The estimate of regional balances of payments in Croatia

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Abstract

Neither the region, as part of the state, nor regional development has occupied the centre of attention in the theory of international trade. There are several reasons, both theoretical and methodological, as well as entirely practical, including the want of any adequate statistics, particularly those necessary for the construction of Croatian regional balances of payments. Accordingly, there are several objectives to this work. After the introduction in which reference is made to the limitations of the running of individual regional economic policies, comes a chapter in which the content of an ideal regional balance of payments is defined. On the way from the ideal to the objective content of regional balances of payments, that is, one reflecting the available data, many methodological problems had to be solved and suitable statistics set up. In the sequel, the analysis of the balances of payments reveals a whole scale of regions that are negative or positive in terms of foreign currency. Although the quantities of the individual balances and items are interesting in themselves, it is important to understand that the different regional exposures to monetary policy possibly require a selective approach from economic policy. At the end, making use of the regional balances of payments, the influence of the depreciation of the kuna on the gross domestic product of the regions is analysed. It is established that in some hypothetical depreciation, if foreign currency transactions were treated ceteris paribus in relation to other economic aggregates, there would be important gains and losses, which would lead to ever greater developmental inequality in Croatia.

Keywords: region, balance of payment, exchange rate, developmental disparities, Croatia

1 INTRODUCTION, OR, NATIONAL AND REGIONAL ECONOMIES AND ECONOMIC POLICIES

When in Croatia in discussions of given economic problems, the terms metropolis and province are used as indicators of geography and development, only a little charge is necessary for arguments to be produced saying that those in the province would find it better if they managed their own economy.[1] At that moment the tone of voice becomes sharper, the province is less developed than the national average. And then, an octave higher still, the provinces are isolated in every sense with all the consequences entailed. After that into the discussion an argument is adduced that will not brook criticism, that the region is characterised by a high environmental sensitivity, which sometimes moves the interest of investors away from these areas. At the end, to the sound of fist on table, everything is top-down, instead of allowing something in the management approach that is bottom-up.

Then the region, irrespective of the internal dissents and divisions, is imagined as an economic entity that is in many elements like a little state, with an open economy, on which exogenous factors have a strong and yet not a crucial impact. It is interesting that regional theory and international trade theory have often dealt with

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[1] For more on this see Filipić (2006).

the similarities and differences of the national economy and a smaller and more or less isolated part of it, the region.

If this theoretical framework is adjusted to the special requirements of the Croatian economic scene, but not only the Croatian (Filipić and Grčić, 2002; Capello and Nijkamp, 2009) the following can be observed:

  – the regions are at different stages of development,
  – regional economies are more open than the national economy,
  – the economy of the region is more closely connected with the economies of other regions within the national economy than different national economies are with each other,
  – a poorer economic structure makes a regional economy sensitive to varied measures of economic policy.

In addition, regional specificities necessitate different forms of regional development policy, for:

  – some of the regions are more less isolated from information,
  – some of the regions are characterised by high environmental sensitivity,
  – they have different urban structures (Barca et al., 2012), and also
  – they have various patterns of innovation (Alderman and Davies, 1990; Abreu et al., 2008).

The recent global economic crisis made the discussion about the specific features of European regional economies very topical. Two aspects are in the centre of attention (Camagni, 2015). In member states of the monetary union who by accession to the union were reduced, as it were, to the status of region, the impossibility of a devaluation of the currency in the event of a negative balance of trade increased the exposure to the crisis and deepened the social differences more strongly in the more weakly developed regions. In addition, the policy of austerity generated asymmetrical effects that in the situation of reduced public spending hit the more weakly developed regions dependent on public transfers and internal demand more strongly, and the rise of interest rates is reflected on the reduction of investment, which is particularly visible in industrial regions.

