemployment rate (ILO definition) amounted to 8.3% in March 2005. While average inflation declined to 11.0% in 2004, monthly year-on-year inflation has been picking up again since mid-2004, reaching 13.4% in April 2005. Thus the Bank of Russia's (CBR's) goal of bringing end-year inflation down to 8.5% in 2005 appears unrealistic. The recent inflation pickup may be explained by the surge in industrial producer prices, strong wage and private consumption growth, and by periodic adjustments of administered prices. Moreover, broad money has been expanding at a high rate.

Table 54

Monetary Developments

	1999	2000	2001	2002	2003	2004	Q4 2004
<i>Nominal year-on-year change of the annual average stock in %</i>							
Broad money (including foreign currency deposits)	63.6	60.0	44.2	31.2	39.2	35.5	32.6
<i>Contributions to the nominal year-on-year change of broad money in percentage points</i>							
Net foreign assets of the banking system	7.5	58.5	44.3	19.8	21.3	22.4	29.4
Domestic credit (net) of the banking system	120.4	30.5	22.8	30.4	29.6	17.8	8.2
of which: claims on the private sector	43.5	36.7	35.2	28.9	29.5	30.9	29.2
claims on households	..	..	..	..	..	..	..
claims on enterprises	..	..	..	..	..	..	..
net claims on the public sector	76.9	-6.2	-12.4	1.5	0.2	-13.2	-21.0
Other domestic assets (net) of the banking system	-64.4	-29.1	-22.9	-19.1	-11.7	-4.6	-4.9

Source: National central bank, OeNB.

High money growth has been fueled by the lavish liquidity injected into the economy by continuing high current account surpluses and ongoing largely unsterilized CBR interventions to slow down the nominal appreciation of the

ruble. As they have been accumulating unrelentingly, Russia's gross official reserves (including gold) reached a new record level of EUR 111 billion in early May 2005, which corresponds to more than a year of imports of goods and services. Only Japan, China, Taiwan, South Korea and Singapore possess larger forex reserves (in absolute terms). The effectiveness of the CBR's policy of curbing inflation is being persistently counteracted by the impacts of its policy of stemming the nominal appreciation of the Russian currency in order to stave off the Dutch disease. In real effective terms, the ruble rose 10% in the 12 months to March 2005.

Table 55

Government Budget							
	1999	2000	2001	2002	2003	2004	2005
% of GDP							
Federal government							
Revenues	12.5	15.4	17.8	20.4	19.6	20.4	17.8
Expenditures	13.8	13.2	14.8	18.5	17.8	16.1	16.3
of which: interest payments	3.4	2.4	2.6	2.1	1.7	1.2	1.4
Balance	-1.3	2.2	3.0	1.8	1.7	4.4	1.5
Primary balance	2.1	4.6	5.6	3.9	3.4	5.6	2.9
Gross public debt	86.4	56.1	42.4	36.2	26.8	..	..

Source: National ministry of finance, Economic Expert Group.

Note: Data on cash basis. Data for 2005 according to budget law.

On the back of high energy prices and proceeds, Russia witnessed a further widening of its twin surpluses in 2004, with the budget in the black for the fifth year in a row. Based on prudent fiscal policies, particularly on expenditure restraint, the federal government budget posted a record surplus of 4.4% of GDP in 2004. In the first two months of 2005, the fiscal position is reported to have further strengthened. Consolidated government budget performance has been moving along the same lines: Aggregated revenues and expenditures

Table 56

Balance of Payments								
	1999	2000	2001	2002	2003	2004	Q1-3 2003	Q1-3 2004
EUR million								
Merchandise exports	71,210	114,379	113,843	113,201	120,040	147,357	87,949	105,355
Merchandise exports: year-on-year change in %	7.1	60.6	-0.5	-0.6	6.0	22.8	6.0	19.8
Merchandise imports	37,168	48,934	60,138	64,278	66,508	77,326	47,923	54,769
Merchandise imports: year-on-year change in %	-28.8	31.7	22.9	6.9	3.5	16.3	3.9	14.3
Trade balance	34,042	65,444	53,705	48,923	53,532	70,030	40,026	50,585
% of GDP	18.6	23.1	15.7	13.5	14.0	15.0	14.4	14.9
Services balance	-4,034	-7,254	-10,227	-10,439	-9,773	-10,810	-7,038	-8,275
Income balance (factor services balance)	-7,291	-7,353	-4,756	-6,856	-11,543	-10,336	-8,048	-7,750
Current transfers	578	65	-912	-808	-352	-648	-410	-530
Current account balance	23,295	50,903	37,810	30,821	31,864	48,237	24,530	34,030
% of GDP	12.7	18.0	11.0	8.5	8.3	10.3	8.9	10.0
Capital account balance	-311.0	12,100.3	-10,514.7	-12,599.1	-858.7	-1,294.3	-561.0	-902.8
% of GDP	-0.2	4.3	-3.1	-3.5	-0.2	-0.3	-0.2	-0.3
Direct investment flows (net)	1,042	-500	250	-49	-1,414	1,545	838	-798
% of GDP	0.6	-0.2	0.1	0.0	-0.4	0.3	0.3	-0.2

Source: National central bank, OeNB.

of federal, regional and local governments produced a surplus of 5.9% of GDP from January to September 2004. Moreover, as of early May 2005, approximately EUR 24 billion have been transferred to the budget stabilization fund, into which oil-related revenues flow when the price of Urals grade crude fetches over USD 27 per barrel.⁸ Given their liquidity drainage function, the budget and the stabilization fund constitute critical elements of Russia's stabilization policy.

The current account surplus rose to EUR 48.2 billion or over 10% of GDP in 2004 and expanded further in the first quarter of 2005 (to over EUR 16 billion as against EUR 10 billion from January to March 2004). Given the mixed business climate for foreign investors, FDI inflows have remained much lower than the country's enormous economic potential would suggest. Russia's gross external debt edged up to EUR 155.2 billion at end-2004, but declined relative to GDP to 33%. Given the very high level of official reserves (see above) and the state's punctual servicing of its liabilities, the Russian Federation became a net creditor in early 2005. At end-January the country prepaid its final debt installment to the IMF. In mid-May Russia agreed with its Paris Club creditors to pre-pay in 2005 at least EUR 12 billion of its Paris Club liabilities of EUR 32 billion.

Table 57

Gross Official Reserves and Gross External Debt						
	1999	2000	2001	2002	2003	2004
<i>End of period, EUR million</i>						
Gross official reserves (excluding gold)	8,387	26,139	37,026	42,291	58,531	88,661
Gross external debt	..	156,232	159,072	143,490	148,290	155,202
<i>% of GDP¹</i>						
Gross official reserves (excluding gold)	4.6	9.2	10.8	11.6	15.3	18.9
Gross external debt	..	55.1	46.5	39.5	38.8	33.2
<i>Import months of goods and services</i>						
Gross official reserves (excluding gold)	2.0	4.7	5.3	5.7	7.8	10.2

Source: National central bank, OeNB, wiw.

¹ Q1 2004: As a percentage of rolling four-quarter GDP.

Since President Putin's reelection in 2004, the overall speed of structural reforms has slowed, although important progress was made in some areas (e.g. banking regulation, the introduction of deposit insurance, small business and housing reforms). In the area of social reforms, the replacement and streamlining of various in-kind benefits for citizens (e.g. free municipal public transport) by financial compensation in early 2005 was organized badly, triggered mass protests and had to be watered down. In recent months, tussles between more reform-oriented and less reform-oriented members of government have displayed a remarkable degree of confusion, which does not bode well for efforts to rein in bureaucratic interference. It remains to be seen whether the most recent slowdown of GDP growth will focus minds on reform.

Cutoff date for data: May 24, 2005.

⁸ Owing to the level of oil prices and forecasts that it will stay high in the medium term, the authorities decided to increase the threshold from USD 20 to USD 27 per barrel in April.

STUDIES

The Euro Changeover in the New Member States – A Preview

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This study discusses issues that can be expected to arise in the context of preparations for the euro changeover in the new Member States. In doing so, it draws on the experiences of those 12 countries that have already introduced the single European currency, with a specific focus on the case of Austria. This experience can be a useful signpost for new Member States, even though their starting conditions differ because the euro already exists and most of the countries in question are on a catching-up route. The paper makes reference to the two main dimensions of the process, namely the noncash and cash changeover. The study stresses the crucial importance of timely preparations and well-devised information for ensuring a smooth changeover. In conclusion, the paper expresses confidence that the new Member States will manage the changeover process successfully when the time has come.

1 Introduction

The creation of the euro area on January 1, 1999, followed by the cash changeover in 2002, was a milestone in EU history. At the beginning of 1999, the euro area consisted of 11 members. Of all EU Member States, only Greece, Sweden, the U.K. and Denmark did not participate. While Greece and Sweden did not fulfill the necessary criteria for euro area membership (the so-called Maastricht or convergence criteria), the U.K. and Denmark decided not to adopt the single currency by applying an opting-out clause they had managed to negotiate in the early 1990s. In 2001, Greece also joined the euro area.

Preparations for the euro changeover, of course, started well before January 1, 1999. The European Council of Madrid had decided on a changeover framework already in 1995. Thus, the participating Member States had about six years to prepare for the changeover. From today's point of view, the whole changeover process was a success story in all Member States, although their approaches on how to manage the euro changeover differed considerably.

Any future enlargement of the euro area and the respective changeover processes will differ from the euro changeover processes the current euro area countries experienced. Obviously, the biggest differences result from the fact that the euro already exists and, in addition, that transition periods – i.e. the time between the irrevocable fixing of the exchange rate and the cash changeover – will be much shorter. Nonetheless, the experience gathered by the current euro area countries will be relevant for future euro area enlargement.

According to EC legislation, the new Member States (NMS) are obliged to pursue the adoption of the euro. The related monetary integration process takes place in three successive steps. In a first step, upon entering the European Union, the NMS automatically became members of Economic and Monetary Union (EMU). As “members with a derogation” the NMS do not fully participate in EMU, as they cannot immediately join the euro area. Nonetheless, they are required to observe a number of obligations embodied in the EMU architecture. The second step consists of their participation in the exchange rate mechanism ERM II, which aims at supporting stability-oriented policies and at fostering the sustained convergence of economic fundamentals and which will thereby help the NMS in their efforts to adopt the euro.² The third step, participation in the euro area (upon fulfillment of the convergence criteria), then marks the final stage of European monetary integration.

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² European Council (1997) and ECB (2003).

With a view to the monetary integration process, the NMS have adopted ambitious goals toward euro adoption. In fact, most of the NMS, in particular the small ones, strive for an early adoption of the euro (as soon as 2007 or 2008, if possible), as the following table shows.

Table 1

Monetary Integration Strategies in the New Member States		
	ERM II entry date/target date	Euro target date
Estonia	June 28, 2004	2006 or January 1, 2007
Lithuania	June 28, 2004	January 1, 2007
Slovenia	June 28, 2004	January 1, 2007
Cyprus	May 2, 2005	2007 or 2008
Malta	May 2, 2005	2008
Latvia	May 2, 2005	January 1, 2008
Czech Republic	around 2 1/2 years before euro target date	2009 or 2010
Poland	around 2 1/2 years before euro target date	2009 (possibly 2010)
Slovakia	2005 or 2006	(2008 or) January 1, 2009
Hungary	open	January 1, 2010

Source: OeNB, national central banks.

This time schedule, of course, implies that the preparatory work for the euro changeover (especially for the noncash changeover process) should by now have started in some of the NMS – and in fact it has. According to the policy intentions voiced by those countries that will adopt the euro later (between 2009 and 2010), the preparatory work will have to start in the near future.

2 Euro Changeover in the New Member States

The euro changeover covers all the activities related to the preparations for euro adoption as well as the actual cash changeover management, including the withdrawal of the respective legacy currency. It further comprises all activities pursued by public administrations at all levels, private and public businesses, national central banks (NCBs) and commercial banks.

As the euro is already in circulation, today it is possible in the NMS to either open an account in euro or even pay in euro provided that both parties involved agree. This will certainly make the cash changeover easier when it comes to providing the public with information on the security features, marketing the idea of a single currency and organizing cash distribution. Although prior experience, especially with banknotes, may make some minor logistical aspects easier to handle, the forthcoming workload of euro cash production and distribution should not be underestimated, as people are keen to get euro coins with a national side of their own country's design.

Another positive aspect that will probably help to smooth the changeover process is that not only the euro area has recently experienced a changeover, but so have those NMS which introduced new currencies in the past decade.³ Experience with the integration of additional NCBs into the Eurosystem is also recent, as the Bank of Greece became a Eurosystem member as late as in 2001.

³ Estonia in 1992; the Czech Republic, Slovakia, Latvia and Lithuania in 1993; the Polish zloty was redenominated in 1995.

An aspect which may complicate the euro changeover is that transition periods will be much shorter than for the original changeover. The time between the irrevocable fixing of the exchange rate and the date the euro becomes legal tender will probably be only a few months compared with a period of three and a half years in the current euro area members (in the case of Greece one and a half years). The relatively short transition period will significantly reduce the time available for the public and private sectors as well as the population in general to implement the changeover.

Of course, many other factors have implications for the changeover process at various stages. We will look at some of these factors in more detail later. First, the institutional framework and related aspects will be discussed.

2.1 Institutional Aspects and Drawing up Changeover Master Plans

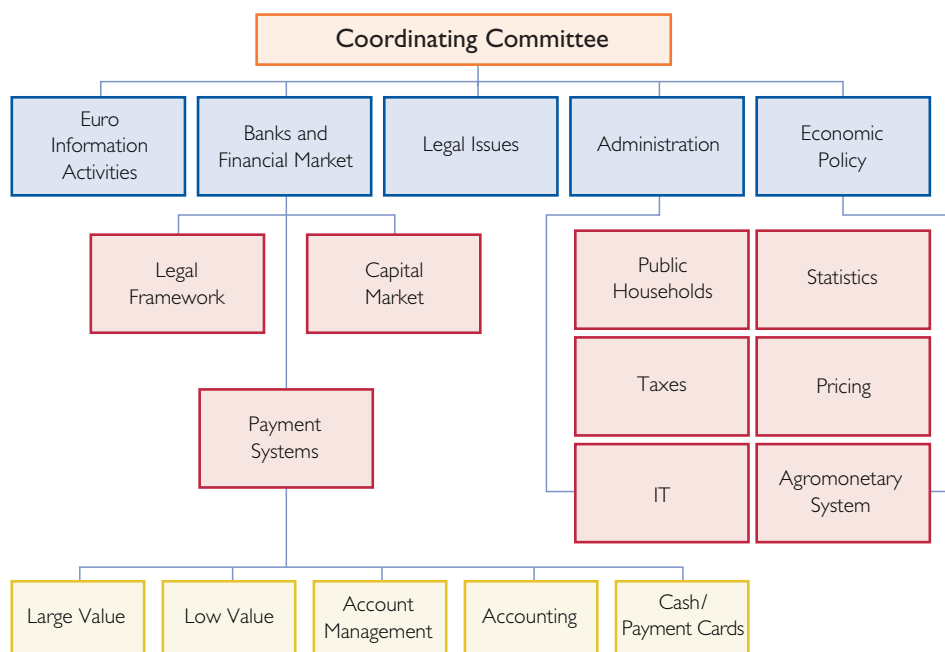
In 1995, the Madrid European Council established the framework for the euro changeover in 1999–2002. The NCBs and the EMI (later the ECB) were involved in the organization of the changeover from the outset. Details and implementation of changeover arrangements were left to the Member States and differed from country to country.

All countries had national master plans defining the steps that had to be taken in the real sector, the financial sector and by the public administration, and the measures needed to adapt legislation. The European Commission supervised the national master plans, but did not coordinate them. In Austria, in addition, the provinces and – at a later stage – the municipalities introduced action plans of their own. Moreover, most of the legal entities, enterprises, commercial

Illustration 1

Austria's Changeover Committee:

Coordinating Committee and Working Groups



Source: OeNB.

banks and – of course – the Oesterreichischen Nationalbank (OeNB) had their own master plans, setting standards and time schedules for their specific needs related to the noncash and cash changeover process.

National committees were established. The main purpose of these committees was not only to foster an exchange of information, but to institute a regular reporting mechanism to ensure an adequate information flow, to detect problems right from the beginning, and to see to it that everybody takes the changeover seriously.

Table 2

Euro Changeover Action Plans and Possible Scenarios in the New Member States				
Country	National changeover plan or similar scenario	National coordinator	Big bang or transitional period	Dual period
Czech Republic	Czech Republic's Euro Accession Strategy (Oct. 2003); Česká národní banka published a paper on its main tasks in connection with the euro introduction (Feb. 2005)	None	Undecided, but most likely big bang	2 weeks to 1 month
Estonia	Joint statement by the Estonian government and Eesti Pank (Jan. 2004); national changeover plan will be presented in mid-2005	Commission of Ministers (including central bank governor) headed by the ministry of finance, which is in charge of changeover management	Big bang	2 weeks
Cyprus	A Strategic Action Plan for the introduction of the euro has been adopted; more detailed plans will have to be elaborated	The National Advisory Committee, chaired by the minister of finance, involves all relevant parties (including the Central Bank of Cyprus)	Big bang	1 month
Latvia	Preliminary changeover plan	Changeover working group at Latvijas Banka; consultations between ministry of finance and the central bank	Big bang	2 weeks
Lithuania	Board of Lietuvos Bankas approved action plan on December 23, 2004; law on the adoption of the euro is expected during the first half of 2005	Working group at Lietuvos Bankas for the development of the changeover plan	Big bang	2 weeks
Hungary	With regard to the 2010 target date, preparatory work is under way at the ministry of finance and Magyar Nemzeti Bank	None	Big bang	1 month
Malta	Preliminary changeover plan is being drafted by the ministry of finance and the central bank	A Euro Changeover Committee will be set up, but will still have to be formally appointed	Big bang	Up to 1 month
Poland	None	So far, there is no national coordinator in charge of the changeover process; an interinstitutional working group (ministry of finance and Narodowy Bank Polski) is dealing with monetary integration issues in general	Undecided, but most likely big bang	Up to 2 months
Slovenia	Master plan for the euro changeover published by Banka Slovenije and the government in Jan. 2005	Coordinating Committee for Technical Preparations to Introduce the Euro (central bank, ministry of finance, other ministries and bodies)	Big bang	1 week
Slovakia	The government approved the concept for the elaboration of the National Plan for the Introduction of the Euro in Slovakia in Jan. 2005; national changeover plan to be approved by mid-2005	ministry of finance	Big bang	2 weeks

Source: European Commission, national central banks.

In most countries, the ministry of finance headed the national coordinating committee; in Austria, the ministry of finance and the OeNB shared this competence. The remaining ministries, the social partners, the Trade Association of the Banking Industry and the provincial and municipal governments sent representatives to the national coordinating committee. This setup proved very efficient in coping with the entire range of issues involved in the changeover.

The ESCB installed a cash changeover committee (CASHCO) to monitor the preparations for the introduction of the euro at the NCBs, but also to enhance coordination between the ECB and the NCBs. In this committee, NCB cash changeover experts met regularly to exchange their views. At the final stage of the cash changeover, a so-called “cockpit” was installed in each central bank, where a small number of high-ranking experts supervised the cash changeover weekend and, just in case, stood ready to take urgent measures or decisions.

Many of the NMS are presently in the process of drawing up changeover plans which cover their institutional framework and the actual changeover scenario. As was the case for the current euro area countries, the national changeover scenario is left to each Member State. Thus, each country may either opt for simultaneously entering the euro area and adopting the euro as legal tender (“big bang” scenario) or for disentangling the two (transitional period). Not all NMS have already expressed their view, but most have indicated that they are provisionally considering a big bang.

The European Commission will monitor the individual national master plans and will report at least once a year on the state of the changeover preparations in the NMS. In addition, the European Commission has relaunched the Public Administration Network II (PAN II) working group, which comprises representatives from the ECB and the Member States with a derogation. The working group thus is an essential forum for exchanging views and information as well as transferring experience and best practice from the current euro area members to the countries preparing the changeover process now. The European Commission also uses PAN II as a forum for informal checks on how the Member States are progressing in their preparations to adopt the euro (see Banka Slovenije, 2005).

In view of future euro area enlargement, the ECB has also developed an Enlargement Master Plan for the purpose of defining, planning and monitoring its own activities. These activities include assisting the NCBs in the NMS in becoming acquainted with the relevant tasks and needs related to euro adoption. Against this background, the NMS are being introduced to the relevant standards applicable to the security, issuance and production of euro banknotes. Moreover, the ECB provides assistance in establishing national euro cash changeover scenarios and has founded a Task Force on future information campaigns in the NMS.

2.2 The Noncash Changeover

2.2.1 The Changeover at the NCBs

The changeover tasks of Eurosystem NCBs were very much dominated by the need for legal, technical and organizational adjustments related to euro area requirements and standards.

First, in order to fulfill the necessary conditions for euro adoption, new central banking legislation had to be adopted to guarantee accordance with the rules governing the euro area.⁴ New legislation in Austria, for example, included changes in the organizational structures of the central bank and in the appointment procedure for members of the board; in Italy, for instance, financing public debt was a major issue. For the NMS there remains less to be done in this respect, as harmonization was a precondition for joining the EU;⁵ by contrast, some legislative adjustment will still be required in Bulgaria and Romania, the next two countries lining up for EU accession (Dvorsky, 2004).

Second, the NCBs of the NMS will have to adapt their organizational structures and the procedures of their individual operational monetary framework to fulfill the responsibilities assigned to the Eurosystem (e.g. with regard to bidding procedures for open market operations, or to collateral and liquidity management issues). The OeNB, for instance, had begun very early (in 1996) to implement the monetary instruments of the future ECB, especially with respect to its open market operations (tender procedure) and collateral requirements. It took the commercial banks some months to adapt to the new system of monetary policy instruments, but once they had familiarized themselves with it, they were well prepared for participating in the ESCB tender procedure.

Aside from these systemic tasks that have to be carried out during the changeover process, the NCBs will have to adapt their accounting and IT systems and switch their client accounts to euro. In addition, the NCBs may have to prepare for printing euro banknotes (that is, if they have printing facilities) and, depending on the individual national situation, also for minting coins. This requires timely technical preparations to guarantee that sufficient printing capacities and adequate facilities will be available, if the printing is not outsourced, which is another option. Having adequate printing facilities will be of special importance, since a new series of euro banknotes will be launched from 2008 or 2009 to 2011 – a period which presumably coincides with the euro area accession plans of some of the new Member States.

2.2.2 The Changeover and the Banking Sector

In the financial markets, the changeover poses somewhat different challenges to retail banking than to the wholesale sector. In the current euro area countries, the changeover did not create any difficulties in the wholesale markets. The changeover was largely completed on the conversion weekend at the beginning of 1999. Since then, new issues of securities, wholesale transactions and most payments have in general been denominated in euro (Bank of England, 2001). For bonds and shares denominated in legacy currencies, Article 14 of EC Regulation 974/98 stipulated that their value should be read as euro.

The conversion of customers' bank accounts and related products into euro was – and will once again prove to be – another major task. Clearly, even though bank accounts of households and SMEs are numerous, their conversion

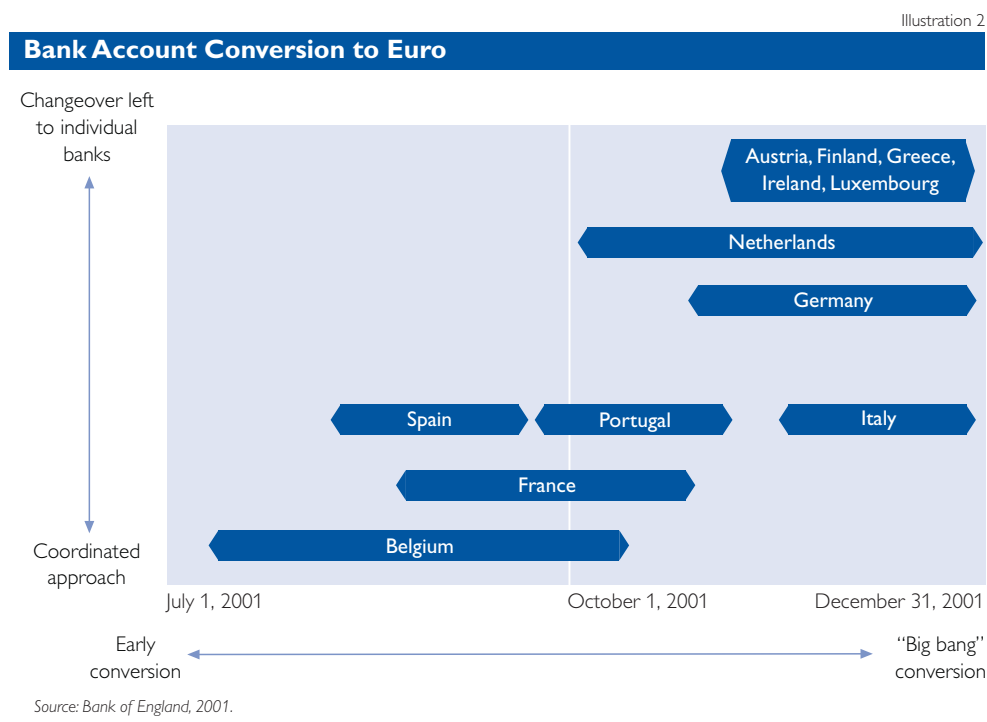
⁴ For a more detailed discussion see Gerhartner et al. (1999).

⁵ See European Commission (2004).

is likely to be less problematic than that of accounts of larger companies, as these usually manage complex internal systems based on different types of accounts and interlinkages between banks' and customers' systems, which may pose reconciliation problems (Bank of England, 2001).

However, the authorities in each NMS will have to decide whether the conversion of accounts is to take place very close to the actual cash changeover date or whether accounts are to be converted in stages over a period of time, that starting approximately half a year before the cash changeover.

Whatever the speed of conversion will be, a decision will have to be made as to whether the authorities prefer to follow a centralized approach (meaning that conversion largely takes place according to a common plan) or to adopt a decentralized approach that leaves the banks some scope for discretion. Illustration 2 shows the different approaches toward bank account conversion in the current euro area countries.



If a country opts for a transitional period, its retail payment infrastructure and systems must be adapted so that payment services and products can be denominated, in parallel, in euro as well as in the legacy currency. In addition, retail banks will have to promote the use of ATMs and electronic payment facilities, e.g. the installation of point-of-sale (POS) terminals for electronic credit and debit card payments in shops, as this will make cash changeover logistics far less complicated. This approach will require intense cooperation with the business sector. Additionally, ATMs must be adapted for euro cash. A major issue here is the question of the most appropriate denominations to be made available via ATMs. At the beginning of the cash changeover, Austria opted for distributing EUR 10 and EUR 100 banknotes via ATMs, as they are relatively close in value to the former ATS 100 and ATS 1,000 banknotes. This choice

provided optimal everyday cash handling conditions both for consumers and the retail sector. In the meantime other denominations have been added to the sample of banknotes distributed via ATMs.

Certainly, a main priority for any bank will be information management. On the one hand, customers must be duly informed about the consequences the changeover has on bank accounts, fees and banknote security issues, etc. To fulfill their obligations as information providers, banks have to prepare adequate information material. Against this background, cooperation with the respective central bank and government is essential. On the other hand, bank staff must be trained accordingly and must be provided with all relevant information.

2.2.3 The Changeover and the Public Sector

Legislative adjustments constitute an important part of the public sector's changeover preparations. Every country will have to implement a law on the conversion of national currency into euro. Although this seems to be a rather trivial task, it should not be underestimated. The question of how to round certain amounts remains. So far, all participating Member States have defined some "signal" amounts (round numbers) in the legacy currency; these signal amounts are e.g. related to tax thresholds, social security payments, charges and fines or fees. In the euro area countries, national legislation ensured correct conversion according to specified rounding rules, taking into account practicability. This step is of particular importance also for all types of official forms, stamps, public transport tickets, parking tickets or any other public services sold via vending machines. In turn, these forms, stamps, ticket machines and the like will have to be adapted or newly produced. Last but not least, also any references to interest payments linked to central bank interest rates must be considered (Lachs and Ritzberger-Grünwald, 1998).

All these legislative adjustments have to go through specific national legal processes which probably also involve decisions made by parliament or other democratic institutions. Keeping in mind that legislative and political processes can sometimes be lengthy, the preparations of the necessary legislative adjustments are definitely among the first steps in the changeover process.

Another main preparatory task – and perhaps the most demanding for the public sector – is to adapt the whole system of public accounting and the respective IT systems to the euro. With respect to social security data, the question will also be whether all historical data will have to be changed into euro or whether data should be converted into euro only when necessary. In Austria, as in the other participating Member States, there was a preference for the second option, which certainly represents a reasonable approach in terms of costs and time (Federal Ministry of Finance, 2000).

The public sector may take the function of a frontrunner. If the public sector switches to the euro early, this will be a positive signal and a good example to the general public. However, the public sector did not do so in most of the current euro area members. While the EU institutions switched to the euro on January 1, 1999, the national administrations in general proved to be the slowest ships in the convoy. Some administrations justified this on grounds that an early changeover might be confusing to the public. Before January 1, 2002, however,

operations in euro concentrated on utility billing, civil servants' salary payslips and public procurement contracts (Bank of England, 2001).

2.2.4 The Changeover and the Corporate Sector

For the business sector, the major task during changeover is to adapt their payment systems and their IT and accounting systems, including salary and wage slips, tax payments, etc. Especially for SMEs, there is also the question of how to treat historical data. In Austria, for instance, neither the public sector nor the private sector were required to convert internal accounts or historical data to euro, and it was more or less up to enterprises themselves to consider whether any changes were necessary.

For the corporate sector, another challenging task is to adapt vending machines (for cigarettes, chewing gum, condoms, etc.), supermarket carts, etc. This may be a very costly process. In Austria, for instance, the cash changeover caused the market leader of vending machines to suspend his business.

Furthermore, the fact that signal prices will have to be recalculated may also have implications for marketing and communication strategies (STUZZA, 2001). In addition, the European Commission recommended a period of dual pricing, and all euro area countries followed this recommendation. Austria was the only country where dual pricing was regulated by law, however. The *Euro-Related Pricing Act* stipulated dual pricing between October 1, 2001, and February 28, 2002. However, businesses could prolong this period if consumers deemed the five months of dual pricing insufficient. In addition, Austria installed a Euro Price Commission to monitor the application of the respective legal provisions (Federal Ministry of Finance, 2000).

