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**Working Paper**

## Trade Flows in Southeast Europe

wiiw Balkan Observatory Working Papers, No. 059

**Provided in Cooperation with:**

The Vienna Institute for International Economic Studies (wiiw) - Wiener Institut für Internationale  
Wirtschaftsvergleiche (wiiw)

*Suggested Citation:* Christie, Edward (2004) : Trade Flows in Southeast Europe, wiiw Balkan  
Observatory Working Papers, No. 059, The Vienna Institute for International Economic Studies  
(wiiw), Vienna

This Version is available at:

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The wiiw Balkan Observatory

Working Papers | 059 | December  
2004

*Edward Christie*

Trade Flows in Southeast Europe





# The wiiw Balkan Observatory

[www.balkan-observatory.net](http://www.balkan-observatory.net)

## *About*

Shortly after the end of the Kosovo war, the last of the Yugoslav dissolution wars, the Balkan Reconstruction Observatory was set up jointly by the Hellenic Observatory, the Centre for the Study of Global Governance, both institutes at the London School of Economics (LSE), and the Vienna Institute for International Economic Studies (wiiw). A brainstorming meeting on Reconstruction and Regional Co-operation in the Balkans was held in Vouliagmeni on 8-10 July 1999, covering the issues of security, democratisation, economic reconstruction and the role of civil society. It was attended by academics and policy makers from all the countries in the region, from a number of EU countries, from the European Commission, the USA and Russia. Based on ideas and discussions generated at this meeting, a policy paper on Balkan Reconstruction and European Integration was the product of a collaborative effort by the two LSE institutes and the wiiw. The paper was presented at a follow-up meeting on Reconstruction and Integration in Southeast Europe in Vienna on 12-13 November 1999, which focused on the economic aspects of the process of reconstruction in the Balkans. It is this policy paper that became the very first Working Paper of the wiiw Balkan Observatory Working Papers series. The Working Papers are published online at [www.balkan-observatory.net](http://www.balkan-observatory.net), the internet portal of the wiiw Balkan Observatory. It is a portal for research and communication in relation to economic developments in Southeast Europe maintained by the wiiw since 1999. Since 2000 it also serves as a forum for the Global Development Network Southeast Europe (GDN-SEE) project, which is based on an initiative by The World Bank with financial support from the Austrian Ministry of Finance and the Oesterreichische Nationalbank. The purpose of the GDN-SEE project is the creation of research networks throughout Southeast Europe in order to enhance the economic research capacity in Southeast Europe, to build new research capacities by mobilising young researchers, to promote knowledge transfer into the region, to facilitate networking between researchers within the region, and to assist in securing knowledge transfer from researchers to policy makers. The wiiw Balkan Observatory Working Papers series is one way to achieve these objectives.



# The wiiw Balkan Observatory

## IBEU

*This study has been developed in the framework of the IBEU project - Integrating the Balkans in the European Union: Functional Borders and Sustainable Security.*

The IBEU project was funded by the 3rd Call of the Key-Action: “Improving the Socio-Economic Knowledge Base” of the European Commission, DG Research under Theme 3: Citizenship, governance, and the dynamics of European integration and enlargement.

IBEU was coordinated by ELIAMEP (Athens) and involved the LSE (London), IECOB (Forlì), WIIW (Vienna), CLS (Sofia), IME (Sofia) and SAR (Bucharest).

For additional information see [www.balkan-observatory.net](http://www.balkan-observatory.net), [www.wiiw.ac.at](http://www.wiiw.ac.at) and [www.eliamep.gr](http://www.eliamep.gr)

# Trade Flows in Southeast Europe

## **Abstract**

This paper seeks to give an overview of the major issues connected to international trade for the countries of Southeast Europe. In its first part the paper revisits the issues of bilateral trade patterns and trade composition in Southeast Europe and looks at recent developments in terms of trade agreements and trade facilitation within the region and between the region and the European Union. The second part of the paper deals with the specific issue of trade in services. A gravity model for trade is estimated on European bilateral services trade flows. The estimation results are then used to produce forecasts for bilateral services trade flows for the countries of Southeast Europe.

**JEL Classification :** F15, F17

**Keywords :** International trade, trade in services, gravity models, Southeast Europe

## Executive Summary

Trade patterns in Southeast Europe were heavily disrupted during the 1990s notably due to the military conflicts in former Yugoslavia. In the last few years the patterns have normalised to a new equilibrium where the European Union, and especially the Western European member states, acts as by far the most important trading partner both for imports and for exports for practically all the countries of the region. While some recovery of trade flows between countries formerly part of Yugoslavia has taken place, countries further from the geographical centre of Southeast Europe such as Albania and Romania trade very little with regional partners and very much with the EU. Romania, Bulgaria and Croatia are likely to join the EU around 2007-2008, while dates for the other countries are uncertain. In parallel the countries of the region are progressively liberalising trade with one another through a series of bilateral trade agreements. Because this bilateral route is rather cumbersome and slow, and because the three aforementioned countries are going to join the EU quite soon anyway, it is clear that the region has no prospect of being a free-trade area in any meaningful sense until all the countries are part of an enlarged EU. This seems to be accepted wisdom by all concerned, as the overriding policy goal for all the countries of the region is to join the EU anyway.

Future prospects for trade between the region and Western Europe and, to a lesser extent, within the region, look better today than a few years ago. There has been marked progress in terms of lowered trade barriers (to the EU and within the region) and trade facilitation measures. GDP growth has been quite strong over the last few years, and trade between the EU-15 and especially Romania and Bulgaria has surged impressively over the last few years, although trade deficits are persistently large. The entry into the EU of Central European countries such as Slovenia and Hungary can only have a positive impact on trade flows, as this implies more direct access to the single market.

Concerning the composition of trade, the countries of Southeast Europe have large shares of their exports from basic manufacturing sectors which employ essentially lower skilled workers, which use rather low technologies, and which miss out on the higher value added available in other sectors. This is in clear contrast to the export structures of the Central European countries which have more technology-intensive and more human capital – intensive export compositions.

On the issue of trade in services, all the countries of the region have good future prospects. Many flows are still relatively low, and as the case of Croatia shows, tourism is a natural export service for many parts of the region. Business services could develop much more than they have so far and have already to some extent developed in the case of Romania. Services trade between Italy and Romania is already quite high, but still below this report's end-of-decade projection. More generally this paper's forecasts indicate high potential for trade in services between Romania and Bulgaria on the one hand, and the large EU economies on the other hand, notably Germany, the UK and France.

## Introduction

Previous research on trade potential in Southeast Europe, e.g. Christie (2002), has shown a highly distorted pattern in the distribution of bilateral trade flows for the late 1990s. This is especially the case for the countries of the former Yugoslavia, with trade flows between Serbia and Croatia at rather low levels, especially compared to what they were prior to disintegration, as well as selectively low trade flows between Serbia and the Federation of Bosnia and Herzegovina and between Croatia and Republika Srpska. A “battered core” in the centre of Southeast Europe consisting of Bosnia and Herzegovina and of Serbia and Montenegro went through the strongest upheavals due to a combination of military conflict, trade sanctions and corrupt leadership. At the same time, the periphery of Southeast Europe, which we define here as Slovenia, Croatia, Romania and Bulgaria, were either able to extirpate themselves from conflict earlier or less scathed (Slovenia, Croatia), or avoided conflict altogether (Romania, Bulgaria). This enabled these countries to develop stronger trade links with the EU earlier, and to enjoy a better growth record. Albania, essentially due to a lower developmental level and unfavourable geography, ended up trading mainly with Greece (to some extent) and Italy (overwhelmingly), and very little with anyone else.

Although the status of Kosovo (Kosova) and the issue of Montenegrin independence are still unresolved questions, the region today is essentially pacified. The countries of Southeast Europe have recently negotiated, and in many cases already ratified and put in application, a set of bilateral free trade agreements with one another. At the same time, the European Union has liberalised trade with the so-called “Western Balkan” countries<sup>1</sup> unilaterally using “autonomous trade concessions” agreements (ATCs). Slovenia and Hungary joined the EU on 1 May 2004, while Romania, Bulgaria and Croatia seem set to join around 2007-2008 (not necessarily simultaneously). These recent positive developments require a revaluation of the trade patterns in the region.

Christie (2002) posited the following key conclusions: Southeast Europe in 1999 was not a region from the point of view of international trade because the trade flows between the countries of that region were in too many instances much lower than one would expect for countries that are geographically so close to one another, having taken their (relatively low) GDPs into consideration; though a reversion to something more like a region was thought possible, it seemed likely that the countries of Southeast Europe would not (re-)integrate economically with one another, but rather become or remain small peripheral economies each with strong trade links to the EU-15 (Germany, Italy, Austria and Greece most of all) but with rather weak ones with their regional partners. The main question for us at this stage is therefore to evaluate recent trends in the trade patterns in the region and try to assess to what extent the scenarios of Christie (2002) may be confirmed or disconfirmed with more recent data. This paper starts with a general overview of the recent patterns in goods trade, followed by a reminder of the recent trade agreements that affect the region and some comments on the issue of trade facilitation. This is followed by a second part which reviews the issue of trade in services and which includes forecasts for bilateral services trade flows for the countries of the region.

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<sup>1</sup> The Former Yugoslavia excluding Slovenia, plus Albania, in other words: Croatia, Bosnia and Herzegovina, Serbia and Montenegro, Macedonia and Albania.

## PART I – Trade in Goods

### The General Pattern of Trade in Goods over the 1998-2003 Period

We start by looking at intra-regional trade in the SEE-7 group of countries.

Table 1 - Imports from other SEE-7 countries as a percentage of total imports

Year / Country	ALB	BiH	BUL	CRO	MAK	ROM	S&M
1998	6.3	43.4	2.8	2.9	20.4	1.1	14.1
1999	7	32.8	2.2	2.5	20.7	0.9	14.6
2000	6.1	21.4	4.4	2.0	19.8	0.7	20.9
2001	5.7	27.9	3.0	2.8	18.2	1.4	21.8
2002	6.1	22.8	2.5	2.7	11.1	1.1	15.3
2003	6.7	32.5	3.0	3.9	20.8	0.9	13.7

Source: IMF Direction of Trade Database, wiiw calculations

Table 2 - Exports to other SEE-7 countries as a percentage of total exports

Year / Country	ALB	BiH	BUL	CRO	MAK	ROM	S&M
1998	2.3	54.1	7	16	19.2	2.9	33
1999	2.1	42.9	8.6	14.7	20.4	2.9	33.8
2000	2.1	30.5	12.6	12	30.9	2.3	28.2
2001	2.8	31.2	9.8	17.4	38.3	3.1	28.7
2002	2.2	37.2	9.3	19.2	20	2.9	31.1
2003	4.0	32.0	9.4	19.5	32.6	3.1	30.7

Source: IMF Direction of Trade Database, wiiw calculations

Several principal features are unchanged over the period. Table 1 shows that Albania and Romania are the least regionally integrated countries from the point of view of trade in goods. There are no detectable trends that would indicate that this may change. Bulgaria and Croatia have an intermediate status. The region is a relatively significant export destination for both countries, but only a very modest source of imports. The core of the region is constituted by Bosnia and Herzegovina, Macedonia and Serbia and Montenegro (S&M). Concerning trends, one notes that Bosnia and Herzegovina has, in terms of shares, been trading less and less with the region over the years, both for imports and for exports, although there seems to be a recovery in 2003 for imports from the region. Macedonia's trade with the region seems to have suddenly fallen in 2002 and then shot back up in 2003. This could be an idiosyncrasy linked to the small size of the country, or just an error in the official data. Finally the shares for Serbia and Montenegro have been roughly stable.

We now look at the corresponding data in terms of US Dollars:

Table 3 - Imports from other SEE-7 countries, USD millions, current prices



Year / Country	ALB	BiH	BUL	CRO	MAK	ROM	S&M
1998	57	1345	140	241	428	117	677
1999	63	918	110	193	435	86	482
2000	67	770	286	158	416	85	773
2001	74	893	216	249	419	227	1046
2002	85	821	195	284	222	205	918
2003	121	1430	300	550	478	218	1055

Source: IMF Direction of Trade Database, *wiww* calculations

Table 4 - Exports from other SEE-7 countries, USD millions, current prices

Year / Country	ALB	BiH	BUL	CRO	MAK	ROM	S&M
1998	7	379	294	736	211	235	957
1999	4	300	318	617	224	241	507
2000	6	305	605	528	402	239	479
2001	8	343	500	783	498	366	545
2002	7	409	521	960	240	392	653
2003	16	416	677	1209	391	543	768

Source: IMF Direction of Trade Database, *wiww* calculations

On the side of imports we note that Bosnia and Herzegovina in fact imported more from the region in 2003 than at any other time since 1998. The 2002 drop in Macedonian trade is also confirmed. On the side of exports, one notes that Serbia and Montenegro still hasn't caught up with the 1998 level, although there is a positive trend in that direction. Romania, Bulgaria, Croatia and Bosnia and Herzegovina all export more to the other countries of the region than they did in 1998.

An alternative definition of Southeast Europe which is occasionally used includes, besides our seven base countries, Slovenia, Hungary, Greece and Turkey. Are the trade patterns much different if one considers imports and exports of the SEE-7 within this larger group of countries?

Table 5 - Imports from other SEE-11 countries as a percentage of total imports

Year / Country	ALB	BiH	BUL	CRO	MAK	ROM	S&M
1998	38.7	60.7	12.4	14.4	47.9	10.1	23.7
1999	37.6	55.2	12.9	13.4	48.2	9.7	24.7
2000	39.2	39.6	13.9	12.7	41.5	8.4	31.3
2001	36.9	49.8	14.1	14	43.6	10.4	36.3
2002	38	45.1	15.5	14.3	40.2	10.6	26.7
2003	36.2	55.5	18.7	15.7	55.4	9	28.9

Source: IMF Direction of Trade Database, *wiww* calculations

Table 6 - Exports to other SEE-11 countries as a percentage of total imports

Year / Country	ALB	BiH	BUL	CRO	MAK	ROM	S&M
1998	16.9	61	25.9	26.1	28.7	12.2	41
1999	17.3	51.1	27.1	27.3	29.8	13.9	43.9
2000	20.6	37.2	31.8	26.3	42.9	13.6	38
2001	16.5	39.3	28	29.7	47.1	15.2	40.2
2002	6.1	47.1	29	30	26.9	12.8	39.4
2003	9.3	40.9	25.7	29.8	44	13.5	40.9

Source: IMF Direction of Trade Database, wiiw calculations

The inclusion of these four additional countries only slightly changes the overall picture. Albania looks less regionally isolated, thanks to its trade with Greece and Turkey (the flows with Slovenia and Hungary are tiny), though this is only really the case with imports. On the side of exports, perhaps surprisingly, Albania has recently been trading less than it used to with the region as a whole. One reason is that exports to Greece apparently fell sharply in 2002 and recovered only modestly in 2003. This could be due to misreporting however, and additional investigations would be necessary to clarify this issue. The other specific case is Romania which, in spite of the inclusion of Hungary (an adjacent country) and Turkey, still seems to trade rather little with its regional partners. Romania again appears as one of the least regionally integrated countries. Appendix B gives the shares and dollar amounts for bilateral trade flows between Romania and Bulgaria and selected regional partners.