What is particularly important is that there are constraints on the economic policy measures that the region had in their armoury to deal with their own economic problems (Filipić, 2000). This refers to all economic policies, particularly the most important, fiscal and monetary. Rules of the common national fiscal policy apply at the regional level. Although we have seen various kinds and strengths of fiscal decentralisation, the most productive budgetary revenues are always in the hands of the central (economic) policy. The region is part of the area of the common currency in which the money supply is controlled by the central bank, which means that not even in monetary policy is it possible for it to seek instruments and measures to govern its own development (Filipić, 2001). However, this does not mean that these themes should be removed from the purview of research.

An important and very topical segment of economic policy is the regulation of relations with foreign countries. Foreign trade policy and price policy are directly interwoven with monetary and foreign exchange policies, and then, via a multiplier, with other policies, so as ultimately to produce the most favourable result for the national economy. All of this in the annual statement is entered in the balance of trade of the state, which represents a systematic representation of the value of the economic transactions of (Croatian) residents with foreign countries in a given period.

In most countries, regional balances of payments are not constructed, and this is the case with Croatia as well. Since 2012, data concerning the imports and exports of the counties have not been reported, although this had happened in an orderly manner for fifty years previously. And the current situation will certainly continue, for contemporary monetary theory, instead of addressing the regions, prompted by the monetary issues in the euro area, has reaffirmed and improved (Dellas and Taclas, 2009; Cesarano, 2006) the almost forgotten theory of optimal currency areas (Mundell, 1963). Nevertheless, even alongside these important theories, some entirely mundane questions will continue to look for answers. Like the following, converted into the case study at the end of this article: to what extent does a change in the exchange rate for the kuna affect regional developmental disparities in Croatia?

An attempt will be made to arrive at answers to these questions with the help of the regional balances of payments of the Croatian regions and countries constructed for the purpose of this analysis.

2 THE BALANCE OF PAYMENTS AND REGIONAL POSSIBILITIES AND IMPOSSIBILITIES

Every textbook on international economics or macroeconomics on its numerous pages will list everything about the concept and the structure of the balance of payments, the techniques of the accounts that are published in this balance, and will devote most of its space to the policy of balancing the balance of payments (for example, Babić and Babić, 2008). In the many methodological documents that are usually published by the central banks (for Croatian by the CNB, Annual Reports) there are definitions of every position of the balance sheet and listings of the residents who are bound to give the building elements of the balance of payments to the central bank and the statistics office are provided. In line with the universally accepted theory, and with the conviction that all levels lower than the national are unimportant for macroeconomic policy, never, ever, in all these books and implementation documents are there mentions of the balance of payments of the smaller territorial units. In truth, in academic articles regional balances of payments are mentioned, in three of their aspects: (a) when regions are understood to mean states that belong to economic, political or geographical groupings; (b) in the context of debates about the theory of optimal currency areas, and (c) when it is being proved that discussions of regional balances of payments are actually unnecessary (for example, Ramos, 2006) and the discussion is directed to the regional balances of current transactions (Ramos, 2007).

So the theme of regional balances of payments is not at all on the agenda, either of theory or of practice. The logical questions arises: whence the interest in drawing up Croatian regional balances of payments?

Once a year, each year, Croatian exporters meet (Brnić, 2015). Tirelessly, they repeat their demand for a correction of the kuna exchange rate. Upwards, of course, for, and here one has to agree with them, export is supposed to exert a positive effect on the whole of the economy. But the effects of this requested depreciation on the rest of the participants in economic life are not mentioned, nor is there any word of importers, for example. Several times a year, each year, debtors with loans denominated in a foreign currency or in kuna with a currency clause get together (Gatarić, 2015) who, logically, want the exchange rate not to be altered, or if it has to be, then to a lower level, the level of a few years back. Nor does this interest group pay any attention in its exchange rate calculations to the others; any mention of foreign currency deposits is for them anathema. It is important for the topic of this article, that both of them, and all others, live and make a living in a very concrete space, in the regions, in the counties, and in many ways share the destinies of their own economic surrounding. Will a change in the exchange rate of the domestic currency improve or damage the economic situation in the region or county? Will a positive different of regional foreign currency inflows and outflows lead to a great income per capita of the region and a small number of unemployed? To find out, it is necessary to start off from analyses that ultimately, outside the scope of this work, can result in adequate measures of economic policy, and an appropriate analytical apparatus consists of the regional balances of payments.