Prior to the changeover process, the retail sector was very hesitant, denying the need for early preparation and pointing out that menu costs (e.g. labeling costs, printing costs for new catalogues) would rise. Later, many retail firms used dual pricing as an active marketing instrument servicing their customers. Some even continued to provide dual labeling for several years; these firms are now being blamed for having contributed to the fact that citizens were slow to adapt to the new price structure. Although the euro is already in circulation in the NMS and people have been developing a feel for it, either from traveling into the euro area or, at a more abstract level, from following the exchange rate, dual labeling could still be a sensible tool to prevent price hikes during the actual changeover. To a certain extent the transparency that goes along with dual pricing can also limit the perceived inflation that is linked to the euro.

While large enterprises in the participating Member States in general organized their changeover preparations well and on time, SMEs were rather slow in getting ready for the euro. Lack of awareness, software shortages, customer confusion and technical conversion problems may help explain their difficulties (Bank of England, 2001). Companies which had not completed their changeover operations in advance had to face serious problems, especially as the cash changeover coincided with the end of the financial year. For many SMEs this is a critical period, and at least some of them ended up interrupting their daily business, thereby damaging their commercial relationship with customers, sup-

pliers and bankers. Despite these difficulties, however, any date other than year-end seems rather impracticable for the introduction of the euro because of the applicable accounting standards and rules.

2.3 The Cash Changeover

The cash changeover requires thorough information and major logistical efforts, including the production of euro banknotes and coins, frontloading the new cash, promoting security and increasing storage capacities, supplying the citizens with euro cash and, last but not least, withdrawing the former national currencies.

Although most countries announced a dual circulation period of two months, the responsible authorities had the ambitious aim to complete the cash changeover within a much shorter period of time. Such an aim can only be achieved if the public – on the one hand – is prepared and willing to cooperate and if – on the other hand – all the required euro banknotes and coins are available from the very beginning. Therefore banknotes and coins must be frontloaded widely to banks and retailers well in advance. For this reason, the cash changeover poses considerable logistical and organizational challenges and constitutes an enormous task not only for the NCBs but for all parties involved, such as commercial banks, retailers and others. In addition, after the old national currency has ceased to be legal tender, the withdrawal of old national banknotes and coins remains a challenging task.

Against this background, three periods can be distinguished within the cash changeover process:

1. the pre-changeover period
2. the actual changeover or dual period and
3. the post-changeover period

2.3.1 The Pre-Changeover Period

The prospective enlargement of the euro area will require the production of additional euro banknotes and coins to replace the acceding currencies. Some of the NMS have the necessary facilities – generally owned by the respective central bank – to produce euro notes and coins and will probably, if commissioned to do so, produce the bulk of their required euro cash. Countries that have no production capacities will have to import euro banknotes and coins.

To ensure that sufficient euro banknotes and coins are available for circulation from the very beginning of the cash changeover, massive frontloading to credit institutions and subfrontloading to retailers and others partners (such as post offices and cash-in-transit companies) is necessary. The lines of business that are probably most affected by cash transactions are grocery stores, tobacconists, bakeries, transport enterprises, drugstores and hotels and restaurant services in general (Schnedlitz, 2001). Although it is not the NCBs' task to organize subfrontloading, it is in their interest to monitor and, if necessary, promote adequate subfrontloading to enhance a smooth changeover.

However, to have an idea of how much cash is initially required, commercial banks are asked to place orders for the amount of cash they wish to receive, including the amounts needed to subfrontload to customers (Bank of England, 2001). In addition, each NCB produced its own studies geared

toward predicting the amount of euro cash needed from the very beginning of the cash changeover.

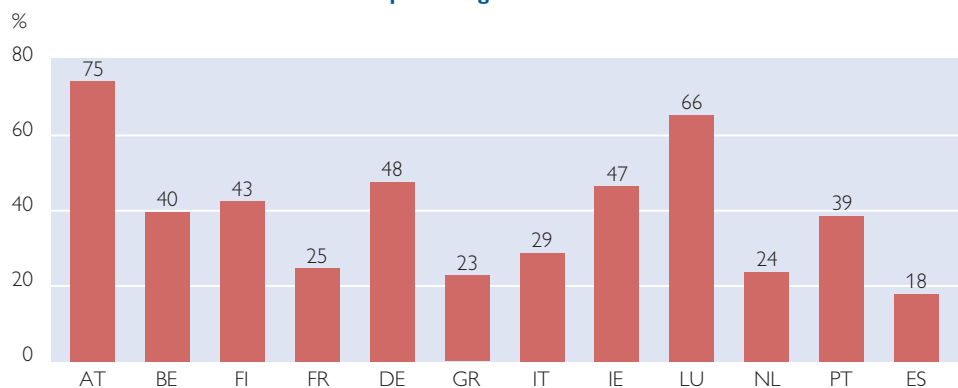
Each of the current euro area countries handled the frontloading process differently. Obviously, frontloading volumes depend on various economic, but also some cultural, factors (e.g. payment habits). For instance, the use of credit and debit cards is negatively correlated with the need for cash. Another factor is public attitude. Are citizens keen on getting rid of their old national currency or are they hesitant about using the new currency? Finally, the prevailing economic structure matters. Regions with strong tourism may need more euro cash than others.

When we take a look at the total amount of frontloaded cash relative to cash in circulation, this ratio was highest in Austria among the present euro area countries. This is because the responsible authorities wanted to be on the safe side and to create room for maneuver should other problems arise. This massive frontloading resulted in a very smooth cash changeover that did not have any regional or sectoral bottlenecks.

Chart 1

Frontloading in the Euro Area

Total amount of frontloaded cash as a percentage of cash in circulation



Source: OeNB.

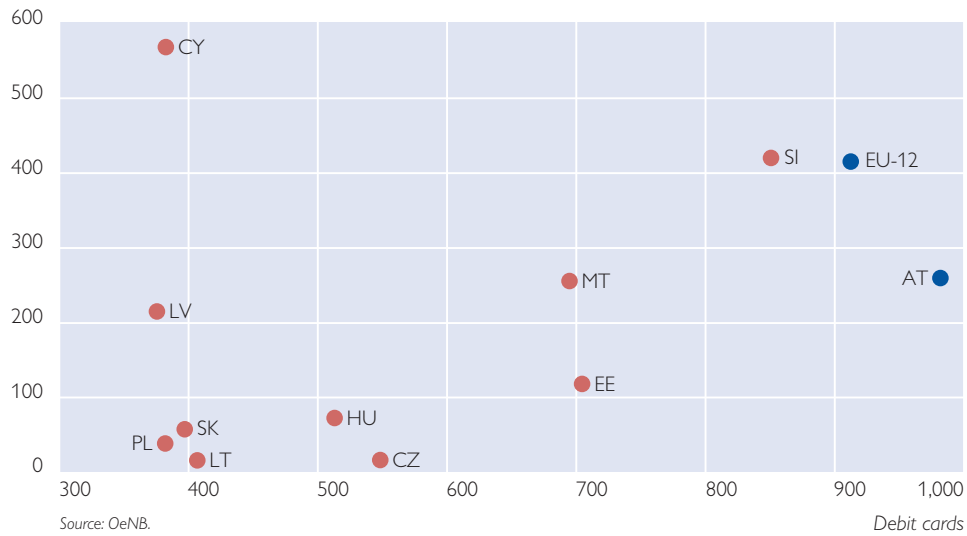
The major difference between the current situation and that of December 2001 is that the euro is already in circulation (also in the NMS). The need for efficient frontloading will thus depend on the amount of euro cash that is already circulating in these economies. A study on euro cash holdings in the neighboring NMS (Stix, 2004) shows that at the end of 2004 about 49% of Slovenians, 26% of Slovaks, 35% of Czechs and 10% of Hungarians held euro, and on average in quite substantial amounts. For instance, in the second half of 2003 the median euro holdings amounted to EUR 300 per person in Slovenia and ranged from EUR 80 to EUR 116 per person in the Czech Republic, Hungary and Slovakia. For the development of euro cash holdings in the NMS in the near future, one can put forward the following arguments: On the one hand, the required stability-oriented policies within the framework of EMU should decrease the precautionary demand for euro-denominated cash and deposits. On the other hand, economic integration will entail closer economic ties, which in turn will enhance the demand for euro transactions.

Chart 2

Use of “Plastic Money” in the New Member States

Number of debit cards and credit cards per 1,000 persons (2004)

Credit cards



Furthermore, people might decide not to reduce but to expand their euro holdings in anticipation of the changeover. Overall, we expect that the demand for euro cash will continue to increase as euro adoption comes closer. A very fundamental aspect that may make the frontloading process easier is the relatively low GDP per capita in the NMS (compared with the current euro area countries), which indicates a relatively low cash need per capita.

There are of course some aspects which pose a challenge to the changeover processes in the NMS. First, compared with the participating Member States, a relatively low use of debit and credit cards can be observed. Chart 2 shows that

Chart 3.1

Number of POS Terminals in the New Member States

Per 1 million inhabitants (2004)

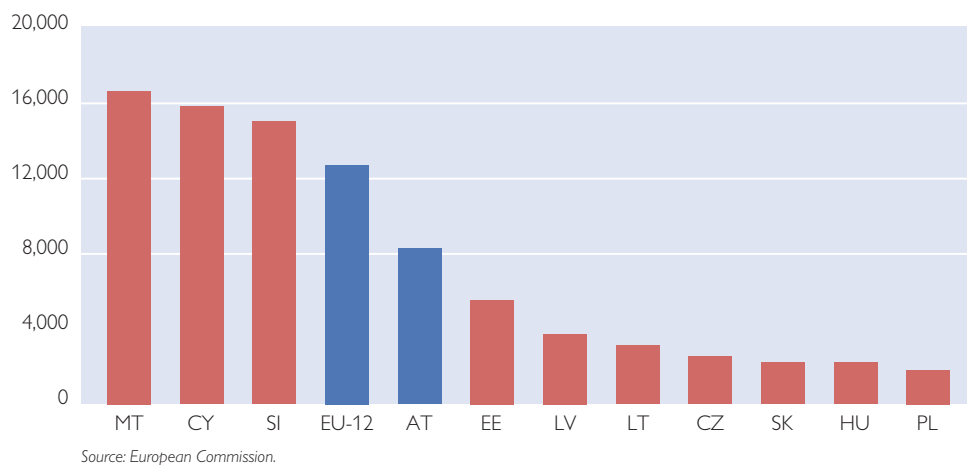
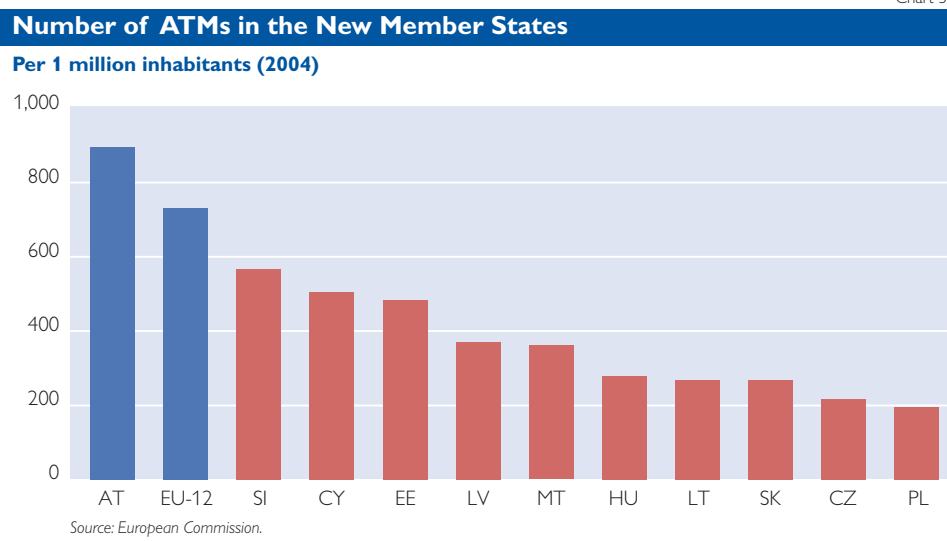


Chart 3.2



most people in the NMS do not have credit cards and only every second person has a debit card. The use of credit and debit cards is comparable to the euro area average only in Slovenia.

Second, with the exception of Cyprus, Malta and Slovenia, POS terminals are relatively rare in the NMS, which is not surprising given the low number of debit and credit cards in use. Also the number of ATMs per inhabitant is much lower in the NMS than in the euro area. During the cash changeover period, people in the NMS are therefore likely to concentrate their financial activities on bank opening hours and thus put enormous pressure on banks' resources. In Austria, ATMs played a major role in the euro cash distribution strategy. In fact, the bulk of banknote supply was scheduled to take place via ATMs.

On average, people in the NMS carry relatively more cash in their pockets than euro area inhabitants. Chart 4 shows banknotes and coins in circulation in the NMS as a percentage of GDP. The relatively higher degree of cash use in the NMS may have several reasons, such as the fact that – in line with low purchasing power – a higher share of wages is used for daily expenditures; or that there may be higher amounts of cash stashed away; or that banking transaction costs are perceived to be too high compared to banks' interest payments; or that confidence in the banking system may still be lacking; or that the low density of ATMs and POS terminals makes it necessary to carry more cash; or that many employees still get their wages in cash rather than having them transferred onto current accounts (as in Malta). Whatever the reason for the high use of cash in the NMS may be, it will have to be taken into consideration when planning the frontloading process.

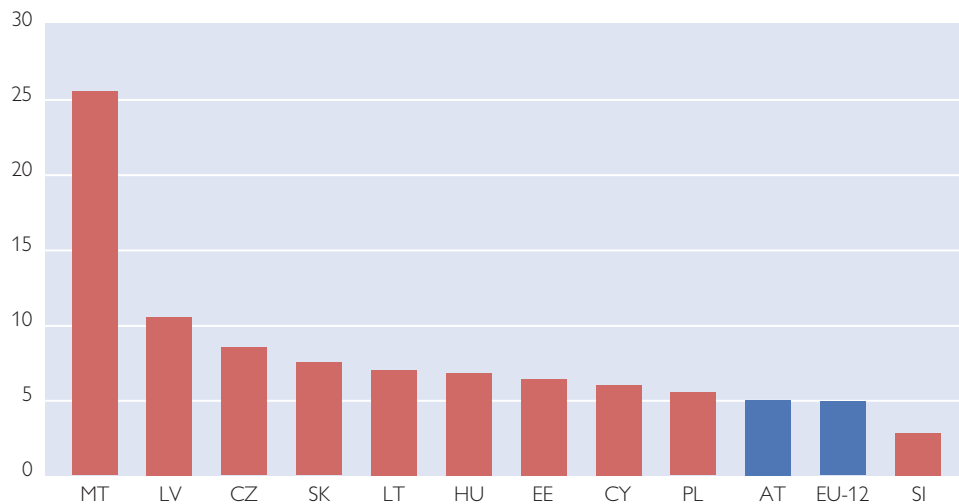
Aside from the scale of the initial demand of euro banknotes and coins, a number of other important issues arise with respect to frontloading and sub-frontloading:

First, it is important to take into account the capacities of cash-in-transit companies, as they may otherwise become a bottleneck, especially with respect to the bulk and weight of coins. In Austria ATS 20 and ATS 50 banknotes were very popular. These denominations roughly corresponded to the EUR 1 and

Chart 4

Banknotes and Coins in Circulation

% of GDP (2004)



Source: European Commission.

EUR 2 coins, so logistical planning had to take into account a higher demand for coins and in fact, 1.5 billion euro coins (nearly 7,600 metric tons) had to be distributed. This in turn meant that cash-in-transit companies had to carry out almost 10,000 individual transports. Another important factor is that various measures promoting the return of hoarded money may lead to an overproportionate return of legacy currency even before the dual circulation period.

Second, ensuring sufficient frontloading and subfrontloading to banks and retailers raises the issue of storage facilities and the risks and costs involved, which may be a problem especially for retailers who – in order to avoid high storage costs and risks – would want to receive banknotes as late as possible. This is logistically not feasible, so retailers will have to accept an early euro supply. With respect to the costs of frontloading, the ECB envisaged a debiting model that provides a formal subsidy to banks. In addition, a few countries introduced additional schemes to provide further compensation to banks (Bank of England, 2001). The arrangements for banks' subfrontloading to retailers and other partners will have to be negotiated between individual banks and their customers.

Third, there is the issue of collateral. Austrian banks had to hold collateral for frontloaded cash with the central bank, but under favorable conditions. Nonetheless, banks were obliged to cover any risks of destruction or robbery of euro banknotes and coins.

Fourth, the timing and speed of the exchange of legacy currency into euro can be geared by fees collected by the banking sector. In Austria, no fees were collected from private customers for exchanging household amounts. The result was that people changed their cash more or less immediately after December 31, 2001, and did not wait for any possible reduction of fees. By contrast, more than three years after the changeover vast amounts of schilling cash have still not been returned in Austria, as there is no deadline for exchanging the last series of schilling banknotes free of charge at the central bank.

A number of recommendations were made during the pre-cash changeover period. In 2001, e.g., the European Commission issued a *Report on the Preparations for the Introduction of Euro Notes and Coins*, which named a series of measures that could be taken before January 1, 2002. From today's point of view, bearing in mind the experience made during the cash changeover, some very useful measures would be the following:

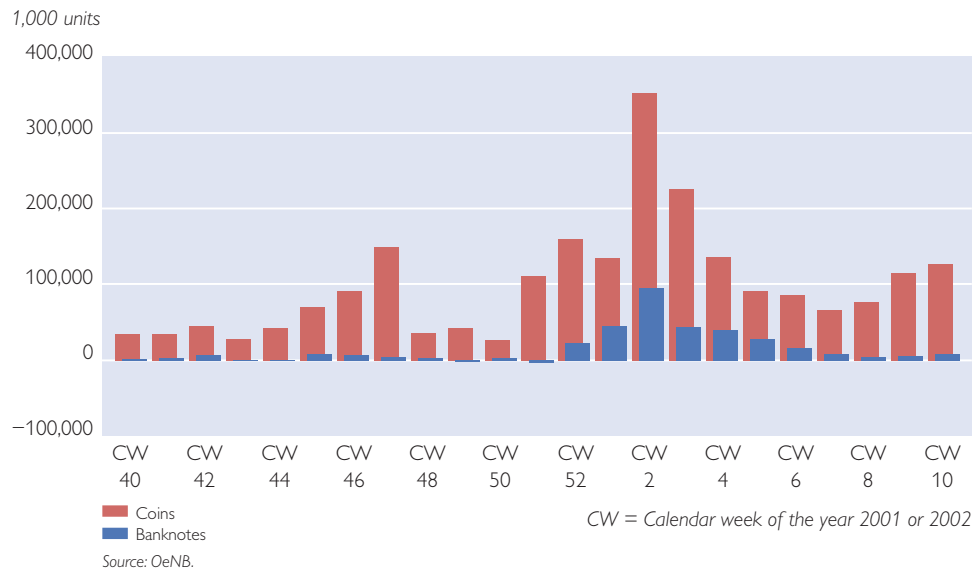
- In Austria, it was estimated that at least 5% of cash in circulation was stashed away by the population. To reduce the amount of euro cash needed for the cash changeover in the forefront, considerable effort went into promoting the collection of hoarded coins. Advertising campaigns launched the idea of either bringing hoarded coins to the bank for deposit in a bank account or to donate them. Donation boxes were set up at various public locations to collect these coins.
- Another measure would be to reduce or abolish the fees for exchanging national currency into euro. At the moment, commercial banks in the NMS charge a fee when selling euro cash. To avoid long waiting times during the cash changeover, banks might reduce or even abolish these fees in advance – an opportunity that was not available to the current euro area members at the time.
- Taking into account the low use of credit and debit cards in most of the NMS as well as the relatively small number of POS terminals, it seems to be crucial to promote the use of electronic payment means and the installation of POS terminals in supermarkets and stores.
- New methods of payment such as Internet banking and other forms of e-banking are developing or gaining ground in the NMS. These offer additional alternatives to ATMs and POS terminals and reduce the number of banking transactions at the counter as well as cash demand.
- In a special form of subfrontloading, the current euro area countries had supplied the general public and small retailers with low denominations of euro – the so-called starter kits – some weeks before the start of the dual circulation period. The starter kits were intended to help people familiarize themselves with the new coins ahead of the dual cash circulation period, ensure a sufficiently widespread distribution of coins and thus reduce the demand for small change in the retail sector.

2.3.2 Dual Circulation

The length of the dual circulation period is decided individually at the national level. As mentioned above, however, the dual circulation period was envisaged to last two months at the most. Nonetheless, the responsible authorities set a more ambitious goal, namely that within the first two weeks after the cash changeover the vast bulk of cash transactions should be paid in euro. Encouraged by the quick withdrawal of the East German mark, Germany envisaged no dual circulation period at all, so the Deutsche mark ceased to be legal tender on January 1, 2002.

Chart 5

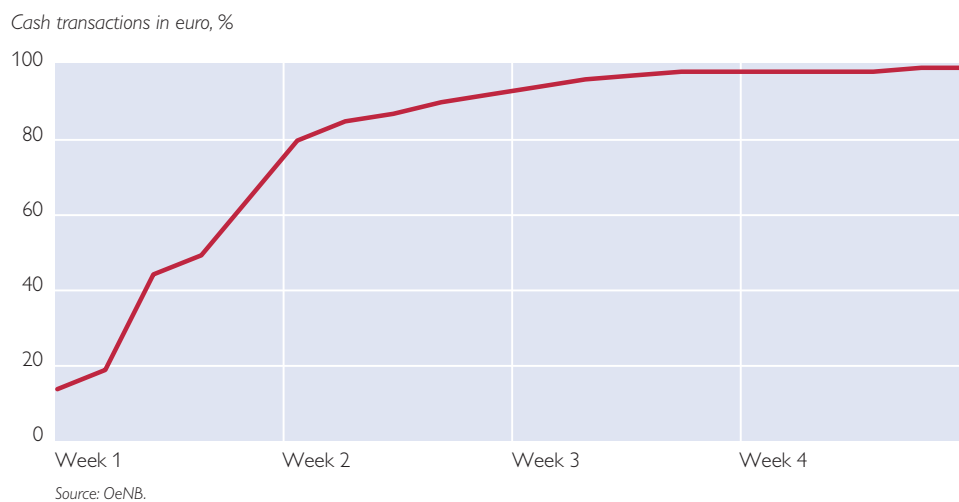
The Withdrawal of ATS Banknotes and Coins



In the end the overall goal set for the cash changeover was reached without problems. The time period needed to withdraw the old currencies and to introduce the euro was much shorter than anyone had expected. At the end of the second week after the cash changeover, around 90% of all transactions were carried out in euro and after another week nearly 100% (see chart 6). In Austria, the smooth cash changeover was mainly based on two factors, namely that it became *en vogue* to pay in euro as a consequence of the large-scale information campaign and that handling two currencies in parallel in everyday life proved much too complicated.

Chart 6

The Speed of the Cash Changeover in Austria



This is good news for those NMS which envisage a short dual circulation period of a few weeks or those that favor a big bang solution without any dual circulation. Nevertheless, it has to be kept in mind that, while frontloading and the supply with euro banknotes and coins are under the authorities' control, the pace of the changeover and of the withdrawal of old national banknotes and coins will be determined by the behavior of the general public and retailers.

Therefore it may be reasonable to introduce measures to promote a swift changeover during the dual circulation period. One such measure would be to encourage retailers to give back change only in euro right from the beginning. Another idea would be to load ATMs preferably with small denominations, as this would reduce retailers' need to hold large stocks of small change and would be in line with price levels, which are clearly below the euro area average in the NMS. However, there is of course the tradeoff that if ATMs are loaded with small denominations, they will be empty relatively fast. This aspect is all the more important the fewer ATMs are in operation and, given the low number of ATMs in the NMS, it will be reasonable to bear this factor in mind.

In the current euro area countries, in early 2002 the following denominations were distributed at ATMs:

Table 3

Main Euro Denominations Distributed via ATMs in Early 2002			
Country	EUR denomination	Country	EUR denomination
Austria	10, 100	Ireland	5, 10, 20
Belgium	5, 20, 50	Italy	10, 20, 50
Finland	20, 50	Luxembourg	20, 50, 100
France	10, 20, 50	Netherlands	5, 10, 20, 50
Germany	5, 10, 20, 50	Portugal	5, 10, 20, 50
Greece	5, 10, 20, 50	Spain	10, 20, 50

Source: Bank of England.

Table 3 shows that there was no euro area-wide strategy or common agreement on which euro denominations to distribute via ATMs. Obviously, each euro area country based its strategy on the respective national circumstances and structures of payment systems or cash holdings.

2.3.3 After Dual Cash Circulation

Once the dual circulation period ends, national banknotes and coins automatically cease to be legal tender. Clearly, arrangements should be made for citizens to exchange their national cash for euro at the NCBs and at commercial banks for some time after the end of the dual period.

Table 4 shows the different time schedules and provisions for exchanging legacy currencies in the euro area and in the new Member States.

In many cases, different exchange periods were granted for banknotes and coins, such as in the Benelux countries, France, Greece and Portugal, where the exchange period is shorter, in general, for coins than for banknotes. In Portugal, it was possible to exchange coins only until end-2002, whereas a five-year exchange period was envisaged for coins in the Netherlands. While some participating Member States have limited the exchange periods for banknotes and coins, other countries, such as Austria, Germany, Ireland or Spain, have opted

Table 4

**Periods Envisaged for the Exchange of Legacy Currency
after the Dual Circulation Period**

EU-12	Banknotes/coins	NMS	Banknotes/coins
Austria	Indefinitely	Cyprus	10 years/2 years
Belgium	Indefinitely/end-2004	Czech Republic	At least 5 years
Finland	10 years	Estonia	Indefinitely
France	10 years/3 years	Hungary	20 years/5 years
Germany	Indefinitely	Latvia	Indefinitely
Greece	10 years/2 years	Lithuania	Indefinitely/5 years
Ireland	Indefinitely	Malta	10 years/2 years
Italy	10 years	Poland	..
Luxembourg	Indefinitely/end-2004	Slovakia	At least 5 years
Netherlands	30 years/5 years	Slovenia	Indefinitely
Portugal	20 years/end-2002		
Spain	Indefinitely		

Source: ECB, OeNB.

for an unlimited exchange period. This customer-oriented approach has helped raise the acceptance of the new currency, as people need not worry about missing any final deadlines.

2.4. Information as a Crucial Element

All the aspects that have been put forward so far also make clear that the changeover process entails certain risks. The main risk of the noncash changeover is that too many of the necessary steps might be left until the last minute. This is especially true for SMEs, as they may not be able to continue trading if they have not adapted to the new situation in time. The major risks of the cash changeover, by contrast, are that (1) it may take longer than envisaged, (2) the cash distribution process may be seriously interrupted (e.g. strikes, shortages of cash-in-transport services, etc.) and (3) that there is strong criminal activity (e.g. counterfeiting).

Against this background, well-targeted information campaigns appear to be a crucial element. During the first euro changeover, one of the major challenges was not only to inform banks, businesses and the general public about the changeover process but also to convince banks and retailers, especially SMEs, to take the changeover seriously and to start preparations early. For Catalan firms, Duque et al. (2005) find that information campaigns conducted by the public administration had a considerable influence on managers' perception of the importance of changeover plans and were therefore key to a smooth changeover process. This finding may be of special interest for the new Member States, as Catalonia and the NMS have a number of similarities (relatively closed economies until the end of the 1980s; both are a preferred destination for FDI from a neighboring country; the manufacturing sector has a relevant share; the average firm size is significantly below the EU average).

In addition to various information campaigns run by the European Commission and the ECB, the Austrian federal authorities, the OeNB, the social partners, commercial banks and a special government information agency called "Euro-Initiative" organized several information campaigns aimed at familiarizing all parties involved with the euro and the changeover process. For the upcoming

changeover process, the ECB plans not only to assist the NMS in familiarizing themselves with the Eurosystem, but also to share with them the experience of its own euro information campaign.⁶

From a national central bank's point of view, a major task during the last changeover was to provide information about the design and the security features of the new banknotes to limit the probability that counterfeits are accepted. In an effort to fight against euro counterfeiting, all Member States are linked via the Counterfeit Monitoring System (CMS). Since the CMS was extended to comprise the NMS as well, the ECB has been actively involved in providing training sessions on security features and counterfeit detection to representatives from the future euro area countries.

Providing information about the design and the security features of euro banknotes and coins will probably be an easier task during the next euro area enlargement, as many people in the NMS already know the euro banknotes rather well. As mentioned above, however, one has to bear in mind that the launch of the second series of euro banknotes is envisaged to start in 2007 and that the new series is likely to have new security features replacing some of the current features. Against this background the involvement of the ECB in future euro information campaigns seems crucial to ensure that in all countries involved, citizens will be given similar messages on the design of euro banknotes and coins.

3 Some Economic Effects of the Changeover

Finally, let us put forward some economic effects of the changeover and link them to the NMS. Certainly, one relevant question is that of direct changeover costs. Another important question is that of the possible impact the changeover has on inflation. Last but not least, we will also take a brief look at some general effects the changeover may have on economic activity.

3.1 Changeover Costs

In order to assess the changeover costs, most studies that deal with this question divide the related costs into the following categories:

- costs of handling two currencies (such as additional cash registers or security measures);
- costs of in-store infrastructure (also for dual pricing);
- costs of IT adaptations; and
- costs of staff training.

Estimates of changeover-related costs, both in Austria and across the EU, vary significantly. One major reason for these differences is that given the long transition period, it was difficult to accurately assess the costs involved. However, according to an internal survey among the euro area NCBs, total changeover costs were expected to be between 0.3% and 0.8% of GDP. In addition, the estimated conversion costs, which are one-off costs, would be offset already within one year by lower selling prices, reduced exchange rate risks and diminished transaction costs (Dirschmid et al., 2001).

⁶ Exchange of information also takes place within the Directors of Communication (DIRCOM) group established by the European Commission to coordinate PR activities. This group consists of the communications representatives from the individual finance ministries and NCBs; it meets on a regular basis.