Table 7 - Imports from the EU-15 as a percentage of total imports

Year / Country	ALB	BiH	BUL	CRO	MAK	ROM	S&M
1998	79	33.4	46.1	52.8	52.8	57.9	45.1
1999	77.6	37.6	50.9	56.7	50.7	62.7	38.3
2000	75.6	33.2	44.0	54.3	49.4	63.0	40.9
2001	77.4	37.2	49.8	55.9	46.1	63.0	49.1
2002	77.6	39.0	50.5	55.5	53.0	63.9	52.0
2003	73.1	35.9	56.4	56.0	50.7	62.7	49.7

Source: IMF Direction of Trade Database, wiiw calculations

Table 8 - Exports to the EU-15 as a percentage of total exports

Year / Country	ALB	BiH	BUL	CRO	MAK	ROM	S&M
1998	88.8	33.8	51.5	47.7	51.8	64.6	38.0
1999	89.9	42.3	53.3	49.4	50.9	66.0	34.3
2000	93.4	47.6	51.2	50.5	46.1	60.6	37.7
2001	91.8	46.3	55.2	55.0	41.4	65.1	47.0
2002	90.0	51.1	56.1	50.4	40.0	66.3	54.0
2003	88.5	55.9	53.2	52.9	53.5	67.1	54.3

Source: IMF Direction of Trade Database, wiiw calculations

Tables 7 and 8 show that Albania's trade is essentially with the EU-15. Most of this trade is with Italy. Romania occupies the second rank as far as trade integration with the EU is concerned. All countries in the region have over 50% of their exports going to the EU-15, while all countries in the region except Bosnia and Herzegovina take over 50% of their imports from the EU-15. On the side of exports, the two main growth stories are Serbia and Montenegro, going from 38.0% to 54.3%, and Bosnia and Herzegovina, going from 33.8% to 55.9%. In the case of the former, the main gains were made after 2000, while the change has been rather progressive in the case of the latter country. All in all, what the data shows is the irresistible pull of the EU-15 countries for Southeast Europe. These patterns will only be stronger with the recent enlargement to 25 member states.

Table 9 - Imports from the EU-15, USD millions, current prices

Year / Country	ALB	BiH	BUL	CRO	MAK	ROM	S&M
1998	711	1035	2305	4382	1109	6137	2165
1999	698	1053	2545	4366	1065	5957	1264
2000	832	1195	2860	4290	1037	7623	1513
2001	1006	1190	3586	4975	1060	10206	2357
2002	1086	1404	3939	5828	1060	11885	3120
2003	1316	1580	5640	7896	1166	15173	3827

Source: IMF Direction of Trade Database, *wiww* calculations

Table 10 - Exports from the EU-15, USD millions, current prices

Year / Country	ALB	BiH	BUL	CRO	MAK	ROM	S&M
1998	266	237	2163	2194	570	5233	1102
1999	180	296	1972	2075	560	5478	515
2000	280	476	2458	2222	599	6302	641
2001	275	509	2815	2475	538	7682	893
2002	270	562	3142	2520	480	8951	1134
2003	354	727	3830	3280	640	11743	1358

Source: IMF Direction of Trade Database, *wiww* calculations

Looking at the trade levels, we note a steady increase in imports from the EU-15 for all countries with some significant jumps in 2003. The strongest progressions are found for Bulgaria and Romania, while the largest importers of EU-15 goods in the region are Romania, Croatia and Bulgaria, in that order. Albanian exports to the EU-15 have stagnated at a relatively low level throughout the period, while those from Bosnia and Herzegovina, which started off at an even lower level in 1998 have now reached 727 million USD, or roughly double the level of Albanian exports. All these flows are of course quite modest, even by the region's standards. Exports from Serbia and Montenegro have broken through the USD 1 billion mark again in 2002, making the exports finally catch up with their 1998 level. Elsewhere there has been steady growth, to some degree for Croatian exports, and to a strong degree for exports from Bulgaria (+77%) and Romania (+124%).

## The composition of Southeast European exports

We briefly turn to the composition of exports of the SEECs. This section is essentially descriptive. For a more thorough analysis of trade composition one may consult Astrov (2001), which provides estimates of revealed comparative advantages by commodity group. We start here by listing the ten main exported commodities for Bulgaria and Romania in 2001-2002. The tables show the 2001-2002 averages, as well as the 1992-1993 averages for comparative purposes.

Table 11 - Bulgarian exports, top 10 commodity groups as shares of total exports

<b>HS / CN Commodity Groups</b>	<b>1992-1993 Average</b>	<b>2001-2002 Average</b>
Textiles and textile products	7.0	21.5
Base metals and products	16.1	17.3
Mineral products	9.6	13.2
Machinery and electrical equipment	12.9	10.5
Chemicals and related products	11.7	9.0
Prep. foodstuffs, beverages, tobacco	12.6	4.6
Vegetable products	4.0	4.6
Footwear, headgear, etc.	2.0	3.0
Plastics, rubber and rubber products	3.5	2.6
Miscellaneous manufactured prod.	1.0	2.1
<b>TOTAL OF TOP 10</b>		<b>88.4</b>

Source: *wiiw*

Table 12 - Romanian exports, top 10 commodity groups as shares of total exports

<b>HS/CN Commodity groups</b>	<b>1992-1993 Average</b>	<b>2001-2002 Average</b>
Textiles and textile products	13.2	25.8
Machinery and electrical equipment	10.3	15.2
Base metals and products	18.2	13.1
Footwear, headgear, etc.	2.5	8.5
Mineral products	12.4	7.7
Means of transport	9.6	5.4
Miscellaneous manufactured prod.	8.3	5.4
Wood & products, charcoal, cork	3.6	4.6
Chemicals and related products	8.4	3.9
Plastics, rubber and rubber products	1.8	2.3
<b>TOTAL OF TOP 10</b>		<b>91.9</b>

Source: *wiiw*

As we can see from the data, the distributions and commodity groups are very similar between the two countries. Eight out of ten of the main commodity groups for each country is among the top ten for the other country in each case. Textiles and textile products, and base metals and products rank very highly for both countries. Agricultural products are more prominent among Bulgarian exports than among Romanian exports (Prepared foodstuffs, beverages and tobacco and vegetable products), while Romania exports larger shares in means of transport and in miscellaneous manufacturing products. If one computes the Herfindahl concentration index for the two countries over all 22 commodity groups that exist at this level of

disaggregation, one finds 1189 and 1298 for Bulgaria and Romania respectively<sup>2</sup>, thus the degree of specialisation is very similar as well.

What has changed since 1992-1993? For both countries the relative importance of textiles has increased strongly. The same is true to a lesser extent for footwear and headgear. One difference between the two countries is that the share of machinery and electrical equipment has increased for Romania, but decreased for Bulgaria.

How do these shares compare to what one finds in the more advanced economies of Central Europe? Machinery and Electrical Equipment and Means of Transport are much more important export commodity groups for Central European countries, whereas textiles and textile products are much less important. Footwear and headgear are not among the top ten for the Central European countries. Neither are any of the commodity groups related to food, beverages or tobacco.

Table 13 - Top 10 exported commodity groups as shares of total exports for four Central European countries

Commodity groups	Czech R.	Slovakia	Hungary	Poland	CEEC-4 Average
Machinery and electrical equipment	31.7	18.8	48.9	21.5	30.2
Means of transport	17.1	20.9	9.3	15.7	15.7
Base metals and products	11.7	14.8	5.3	11.6	10.8
Textiles and textile products	5.4	6.7	5.2	7.5	6.2
Miscellaneous manufactured prod.	4.6	3.8	4.4	8.0	5.2
Plastics, rubber and rubber products	5.7	5.6	4.0	4.9	5.0
Chemicals and related products	4.6	4.9	4.9	4.9	4.8
Mineral products	3.3	7.5	1.9	5.7	4.6
Paper and paper products	3.2	5.0	1.5	3.7	3.3
Stone, cement, ceramic, glass, etc.	4.3	2.4	1.1	2.3	2.5
<b>TOTAL OF TOP 10</b>					<b>88.3</b>

Source: *wiiw*

Note: the CEEC-4 column is an unweighted average

So far we have only discussed Romania and Bulgaria. What is the situation with the other SEECs? Unfortunately, most of the other countries of the region do not provide trade statistics according to the harmonised system (HS) or its European equivalent (CN) which makes matching commodity groups rather difficult. However a brief look at the data does enable some basic observations.

In the case of Macedonia, the export data for 2001-2002 (unweighted averages of the 2001 and 2002 shares) shows high shares for clothing and footwear, together 32.1% of total exports, and for metals (iron and steel, non-ferrous metals and other metal processings) accounting for 23.1%, while the whole of machinery and transport equipment (which includes machinery, electrical equipment, vehicles and other transport equipment) only accounts for 6.7% of total exports<sup>3</sup>. In the case of Serbia

<sup>2</sup> The Herfindahl concentration index is equal to the sum of the squares of the shares expressed in percentage form (e.g. 70% is taken as being 70). Thus the range of possible values for the Herfindahl index is from zero (an infinite number of shares equal to zero) to 10'000 (only one non-zero share, equal to 100).

<sup>3</sup> Source: Statistical Yearbook of the Republic of Macedonia 2003

and Montenegro textiles, clothing, footwear and leather products together account for 14.5% of total exports, metals and metal products for 19.7%, and machinery (all types) and transport equipment for 13.4%. Chemicals (7.1%) and rubber and plastics (7.3%) are also relatively important categories. Thus Serbia and Montenegro seems to have a slightly more “high-tech” export structure than Macedonia with a smaller share in textiles and a higher one in machinery and transport equipment, though the latter share is still much lower than those found for the Central European countries, where a roughly equivalent category<sup>4</sup> would account for between 37% and 58% of total exports depending on which country one looks at.

Croatia’s export structure can be similarly described. If one looks at the distribution in NACE 2-digit terms and one accepts certain groupings of categories (in order to roughly match HS / CN 1-digit data), one finds that the top 5 export commodity groups are (by unweighted 2001-2002 average shares of total exports):

1. textiles, wearing apparel, fur and fur products, and leather products (NACE 17, 18 and 19) which account for 16.2% of exports, followed by
2. motor vehicles and transport equipment (NACE 34 and 35) with 15.7%,
3. machinery, electrical equipment, office machinery, computers, radios, TV sets etc. (NACE 29 to 32) with 13.4%,
4. mineral products (NACE 23 and 26) with 12.1%,
5. chemicals with 10%

These are followed by: food, beverages and tobacco products, basic metals and metal products, wood and cork products, and furniture and other manufacturing. As we can see, this structure has more in common with those of Romania, Bulgaria or Serbia and Montenegro, than with those found in the Central European countries, with textiles and related products again coming out on top, although the shares for machinery and for transport equipment and vehicles are high by the region’s standards.

For Bosnia and Herzegovina data is available according to the HS system for 2003.

Table 14 – Exports of BiH, top 10 commodity groups as shares of total exports

<b>HS / CN Commodity Groups</b>	<b>2003</b>
Base metals and products	20.9%
Wood & products, charcoal, cork	16.7%
Machinery and electrical equipment	12.0%
Mineral products	9.3%
Miscellaneous manufactured prod.	8.4%
Textiles and textile products	5.6%
Means of transport	4.4%
Footwear, headgear, etc.	4.1%
Prep. foodstuffs, beverages, tobacco	3.6%
Raw hides and skins, leathers, furs	2.5%
<b>TOTAL OF TOP 10</b>	<b>87.6%</b>

*Source: Central Bank of Bosnia and Herzegovina*

<sup>4</sup> Found by taking the sum of the first two rows in table 13.

This distribution is thus different from the other SEECs in that textiles and textile products are much less important for Bosnia and Herzegovina. It is nevertheless still a very “low tech” distribution, as metals, wood, minerals, foodstuffs and hides, skins, leather and fur together account for a very large share of exports.

Finally let us look at the case of Albania. For Albania data is also available according to the HS system. The table gives the average shares for 2001-2003:

Table 15 – Exports of Albania, top 10 commodity groups as shares of total exports

<b>HS / CN Commodity Groups</b>	<b>2001-2003 Average</b>
Textiles and textile products	36.6%
Footwear, headgear, etc.	29.1%
Base metals and products	9.5%
Vegetable products	3.7%
Prep. foodstuffs, beverages, tobacco	3.7%
Raw hides and skins, leathers, furs	3.5%
Machinery and electrical equipment	2.7%
Wood & products, charcoal, cork	2.5%
Mineral products	2.5%
Miscellaneous manufactured prod.	1.9%
<b>TOTAL OF TOP 10</b>	<b>95.6%</b>

*Source: Albanian Center for International Trade (ACIT)*

As we can see, the importance of textiles is very high and is closely followed by the footwear and headgear category. These two sectors together account for 65.7% of exports. Overall the composition of Albanian exports is one of the least skill intensive in the region and is heavily concentrated on textiles, clothing and related articles. In practice most of these products are exported to Italy, as Italian clothes manufacturers outsource to Albania.

To summarise, the countries of Southeast Europe have large shares of their exports from basic manufacturing sectors which employ essentially lower skilled workers, which use rather low technologies, and which miss out on the higher value added available in other sectors. This is in clear contrast to the export structures of the Central European countries where machinery and electrical equipment and means of transport are much more important export commodity groups. In light of this, the current export structures of the SEECs seem neither sustainable nor desirable in the long run. If the SEECs were to evolve towards something like the current structures of the CEECs, one would need to see the emergence of more human capital intensive and technology intensive export sectors which, as real wages would rise in the SEECs, would exert increasingly strong pressures on sectors such as textiles as wage differentials with respect to non-European competitors would rise.

In the short run however these sectors may continue to be successful export commodities for the region, as increased integration with the EU and improved physical access to the EU market will further drive down transaction costs. For the longer run much will depend on the upgrading of quality and skill intensity in currently important sectors such as textiles (e.g. by shifting more to design while outsourcing

the most basic tasks to less costly non-European producers<sup>5</sup>) and the developments in higher value-added, higher skill sectors.

## **The current state of trade agreements**

### Trade arrangements with the European Union

Concerning the five countries of the sub-region referred to by the EU as the Western Balkan<sup>6</sup>, one finds the following summary statement on the Commission's DG Trade web site<sup>7</sup>: "In 2000, the EU granted autonomous trade concessions to the five countries of the region, making it possible for around 95% of their exports to enter duty-free into the Union. The EU maintains tariff quotas only on imports of wine, baby beef and certain fishery products. Quotas are also applied on textiles imports from Serbia-Montenegro."

Let us now look more closely at the actual Council Regulations, in particular Council Regulations 2007/2000, 2563/2000 and 2487/2001, issued on 18 September 2000, 20 November 2000 and 18 December 2001.

Council Regulation (CR) 2007/2000 stated that, with a few exceptions on sensitive products, products originating in Albania, Bosnia and Herzegovina, Croatia and Kosovo<sup>8</sup> would be admitted into the EU-15 without any restrictions (without any tariffs, and without any quotas or any other equivalent measures). The main exceptions, for which quantitative restrictions (and, if exceeded, tariffs) were spelled out, were textile products, fishery products and baby beef. The regulation did not apply to the then federal republic of Yugoslavia (Serbia and Montenegro), although it lifted tariffs for imports of aluminium products up to specified quotas. For Macedonia there was only a lifting of the import tariff on wine (up to a set quota). The arrangement for wine also applied to the other countries, except Serbia and Montenegro.