It is the general government sector at all of its levels that makes the fundamental difference between the national and the regional balances of payments (sectorisation according to European System of National and Regional Accounts, ESA, EC, 2013). It does not exist in the Croatian regional balances of payments that will be presented below. It is possible, according to some key (for example the structure of GDP or tax revenues) to divide state transfers and government loans into regions/counties, but in this case the regional balances of payments would to a great extent (because of the large aggregates of government sources and the use of the funds) lose their specificities. All other residents from the national balance of payments are also there in the regional: (1) non-financial corporations, (2) financial corporates (excluding monetary institutions), (3) households, and (4) foreign countries.

Looked at in terms of the narrower balances that make up the balance of payment (table 1), the balance of current transactions (save for government transfers) is in its content the same for the national and the regional level. The difference is only in the geographical scope. All transactions that are conducted in the goods, service and transfer segment in a foreign currency or in kuna equivalent are listed here. Naturally, this makes up a difference from the regional corporate accounts and the kuna inter-regional transactions are treated as trade of a region with "abroad".

TABLE 1

Content of the balance of payments

National level – Croatia		Regional or county level	
Current account		**Current account**	
Debit	Credit	Debit	Credit
A. Goods and services		**A. Goods and services**	
1. Goods imports	1. Goods exports	1. Goods imports	1. Goods exports
Goods balance		Goods balance	
2. Services imports	2. Services exports	2. Services imports	2. Services exports
2.1. Tourist spending abroad	2.1. Spending of foreign tourists inland	2.1. Tourist spending abroad	2.1. Spending of foreign tourists inland
2.2. Other services from abroad	2.2. Other services sold abroad	2.2. Other services from abroad	2.2. Other services sold abroad
Services balance		Services balance	
Balance of goods and services		Balance of goods and services	
B. Income and current transfers		**B. Income and current transfers**	
3. Transfers abroad	3. Transfers from abroad	3. Transfers abroad	3. Transfers from abroad
3.1. Remittances of foreign workers employed inland	3.1. Remittances of domestic workers from abroad	3.1. Remittances of foreign workers employed inland	3.1. Remittances of domestic workers from abroad
3.2. Pensions paid to foreigners	3.2. Pensions of domestic residents from abroad	3.2. Pensions paid to foreigners	3.2. Pensions of domestic residents from abroad
3.3. Other private transfers to foreigners (interest and dividends)	3.3. Other private transfers from abroad (interest and dividends)	3.3. Other private transfers to foreigners (interest and dividends)	3.3. Other private transfers from abroad (interest and dividends)
3.4. Government transfers abroad	3.4. Government transfer revenues		
Balance of current transfers		Balance of current transfers	
3.5. Compensations to employees	3.5. Compensations to employees	3.5. Compensations to employees	3.5. Compensations to employees
3.6. Income from FDI in the domestic economy	3.6. Income from FDI abroad	3.6. Income from FDI in the domestic economy	3.6. Income from FDI abroad
3.7. Income from portfolio investment	3.7. Income from portfolio investment	3.7. Income from portfolio investment	3.7. Income from portfolio investment

National level – Croatia

3.8. Income from other investments	3.8. Income from other investments
Balance of income	
Capital and financial account	
Assets	Liabilities
C. Long-term capital	
4. FDI abroad	4. FDI from foreign countries
5. Private investments in securities abroad	5. Private foreign portfolio investments in the country
6. Government loans made abroad	6. Government borrowing abroad
D. Short-term capital	
7. Private commercial loans made to foreigners	7. Private commercial loans received from foreigners
8. Private deposits in foreign banks	8. Private deposits of foreigners in domestic banks
9. Private purchases of foreign monetary instruments	9. Private sale of monetary instruments to foreigners
10. Government loans made abroad	10. Government borrowing abroad
Reserves account	
Assets	Liabilities