Another important question in this context is who will have to bear the changeover costs. In Austria, the general principle with respect to changeover costs was that everybody had to take care of their own costs. Aside from budgetary aspects, the idea was to make the changeover a shared effort of society as a whole and to raise personal responsibility.

During the changeover, financial support for the banking sector was very limited; examples include the fact euro cash frontloaded to commercial banks had to be collateralized, but banks were allowed to reap the interest until December 28, 2001. This rule, which was based on an ECB guideline, was lifted in three steps after January 2002 and also gave an incentive to collect and return the old schilling banknotes quickly. Moreover, additional storing and safe capacities were provided by the central bank free of charge. However, the Austrian banking sector had to cover approximately one-third of total direct costs. The situation may be different in the NMS, as most of their commercial banks are owned by foreign banks located in the euro area. It should be relatively easy for the parent banks to adapt the logistics they ran a few years ago and to apply them in the next changeover process.

3.2 Impact on Inflation and Economic Activity

Price developments are affected by a number of factors such as tax measures, wage developments, inflation expectations, changes in the terms of trade. Thus, it is difficult to quantify, or even predict, the impact the changeover has on inflation or to decide whether possible price hikes may be changeover-related or not (for Austria, see Fluch and Rumler, 2005). Nonetheless, there are some reasonable assumptions which can be put forward with respect to price developments. In this context, we have to distinguish between effects that put upward risks on inflation and effects that generate downward pressure.

As the changeover process involves certain costs and as a good part of these costs is borne by banks and retailers, these costs tend to be passed on to the consumers. In addition, whenever prices are moving, there is the temptation to round up to psychologically or technically convenient prices. Depending on the competition in the respective sector but also on agreements between the retail sector, the government and the social partners, the upward pressure on inflation is restricted.

There are some aspects, by contrast, that create downward pressure on inflation. Higher international price transparency, as supported by the common currency, enhances competition and thus leads to downward price adaptations. This happened e.g. in the IT and communication sectors. In addition, as was the case in Austria, a few months before and after the introduction of the euro, consumer associations and other institutions (e.g. the social partners) carried out more price checks than usual, which in turn put pressure on retailers and banks to follow a fair and transparent price policy. As already mentioned, the use of dual pricing could support this policy. Last but not least, the Austrian government's approach – as recommended by the Ecofin Council and the ECB – was to round prices, especially signal prices, taxes and fees, in favor of the general public. This would also be a valuable option to the governments of the NMS, espe-

cially as administered prices still play a considerable role in most of these countries. In fact, they account for a significant share of about 10% to 25% in national consumer price indices (CPIs) (Égert et al., 2004).

Turning finally to possible effects on general economic activity, it is clear that a proportion of the changeover costs at the same time represents an increase in economic activity. While the net effects on consumption are difficult to predict, the euro changeover involves significantly stronger activities in certain sectors, in particular the banking sector, the transportation sector, the IT sector and many other businesses such as vending machine companies, the media and advertising industry (Dirschmid et al., 2001). Of course, output could also be adversely affected if the changeover does not go smoothly and leads to major disruptions in the economy.

For the NMS it will be even more difficult to disentangle the changeover effect on inflation and GDP growth from other cyclical and structural factors that impact on these key variables. In addition, the fulfillment of the convergence criteria will overlap with the changeover period. In the previous changeover process, these two aspects had been largely disentangled, as there was a three-year waiting period before the cash changeover. Therefore, predicting the economic consequences of the next changeover process seems to be even more complicated than it was for the current euro area countries.

4 Conclusions

With the introduction of the euro, today's euro area countries have successfully managed an enormous economic and logistical challenge. This was accomplished in a broad and well-coordinated effort. The ten NMS which joined the European Union in May 2004 are going to introduce the euro after they successfully fulfill the Maastricht convergence criteria; the convergence process is expected to take two years at least. As some of the NMS have already joined ERM II and others are well underway to doing so, national changeover processes may be starting soon.

Therefore, several questions arise concerning preparedness and prospective challenges. In which aspects do the NMS differ from the euro area countries and which aspects are basically the same as in the euro area? Aspects that differ from the situation the current euro area countries had to face before and during the changeover require new concepts and solutions; aspects that are similar or equal to the euro area experience suggest taking a look at what the NMS can learn from the euro area.

The differences from the euro area can be divided into two groups: those that make things easier for the NMS and those that might cause difficulties. Starting with the first group, the fact that the euro is already in circulation is obviously the biggest difference compared to the situation the current euro area countries experienced, thus making information campaigns less relevant and cash changeover logistics a little bit easier to handle. Moreover, the lower GDP per capita tends to reduce the need for euro cash. In addition, some of the NMS recently introduced new banknotes and coins, so they were able to gather some experience on their own. Last but not least, the commercial banking sector in the NMS is characterized by foreign ownership, with the majority of owners being euro area-based. The fact that they have done the exercise once

should be helpful. In addition, a possible scenario might be that parent banks frontload to their subsidiaries at least at the very beginning of the cash changeover process, when shortages are likely to occur and national distribution channels are not yet fully in place.

The NMS differ from the euro area countries in that they are catching-up economies in different stages of transition. They are characterized by different degrees of banking intermediation, different payment habits and varying degrees of unofficial euroization. All these factors may influence both the amount of frontloading required and the changeover process quite significantly, although the direction is not always clear. On the one hand, the relatively low degree of banking intermediation together with the relatively rare use of payment cards (exceptions do exist here) result in an above-average circulation of cash in the individual economies. Therefore, frontloading and the cash changeover will be even more of a challenge. On the other hand, in countries with unofficial euroization, euro cash is already circulating and people use it, if not daily, at least once in a while. This phenomenon should make frontloading less important and thus render the cash changeover easier.

Last but not least, the institutional framework drastically shortens the changeover period. Between 1999, when exchange rates were irrevocably fixed, and 2002, when the euro banknotes and coins were introduced, the euro area countries had three years for targeted changeover preparations. The NMS will not have as long a period of time at their disposal, even though the legal framework does not provide that the euro be immediately introduced as soon as the EU Council finds the Maastricht criteria to have been successfully fulfilled. At the moment, the debate is about how long the euro cash changeover can be postponed after exchange rates have been fixed and countries have become members of the euro area. Theoretically the NMS could postpone the introduction of euro cash. But with the euro already circulating in other parts of the euro area, such a strategy would not be accepted by the public and would in the end result in reduced seigniorage for the national central banks.

Therefore, for the countries that are “frontrunners” for euro adoption it is key to start preparations early. In fact they will have to start preparations long before the relevant EU institutions make their decisions. The actual time schedule for euro adoption is as follows: In the first year after joining the EU, six out of ten NMS entered ERM II (three of them on June 28, 2004, and three on May 2, 2005). The earliest point in time for a convergence assessment will be summer 2006. If the outcome of this assessment is positive, the changeover process provides for the introduction of the euro on January 1, 2007. All in all, these countries have one and a half years left to get ready for the euro. Is this enough time to make a smooth changeover possible? Where do the preparations stand now? Our analysis has shown that the NMS have started their preparations already, that they have installed national changeover committees and that they are currently gathering expertise from the euro area NCBs, the ECB and the European Commission. There is, however, no sign of any information campaign directed at the general public or at the corporate sector at large. Obviously, the NMS still have a long way to go in this respect.

All in all, the previous changeover process has shown three things: First, as the euro changeover is a major effort, preparations have to start early; second, as it is in the national interest that the changeover work smoothly, the authorities involved have to cooperate closely; and third, as the changeover is a highly complex and demanding process, it is recommendable to consult a number of experts. Although there was a lot of skepticism up to the last minute, the euro area countries and the international institutions involved in the changeover (e.g. the European Commission and the ECB) have managed this challenge successfully. As the NMS can draw on the expertise gained during the first euro changeover and as the more difficult and less difficult aspects will be balanced, there is reason to be confident that the NMS will manage the changeover process successfully.

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Exchange Rate Regimes, Foreign Exchange Volatility and Export Performance in Central and Eastern Europe

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This paper attempts to analyze the direct impact of exchange rate volatility on the export performance of ten Central and Eastern European transition economies as well as its indirect impact via changes in exchange rate regimes. Not only aggregate but also bilateral and sectoral export flows are studied. To this end, we first analyze shifts in exchange rate volatility linked to changes in the exchange rate regimes and second, use these changes to construct dummy variables we include in our export function. The results suggest that the size and the direction of the impact of forex volatility and of regime changes on exports vary considerably across sectors and countries and that they may be related to specific periods.

1 Introduction

The relationship between exchange rate volatility and export flows has been studied in a large number of theoretical and empirical papers. From a theoretical point of view, the effect of exchange rate volatility on international trade is not unambiguous. On the one hand, it may be argued that a rise in exchange rate volatility increases the uncertainty of profits on contracts denominated in a foreign currency because this risk leads risk-averse and risk-neutral agents to redirect their activity from higher risk foreign markets to the lower risk home market. On the other hand, higher exchange rate volatility and thus higher risk represent a greater opportunity for profit and might increase trade.³

From an empirical point of view, the large body of literature focusing on developed countries generally cannot establish any clear and statistically significant link between exchange rate volatility and aggregate or bilateral export flows. Nonetheless, differentiating between sectors yields more encouraging results even though the evidence from sectoral data suggests that the impact of volatility differs both in magnitude and direction across sectors (Klein, 1990; Bini-Smaghi, 1991; McKenzie, 1998, among others). Interestingly, Fontaigné and Freudenberg (1999) show that exchange rate volatility has a negative impact on intraindustry trade.

More recently, Doroodian (1999), Chou (2000), Achy and Sekkat (2001), Siregar and Rajan (2002), Arize et al. (2004) and Baak (2004) put pen to paper to investigate the case of less developed countries employing multilateral, bilateral and sectoral export data. Generally speaking, these papers unanimously support the hypothesis that exchange rate volatility has a negative effect on exports flows. In other words, an increase in volatility appears to depress exports in less developed countries. Along these lines, a related question very few researchers have investigated is whether changes in exchange rate regimes which can be associated with a shift in the amplitude of volatility cause export flows to decrease (see Fountas and Aristotelous, 1999, for the Exchange Rate

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³ See McKenzie (1999) for a very complete survey on this topic.

Mechanism period and Aristotelous, 2001, for Britain and the U.S.A. from 1889 to 1999).⁴

In this paper, we undertake to dissect the relationship between exchange rate volatility, exchange rate regimes and export performance in ten transition economies in Central and Eastern Europe (CEE), namely Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Russia, Slovakia, Slovenia and Ukraine. To address this issue, we look not only at yearly and monthly aggregate export data but also analyze export flows to the European Union (EU) and at the sectoral level.

The methodological framework used here marks a departure from the traditional literature on the impact of exchange rate volatility on export flows. We proceed in three stages. First, we identify changes in exchange rate volatility using two procedures, the Iterated Cumulative Sums of Squares (ICSS) algorithm developed by Inclán and Tiao (1994) and Hansen's (1997) approximation to the p-values of the supreme, exponential and average statistics developed by Andrews (1993) and Andrews and Ploberger (1994). Second, we match shifts in exchange rate volatility with changes in the exchange rate regime and construct dummy variables corresponding to changes in exchange rate regimes in line with the detected structural breaks. Third, we include the indirect forex volatility measure (dummies) and, alternatively, a direct measure of exchange rate volatility (as in the previous literature) in export functions using both panel and time series cointegration estimation techniques.

The issue of forex volatility and trade, which to our knowledge has not yet been analyzed for this group of countries, is of particular interest because five countries from our pool joined the EU in May 2004 and the accession to the EU of three others is in all likelihood only a matter of time. Joining the EU entails the prospect of adopting the euro or even the obligation to do so, with the timing of this step having recently been subject to lively academic and policy discussions. If exchange rate volatility were to impede export flows, commonly perceived as the engine of economic growth in those countries, their motivations for adopting the euro and hence for making a greater effort to meet the Maastricht convergence criteria – in particular those applying to public finances – should increase considerably.

The remainder of this paper is structured as follows. Section 2 gives a detailed overview on the tested export equations, including a volatility measure, the econometric techniques for testing structural breaks in exchange rate volatility, and the cointegration techniques used to estimate the export functions. This is followed by the discussion of the shifts in exchange rate regimes in section 3. Section 4 reports the estimation results of the export functions based on panel and time series data and discusses the results. Section 5, finally, provides some concluding remarks.

⁴ Gravity models offer an alternative to aggregate export functions because they analyze all possible bilateral trade relations for a given set of countries (for instance, a panel of ten countries would comprise 120 bilateral trade series). The impact of forex volatility on trade is not less controversial in the gravity context: a negative relationship is found in Rose (2000), Taglioni (2002), Babetskaia-Kukharchuk and Maurel (2004) and Frankel and Rose (2002), no connection between forex volatility and trade is detected in Tenreyro (2003), and the relationship is positive in Babetskii et al. (2003) and in Bussière et al. (2004).

2 Estimation and Data Issues

2.1 Nominal and Real Export Functions

Although the selection of the correct trade equation in general and that of an export equation in particular is problematic, we follow the approach employed, for instance, in McKenzie (1998), who analyzes the relationship between exchange rate volatility and trade flows in a very meticulous and systematic way. The export functions are estimated both in nominal and real terms, and include domestic and foreign income (Y_t and Y_t^*), relative prices (P_t and P_t^*), usually defined as export prices in the domestic economy to import prices in the foreign economy, the nominal exchange rate (E_t) for nominal exports (X_t^N), the real exchange rate ($Q_t = E_t \cdot P_t^* / P_t$) for real exports (X_t^R), and a volatility measure of the nominal and the real exchange rates, denoted by VOL_t^E and VOL_t^Q , respectively.

It is a well-established fact in the literature dealing with transition economies that an increase in the transition economies' export flows was substantially influenced by the massive inflow of foreign direct investment (FDI) into the manufacturing sector. FDI, absorbed either by privatization or by the establishment of greenfield projects, built up substantial exports capacities in the transition economies (see Barrell and Holland, 2000; Campos and Kinoshita, 2002; or Benáček et al., 2003). Table 1 shows the dramatic increase in FDI stocks relative to GDP; by 2003, the figures are close to or well over 30% in Bulgaria, Croatia, the Czech Republic, Hungary, Poland and Slovakia. Changes of exports as a share in GDP are reported in table 2; they more than doubled in most of the countries. Hence, we modified equations of the standard specification by taking account of the prominent role of FDI in export performance:

$$X_t^N = f(Y_t^N, Y_t^{N*}, P_t, P_t^*, E_t, FDI_t^N, VOL_t^E) \quad (1)$$

$$X_t^R = f(Y_t^R, Y_t^{R*}, Q_t, FDI_t^R, VOL_t^Q) \quad (2)$$

Economic theory suggests that the impact of nominal and real income should be positive on nominal and real exports, respectively. Moreover, an exchange rate depreciation may increase exports and the impact of domestic (foreign) relative prices on exports should be negative (positive). The volatility measure, VOL_t , is a standard direct measure of volatility, and, alternatively, a dummy variable constructed in accordance with changes in the exchange rate regime and exchange rate volatility. The effect of exchange rate volatility on exports is, from the theoretical viewpoint, ambiguous and may have a positive or negative impact on export flows.

An increase or decrease in exchange rate volatility may impact on exports with a certain delay, given that export contracts may be fixed one or two periods ahead. The same may apply to foreign direct investment, as the fruits of FDI inflows may be felt only with some delay. FDI has been mainly related either to privatization or to greenfield investments. In both cases, some time is needed to restructure the company or to build the plant, which can then produce goods for exports. This is the reason both volatility measures and FDI are used also with a lag of one or two years in equations (1) and (2).

2.2 Testing for Structural Breaks

The methodology used in this study to detect structural breaks in the variance of the exchange rate series is based on two procedures: the Iterated Cumulative Sums of Squares (ICSS) algorithm developed by Inclán and Tiao (1994) and Hansen's (1997) approximation to the p-values of the supreme, exponential and average statistics developed by Andrews (1993) and Andrews and Ploberger (1994).

Inclán and Tiao (1994) propose a cumulative sums of squares algorithm to estimate the number of changes in variance and the point in time of each variance shift. Let

$$C_k = \sum_{t=1}^k \epsilon_t^2, \quad k = 1, \dots, n \quad (3)$$

be the cumulative sum of the squared observations from the start to the k^{th} point in time where n is the number of observations and ϵ_t denotes a series of independent observations from a normal distribution with zero mean and with unconditional variance σ_t^2 . From equation (5), Inclán and Tiao (1994) propose to use the statistic given by:

$$IT = \sup_k \sqrt{n/2} |D_k| \quad (4)$$

where $D_k = \frac{C_k}{C_n} - \frac{k}{n}$. Under the null hypothesis of constant unconditional variance, asymptotically D_k behaves as a Brownian bridge. The critical value of 1.36 is the 95th percentile of the asymptotic distribution of $\sup_k \sqrt{n/2} |D_k|$. Thus, upper and lower boundaries can be set at ± 1.36 in the D_k plot. Exceeding these boundaries marks a significant change in the variance of the series. If the series under study has multiple break points, the D_k function alone is not enough because of the masking effects. To avoid this problem, Inclán and Tiao (1994) design an algorithm that is based on a successive evaluation of D_k at different parts of the series, dividing consecutively after a possible change point is found.

Our second procedure to detect structural breaks in volatility is based on univariate autoregressive models for first differences (growth rates) of the series, which we denote as q_t . Following McConnell and Pérez-Quirós (2000) and Camacho (2004), we compute, at any quarter t , the Generalized Method of Moments (GMM) estimates of the specification:

$$q_t = \mu + \phi q_{t-1} + \epsilon_{1s} \quad (5)$$

$$\sqrt{\frac{\pi}{2}} |\hat{\epsilon}_{1s}| = \alpha_1 D_{1s} + \alpha_2 D_{2s} + \epsilon_{2s} \quad (6)$$

where the dummies are $D_{1s} = \begin{cases} 0 & \text{if } s \leq T \\ 1 & \text{if } s > T \end{cases}$ and $D_{2s} = \begin{cases} 1 & \text{if } s \leq T \\ 0 & \text{if } s > T \end{cases}$, and

s refers to data of the period from the beginning of the sample to s , the instru-

ments for each period s are a constant, q_t , D_{1s} and D_{2s} , T is the estimated break point and α_1 and α_2 are the estimators of the standard deviation.⁵

Andrews (1993) and Andrews and Ploberger (1994) develop statistics for cases similar to the previous one, where the parameter T appears under the alternative hypothesis but not under the null of constant conditional standard deviation ($\alpha_1 = \alpha_2$). They define the function $F_n(T)$ as the Wald (W), Likelihood Ratio (LR) or Lagrange Multiplier (LM) statistic of the hypothesis that ($\alpha_1 = \alpha_2$) for break date T , where n is the number of observations. They assume that T lies in a range T_1, T_2 .⁶ Specifically, Andrews (1993) considers the supreme statistic:

$$SupF = \sup_{T_1 \leq T \leq T_2} F_n(T) \quad (7)$$

where $F = W$, LR or LM. Andrews and Ploberger (1994) consider the exponential and average statistics, given by the following expressions:

$$ExpF = \ln \left(\frac{1}{T_2 - T_1 + 1} \sum_{T=T_1}^{T_2} \exp\left(\frac{1}{2} F_n(T)\right) \right) \quad (8)$$

$$AveF = \frac{1}{T_2 - T_1 + 1} \sum_{T=T_1}^{T_2} F_n(T) \quad (9)$$

where $F = W$, LR or LM. The asymptotic distributions of these statistics are nonstandard and have been obtained by Andrews (1993) and Andrews and Ploberger (1994), together with their asymptotic critical values. In this paper we apply these statistics, using the associated p-values obtained following the approximation developed by Hansen (1997). In particular, we use statistics in equations (7), (8) and (9) in a new way: we sequentially apply those tests, compute the p-values associated with the supreme, exponential and average statistics for any date, and obtain a profile of p-values. In doing so, we will have numerical and graphical information that will be used to delimit periods of stability and instability in the variance of the series.

2.3 Estimation Methods

The order of integration of the variables is tested using time series unit root and stationarity statistics such as the Augmented Dickey-Fuller (ADF), the Phillips-Perron (PP), the Kwiatkowski-Phillips-Schmidt-Shin (KPSS) and the Elliot, Rothenberg, and Stock (ERS) Point Optimal tests. Moreover, the panel unit root test proposed by Im et al. (2003), the Im-Pesaran-Shin (IPS) test, is used for panel data. For the time series data, equations (1) and (2) are estimated using the Dynamic Ordinary Least Squares (DOLS) approach suggested by Stock and Watson (1993) and the Auto-Regressive Distributed Lag (ARDL) approach proposed by Pesaran et al. (2001).

⁵ If ε_t follows a normal distribution, $\sqrt{\frac{1}{2}}|\hat{\varepsilon}_t|$ is an unbiased estimator of the standard deviation of ε_t .

⁶ We set $T_1 = .15n$ and $T_2 = .85n$ (see Andrews, 1993, and Andrews and Ploberger, 1994).

For the panel data, the cointegration tests worked out by Pedroni (1999) are used. Out of the seven panel cointegration statistics developed by Pedroni (1999), we choose those which not only permit heterogeneity in the slope coefficients and the constant term but also allow for heterogeneous autoregressive coefficients in the residuals. These are the nonparametric PP, rho statistics and an ADF-based t-statistic. The coefficients are estimated using fixed effect OLS.

Banerjee et al. (2004) argue that in the presence of cross-unit cointegration relationships, panel cointegration tests tend to overreject the null of no cointegration. In (1) and (2), the foreign income and price variables may be strongly correlated across countries. To diminish the cross-sectional bias, the ratios $Y_t^N/Y_t^{N^*}$ and P_t/P_t^* rather than the separate series are used for panel data.

2.4 Data Issues

To carry out our empirical analysis, we use two sets of data. The first set of data consists of yearly data and spans the period from 1990 to 2003. It is obtained from the Economies in Transition 2004 database of the Vienna Institute for International Economic Studies (wiiw). Following our export function specification, the domestic and foreign price indices are producer prices. Some studies use consumer prices, but these indices clearly contain elements which have little to do with the exporting sectors (such as administered or regulated prices, changes in indirect taxes and imported goods). Others use export prices for the domestic economy and import prices for the foreign economy. However, we first face a data constraint here in that export prices are available only for four countries (the Czech Republic, Hungary, Poland and Slovenia). For export prices, one may use export unit values or proper export prices. However, the dynamics of the two types of series may be rather different in practice. Another source of confusion is that the series are commonly expressed in U.S. dollar terms, which implies that the exchange rate is already included in the series, and, perhaps more importantly, that they are of little use when the other variables are expressed in effective terms or against the euro area. For the sake of consistency, we opted for the producer price series. Nominal exports and GDP are expressed in domestic currency units, and real exports are obtained as nominal exports deflated by producer price series. Real GDP is the cumulated series based on yearly real GDP growth rates. Nominal FDI is the cumulated FDI stock, while for the real export equation, it is constructed as the stock of FDI as a share of GDP. GDP and PPI series for the foreign economy are a weighted average of euro area and U.S. series, where the weight for the euro area corresponds to the share of exports to the euro area in total exports and the weight for the U.S. series represents the rest of total exports.

A sectoral decomposition for exports is available for all countries except Russia and Ukraine; according to this decomposition, exports are classified in nine sectors.⁷ Table 1 indicates that most of the eight CEE economies' exports concentrate on manufacturing, representing a share of slightly more than 60%

⁷ (1) Food and live animals, (2) beverages and tobacco, (3) crude materials, inedible, except fuels, (4) mineral fuels, lubricants, etc., (5) animal and vegetable oils, fats, waxes, (6) chemicals and related products, (7) manufactured goods classed by materials, (8) machinery and transport equipment, and (9) miscellaneous manufactured articles.

for Bulgaria and Croatia at the lower end and above 80% for the Czech Republic, Hungary and Slovakia at the higher end. The share of machinery and transport equipment alone reaches 50% in the Czech Republic and Slovakia and 60% in Hungary in 2003.

Table 1

The Share of Exports by Sectors in Total Exports

%, 2003

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S7 S8 S9
Bulgaria	6.7%	2.1%	6.3%	8.4%	0.2%	9.0%	24.7%	13.0%	28.8%	66.5%
Croatia	9.1%	2.6%	5.7%	9.6%	0.2%	9.6%	14.0%	29.4%	19.6%	63.0%
Czech Republic	2.7%	0.6%	2.8%	2.9%	0.1%	5.9%	23.1%	50.1%	11.8%	85.0%
Hungary	6.2%	0.3%	1.8%	1.6%	0.2%	6.9%	10.3%	61.1%	10.6%	82.0%
Poland	7.6%	0.3%	2.6%	4.3%	0.0%	6.5%	23.7%	37.8%	17.1%	78.6%
Romania	2.2%	0.2%	6.2%	6.5%	0.2%	4.8%	19.3%	21.5%	38.9%	79.7%
Slovakia	2.5%	0.4%	2.5%	5.2%	0.1%	5.2%	23.7%	47.4%	13.0%	84.1%
Slovenia	2.1%	1.3%	1.7%	1.4%	0.1%	13.8%	25.6%	36.6%	17.5%	79.7%

Source: Calculated on the basis of the wiiw's Countries in Transition 2004 database.

Notes: S1: Food and live animals, S2: beverages and tobacco, S3: crude materials, inedible, except fuels, S4: mineral fuels, lubricants, etc., S5: animal and vegetable oils, fats, waxes, S6: chemicals and related products, S7: manufactured goods classed by materials, S8: machinery and transport equipment, S9: miscellaneous manufactured articles.

The exchange rate series are defined as units of domestic currency units per one unit of the foreign currency. Hence, a decrease (increase) in the exchange rate indicates an appreciation (depreciation). Furthermore, the real exchange rate is calculated using producer price series rather than consumer price series for reasons developed earlier.

The second set of data contains monthly data drawn mostly from the wiiw monthly database on Eastern Europe. It covers the period from January 1993 to September 2004 for the Czech Republic, Hungary, Poland and Romania, and from January 1994 to September 2004 for Croatia, Russia, Slovakia and Slovenia. For Bulgaria and Ukraine, monthly time series for exports start only in 1999 and 1998, respectively; for this reason, they are excluded from the cointegration analysis. If not indicated otherwise, the construction of the series is the same as for the yearly data. Note that the monthly FDI series are obtained by linear interpolation from yearly data. For the Czech Republic, Croatia, Hungary, Poland, Romania, Slovakia and Slovenia, besides aggregate exports, exports to the euro area are also analyzed. Domestic and foreign incomes are proxied by industrial production, the only variable available at a monthly frequency which can be taken as an approximation of gross domestic product.⁸ Wherever the presence of seasonality is detected in the data, the series are seasonally adjusted and are taken as a natural logarithm.⁹

A final and important aspect of the data is the construction of variables capturing the volatility of the real exchange rate. For yearly data, two direct measures are used: (1) the standard deviation of monthly changes in the exchange rate for the 12 months of the year (VOLE), and (2) the average of standard deviations computed for each month of the year based on monthly changes in the

⁸ Alternatively, quarterly GDP series interpolated to monthly frequency could be also used.

⁹ The U.S. Census Bureau's X12 seasonal adjustment program was used.

exchange rate for a window of 12 months (VOLA). For monthly data, a standard deviation for a 12-month window is computed for each month. In addition, dummy variables are also used with the aim of capturing changes in the exchange rate regime and forex volatility. More discussion on this issue is provided in the next section.

3 Exchange Rate Regimes and Breaks in Volatility

3.1 Changes in Exchange Rate Regimes

Table 2

Exchange Rate Regimes in Transition Economies from 1990 to 2005																
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
CEEC-5																
Slovenia	x	3a (6)	3a (6)	3a (6)	3a (6)	3a (6)	3a (6)	3a (6)	3a (6)	3a (6)	3a (6)	3a (6)	3a (6)	3a (6)	3a→5	5
Hungary	1	1	1	1	1	1→2	2	2	2	2	2	2→4→5	5	5	5	5
Poland	1	1	2	2	2	4	4	4	4	4	4→7	7	7	7	7	7
Slovakia	1	1	1	1	1	1	5	5	5	5→6	6	6	6	6	6	6
Czech Republic	1	1	1	1	1	1	5	5→6	6	6	6	6	6	6	6	6
Southeastern Europe																
Bulgaria	1	6	6	6	6	6	6	0	0	0	0	0	0	0	0	0
Croatia			1	5 (6)	5 (6)	5 (6)	5 (6)	5 (6)	5 (6)	5 (6)	5 (6)	5 (6)	5 (6)	5 (6)	5 (6)	5 (6)
Romania	1	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)	3b (6)
CIS																
Russia			6	6	6	6→5	4	4	4→6	6	6	6	6	6	6	6
Ukraine				6	6	6	6	6→5	5	5	5→6	6	6	6	6	6

Source: Authors.

Notes: 0: formal or de facto currency board; 1: peg to a currency or to a basket with fluctuation margins less than, or equal to, $\pm 2.25\%$; 2: crawling peg with fluctuation margins of less than, or equal to, $\pm 2.25\%$; 3a: float with active management by monetary authorities (implicit crawling peg); 3b: float with active management by monetary authorities (implicit crawling band); 4: crawling peg with fluctuation margins of more than $\pm 2.25\%$; 5: peg to a currency or a basket with fluctuation margins of more than $\pm 2.25\%$; 6: float with intervention; 7: free float without any intervention. In parentheses are the de jure regimes for Croatia, Romania and Slovenia. Shaded areas denote a regime shift.

Table 2 presents a general overview of how exchange rate regimes change over time in transition economies. For the CEEC-5, a gradual move from a peg toward more flexibility can be observed for all countries with the exception of Slovenia, which has maintained a de facto crawling peg until its entry into ERM II in June 2004. Both Hungary and Poland started transition using pegged regimes with discretionary adjustments and then switched to crawling peg regimes. Poland widened the fluctuation margins up to $\pm 15\%$ in consecutive steps to cope with appreciation pressures, and then opted for a pure floating regime in 2000. Hungary maintained its tight-band crawling peg regime for a longer period and adopted a pegged regime with fluctuation margins as high as $\pm 15\%$ in April 2001.¹⁰ The Czech Republic and Slovakia, which had a common history until 1993, had pegged regimes until 1997 and 1998, respectively, when, after a short-lived widening of bands in the Czech Republic, and with a brusque shift in Slovakia, they moved toward a managed float. More flexible exchange rate regimes may indeed generate more amplified movements in the nominal exchange rate, which, in turn, make these countries prone to being “victims” of nominal exchange rate volatility.