CR 2007/2000 was amended as early as November 2000 by CR 2563/2000 to include Macedonia and Serbia and Montenegro alongside the countries granted preferential access in CR 2007/2000. CR 2563/2000 was essentially a positive development for Macedonia and Serbia and Montenegro as it was equivalent to reducing tariffs to zero on all industrial goods except certain textile products. A new safeguard clause was introduced in case the EU-15 came to judge itself to be "swamped" by agricultural or fishery products.

CR 2487/2001 together with bilateral agreements (Stabilisation and Association Agreements) between the EU and Croatia and between the EU and Macedonia again slightly modified trade barriers. Thanks to their bilateral trade agreements, Croatia and Macedonia were henceforth granted "unlimited duty-free access" (the wording is that of the EC Regulation, more on the exact meaning below) to the EU-15 for their textile products and improved access for their fishery and baby beef products. In other aspects the bilateral agreements took over the preferential access already

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<sup>5</sup> in an analogous way as to what Italy is doing now with Albania

<sup>6</sup> Croatia, Bosnia and Herzegovina, Serbia and Montenegro, Albania and Macedonia

<sup>7</sup> [http://europa.eu.int/comm/trade/issues/bilateral/regions/balkans/index\\_en.htm](http://europa.eu.int/comm/trade/issues/bilateral/regions/balkans/index_en.htm)

<sup>8</sup> Although Kosovo is by no means a sovereign state, the European Union treats it as a separate entity for the purposes of its trade concessions. The EU's definition of Kosovo is the same as that of the United Nations.



granted by CR 2007/2000. Concerning the remaining countries and territories, i.e. Albania, Bosnia and Herzegovina and Serbia and Montenegro, and Kosovo, CR 2487/2001 was mainly a tidying up exercise. The only changes were that restrictions on textile products would apply only to Serbia and Montenegro from then on, Bosnia and Herzegovina having negotiated a separate bilateral agreement with the EU. By implication CR 2487/2001 means that textile products from Albania and Kosovo have free access to the EU. However this is not clearly stated.

The restrictions that now apply to Serbia and Montenegro and that applied to certain other countries prior to them reaching bilateral agreements with the EU are specified in an older EC Regulation which spells out the general-case restrictions for imports of textiles from countries with which the EU has no specific bilateral agreement. These general restrictions are therefore quite strict. Croatia, Macedonia, and (so it would seem) Albania and Kosovo are now in a different regime, which is referred to as a “double-checking system”. This system operates using import and export licences issued respectively in the EU and in the partner country. Trade is initially free of tariffs and quotas, but there are safeguard clauses for the EU. The safeguard clauses typically state limits that could be phrased as follows: no more of product A may be imported in a given year than  $x\%$  over 100% of what was imported in a (stated) range of products the previous year. Finally, one should of course remember that the rules of origin still apply.

Concerning Romania and Bulgaria, both countries are relatively advanced along the accession path. Bilateral trade between the EU and Bulgaria and Romania has been gradually liberalised under the Europe Agreements over the course of the 1990s. Currently, over 95% of both countries' trade with the EU is conducted freely, while a few agricultural and processed agricultural products remain subject to customs duties on both sides. This implies that the EU is paradoxically more restrictive for certain types of goods originating in Romania and Bulgaria (notably processed agricultural goods) than it is with regards to the same goods if they originate from Western Balkan countries. Judging by the commodity group shares we looked at earlier, one may assume that these remaining restrictions are especially a problem for Bulgaria.

### Trade agreements within Southeast Europe

In order to liberalise trade throughout the region, two main paths were initially feasible in principle: a single multilateral agreement establishing a free-trade area, or a set of bilateral agreements between each pair of countries. The latter path, many would say unfortunately, was chosen. The additional cost of the bilateral route compared to the multilateral route is obvious and may be stated as follows: to mimic a multilateral free trade zone agreement between  $N$  countries following a bilateral route, one must negotiate, sign, and then ratify (on both sides)  $N \times (N-1) / 2$  bilateral agreements. This comes down to  $N \times (N-1)$  ratification procedures to be driven through the national parliaments, with all the pitfalls, pressures and lobbying which may interfere each time, let alone the amount of time that such procedures require. In the case of Southeast Europe, where the process was set up following the *Memorandum of Understanding on Trade and Transport Facilitation in Southeast Europe* of June 2001, and for which the 7 participating countries were incorporated,

this therefore comes down to 21 bilateral agreements and 42 ratification procedures<sup>9</sup>, instead of 1 agreement and 7 ratification procedures as would have been the case if the multilateral route had been chosen.

Then again the coverage that has now (at last) been reached is quite extensive. Out of the 21 bilateral free trade agreements (FTAs) that are necessary, all have been at least initialled (in terms of negotiations). Some have been signed and are awaiting ratification, and 17 were already in force as of 2 June 2004. Of these 17, 3 are thanks to joint memberships of CEFTA for trade between Croatia, Romania and Bulgaria (with one another) while the remaining 14 are actual bilateral agreements that have now been put in application. A summary table is available in the appendix (Appendix A). Messerlin and Miroudot (2004) provides a recent and detailed survey of the coverage and status of these agreements.

It is important to understand at this stage that these FTAs do not really mean free trade in the strict sense of no tariffs and no quotas as soon as the agreements come into force. The agreements lift a whole range of tariffs on many commodities, but in several cases only progressively, over a number of years. For example, if we look at the FTA between Albania and Croatia, we find that Article 1, Section 1, states that *“the Parties shall gradually establish a free trade area in a transitional period of six years, starting from the entry into force of this Agreement”*. Concretely, quotas and customs duties on exports on all industrial goods were abolished immediately upon entry into force of the agreement, but not customs duties on imports (tariffs), which were only abolished for certain industrial goods. The FTA specifies two lists of commodities for which there is a progressive reduction in tariffs, one for Albanian imports from Croatia, and the other for Croatian imports from Albania. The agreement stipulates a progressive reduction in the tariffs (each year from 1 January 2004), converging to zero as of 1 January 2008. The other FTAs are similar in structure and objectives, so that fully free trade for industrial goods will not materialise in the region before 2008.

### **Potential further trade liberalisation**

What we can see from the above summary is that the most important part of the trade barrier reduction that is of interest for the countries of the region has already taken place. Although there is still work to do on the regional bilateral agreements, the EU was, is and will continue to be the most important trading partner for each country in the region.

The regional bilateral agreements are progressing. On the one hand we have agreements such as that between Albania and Bosnia-Herzegovina from which one should not expect massive trade flows for obvious reasons. On the other hand one key player, Serbia and Montenegro, only benefits from 3 fully operational agreements out of 6 possible regional agreements. This is an issue because of the central location of Serbia and Montenegro within the region. It borders all the other countries, and one cannot possibly talk about any meaningful regional trade if the centrally located country cannot act as some sort of hub. At this stage one may assume that the evolution of trade barrier reduction is confirming the conclusions of Christie

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<sup>9</sup> The Republic of Moldova subsequently joined the process, so that the bilateral route now implies 24 agreements and 48 ratification procedures, versus 1 agreement and 8 ratification procedures for the multilateral route.

(2002). One may view the region as being made up of three concentric circles. The outer circle, made up of Slovenia, Hungary, Italy, Greece and Turkey is, with the exception of Turkey, already in the EU. The second circle, further in, is made up of Croatia, Romania and Bulgaria, which will almost certainly all join around 2007-2008. And the third circle, which is the remainder in a sense, is made up of Serbia and Montenegro, Macedonia, Albania and Bosnia and Herzegovina. The pattern which emerges is therefore not of a region which may be re-born from the ashes, so to speak, but rather of a region which is gradually being integrated into the EU from the outside. Indeed, by the time that all 21 regional bilateral trade relations are truly free, it is likely that they will have been partly replaced by a revised set of bilateral agreements with the EU for the remaining non-members, i.e. Albania, Bosnia and Herzegovina, Serbia and Montenegro and Macedonia. As was pointed out earlier with the example of the FTA between Albania and Croatia, the full lifting of tariffs will not be general until 2008, by which time only the core countries of the region will still be outside of the EU. The likeliest medium-term scenario, around 2008, is therefore that the core countries, still outside of the EU, will enjoy the ATCs of the EU, which will then encompass Croatia, Romania and Bulgaria, while having highly liberalised trade with each other. In the longer run, probably sometime between 2010 and 2015, it is most likely that all the core countries will have become members of the EU as well. In other words, fully free trade across the whole of Southeast Europe will only truly come about as part of an enlarged EU, although the period between 2008 and the final accessions will have already been one of highly liberalised trade.

### **Trade facilitation and infrastructure development in Southeast Europe**

With the issue of trade potential comes the issue of trade facilitation. As tariffs and quotas are reduced, other barriers and impediments to trade may remain, and grow in relative importance, such as poor infrastructure, both tangible (in terms of transport, but also in terms of telecommunications) and intangible (speed and complexity of administrative procedures, of payment procedures, of clearing procedures, of insurance procedures and so on). The *Memorandum of Understanding on Trade and Transport Facilitation in Southeast Europe* (MoU) of June 2001 which was mentioned previously in the context of the bilateral FTAs also covers the issue of trade facilitation.

Before we proceed to what is specific to the region, it is useful to provide definitions of what "trade facilitation" is supposed to encompass. UNECE (2003) lists several, notably:

- 1 – The systematic rationalisation of procedures and documentation for international trade, in particular of all the activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade.
- 2 – The simplification and standardisation of procedures and associated information flows required to move goods internationally from seller to buyer and to pass payment in the other direction.
- 3 – That which aims to support activities dedicated to improving the ability of business, trade and administrative organisations, from developed, developing and

transitional economies, to exchange products and relevant services effectively. The principal focus being to facilitate international transactions, through the simplification and harmonisation of processes, procedures and information flows, and so contribute to the growth of global commerce.

The idea of trade facilitation is therefore that one should strive to improve efficiency and to reduce costs at each stage of the trade transaction process. Trade facilitation therefore primarily involves:

- Simplifying (and, where possible, eliminating) formalities and procedures, in particular those related to the import, export and transit of goods;
- Harmonising applicable laws and regulations;
- Improving and standardising physical infrastructures and facilities, including transport and customs facilities;
- Standardising and integrating information definitions and requirements and the use of information and communications technologies so as to exchange this information efficiently.

In the case of Southeast Europe, the signatories to the aforementioned MoU are also incorporated into the Trade and Transport Facilitation in Southeast Europe Program (TTFSE) which aims to foster trade by promoting more efficient and less costly trade flows across the countries in Southeast Europe and to provide EU-compatible customs standards. The program seeks to reduce non-tariff costs to trade and transport, reduce smuggling and corruption at border crossings, and strengthen and modernise the customs administrations and other border control agencies. The program is the result of a collaboration between the national governments of the region, the World Bank, the USA and the EU. All seven countries covered in this paper, as well as Moldova, are included. The web site of TTFSE<sup>10</sup> provides practical information, e.g. import and export procedures, border crossings and contact information of relevant institutions.

Data available from the original TTFSE web site<sup>11</sup> indicates a successful, steady and significant reduction of clearance times at most border crossing points in the region over the 2001-2003 period. Just to cite a few examples: average entry times at the Albanian port of Durres were 125 minutes in the last quarter of 2001 and 87 minutes in the last quarter of 2003 (a 30% reduction); clearance times at Banja Luka in Republika Srpska averaged 236 minutes in the second quarter of 2002 and just 91 minutes in the last quarter of 2003 (-61%); in Plovdiv (BG) the average clearance time was 227 minutes in the first quarter of 2001 and only 44 minutes in the third quarter of 2003 (-80%). Similar progress has been made elsewhere in the region, with the notable exceptions of most Serbian and Montenegrin crossings or entry points, for which progress has not been significant.

As was pointed out in Christie (2002), border waiting times in the region were still substantial in 1999. For example, the aggregated mean waiting time for a truck delivering goods from Bulgaria to Germany was 26 hours and 20 minutes out of a total transport time of 59 hours and 34 minutes, in other terms 44%. Of course this included waiting times that no longer exist, for example between Hungary and Austria, and as we have just seen, clearance times in many places in the region have

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<sup>10</sup> <http://www.ttfse.org>

<sup>11</sup> <http://www.seerecon.org/ttfse/>

come down significantly. Taken together, these findings point to a very significant total drop in clearance times at borders or points of entry both within the region and between the countries of the region and their main source and destination markets in Western and Central Europe. This is an extremely welcome development which, if continued, should help to insure that the potential gains to trade due to tariff reductions are actually realised.

What clearance time reductions and the recent accession of the Central European countries also imply is that border waiting times are much less influential on the choice of the optimal route for transport companies (since the choice and number of border crossings is of much less importance), and so these may now be optimised under only the constraints of the transport infrastructure network. For this reason we now briefly turn to the issue of physical infrastructure in the region.

Holzner and Christie (2004), a wiiw study on the state of transport infrastructure in Southeast Europe which is also a contribution to the current project, puts forward the following findings: while rail density in the region is close to the European average, road density is significantly below the European average. Moreover rail and road transport infrastructure in the region is of very poor quality compared to the other countries in Europe. Low levels of double track railway lines and a limited number of, and total length of, motorways in the region are a constraint. Regression results concerning the total length of paved roads indicate that SEE countries have, in comparison with other European countries, a smaller level of total length of paved roads per capita than their current (and low) GDP levels would imply. As in many other fields, the EU and other international organisations are actively involved in helping the countries of the region to develop and improve their transport infrastructure. In particular, the Infrastructure Steering Group<sup>12</sup> (ISG) was set up in May 2001<sup>13</sup>. The objective of the Group is to facilitate the development of regional infrastructure in South East Europe. The stated aim of the ISG is to help in developing infrastructure within a regional approach, instead of at a national level. As reported in its latest status document<sup>14</sup>, as of May 2004 the ISG was monitoring a total of 51 infrastructure projects for a total sum of EUR 4.1 Billion, 68% of which concern transport infrastructure. A further 20% cover energy (electricity, gas, oil, district heating), 8% cover water and the environment, and 3% are devoted to cross-border infrastructure. This comes on top of a set of other similar projects that have already been completed.

As we have seen from the various definitions of trade facilitation, there is a non-exclusive emphasis on aspects of trade in goods, for example simplifying and speeding up customs procedures for trucks or other vehicles (e.g. by implementing chip-card systems and internationally connected databases that track movement, weight of shipment, type of shipment, taxes, tariffs and so on), but trade facilitation also generalises to aspects of importance to all trade, including trade in services. Better transport and telecommunications infrastructure as well as faster and more efficient border crossings may help both types of trade, as tourism, transport services and various other types of business services may be helped. We now turn our attention to trade in services for the countries of the region.

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<sup>12</sup> The Group consists of experts from the European Commission, the World Bank, the EBRD, the EIB, the Council of Europe Development Bank and the Office of the Special Coordinator of the Stability Pact.

<sup>13</sup> <http://www.seerecon.org/infrastructure/>

<sup>14</sup> Office for Southeast Europe (2004)

## **PART II – Trade in Services**

In this second part the methodology and findings of an analysis of the potential for trade in services for the countries of Southeast Europe is presented and discussed. A gravity model is estimated and then used together with a single GDP growth scenario in order to estimate potential flows up to 2009.