Regional or county level

3.8. Income from other investments	3.8. Income from other investments
Balance of income	
Capital and financial account	
Assets	Liabilities
C. Long-term capital	
4. FDI abroad	4. FDI from foreign countries
5. Private investments in securities abroad	5. Private foreign portfolio investments in the region
D. Short-term capital	
	7. Foreign currency loans of credit institutions
	7.1. Non-financial corporates
	7.2. Household
8. Foreign currency deposits in banks	
8.1. Non-financial corporates	
8.2. Household	
9. Private purchases of foreign monetary instruments	9. Private sale of monetary instruments to foreigners
Balance of foreign currency inflows and outflows	
Foreign currency outflow	Foreign currency inflow

Source: for the national level, CBS; regional level, author.

Everything stated about the balance of current transactions also applies to the long-term capital sub-balance in the balances of capital and financial transactions, naturally apart from the item of government loans and borrowings. All real and portfolio investments to or from foreign countries, that have their origin or destination in a region, can be recorded in the regional balance of payments too.

The "domestic-foreign" criterion of the national accounts unquestioningly takes it for granted that everything inland is paid in the domestic and abroad in the foreign currency. In the regional short-term balances of capital and financial transactions that are presented here, this criterion is replaced by the "foreign currency-kuna" criterion, according to which, apart from the county location, the only essential thing is the currency involved in the transaction. All financial transactions of residents in a region in foreign currency or in kuna with a currency clause are the content of this segment of the regional balances of capital and financial transactions. In this manner, sometimes also because of want of information, on the way from national to regional, items 7 and 8 are modified and transformed into regional foreign currency loans and deposits.

Finally, the reserves account. For reasons stated above (general government level) it does not exist at the regional level. Instead of reserves, in the regional balance of payments, the balance of foreign currency inflows and outflows is recorded.

As already stated, the balance of payments is a systematic representation of the values of economic transactions of residents with the rest of the world in a given period. Regional balances of payments, in the way arranged in this paper, require a new definition. They are a systematic depiction of the value of economic transactions of regional residents that, irrespective of whether they are with foreign countries or with domestic residents, are carried out in a foreign currency, or in the domestic currency with a foreign currency clause, in a given period. Conceived in this way, in a considerable part, they can be considered foreign currency balances.

3 SOURCES OF DATA, OR *PER ASPERA AD* (REGIONAL) *ASTRA*

There are three kinds of sources of data for the compilation of the national balance of payments: (1) reports of government institutions: the Croatian Bureau of Statistics (CBS), the Croatian Institute for Retirement Insurance (CIRI); (2) specialised reports of the CNB about aggregated payment transactions with foreign countries, debtor relations with foreign countries, monetary statistics and international reserves; and (3) assessments and statistical reports conducted by the CNB. In principle, the goods balance is made by the CBS, the balance of transfers in the part relating to pensions is the task of CIRI, and the rest, the balance of services, not including tourism, and items in the balance of capital and financial transactions, pursuant to reports by residents, is aggregated by the CNB. This "in principle" means that within all the balances there are items that are either estimated or adopted from foreign sources.

All these data arrive from residents who carry out business transactions with foreign countries. In their reports are the addresses of residents, their principal places of residence or domiciles, depending on whether legal or natural entities are concerned. This fact, that the location of the transaction is known, suggests the conclusion that in some ideal statistics it would be possible without any great problems to draw up regional balances of payments (or regional social accounts, including regional input-output tables). But this is not done, and some of the reasons for this, to which one has to add the high degree of centralisation of almost everything in people's minds and in practice, were given in the previous chapter. For the making of regional balances of payments, then, it would be necessary to identify where the information is, to ask those who have it to reorganise it according to the counties, and where this information does not exist, to estimate it and in some cases to make use of the information of international institutions.