¹⁰ Note that formally, the crawling peg regime was abandoned in October 2001, when the rate of crawl was set to zero. However, in practice, between April and October 2001 the rate of crawl was very low and remained insignificant in terms of influencing the exchange rate because of the enlarged fluctuation bands.

An opposite tendency becomes apparent in Southeastern Europe, especially in Bulgaria, which can be best described as an abrupt shift from a managed float toward more rigidity (a currency board). The cases of Croatia and Romania are similar to that of Slovenia, with regimes that have remained unchanged for a long time. Although officially announced as a managed float, the regime Romania has been operating for the past 15 years or so is a de facto crawling peg or band, and Croatia has maintained its nominal exchange rate in a very narrowly managed band from 1994 onward.¹¹ Russia and Ukraine constitute another group of countries with cyclical changes in the exchange rate regime. Starting with a managed float, Russia pegged the ruble to the dollar in 1995 and introduced a crawling band in 1996, which ended with the return to a managed float in the aftermath of the Russian crisis of 1998. Ukraine also entered the initial phase of transition with a managed float and followed Russia with some delay in pegging its currency to the dollar in 1997. The country let the hryvnia float in 2000 after an uphill struggle against constant depreciation pressures from August 1998 on, which included an increase in the fluctuation band and a shift toward a stronger depreciation of the band.

3.2 Breaks in Volatility

Table 3 reports the breaks in volatility detected when using the ICSS and the Hansen methods for real and nominal exchange rates in effective terms.¹² Note that results are reported only for the effective exchange rates for Russia and Ukraine. A number of general observations can be made: First and perhaps most importantly, the reported results reflect most of the changes in the exchange rate regimes. Nonetheless, there is ample evidence that changes in nominal and real exchange rate volatility also occurred within one and the same exchange rate regime. Second, the two procedures (ICSS and Hansen) may yield different results. The ICSS procedure produces one-off changes in volatility, while the Hansen method shows the periods during which volatility in the exchange rate is different from that in the remaining observations. Generally speaking, the number of reported breaks in volatility is usually higher for the Hansen procedure than for the ICSS procedure. Third, breakpoints in the real exchange rate may or may not coincide with breakpoints in the nominal exchange rate. Finally, the use of effective exchange rate series obtained from different sources for Hungary (Magyar Nemzeti Bank versus wiiw) may lead to different results. This may be partly traced to the different time period over which the time series are available.

¹¹ Croatia, Romania and Slovenia are the three countries in our sample whose de jure and de facto regimes differ markedly.

¹² Results for the euro exchange rates are not reported because they are mostly in line with the results for the real effective exchange rates.

Table 3

Structural Changes in Exchange Rate Volatility			
Country	Method	REER	NEER
Bulgaria	ICSS	1993.9, 1994.4, 1996.3, 1997.5, 1999.7	1994.2, 1996.4, 1997.1, 1998.10
	Hansen	1997.2**, 1997.3*, 1997.4–1998.3**, 1999.5–1999.7**, 1999.9–2000.12**, 2001.1–2004.9†	1995.12–1996.4**, 1997.2–1997.12**, 1998.1–2004.12†
Croatia	ICSS	no breaks	no breaks
	Hansen	no breaks	1995.1–1995.6*
Czech Republic	ICSS	no breaks	1996.4, 1999.2
	Hansen	1997.12–1998.2**, 1998.3*, 1998.4**, 1998.5–2004.9†	1992.1**, 1992.4–1992.5*, 1992.8–1992.10**, 1992.11–1995.2*, 1995.3–1995.5**, 1995.6–2004.9†
Hungary	ICSS	1994.6, 1995.3	1990.11
	Hansen	1992.12**, 1993.3–1993.11* MNB: 2000.11**, 2000.12*, 2001.3–2001.4**	1991.1*, 1991.2**, 1996.5–1998.10*, 1998.11–1998.12** MNB: 1991.1*, 1991.2–1991.4**, 1991.8*, 1991.11**, 1992.2–1992.3, 1996.8–1996.10**, 1996.11–1998.10*, 1998.11**, 1998.12**, 1999.1–1999.4*, 1999.8–2001.3**, 2001.4*, 2001.5**
Poland	ICSS	1993.5, 1997.9	1993.7, 1997.5
	Hansen	2002.5–2002.9**, 2003.3–2003.10**, 2004.3**1993.12*, 2003.9**	1994.1–1994.2*, 1994.3–1994.4**, 1994.5–1995.2*, 1995.3–1995.4**, 1999.7–2000.3**, 2000.4–2004.9†
Romania	ICSS	1992.10, 1994.4, 1995.9, 1996.11, 1997.2, 1999.5	1992.6, 1993.12, 1997.3
	Hansen	1994.3–1994.8**, 1994.9–1997.2*, 1997.3–1998.6**, 1998.7–2004.8†	1992.3–2004.9*
Slovakia	ICSS	1993.6, 1994.6	1993.7, 1998.8, 2000.10
	Hansen	no breaks	1994.1–1994.2*, 1994.3–1995.2**, 2000.3**, 2000.5–2000.9**, 2000.10–2004.9†
Slovenia	ICSS	1995.3	1995.2
	Hansen	1997.12–1998.8** 1999.3–2000.5** 2003.4†, 2004.7–2004.9†	1997.4–1997.8**, 1997.12–1998.6**, 1998.7–1998.8*, 1998.9–1999.8*, 1999.9*, 1999.10**, 1999.12–2000.5**, 2000.8*, 2000.11** 2001.5–2001.7**, 2001.9–2001.11†, 2002.2–2004.9†
Russia	ICSS	1996.7, 1998.6, 1998.11	1996.7, 1998.7, 1998.11
	Hansen	1995.1–1995.2*, 1995.3**, 1995.4*, 1995.5**, 1996.3–1996.5**, 1996.6*, 1998.1–1998.7**, 2002.1–2002.5**, 2002.6–2003.11*, 2003.12–2004.9**	1998.12**, 2001.11–2002.2**, 2002.3–2004.9†
Ukraine	ICSS	1998.7, 1998.9, 2000.3	1998.7, 1998.9, 1999.12
	Hansen	2003.3**	2001.9–2002.2**, 2002.3–2004.9*

Source: Authors.

Notes: REER and NEER refer to the real effective exchange rate and the nominal effective exchange rate. The exchange rate series are obtained from the wiiw monthly database and PPI-based real exchange rates. MNB refers to the exchange rate series provided by Magyar Nemzeti Bank. * and ** indicate evidence of instability at the 5% and 10% significance levels, respectively.

3.3 The Construction of Dummy Variables

The dummy variables take the value 0 for the low volatility regime and 1 for the high volatility regime. Table 4 below summarizes the periods for which the dummy variables are constructed along the line of changes in the exchange rate regimes combined with the changes in forex volatility analyzed previously. It shows the periods for which the dummy variables take the value 1. For yearly data, only one high volatility regime is used, mainly because of the difficulty

of combining several alternative volatility regimes for given countries.¹³ This gap is filled for monthly data, where several alternative periods are considered for the Czech Republic, Hungary, Poland, Slovakia and Russia. For Croatia, Romania and Slovenia, only the direct volatility measures are employed in the absence of changes in the exchange rate regimes. For Croatia, the identified high volatility regime from 1990 to 1993 cannot be tested for monthly data, as they start only in 1994. As noted earlier, estimations are not carried out on a monthly basis for Bulgaria and Ukraine.

Table 4

Dummy Variables and High Volatility Regimes			
	Yearly data	Monthly data	
	High		High
Bulgaria	1991–1996		..
Croatia	1990–1993		..
Czech Republic	1997–2003	DUM1	1997.05 2004.09
		DUM2	1998.05 2004.09
Hungary	1990–1994; 2001–2003	DUM1	1995.3 2004.9
		DUM2	2001.4 2004.9
Poland	1990–1991; 1995–2003	DUM1	1998.10 2004.09
		DUM2	2000.03 2004.09
Romania	—		—
Slovakia	1998–2003	DUM1	1997.01 2004.09
		DUM2	1998.10 2004.09
Slovenia	—		—
Russia	1990–1994; 1998–2003	DUM1	1994.1 1997.06
		DUM2	1998.9 2004.09
Ukraine	1990–1996; 1999–2003		..

Source: Authors.

4 Empirical Results

4.1 Estimation Results for Panel Data

We start by analyzing the impact of exchange rate volatility and changes in exchange rate regimes on export performance in a panel context. The panel unit root tests indicate that most of the variables are I(1). The two direct volatility measures are exceptions. With this as a background, panel cointegration is used for level variables including the dummy variables, and fixed effect OLS is applied to data in first differences. In the first difference specification, the volatility measures are not first-difference, given the fact that they are already stationary in levels.

The Pedroni mean group statistics reported in table 5 show the presence of cointegration for most of the specifications. Table 6 contains the estimation results including the volatility measure and FDI with a lag of one year. When all ten countries are included in the panel (CEEC-10), the indirect dummy vol-

¹³ It should be noted that the period over which yearly data are available is sometimes longer than the one for which monthly data are available. This is the case, for instance, for Croatia, where large devaluations occurred from 1990 to 1993; this is why we constructed a dummy to cover this period.

atility measure turns out to have a positive sign for the level equations (shaded), indicating that an increase in exchange rate volatility is associated with an increase in exports. For the equations in first differences, all (lagged) volatility measures are mostly insignificant. This result implies that an increase in exchange rate volatility causes exports to decrease with a delay. Nonetheless, results for the CEEC-8 (excluding Russia and Ukraine) indicate that the direct volatility measures (VOLE and VOLA) are statistically significant with a negative sign – for both nominal and real export equations. These results are fairly robust over the time period investigated, as the results for the period from 1993 to 2003 are very similar to those obtained for the periods from 1990 to 2003 and from 1995 to 2003.

For sectoral exports, it appears that the exchange rate volatility measures are not significant for the first five sectors¹⁴ (and are therefore not reported here). By contrast, as shown in table 6, exchange rate volatility is found to hamper manufacturing exports. This does not mean that these sectors were the only ones to be affected. Exports of the chemicals sector are, in fact, also influenced by exchange rate volatility. Although the effect is mostly positive for the cointegration relationships including the dummy variables, the effect switches sign when data in first differences are used: Higher exchange rate volatility appears to dampen export growth in chemicals and manufacturing. These results seem to be most robust for manufactured goods classed by materials and for machinery and transport equipment.

Table 5

Pedroni Panel Cointegration Tests from 1993 to 2003

		Nominal exports			Real exports		
		Rho statistics	PP statistics	ADF statistics	Rho statistics	PP statistics	ADF statistics
CEEC-10	total exports	2.994	-10.012***	-5.267***	3.187	-2.259**	-1.262
CEEC-8	total exports	2.767	-8.698***	-4.003***	2.713	-2.856**	-1.295
	sector 6	3.136	-3.470**	-1.836*	2.165	-5.484***	-3.349***
	sector 7	2.595	-7.989***	-6.501***	1.830	-7.481***	-4.829***
	sector 8	2.879	-7.364***	-3.544***	2.347	-5.326***	-3.504***
	sector 9	2.912	-4.819***	-4.637***	2.786	-0.929	-0.486

Source: Authors.

Notes: PP: nonparametric Phillips-Perron statistics, ADF: Augmented Dickey-Fuller;

*, ** and *** indicate that the null of no cointegration is rejected at the 10%, 5% and 1% levels, respectively.

¹⁴ (1) Food and live animals, (2) beverages and tobacco, (3) crude materials, inedible, except fuels, (4) mineral fuels, lubricants and (5) animal and vegetable oils, fats, waxes.

Table 6

Coefficient Estimates from 1993 to 2003

	Nominal exports					Real exports			
	Y/Y*	P/P*	E	FDI	VOL	Y/Y*	Q	FDI	VOL
CEEC-10 aggregate exports									
DUM	0.695***	-0.219	0.552***	0.188***	0.118**	1.017***	0.453***	0.222***	0.134**
DUM	0.478**	-0.136	0.686***	-0.125**	0.006	0.865***	0.691***	0.03	-0.005
VOLA	0.436**	-0.003	0.604***	-0.088	-0.009	0.774**	0.636***	0.093 [†]	-0.019
VOLE	0.415**	0.016	0.619***	-0.082	-0.022 [†]	0.801**	0.669***	0.071	-0.022
CEEC-8 aggregate exports									
DUM	0.767**	0.007	0.215	0.186***	0.084	1.423***	0.181	0.196***	0.131**
DUM	0.092	0.355	0.544***	-0.049	-0.014	0.418	0.49**	-0.01	-0.036
VOLA	0.01	0.559 [†]	0.432**	0.006	-0.045**	0.216	0.41**	0.092 [†]	-0.056**
VOLE	-0.01	0.551 [†]	0.465**	-0.01	-0.043***	0.267	0.431**	0.047	-0.048**
CEEC-8 chemicals and related products (sector 6)									
DUM	1.915***	-1.706***	0.919**	-0.008	0.068	1.82***	0.714**	0.052**	0.105*
DUM	0.832*	-0.628	0.862**	-0.035	0.021	1.26**	0.655**	0.024	0.033
VOLA	0.685	-0.349	0.751**	0.019	-0.051	0.86	0.736**	0.147	-0.049
VOLE	0.635	-0.311	0.773**	0.009	-0.058**	0.658	0.683**	0.147	-0.065*
CEEC-8 manufactured goods classed by materials (sector 7)									
DUM	0.902***	-0.374	0.494*	0.115***	0.041	1.16***	0.454**	0.133***	0.081**
DUM	0.107	0.493	0.436**	-0.006	0.018	0.281	0.333*	0.037	0.006
VOLA	-0.024	0.742 [†]	0.337	0.043	-0.046**	-0.026	0.29	0.135**	-0.054*
VOLE	-0.017	0.686	0.386*	0.019	-0.034**	0.084	0.292	0.082	-0.035
CEEC-8 machinery and transport equipment (sector 8)									
DUM	0.899	-0.186	0.143	0.367***	0.113	2.641***	0.35	0.354***	0.226**
DUM	-0.134	0.748	0.314	-0.192*	-0.092*	-0.203	0.219	-0.108	-0.121**
VOLA	-0.166	0.991	0.101	-0.088	-0.073**	-0.296	0.079	0.064	-0.108**
VOLE	-0.193	0.969	0.157	-0.115	-0.067**	-0.432	0.086	0.028	-0.112**
CEEC-8 miscellaneous manufactured articles (sector 9)									
DUM	0.077	1.522***	-0.519*	0.166***	0.075	0.15	-0.831***	0.206***	0.05
DUM	0.067	0.289	0.654***	0.038	-0.043*	0.249	0.634***	0.118**	-0.104***
VOLA	0.102	0.295	0.605***	0.062	-0.012	0.381	0.522**	0.135**	-0.02
VOLE	0.089	0.307	0.609***	0.06	-0.015	0.468	0.584**	0.091	-0.025

Source: Authors.

Notes: The dummy variable DUM (shaded) refers to equations estimated in levels, whereas the nonshaded areas refer to equations estimated in first differences. VOLE is the standard deviation of changes in the exchange rate for twelve months of the year, and VOLA is the average of standard deviations computed for each month of the year for a window of twelve months (see section 2.4). CEEC-8 exclude Russia and Ukraine. *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively.

4.2 Estimation Results for Time Series

Estimation results resting on panel data indicate that exchange rate volatility might impact on both nominal and real exports. Given that panel results provide a general picture of the studied phenomenon, the question of the role of exchange rate volatility in the individual countries remains unanswered. This question, which is of utmost importance for policymakers, can be best answered by drawing on time series analysis, to which we now direct our attention.

With very few exceptions, the time series are difference stationary, i.e. I(1) processes. This finding and the more than 120 monthly observations (141 for the period from January 1993 to September 2004 and 129 for the period from January 1994 to September 2004) motivate us to use cointegration to study to what extent, if at all, exchange rate volatility influences export

performance. To check our results, we carry out OLS estimations for variables in year-on-year changes ($dx = \ln(x_t) - \ln(x_{t-12})$) that turn out to be stationary in levels.

We separate the countries under study into two groups. One group contains countries where no changes in the exchange rate regimes occurred over the time span of the monthly data, namely Croatia, Romania and Slovenia. The other group includes the remaining countries. Results for DOLS and the bounds testing approach are reported for all countries. Coefficient estimates are shown only if cointegration relationships could be established for the export equation. Results for year-on-year changes are reported systematically. Lagged values of both volatility measures and FDI are used for panel data. The outcome of this exercise is included in the paper only if the results are markedly different from the results based on contemporaneous volatility and FDI. The estimation results are displayed in tables 7a to 7c. To save space, these tables only include the coefficient estimates for the volatility measures.¹⁵

4.2.1 Croatia, Romania and Slovenia

For the three countries without changes in the exchange rate regime we used only the direct volatility measure.¹⁶ The absence of major changes in the exchange rate regime does not necessarily imply that these countries are immune to forex volatility, however. As a matter of fact, they appear to be unevenly affected by it. Slovene exports do not seem to be linked to exchange rate volatility. For all specifications including real and nominal exports both in effective terms and to the euro area, the coefficient of exchange rate volatility is statistically insignificant except for the case of lagged volatility and FDI for nominal exports to the euro area. Moreover, the coefficient estimates for the rest of the variables in the model generally bear the expected signs when they are significant (except for the domestic relative price). For Romania, it is difficult to establish cointegration in half of the cases. When cointegration is found, and if the coefficient estimate is significant at any standard significance level, volatility is negatively correlated to exports. However, this only holds for nominal exports. For year-on-year changes, a statistically significant negative relationship is found between exports and lagged forex volatility. The biggest impact of forex volatility on exports could be established for Croatia. Although mostly unimportant when volatility is used in a contemporaneous manner, volatility with a lag of 12 months is associated negatively with exports, and this relationship appears to be particularly robust: not only are the results very similar for nominal and real exports but they are also very comparable regardless of the estimation method used (DOLS, ARDL or year-on-year changes).¹⁷

¹⁵ The full results are available from the authors upon request.

¹⁶ We did not construct dummies as the exchange rate regimes in these countries remained unchanged.

¹⁷ The fact that the coefficient estimates, if significant, usually bear the expected sign deserves mention. For real exports, the sign on the real exchange rate is, however, negative, which indicates that an appreciation of the exchange rate is associated with an increase in exports. Time and again, the sign on FDI has a counterintuitive negative sign.

4.2.2 The Czech Republic, Hungary, Poland, Russia and Slovakia

This section dissects the results obtained for the group of countries which experienced a number of changes in their exchange rate regimes. Putting the Czech Republic under the microscope reveals that exports, especially those to the euro area, are hampered by exchange rate volatility, conditioned on the other variables included in the export functions. This result comes instantaneously without using lagged variables. What is somewhat surprising is the finding that when we use the dummy variables to capture volatility increases related to regime changes, the estimated coefficients usually turn out to be positive, indicating that the shift toward a more flexible regime tends to generate more export flows. This holds true for both dummy variables, each of which captures a somewhat different time period. The fact that a negative relationship could be found between the direct measure of forex volatility and exports and that the relationship is reversed for the dummies may possibly be explained by a changing exchange rate volatility during the float and, perhaps more importantly, during the period prior to the float.

The story of Hungary is a little bit different from that of the Czech Republic. For nominal and real exports, the direct volatility measure is mostly significant and always has a positive sign. However, when volatility is considered with a lag of 12 months, the coefficients switch sign all of a sudden. This is something that we could observe for the panel estimations; it indicates the delay with which an increase in exchange rate volatility (negatively) affects export flows. Such a delay might result from export contracts which often have a duration of up to one year. Coming to the dummy variables, it appears that the dummy that covers the recent widening of the fluctuation bands to $\pm 15\%$ most often has a negative sign, with or without lags. However, this observation only holds for the real export equation, as the relationship turns out to be rather insignificant for nominal exports. Regarding the dummy covering the period from 1995 to 2004, the results are conflicting in the sense that the direction of the relationship is fairly difficult to establish across the nominal and real export equations.

In Poland, we can observe a situation partly similar to the Hungarian story. For both nominal and real exports, the effect of the lagged direct volatility measure on export flows is negative if there is a statistically significant relationship. Exactly the same applies for the first dummy spanning the period from October 1998 to September 2004: The lagged dummy always bears a negative sign. However, for the second dummy, which took the value of 1 from March 2000 to September 2004, the sign is found to be consistently positive. A first explanation for this phenomenon may be that exchange rate volatility generated by the widening of the fluctuation bands impacted negatively on exports; when poorly performing export firms dropped out after a while, only those which were able to cope with increased volatility remained. The second explanation is similar in spirit to the one provided for the Czech case. Over the period from 1998 to 2004, there may have been several forex volatility regimes. Thus, volatility increased after the widening of the bands and calmed down later on. This may have coincided with the official move toward a free float, which did not generate any additional forex volatility.

Tabelle 7a

Exchange Rate Volatility and Exports for the Czech Republic and Russia

Czech Republic			Russia			
<i>Real exports</i>						
VOL						
EFF	DOLS (0,3) SIC		EFF	DOLS (0,0) SIC		
	ARDL (1,1) SIC			ARDL (1,1) HQ	-0.052***	
	YOY	0.016		YOY	0.004	
EUR	DOLS (0,0) SIC	-0.026***	EFF	DOLS (0,0) SIC	0.045***	
	ARDL (1,1) SIC	-0.028**		VOL-12	ARDL (1,1) SIC	0.053***
	YOY	0.005		FDI-12	YOY	0.044***
DUM1						
EFF	DOLS (0,0) SIC		EFF	DOLS (0,1) SIC		
	ARDL (2,2) SIC			ARDL (1,1) SIC	0.025	
	YOY	0.071***		YOY	0.111***	
EUR	DOLS (1,0) HQ	-0.035**				
	ARDL (1,1) SIC					
	YOY	0.069***				
DUM2						
EFF	DOLS (0,3) SIC					
	ARDL (2,2) SIC					
	YOY	0.065***				
EUR	DOLS (0,0) SIC	0.008				
	ARDL (1,1) SIC					
	YOY	0.065***				
<i>Nominal exports</i>						
VOL						
EFF	DOLS (0,0) SIC	-0.022**	EFF	DOLS (4,4) AIC	-0.002	
	ARDL (1,1) SIC	-0.024		ARDL (1,1) HQ	-0.024**	
	YOY	0.002		YOY	0.025	
EUR	DOLS (0,0) SIC	-0.072***	EFF	DOLS (0,0) SIC	0.042***	
	ARDL (1,1) SIC			VOL-12	ARDL (1,1) SIC	0.043***
	YOY	-0.013		FDI-12	YOY	0.065***
DUM1						
EFF	DOLS (0,0) SIC	0.068**	EFF	DOLS (0,0) SIC	-0.155**	
	ARDL (2,2) SIC	0.081		ARDL (2,2) SIC		
	YOY	0.076***		YOY	0.043	
EUR	DOLS (0,0) SIC					
	ARDL (1,1) SIC					
	YOY	0.124***				
DUM2						
EFF	DOLS (3,3) HQ	0.062***				
	ARDL (1,1) SIC	0.058				
	YOY	0.077***				
EUR	DOLS (3,4) AIC					
	ARDL (1,1) SIC					
	YOY	0.182***				

Source: Authors.

Notes: Figures in parenthesis after DOLS (ARDL) show the number of leads and lags (lags) used. SIC: Schwarz, HQ: Hannan-Quinn, AIC: Akaike; SIC, HQ and AIC indicate that the lag structure is determined using the respective information criteria. YOY refers to the OLS estimates on year-on-year changes. VOL is the direct volatility measure, DUM1 and DUM2 are the dummies shown in table 4. EFF indicates effective exports while EUR denotes exports to the euro area. VOL-12 and FDI-12 show that volatility and FDI are used with a lag of 12 months. *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively.

Exchange Rate Volatility and Exports for Hungary, Poland and Slovakia

Hungary			Poland			Slovakia		
<i>Real exports</i>								
VOL								
EFF	DOLS (0,0) SIC	0.082***	EFF	DOLS (0,0) SIC		EFF	DOLS (0,0) SIC	0.099***
	ARDL (4,4) FIX	0.116***		ARDL (1,1) SIC			ARDL (1,1) SIC	
	YOY	0.057**		YOY	-0.03		YOY	0.081***
EUR	DOLS (0,0) SIC		EUR	DOLS (4,4) AIC		EUR	DOLS (0,0) SIC	0.029**
	ARDL (2,2) SIC			ARDL (1,1) SIC			ARDL (1,1) SIC	
	YOY	0.079***		YOY	-0.045			
EFF (VOL-12)	DOLS (0,0) SIC	-0.06***	EFF	DOLS (0,2) HQ	-0.069*			
	ARDL (4,4) FIX	-0.102**	VOL-12	ARDL (1,1) SIC				
	YOY	-0.127***	FDI-12	YOY	0.029			
EUR (VOL-12)	DOLS (0,0) SIC		EUR	DOLS (0,0) SIC				
	ARDL (2,2) SIC		VOL-12	ARDL (1,1) SIC				
	YOY	-0.09***	FDI-12	YOY	0.029			
DUM1								
EFF	DOLS (0,0) SIC	-0.074**	EFF	DOLS (0,0) SIC	0.069***	EFF	DOLS (0,0) SIC	-0.162***
	ARDL (2,2) SIC	-0.164**		ARDL (1,1) SIC			ARDL (1,1) SIC	
	YOY	0.083**		YOY	-0.013		YOY	0.066**
EUR	DOLS (0,0) SIC		EUR	DOLS (1,0) SIC		EUR	DOLS (0,0) SIC	-0.063***
	ARDL (2,2) SIC	-0.185**		ARDL (1,1) SIC			ARDL (1,1) SIC	
	YOY	0.02		YOY	-0.004		YOY	0.029
EUR (VOL-12)	DOLS (4,4) FIX	-0.115***	EFF	DOLS (0,2) HQ	-0.05*			
	ARDL (2,2) SIC	-0.204***	FDI-12	ARDL (1,1) SIC				
	YOY	-0.049*		YOY	-0.048			
			EUR	DOLS (0,2) HQ	-0.088***			
			FDI-12	ARDL (1,1) AIC				
				YOY	-0.04			
DUM2								
EFF	DOLS (0,0) SIC	-0.018	EFF	DOLS (0,4) AIC	0.098***	EFF	DOLS (1,2) AIC	0.218***
	ARDL (4,4) FIX	0.013		ARDL (1,1) SIC			ARDL (1,1) SIC	
	YOY	0.094***		YOY	0.097***		YOY	0.088***
EUR	DOLS (0,0) SIC		EUR	DOLS (0,0) SIC	0.178***	EUR	DOLS (0,0) SIC	0.157***
	ARDL (2,2) SIC	0.014		ARDL (1,1) SIC			ARDL (1,1) SIC	
	YOY	0.102***		YOY	0.088***		YOY	0.041**
<i>Nominal exports</i>								
VOL								
EFF	DOLS (0,0) SIC	0.03***	EFF	DOLS (0,0) SIC	0.097***	EFF	DOLS (0,0) SIC	0.058***
	ARDL (2,2) SIC	0.04*		ARDL (1,1) SIC			ARDL (1,1) SIC	
	YOY	0.04***		YOY	-0.028		YOY	0.14***
EUR	DOLS (0,0) SIC	0.033***	EUR	DOLS (0,0) SIC	0.11***	EUR	DOLS (0,4) AIC	-0.104*
	ARDL (1,1) SIC			ARDL (1,1) SIC			ARDL (4,4) FIX	-0.132*
	YOY	0.064***		YOY	0.018		YOY	-0.064
EFF (VOL-12)	DOLS (0,0) SIC	-0.039***	EFF	DOLS (0,0) SIC	-0.051***	EUR	DOLS (0,0) SIC	0.124***
	ARDL (1,1) SIC		VOL-12	ARDL (1,1) SIC		VOL-12	ARDL (1,1) SIC	
	YOY	-0.06***	FDI-12	YOY	-0.067**	FDI-12	YOY	0.139***
EUR (VOL-12)	DOLS (0,0) SIC	-0.025***	EUR	DOLS (0,0) SIC	-0.06***			
	ARDL (3,3) AIC	-0.033**	VOL-12	ARDL (1,1) SIC				
	YOY	-0.071***	FDI-12	YOY	-0.121***			
DUM1								
EFF	DOLS (0,0) SIC	-0.016	EFF	DOLS (4,4) AIC		EFF	DOLS (1,0) AIC	-0.166***
	ARDL (4,4) AIC	-0.01		ARDL (1,1) SIC			ARDL (1,1) SIC	
		0.134***		YOY	-0.09***		YOY	0.069**
EUR	DOLS (0,0) SIC	-0.005	EUR	DOLS (4,4) AIC		EUR	DOLS (0,0) SIC	-0.179***
	ARDL (2,2) SIC			ARDL (1,1) SIC			ARDL (3,3) AIC	-0.197***
	YOY	0.083		YOY	-0.018		YOY	0.02
			EFF	DOLS (0,0) SIC	-0.068***	EUR	DOLS (1,0) AIC	-0.096*
			FDI-12	ARDL (1,1) SIC		VOL-12	ARDL (1,1) SIC	
				YOY	-0.087***	FDI-12	YOY	-0.108*
			EUR	DOLS (0,0) SIC	0.021			
			FDI-12	ARDL (1,1) SIC	-0.059*			
DUM2								
EFF	DOLS (0,0) SIC	-0.091*	EFF	DOLS (0,0) SIC	0.044	EFF	DOLS (1,1) AIC	0.155***
	ARDL (4,4) AIC	-0.098		ARDL (1,1) SIC			ARDL (1,1) SIC	
	YOY	0.063**		YOY	0.112***		YOY	0.113***
EUR	DOLS (0,0) SIC	-0.111*	EUR	DOLS (0,0) SIC		EUR	DOLS (0,4) AIC	-0.136
	ARDL (1,1) SIC	-0.088		ARDL (1,1) SIC			ARDL (1,1) SIC	
	YOY	-0.135***		YOY	0.059*		YOY	-0.013
						EUR	DOLS (0,0) SIC	0.207**
						FDI-12	ARDL (1,1) SIC	
							YOY	0.036

Source: Authors.