### **Motivation**

The issue of the potential for trade in goods in Southeast Europe has benefited from quite a lot of attention over the last few years. Apart from Christie (2002), several estimates have been made to estimate potential trade in goods using gravity models, notably Agolli and Xhepa (2003) for the case of Albania, Jovicic, Mitrovic and Zdravkovic (2001) for the case of Serbia and Montenegro and Vujcic and Susic (2001) for the case of Croatia.

On the other hand trade in services has received much less attention. This is due in good part to a lack of data, in particular a lack of bilateral flows in services. It is therefore in this area that this paper wishes to fill a gap. From an economic point of view, an analysis of trade in services for the region is of interest for three main reasons. First of all several countries in Southeast Europe have a potential in developing their tourism industries. The geography and climate prevalent in the region are favourable to such activities, and one could argue that if Croatia, and for that matter Greece, are able to extract substantial revenues from the supply of such services to foreign tourists, then there is no reason a priori why Montenegro and Albania on the Adriatic and Bulgaria and Romania on the Black Sea could not do likewise. Besides coastlines, there are other potentially attractive natural features in the region, e.g. mountains and woodlands. Secondly the region of Southeast Europe is a natural transit area between Western and Central Europe on the one hand, and Turkey and the Middle East on the other hand. This implies a potential for transportation services. Finally one should expect links between services trade and migration patterns, notably due to the fact that Western Europe is home to significant émigré communities from the region, which may induce a demand for transport, travel and possibly other business services.

Currently, the relative importance of trade in services (with respect to total trade) varies quite considerably between the countries of the region. On the side of exports, and looking at 2001 and 2002 data, services are particularly important for Croatia (around 50% of total exports). On the opposite end of the distribution one finds Romania and Macedonia (around 15% and 18% of total exports respectively), while the other countries have services exports between 25% and 30% of total exports. On the side of imports, again for 2001 and 2002, services constitute a rather small share of total imports, as low as 4%-5% in the case of Bosnia and Herzegovina, and around 6%-8% in the case of Serbia and Montenegro. The ratios are higher for the more advanced countries of the region (in the sense of EU accession prospects), with shares of around 13%, 18% and 20% for Romania, Bulgaria and Croatia respectively.

## Methodology

The base form of the gravity model is taken from Fidrmuc (2000) :

$$M = k \cdot GDP_M^b \cdot GDP_X^g \cdot D^d \quad (1)$$

where M is the flow of FDI or imports into country M from country X, D is the geographical distance between the countries' capitals, and k,  $\beta$  and  $\gamma$  are coefficients to be estimated.  $\beta$  and  $\gamma$  are expected to be positive and in the region of 1, d is expected to be negative and is generally estimated between  $-0.7$  and  $-1.5$ .

This model provides an average base as to what FDI or trade flows are in the chosen sample, but one expects deviations from that base due to country-pair or country-group specifics. Some countries may for instance be parties to agreements on preferentially lower barriers to trade and FDI (typically, Regional Integration Agreements such as the EU, NAFTA, CEFTA etc.). Other specific effects may include having a common land border, or cultural affinities such as a common language. Negative deviations also exist, for example because of military conflicts or economic sanctions.

For example a model testing for p different possible distortions would be expressed:

$$\ln(M) = \mathbf{a} + \mathbf{b} \ln(GDP_M) + \mathbf{g} \ln(GDP_X) + \mathbf{d} \ln(D) + \sum_{s=1}^p \mathbf{I}_s G_s \quad (2)$$

Where  $G_s$  is the dummy variable identifying category or distortion s, and  $\gamma_s$  is its coefficient. The specification above is equivalent to the following:

$$M = \exp(\mathbf{a}) \cdot GDP_M^b \cdot GDP_X^g \cdot D^d \cdot \prod_{s=1}^p \exp(\mathbf{I}_s G_s) \quad (3)$$

One major specification issue about the econometrics of gravity equations is that of data pooling, i.e. whether one should estimate a single equation for a set of country-pair flows, or whether one should control for country heterogeneity by doing separate estimations by source or destination country - or by introducing country dummy variables - or whether one should go further still and control for country-pair heterogeneity and apply a classical panel data estimation method such as fixed effects. The choice for this present study is to apply the methodology proposed in Matyas (1997) which controls for country heterogeneity.

What Matyas suggested was to go back to a full specification (4), i.e. a triple-indexed model (source country, destination country and time) where there are individual intercepts for each source country ( $\mathbf{a}_i$ ), for each destination country ( $\mathbf{g}_j$ ) as well as for each time period ( $\mathbf{f}_t$ ). The gravity model should always be applied to a panel data set. Then, once country-specific effects (both as source and as destination countries) and time-specific effects (to account for the business cycle as well as for a possible global time trend) have been stripped out, one can test additional effects with dummy variables, such as membership of a trade agreement.

$$\ln(M_{ijt}) = \mathbf{a}_i + \mathbf{g}_j + \mathbf{f}_t + \mathbf{b}_1 \ln(\text{GDP}_{it}) + \mathbf{b}_2 \ln(\text{GDP}_{jt}) + \mathbf{b}_3 \ln(D_{ij}) + \mathbf{e}_{ijt} \quad (4)$$

(With additional dummy variables as appropriate, e.g. free trade area membership)

The economic rationale for this specification is as follows: the source and destination country effects account for how open countries are in exports and in imports in turn, with regards to all other countries in the sample. The idea is to capture effects such as competitiveness of the export sector on the source side and general openness to trade and investment (such as lower barriers (for trade), or lower corporate tax (for FDI) for example) on the destination side. These effects are of course combined with net domestic demand and supply for the relevant goods and/or services.

## Data Issues

The period covered for the dataset is 1999 to 2002. All services trade flows used were expressed in current prices in millions of Euros. When two same flows were available from two different sources, preference was generally given to the larger flow (size criterion), the assumption being that the relevant institutions all provide totals based on the aggregation of recorded transactions and that the main data problem is “under-recording”. However more recent series from the same source were of course given preference over older ones (revised data versus initial data criterion), and series that had more missing values but systematically larger reported values were preferred for the whole period<sup>15</sup> (consistency criterion)<sup>16</sup>. All in all however it is necessary to stress that the overall quality of the data on trade in services is very poor, especially for the countries of Southeast Europe. As a direct result of this situation analytical work such as the present one is made less reliable than it could otherwise be. The conclusion is of course that internationally clear and consistent definitions and thorough and consistent data collection and production procedures for services trade would be extremely helpful for similar future work.

The flows from OECD countries were mostly taken from the documentation section of the *OECD Forum on Trade in Services in South Eastern Europe*. Some additional missing flows (e.g. for the smaller Southeast European countries) were successfully obtained by direct enquiries at national banks in the cases of Germany, Austria, France and The Netherlands. Some additional flows were also taken from the New Cronos database. Data on bilateral services trade flows for the countries of Southeast Europe is very difficult to get hold of. Most national banks in the region are generally unable to provide such data. For instance in the case of Romania this is because the raw data received by the BOP department does not systematically include the identity of the partner countries since this was not required from the banks until now. Croatia and Bulgaria both report that this type of data is “not

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<sup>15</sup> For example, if source A reports a sequence of (10; 12; 15) for the three years, whereas source B reports (n.a.; 32; 35), then source B is preferred over source A for all three years, rather than going for the simplistic choice implied by the size criterion alone which would be (10; 32; 35). The idea is that the value 10 would adversely influence coefficient estimates.

<sup>16</sup> One very specific case was Dutch exports to Serbia and Montenegro. The data was (95; 4; 4; 5). The 95 value was due almost exclusively to air transport, mostly passenger but also some freight, which was seemingly discontinued. The data is probably correct, but it was decided to ignore the whole series to avoid having an influential observation.



available”, though they do not provide any explanation. The final result of this whole situation is that flows between countries of the region are mostly not available at all. Flows between countries of the region and Western economies are available in many cases however, thanks to the BOP data of the Western countries, but this makes double-checking impossible. Unsurprisingly flows between the Western countries and Croatia, Romania and Bulgaria are reasonably well covered, whereas the coverage for the other countries of the region is very limited.

One additional problem which arose was that even when data was available, it was in certain cases only partial and thus represented only a fraction of recordable trade in services<sup>17</sup>. This is notably the case for Serbia and Montenegro.

The data from the National Bank of Serbia seemed at first to be a welcome exception in quality and effort, as it is provided in two-dimensional tables with simultaneous breakdown by partner country and by type of service. An aggregated version - total services imports and total services exports, by partner country – can be found in appendix C. Unfortunately the overall totals computed from these tables are very different from the same aggregate values – exports of services and imports of services – that are published by the Bank in aggregate balance of payments tables. If all the totals were lower, and by a reasonably consistent ratio, one could at least assume that there is a simple problem of coverage and perhaps take the risk of “correcting” the data by hand. Unfortunately on the side of imports the total from the country breakdown is significantly *larger* than the published total import of services found for example on the Bank’s web site. This could imply that the published BOP aggregates for 2001 are simply wrong<sup>18</sup> (the country breakdown having unearthed otherwise unrecorded transactions), or alternatively it could mean that the raw data was incorrectly aggregated, for example due to double or triple counting in cases where the source country was not easily identifiable. Because of all these problems, the data from the National Bank of Serbia was not used at all. Fortunately however some flows were available from other sources. In the end these were the flows with Germany, Austria, France, the Netherlands and the United Kingdom. The reason for appendix C is to explicitly illustrate the issue of data reliability.

Turning to the flows as reported by the German Bundesbank, some data entries seem odd. Imports from Bosnia-Herzegovina and from Serbia and Montenegro seem to have surged dramatically between 2000 and 2001, albeit from a low initial level. Although one may come up with any number of reasonable explanations as to why this may be true, it is also not unreasonable to suspect a change in methodology or in the definitions of the series on the part of the Bundesbank.<sup>19</sup> However given the lack of alternative data it was decided to proceed with the use of the Bundesbank data, except when the data selection rules detailed in the beginning of this section were applicable.

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<sup>17</sup> This is not even a reference to informal services trade. It is a question of how comprehensive the measurement method is.

<sup>18</sup> And therefore the aggregate current account data is also incorrect, unless it was “compensated” by an equally wrong goods trade balance.

<sup>19</sup> Such problems also arise for flows between OECD economies. There are for example huge differences in reported services trade flows between the UK, France and Belgium-Luxembourg on the one hand and Austria on the other, with the Austrian National Bank reporting much larger flows than its counterparts.

As a result, the number of country-to-country “relations”<sup>20</sup> covered was 405, with a relatively high coverage for the years 1999-2001 with 355, 399 and 397 available flows for each year in turn, and only very patchy coverage for 2002 with just 40 available flows. The countries included as partners in the sample were: the European Union countries without Portugal, Ireland and Finland, and with Belgium-Luxembourg treated as one country; the United States, Switzerland, Turkey, Russia, Ukraine, five accession countries (Slovenia, Slovakia, Czech Republic, Hungary, Poland), and seven Southeast European countries (Croatia, Bosnia-Herzegovina, Serbia and Montenegro, Albania, Bulgaria, Romania, Moldova). It was necessary to exclude Macedonia due to insufficient data.

GDP data was collected from the OECD for OECD countries, and from w.i.i.w. for transition countries. Nominal GDP at current prices, expressed in millions in Euros (at current exchange rates) was used for all countries for 1999 to 2001. Distances were taken as geographical distances between capitals in kilometres, with the exception of Germany, where the “economic centre” was taken as the centre of a triangle linking Berlin, Munich and Frankfurt.

### **Forecasting of GDP and services trade flows up to 2009**

For the purposes of forecasting, the estimated gravity equation obtained from the 1999-2001 panel data set was used. The assumption is of no regime change for the overall gravity relationship, meaning no change in the values of the coefficients on the GDPs and on distance. The intuition behind the forecasts therefore relies on the assumed growth paths and on the modification of regional dummy variables to simulate an “upgrade” of Southeast Europe’s general situation to that of Central Europe, and then to that of EU-15 states.

The assumed growth paths are as follows: GDP data was already available for 2002, so it was taken as it stood (October 2003); for the years 2003 and 2004, w.i.i.w.’s real GDP growth forecasts were used for all the transition countries. Then 4% per annum real growth was assumed for 2005-2009 for the accession countries, and 4.5% per annum for the countries of Southeast Europe and the CIS countries. For Western economies, a 2% per annum real growth rate was assumed from 2003 to 2009. The exchange rates prevalent in 2002 were assumed to remain the same from 2003 to 2009. The results of the forecasts are therefore to be interpreted as being expressed at 2002 prices and at 2002 exchange rates. The three chosen rates are supposed to be rough estimates of the relevant long-run average growth rates, but one could of course argue that for example some of the Central European countries may end up having a bit less than 4% per annum over the period, while one would hope that some of the Southeast European countries with very low current GDP per capita levels may do a bit better than 4.5%.

### **Empirical Results and Analysis**

We present below the summary table of the regression results for the first estimation of the model. The individual country importer and exporter dummy variable coefficient estimates are not shown. The full results are in appendix D.

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<sup>20</sup> Country A exporting to country B counts as one relation. Country B exporting to country A counts as another one.

Dependent Variable: LOG(SERVICES TRADE FLOW)				
Method: Least Squares				
Included observations: 1189				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Overall Intercept	1.718864	2.947022	0.583254	0.5598
LOG(GDP EXPORTER)	0.672341	0.266312	2.524639	0.0117
LOG(GDP IMPORTER)	0.805896	0.268645	2.999854	0.0028
LOG(DISTANCE)	-1.032046	0.058770	-17.56063	0.0000
Common Land Border	0.358956	0.088383	4.061371	0.0001
EU15	0.930839	0.192400	4.838036	0.0000
Accession Countries – EU15	-0.048608	0.140332	-0.346378	0.7291
Moldova - CIS	1.990606	0.280325	7.101077	0.0000
....	.....	.....	.....	.....
R-squared	0.908475	Mean dependent var		12.22237
Adjusted R-squared	0.903521	S.D. dependent var		2.319034
Durbin-Watson stat	2.317096	Prob(F-statistic)		0.000000

One notices that the gravity specification is appropriate, with GDP and distance clearly significant and of the expected signs and magnitudes. The overall goodness of fit is also relatively good. Interestingly, the time effects (excluded from the above regression) were not significant, which implies that there is no significant overall cycle or time trend. This implies that, for the flows in the sample, there is no specific growth trend over the 1999-2001 period that is not explained by GDP growth. Also, the dummy variable for having a common land border (sometimes referred to in the literature as the adjacency variable) is positive and significant. A dummy variable for having a common language was also tested, but was not significant and was therefore excluded from the regression summarised above.