Here concretely are the regional data that have led to the rearrangement of the Croatian databases about the balance of payments.

Goods balance. In Croatia, for more narrowly defined territorial units, for years, balances of goods exchanges with foreign countries were drawn up. Once these units were the unions of communes, and at request it was possible to obtain the balance from a commune. Then came the counties, for which these balances were properly drawn up as well. Until 2012, the last year in this long-term series, since which time the CBS has ceased to publish them. After Croatia joined the EU and had to meet the requirements of Eurostat, the goods exchanges of the counties with foreign countries are no longer (publicly) available. Although as a member of the EU it has to meet its requirements, Croatia is still a concrete country with its own regional identity.[2] Accordingly, for analytical and economic reasons as well as for those of economic policy, it would be very important to known the economic and not just the political *raison d'être* of the counties. Especially if the raw data do exist somewhere. It is the merchandise trade balance that temporally defined for this paper the regional balance of payments, worked out for 2012. The data, then, are not up-to-date, which partially diminishes their topicality, but since changes in the balance of payments are in a great extent the consequences of structural changes, the fundamental trends still hold.

And one specific feature that stems from the great concentration of economic activities in Zagreb. The CBS data in terms of counties are obtained on the basis of the classification of firms that have exported from or imported to the county (municipality, city) in which they are registered according to the Register of Business Entities. In this manner almost 60% of the total imports of goods (and 62% of services imports) are carried out in Zagreb. This information (marked *), tells us not only about the concentration but also the earnings of importers located in

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[2] Members of the EU do on the whole make up regional balances of the imports and exports of goods and services. As examples, only, the UK <https://www.uktradeinfo.com/Statistics/RTS/Pages/default.aspx>, and Germany <https://www.bundesbank.de/.../statso_11_balance_of_payments_by_region>.

Zagreb (and then about the employees and the paid-in tax on personal and corporate income tax), but does not provide any information about the final allocation of the imports. For this reason, for the sake of greater reality in the regional balances of payments, alternative estimates (labelled **) have been made that assign the imports of goods and services across Croatia in line with the structure of GDP. Unlike imports, regional exports are well correlated with the GDP of the regions and do not need to be corrected. For example, in that same year, 2012, the city of Zagreb accounted for 37% of Croatian exports, and 33% of GDP.

Balance of services. There are two items in this balance. The first, the tourist (2.1) is estimated at the regional level, for there are no such balances. For the income side this is done in three steps: (1) the foreign current income from foreign tourists according to spending in commercial accommodation per county is calculated as the product of the number of overnight stays by foreign tourists per county and the daily spending of tourists in commercial accommodation in euros, (2) then the foreign currency earnings according to spending in commercial accommodation expressed in percentages for the counties, and (3) the structure calculated in this way per county is multiplied by the total foreign currency earnings from tourism in the balance of payments of the Republic of Croatia for 2012. On the debit side, tourist spending of the domestic population abroad is obtained by adaptation of data about foreign spending published by the CBS and the Institute of Tourism in Zagreb. Conceived in this way, it relies on the methodological consideration of the position of tourism in the balance of payments of Croatia (Galinec, 2000). Sources of data used in these calculations are given in tables A7, A8 and A9 in the appendix.

The second item (2.2), services from abroad and services sold abroad is taken in its entirety from the national balance of payments with the proviso that the employees of the statistics section[3] of the CNB have, making use of the addresses of the residents, converted it into a regional balance of services.