Note: See table 7a.

The case of Slovakia contrasts with the findings for the other countries because the direct volatility measure seems to be positively associated with exports, and this assessment remains unchallenged even when using the volatility measure with lags. Concerning the impact of the different exchange rates regimes, the situation is astonishingly similar to that observed in Poland: the dummy variable that covers the period starting in January 1997, when the fluctuation margins were widened to $\pm 7\%$, indicates a negative relationship between the regime shift and exports. However, when a managed float was officially introduced in October 1998, this conclusion did not apply any more, as the sign becomes positive. The two explanations put forward for Poland may also apply here.

Let us now take a closer look at Russia, for which we only examined exports in effective terms because of the unavailability of data for exports to the euro area or the U.S. economy alone. The results contradict each other, as both negative and positive signs can be found even if the positive signs appear to outweigh the negative ones. The fact that no clear relationship between volatility and exports could be found is not very surprising in the light of the high share of oil-related products in total exports (amounting to about 50% of total exports in 2003). Exports of oil-related products may be suspected to be linked more closely to the level of the (real) exchange rate than to its volatility. While

Table 7c

Exchange Rate Volatility and Exports for Slovenia, Romania and Croatia

Slovenia			Romania			Croatia			
<i>Real exports</i>									
VOL									
EFF	DOLS (0,0) SIC	0.032	EFF	DOLS (0,4) SIC	-0.03*	EFF	DOLS (4,1) AIC	0.172	
	ARDL (3,3) SIC	0.02		ARDL (2,2) SIC			ARDL (1,1) SIC		
	YOY	0.043		YOY	0.000		YOY	-0.346**	
EUR	DOLS (0,0) SIC	0.015	EUR	DOLS (0,3) SIC	-0.017	EUR	DOLS (0,0) SIC	0.028	
	ARDL (3,3) SIC	0.016		ARDL (2,2) SIC			ARDL (4,4) AIC	0.034	
	YOY	-0.006		YOY	0.006		YOY	0.103	
			EFF	DOLS (0,4) SIC		EUR	DOLS (4,1) AIC	-0.087*	
				Vol(-12)	ARDL (2,2) SIC			ARDL (4,4) FIX	-0.071*
				FDI(-12)	YOY		-0.034*	FDI-12	YOY	-0.134*
			EUR	DOLS (0,0) SIC					
				Vol(-12)	ARDL (2,2) SIC				
				FDI(-12)	YOY	-0.041*			
<i>Nominal exports</i>									
VOL									
EFF	DOLS (0,0) SIC	-0.004	EFF	DOLS (0,1) SIC	-0.019	EFF	DOLS (0,0) SIC	-0.057	
	ARDL (3,3) SIC	0.014		ARDL (2,2) SIC			ARDL (1,1) SIC		
	YOY	0.033		YOY	0.004		YOY	-0.458***	
EUR	DOLS (0,0) SIC	-0.052*	EUR	DOLS (3,4) AIC	0.012	EUR	DOLS (3,3) AIC	0.035	
	ARDL (1,1) SIC	-0.058		ARDL (1,1) SIC			ARDL (2,2) SIC		
VOL-12	YOY	-0.008		YOY	0.061		YOY	0.090	
FDI-12			FDI-12			FDI-12	DOLS (0,0) SIC	0.124*	
							ARDL (1,1) SIC		
							YOY	0.1	
						EUR	DOLS (1,0) AIC	-0.083**	
							VOL-12	ARDL (2,2) AIC	-0.125***
	YOY	-0.21***		YOY	-0.21***	FDI-12	YOY	-0.21***	

Source: Authors.
Note: See table 7a.

for the other countries both real and nominal exchange rates are correlated positively with exports, i.e. a depreciation results in an increase in exports, the results for Russia indicate the opposite to be the case, which is especially true of the real exchange rate: An appreciation of the exchange rate is linked to a rise in exports.

5 Concluding Remarks

In this paper, we made an attempt to provide answers to the questions of whether changes in exchange rate regimes and exchange rate volatility have any impact on the exports of transition economies.

The countries under study can be divided into two broad groups reflecting the evolution of exchange rate regimes over time. One group of countries, which includes the Czech Republic, Hungary, Poland and Slovakia, started transition with pegged regimes and then moved, at different paces, toward more flexibility. Bulgaria first had a managed float and then switched to a currency board in 1997. Russia and Ukraine experienced cyclical movements from flexibility to more rigid regimes and then back again to more flexibility. The other group, which contains Croatia, Romania and Slovenia, has experienced no changes in their exchange rate regimes for the last ten years or so.

Both the direct impact of forex volatility and its indirect impact via changes in the exchange rate regime were assessed on the basis of standard export equations, augmented with FDI, which captures the very essence of economic transformation. The estimation results for panels including ten and eight transition economies suggest that a rise in forex volatility measured either directly or via changes in the exchange rate regime weakens exports to some extent, and that this negative impact is transmitted with some delay rather than being instantaneous. A meticulous look at sectoral exports confirms this finding in the sectors chemicals and different types of manufacturing. These sectors, which together account for up to 80% of total exports, are found to be adversely affected by increased exchange rate volatility.

More country-specific insights can be gained from time series estimations based on cointegration and using year-on-year changes in the variables. The results range from one end of the spectrum to the other. For some countries, such as Slovenia and Russia, there is little evidence of a negative relation between forex volatility and exports. This outcome is not surprising in view of the low volatility observed for the Slovenian tolar, as the Bank of Slovenia was trying to target not only the level but also the volatility of the exchange rate. An explanation for Russia's lack of sensitivity toward forex volatility might be the high share of oil-lock of products in total exports (close to 50%), the demand for which depends more on the exchange rate level than on its variance. The evidence for Romania is weak. Croatia, the Czech Republic, Hungary and Poland are located at the other end of the spectrum; for these countries, the estimation results provide some evidence of the adverse effect of forex volatility on exports. Although the results are sensitive to the use of real and nominal variables and to different estimation methods, some general conclusions may be drawn if we bear these caveats in mind. While exchange rate volatility seems to have an instantaneous effect on exports in the Czech case, it translates into poor export performance only with some delay in the three other countries.

Regarding shifts in the exchange rate regime, or more specifically, a move toward more flexibility, it appears that the recent period of widening fluctuation bands to $\pm 15\%$ in Hungary can be associated with a fall in exports, conditioned, of course, on other variables such as foreign and domestic output, prices, the level of the exchange rate and FDI. For Poland and Slovakia, we can observe the onset of more exchange rate flexibility being accompanied by a drop in exports, but exports seem to have recovered later on.

To summarize, we did not embark on this enterprise in vain, as we found convincing evidence that exchange rate volatility might impact negatively on export flows in the CEE transition economies. Hence, our project turns out to have been more than just another blur project. We also found that key exporting sectors, e. g. manufacturing, might be badly affected by exchange rate volatility. Nonetheless, country-specific results also showed that some countries are concerned to a large extent whereas others seem to be spared the harmful effect of exchange rate volatility. However, the countries with the largest share of manufacturing goods in total exports, such as the Czech Republic and Hungary, are found to be more likely to be exposed to exchange rate volatility than the others. Another reason for the higher vulnerability of these countries to forex volatility might be their large share of intraindustry trade in total trade, and in particular in manufacturing (Fontagné and Freudenberg, 1999).¹⁸ Furthermore, this negative impact might be related to higher exchange rate flexibility for some countries. This may be an important motivation for the new EU Member States, especially for Hungary and – perhaps to a lesser extent – for the Czech Republic and Poland, to aim at achieving greater exchange rate stability.

¹⁸ See Fidrmuc and Korhonen (2004) for the share of intraindustry trade in total trade of the countries under study.

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Financial Globalization, Capital Account Liberalization and International Consumption Risk-Sharing

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This paper analyzes whether international risk-sharing has improved along the same lines as the process of financial globalization. International financial markets allow investors to efficiently diversify their risks. Agents can protect themselves against fluctuations in their incomes through trading in assets with appropriate payoff structures. However, the usual finding in the literature is that international risk-sharing is quite limited. We argue that despite the liberalization of capital accounts and the removal of various legal barriers to capital mobility, international risk-sharing still appears to be rather limited.

1 Introduction

In theory, developed financial markets and stable financial intermediaries allow investors to efficiently pool their risks. Agents can protect themselves against fluctuations in their incomes through trading in assets with appropriate payoff structures. If, for example, the GDP growth rates in two countries are negatively correlated so that rates of return in country A are strong when they are weak in country B and vice versa, inhabitants of each country could buy foreign assets in the other country to smooth the fluctuations in their income and therefore in their consumption. For this kind of risk-sharing it makes no difference whether agents invest in foreign assets directly or keep an account with a bank which invests abroad. Hence, domestic consumption growth should not depend exclusively on domestic income growth, but also on global income growth and, as this argument holds for every financially integrated country, the growth rates of consumption across these countries should be highly correlated.

However, the usual finding in the literature is that international risk-sharing is rather limited.⁴ Backus et al. (1992) demonstrate that cross-country consumption correlations are too low to be consistent with a model characterized by complete markets and perfect capital mobility. In addition, French and Poterba (1991) report a large home bias in equity holdings (i.e. unexplained preferences for domestic equity) and consequently only a small degree of international diversification. Moreover, various authors have empirically tested for risk-sharing using consumption data and find that the implications of complete market models are largely rejected.⁵ In particular, a common result is that the cross-country correlations of output growth rates are higher than those of consumption growth rates, which indicates that the opportunities for international risk-sharing have not been fully exploited. Moreover, consumption is usually found to react to country-specific shocks, which is inconsistent with perfect risk-sharing.

However, the ongoing process of globalization and financial market integration has increased the amount of international financial transactions. Tesar and Werner (1998) present some evidence that the home bias, although still substantial, has somewhat declined over time. Europe appears to be a particularly interesting case in this context, since the creation of the EU and EMU (Economic and Monetary Union) were to a great extent motivated by the idea of promoting

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⁴ For recent surveys see Obstfeld and Rogoff (2000) and Lewis (1999).

⁵ See, for instance, Obstfeld (1994), Canova and Ravn (1996), Lewis (1996).

the integration of financial and goods markets. Blanchard and Giavazzi (2002), for instance, report that the Feldstein and Horioka (1980) puzzle, which emphasizes the high correlation between domestic savings and domestic investment, has basically disappeared in Europe over the last decades, suggesting that capital mobility has indeed increased. Similarly, capital mobility has also risen in Austria over time. Over the period from 1980 to 1998 foreign assets and liabilities as a share of GDP more than doubled in Austria.⁶ For the years 1998 to 2002, Nesvadba (2004) reports an increase of more than 50%. Thus, one might expect risk-sharing to have improved over time.

The purpose of this paper is to review the empirical evidence on whether the continuing process of globalization coincides with an increase in the extent of risk-sharing among industrialized countries and in particular the EU-15 Member States.

The remainder of the paper is structured as follows: Section 2 discusses financial market integration in Europe. Section 3 provides a brief overview of the methodology used in the empirical literature, and section 4 surveys the empirical evidence on the evolution of risk-sharing over time. Section 5 concludes the paper.

2 Measures of Financial Market Integration in Europe

We start from the assumption that capital controls are the main obstacle for financial integration and, consequently, risk-sharing in Europe. Therefore, we will sketch the ups and downs in the liberalization of capital accounts from the foundation of the European Economic Community (EEC) to the creation of EMU.⁷ Additional obstacles to financial integration in Europe are the remaining differences in national financial regulations and the segmentation of retail markets for financial services. Therefore, measures implemented to remove these barriers to a single financial market are described at the end of this section.

2.1 Capital Account Liberalization

Already in 1957, the freedom of capital movements was codified in the Treaty of Rome, the founding text of the EEC. The Treaty of Rome (“the Treaty”) states that “to the extent necessary to ensure the proper functioning of the Common Market, member states shall progressively abolish between themselves all restrictions on the movement of capital” (Article 67.1). The commitment to liberalization was admittedly weak, as the operational agreements asked countries only to abstain from introducing new restrictions. The Treaty also contained safeguard clauses which allowed for deflection from the path of liberalization. In the early 1960s, two EC directives were adopted that aimed at specifying the obligations from the Treaty for intra-Community flows. For the rest of the 1960s, the momentum for liberalization was lost, as countries like France and Italy feared exchange rate devaluations caused by speculation and therefore resisted further attempts to liberalize short-term capital movements.

⁶ See Lane and Milesi-Ferretti (2001).

⁷ For a detailed report on the liberalization of capital accounts in Europe, see Bakker (1996).

In general, the maintenance of exchange rates was one of the goals of economic policy, and whenever liberalization measures posed a threat to that goal, they were reversed. Such a threat arose in the early 1970s from the massive capital flows out of the U.S.A. and into European countries. The governments of EEC member countries tried to avoid the economic consequence of such flows, the appreciation of their currencies, for they feared a loss of competitiveness. The oil crisis of 1973 confronted most EEC members with the risk of large current account deficits, prompting them to impose stringent controls on capital outflows. The accession of Denmark, Ireland and the U.K. can be seen as a further drawback for the liberalization of capital accounts in the EEC, as these countries not only had not taken part in the liberalization process of the 1960s, but had also developed their own traditions of restraining capital movements. The lost momentum for liberalization was also reflected in the Commission's attitude toward capital controls. Being a strong advocate of liberalization during the 1960s, the Commission now called for measures to control undesirable capital flows.

The effectiveness of capital controls was undermined by the lack of legal enforceability and new financial instruments. Also, the growing influence of market participants operating cross-border exacerbated the maintenance of capital controls in all EEC member states. In 1979 the U.K., under its newly elected conservative government, implemented rapid liberalization of capital movements. In the same year, the European Monetary System (EMS) was founded. Aiming at enhancing European integration by creating monetary stability, the EMS neglected capital liberalization at the beginning. In the EMS, in case of downward pressure on a member's currency, countries with stable exchange rates were to intervene to support that currency. No later than 1982, Germany and the Netherlands began to question that mechanism and proposed capital account liberalization as a solution. The reluctance to give up controls stemmed partly from institutional reasons: maintenance of capital controls required a large bureaucratic apparatus; once abandoned, the controls might not be reimposed easily.

But then France joined the liberalization movement, as it found the very strict measures imposed in 1983 to be relatively ineffective. By the mid-1980s the Commission, too, reassumed a proliberalization attitude and paved the way for the Single European Act of 1987. Equally emphasizing the freedom of capital movements and that of goods and services, the Single European Act led to the adoption of the directive of 1988⁸, which aimed at the establishment of a fully liberalized financial market by 1990. The directive contained concessions in the form of longer transition periods for Member States which were not ready to give up controls in the near future, especially the newly acceded Mediterranean countries. From 1988 on, EEC Member States abandoned their controls successively, Greece being the last to do so in 1994.

⁸ Council Directive 88/361/EEC of 24 June 1988 for the implementation of Article 67 of the Treaty.

2.2 Financial Services Regulations

Besides capital account liberalization, other obstacles to financial integration were abolished during the period under consideration. The freedom of establishment in the financial services sector was already granted in 1973. The first banking coordination directive (1977) aimed at the harmonization of rules and administrative provisions applicable to the operations of credit institutions. But the impact of these directives was limited due to the capital account restrictions still in place at that time.

A breakthrough occurred after adoption of the Single European Act when the second banking coordination directive was implemented in 1993. The second directive established the principle of a single license allowing banks and other financial institutions to offer their services throughout the Community. It relies on three pillars, namely the further harmonization of regulations governing the financial sector, the principle of home-country control (that is, the supervision of a financial institution operating in any Member State by the supervising bodies of its country of origin) and the mutual recognition by the national supervisory authorities of the rules and regulations in the countries of origin of the banks operating on their territory. The rules harmonized by the second directive include regulations on the preparation of annual accounts, the definition of a solvency ratio, the monitoring of market risks, the prevention of money laundering and the limitation of large exposures. For Romero de Avila (2003), the codification of some minimum standards together with the principle of mutual recognition “opened up a process of competitive deregulation (what has often been called a “race to the bottom”) in the range of banking activities permitted in EU countries,” as any more stringent national regulation would entail a competitive disadvantage for national financial institutions. In the aftermath of the implementation of the second directive, cross-border branching increased by a substantial 58% within the first three years.

To sum it up, the easing of capital controls was on the European agenda already in the 1960s, soon after the signing of the Treaty of Rome. The collapse of Bretton Woods and the oil crises in the 1970s changed the political priorities and led to an increase in restrictions on capital mobility. In addition, the intensification of economic integration in Europe as well as the growing awareness of the controls’ declining effectiveness within a changed financial landscape convinced policymakers of the need to integrate financial markets. Beginning with the Single Act of 1986, capital controls were abolished in all Member States to pave the way for EMU. Approximately about the time capital controls had been abolished in the last Member State, the establishment of a Single Market for financial services was begun, opening up the way to intensified competition among European banks and other financial institutions. But one has to keep in mind that other factors that are crucial to the integration of financial markets, such as taxation, corporate laws or the judicial enforcement of investor rights, which are subject to national standards, still represent informal barriers to perfect financial integration within the EU.

3 Testing for Risk-Sharing Using Consumption Data

Empirical studies of risk-sharing are usually based on two central implications of economic theory: (1) Under full risk-sharing, individual country consumption growth rates should move one for one with aggregate consumption growth, and (2) consumption growth rates should not be correlated with idiosyncratic shocks, in particular income shocks.

Empirical tests of these theoretical implications are in general implemented by running regressions of individual consumption growth on aggregate consumption growth and aggregate GDP growth:

$$c_t^i = a^i + \beta c_t^a + \gamma y_t^i + u_t,$$

where c_t^i and c_t^a denote consumption growth in country i , aggregate consumption growth y_t^i denotes individual GDP growth and u_t is an error term. Under complete markets, agents are able to completely eliminate any idiosyncratic risk. Thus, individual consumption should move one for one with aggregate consumption and should not depend on idiosyncratic variables, such as idiosyncratic income. Thus, testing the joint hypothesis that $\beta = 1$ and $\gamma = 0$ constitutes a test of perfect risk-sharing. Under incomplete markets, individual consumption will also depend on the realization of idiosyncratic shocks, such as income shocks. Hence, in this case the coefficient γ would be significantly different from zero.

In general, perfect risk-sharing is strongly rejected in the data.⁹ Sorenson and Yosha (1998) show that under incomplete markets, the coefficient on idiosyncratic income can be interpreted as the fraction of risk that is not insured against country-specific risks. They find that about 40% of income shocks are smoothed in the EU. Moreover, risk-sharing among the EU member countries appears to be rather limited compared to risk-sharing among U.S. states. Asdrubali et al. (1996) find that risk-sharing among U.S. states is considerably higher. In particular, about 75% of idiosyncratic income shocks are smoothed among U.S. states.

4 Has Risk-Sharing Changed over Time?

Most of the empirical literature discussed so far imposed parameter constancy over time. Hence, the literature has mostly ignored that the increasing financial globalization and integration might have had a considerable impact on the amount of risk-sharing that individual countries can achieve.

As discussed earlier, capital flows among the EU-15 countries were more restricted in the 1970s and early 1980s than in the 1960s. The late 1980s and 1990s were again characterized by more liberal regimes. Nevertheless, the individual country experiences displayed considerable heterogeneity, in particular with respect to the dating of deregulation/reregulation. In principle it would be possible to test for the impact of changes in the capital account regime on risk-sharing by applying the standard Chow test for parameter stability to the regression equation. There are several disadvantages to such a strategy: First, in some cases, it is difficult to date liberalization measures, since they were implemented gradually. Second, if risk-sharing relationships respond with a lead

⁹ See, for instance, Lewis (1999) and the references therein.

or a lag to changes in capital account restrictions, the Chow test for a break at a known date may have low power. Finally, while in theory changes in the degree of capital account restrictions should result in changes in the degree of risk-sharing, many other factors might be important, too. One way to deal with the resulting specification problem is to choose a data-driven approach which does not impose a priori knowledge of the break dates.

Obstfeld (1994) runs time series regressions separately for each of the G-7 countries and finds some evidence for partial risk-sharing and a trend toward an increase in risk-sharing after the Bretton Woods era.

Following Obstfeld (1994), Moser et al. (2004) estimate time series regressions for the EU-15 countries and analyze whether the regression relationship has remained stable over time. The procedure proposed in Bai and Perron (1998a, 1998b) is used to identify structural breaks at unknown dates. To assess whether risk-sharing has changed over time, the evolution of the slope coefficients across different regimes is analyzed. Perfect risk-sharing entails an increase in the comovement of consumption in country i with aggregate consumption and a decline in the exposure to idiosyncratic income. In identifying the causes of changes in the degree of risk-sharing, it is important to note that changes in the degree of capital account liberalization and regulations on financial services are neither necessary nor sufficient to trigger changes in risk-sharing. However, we argue that at least in the sphere of economic policy it is in these areas where the most important changes took place. It is therefore of interest whether observed changes in risk-sharing are consistent with changes in the policy regime, at least with respect to the general trends across Europe.

The main results reported in Moser et al. (2004) can be summarized as follows: It is found that for a number of countries there was no change in the degree of risk-sharing during the period under consideration. Notably, for some countries (Italy, France, Greece and Portugal) risk-sharing has even deteriorated over time, which is broadly consistent with an adverse influence of the reregulation of capital accounts in these countries after the breakdown of the Bretton Woods regime. However, with the exception of Portugal, the degree of risk-sharing in Europe did not recover in the 1980s and 1990s. In fact, Portugal after 1985 is the only example where intra-European risk-sharing has improved. Thus, overall it appears that financial globalization has not improved consumption risk-sharing in the EU-15.

Using a methodology closely related to that in Asdrubali et al. (1996), Artis and Hoffmann (2004) analyze how risk-sharing has evolved over time. They examine a sample of OECD countries and find no indication of an improvement in risk-sharing in the more recent subsample starting in 1980. However, they argue that permanent and transitory shocks to GDP are qualitatively different sources of risk and should therefore be analyzed separately in risk-sharing regressions. Taking this distinction into account, Artis and Hoffmann (2004) find that the countries in their sample have become insured against permanent shocks during the period of financial globalization.

In any case, international risk-sharing in Europe appears to be far from perfect, which may also have far-reaching implications for EMU, since the question of how to deal with asymmetric shocks is important for a monetary union. It is usually found that macroeconomic shocks are less synchronized among Euro-

pean countries than among U.S. states. However, as long as international financial markets provide insurance against regional shocks, these asymmetries may not be problematic.

One might argue that the introduction of the single currency occurred only relatively recently and that it is therefore not adequately reflected in the empirical analysis. It might be the case that the single currency has a profound impact on international trade in goods and assets which has not become discernible so far. Along these lines, Mélitz and Zumer (1999) argued that the single currency will promote risk-sharing among EMU countries. Moreover, the effects of recent policy initiatives, such as the Financial Services Action Plan of the European Commission, might result in more risk-sharing in the future. Without having identified the sources of the apparent lack of an improvement in risk-sharing, though, the effects of EMU as well as of other recent policy initiatives on intra-European risk-sharing are hard to judge. Thus, a detailed analysis of potential explanations of the limited extent of risk-sharing appears to be an interesting and important topic that warrants further research.

5 Concluding Remarks

This paper has dealt with the issue of whether international risk-sharing has improved along the same lines as the process of financial globalization. In some sense this is equivalent to asking the question of how integrated the financial markets really are. Using a standard risk-sharing regression covering the period 1960–2002, Moser et al. (2004) find that risk-sharing among the EU-15 countries does not appear to have improved. Using a sample of OECD countries, Artis and Hoffmann (2004) present empirical evidence that countries have become better insured against permanent shocks, but not against temporary shocks. This would imply that the increase in capital mobility has led to a more efficient allocation of permanent income risk and thereby increased economic welfare.

Nevertheless, international risk-sharing still appears to be rather limited despite the liberalization of capital accounts and the removal of various legal barriers to capital mobility. However, it can be argued that legal barriers are only one friction that prevents the integration of international financial markets. Indirect barriers such as differences in institutional aspects including investor protection and accounting standards, which are reflected in transaction and information costs, might be even more important than capital account restrictions.¹⁰

A variety of other legal and regulatory factors can also influence the degree and geographical distribution of the international diversification of portfolios. A recent example in Austria is an investment restriction which provides financial incentives to purchase stocks (effected by certain investment vehicles on behalf of investors) that are first-listed at exchanges in a European Economic Area (EEA) country whose stock market capitalization does not exceed 30% of that country's GDP over a number of years (see Federal Law Gazette No. 155/2002 Article 108h paragraph 1 and Federal Law Gazette No. 10/2003 Article I). At

¹⁰ Empirical evidence in favor of the hypothesis that risk-sharing is related to institutional aspects and in particular to investor protection is reported in Scharler (2004).

present this condition applies in particular to the new Member States and Austria itself.¹¹ The investment products that are structured according to those regulations have become quite popular so far.¹² It is therefore likely that these financial regulations have caused a substitution of the domestic and foreign assets which they cover for financial assets which they do not cover and which were previously held by Austrian residents.

Overall, most studies on international risk-sharing point toward a substantial divergence between theory and empirical evidence. One interpretation of this divergence is that the degree of capital mobility is not high enough to allow for an efficient international diversification of financial asset holdings.

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¹¹ The new Member States are the countries that entered the European Union in May 2004 (the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia).

¹² According to data of the Austrian Ministry of Finance, within one year after its inception on January 1, 2003, Austrians purchased a total of 281,138 pension insurance contracts covering a total investment volume of EUR 238.5 million.

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Albania: Country Profile and Recent Economic Developments¹

Anton Schautzer²

This paper provides an overview of the transition process and recent economic developments in Albania. The Albanian economy has embarked on a dynamic catching-up process. Since 1998 real GDP growth has amounted to 7% on average, and registered unemployment has been decreasing continuously since 2000, now standing below the level of some of Albania's neighboring countries. Progress toward price stability, an important monetary policy objective, has also been substantial. The Albanian lek (ALL) has been appreciating against the euro in nominal as well as in real terms, and the deficit-to-GDP ratio has been decreasing. The trade balance, however, is a major weak spot. The deficit in the trade balance is mostly covered by transfers and, since 2000, by the beginning foreign direct investment (FDI) inflow. Gross foreign debt has been on a decreasing trend and currently amounts to about 20% of GDP. The fight against corruption, organized crime and the black economy remains a primary objective of the Albanian authorities. Progress in this area is crucial to finally open the door for a Stabilisation and Association Agreement (SAA) with the European Union.

1 Introduction

1.1 Political and Institutional Framework

Albania entered the 1990s after several decades of extreme isolation. In March 1991 the country saw its first democratic elections, from which the Communist Party emerged victorious. However, persistent discontent with low living standards and bad living conditions led to mass emigration to Greece and Italy; as a consequence, the government resigned. Thus, in 1992, new elections were called and won by the Democratic Party under Sali Berisha. The Berisha government finally started the transition process toward a free market economy.

The first years of transition were characterized by high unemployment and widespread poverty. The political scene was clouded by conflicts between the two big political camps. In the elections that followed in 1996 the Democratic Party remained in power. In 1997, after some sluggish transition progress, the country was shaken by a severe financial crisis. About USD 1.2 billion, i.e. more than 50% of Albania's total GDP of 1996, were invested in highly speculative pyramid schemes. Toward the end of 1996, 12 of the existing 16 pyramid systems collapsed. Many private Albanian investors accused the government of having breached its supervisory duties and of having profited from the pyramid systems. The consequence was a severe economic, social and political crisis, which was accompanied by, partly violent, mass protests and riots. A military intervention by foreign troops under UN mandate helped to overcome the crisis and to gradually reestablish order.

In the subsequent elections of 1997 the Socialist Party won, and Fatos Nano became new prime minister. On November 28, 1998, a new constitution was confirmed by referendum, which strengthened the position of the prime minister and of parliament.

In 1999, during the Kosovo war, Albania proved to be a stable factor in the region. Although the Kosovo war and the conflicts in Macedonia affected national and ethnic interests, Albania did not interfere and thus contributed to preventing the expansion of the conflict. Moreover, Albania offered shelter

¹ This paper is a summary of the author's country profile of the Republic of Albania, which is available on request (in German only).

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to about 460,000 war refugees. After the elections of 2001 a coalition cabinet led by the Socialist Party was established. The next elections will be held on July 3, 2005.

In January 2003 negotiations with the EU were initiated within the framework of the Stabilisation and Association process. These negotiations are aimed at reaching a Stabilisation and Association Agreement (SAA), which is to provide the contractual framework for the EU and Albania during the period leading up to Albania's EU accession. So far, such agreements have been concluded with Croatia and with the Former Yugoslav Republic of Macedonia. Negotiations with Bosnia and Herzegovina and with Serbia and Montenegro have not started yet. (However, in April 2005 the European Commission recommended opening negotiations with Serbia and Montenegro.) So far, only little progress has been made in the negotiations with Albania. The European Commission has called for greater commitment on the part of the Albanian authorities in fighting organized crime, human trafficking, money laundering and corruption, and for more adequate measures aimed at reducing the shadow economy.

1.2 Structural Reforms

The Albanian authorities are aware of the fact that further structural reforms are needed. One part of the reform agenda includes further privatizing public entities, improving infrastructure (especially local and international transport networks), resolving energy sector issues, supporting small and medium-sized enterprises and stimulating competition. The other part consists in taking anti-corruption measures, reforming legislation and administration as well as strengthening institutional and administrative capacities. Although the efficiency of the tax and customs administration has been improved, incentives for transforming illegal or semi-legal businesses into formal ones are still insufficient (IMF, 2005a).

1.3 IMF Facility

Within the framework of the IMF's Poverty Reduction and Growth Facility, a total amount of SDR 96.1 million was granted to Albania between July 1993 and December 2004. SDR 33.7 million have already been repaid. Albania's member's quota amounts to SDR 48.7 million. At the moment the IMF has no Stand-By Agreement with Albania.