The most interesting results however concern the EU membership variable, which is positive and clearly significant, whereas a dummy variable defined for the trade flows between the accession countries (in this data set these are restricted to Poland, The Czech Republic, Slovakia, Hungary and Slovenia) and the European Union is not significant. This implies that the “base level” of the model is that of the accession countries trading with the EU15, and therefore intra-EU15 flows are on average significantly higher than flows between the accession countries and the EU15, GDPs and distances being accounted for. One may interpret this result as meaning that gains to services trade volumes only occur to countries once they are actually inside the EU, meaning that the accession process has by far not yielded the increases in services trade volumes that arise with full membership. This result seems plausible. It is in contrast to some of the results found for trade in goods, especially if one excludes agricultural goods, where the major gains to trade volumes are made (were made) already during the accession process. Furthermore if one estimates the model with an additional dummy variable for flows between the Southeast European countries alongside each in turn of the two variables discussed above, one finds that the Southeast European dummy variable coefficient is significantly below both the EU15 one and the accession countries-to-EU15 one. What this means is that flows between Southeast European countries and the EU15 are not only below potential (from a gravity model viewpoint, that is, with GDPs and distances being accounted for, as well as country heterogeneity) but they are also significantly below what they would be if the Southeast European countries were “like the accession countries”, in a general sense. This result is interesting in itself, but it is also of interest because it

is similar to results from similarly specified gravity models for goods trade, where the general situation of Central European countries may be seen as an intermediate and already higher level of integration with the EU15 that the countries of Southeast Europe could hope to reach in the medium-run. Therefore in this current context as well, one may gain insight into the medium-run prospects for services trade levels by simulating an upward shift towards accession country status. This is however a general result which does not treat imports separately from exports, but rather gives a first impression regarding the degree of realised trade integration. On the one hand one needs to look more closely at the individual country effects and compare them. On the other hand, one should bear in mind the comparatively low GDP levels prevalent in Southeast Europe: if the economies of the region experience strong and sustained growth over the next 5-10 years, there should be a similarly strong growth in trade flows, even without an improvement in status. An upgrade to accession country status, and ultimately EU membership itself, would provide two additional and rather strong upward shifts in the average volumes of services trade. The other issue one should bear in mind at this stage is the fact that services trade liberalisation is much less advanced on the international level than is industrial goods trade liberalisation. As stated previously, a similar model for goods trade would pick up an additional positive and significant time trend for example for the 1990s, whereas such a trend is not apparent in the present services trade context for the given 1999-2001 period. However this does not exclude a positive time trend from happening over the 2001-2009 period, which would be driven by multilateral as well as possibly bilateral agreements concerning services trade. Quantifying such a trend would constitute an enhancement to the forecasting section of the current study, but would require a much more ambitious modelling framework, while not necessarily being very reliable. Also, given the inherent difficulty in forecasting GDP growth paths for periods exceeding a few years, one could argue more simply for interpreting forecasted flows as lower bound estimates which may be significantly exceeded thanks to a subsequent global growth trend.

One specific dummy variable for trade between Moldova on the one hand and Russia and Ukraine on the other was specifically introduced and, as was expected, is significant and of quite high magnitude. Indeed the implied ratio to the base level here is equal to  $\exp(1.9906) = 7.3$ . In other words the trade flows between Moldova and its two CIS partners is 7.3 times higher, GDPs and distances accounted for, than the flows that Moldova has with its other partners. It was interesting to check for this very specific case as it was clear from the data that Moldova still trades heavily with its former Soviet partners and not so much with EU15 countries (Germany, France and the Netherlands being the available observations in this case). This result should not be interpreted as meaning that Moldova's trade with Russia and Ukraine should fall by a factor of 7.3. What can be said is that a relative redistribution of trade volumes in favour of more trade with non-CIS partners would be a natural evolution. An additional estimation using a dummy variable that encompasses trade flows between Moldova on the one hand and Russia, Ukraine but also Romania on the other hand yields the following results: the dummy variable is again significant and of high magnitude (even higher in fact), while the Moldova exporter and importer dummy variable coefficient estimates (which now apply only to the flows with the three EU15 countries) are both negative. However they are not significant. This means that Moldova's potential level is not clearly identified. But what can be said is that the geographical distribution of Moldovan services trade flows is strongly distorted in favour of the CIS and Romania, or alternatively one could say that the

distortion is in the disfavour of Germany, France and the Netherlands. However we recall at this stage that especially the flows with France and the Netherlands are probably underestimated by the data. Finally it is important to note that the coefficients for the EU15 and Accession countries – EU15 dummy variables are very sensitive to the inclusion of the Moldova-CIS variable. Without the Moldova-CIS variable, the coefficients are 1.552615 instead of 0.930839 and 0.362943 (and significant) instead of -0.048608 (and not significant). However they are both quite stable (whether the Moldova-CIS variable is there or not) if one takes out a few country effects at random.

We now focus on the different levels of the country-as-exporter and country-as-importer dummy variable coefficients. These are presented separately for the exporter and importer sides in appendix E and are the result of a second estimation that again excludes the time effects (since these were not significant) as well as the EU, accession countries-with-EU and Moldova with CIS dummy variables. We discuss only those coefficients that are significant of course. On the exporter side, all the significant coefficients are negative. We find several countries of Southeast Europe, notably Romania, Croatia and Albania, the latter having a strongly negative value. These results are not surprising on the whole, as they confirm the lower level of Southeast European trade already detected in the first specification thanks to the dummy variable for trade with the EU-15. Albania's low value is not surprising given its comparatively low level of development in general, combined with its generally low level of exports, both in goods and in services. What the result means here however is that Albania is very far below its potential level, given its GDP and how far it is from potential partners. At this stage several comments are crucial: first of all the flows between Albania and Italy and between Albania and Greece were not available for the sample used here. If goods trade is any indication, then Albania's result would certainly be less drastic if these flows had been included. However if the result is to be believed qualitatively, then this still implies that Albania could be exporting more given its level of GDP. But one could argue that as things stand today it is in fact Albania's current GDP which is high compared to its current supply of goods and services, as Albania's GDP is indirectly boosted by remittances from emigrants. On the other hand if Albania's GDP can subsequently be channelled into productive investment domestically, then the whole picture could change.

Regarding Croatia, the result is surprising. One would have thought that Croatia's highly successful tourism industry would impact on the results. The interpretation here in fact is that, again according to Croatia's current GDP level and its distances to its partners, it could in fact be exporting much more, were it "like an average country". This does not tell us whether this should be in tourism or elsewhere, since it is an aggregate result. However given the size of the tourism sector in Croatia, one could assume that an expansion in exports of services should come from other sectors if Croatia converged towards the average country of the sample. On the importer side Croatia and Bosnia-Herzegovina appear to be importing less services than their potential demand for them. All in all the results show that Slovakia and Croatia both significantly under-trade in both directions with the rest of the sample.

### **Estimates of Potential Past and Future Services Trade Flows**

Using the estimation of the model with only the two regional dummy variables EU-15 and Accession Countries – EU-15, and applying it as it stands with the GDP

forecasts, one obtains projected flows. Selected results are presented country by country in a series of tables alongside the available measured flows and some short comments. The complete results, together with the available observations which were used concerning Southeast Europe can be found in appendix G. All flows are expressed in millions of Euros. They are at current prices for 1999-2002 and at 2002 prices for 2003-2009. The working assumption for the region is that Croatia, Bulgaria and Romania will have become full members by 2009, but not the other countries of the region, which will however have been “upgraded” to accession country status. The estimates for potential trade between these three countries and any of the other “EU-28” countries<sup>21</sup> for 2009 are computed using the EU-15 membership dummy coefficient estimate directly. For the other countries, namely Albania, Bosnia-Herzegovina, Moldova, Macedonia, and Serbia and Montenegro, the Southeast Europe level is replaced by the Accession country level for the 2009 estimate. It is important to point out that the methodology is especially meant to simulate the effects of GDP growth and of integration with Western Europe. Projected flows among the countries of the region require ad hoc, individual interpretations in each case, given the highly heterogeneous quality of bilateral relations in the region. Data reliability and availability also play a major role in this context.

## Albania

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
France	3	14	8	8
Germany	7	8	11	11
United Kingdom	5	3	6	na
<b>Exports to</b>				
France	na	5	4	na
Germany	30	20	17	37
United Kingdom	9	10	11	na

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
France	3	3	4	4	5	5	9
Germany	9	11	13	14	15	16	29
United Kingdom	6	7	8	9	10	10	19
<b>Exports to</b>							
France	2	3	3	3	3	3	6
Germany	15	18	21	22	23	24	44
United Kingdom	4	6	6	7	7	8	14

With the exception of services exports to Germany, recent flows are close to their potential values. Germany is of course the largest current and potential partner among the four countries above. One should add estimates for Italy and Greece, which are of course two key partners for Albania. Unfortunately the current flows are not available.

<sup>21</sup> The assumption is that by 2009 the estimated EU-15 effect of the model will identically and fully apply to the accession countries of 2004 as well as to Croatia, Romania and Bulgaria.

Exports to	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Italy	8	10	12	13	13	14	25
Greece	10	12	14	15	16	17	31

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Italy	9	12	13	15	15	16	30
Greece	22	27	32	36	38	40	74

For both partner countries the projected flows are quite large. Greece is the largest potential partner according to these projections. The reason is the double effect of a smaller geographical distance together with the border effect, which is assumed to be of the estimated average magnitude. The border effect is also assumed for the table below, giving the projections for Albanian trade with Serbia and Montenegro.

	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Imports from S. & M.	3	4	5	7	7	7	15
Exports to S. & M.	1	1	1	2	2	2	4

If the Serbian data from appendix C is any indication, then the two neighbours are trading well below potential. This is not surprising given the relative under-development of northern Albania and the "barrier" constituted by Kosovo (Kosova). The 2009 projection suggests that under favourable conditions (e.g. infrastructure investment as well as the development of Kosovo in order to reach the normal level of a border effect) the two countries could be partners of medium importance.

## Bosnia-Herzegovina

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
France	na	6	3	2
Germany	318	15	18	27
Netherlands	1	2	4	1
Exports to				
France	na	4	1	3
Germany	38	33	179	201
Netherlands	5	43	19	22

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
France	5	5	6	6	6	7	12
Germany	14	15	17	18	18	19	35
Netherlands	2	3	3	3	3	3	6
Exports to							
France	8	9	10	11	11	11	21
Germany	55	61	66	69	72	74	135
Netherlands	6	7	8	9	9	9	17

Germany is by far the largest current and potential partner. In general the flows for 2001 and 2002 are close to the potential values. The exception is the recent large values for exports to Germany, which are already above the 2009 projection. Clearly an important share of services exports of Bosnia-Herzegovina is linked to travel and tourism of Bosnians living in Western Europe (notably Germany), as well as other services aimed at these persons. From this perspective, one would expect relatively high flows with Austria (the data is not available, unfortunately) as well as with other countries that have a significant Bosnian diaspora. Unfortunately it is not possible to verify this in more detail. Turning now to trade with Serbia and Montenegro:

	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Imports from S. & M.	8	9	12	14	15	16	31
Exports to S. & M.	13	14	20	25	26	28	55

According to the Serbian National Bank, Bosnian exports of services to Serbia and Montenegro were 9.4 million euros in 2001 and 12.9 million euros in 2002, while Bosnian imports from Serbia and Montenegro were 6.6 million euros in 2001. In other words trade with Serbia and Montenegro might in fact be a bit below the current potential. From the point of view of the model, the projections are high due to the combination of a very short distance with the common land border effect. In practice it is a well-known fact at least regarding goods trade that common ethnicity plays an important role, with almost all the trade with Serbia involving firms and individuals from Republika Srpska alone. Having said that the data has the problems already discussed, and it could be the case that trade levels are in fact much higher, and thus perhaps already above potential rather than below. Informal trade is difficult to estimate, but the consensus is that it is quite high especially between Republika Srpska and Serbia. But be that as it may, the 2009 projection, when set against the projections for the Netherlands or France, do indicate that Bosnia-Herzegovina and Serbia and Montenegro should be very important partners for each other.

## Bulgaria

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
Austria	56	70	77	na
Czech Republic	na	47	48	na
Germany	121	151	211	192
Italy	na	41	67	na
Netherlands	14	17	9	na
<b>Exports to</b>				
Austria	32	36	45	na
Czech Republic	na	50	42	na
Germany	211	275	362	464
Italy	na	59	69	na
Netherlands	38	29	15	na



Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	31	36	40	43	45	48	290
Czech Republic	10	12	14	17	18	19	123
Germany	67	76	84	91	95	101	610
Italy	42	48	54	59	62	66	398
<b>Exports to</b>							
Austria	32	36	40	43	45	47	281
Czech Republic	9	10	12	15	16	17	107
Germany	146	162	177	191	200	210	1254
Italy	50	57	63	69	72	76	453

For the 2009 projections we see the strong upsurge due to the projected impact of EU membership for Bulgaria. Germany is again the largest current and potential partner and the current flows are above their current projections, though if the 2009 projections are to be believed, there is still scope for growth. Interestingly the Czech Republic has above potential flows with Bulgaria for 2000 and 2001. These higher than expected flows may be a positive consequence of goods trade links through CEFTA, as well as tourism in both directions. If one looks at broad categories of services, thereby distinguishing transportation, travel and other commercial services, for trade between Bulgaria and selected EU countries<sup>22</sup>, one notes for 2000 and 2001 that travel services represent more than 50% of the total, while other commercial services are around 22%-23% of the total for both years. These proportions are similar to those for countries such as Spain, Italy or Greece, e.g. by taking an unweighted average for these three countries.

Turning now to projected flows with Romania and Serbia and Montenegro, we find:

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Romania	73	91	107	121	129	138	908
Serbia and Montenegro	32	35	48	61	64	69	138

Exports to	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Romania	67	85	100	113	120	128	847
Serbia and Montenegro	30	32	45	58	61	65	131

Again the combined effect of small distance and the common land border yields relatively high projections. The 2009 projections for trade with Romania are also very much boosted by the additional effect of the EU membership dummy variable. The projections are indicative of a possible outcome, though much of the debate should focus on the high value of the EU membership variable coefficient. One can of course question the idea that it would necessarily stay at the same value until 2009 and apply fully to all member countries in that year.