Income and current transfers. Drawing up this balance at a regional level turned out to be an insuperable problem. To such an extent that there are data for not a single item of transfers and earnings in the regional balances of payments. For example, information about the foreign currency remittances of workers abroad (3.1) are (in spite of the order of the CNB that they are reported on the regulation forms) partial, for the majority of foreign currency earnings are personally picked up abroad. At the national level the World Bank helps, for with the help of the IMF it draws up each year an estimate of foreign currency remittances for most countries in the world. For Croatia in 2012 this came to almost 1.1 billion euros.[4]

In the case of pensions (3.2) the story is a bit different, but the outcome for the regional balances of payments is just as unsatisfactory. In the official statistical

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[3] Thanks of the author to employees in the Statistics Sector of the CNB for their expertise, patience and good will.
[4] Available at: <http://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT>.

records of the CIRI for example, on December 31, 2014, there were 153,721 beneficiaries whose pensions were defined by the application of international social security agreements, the average pension coming to 742.38 kuna. This works out to an annual sum of almost 1.4bn kuna or 180 million euros. In the number of 153,721 beneficiaries of these pensions, users whose pensions are sent abroad and to the Republic of Croatia are included. For the pensions that the CIRI pays abroad in the database of the beneficiaries of pensions there is no information about the municipality of origin from which it would be possible to list the data per county, only the foreign address of the residence of the beneficiary as reported to the CIRI. On the other hand, there is also no information about beneficiaries of pensions or the pension receipts that have their residence in the Republic of Croatia but who receive their pensions from abroad, for the payment from abroad is made directly into the bank account of the beneficiary, and not through the CIRI.

Undoubtedly, the regional balances of payments would be more realistic if foreign currency remittances and pensions were included in them. However, these two items, in the sum total of about 1.3 million euros make up less than 3% of the total foreign currency inflows of the regional balances of payments of about 42 million euros, which means that, after all, the results obtained have a high level of reliability.

Capital and financial transactions. As is done in the national balance of payments, in the regional balances of capital and financial transactions, all transactions are divided into short- and long-term. As for long-term transactions, for private investments in securities abroad and private foreign portfolio investments at home (item 5 in table 1) there are no data for levels below the national. When direct investment (item 4) is concerned, the CNB has information about foreign investment in the country and also for investments from the country abroad. The methodology for foreign direct investment in the regional balances of payments follows the national methodology,[5] with the proviso that here too the statistics sector of the CNB excelled itself, converting for the purposes of this paper national into county-level data. Data about foreign investments are harmonised with the most recent statistical requirements (BPM6) of the EU, which has adopted the methodology of the IMF (IMF, 2009).[6]

The short-term capital segment in the regional balance of capital and financial transactions basically records loans and deposits in the same way as in the national balance of payments. However, not only are there different levels of geographical coverage, but there is an important difference in content. At the regional level all foreign and domestic loans (item 8) and deposits (item 7) are comprehended if the transaction is executed in a foreign currency or in kuna with a foreign currency clause. For private sales of monetary instruments (item 9), there are no data at a level lower than the national.

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[5] Available at: <http://www.hnb.hr/statistika/strana-ulaganja/h-info-nova-metodologija.pdf>.
[6] Detailed explanations of the introduction of BPM6 (Assets and Liability Principle) instead of BPM5 (Direction of Investment Principle) at Škudar (2014).

Reserves account. The sum of the balance of current transfers and capital transactions in the national balance of payments is equal to the changes in reserves. Although in the regional balances of payments, conceived for this paper, the balance of all transactions expressed in the balances of current and capital transactions is shown, no reserves account, as final closing of the balance of payments, exists, for there is no need to cover the temporal gap between foreign currency earnings and expenses.

The data that were available determined the final appearance of the regional balances of payments. Together with the amounts of the final items, the total balances for all the countries are show in table 2 below.