2 Development of Real Economy Indicators

2.1 Economic Growth and the Average Level of Income

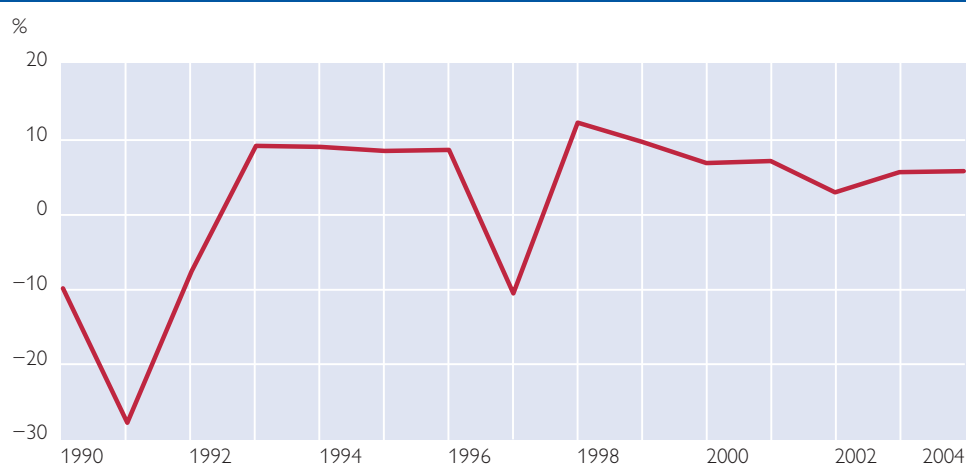
With a cumulative real economic growth of about 40% between 1990 and 2004, Albania ranks among the most successful transition economies. This successful development started from a rather low level, however. During the first transition phase between 1990 and 1992, GDP decreased by a total of 39%. The liberalization of prices and foreign trade, the privatization of agricultural land and a macroeconomic stabilization program directed at the reduction of monetary growth, the budget deficit and inflation laid the foundation for the high average growth rate of 9.3% in the following three years (1993–96). The agricultural sector, the service sector and, to a lesser extent, the construction sector contributed most significantly to economic growth. After a setback in 1997, when

GDP decreased by 7% because of the financial crisis, Albania was soon back on a growth track. In 1999 real GDP reached the level of 1990. In 2002 economic growth slowed down to 3.4%, which was attributable to a bottleneck in energy supply and unfavorable weather conditions for the agricultural sector. In 2003 and 2004, the real growth rate went up to 6% again.

The Albanian Ministry of Finance expects an average yearly economic growth of 6% until 2007 (Ministry of Finance of the Republic of Albania, 2004). The Vienna Institute for International Economic Studies (wiiw) projects a real growth rate of 6.2% for 2004 and 6.5% for 2005 (Holzner, 2004), whereas the IMF forecast amounts to 6.0% for 2005 (IMF, 2005b).

Chart 1

Real GDP Growth Rates



Source: World Bank, Albanian Institute of Statistics (INSTAT).

GDP at market exchange rates amounted to EUR 5.4 billion in 2003, which corresponds to EUR 1,745 per capita and EUR 4,267 per capita at purchasing power parities (PPP), respectively. In PPP terms the Albanian per capita GDP appears to be clearly lower than in the other Southeastern European countries

Table 1

GDP per Capita at PPP and at Exchange Rates

for Selected Countries of the Region

GDP per capita, EUR

	2000		2003	
	At PPP	At exchange rates	At PPP	At exchange rates
Albania	3,184	1,239	4,267	1,745
Bosnia and Herzegovina	4,940	1,359	5,670	1,611
Bulgaria	5,325	1,674	6,341	2,249
Croatia	8,111	4,502	9,720	5,747
FYR of Macedonia	5,169	1,921	5,401	2,041
Moldova	2,150	x	x	x
Romania	5,006	1,795	6,315	2,316
Serbia	4,186	3,106	5,130	1,949

Source: wiiw; Moldova: EBRD.

(SEECs), with the probable exception of Moldova. At market exchange rates, the Albanian per capita GDP deviates by far less from the levels in most other SEECs, as the ALL exchange rate is higher valued in terms of PPP than other SEEC currencies (except for the Croatian kuna).

2.2 GDP Developments: The Expenditure Side

The analysis of the development of GDP components on the demand side of the equation is severely limited by the lack of comprehensive up-to-date statistical information. A particular problem was that no data could be found on the real annual changes of these components. Instead, the analysis had to be based on the development of the shares of demand-side subaggregates in total nominal GDP.

Table 2

GDP Components (Expenditure Side)

% of GDP

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Final consumption	101.9	109.4	107.3	96.3	95.2	91.2	96.4	99.8	97.5
of which: households	67.3	89.3	84.1	70.6	65.9	61.0	57.8	90.1	87.9
statistical discrepancy	24.8	9.3	13.5	16.5	20.4	20.7	28.6	0.0	0.0
households including statistical discrepancy	92.2	98.6	97.6	87.1	86.3	81.6	86.3	90.1	87.9
general government	9.7	10.8	9.8	9.2	8.9	9.5	10.1	9.7	9.6
Gross fixed capital formation	21.0	16.8	16.3	20.0	24.7	29.2	28.0	25.0	25.4
of which: statistical discrepancy	4.2	1.4	2.1	2.7	3.4	3.4	4.7	0.0	0.0
Domestic absorption	122.9	126.3	123.6	116.3	119.9	120.4	124.5	124.8	122.9
Exports of goods and services	12.3	10.5	10.8	15.7	17.6	18.3	19.4	20.4	21.7
Imports of goods and services	35.2	36.7	34.4	32.0	37.5	38.6	43.8	45.2	44.6
Net exports of goods and services	-22.9	-26.3	-23.6	-16.3	-19.9	-20.4	-24.5	-24.8	-22.9

Source: Author's calculations based on IMF, 2005c.

Note: The IMF, allocated the total statistical discrepancy contained in the national accounts up to 2002 to final consumption and investment according to the ratio observed in the national accounts excluding the discrepancy. Unexplained oscillations in this discrepancy introduced additional statistical uncertainty into the historical data. Data for 2003 and 2004 are estimates.

2.2.1 Private Consumption

In 1997 the share of private consumption (including the allocated part of total statistical discrepancy) in total nominal GDP increased significantly. However, this was only attributable to the fact that the annual average of consumer prices rose by about 33% (after a mere 13% in 1996), while CPI-deflated private consumption (including statistical discrepancy) fell markedly and by far more than real GDP. Moreover, from 1998 to 2001 CPI-deflated private consumption recovered by less than real GDP. As disinflation was more pronounced based on consumer prices than on the GDP deflator, the share of private consumption in total nominal GDP decreased significantly. After CPI-deflated private consumption had expanded by far more than real GDP in 2002 and 2003, its growth rate moderated to that of GDP in 2004 according to IMF estimates. Strong real consumption growth in these years was underpinned by significant real wage growth. While consumer price inflation was relatively low and stable in these three years (2002–04), the share of private consumption in total nominal GDP increased from about 82% in 2001 to close to 90% in 2004.

2.2.2 Public Consumption

From 1996 to 2004 the share of public consumption in total nominal GDP remained slightly below 10% most of the time, with only moderate fluctuations.

2.2.3 Gross Fixed Capital Formation (GFCF)

In 1997 the share of GFCF (including the allocated part of total statistical discrepancy) in total nominal GDP decreased significantly. However, this was mainly caused by the sharp increase of nominal GDP resulting from the upward jump in inflation. It is not clear whether GFCF fell by more or less than total real GDP that year. However, the continuous strong increase of the share in nominal GDP from 1998 to 2004, which peaked in 2001, suggests higher real growth in GFCF than in total GDP.

2.2.4 Imports and Exports

In 1997 the share of exports in total nominal GDP was only about 10%. This very low export-to-GDP ratio clearly reflects the isolation the Albanian economy had suffered for several decades. On the import side, the lack of competitive production units and the enormous demand for Western consumption goods by the Albanian population after decades of isolation also showed in a comparatively high share of imports in total nominal GDP. Thus, in 1997 Albania had negative net exports of about 26% of GDP.

However, from 1997 to 2004 Albania succeeded in more than doubling its export-to-GDP ratio, while at the same time containing net exports at lower levels than at the beginning of this period. Obviously, export growth has contributed significantly to real GDP growth in recent years. At the same time, the weight of exports is still relatively low by international comparison, a fact which suggests high growth potential for the future.

2.3 GDP Developments: The Production Side

2.3.1 Agriculture

Agriculture is one of the most important sectors of the Albanian economy, in particular in terms of its contribution to total employment. Before the beginning of the transition process, the Albanian industry used to outperform agriculture in terms of GDP. Estimates for 1983 show that agriculture had a share of about 34% in GDP, whereas industry accounted for more than 43% (World Bank, 2004a). The privatization of agricultural land was one of the first measures at the onset of the transition process. As industrial output collapsed at the same time, the share of agriculture in GDP reached 55% in 1993 (World Bank, 2004a). Since then, the primary sector has grown continuously but more slowly than the other main sectors of the economy.³ As a consequence, it has lost weight, particularly in favor of services. According to the Albanian Institute of Statistics (INSTAT), the share of agriculture in nominal GDP declined from 33% in 1996 to 26% in 2002.

³ The World Bank estimates the average annual growth in agriculture from 1993 to 2003 at 2.2%.

2.3.2 Industry

The industrial sector had been by far the most important sector in the Albanian economy for a long time. The lacking competitiveness of the state industry, which had been protected by the isolation of the country, caused a decrease in the industrial sector's share in GDP from about 43% in 1983 to 23% in 1993 (World Bank, 2004a). According to INSTAT, the share of industry in nominal GDP declined from 15.5% in 1996 to 10.5% in 2002. Simultaneously, the industrial sector underwent a far-reaching structural change. In parallel, the energy supply for industry improved markedly, inter alia through network improvements and consequently a reduction of supply interruptions, which enhanced the conditions for industrial production growth. Furthermore, domestic electricity production could be increased to cover about 80% of consumption, which substantially reduced the dependence on imports (IMF 2004b).

2.3.3 Construction

One of the most dynamic sectors of the Albanian economy is the construction sector. According to INSTAT, the share of construction in nominal GDP increased from 4.7% in 1996 to 7.8% in 2002. A depleted capital stock, with respect to both buildings and infrastructure, shows the high potential in construction in the years to come.

2.3.4 Services Sector

At the beginning of Albania's transition process the services sector played a rather small role, merely contributing around 23% to GDP in 1993 (World Bank, 2004a). As this sector grew quite dynamically, its share in GDP increased significantly. According to INSTAT, the share of services in nominal GDP increased from 47% in 1996 to 57% in 2002. Especially the subcategory "trade, hotels and restaurants" has considerable potential, as Albania has a long coastline and a rich cultural heritage, and tourism will probably become more important in the future.

2.4 Labor Market

2.4.1 Employment and Unemployment

After total employment had fallen continuously until 1999, it stagnated until the end of 2004, except for a small increase by 0.7% in 2003.⁴

In parallel, the unemployment rate (registered unemployment) had increased from 12.4% at the end of 1996 to 18.4% at the end of 1999. Its decline to 14.4% at the end of 2004 resulted primarily from a drop in the total labor force, as total employment remained nearly unchanged.

Apart from structural changes and reforms (e.g. in the regulations for unemployment registration) that can be considered typical for a transition process, the decrease in the total labor force can be explained by vast emigration.

Moreover, while the spreading of the shadow economy is not unusual during economic transition, the share of the informal sector in Albania seems to be particularly large. According to IMF estimates the informal sector accounts for

⁴ Owing to a methodological break at the turn of the year 2000/2001, it is not possible to compute a rate of change for 2001.

30% to 60% of the total Albanian economy, whereas INSTAT estimates it to account for one-third of official GDP (IMF, 2003).

Even though employment in the agricultural sector has decreased substantially, it is still high. In 2003 about 58% of the employed population worked in the primary sector, 13% in the secondary sector and 29% in the tertiary sector. Higher employment in the services sector was attributable to substantial increases in trade and in the transportation and communication industries.

The government is trying to reduce unemployment, which is particularly high among women, by improving the efficiency of the employment service and by retraining unemployed persons.

2.4.2 Labor Productivity and Wages

From 2001 to 2004 labor productivity in the whole economy advanced at an average annual rate of 5%, while average gross wages increased at an average rate of nearly 11%. The resulting rise in nominal unit labor costs during that period by 5.5% per annum was probably instrumental in raising the average price level in the economy (as measured by the GDP deflator) by about the same rate.

In the following, labor productivity and wage levels in Albania are assessed by means of an international comparison. Labor productivity (as measured by GDP per employed person at PPP) was low in Albania in 2004, not only compared to Austria or Poland, but also compared to SEECs, in particular the Former Yugoslav Republic of Macedonia and Bulgaria. The average wage level (measured in euro at the respective exchange rates) in Albania was, by contrast, not that much lower than in Macedonia, and it was even slightly higher than in Bulgaria. Thus, the unit labor cost level in Albania exceeded that of Macedonia and, to an even greater extent, that of Bulgaria. Higher unit labor costs in euro in Albania were mainly a result of the relatively high comparative price level, which stood at 45% in 2004 against about 37% in Macedonia and Bulgaria. This high comparative price level reflects the substantial real appreciation of the Albanian lek since 1997. Back in 1996, Albania's comparative price level had been much lower than that of Macedonia and only slightly higher than that of Bulgaria.

Table 3

Indicators of Macro-Competitiveness in 2004

EUR-based, annual average

	Labor productivity level (Austria = 100)	Wage level (EUR) (Austria = 100)	Unit labor cost level (Austria = 100)	Memorandum items	
				Comparative price level (euro area = 100)	
Albania	24.6	6.2	25.2		44.8
Bulgaria	29.2	6.0	20.4		36.8
Croatia	53.3	31.2	58.6		59.9
FYR of Macedonia	34.2	7.8	22.9		37.3
Poland	47.0	21.0	44.7		48.3

Source: Author's calculations based on data provided by INSTAT and wiw.

3 Inflation and Its Components

Inflation, as measured by the consumer price index (CPI), declined rapidly from an annual average of 33% in 1997 to close to zero in 1999. After having remained below the upper target limit of 4% in every month since December 2002, the yearly inflation rate slightly exceeded the 4% limit in February 2004, but then decreased again to 2.2% in November and December 2004. The average annual inflation rate for 2004 was 2.9%. Thus, Albania achieved its monetary policy inflation target in recent years.

Within total CPI, the position “food and non-alcoholic beverages” is the most important item in the basket with a weight of 42.6%. Annual average food price inflation fell from about 6% in 2002 to zero in 2004. This decline contributed significantly to reducing annual average inflation in 2003 and helped contain the inflationary impact stemming from the rise in international energy prices and hikes in administered prices in the communication industries in 2004.

It is important to note that the positions “clothes and footwear” and “furniture, households items and maintenance,” which are core inflation components in the goods sector, showed deflation throughout the period of 2002 to 2004, while the position “education,” which belongs to the service sector, recorded inflation rates far above average in these years.

Table 4

Selected Factors Influencing Inflation		1996	1997	1998	1999	2000	2001	2002	2003	2004
Consumer prices	December, year-on-year, %	17.4	42.1	8.7	-1.0	4.2	3.5	1.7	3.3	2.2
	Annual average, year-on-year, %	12.7	33.2	20.6	0.4	0.0	3.1	5.2	2.3	2.9
Producer prices	Annual average, year-on-year, %	..	..	..	2.2	4.9	-5.4	6.4	6.2	9.5
GDP deflator	Year-on-year, %	..	13.9	13.5	4.5	4.3	6.9	7.4	3.7	5.6
Unit labor costs, whole economy	Nominal, year-on-year, %	..	..	4.5	-0.8	3.0	..	7.9	3.0	5.8
Nominal exchange rate	ALL per EUR 1, December	128.6	163.9	164.3	136.8	130.8	122.0	137.9	133.7	126.7
	ALL per EUR 1, December, year-on-year, %	0.6	27.5	0.2	-16.8	-4.4	-6.7	13.0	-3.1	-5.2
	EUR per ALL 1, December, year-on-year, %	-0.6	-21.6	-0.2	20.1	4.6	7.2	-11.5	3.2	5.5
	ALL per EUR 1, annual average	135.9	168.9	168.7	147.0	132.6	128.5	132.4	137.5	127.6
	ALL per EUR 1, annual average, year-on-year, %	7.2	24.3	-0.1	-12.9	-9.8	-3.1	3.0	3.9	-7.2
	EUR per ALL 1, annual average, year-on-year, %	-6.8	-19.5	0.1	14.8	10.9	3.2	-2.9	-3.7	7.8
	Real exchange rate	EUR per ALL 1, annual average, year-on-year, %	..	5.4	19.4	13.9	8.6	4.0	-0.1	-3.5	8.5
	basis: CPI	..	..	..	17.9	10.6	-4.4	3.3	0.9	15.4
	basis: PPI	..	-8.2	12.3	17.9	14.1	7.7	1.6	-2.2	11.6
	basis: GDP deflator	..	..	..	..	..	..	..	..	..
M2 (excluding foreign currency deposits)	Nominal, annual average, year-on-year, %	46.1	36.6	28.9	20.9	13.7	13.1	12.2	7.6	8.2
Broad money (including foreign currency deposits)	Nominal, annual average, year-on-year, %	192.2	47.0	21.6	16.3	14.4	16.1	9.7	6.0	10.0
	Real (GDP deflator), annual average, year-on-year, %	..	29.0	7.1	11.3	9.6	8.6	2.2	2.3	4.2
	% of GDP	45.4	65.2	62.0	62.7	64.0	64.6	63.9	61.6	60.4
Budget balance (including grants)	% of GDP	-11.3	-13.0	-9.5	-9.0	-7.5	-6.6	-5.6	-4.2	-4.9
Real GDP	Year-on-year, %	9.1	-10.2	12.7	10.1	7.3	7.6	3.4	6.0	6.2

Source: INSTAT, Bank of Albania, World Bank, author's calculations.

The rise in industrial producer prices in recent years was not only driven by the rise in international energy prices but also by the adjustment in administered prices in the energy sector aimed at reaching cost coverage.

The marked disinflation from 1997 to 1999 and the fact that inflation has been relatively low since 1999 despite strong increases in international energy prices in 1999 and 2000 can be attributed in particular to the lek's strong nominal appreciation from 1998 to 2001. After a moderate corrective depreciation in 2002 and 2003, the nominal exchange rate appreciation in 2004 led to roughly the same nominal level as in 2001. In real terms, however, the currency further appreciated between 2001 and 2004. This contributed to a deflationary impact on the consumer prices of durable goods and thus helped contain the inflationary impact of energy prices, administered prices and unit labor costs in 2004.

In addition, the relatively low level of underlying inflation has probably been favored by the deceleration of real money growth to below real GDP growth in recent years.

4 Monetary Sector Developments

4.1 The Bank of Albania's Monetary and Exchange Rate Policy

Since the end of 1997 the Bank of Albania's most important objective has been to achieve and maintain price stability (Bank of Albania, 1997). During recent years, this objective has been specified as an annual inflation rate of between 2% and 4% at the end of the year. In order to attain this objective, the Bank of Albania attempts to control the money supply through an annual monetary program (Bank of Albania, 2003a). This program, which is updated quarterly, determines the annual growth rate of broad money in line with a certain level of inflation and projections of the potential output growth and money velocity (Luçi, 2005). Thus, monetary policy in Albania uses money growth as an important intermediate variable.

The Bank of Albania's most important monetary policy instrument is the repo rate, i.e. a fixed interest rate which is applied in (reverse) repurchase agreements with a maturity of one week on the basis of weekly auctions. The repo rate serves as a floor or ceiling rate if these auctions are held as variable price auctions. The purpose of these open market operations is to steer (short-term) market interest rates, manage the liquidity situation and signal the stance of monetary policy. The Bank of Albania uses repurchase agreements to withdraw liquidity via the temporary sale of treasury bills by the Bank of Albania (commercial banks' deposit placement with the central bank), while reverse repurchase agreements inject liquidity via the temporary purchase of treasury bills by the central bank (collateralized loans to commercial banks). In addition, the Bank of Albania buys and sells treasury bills outright on the market for structural purposes. These nonreversible operations of nonstandardized frequency have a permanent effect on liquidity.

The repo rate is the calculation basis for the interest rates of the standing facilities to which no limits apply under normal circumstances: overnight deposits (repo rate minus 3 percentage points), (collateralized) overnight loans (repo rate plus 2.5 percentage points) and lombard loans (repo rate plus 6 percentage points).

The required rate for minimum reserves has been 10% of the required reserve base since 1995 (Raiffeisen Zentralbank, 2005). The reserve base includes deposits with a maturity of up to two years denominated in domestic or foreign currency. The minimum reserve must be held at the Bank of Albania in Albanian lek, euro or U.S. dollar. Minimum reserves are remunerated with 70% of the repo rate, of EURIBOR or LIBOR depending on the currency (Bank of Albania, 2003b).

The Bank of Albania has established a loosely managed float as its exchange rate regime, which means that it intervenes to prevent strong fluctuations. In 2003 and 2004, interventions primarily aimed at containing the appreciation pressure in order to preserve external competitiveness. The Bank of Albania does not use a formal reference currency, but because of the close economic relations with the euro area (especially with Italy and Greece) euro exchange rate developments are closely observed.

4.2 Interest Rates

Albania's interest rate policy responds to inflation and exchange rate developments. Accordingly, the Bank of Albania has cut the repo rate in several steps from 8.5% at end-2002 to 6.5% at end-2003. After further gradual cuts, the repo rate reached a new historical low of 5% on March 30, 2005. In addition, the central bank's rate for overnight deposits was cut at the beginning of 2004, from 2.5 to 3 percentage points below the repo rate. The interest rate channel proved effective, as the commercial banks cut interest rates on the lek deposit market, on the primary market for 3-, 6- and 12-month treasury bills and on the interbank market as well. The interest rate for overnight transactions in the interbank market reached 3.9% in December 2003, which was half of the level of the previous year. The 12-month treasury bill yield decreased from 13% in December 2002 to 8.1% in December 2004.

Nominal interest rates on 12-month deposits of nonbanks decreased continuously from 9.3% in December 2002 to 6% in December 2004. Taking into account year-on-year changes in CPI of around 2% in both periods, the real interest rate on these deposits declined in parallel, but remained clearly positive. Nominal interest rates on 6- to 12-month loans to nonbanks decreased from 16% in December 2002 to 10.5% in December 2003 and then increased again to 13.7% in December 2004. However, the rise in PPI inflation during these years had the effect that, for industrial companies, the real interest rate on these loans fell sharply in 2003, from about 9% to about 2.5%, and declined further to slightly above 1% at the end of 2004.

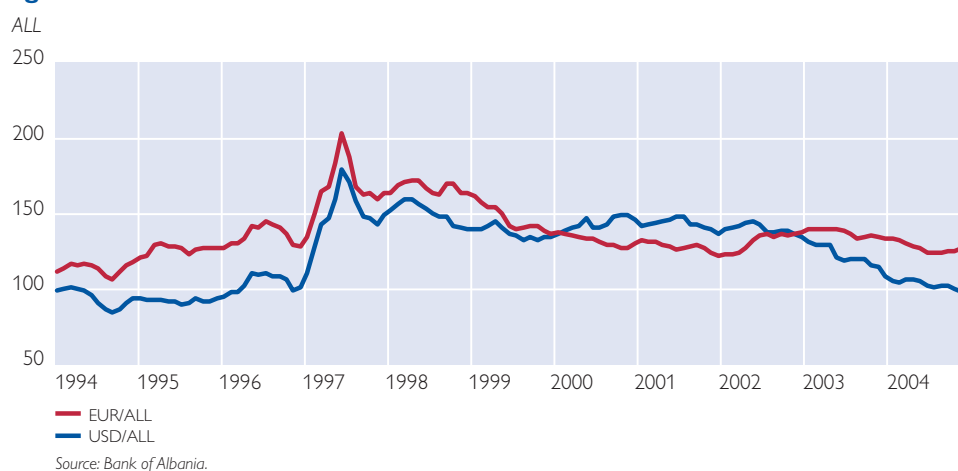
4.3 Exchange Rate Developments

After the abrupt and overshooting depreciation of the Albanian lek during the financial crisis in the first half of 1997, the Albanian currency underwent a corrective appreciation in the second half of that year. Compared to the annual average of 1996, the nominal average value of the Albanian lek was 20% lower (in euro terms) in 1997. However, the lek's real average value did not change much in 1997, given the simultaneous upward jump in inflation. From 1997 to 2001, the Albanian lek appreciated against the euro in nominal terms by more than 30%, reaching a level which was 6% above that of 1996. In real terms, it

appreciated by 54% (based on CPI) and by about 60% (based on the GDP deflator). Between 2001 and 2004, the Albanian lek was broadly stable in nominal terms, although it depreciated by 6.5% until 2003 and appreciated again by 8% after that. However, in real terms, it further appreciated by 4.5% (based on CPI) and by about 11% (based on the GDP deflator). The weakening of the currency from February 2002 to May 2003 was related to the significant deterioration of the current account balance in 2002.

Chart 2

Nominal Exchange Rate Development of the Albanian Lek (ALL) against the Euro and the U.S. Dollar



4.4 Development of Monetary Aggregates and Their Counterparts

Regarding the components of broad money (the shares of currency outside banks, demand deposits, time deposits and foreign currency deposits in M3), substantial shifts took place between end-1996 and end-1998, mainly as a result of the financial crisis in the first half of 1997 and its immediate aftermath. During this period the share of demand deposits as well as that of currency outside banks went down, while the share of time deposits went up substantially from 20% to 45% of M3, reflecting the reestablished confidence in the banking system. It is interesting to note that the share of foreign currency deposits even went down slightly over this period. By 2004, these shares had not changed much compared to the end of 1998. The moderate rise in the share of foreign currency deposits from 24% (end-1998) to 32% (end-2001) – a level close to that of end-2004 (31%) – was most probably attributable to the depositing of holdings of euro-constituent currencies (mainly of Deutsche mark) by domestic residents prior to the euro cash changeover at the beginning of 2002.

Both domestic credit growth and net foreign assets (NFA) growth contributed significantly to the growth of broad money from 1999 to 2004. Only in 2002 and 2003, the growth of average annual NFA, converted into Albanian lek, was subdued – despite the nominal depreciation in these years. In 2004, however, it accelerated despite the nominal appreciation.

From end-1995 to end-2001, the Bank of Albania's NFA increased continuously in euro terms, implying a steady rise in the NFA of the total banking sys-

Table 5

Monetary Developments					
	2000	2001	2002	2003	2004
<i>Nominal year-on-year change of the annual average stock in %</i>					
Broad money	14.4	16.1	9.7	6.0	10.0
<i>Contributions to the nominal year-on-year change of broad money in percentage points</i>					
Net foreign assets of the banking system	5.8	11.1	3.3	-0.4	3.9
Domestic credit (net) of the banking system	7.8	3.7	7.2	6.8	4.1
<i>of which: claims on the private sector</i>	1.7	0.7	2.3	2.7	2.9
<i>claims on households</i>	1.5	-0.6	-0.5	0.9	1.6
<i>claims on enterprises</i>	0.2	1.3	2.8	1.8	1.3
<i>net claims on the public sector</i>	6.3	2.8	5.1	4.1	1.1
Other domestic assets (net) of the banking system	0.8	1.2	-0.8	-0.4	2.0

Source: Bank of Albania, author's calculations.

Note: Broad money is defined as the sum of net foreign assets, domestic credit and other domestic assets of the banking system.

tem. In 2002, however, NFA temporarily decreased as a result of the significant deterioration of the current account balance. The improvement in the external balance in 2003, and in particular in 2004, led to a sizeable and continuous buildup of NFA from mid-2003 onward, accompanied by significant appreciation pressures.

A significant part of the recent increases in NFA stemmed from interventions on the foreign exchange market by the Bank of Albania, which were aimed at containing the appreciation of the lek in order to preserve external competitiveness.

Table 6

Net Foreign Assets									
<i>EUR million, end of period</i>									
	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total	420	419	508	739	987	1,313	1,157	1,191	1,480
Bank of Albania	156	192	219	346	542	712	678	732	926
Commercial banks	..	..	..	..	445	601	479	459	554

Source: Bank of Albania.

Note: Data refer to the end of period.

Within total domestic lending, net claims on the public sector made the largest contribution to credit growth until 2003, while claims on the private sector were more important in 2004. Net lending to the public sector constitutes the bulk of domestic lending. It is extended primarily via the purchase of government securities. The growth of net lending to the public sector slowed down from 9% in 2002 to 2% in 2004. In parallel, lending to enterprises slowed down from 67% to 17%, while lending to households expanded vigorously by about 75% each in 2003 and 2004 from a very low base level, after having decreased by nearly 30% in 2002. In 2004, the slowdown in the growth of lending to the government sector was pivotal in containing broad money growth.

At the same time, the sectoral composition of lending to nonfinancial companies changed rapidly. The share of loans to the trade sector, traditionally the most important debtor, decreased from about 40% in 2001 to 22.5% in 2004.

The agricultural sector has also received fewer loans in recent years, although gradual improvements of the banking infrastructure in rural areas are now contributing to better access to loans. Real estate lending, by contrast, has gained importance.

The share of long-term loans with a maturity of more than twelve months rose from 16% at end-2002 to 30% at end-2004.

An important characteristic of the Albanian banking sector's asset side is the large share of foreign currency loans (more than 80% at end-2004). Their share had increased sharply from 32% at end-1998 to more than 80% at end-2001. During those years the strong appreciation of the Albanian lek provided a rationale for foreign currency funding. In turn, the upward jump in foreign currency lending probably contributed to the lek's appreciation. The fact that the share of foreign currency lending remained at a high level until 2004 may reflect expectations of a further (real) appreciation of the lek.

5 Public Finance

Albania had high fiscal deficits in the 1990s, ranging from 10% to 16% of GDP. In the late 1990s, the country embarked on a consolidation course, and the deficit was reduced from 12% (9% when including grants) of GDP in 1999 to 4.6% (and 4.2%, respectively) of GDP in 2003. For 2004, the deficit-to-GDP ratio is estimated to have remained stable. For 2005, Albania's mid-term budgetary program targets a deficit of the same size as in 2003 and 2004, i.e. 4.6% of GDP. In 2006 and 2007 the deficit is supposed to be reduced to 4% and 3.8%, respectively (Ministry of Finance of the Republic of Albania, 2004).