<sup>22</sup> Germany, Austria, France, Netherlands, Italy, United Kingdom, Belgium-Luxembourg

## Croatia

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
Austria	203	278	268	na
Czech Republic	na	28	34	na
France	116	58	51	na
Germany	129	147	151	156
Netherlands	10	16	12	na
United Kingdom	56	61	51	na
<b>Exports to</b>				
Austria	162	215	379	na
Czech Republic	na	89	140	na
France	40	45	53	na
Germany	515	774	1015	1217
Netherlands	19	24	37	na
United Kingdom	24	41	66	na

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	157	172	188	205	215	225	1362
Czech Republic	23	26	30	36	38	40	257
France	38	41	45	50	52	55	331
Germany	121	130	142	154	162	169	1024
Netherlands	20	22	25	27	29	30	182
United Kingdom	54	63	69	76	79	83	502
<b>Exports to</b>							
Austria	186	202	219	238	248	259	1543
Czech Republic	27	30	36	43	45	48	307
France	43	47	51	56	58	60	361
Germany	304	326	352	379	396	413	2465
Netherlands	34	38	43	47	49	51	303
United Kingdom	66	77	83	91	95	99	593

By the region's standards Croatia has very high current services export levels to certain countries, especially Germany and Austria. This is due in most part to Croatia's very successful tourism industry which attracts a large number of German and Austrian tourists who are "big spenders" on average. For example if one looks at Germany's disaggregated flows with Croatia, one notes that, on the side of Germany's imports from Croatia, travel services represented 70% of total services imports in 1999, 75% of total services imports in 2000 and 83% of total services trade imports in 2001. This trend came on the back of a strong total increase over the period in services imports from Croatia, which is confirmed if one looks at the evolution of tourist arrivals from Germany into Croatia over the same period. Similar results are found in the case of Austria, though the initial proportion for travel services was lower in 1999. The shares are respectively 47%, 56% and 78%. The overall trends are identical for both Austria and Germany regarding the overall increase of services imports from Croatia and the increase of the number of tourist arrivals. Over the same period other commercial services exports (excluding transportation and travel) from Croatia to Austria and to Germany have stagnated. Data on tourism

arrivals for Croatia, Romania and Serbia and Montenegro can be found in appendix H. A first look at the data clearly shows Croatia's success in attracting tourists, with totals for 2001 being 6.994 million arrivals, compared to 4.938 million arrivals for Romania, a much larger country, and just 351 thousand for Serbia. Interestingly the flows of persons from Austria and from the Czech Republic are of similar magnitudes, but the level of exports of services to Austria is much higher than the level of exports of services to the Czech Republic. This is due in part to the higher purchasing power of Austrian tourists compared to Czech ones. On the other hand links between Austria and Croatia go further than tourism. In part due to the Croatian diaspora in Austria, travel services sold to Croats who live in Austria are significant, though these same persons may not always be counted as tourists. Austria is the largest current source of services imports for Croatia and the model's forecasts indicate that Austria is potentially the largest source of services imports for Croatia as well. There is much more business-related travelling between Austria and Croatia than between Austria and the Czech Republic. Finally one also notices that flows from other former Yugoslav republics are also quite large, especially in the case of Slovenia. This is easy to explain with regards to geographical proximity, language similarities and habits inherited from the past. More generally one notices a strong upward trend of Croatian services exports to all countries over the period of observation. Though this trend will probably not sustain itself much longer at least in terms of the number of tourist arrivals, especially for flows from Austria, Slovenia or Germany which are already large, one may assume that Croatia is set for further gains in this sector due simply to increasing purchasing power from e.g. Slovenian or Czech tourists over the next few years as well as due to further probable gains from less traditional source countries, for example France or the UK.

## Romania

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
Austria	110	139	172	na
France	na	105	133	na
Germany	114	129	140	150
Italy	na	123	101	na
Moldova	6	9.3	11.3	15.3
Netherlands	26	37	36	na
United Kingdom	64	71	93	na
<b>Exports to</b>				
Austria	60	81	98	na
France	na	97	93	na
Germany	220	289	279	299
Italy	na	378	432	na
Moldova	16.6	18.4	16.4	18.3
Netherlands	26	45	39	na
United Kingdom	71	98	114	na

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	50	60	67	72	76	79	479
France	40	48	54	58	61	64	388
Germany	109	129	143	154	162	169	1026
Italy	61	73	82	90	94	98	596
Moldova	5	7	9	10	10	11	22
Netherlands	21	26	30	32	34	36	216
United Kingdom	68	86	96	105	110	115	696

Exports to	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	55	65	71	76	80	83	497
France	42	50	55	59	62	65	387
Germany	256	296	325	347	363	379	2262
Italy	78	92	103	112	117	122	727
Moldova	9	12	15	16	17	18	36
Netherlands	34	41	47	51	53	55	329
United Kingdom	77	97	106	116	121	126	753

On the exports side, most observed flows are close to or a bit below their potential values for 2001. The notable exception is for exports to Italy, which were 432 million Euros in 2001, as against a projection of 103 million Euros for the same year. Tourism is an important factor of course. More generally the volume of travel services is high. This is probably a combination of Italian tourists and business travellers on the one hand, and Romanians residing in Italy travelling back home for whatever reason. In general economic relations between Italy and Romania are strong. This applies to trade in goods as well as to investment flows. Even at the level of small firms in Romania it is not uncommon to find Italian entrepreneurs who have moved to Romania to start or take over a business. The concept of cultural affinity and the similarity of the two languages certainly plays a role. The breakdown by category of services in the case of trade between the two countries is more balanced than is the case for example for Croatia. Travel services are the largest component (66% in 2000, 58% in 2001), but flows of the category "other commercial services" (services that are neither transportation nor travel nor government) are of significant magnitudes (21% in 2000, 28% in 2001), and the balance is in favour of Romania. In the case of France, to which a similar argument of cultural affinity may be applied, travel services are surprisingly low, while other commercial services actually represent the largest share of trade between the two countries. A point of detail that could be worth investigating concerns the link with tourism data. In terms of arrivals per year, Germany has a significantly larger flow of persons than Italy. In spite of that, travel services exports from Romania to Italy are almost as large as total services exports from Romania to Germany (the breakdown by category is not available). One would imagine that this could be due to a combination of more business travel together with a higher number of Romanians residing in Italy who travel back and forth and who are not counted as tourists.

## Serbia and Montenegro

Selected regional projections have already been discussed, so we focus only on the available EU partner countries.

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
Austria	exists	exists	exists	exists
France	na	18	18	18
Germany	29	35	48	83
United Kingdom	50	148	61	na
<b>Exports to</b>				
Austria	exists	exists	exists	exists
France	na	18	6	17
Germany	54	64	305	406
Netherlands	39	28	64	53
United Kingdom	44	43	47	na

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	46	47	62	78	80	84	155
France	24	24	32	41	42	44	81
Germany	66	67	88	110	113	119	219
United Kingdom	37	40	53	67	69	73	134
<b>Exports to</b>							
Austria	51	53	67	81	84	87	159
France	25	26	34	41	42	44	80
Germany	157	159	202	244	251	263	477
Netherlands	21	22	29	35	36	38	69
United Kingdom	42	47	60	73	76	79	143

The flows for Austria may not be transmitted here, but let us just say that they are above their current projections, above even the 2009 projection for exports, but below the 2009 projection for imports. In fact for imports the flows from Austria are the largest of the whole table. Regarding exports, something seems to have happened between 2000 and 2001. Exports to Austria, Germany and the Netherlands have all shot up in that period. Regarding potentials, the projections indicate that there is some growth potential with the UK and with France. Now coming back to our earlier projections for trade with Bulgaria and with Bosnia-Herzegovina, and focusing just on the 2009 projections, we would get the following partner rankings: for exports, 1. Germany (477 mn), 2. Austria (159 mn), 3. United Kingdom (143 mn), 4. Bulgaria (138 mn), 5. France (80 mn), 6. Netherlands (69 mn), 7. Bosnia-Herzegovina (31 mn), 8. Albania (15 mn). Of course several important potential partners are missing, notably Italy, Romania and Croatia, but this gives a feeling of the magnitudes the model projects for different countries.

## Conclusions

The first feature one should bear in mind is that there are enormous differences in total GDP levels between the countries of Southeast Europe and the major Western European economies<sup>23</sup>. This implies that even if some regional integration does happen in Southeast Europe many of the regional trade levels will be significantly below those with Western Europe for the foreseeable future. This is especially true of trade with Germany of course. This general comment applies to both trade in goods and in services, as well as to investment flows and is in line with earlier findings, in other words the countries of Southeast Europe – with the exception of Romania – are, and are set to remain, small peripheral economies with regards to Western Europe. Their geographical proximity to one another only partly compensates for the small size of their economies. Having said that, it is interesting to look at the potential effect of a common land border, as illustrated in the data on trade in goods (e.g. Slovenia or Hungary are relatively important regional partners for Croatia, but not at all for Albania), and as illustrated in the section on trade in services. This is particularly poignant in the case of the countries of the former Yugoslavia where some borders had turned into very stubborn barriers, at least from the point of view of the official economy (e.g. UN sanctions on Yugoslavia; conflict between Croatia and Serbia). Severed transport links as well as severed corporate and private links in the former Yugoslavia have had notoriously adverse effects on trade and investment levels, as is well known. More generally infrastructure development remains a key issue for the region, especially for Bosnia-Herzegovina, Albania, Kosovo and Moldova.

As we have seen, the EU lowered its trade barriers for goods originating from the core of the region unilaterally. This was a well-inspired move on the part of the EU as the unilateral route was certainly the most effective and fastest way of liberalising trade with the region. If one believes the argument of Bhagwati (2002), which is a general argument about trade liberalisation, the countries of the region can be expected to lower barriers towards the EU by “sequential reciprocity”. This argument is especially likely to hold given the fact that EU membership is the strategic goal of the whole region anyway.

Regional cooperation has picked up. Though a multilateral route to regional trade liberalisation may have been preferable for efficiency reasons, at least the process which is in place is progressing and is forcing improved bilateral contacts between each pair of countries (this is perhaps the only advantage of the bilateral route, and not a strictly economic one at that.)

On the other hand one should bear in mind that the process of trade liberalisation is neither complete nor entirely safe from possible future setbacks. It is still possible, in the present framework, for domestic corporate interests in the “core” countries to lobby for and obtain selective hikes in import tariffs (with respect to the EU and/or to the rest of the world), even if these may be just temporary. For governments in the region, such actions may seem like a good move in order to temporarily “fix” the

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<sup>23</sup> Gligorov et al. (2004) contains the most recent data and wiiw’s most recent growth forecasts for Southeast European as well as for Central and Eastern European countries.

budget deficit thanks to the extra revenues, and indeed such options are being debated, for example in Serbia. However the problem with this type of solution is that it can be addictive as it opens the door to further tinkering with tariffs at a later date, which is something that domestic corporate interests will not fail to notice. This can become a problem because the existence of this type of “quick fix” discourages governments from tackling imbalances through other (and arguably more appropriate) means, i.e. by changes to domestic taxation and/or expenditures or by changes to monetary policy. Besides, there are numerous other drawbacks to even temporary rises in tariffs, notably in terms of reduced import competition and higher prices for final domestic consumers. The distortionary nature of such measures may also have unforeseen (and unwelcome) effects. Overall, the net welfare effect will very often be negative in spite of (typically) higher tariff revenues.

On another level, one remembers that the countries of the region have the strategic goal of joining the European Union. As the countries of the region get closer and closer to this goal, they will be expected to adapt their trade policies to those of the EU anyway. As members they will have exactly the same external tariffs as the rest of the EU and fully free trade within the EU. In light of this, since the goal is known in advance, one could consider jumping forward and opting for a customs union with the EU. The other argument in favour of the core countries joining a customs union with the EU is that of (reducing) the trade diversion which may result from the bilateral trade agreements, given that some of the countries’ tariffs towards the rest of the world are still quite high (and higher than the EU external tariffs).

As previously stated, the major economic issues faced by the core countries can be addressed using policy instruments other than tariffs. Joining a customs union with the EU would indirectly help to focus minds on the tougher issues of domestic taxation and expenditures, which may not be a bad thing. As is well-known, all countries of the region have large informal sectors and low tax compliance rates<sup>24</sup>. This is an important issue which needs to be tackled head on by the governments in the region anyway, and in my view the sooner the better.

Having said that, the current trends are positive. Free trade agreements, real improvements towards trade facilitation and foreseeable improvements in infrastructure imply that improvements can be expected in the medium to long run. GDP growth performance has been quite good across the region over the last three years or so. Croatia, Romania and Bulgaria are expected to join the EU around 2007-2008, while the EU itself has granted some relatively generous unilateral trade concessions to the other countries of the region. Key international players are acting in a coordinated fashion on the major issues of interest, notably trade facilitation and infrastructure project coordination, while funds from these players are contributing to a whole set of badly needed improvements in these areas. Some notable improvements have already been achieved in terms of customs clearance times in many places. The accession of the Central European countries, notably Slovenia and Hungary, should also have a positive effect on trade flows with the region. However some of the major processes at work, especially those linked to infrastructure, are neither fast, nor should be expected to provide instant and spectacular results, but they are nevertheless on the right track. For the longer term, as discussed in the

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<sup>24</sup> For some estimates, see Christie and Holzner (2004).

section on the composition of exports, one would hope to see strong growth in exporting sectors with higher value added. If something like the experience of the Central European countries is to be followed, then the region is also in need, among other things, of more foreign direct investment. On the issue of trade in services, Croatia's successful tourism industry and certain other features of the region which were discussed indicate that the potential for services trade is quite high. Taken together, recent developments indicate that the outlook for trade to, from and within the region, is a positive one.



## References

Agolli M., Xhepa S. (2003), "Albania's foreign trade through a Gravity approach", Paper presented at the ACIT seminar on "Trade and Economic Integration of the Western Balkan Countries in the European Union", Tirana, 12-13 December 2003.

Astrov V. (2001), "Structure of Trade in Manufactured Products Between Southeast European Countries and the European Union", Paper presented at the wiiw-GDN workshop on "Regionalism in Southeast Europe", Vienna, November 2001.

Brenton P., Di Mauro F., Luecke M. (1999), "Economic Integration and FDI: An Empirical Analysis of Foreign Investment in the EU and in Central and Eastern Europe", *Empirica*, Vol. 26, pp. 95-121

Breuss F., Egger P. (1999), "How Reliable are Estimations of East-West Trade Potentials Based on Cross-Section Gravity Analyses?", *Empirica*, Vol. 26, pp. 81-94.

Cheng, I-Hui, Howard J.W. (1999), "Controlling for Heterogeneity in Gravity Models of Trade", FRBSL Working Paper No. 99-010A, Federal Reserve Bank of St.Louis.

Christie E., Holzner M. (2004), "Household Tax Compliance and the Shadow Economy in Central and Southeastern Europe", Paper presented at the wiiw Spring Seminar 2004.

Christie E. (2003), "Foreign Direct Investment in Southeast Europe", WIIW Working Paper No. 24.

Christie E. (2002), "Trade Potential in Southeast Europe : A Gravity Model Approach", WIIW Working Paper No. 21.

Di Mauro F. (2000), "The Impact of Economic Integration on FDI and Exports: A Gravity Approach", CEPS Working Document 156.

Fidrmuc Jan, Fidrmuc Jarko (2000), "Disintegration and Trade", CEPS Discussion Paper 2641.

Gligorov V. et al., "As East You Go, the More They Grow: Transition Economies in a New Setting", WIIW Research Report No. 308, July 2004.

Holzner M., Christie E. (2004), "Infrastructural Needs & Economic Development in Southeastern Europe - The Case of Rail and Road Transport Infrastructure", Paper presented at the IBEU Interim Meeting "Functional Borders and Sustainable Security: Integrating the Balkans in the European Union", Athens, 14-16 May 2004.

Jovicic M., Mitrovic R.D., Zdravkovic M. (2001), "Federal Republic Yugoslavia: Trade Potentials and Comparative Advantages", Paper presented at the wiiw-GDN workshop on "Regionalism in Southeast Europe", Vienna, November 2001.

Matyas L. (1997), "Proper Econometric Specification of the Gravity Model", *The World Economy*, Vol. 20. no. 3, pp. 363-368.

Messerlin P.A., Miroudot S. (2004), "Trade Liberalization in South East Europe: Review of Conformity of 23 FTAs with the MoU", study prepared for the Stability Pact of South Eastern Europe, Groupe d'Economie Mondiale, January 2004.

Office for Southeast Europe (European Commission / World Bank) (2004), "Implementation of Regional Infrastructure Projects - Status as of May 2004", Brussels, May 2004.

Römisch R. (2001), "Trade in Services in the Central and East European Countries", WIIW Research Report No. 274.

SIEPA (2002), "Regional Free Trade Area and Special Trade Agreements with Other Countries", Serbian Investment and Export Promotion Agency, March 2002.