4 RESULTS

Disaggregation of the items of the national balance of payments according to the regional sample reveals to us the volume of transactions that the regional level carries out in foreign currency (or in kuna equivalent). As already pointed out, this is a kind of foreign currency balance sheet of the counties. But unluckily the data refer only to 2012, because there are no more recent figures for some important items (exports and imports), and to go back into the past, which would result in better quality conclusions, goes beyond the physical capacities of an individual. Nevertheless, the data gathered and processed for the one year analysed do throw light on the intra-Croatia foreign currency image which, in its basic aggregates and structure, holds good today too.

Some important information is contained in table 2. Above all, that concerning the total volume of transactions. The counties, together, in 2012 carried out foreign currency transactions that almost reach the level of total Croatian GDP. In figures, that year Croatian GDP came to about 44 million euros, and foreign currency transactions on the outflow side came to 39.5 million euros (about 90% of GDP) and on the inflow side about 42 million euros (about 96% of GDP). These are very important resources, then, which can, in somewhat different approaches to the decentralisation of policy and economic policy, affect the development of the regional level.

The consolidated county balance is positive: foreign currency inflows are greater than outflows. The balance of 2.6 billion euros says that the foreign currency outflows are almost 7% lower than the inflows. Naturally, here it has to be said that in the regional balance of payments there are no transfers and earnings, as there are not in general government, its sources and uses, which would as explained in chapter 2, have an effect on this balance.

Looked at in terms of structure, the real sector shown in the balance of current transactions on the debit accounted for 47.3% and on the credit side 43.9% of all transactions covered by the consolidated balance. The preponderance is then on the side of capital and financial transactions. In consequence, of which we are becoming fully cognisant today, the exposure of the economy and of households to foreign currency risk on the basis of transactions with the banking system is great.

TABLE 2

Consolidated balance of payments of all the counties in 2012, in millions of euros

Consolidated counties balance of payments			
Current account			
Debit		Credit	
A. Goods and services			
1. Goods imports	16,147.1	1. Goods exports	9,605.7
Goods balance	6,541.4		
2. Services imports	2,526.7	2. Services exports	8,890.3
2.1. Tourist spending abroad	1,016.5	2.1. Foreign tourist spending inland	6,858.7
2.2. Other services from abroad	1,510.2	2.2. Other services inland	2,031.6
Services balance			6,363.6
Goods and services balance	177.8		
Capital and financial transactions			
Assets		Liabilities	
C. Long-term capital			
4. FDI abroad	-63.5	4. FDI from abroad	1,109.2
Long-term capital balance			1,172.8
D. Short-term capital			
8. Foreign currency deposits in banks	20,883.2	7. Foreign currency loans of credit institutions	22,518.8
8.1. Non-financial corporate	2,291.0	7.1. Non-financial corporates	9,265.5
8.2.Households	18,592.2	7.2. Households	13,253.4
Short-term capital balance			1,635.6
Balance of capital and financial transactions			2,808.4
Balance of foreign currency inflows and outflows – all counties			
Foreign currency outflow	39,493.5	Foreign currency inflow	42,124.0
Foreign currency inflow and outflow balance			2,630.6

Finally, the sub-balances. The imports of goods are greater than the exports. Services imports are smaller than exports, both in tourism and in other services; foreign investments are greater than Croatian investments abroad, foreign currency loans to the non-financial sector are four times the size of the foreign currency deposits of the same sector; foreign currency deposits of households are 40% greater than their loans in foreign currency. All of these relations are on the whole familiar from CBS statistics about the balance of payments of the country.

What is not known is the territorial distribution of these balance of payments items and their balances. The data in table 3 distribute the figures in the last row of table 2 across the Croatian space.