Table A7

Fiscal Revenues, Expenditures and Balance

% of GDP

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenues (excluding grants)	19.1	18.8	20.3	16.4	17.6	22.7	22.7	22.7	22.2	22.2	22.4	22.1
Revenues (including grants)	22.3	20.8	21.3	16.5	18.3	24.9	26.0	24.6	23.9	22.8	22.8	22.4
Expenditures	35.8	32.7	30.6	27.8	31.3	34.3	34.9	32.1	30.5	28.4	27.0	26.7
Balance (excluding grants)	-16.7	-13.9	-10.3	-11.4	-13.7	-11.7	-12.3	-9.4	-8.3	-6.2	-4.6	-4.6
Balance (including grants)	-13.5	-11.9	-9.3	-11.3	-13.0	-9.5	-9.0	-7.5	-6.6	-5.6	-4.2	-4.3

Source: Albanian Ministry of Finance, IMF.

5.1 Budget Revenues

The legal basis of the current tax system has been gradually created over the past ten years. Value-added tax was introduced in 1996 and stands at 20%. In December 1998, new income tax legislation entered into force, and in January 2001 the corporate tax was cut from 30% to 25%.

Tax collection in Albania is relatively weak. Sizeable potential revenues remain untapped as the black economy is pervasive. However, the significant and continuous increase in the ratio of direct tax revenues to GDP since 1998 may indicate that the fight against the black economy is starting to show first results. Indeed, the higher direct tax revenue-to-GDP ratio allowed the overall revenue-to-GDP ratio (excluding grants) to remain relatively stable from 1998 onward, despite decreasing revenues from customs duties and non-tax revenues.

Table 8

Development of the Revenue Structure

% of total revenues

	1993	1998	2003
Total revenues	100.0	100.0	100.0
Indirect taxes	19.0	30.8	30.3
Direct taxes	40.0	15.4	28.1
Customs duties	13.0	13.5	8.3
Local taxes	1.0	0.8	5.0
Social insurance contributions	12.0	16.9	17.2
Non-tax revenues	15.0	22.2	11.3

Source: Albanian Ministry of Finance.

5.2 Budget Expenditures

When comparing the development of revenue and expenditure ratios it becomes clear that the budget deficit reduction between 1999 and 2004 was solely achieved on the expenditure side.

A detailed analysis of the expenditure structure shows the following picture: In 1998 interest payments amounted to almost one quarter of total budget expenditures. This share was clearly reduced by 2003. While the share of public investment expenditure in total budgetary expenditures increased from 17% in 1998 to 23% in 2001 despite a higher overall expenditure-to-GDP ratio, it was cut to a mere 15% by 2003 and contributed to the further reduction of the overall ratio. Social insurance expenditures, however, increased substantially.

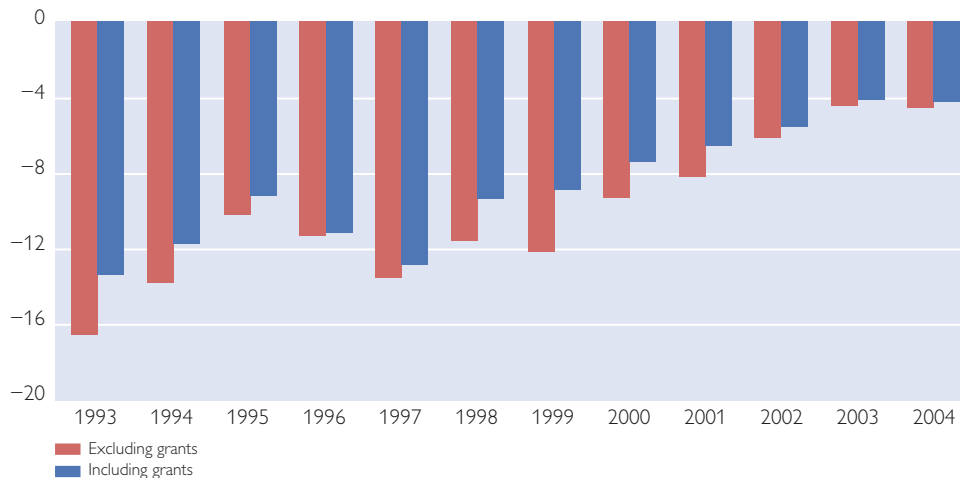
5.3 Budget Deficit

A relatively stable revenue ratio and the lower expenditure ratio helped reduce the budget deficit from 1999 to 2004.

Chart 3

Total Public Budget Deficit

% of GDP



Source: Albanian Ministry of Finance; 2004: IMF estimations.

The budget deficit has to a great extent been financed by domestic sources. In 2003, for example, about 70% of the budget deficit were financed by domestic sources; of these 70%, two-thirds stemmed from the purchase of government securities by commercial banks. Traditionally, treasury bills have been issued, with the share of treasury bills with a 12-month maturity increasing. In addition, two-year bonds have been issued since October 2002.

Table 9

Financing Structure of the Budget Deficit

%	1993	1998	2003
Domestic financing	64.0	57.4	70.5
of which: by privatization (% of domestic financing)	4.0	0.5	3.8
Foreign financing	36.0	42.6	29.5

Source: Albanian Ministry of Finance.

Privatization played a subordinate role in budget deficit financing until 2003. In 2004, however, the privatization of the biggest Albanian bank, the Savings Bank (Banka e Kursimeve)⁵ contributed significantly to deficit financing. These privatization proceeds implied that the growth of net lending to the public sector extended by commercial banks decreased significantly in 2004.

Further privatizations are planned (Emerging Europe Monitor, 2004b): Albtelekom (telecommunications), ARMO (refinery), KESH (power plant operator), INSIG (insurance company), ALBPETROL (oil production), Petroimpex (operator of service station network).

5.4 Public Debt

The public debt-to-GDP ratio rose from 35% in 1998 to a peak of 41% in 2000, and then declined continuously to 37.7% in 2003 according to wiiw (2005). IMF data also show a decline in recent years, but from much higher levels: After a peak of 85% in 1997, the ratio is assumed to have fallen continuously, reaching 55% in 2004 (IMF, 2005c).

6 Balance of Payments and External Debt

6.1 Regional Structure of Foreign Trade

The weight of the European Union in Albania's foreign trade is obvious. In 2003, more than 93% of all Albanian exports went to the EU, with Italy (74.9%) and Greece (12.9%) once more being the most important partners. Imports from EU member countries accounted for 68% of imports to Albania in 2003, with Italy and Greece again being the most important trading partners by far: 34% of Albanian imports came from Italy and almost 20% from Greece compared to 6.5% from Turkey and 5.7% from Germany.

Trade with other neighboring countries (Serbia and Montenegro, Macedonia) is surprisingly low. The predominant position of Greece and especially of Italy in Albania's foreign trade has several reasons. First, relations with

⁵ The Savings Bank (Banka e Kursimeve) was purchased by the Austrian Raiffeisen Zentralbank in April 2004. In October 2004 it was renamed "Raiffeisen Bank Sh.a." This means that all Albanian banks are now privatized and foreign-owned.

Italy are strong and varied despite a burdened past. During the communist era the Albanian population could receive Italian television, and today many Albanians speak Italian. What is more, there is a large Albanian community in Italy. Second, trade activities among the countries of Southeastern Europe had already been rather limited before the 1990s (EBRD, 2004), as Albania chose isolation after it had discontinued its diplomatic relations to Yugoslavia (1948), the Soviet Union (1961) and finally the People's Republic of China (1978). Finally, the low level of interregional trade in Southeastern Europe is also a result of past tensions within the region.

However, an initiative intended to support trade among the SEECs has been developed within the framework of the EU's Stabilisation and Association process. A network of bilateral agreements, which is to enter into force in 2008, is supposed to create a free trade zone in the region (European Commission, 2004).

6.2 Current Account

Albania's trade balance displays a very large deficit, which points to the lacking competitiveness of many Albanian products on international markets. This trade deficit has been partly covered by a positive balance in current transfers. As many Albanians work abroad, remittances play an important role in the economy. The large trade deficit is to some extent a consequence of buoyant net current transfers.

The export-to-GDP ratio according to the balance of payment statistics does not show a clear longer-term upward trend. Thus, it does not confirm the rather encouraging findings on the basis of nominal data from the national accounts. Both strong real appreciation and the economic slowdown in the Italian export market after 2000 might provide some explanation for this relatively weak export performance. The import-to-GDP ratio changed more markedly. A significant decrease until 1999 may have resulted from the sharp decline in net current transfers. Then, up to 2001, it increased by roughly the same degree despite weaker GDP growth, probably driven by the previous sustained real appreciation. Further weakening GDP growth combined with a temporary

Table 10

Current Account									
	1996	1997	1998	1999	2000	2001	2002	2003	2004
% of GDP									
Exports of goods	8.3	7.3	7.5	8.0	6.9	7.2	6.8	7.3	7.4
Imports of goods	31.4	31.9	29.4	27.4	29.3	31.4	30.6	29.0	26.9
Trade balance	-23.1	-24.6	-21.8	-19.4	-22.4	-24.2	-23.8	-21.7	-19.5
Services balance	-0.5	-1.5	-1.5	3.0	0.3	2.1	-0.2	-1.3	-0.3
Current transfer balance	19.0	12.2	18.1	10.2	14.7	13.4	13.0	13.7	12.8
Income balance	2.4	2.3	2.8	2.2	2.9	3.5	2.6	2.8	2.1
Current account balance	-2.1	-11.7	-2.5	-4.0	-4.5	-5.2	-8.3	-6.5	-4.9
Memorandum items									
Real GDP growth (Albania)	9.1	-10.2	12.7	10.1	7.3	7.6	3.4	6.0	6.0
Real GDP growth (Italy)	1.1	2.0	1.8	1.7	3.0	1.8	0.4	0.3	1.2

Source: Bank of Albania, EUROSTAT.

interruption of appreciation may then have supported the decline of the import-to-GDP ratio and the resulting improvement in the trade balance by 2004, which was achieved despite the rising cost of energy imports.

As a result of the prominent role of net current transfers, the current account deficit doubled from 2% to 4% of GDP from 1996 to 1999 despite the improvement in the trade balance. However, higher net current transfers from abroad helped mitigate the impact of the rising trade and services deficit in the current account balance up to 2002. Then, a stable current transfer surplus allowed the recent improvement in the trade balance to fully translate into a lower current account deficit by 2004, when it amounted to 4.9% of GDP or EUR 322 million.

6.3 Capital and Financial Accounts

The sum of the capital account surplus and net FDI inflows covered a very large part of, or even exceeded, the current account deficit in the years following 1996, with the exception of 1997 and 2002. The capital account, for example, contained debt relief, inheritances, donations and investment subsidies provided by international organizations. In 2004, the higher level of net FDI inflows alone nearly sufficed to cover the lower current account deficit.

Table 11

Capital and Financial Accounts as Compared to the Current Account

% of GDP

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Current account balance	-2.1	-11.7	-2.5	-4.0	-4.5	-5.2	-8.3	-6.5	-4.9
Capital account balance	0.0	0.0	1.1	2.0	2.1	2.8	2.5	2.6	1.6
Financial account balance	1.7	7.0	1.0	1.7	5.5	2.6	4.5	3.3	4.9
of which: FDI	3.1	2.2	1.6	1.2	3.9	4.9	2.9	2.9	4.3
Net errors and omissions	1.9	6.5	2.5	3.8	0.4	3.2	2.5	2.4	x

Source: Bank of Albania.

Annual FDI inflows had oscillated around EUR 50 million from 1993 to 1995, before climbing to EUR 71 million or 3% of GDP in 1996. However, in the wake of the financial crisis of 1997 investment inflows dried up again. Since 2000 Albania seems to have become more attractive for foreign investors, and in 2001 FDI inflows peaked at EUR 231 million or 5% of GDP, partly as a result of significant privatization proceeds which amounted to about 43% of net FDI inflows. In 2002 and 2003 the share of privatization decreased to 2.5% and 4.2%, respectively; total FDI inflows were lower but still reached a level of 3% of GDP. The pickup of FDI inflows in 2004 to EUR 278 million or 4.3% of GDP may be attributed to the privatization of Albania's Savings Bank, which was sold to the Austrian banking group Raiffeisen Zentralbank yielding proceeds of about EUR 105 million.

The most important investors in Albania are Italy and Greece. About 82% of FDI stock stem from these two countries. Investment has been flowing into industry (42%), trade (27%) and construction (6%).

6.4 Gross Foreign Debt

Gross foreign debt (in euro terms) fell from 42% of GDP at the end of 1997 to only about 16% at the end of 2004. This reflects the fact that most of the current account deficits were covered by non-debt inflows, thus minimizing new net borrowing. Moreover, strong real GDP growth and the strong real appreciation of the Albanian lek contributed to this decrease. At the same time, the structure of foreign debt changed significantly. While at the end of 1997 the bulk of foreign debt (54%) consisted in arrears, a quarter was owed to multilateral lenders and 21% to bilateral creditors (mainly the Paris Club), at the end of 2004, 60% of total foreign debt were owed to multilateral lenders (primarily to the International Development Association of the World Bank Group) and one third was owed to bilateral creditors, again mainly the Paris Club.

7 Conclusions

In the 1990s, Albania's transition process was characterized by efforts directed at overcoming its severe economic, social and political problems. After long years of isolation the country started its transition process from a very low level. Although broad reforms were initiated in 1992 (liberalization of prices and foreign trade, macroeconomic stabilization program, privatization of agricultural land), dynamic development was prevented by a difficult political environment, the weakness of market economy institutions and legal frameworks as well as massive emigration due to widespread poverty. In 1997 a severe financial crisis led to riots. However, after an intervention by foreign troops under UN command, political and economic stabilization was achieved and a dynamic growth process began. The following aspects of Albania's economic performance in recent years are particularly noteworthy:

1. Average economic growth of almost 7% from 1998 to 2004;
2. Drop in unemployment to below 15% in 2004;
3. Sustained nominal and real appreciation of the Albanian lek, except for a temporary interruption in 2002–03;
4. Decrease of annual average inflation to below 3% in 2004;
5. Reduction of the budget deficit to less than 5% of GDP in 2004; and
6. Increasingly successful fight against the shadow economy (increase of direct tax revenues).

A weak spot in the overall picture is the sizeable trade balance deficit, which seems to point at some weaknesses in the country's competitiveness. However, the buoyant remittances and other current transfers cover the large trade deficit to some extent. It is worth noting that in the period from 2002 to 2004 the trade deficit decreased due to lower imports, while net current transfers remained stable. Continued FDI, in particular in manufacturing and tourism, might help ameliorate Albania's competitive position over time. At present, the depleted infrastructure is an obstacle to more dynamic investment inflows.

In the financial sector, the beginning involvement of foreign players (especially Austrian banks) is a positive sign which could help promote sustainable economic development.

Albania has been given the perspective of EU membership (Council of the European Union, Thessaloniki, 2003), and in 2003 negotiations on a Stabilisation and Association Agreement started. To date, these negotiations are still at a

rather early stage, as the European Commission has called for greater commitment on the part of the Albanian authorities in fighting organized crime, human trafficking, money laundering and corruption, and in implementing more ambitious measures to reduce the shadow economy.

Cutoff date for data: May 31, 2005.

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HIGHLIGHTS

The CEEC Website

Silvia Kirova

We hope that you will find this website useful and that you will stay in touch with us: Click on <http://ceec.oenb.at> or visit the OeNB's website at www.oenb.at, where you may click on the quick link Central and Eastern Europe. The CEEC website is available in German and English. Please send your inquiries or proposals directly to the CEEC team at ceec@oenb.at.

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- Statistics and Reporting
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CEEC Research Platform (ceec.oenb.at)

The CEEC Research Platform of the Oesterreichische Nationalbank's Foreign Research Division offers you selected reports, analyses and studies about economic developments in Central and Eastern Europe. Furthermore, you will find information about related events scheduled at the Oesterreichische Nationalbank.

Focus on European Economic Integration

Focus on European Economic Integration 1/2004

The OeNB's semiannual publication Focus on European Economic Integration (the successor of Focus on Transition) provides a wide range of CEEC- and SEE-related material – country analyses and data, studies on economic topics as well as descriptions of events hosted by the OeNB.

Banking Sector and Financial Stability

Financial Stability Report 8

Reports
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Financial Flows into Emerging Markets

Events

Conference on European Economic Integration

The renowned East-West Conference of the Oesterreichische Nationalbank has been renamed: it is now the Conference on European Economic Integration!

The selected abstracts below alert readers to studies on CEEC topics published in other OeNB publications. For further details see www.oenb.at.

The Croatian Banking System

This paper provides an analysis of the stability of the Croatian banking sector. After the banking crisis of 1998, the Croatian banking system underwent a deep transformation process; foreign investors gained a dominating market share of more than 90% of total assets, with Austrian banks holding 43% thereof. Compared to other Central and Eastern European countries (CEECs), the degree of banking intermediation is relatively high in Croatia. In recent years, lending to the private sector and in particular to households has risen at the cost of lending to the general government. Foreign currencies continue to play an important role in the Croatian banking sector, in particular on the liabilities side of banks' balance sheets. While maintaining a large negative net foreign currency position on balance (with an increasing portion of net liabilities to nonresidents), Croatian banks' overall net foreign currency position seems to be marginally positive. Still, foreign currency(-indexed) lending represents a credit risk as it entails an indirect exchange rate risk. Asset quality, by contrast, has improved significantly over the past five years, the capital adequacy ratio is on a relatively high – albeit declining – level, and real return on equity (ROE) is now as high as the profitability levels observed in other CEECs.

Published in Financial Stability Report 9.

Thomas Reininger
Zoltan Walko

Austria's EU Accession and Trade

This contribution discusses the development of Austria's trade with the European Union. First, a descriptive analysis shows that Austrian exports to the European Union were adversely affected by trade barriers during the 1980s and in the first half of the 1990s. As a result, Austria's market shares in the European Union declined steadily until 1995. Second, a gravity model for a panel of OECD countries confirms positive trade liberalization effects after the country's accession to the EU. More recently, the introduction of the euro in 1999 seems to have given a new impetus to trade flows between Austria and the countries of the euro area.

Published in Monetary Policy & the Economy 2/05.

Jarko Fidrmuc

A Presentation Organized by the OeNB's Foreign Research Division in Cooperation with the OeNB's Anniversary Fund

On May 23, 2005, Austria's ambassador to the United Nations in Geneva and former High Representative for Bosnia and Herzegovina, *Wolfgang Petritsch*, and Professor *Rudolf Richter*, dean of the Faculty of Social Sciences at the University of Vienna, presented results of the project "Democracy in Southeastern Europe," which was financed by the OeNB's Anniversary Fund. The presentations were organized by the Foreign Research Division in cooperation with the Anniversary Fund and chaired by *Peter Mooslechner*, Director of the OeNB's Economic Analysis and Research Section. Both speakers described the political mood in Bosnia and Herzegovina, in Croatia, and in Serbia and Montenegro, and outlined possible European perspectives for these countries on the basis of representative surveys and interviews with experts carried out between 2002 and 2004.

The results were somewhat surprising, especially for Bosnia and Herzegovina. Richter pointed out that a large proportion of the questioned Bosnians had positive feelings about the past communist system in former Yugoslavia, whereas 75% were dissatisfied with the present political system. In Croatia as well as in Serbia,¹ the percentages were significantly lower in both cases. More than two-thirds of the questioned Bosnians were in favor of a strong leadership, the restoration of the communist system or a military government (Croatia and Serbia: 35% to 40%).

While people in Croatia and in Serbia looked more or less optimistically into the future, Bosnians were rather pessimistic. According to the survey, about one-third of the respondents in Croatia and Serbia described themselves as optimistic, trustful, ready for change and open-minded, compared to only about 15% in Bosnia. The optimistic respondents were typically young and had a higher education and higher incomes. However, even within this group, about 25% of Bosnians said they preferred the communist system. Thus "Yugonostalgia" is strongest in Bosnia because this country suffered the greatest socio-economic setback due to the war, Petritsch explained. By contrast, about one-third of Croatians and Serbians and almost 60% of Bosnians claimed to be pessimistic, frustrated or even anti-EU. Typically, they were older and less educated, had lower incomes and were more affected by poverty. They viewed the present and future political system with pessimism and would like to see the old Titoist system restored.

In general, however, the survey respondents in these countries had a rather positive attitude toward, and high expectations of, the EU. Richter explained that experts in these countries emphasized the historical role of their countries from an emotional and cultural point of view. All three countries saw their place within Europe. In Croatia, EU scepticism was more pronounced, though, because the impression prevailed that the EU had been unnecessarily hampering the country's EU accession.

¹ The sample applies to Serbia only.

Rudolf Richter drew the following conclusions: The democratization process in Croatia is seen as a self-evident development. In Serbia, people feel that they belong to Europe and are intent on achieving common welfare. The surveyed persons were quite optimistic, but questioned the capacity and preparedness of their institutions. Bosnians claimed to be very disappointed and pessimistic and even expected an aggravation of the situation in their country.

Wolfgang Petritsch pointed out that these countries could be EU members by 2014. However, four major problems still need to be tackled: the status of Kosovo needs to be resolved, the future of the union between Serbia and Montenegro has to be clarified, the role of the international community in Bosnia and Herzegovina needs to be determined, and the unsolved questions in the Former Yugoslav Republic of Macedonia with respect to the Albanian minority must be worked out according to the Ohrid agreement of 2001.

Despite tangible success, the overall situation in Bosnia and Herzegovina is still fragile. The citizens are dissatisfied with their political system, as the state is divided into two highly autonomous entities with up to five layers of government. The continued application of the ethnic principle paralyzes the country. Wolfgang Petritsch, who is deeply involved in the international efforts to stabilize Bosnia and Herzegovina, stated that Bosnians still rely very much on the international community. He called for more local commitment and emphasized the ownership principle.

In the case of Kosovo, the most volatile flashpoint in the region, it is necessary to find a solution as soon as possible. The separation from Serbia is already an obvious fact, but the final status of Kosovo has to be defined by the UN. Petritsch cautioned that no sustainable economic development of Kosovo was possible without having resolved this question. Of course, various crucial issues – the return of Serb refugees, their safety in Kosovo, the protection of Serbian orthodox cultural and religious monuments – still need to be clarified; Petritsch expects a solution in 2006.

Croatia is ready for accession negotiations with the EU. However, the beginning of negotiations has been postponed, as Croatia's cooperation with the International Criminal Tribunal for the former Yugoslavia (ICTY) in The Hague is regarded as insufficient.

Generally speaking, both Serbia and Croatia have yet to engage in a serious internal debate on war crimes perpetrated during the violent dissolution of Yugoslavia in the 1990s.

In concluding, Petritsch stressed five areas as the main challenges for the future of the region:

- continuation of EU integration in order to prevent a “Balkans ghetto;”
- reform of the political system to strengthen the institutional setup of these “weak states,” including minority rights;
- fight against corruption and organized crime to establish an environment conducive to much-needed FDI;
- stronger regional political and economic cooperation; and
- success in the above-mentioned areas will help Europe to define its *finalité*.

According to Petritsch, Europe will only be whole and united once SEE is part of the EU.

Further information about the project (in German only) is forthcoming on the OeNB's website at http://www.oenb.at/de/ueber_die_oenb/foerderung/jubilaefonds/jubilaefonds.jsp.

The “East Jour Fixe” of the Oesterreichische Nationalbank

54th East Jour Fixe

Economic Geography / Fiscal Consolidation

The East Jour Fixe of the Oesterreichische Nationalbank, a series of meetings initiated in 1991 as a forum in which economists, members of academia, government officials and other experts on Eastern Europe meet to discuss specific transition issues, looks back on a long tradition. On March 7, 2005, this seminar series was continued with the 54th East Jour Fixe meeting on the topics “Economic Geography” and “Fiscal Consolidation.”

The 54th East Jour Fixe meeting was organized in two largely independent sessions. The first session was chaired by Jarko Fidrmuc, Foreign Research Division, who introduced the topics of the meeting and the speakers of the first session. Then, Professor Joseph Francois from Erasmus University in Rotterdam presented his recent research results on the “Regional Impacts of Geographic Linkages and Agglomeration.” In the first part of his presentation, Francois discussed the mechanics of economic geography in multiregion computable general equilibrium (CGE) models. He briefly reviewed the literature and addressed some modeling issues. He explained in depth how particular factors (especially market size including increasing returns to scale as well as competition and variety effects, intersectoral linkages, and accumulation and factor mobility) are treated in various types (so-called generations) of CGE models.

In the second part of the presentation, Francois discussed the application of CGE modeling to trade liberalization between developed and developing countries that constitute the current Doha Round negotiations of the World Trade Organization (WTO). Although the talks took off in 2001 (after a series of launch delays such as the meeting in Seattle in 1999), the negotiating agenda is still ambiguous in a number of crucial areas. The most important open questions include market access in agriculture, manufacturing and services. Francois sketched the complex structure of the applied CGE model of the world economy. In addition to various modeling features addressed in the first part of the presentation, in its baseline scenario the applied CGE model also takes into account the enlargement of the EU, the Agenda 2000 reforms of the CAP (the EU’s common agricultural policy), the abolition of textile and clothing quotas in 2005 and China’s WTO accession. He went on to detail the global effects of different liberalization scenarios in the Doha Round. Especially for developing countries, the calculated results differ greatly depending on the actual amount and coverage of liberalization. Finally, Francois presented the effects on the new Member States (NMS) of the EU. For the NMS, the CGE model implied less pronounced effects than those of EU enlargement. Yet, the agglomeration effects could yield positive GDP and export effects.

The contribution was discussed by Julia Wörz, Vienna Institute for International Economic Studies. She addressed several general modeling issues, such as the sensitivity of the calculated agglomeration effects on the amount of data aggregation, and described the results for selected sectors, e.g. textiles. Moreover, Wörz touched on the position of the developing countries in the negotiations. The general discussion focused on the implications of the Doha Round especially for the NMS.

The second session was chaired by Peter Backé, Head of the Unit for Central and Eastern European Analysis, and focused on public finance issues in Central and Eastern Europe. Philipp Rother, Principal Economist in the Fiscal Policy Division of the European Central Bank, presented a paper on “Fiscal consolidations in the Central and Eastern European countries,” which he coauthored with António Afonso and Christiane Nickel, and which has been published as ECB Working Paper No 473 in the meantime. On the basis of logit models for the period from 1991 to 2003, Rother discussed the determinants of success probability of fiscal consolidations in the individual countries of the EU-15, the eight NMS from Central and Eastern Europe as well as two candidate countries (Bulgaria and Romania). Consolidation events were defined as substantive improvements in fiscal balances adjusted for the impact of cyclical effects.

The results seem to suggest that for these countries expenditure-based consolidations have tended to be more successful than revenue-based consolidations. Rother showed that the results are robust to alternative thresholds for the identification of fiscal events and composition dummies. Interestingly, the results differ from those for the EU-15, where composition dummies remain generally insignificant. Rother conjectured that the results for CEECs could be explained by an inability to increase revenue ratios above already high levels due to a lack of administrative capacity.

The paper was discussed by Ludwig Strohner, an economist from the Institute for Advanced Studies (IHS) specializing in public economics and tax issues. He reviewed the macroeconomic effects of fiscal consolidations, with a particular focus on expansionary fiscal contractions. Strohner examined the definition of successful consolidation used by the authors, the issue of intended fiscal consolidations versus actual fiscal consolidation events as well as announcement and timing effects.

In the subsequent general discussion, it was pointed out that most of the consolidation events captured in the paper took place in the mid-1990s and were associated with cuts in subsidies to enterprises during their privatization and, in some cases, also with reductions in defense spending. Against this backdrop, the question arose to what extent one could draw conclusions from the consolidation efforts undertaken a decade ago for the design of future fiscal contractions in Central and Eastern Europe. Also, it was argued that the paper may have captured the discontinuation of temporary expenditures (e.g. on banking consolidation) or the reduction of interest payments (due to the use of privatization revenues to pay off public debt) as expenditure-based fiscal consolidation events, which might be debatable. Moreover, it was suggested to extend the analysis to periods prior to fiscal stabilizations and to episodes of fiscal loosening and their composition in terms of revenues and expenditures.

Olga Radzyner Award for Scientific Work on European Economic Integration

The Oesterreichische Nationalbank has established an award to commemorate Olga Radzyner, former Head of the Foreign Research Division, who died in a tragic accident in August 1999. The award is bestowed on young economists for excellent research focused on topics of European economic integration and is conferred annually. This year, three applicants are eligible to receive a single payment of EUR 3,000 each from an annual total of EUR 9,000.

The submitted work shall be in the form of a master's or doctoral thesis, a working paper or a scientific article, and shall be in English or in German. Authors shall submit the work before their 35th birthday and shall be citizens of any of the following countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, the Former Yugoslav Republic of Macedonia, Hungary, Latvia, Lithuania, Poland, Romania, Serbia and Montenegro, Slovakia or Slovenia.

To identify their work as a submission, applicants shall mark the envelope with the reference "Olga Radzyner Award" and send it to the Oesterreichische Nationalbank, Foreign Research Division, Otto-Wagner-Platz 3, PO Box 61, AT 1011 Vienna. The Oesterreichische Nationalbank shall receive the work submitted for the award in 2005 by October 3, 2005, at the latest.

For detailed information, please visit our Internet website at <http://ceec.oenb.at> or contact Ms. Sonja Pierron in the Foreign Research Division of the Oesterreichische Nationalbank either by e-mail (sonja.pierron@oenb.at) or by phone (+43-1-40420-5205).

STATISTICAL ANNEX

Table A1

Gross Domestic Product

Annual real change in %

	2002	2003	2004	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4
Albania	3.4	6.0	5.9	x	x	x	x	x	x
Bosnia and Herzegovina	5.5	3.5	6.0	x	x	x	x	x	x
Bulgaria	4.9	4.5	5.6	3.8	5.7	4.5	5.5	5.8	6.2
Croatia	5.2	4.3	3.8	3.9	3.3	4.2	3.8	3.6	3.6
FYR of Macedonia ¹	0.9	3.4	2.9	x	x	x	x	x	x
Romania	5.2	5.2	8.7	5.8	5.2	6.2	7.1	10.0	9.7
Russia	4.7	7.3	7.1	6.2	7.7	7.3	7.5	7.1	6.7
Serbia and Montenegro	3.8	2.0	7.0	x	x	x	x	x	x
Turkey	7.9	5.8	8.9	5.5	6.1	11.8	14.4	5.3	6.3
Ukraine	5.2	9.4	12.1	6.5	12.7	12.3	13.3	14.6	8.2

Source: Eurostat, wiw, national sources.