The Republic of Albania and The Republic of Croatia (2002), "Free Trade Agreement Between The Republic of Albania and The Republic of Croatia", 2002.

UNECE (2003), "Trade Facilitation – The Challenges for Growth and Development", United Nations Economic Commission for Europe, United Nations, New York and Geneva, 2003.

Vidovic H. (2002), "The Services Sectors in Central and Eastern Europe", WIIW Research Report No. 289.

Vujcic B., Sosic V. (2001), "SEE and the Trade Potential of Croatia", Paper presented at the wiiw-GDN workshop on "Regionalism in Southeast Europe", Vienna, November 2001.

Wei S.-J. (1996), "Intra-national Versus International Trade: How Stubborn Are Nations in Global Integration?", NBER Working Paper 5531, April 1996.

## APPENDIX A

### Free Trade Agreements in Southeast Europe as of 2 June 2004

	Albania	Bosnia and Herzegovina	Bulgaria	Croatia	FYR of Macedonia	Romania	Serbia and Montenegro*
Albania		Signed 28/04/03 Ratified by Albania 10/07/03	Applied 01/09/03	Applied 01/06/03	Applied 15/07/02	Applied 01/01/04	Signed 13/11/03 Ratified by both countries
Bosnia and Herzegovina			Applied 01/05/04	Provisionally Applied 01/01/01 (not ratified by BiH)	Applied 01/07/02	Applied 01/06/04	Applied 01/06/02
Bulgaria				CEFTA 01/03/03	Applied 01/01/00	CEFTA	Applied 01/06/04
Croatia					Applied 11/06/97 Revised 11/06/02 Applied by 11/07/02	CEFTA 01/03/03	Signed 23/12/02 New provisions to be applied from 01/07/04 (?)
FYR of Macedonia						Applied by 01/01/04	Applied 7/10/96
Romania							Signed 23/12/03 To be applied by 01/07/04 (?)
Serbia and Montenegro*							

\* Serbia & Montenegro started negotiation process when it was known as FR Yugoslavia; therefore, both names may appear in the agreements.

Source: [www.stabilitypact.org](http://www.stabilitypact.org)

## APPENDIX B

### Goods Trade Flows of Bulgaria and Romania with Selected Partners

#### *Bulgaria*

##### BULGARIAN EXPORTS as a share of total exports

TO	Turkey	Romania	Greece	S&M	Italy	Germany
2000	10.2%	1.8%	7.8%	7.8%	14%	9.1%
2001	8.2%	2.6%	8.9%	4.2%	15.1%	9.6%
2002	9.4%	2.8%	9.2%	3.1%	15.5%	9.6%
2003	9.3%	2.8%	5.8%	3.0%	14.8%	11.6%

##### BULGARIAN EXPORTS in millions of USD

TO	Turkey	Romania	Greece	S&M	Italy	Germany	TOTAL
2000	490	86	374	374	686	437	4800
2001	418	133	454	214	770	490	5100
2002	526	157	515	174	868	538	5600
2003	670	202	418	216	1066	835	7200

##### BULGARIAN IMPORTS as a share of total imports

FROM	Turkey	Romania	Greece	S&M	Italy	Germany
2000	3.3%	3.5%	4.9%	0.4%	8.4%	13.8%
2001	3.8%	2.4%	5.7%	0.3%	9.7%	15.4%
2002	5.0%	2.1%	6.1%	0.3%	11.4%	14.4%
2003	5.1%	2.2%	8.9%	0.3%	11.5%	15.0%

##### BULGARIAN IMPORTS in millions of USD

FROM	Turkey	Romania	Greece	S&M	Italy	Germany	TOTAL
2000	215	228	319	26	546	897	6500
2001	274	173	410	22	698	1109	7200
2002	390	164	476	23	889	1123	7800
2003	510	220	890	30	1150	1500	10000

##### BULGARIAN TRADE BALANCE as a share of total trade

WITH	Turkey	Romania	Greece	S&M	Italy	Germany	TOTAL
2000	39%	-45%	8%	87%	11%	-35%	-15%
2001	21%	-13%	5%	82%	5%	-39%	-17%
2002	15%	-2%	4%	76%	-1%	-35%	-16%
2003	14%	-4%	-36%	76%	-4%	-28%	-16%

#### *Romania*

##### ROMANIAN EXPORTS as a share of total exports

TO	Turkey	Bulgaria	Hungary	S&M	Italy	Germany
2000	5.2%	1.8%	3.0%	na	21%	16.9%
2001	5.9%	1.3%	2.9%	1.3%	23.2%	15.8%
2002	4.4%	1.1%	2.8%	1.2%	24.4%	15.5%
2003	4.3%	1.3%	3.2%	0.8%	23.5%	15.6%

ROMANIAN EXPORTS in millions of USD							
TO	Turkey	Bulgaria	Hungary	S&M	Italy	Germany	TOTAL
2000	541	187	312	na	2153	1758	10400
2001	696	153	342	153	2738	1864	11800
2002	594	149	378	162	3294	2093	13500
2003	753	228	560	140	4113	2730	17500

ROMANIAN IMPORTS as a share of total imports						
FROM	Turkey	Bulgaria	Hungary	S&M	Italy	Germany
2000	2.0%	0.6%	3.6%	na	20.3%	18.6%
2001	1.9%	0.9%	4.8%	0.4%	20.4%	18.8%
2002	3.3%	0.9%	4.1%	0.2%	20.3%	18.1%
2003	3.0%	0.7%	3.2%	0.1%	19.7%	16.9%

ROMANIAN IMPORTS in millions of USD							
FROM	Turkey	Bulgaria	Hungary	S&M	Italy	Germany	TOTAL
2000	242	73	436	na	2456	2251	12100
2001	308	146	778	65	3305	3046	16200
2002	614	167	763	37	3776	3367	18600
2003	726	169	774	24	4767	4090	24200

ROMANIAN TRADE BALANCE as a share of total trade							
WITH	Turkey	Bulgaria	Hungary	S&M	Italy	Germany	TOTAL
2000	38%	44%	-17%	na	-7%	-12%	-8%
2001	39%	3%	-39%	41%	-9%	-24%	-16%
2002	-2%	-6%	-34%	63%	-7%	-23%	-16%
2003	2%	15%	-16%	71%	-7%	-20%	-16%

Source: IMF-DOT and wiiw (all tables)

## APPENDIX C

### Trade in services of Serbia and Montenegro (Partial Coverage): selected partner countries

Partner Country	Exports 2001	Imports 2001	Exports 2002	Imports 2002
Albania	0.013	0.183	n.a.	0.417
Austria	9.062	24.029	n.a.	16.102
Bulgaria	5.645	4.475	n.a.	1.923
Bosnia-Herzegovina	6.617	9.357	n.a.	12.859
Belgium-Luxembourg	3.667	7.635	n.a.	9.054
Switzerland	11.753	31.618	n.a.	20.533
Czech Republic	7.666	3.549	n.a.	2.071
Germany	42.393	179.636	n.a.	114.418
Germany (Bundesbank data)	305	48	406	83
Denmark	0.506	8.407	n.a.	1.4
Spain	1.073	2.443	n.a.	1.669
France	6.208	10.719	n.a.	18.434
Greece	7.143	4.524	n.a.	3.854
Croatia	14.647	3.088	n.a.	3.472
Hungary	18.363	4.133	n.a.	7.135
Italy	16.768	18	n.a.	32.843
Moldova	0.035	0.001	n.a.	0.015
Macedonia	4.983	5.772	n.a.	8.505
Netherlands	1.366	12.219	n.a.	4.133
Poland	1.03	0.382	n.a.	0.692
Romania	3.843	2.965	n.a.	2.376
Russia	15.542	9.351	n.a.	3.353
Sweden	2.992	2.856	n.a.	4.245
Slovakia	1.109	0.413	n.a.	6.672
Slovenia	3.848	3.262	n.a.	7.469
Turkey	2.025	6.714	n.a.	4.755
Ukraine	2.47	0.32	n.a.	0.362
United Kingdom	20.255	27.615	n.a.	30.044
United States	17.116	17.685	n.a.	19.437
<b>World</b>	<b>267.187</b>	<b>493.034</b>	<b>n.a.</b>	<b>385.169</b>
<b>Totals according to BOP Aggregates</b>	<b>847</b>	<b>361</b>	<b>856</b>	<b>568</b>
<b>Coverage</b>	<b>32%</b>	<b>137%</b>	<b>n.a.</b>	<b>68%</b>

**Units: millions of Euros at current exchange rates**

*Source: National Bank of Serbia unless otherwise indicated*

Notes: The country breakdown presents significant discrepancies, with regards to BOP data aggregates from the National Bank of Serbia itself, as well as with regards to Bundesbank data for the case of trade with Germany. In other words the data above is not reliable.

## APPENDIX D

### Trade in Services Gravity Model Regression Results – First Specification

Dependent Variable: LOG(FLOW)				
Method: Least Squares				
Sample(adjusted): 1 1587				
Included observations: 1189				
Excluded observations: 398 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	P-Value
Overall Intercept	1.718864	2.947022	0.583254	0.5598
LOG(GDPEXP)	0.672341	0.266312	2.524639	0.0117
LOG(GDPIMP)	0.805896	0.268645	2.999854	0.0028
LOG(DISTANCE)	-1.032046	0.058770	-17.56063	0.0000
Common Land Border	0.358956	0.088383	4.061371	0.0001
EU15	0.930839	0.192400	4.838036	0.0000
Accession Countries – EU15	-0.048608	0.140332	-0.346378	0.7291
Moldova - CIS	1.990606	0.280325	7.101077	0.0000
Albania – Importer	-1.278416	0.742004	-1.722924	0.0852
Albania – Exporter	-2.065749	0.738774	-2.796184	0.0053
Austria – Importer	0.103505	0.372403	0.277937	0.7811
Austria – Exporter	0.121360	0.370313	0.327723	0.7432
Bulgaria – Importer	-0.071248	0.440260	-0.161831	0.8715
Bulgaria – Exporter	-0.368378	0.434521	-0.847778	0.3967
Bosnia-Herzegovina – Importer	-1.446326	0.710793	-2.034806	0.0421
Bosnia-Herzegovina – Exporter	-1.308765	0.707401	-1.850102	0.0646
Belgium-Luxembourg – Importer	-0.230196	0.438540	-0.524914	0.5997
Belgium-Luxembourg – Exporter	-0.604952	0.435854	-1.387970	0.1654
Switzerland – Importer	1.209140	0.452475	2.672282	0.0076
Switzerland – Exporter	0.860964	0.449706	1.914503	0.0558
Germany – Importer	0.302948	0.966311	0.313510	0.7540
Germany – Exporter	-0.128390	0.957929	-0.134028	0.8934
Denmark – Importer	-0.691258	0.333528	-2.072565	0.0384
Denmark – Exporter	-1.080448	0.331666	-3.257640	0.0012
Spain – Importer	-0.395543	0.656325	-0.602664	0.5469
Spain – Exporter	-0.055195	0.651134	-0.084767	0.9325
France – Importer	-0.892282	0.871176	-1.024227	0.3059
France – Exporter	-0.580057	0.863809	-0.671510	0.5020
Greece – Importer	-0.029300	0.291301	-0.100584	0.9199
Greece – Exporter	0.468611	0.291023	1.610222	0.1076
Croatia – Importer	-0.656690	0.357402	-1.837399	0.0664
Croatia – Exporter	-0.790840	0.358024	-2.208902	0.0274
Hungary – Importer	0.064647	0.165065	0.391643	0.6954
Hungary – Exporter	-0.269773	0.169336	-1.593120	0.1114
Italy – Importer	-0.417047	0.822220	-0.507221	0.6121
Italy – Exporter	-0.326524	0.815292	-0.400500	0.6889
Moldova – Importer	0.095998	1.020496	0.094070	0.9251
Moldova – Exporter	-0.969913	1.013624	-0.956877	0.3388
Netherlands – Importer	-0.126920	0.542248	-0.234062	0.8150
Netherlands – Exporter	-0.396829	0.538013	-0.737582	0.4609
Poland – Importer	-0.165005	0.337332	-0.489148	0.6248
Poland – Exporter	-0.490401	0.336466	-1.457507	0.1453
Romania – Importer	-0.201514	0.230546	-0.874071	0.3823
Romania – Exporter	-0.326376	0.232907	-1.401316	0.1614

Russia – Importer	0.340525	0.458947	0.741971	0.4583
Russia – Exporter	-0.295739	0.456120	-0.648379	0.5169
Sweden – Importer	-0.052675	0.425939	-0.123668	0.9016
Sweden – Exporter	-0.558809	0.422462	-1.322744	0.1862
Serbia and Montenegro – Importer	-0.306415	0.502642	-0.609610	0.5422
Serbia and Montenegro – Exporter	-0.594453	0.492359	-1.207357	0.2275
Slovakia – Importer	-0.714226	0.305185	-2.340306	0.0194
Slovakia – Exporter	-1.317860	0.305552	-4.313052	0.0000
Slovenia – Importer	-1.034586	0.334381	-3.094037	0.0020
Slovenia – Exporter	-1.354485	0.334048	-4.054760	0.0001
Turkey – Importer	-0.189460	0.375689	-0.504299	0.6141
Turkey – Exporter	0.316060	0.374200	0.844629	0.3985
Ukraine – Importer	-0.684584	0.297705	-2.299539	0.0217
Ukraine – Exporter	-1.289206	0.294824	-4.372791	0.0000
United Kingdom – Importer	-0.241586	0.890324	-0.271347	0.7862
United Kingdom – Exporter	0.005891	0.882480	0.006675	0.9947
United States – Importer	1.886091	1.409373	1.338248	0.1811
United States – Exporter	2.236540	1.396965	1.601000	0.1097
R-squared	0.908475	Mean dependent var		12.22237
Adjusted R-squared	0.903521	S.D. dependent var		2.319034
S.E. of regression	0.720317	Akaike info criterion		2.232486
Sum squared resid	584.7519	Schwarz criterion		2.497426
Log likelihood	-1265.213	F-statistic		183.3860
Durbin-Watson stat	2.317096	Prob(F-statistic)		0.000000



## APPENDIX E

### Country Dummy Variable Coefficients – Second Estimation

#### Rankings of country importer and country exporter coefficients

Note: Same model as in Appendix D but without time effects and without the EU and EU-Accession Countries dummy variables. Only the dummy variable coefficients that were significant at the 10% level are reproduced here.