¹ Former Yugoslav Republic of Macedonia.

Table A2

Industrial Production

Annual real change in %

	2002	2003	2004	Oct. 04	Nov. 04	Dec. 04	Jan. 05	Feb. 05	March 05
Albania	1.8	2.7	3.1	x	x	x	x	x	x
Bosnia and Herzegovina	13.9	-7.8	9.0	15.6	12.0	9.0	-4.9	4.3	5.0
Bulgaria	4.7	14.1	17.7	14.1	22.6	21.5	10.9	8.0	..
Croatia	5.5	4.1	3.7	-3.3	5.9	9.7	6.4	-1.5	..
FYR of Macedonia	-5.3	4.7	-12.7	x	x	x	x	x	x
Romania	4.4	3.2	5.4	2.4	9.3	12.3	8.6	3.2	..
Russia	3.7	7.0	7.4	4.6	12.5	4.6	2.1	5.1	4.0
Serbia and Montenegro	1.7	-2.7	7.9	x	x	x	x	x	x
Turkey	9.5	8.8	10.0	0.8	8.7	4.1	5.0	14.9	..
Ukraine	7.0	15.8	12.5	x	x	x	x	x	x

Source: wiw, EBRD, national sources.

Table A3

Average Gross Wages

Annual nominal change in %

	2002	2003	2004	Sep. 04	Oct. 04	Nov. 04	Dec. 04	Jan. 05	Feb. 05
Albania ¹	22.7	8.5	..	x	x	x	x	x	x
Bosnia and Herzegovina ²	1.4	8.4	6.3	8.9	8.5	6.9	11.1	8.6	9.3
Bulgaria ³	7.0	4.0	6.1	5.9	7.2	5.9	6.0	..	..
Croatia ⁴	5.0	5.9	5.9	6.0	3.3	7.4	6.6	4.1	..
FYR of Macedonia ⁴	6.9	4.8	4.0	x	x	x	x	x	x
Romania ⁴	27.1	25.4	22.5	21.8	22.5	24.0	21.5	25.3	23.1
Russia ³	34.5	24.8	24.0	24.5	17.8	17.6	19.8	23.8	22.0
Serbia and Montenegro ⁴	65.8	24.9	..	x	x	x	x	x	x
Turkey ⁵	32.1	17.2	10.3	9.7	..	2.9	9.4	..	..
Ukraine ³	20.7	22.8	27.6	26.6	27.7	31.6	27.7	28.3	30.7

Source: wiw, national sources.

¹ Monthly earnings in the state sector.

² Excludes Brcko district wages.

³ Total economy, gross.

⁴ Total economy, net.

⁵ Monthly manufacturing earnings.

Table A4

Unemployment Rate

End of period, %

	2002	2003	2004	Oct. 04	Nov. 04	Dec. 04	Jan. 05	Feb. 05	March 05
Albania	15.8	15.0	14.4	x	x	x	x	x	x
Bosnia and Herzegovina	40.9	42.0	42.0	..	..	..	..	..	..
Bulgaria ¹	17.4	14.3	12.7	11.8	11.9	12.2	13.1	13.1	12.7
Croatia ¹	22.3	19.5	18.2	18.1	18.4	18.7	19.1	19.3	19.3
FYR of Macedonia ²	31.9	36.7	37.0	x	x	x	x	x	x
Romania ¹	10.2	7.6	6.8	6.1	6.2	6.2	6.3	6.2	..
Russia ²	8.0	8.6	8.2	8.0	8.4	8.5	8.6	8.8	..
Serbia and Montenegro ¹	13.8	15.2	15.0	x	x	x	x	x	x
Turkey ²	10.4	10.5	10.3	x	x	x	x	x	x
Ukraine ²	10.1	9.1	8.6	x	x	x	x	x	x

Source: wiw, national sources.

¹ Registered, period average.² LFS, period average.

Turkey: Quarterly data only.

Table A5

Industrial Producer Price Index

Period average, annual change in %

	2002	2003	2004	Oct. 04	Nov. 04	Dec. 04	Jan. 05	Feb. 05	March 05
Albania	x	x	x	x	x	x	x	x	x
Bosnia and Herzegovina	-0.3	-0.1	2.3	2.5	2.5	2.6	2.2	1.1	0.7
Bulgaria	1.4	5.0	5.9	8.3	7.2	5.1	4.7	6.4	..
Croatia	-0.5	1.9	3.6	6.3	5.5	4.8	4.4	5.1	5.1
FYR of Macedonia	-0.9	-0.3	0.9	x	x	x	x	x	x
Romania	23.2	19.6	19.1	20.0	18.2	15.9	14.6	12.9	..
Russia	11.7	15.6	24.0	27.7	29.5	28.9	23.7	21.2	..
Serbia and Montenegro	-41.3	-3.8	..	x	x	x	x	x	x
Turkey	50.1	25.6	14.6	19.6	17.1	15.3	10.7	10.6	11.3
Ukraine	3.1	7.8	20.4	24.3	25.2	24.3	22.6	22.4	22.0

Source: wiw, national sources.

Table A6

Consumer Price Index

Period average, annual change in %

	2002	2003	2004	Oct. 04	Nov. 04	Dec. 04	Jan. 05	Feb. 05	March 05
Albania	5.2	2.3	2.9	2.0	2.2	2.2	3.3	1.8	1.7
Bosnia and Herzegovina ¹	0.6	0.7	0.1	-0.6	-0.4	0.3	0.5	1.2	1.7
Bulgaria	5.8	2.3	6.1	5.8	4.5	4.0	3.3	3.9	4.3
Croatia ²	1.7	1.8	2.1	2.0	2.3	2.7	2.7	3.3	3.9
FYR of Macedonia ¹	1.4	2.4	0.9	x	x	x	x	x	x
Romania	22.5	15.3	11.9	10.8	9.9	9.3	8.9	8.9	8.7
Russia	16.0	13.6	11.0	11.6	11.7	11.7	12.6	12.8	13.3
Serbia and Montenegro	16.5	9.4	10.8	11.4	11.8	13.8	16.3	17.0	17.5
Turkey	45.0	25.5	8.6	9.4	9.5	9.4	9.2	8.7	7.9
Ukraine	0.8	5.2	9.0	11.7	11.3	12.3	12.6	13.3	14.7

Source: Eurostat, wiw, national sources.

¹ Retail prices.² Retail prices until 2001.

Table 7

Trade Balance

% of annual GDP

	2002	2003	2004	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4
Albania	x	x	x	x	x	x	x	x	x
Bosnia and Herzegovina	x	x	x	x	x	x	x	x	x
Bulgaria	-10.2	-12.4	-14.0	-9.1	-16.5	-12.4	-17.5	-8.4	-17.8
Croatia	-24.6	-27.3	-24.3	-26.7	-29.3	-23.2	-28.3	-21.2	-24.9
FYR of Macedonia	x	x	x	x	x	x	x	x	x
Romania	-5.7	-7.9	-9.0	-5.9	-9.9	-6.0	-11.3	-7.1	-10.8
Russia	13.5	14.0	15.0	13.3	12.9	14.4	15.0	15.1	15.2
Serbia and Montenegro	x	x	x	x	x	x	x	x	x
Turkey	-4.0	-5.7	-7.9	-5.0	-6.3	-8.3	-9.2	-7.1	-7.5
Ukraine	1.7	-0.4	5.8	-1.1	-2.5	7.9	10.4	4.0	2.4

Source: National central banks.

Table A8

Current Account Balance

% of annual GDP

	2002	2003	2004	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4
Albania	-9.0	-7.6	-7.6	x	x	x	x	x	x
Bosnia and Herzegovina	-18.4	-17.4	-14.8	x	x	x	x	x	x
Bulgaria	-5.6	-9.2	-7.4	2.8	-15.8	-12.2	-10.2	7.4	-16.5
Croatia	-8.7	-6.9	-4.6	24.7	-19.8	-19.1	-14.1	25.9	-16.2
FYR of Macedonia	-9.5	-6.0	-6.9	x	x	x	x	x	x
Romania	-3.4	-5.7	-7.5	-2.6	-7.8	-2.7	-10.6	-4.0	-10.8
Russia	8.5	8.3	10.3	6.3	7.0	10.4	9.9	9.8	11.1
Serbia and Montenegro	8.8	-10.2	-11.3	x	x	x	x	x	x
Turkey	-0.9	-3.3	-5.1	1.3	-5.0	-8.8	-6.9	-0.7	-5.8
Ukraine	7.3	5.8	10.5	4.6	2.7	13.9	15.4	8.8	5.9

Source: National central banks.

Table A9

Net Foreign Direct Investment

% of annual GDP

	2002	2003	2004	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4
Albania	x	x	x	x	x	x	x	x	x
Bosnia and Herzegovina	x	x	x	x	x	x	x	x	x
Bulgaria	5.7	10.3	8.4	8.7	10.3	8.6	14.6	-11.0	22.8
Croatia	2.5	6.6	2.4	1.9	11.3	3.6	3.2	1.6	1.4
FYR of Macedonia	x	x	x	x	x	x	x	x	x
Romania	2.5	3.2	6.8	2.3	3.0	4.0	5.9	2.6	12.5
Russia	0.0	-0.4	0.3	-0.6	-2.1	0.6	0.4	-1.4	1.8
Serbia and Montenegro	x	x	x	x	x	x	x	x	x
Turkey	0.5	0.5	0.6	0.6	0.6	0.7	0.6	0.5	0.5
Ukraine	1.6	2.8	2.6	2.7	2.1	2.8	4.1	2.2	1.7

Source: National central banks.

Table A10

Reserve Assets Excluding Gold

End of period, % of annual GDP

	2002	2003	2004	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4
Albania	x	x	x	x	x	x	x	x	x
Bosnia and Herzegovina	23.6	25.6	..	x	x	x	x	x	x
Bulgaria ¹	25.6	28.1	33.1	27.2	28.1	27.9	31.3	31.0	33.1
Croatia ¹	23.3	25.7	23.3	24.5	25.7	23.8	24.1	23.8	23.3
FYR of Macedonia	19.0	..	..	x	x	x	x	x	x
Romania ¹	12.3	12.7	18.2	13.4	12.7	13.2	14.7	17.5	18.2
Russia ¹	11.6	15.3	18.9	13.7	15.3	16.5	16.5	16.7	18.9
Serbia and Montenegro	x	x	x	x	x	x	x	x	x
Turkey ¹	13.4	12.4	11.0	13.9	12.4	12.0	12.0	12.0	11.0
Ukraine	9.2	12.3	13.1	12.9	12.3	14.3	16.6	19.5	13.1

Source: wiw, IMF.

¹ Quarterly data on the basis of rolling four-quarter GDP.

Table A11

Gross External Debt

End of period, % of annual GDP

	1998	1999	2000	2001	2002	2003	2004
Albania	36.9	32.3	31.8	29.2	26.5	24.8	20.3
Bosnia and Herzegovina	69.2	66.2	59.2	47.5	45.0	36.6	30.5
Bulgaria	x	90.9	87.5	79.5	65.0	61.4	59.3
Croatia	47.5	54.1	60.6	60.7	62.2	77.6	82.0
FYR of Macedonia	40.1	40.6	41.5	43.9	43.1	38.8	38.6
Romania ¹	21.7	26.6	27.9	30.4	30.6	31.2	29.7
Russia	x	x	55.1	46.5	39.5	38.8	33.2
Serbia and Montenegro	67.3	61.8	164.0	103.5	76.4	69.7	56.8
Turkey	47.0	60.1	59.1	81.3	65.1	53.7	49.2
Ukraine	x	x	60.1	54.3	46.2	43.0	43.1

Source: National central banks, EBRD.

¹ Medium- and long-term debt.

Table A12

General Government Balance

% of GDP

	2002	2003	2004	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4
Albania	-7.2	-4.8	-5.3	x	x	x	x	x	x
Bosnia and Herzegovina	-2.4	-0.2	-0.9	x	x	x	x	x	x
Bulgaria	-0.6	0.0	1.7	2.3	-8.9	2.9	7.4	4.0	-6.1
Croatia ¹	-2.0	-1.1	..	-0.2	4.0	-5.3	..	..	..
FYR of Macedonia	-5.6	-1.6	0.1	x	x	x	x	x	x
Romania ¹	-3.1	-1.5	-0.8	1.0	-2.8	-1.5	-1.6	1.0	-1.4
Russia ¹	1.4	1.7	4.4	1.5	-0.3	3.8	5.6	5.1	3.0
Serbia and Montenegro	-4.6	-3.4	-2.0	x	x	x	x	x	x
Turkey	-14.1	-11.1	-7.0	-4.5	-10.2	-8.6	-7.9	-4.9	-7.7
Ukraine	0.7	-0.2	-3.4	2.0	-5.8	1.9	-0.8	-2.4	-9.8

Source: wiw, EBRD, national sources.

¹ Central government balance.

Table A13

Gross General Government Debt

% of annual GDP

	1998	1999	2000	2001	2002	2003	2004
Albania	75.9	72.7	71.3	66.8	64.8	60.7	55.3
Bosnia and Herzegovina	x	x	x	x	x	x	x
Bulgaria	x	79.3	73.6	66.2	54.0	46.3	38.8
Croatia ¹	x	x	x	x	x	51.6	53.8
FYR of Macedonia	x	x	x	x	x	x	x
Romania	x	x	23.9	23.2	23.3	21.3	18.5
Russia	81.9	90.0	62.5	48.2	41.4	32.4	25.9
Serbia and Montenegro	x	x	x	x	x	x	x
Turkey	50.2	65.9	57.5	105.2	94.3	87.2	80.8
Ukraine	37.6	51.0	45.9	36.9	33.5	29.3	24.7

Source: Eurostat, EBRD.

¹ Central government debt.

Table A14

Broad Money

End of period, annual nominal change in %

	2002	2003	2004	Oct. 04	Nov. 04	Dec. 04	Jan. 05	Feb. 05	March 05
Albania (M3)	5.7	7.6	13.1	9.7	10.5	13.1	13.7	15.1	..
Bosnia and Herzegovina (M2)	8.6	8.4	24.3	22.7	24.3	24.3	22.6	21.4	19.3
Bulgaria (M3)	11.7	19.6	23.1	18.7	19.9	23.1	24.2	23.9	38.1
Croatia (M4)	9.5	11.0	8.6	8.9	8.5	8.6	7.8	8.6	..
FYR of Macedonia	-9.3	18.0	22.5	x	x	x	x	x	x
Romania (M2)	38.2	23.3	40.1	35.4	33.6	40.1	39.6	42.4	..
Russia ¹	33.8	38.5	33.7	32.7	33.7	33.7	31.4	30.6	..
Serbia and Montenegro	52.7	27.9	32.1	x	x	x	x	x	x
Turkey ¹	29.1	14.6	22.1	27.0	22.8	22.1	..	..	..
Ukraine	41.8	46.5	32.4	45.3	41.9	32.4	35.8	36.3	..

Source: wiw, national sources.

¹ Monetary survey definition.

Table A15

Official Key Interest Rate

End of period, %

	2002	2003	2004	Nov. 04	Dec. 04	Jan. 05	Feb. 05	March 05	April 05
Albania (repo rate) ¹	8.5	7.0	5.3	5.3	5.3	5.3	5.3	5.0	5.0
Bosnia and Herzegovina	x	x	x	x	x	x	x	x	x
Bulgaria (official refinancing rate) ²	3.31	2.83	2.37	2.36	2.37	2.45	1.89	1.91	1.95
Croatia (official discount rate) ³	4.50	4.50	4.50	4.50	4.50	4.50	4.50	..	..
FYR of Macedonia (basic central bank rate)	10.70	6.50	6.50	6.50	6.50	..	..	..	..
Romania (official refinancing rate) ⁴	20.40	20.41	17.00	18.75	17.00	16.50	15.75	14.50	12.50
Russia (official refinancing rate) ⁵	21.00	16.00	13.00	13.00	13.00	13.00	13.00	..	..
Serbia and Montenegro (discount rate)	9.50	9.00	8.50	x	x	x	x	x	x
Turkey (overnight deposit rate) ⁶	44.00	26.00	18.00	20.00	18.00	17.00	17.00	..	..
Ukraine (refinancing rate)	7.00	7.00	9.00	9.00	9.00	9.00	9.00	..	..

Source: Eurostat, Bloomberg, wiw, IMF.

¹ The Bank of Albania's basic interest rate.

² The Bulgarian National Bank's basic interest rate.

³ Hrvatska narodna banka's basic rate for lending to commercial banks.

⁴ From February 1, 2002, reference rate of Banca Națională a României.

⁵ Charged by the Bank of Russia on three-month loans to commercial banks.

⁶ The interest rate paid by Türkiye Cumhuriyet Merkez Bankası on overnight deposits.

Table A16

Three-Month Interbank Rate¹

End of period, %

	2002	2003	2004	Sep. 04	Oct. 04	Nov. 04	Dec. 04	Jan. 05	Feb. 05
Albania	x	x	x	x	x	x	x	x	x
Bosnia and Herzegovina	x	x	x	x	x	x	x	x	x
Bulgaria	x	3.50	3.64	3.39	3.61	3.69	3.64	3.67	3.65
Croatia	3.93	8.33	6.65	7.49	7.28	6.53	6.65	6.45	6.46
FYR of Macedonia	x	x	x	x	x	x	x	x	x
Romania	20.47	22.31	17.19	19.00	19.00	18.06	17.19	15.80	12.69
Russia	13.35	6.20	6.16	7.81	5.60	5.64	6.16	6.30	6.16
Serbia and Montenegro	x	x	x	x	x	x	x	x	x
Turkey	49.00	26.00	23.00	24.00	23.00	23.00	23.00	19.00	19.00
Ukraine	x	4.75	10.50	5.00	5.99	10.50	10.50	10.50	10.50

Source: Bloomberg, Thomson financial.

¹ Ask rate.

Table A17

Exchange Rate

Period average, national currency per EUR (ECU)

	2002	2003	2004	Nov. 04	Dec. 04	Jan. 05	Feb. 05	March 05	April 05
Albania	132.46	137.58	127.61	127.42	126.34	126.22	126.70	126.38	125.85
Bosnia and Herzegovina	1.96	1.96	1.96	x	x	x	x	x	x
Bulgaria	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.96	..
Croatia	7.41	7.57	7.50	7.56	7.56	7.55	7.52	7.46	7.39
FYR of Macedonia	60.98	61.26	61.34	x	x	x	x	x	x
Romania	31,234.75	37,543.00	40,511.75	39,848.00	38,696.00	38,168.00	36,733.00	36,292.00	..
Russia	29.65	34.55	35.81	37.08	37.39	36.72	36.38	36.47	..
Serbia and Montenegro	60.79	65.26	73.00	76.80	78.12	79.59	80.40	80.79	..
Turkey	1.44	1.70	1.78	1.88	1.87	1.78	1.71	1.73	..
Ukraine	5.03	6.02	6.61	6.89	7.10	6.99	6.89	..	..

Source: Eurostat, wiw, national sources, Thomson financial.

NOTES

Legend, Abbreviations and Definitions

Legend

× = No data can be indicated for technical reasons

.. = Data not available at the reporting date

0 = The numerical value is zero or smaller than half of the unit indicated

Discrepancies may arise from rounding.

Abbreviations

ADF test	Augmented Dickey-Fuller test
ALL	Albanian lek
ARDL	Auto-Regressive Distributed Lag
ATM	automated teller machine
BNB	Bulgarian National Bank
BOFIT	Bank of Finland Institute for Economies in Transition
CAP	common agricultural policy (EU)
CBR	Central Bank of Russia
CEE	Central and Eastern Europe
CEECs	Central and Eastern European countries
CEEI	Conference on European Economic Integration (OeNB)
CIS	Community of Independent States
CGE model	computable general equilibrium model
CPI	consumer price index
DOLS	dynamic ordinary least squares
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
Ecofin	Council of Economic and Finance Ministers
ECU	European Currency Unit
EEA	European Economic Area
EEC	European Economic Community
EMBI	Emerging Markets Bond Index
EMI	European Monetary Institute
EMS	European Monetary System
EMU	Economic and Monetary Union
ERM	exchange rate mechanism
ERM II	exchange rate mechanism II
ERS test	Elliott-Rothenberg-Stock test
ESCB	European System of Central Banks
EU	European Union
EUR	euro
FDI	foreign direct investment
FSAP	Financial Services Action Plan
FYROM	Former Yugoslav Republic of Macedonia
GDP	gross domestic product
GFCF	gross fixed capital formation
GMM	Generalized Method of Moments
HICP	Harmonized Index of Consumer Prices
ICSS	Iterated Cumulative Sums of Squares
ICTY	International Criminal Tribunal for the Former Yugoslavia

ILO	International Labor Organization
IMF	International Monetary Fund
INSTAT	Albanian Institute of Statistics
IPS test	Im-Pesaran-Shin test
KPSS test	Kwiatowski-Phillips-Schmidt-Shin test
LM	Lagrange multiplier
LR	likelihood ratio
LFS	Labor Force Survey
MNB	Magyar Nemzeti Bank
NACE	statistical classification of economic activities (EU)
NBS	Národná banka Slovenska
NCB	national central bank
NFA	net foreign assets
NMS	new Member State(s) (EU)
OCA	optimum currency area
OECD	Organisation for Economic Co-operation and Development
OeNB	Oesterreichische Nationalbank
OLS	ordinary least squares
OMV	OMV Aktiengesellschaft (Austrian mineral oil company)
PAN II	Public Administration Network II (European Commission)
PEP	Pre-Accession Economic Programme
POS	point of sale
PP test	Phillips-Perron test
PPI	producer price index
PPP	purchasing power parity
ROE	return on equity
SAA	Stabilisation and Association Agreement (EU)
SAP	Stabilisation and Association Process (EU)
SDR	Special Drawing Right
SEE	Southeastern Europe
SEECs	Southeastern European countries
SGP	Stability and Growth Pact
SMEs	small and medium-sized enterprises
Treaty	Treaty on European Union
ULC	unit labor costs
UN	United Nations
USD	U.S. dollar
VAT	value-added tax
WIFO	Österreichisches Institut für Wirtschaftsforschung – Austrian Institute of Economic Research
wiiw	Wiener Institut für internationale Wirtschaftsvergleiche – The Vienna Institute for International Economic Studies
WTO	World Trade Organization

Definitions

Bulgaria is a candidate country within the EU enlargement process. A candidate country is a country that has formally applied to the European Union for membership and has been officially recognized by the European Council as a candidate for membership. As the Accession Treaty was signed on April 25, 2005, Bulgaria may be termed an acceding country.

Bulgaria applied for EU membership on December 15, 1995, and was formally recognized as a candidate country at the Helsinki European Council meeting on December 10 and 11, 1999. Accession negotiations were opened on February 15, 2000. Negotiations were provisionally closed in December 2004, and the Accession Treaty was signed on April 25, 2005. The Accession Treaty will have to be ratified by the national parliaments of the 25 EU Member States and those of Bulgaria and Romania in order to enter into legal force.

Romania is a candidate country within the EU enlargement process. A candidate country is a country that has formally applied to the European Union for membership and has been officially recognized by the European Council as a candidate for membership. As the Accession Treaty was signed on April 25, 2005, Romania may be termed an acceding country.

Romania applied for EU membership on June 22, 1995, and was formally recognized as a candidate country at the Helsinki European Council meeting on December 10 and 11, 1999. Negotiations were provisionally closed in December 2004, and the Accession Treaty was signed on April 2005. The Accession Treaty will have to be ratified by the national parliaments of the 25 EU Member States and those of Bulgaria and Romania in order to enter into legal force.

Croatia is a candidate country within the EU enlargement process. A candidate country is a country that has formally applied to the European Union for membership and has been officially recognized by the European Council as a candidate for membership.

Croatia applied for EU membership on February 21, 2003, and was formally recognized as a candidate country at the Brussels European Council meeting on June 17 and 18, 2004. The European Council of December 2004 had scheduled the start of accession negotiations for March 17, 2005, provided that Croatia fully cooperated with the International Criminal Tribunal for the former Yugoslavia (ICTY). On March 16, 2005, the General Affairs and External Relations Council (GAERC) of the EU concluded that “In that regard, after deliberations by the Council and in the absence of a common agreement, the opening of accession negotiations has been postponed” and that “The bilateral intergovernmental conference will be convened by common agreement as soon as the Council has established that Croatia is cooperating fully with the ICTY.” The European Council of March 22 and 23, 2005, supported the creation of a task force to report on Croatia’s progress in meeting the conditions for opening accession negotiations with the EU. The task force would consult both with the Croatian authorities and with the ICTY and report to the GAERC.

Turkey is a candidate country within the EU enlargement process. A candidate country is a country that has formally applied to the European Union for membership and has been officially recognized by the European Council as a candidate for membership.

Turkey applied for EU membership on April 14, 1987, and was formally recognized as a candidate country at the Helsinki European Council meeting on December 10 and 11, 1999. On the basis of a report and recommendation by the European Commission, the European Council of December 2004 decided that Turkey fulfills the Copenhagen political criteria (provided that it brings into force six specified pieces of legislation) and that accession negotiations should be opened on October 3, 2005.

The *Former Yugoslav Republic of Macedonia* is an applicant country within the EU enlargement process. An applicant country is a country that has formally applied to the European Union for membership.

The Former Yugoslav Republic of Macedonia applied for EU membership on March 22, 2004.

List of Studies and Special Reports Published in Focus on European Economic Integration¹

For further details see www.oenb.at.

Issue 2/04

Central Bank Independence in Southeastern Europe with a View to Future EU Accession

Sandra Dvorsky

A Meta-Analysis of Business Cycle Correlations between the Euro Area, CEECs and SEECs – What Do We Know?

Jarko Fidrmuc and Iikka Korhonen

Exchange Rate Arrangements and Monetary Policy in Southeastern Europe and Turkey: Some Stylized Facts

Stephan Barisitz

Exchange Rate Developments and Fundamentals in Four EU Accession and Candidate Countries: Bulgaria, Croatia, Romania and Turkey

Jesús Crespo-Cuaresma, Jarko Fidrmuc and Maria Antoinette Silgoner

Equilibrium Exchange Rates in Southeastern Europe, Russia, Ukraine and Turkey: Healthy or (Dutch) Diseased?

Balázs Égert

For a comprehensive list of studies and special reports published in Focus on Transition, please see Focus on European Economic Integration 1/04, pp. 199–203.

¹ Focus on Transition was published up to issue 2/2003 and has been replaced by Focus on European Economic Integration since issue 1/04.

Periodical Publications of the Oesterreichische Nationalbank

For further details see www.oenb.at

Statistiken – Daten & Analysen

quarterly

This publication contains reports and analyses focusing on Austrian financial institutions, cross-border transactions and positions as well as financial flows. The contributions are in German, with executive summaries of the analyses in English. The statistical part covers tables and explanatory notes on a wide range of macroeconomic, financial and monetary indicators. The tables including additional information and data are also available on the OeNB's website in both German and English. This series also includes special issues on selected statistics topics that will be published at irregular intervals.

Monetary Policy & the Economy

quarterly

This quarterly publication, issued both in German and English, offers analyses of cyclical developments, medium-term macroeconomic forecasts and studies on central banking and economic policy topics. This publication also summarizes the findings of macroeconomic workshops and conferences organized by the OeNB.

Financial Stability Report

semiannual

The *Financial Stability Report*, issued both in German and English, contains first, a regular analysis of Austrian and international developments with an impact on financial stability and second, studies designed to provide in-depth insights into specific topics related to financial market stability.

Focus on European Economic Integration

semiannual

Focus on European Economic Integration, the successor publication to *Focus on Transition* (published up to issue 2/2003), contains a wide range of material on Central and Eastern European countries (CEECs), beginning with a topical economic analysis of selected CEECs. The main part of the publication comprises studies, on occasion several studies focusing on a special topic. The final section provides information about the OeNB's CEEC-related activities and conferences as well as a statistical annex.

Annual Report

annual

The *Annual Report* of the OeNB provides a broad review of Austrian monetary policy, economic conditions, new developments in financial markets in general and financial market supervision in particular, as well as of the OeNB's changing responsibilities and its role as an international partner in cooperation and dialogue. It also contains the financial statements of the OeNB.

Economics Conference (Conference Proceedings)

annual

The *Economics Conference* hosted by the OeNB represents an important international platform for exchanging views on monetary and economic policy as well as financial market issues. It convenes central bank representatives, economic policy decision makers, financial market players, academics and researchers. The conference proceedings comprise all papers, most of them in English.

The Austrian Financial Markets

annual

The publication *The Austrian Financial Markets* provides easy access to continuously updated information on the Austrian capital markets to the international investment community. The brochure is jointly edited by the OeNB and the Oesterreichische Kontrollbank AG (OeKB).

Proceedings of OeNB Workshops

recurrent

The proceedings of *OeNB Workshops* were introduced in 2004 and typically comprise papers presented at OeNB workshops at which national and international experts, including economists, researchers, politicians and journalists, discuss monetary and economic policy issues. Workshop proceedings are available in English only.

Working Papers

recurrent

The OeNB's *Working Paper* series is designed to disseminate, and provide a platform for discussing, findings of OeNB economists or outside contributors on topics which are of special interest to the OeNB. To ensure the high quality of their content, the contributions are subjected to an international refereeing process. The opinions are strictly those of the authors and in no way commit the OeNB.

Conference on European Economic Integration (Conference Proceedings)

annual

This series, published by a renowned international publishing house, reflects presentations made at the OeNB's annual central banking conference on Central, Eastern and Southeastern European issues and the ongoing EU enlargement process (formerly *East-West Conference*).

For further details see ceec.oenb.at

Newsletter of the Economic Analysis and Research Section

quarterly

The English-language *Newsletter of the Economic Analysis and Research Section* is only published on the Internet and informs an international readership about selected findings, research topics and activities of the OeNB's Economic Analysis and Research Section. This publication addresses colleagues from other central banks or international institutions, economic policy researchers, decision makers and anyone with an interest in macroeconomics. Furthermore, the *Newsletter* offers information on publications, studies or working papers as well as events (conferences, lectures and workshops).

For further details see hvwnewsletter.oenb.at

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