Country	Direction	Coefficient	P-Value
Hungary	Exporter	-0.4038	0.0248
Romania	Exporter	-0.4112	0.0642
Poland	Exporter	-0.7025	0.0508
Croatia	Exporter	-0.7771	0.0310
Ukraine	Exporter	-0.8823	0.0017
Slovakia	Exporter	-1.2553	0.0001
Albania	Exporter	-1.9240	0.0137

Country	Direction	Coefficient	P-Value
Switzerland	Importer	0.9688	0.0379
Greece	Importer	0.7757	0.0093
Croatia	Importer	-0.6223	0.0835
Slovakia	Importer	-0.6317	0.0535
Slovenia	Importer	-1.1980	0.0008
Bosnia-Herzegovina	Importer	-1.3052	0.0817

## APPENDIX F

### Assumed GDP Growth Paths

Countries	1999	2000	2001	2002	2003	2004	2009
Bulgaria	12164	13679	15190	16527	17271	18135	22600
Albania	3315	4151	4745	5123	5379	5648	7038
Bosnia-Herzegovina	4399	4914	5358	5562	5746	5947	7411
Moldova	1101	1393	1654	1718	1795	1876	2338
Croatia	18679	19976	21811	23820	24773	25690	32014
Romania	33489	40127	44848	48384	50319	52332	65216
Serbia and Montenegro	9458	9383	12889	16601	16933	17610	21945
Czech Republic	51578	55738	63822	73855	75554	77594	94405
Hungary	45069	50655	57853	69886	72122	74646	90818
Poland	145521	170776	204255	199555	204544	210680	256324
Slovakia	18942	21339	22843	25144	26150	27458	33406
Slovenia	18843	20594	21829	23360	23944	24782	30151
Russia	183818	280669	345937	366425	384746	402060	501040
Ukraine	29691	33819	42420	43922	46557	48419	60339
Austria	197154	207037	211857	216831	221168	225591	249071
Belgium-Luxembourg	254218	268284	275792	283926	289605	295397	326143
Germany	1978600	2030000	2071200	2108200	2150364	2193371	2421659
Denmark	162430	171668	177736	182956	186615	190347	210159
Spain	565199	609319	651641	693925	707804	721960	797102
France	1355102	1416877	1463722	1506118	1536240	1566965	1730056
Greece	118053	123099	130927	141132	143955	146834	162116
Italy	1107994	1166548	1220147	1258349	1283516	1309186	1445447
Netherlands	374070	402599	429172	444324	453210	462274	510387
Sweden	235997	260120	244905	255423	260531	265742	293401
United Kingdom	1369988	1559392	1596986	1659112	1692294	1726140	1905799
Switzerland	242772	260313	274662	284139	289822	295618	326386
Turkey	173097	216736	164553	193145	200871	208906	254166
United States	8643247	10568279	11186204	10978940	11198519	11422489	12611351

*Units: Nominal, at market prices, in millions of Euros at current prices and exchange rates up to 2002, and at 2002 prices and exchange rates thereafter.*

*Sources: OECD, WIIW, Own calculations*

## APPENDIX G

### Projected Flows and Available Observations

Note: All flows are in millions of Euros, at current prices for 1999-2001, and at 2002 prices and exchange rates for 2003-2009. The available data for Austria concerning Albania and Serbia and Montenegro was obtained under the condition that it would not be transmitted to third parties. The other flows reported by Austria are shown, as they are available from the OECD.

#### ALBANIA

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
Austria	exists	exists	exists	exists
France	3	14	8	8
Germany	7	8	11	11
Netherlands	na	1	na	1
United Kingdom	5	3	6	na
<b>Exports to</b>				
Austria	exists	exists	exists	exists
France	na	5	4	na
Germany	30	20	17	37
Netherlands	1	2	1	3
United Kingdom	9	10	11	na

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	4	5	6	6	7	7	13
France	3	3	4	4	5	5	9
Germany	9	11	13	14	15	16	29
Netherlands	2	2	3	3	3	3	6
United Kingdom	6	7	8	9	10	10	19
<b>Exports to</b>							
Austria	3	4	4	5	5	5	9
France	2	3	3	3	3	3	6
Germany	15	18	21	22	23	24	44
Netherlands	2	2	3	3	3	3	6
United Kingdom	4	6	6	7	7	8	14

## BOSNIA-HERZEGOVINA

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
France	na	6	3	2
Germany	318	15	18	27
Netherlands	1	2	4	1
<b>Exports to</b>				
France	na	4	1	3
Germany	38	33	179	201
Netherlands	5	43	19	22

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
France	5	5	6	6	6	7	12
Germany	14	15	17	18	18	19	35
Netherlands	2	3	3	3	3	3	6
<b>Exports to</b>							
France	8	9	10	11	11	11	21
Germany	55	61	66	69	72	74	135
Netherlands	6	7	8	9	9	9	17

## BULGARIA

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
Austria	56	70	77	na
Belgium- Lux.	2	3	0	na
Czech Republic	na	47	48	na
Denmark	4	3	3	na
France	23	48	20	na
Germany	121	151	211	192
Italy	na	41	67	na
Netherlands	14	17	9	na
Slovakia	0	0	1	na
United Kingdom	58	67	61	na
<b>Exports to</b>				
Austria	32	36	45	na
Belgium-Lux.	4	11	11	na
Czech Republic	na	50	42	na
Denmark	4	5	5	na
France	26	28	31	na
Germany	211	275	362	464
Italy	na	59	69	na
Netherlands	38	29	15	na
Slovakia	1	1	2	na
United Kingdom	46	51	68	na

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	31	36	40	43	45	48	290
Belgium-Lux.	8	10	11	12	12	13	78
Czech Republic	10	12	14	17	18	19	123
Denmark	4	4	5	5	6	6	37
France	25	29	32	35	37	39	236
Germany	67	76	84	91	95	101	610
Italy	42	48	54	59	62	66	398
Netherlands	13	15	17	18	19	20	124
Slovakia	2	3	3	4	4	4	26
United Kingdom	40	48	54	59	62	65	397
<b>Exports to</b>							
Austria	32	36	40	43	45	47	281
Belgium-Lux.	13	15	16	18	18	19	116
Czech Republic	9	10	12	15	16	17	107
Denmark	6	7	7	8	8	9	52
France	25	28	31	33	35	37	220
Germany	146	162	177	191	200	210	1254
Italy	50	57	63	69	72	76	453
Netherlands	19	22	25	27	28	30	176
Slovakia	4	5	6	7	7	8	51
United Kingdom	42	51	56	61	64	67	400

## CROATIA

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
Austria	203	278	268	na
Belgium-Lux.	7	4	6	na
Czech Republic	na	28	34	na
France	116	58	51	na
Germany	129	147	151	156
Netherlands	10	16	12	na
Slovakia	12	3	13	na
United Kingdom	56	61	51	na
<b>Exports to</b>				
Austria	162	215	379	na
Belgium-Lux.	6	5	13	na
Czech Republic	na	89	140	na
Denmark	na	na	na	na
France	40	45	53	na
Germany	515	774	1015	1217
Netherlands	19	24	37	na
Slovakia	6	5	11	na
United Kingdom	24	41	66	na

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	157	172	188	205	215	225	1362
Belgium-Lux.	13	15	16	18	18	19	117
Czech Republic	23	26	30	36	38	40	257
France	38	41	45	50	52	55	331
Germany	121	130	142	154	162	169	1024
Netherlands	20	22	25	27	29	30	182
Slovakia	4	4	5	6	6	6	42
United Kingdom	54	63	69	76	79	83	502
<b>Exports to</b>							
Austria	186	202	219	238	248	259	1543
Belgium-Lux.	24	26	29	31	33	34	204
Czech Republic	27	30	36	43	45	48	307
Denmark	8	9	10	11	12	12	72
France	43	47	51	56	58	60	361
Germany	304	326	352	379	396	413	2465
Netherlands	34	38	43	47	49	51	303
Slovakia	6	7	8	9	10	10	66
United Kingdom	66	77	83	91	95	99	593

## ROMANIA

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
Austria	110	139	172	na
Belgium-Lux.	4	5	3	na
Denmark	4	3	6	na
France	na	105	133	na
Germany	114	129	140	150
Italy	na	123	101	na
Moldova	6	9.3	11.3	15.3
Netherlands	26	37	36	na
United Kingdom	64	71	93	na
<b>Exports to</b>				
Austria	60	81	98	na
Belgium-Lux.	7	8	48	na
Denmark	3	6	6	na
France	na	97	93	na
Germany	220	289	279	299
Italy	na	378	432	na
Moldova	16.6	18.4	16.4	18.3
Netherlands	26	45	39	na
United Kingdom	71	98	114	na

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	50	60	67	72	76	79	479
Belgium-Lux.	14	17	19	20	21	22	136
Denmark	7	8	9	10	11	11	69
France	40	48	54	58	61	64	388
Germany	109	129	143	154	162	169	1026
Italy	61	73	82	90	94	98	596
Moldova	5	7	9	10	10	11	22
Netherlands	21	26	30	32	34	36	216
United Kingdom	68	86	96	105	110	115	696

Exports to	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	55	65	71	76	80	83	497
Belgium-Lux.	24	28	31	33	35	36	216
Denmark	11	13	15	16	17	17	104
France	42	50	55	59	62	65	387
Germany	256	296	325	347	363	379	2262
Italy	78	92	103	112	117	122	727
Moldova	9	12	15	16	17	18	36
Netherlands	34	41	47	51	53	55	329
United Kingdom	77	97	106	116	121	126	753

## SERBIA AND MONTENEGRO

Imports from	Flow 1999	Flow 2000	Flow 2001	Flow 2002
Austria	exists	exists	exists	exists
France	na	18	18	18
Germany	29	35	48	83
United Kingdom	50	148	61	na
<b>Exports to</b>				
Austria	exists	exists	exists	exists
France	na	18	6	17
Germany	54	64	305	406
Netherlands	39	28	64	53
United Kingdom	44	43	47	na

Imports from	Projection 1999	Projection 2000	Projection 2001	Projection 2002	Projection 2003	Projection 2004	Projection 2009
Austria	46	47	62	78	80	84	155
France	24	24	32	41	42	44	81
Germany	66	67	88	110	113	119	219
United Kingdom	37	40	53	67	69	73	134
<b>Exports to</b>							
Austria	51	53	67	81	84	87	159
France	25	26	34	41	42	44	80
Germany	157	159	202	244	251	263	477
Netherlands	21	22	29	35	36	38	69
United Kingdom	42	47	60	73	76	79	143

## APPENDIX H

### Tourism Data – Number of Arrivals by Country of Origin

CROATIA	1999	2000	2001	2002	2003
TOTAL WORLD	3443232	5831180	6544217	6944345	7408590
TOTAL EUROPE	3369698	5719995	6428582	6806518	7244346
Austria	374276	640199	686844	690366	708506
Belgium	16159	40902	47556	60194	72989
Belarus	1983	3988	3678	2364	1642
BiH	157027	181836	172490	173214	177662
Bulgaria	4669	5907	10876	13072	17386
Czech Republic	415295	710958	742485	697902	699473
Denmark	11954	21007	23126	29697	42298
Estonia	264	515	885	2330	4496
Finland	2840	3961	4162	8195	10292
France	31646	57193	74719	134708	220636
Greece	1556	2778	3556	3405	4659
Ireland	4061	5668	9927	18727	29027
Italy	538347	1011634	1059810	1099427	1205532
Israel	7084	33514	55995	80740	75173
Serbia and M.	3481	5416	9067	13200	23443
Latvia	368	333	1263	2710	4721
Lithuania	1564	6298	11308	13065	16523
Luxembourg	1143	871	1477	1882	4433
Hungary	141413	249887	279825	318015	356139
Macedonia	8186	11871	15442	15928	14893
Netherlands	72551	103595	125087	148140	179483
Germany	531259	1048275	1299729	1481659	1551844
Poland	104893	284783	391809	358065	237968
Portugal	1799	4291	5892	6690	9616
Romania	7455	16633	19355	13947	15756
Russia	9001	28414	46238	55479	56972
Slovakia	107629	187344	202905	191176	187955
Slovenia	689851	848888	876987	869900	918462
Spain	10879	25022	19692	26022	43791
Sweden	13893	21070	27248	34619	53211
Switzerland	24227	36223	46026	60607	82883
Turkey	4382	5373	5529	5572	5731
Ukraine	3425	5651	5109	7073	8491
Great Britain	50890	84549	106960	132160	152519
Australia	7039	9379	10323	15602	20258
Japan	6375	10933	12565	15340	16040
Canada	9600	14215	14870	16409	19040
USA	36060	52654	52446	58529	65430

Source: Croatian Bureau of Statistics



ROMANIA - ARRIVALS (persons) FROM	1998	1999	2000	2001
WORLD	4831000	5224000	5264000	4938000
United States	74000	69000	79000	78000
EUROPE	4601000	5006000	5024000	4696000
EU15	761000	765000	834000	981000
Austria	56000	63000	66000	85000
Belgium	17000	18000	19000	23000
Denmark	9000	9000	10000	12000
Finland	2000	4000	4000	4000
France	64000	62000	76000	88000
Germany	259000	249000	255000	328000
Greece	71000	71000	70000	67000
Ireland	3000	3000	4000	5000
Italy	151000	158000	189000	219000
Luxembourg	1000	1000	1000	1000
Netherlands	48000	47000	55000	58000
Portugal	2000	2000	3000	3000
United Kingdom	54000	52000	53000	56000
Spain	10000	10000	12000	14000
Sweden	14000	16000	17000	18000
Belarus	71000	40000	28000	26000
Bulgaria	464000	489000	363000	392000
Czech Republic	57000	70000	71000	78000
Serbia and Montenegro	112000	152000	143000	127000
Macedonia	8000	39000	15000	11000
Moldova	1192000	1455000	1436000	1033000
Poland	105000	103000	102000	106000
Russia	124000	78000	83000	86000
Slovakia	107000	92000	80000	84000
Turkey	263000	281000	253000	230000
Ukraine	424000	319000	330000	324000
Hungary	829000	1031000	1203000	1131000

*Source: National Institute of Statistics of Romania*

SERBIA - ARRIVALS (persons) FROM	1998	1999	2000	2001	2002
Albania	0	0	0	0	0
Bosnia and Herzegovina	71080	58447	75902	73533	62646
Bulgaria	10523	5946	8605	10562	14334
Greece	12463	8317	8725	8299	12453
Hungary	6851	2477	4808	9743	14205
Macedonia	21462	11787	19484	25846	32150
Romania	8243	4309	7611	10931	12322
Slovenia	7479	3131	7336	20851	29829
Croatia	4977	3585	7920	13775	19341
Austria	7019	2933	5189	10059	13999
Belgium	1328	494	1630	2501	3955
United Kingdom	6838	2171	3225	7586	10441
Denmark	1269	482	967	2010	2347
Ireland	949	261	560	1136	1338
Iceland	294	88	63	87	281
Italy	20404	8133	12605	16813	23410
Luxembourg	126	76	187	185	250
Germany	13033	3907	8327	18850	33454
Norway	2568	733	975	2582	3745
Poland	1762	662	1921	7818	14448
Portugal	296	143	403	639	638
Russian Federation	24189	6946	14025	18393	20898
Turkey	3352	804	1683	4480	5737
Finland	580	366	434	791	1038
France	4723	2194	3147	6770	8593
Netherlands	2748	988	1850	3926	5648
Czech Republic	3742	1627	4200	13009	24259
Slovakia	3149	1430	4468	8177	16453
Switzerland	2296	1522	2934	4717	5523
Sweden	2564	1155	1660	3172	4205
Spain	1788	603	1035	1971	2335
Other European countries	9431	4560	9336	16250	15551
Australia	986	339	734	1241	1458
Israel	1466	529	859	1801	2850
Japan	1085	1128	1539	1715	1704
Canada	1145	447	891	1647	2494
New Zealand	85	58	87	133	280
United States	8807	2148	2740	8908	12099
Other non-European countries	11539	6724	10892	10426	11512
WORLD	282639	151650	238957	351333	448223

Source: National Bank of Serbia