TABLE 3

The balance of regional balances of foreign currency (RFCBP) and estimated balance (ERFCBP) inflows and outflows in 2012, according to NUTS 2, macroregions and counties in millions of euros

NUTS 2, macroregion, county	Regional balance	
	RFCBP*	ERFCBP**
Zagreb or Central Croatian macroregion		
Zagreb County	-283.5	-17.8
Krapina-Zagora County	113.7	70.5
Sisak-Moslavina County	390.3	124.0
Karlovac County	40.7	-170.2
Varaždin County	549.6	503.9
Koprivnica-Križevci County	256.4	18.1
Bjelovar-Bilogora County	60.6	-133.3
Međimurje County	21.6	-47.1
Total excl. Zagreb	1,148.8	348.0
City of Zagreb	-4,685.1	247.0
Zagreb macroregion total	-3,536.3	595.1
Osijek or Slavonian macroregion		
Virovitica-Podravina County	121.3	-5.9
Požega-Slavonia County	63.0	-54.7
Brod-Posavina County	94.8	-66.0
Osijek-Baranja County	752.8	181.1
Vukovar-Srijem County	139.5	-72.7
Osijek macroregion total	1,171.3	-18.2
NUTS 2 Continental Croatia	-2,365.0	576.9
Rijeka or Primorje-Gorski Kotar macroregion		
Primorje-Gorski Kotar County	1,064.3	132.7
Lika-Senj County	174.0	30.5
Istria County	1,840.2	1,512.2
Rijeka macroregion total	3,078.5	1,675.4
Split or Dalmatia macroregion		
Zadar County	732.0	351.2
Šibenik-Knin County	1,001.1	920.9
Split-Dalmatia County	-453.0	-1,159.8
Dubrovnik-Neretva County	637.0	265.9
Split macroregion total	1,917.0	378.2
NUTS 2 Adriatic Croatia	4,995.5	2,053.7
RC total	2,630.6	2,630.6

Table 3, like all the subsequent tables, contains two variants of the balance of the balance of foreign currency inflows and outflows of the more closely defined territorial units. In the first, labelled (*), data per county are obtained on the basis of the classification of firms that have imported or exported goods and/or services into or out of the county (municipality, city) in which they are registered according to the registry of business entities. This is the usual approach in official statistics, hence the this variant of the balance has no E in its title. The second variant, marked with (**), estimates (hence the E) the imports of goods and services per county by

dividing the total Croatian imports according to the country structure of GDP. Such a distribution can be justified by a direct import coefficient that is calculated by comparing import with GDP. Other sub-balances (tourism, long-term and short-term capital) are the same in both versions of the regional balances of payments.

Apart from data for the twenty counties and Zagreb City, regional aggregates are also produced in table 3. In line with European criteria, Croatia is divided into two NUTS 2 regions, Continental Croatia and Adriatic Croatia (Regional Development of Croatia Law, OG 147/14) and also according to the division into regions from the Croatian Encyclopaedia (LZMK 2013-2015) into four macro-regions, those of Zagreb, Osijek, Rijeka and Split.

All sources, as well as the methodology of the alternative balances, and for the definitions of the regional units, are given along with the tables in the appendix.

In the official version (RFCBP*), all the counties, except for the Zagreb County, Zagreb City and Split-Dalmatia are positive with respect to foreign currency. The import of goods is the item that conditions this distribution of success. The very low coverage of goods imports by exports has brought the whole of the Zagreb macroregion, and even the NUTS 2 Continental Croatia, to a negative balance. In the Split-Dalmatia County, the negative balance of foreign currency inflows and outflows is contributed to not only by the import-export deficit but also by the very large discrepancy of loans and deposits.

Graph 1

Regional balances of foreign currency inflows and outflows* per county in 2012

The picture will be different and, it seems, more realistic if imports are divided according to GDP criteria. This criterion brings imports closer to their ultimate purpose and is more accurate than records according to the address of the import firm. To answer the question just how much more accurate, one would have to have data of the importers (mainly from Zagreb) about the ultimate destination of the goods imported.

Instead of the three counties, in this estimated version of regional balances of payments a negative balance is shown by ten of them, with the proviso that the City of Zagreb is no longer among them. It has delivered its negative balance to the surroundings and to the East, to Slavonia. The consequence of this transformation of imports is that both the NUTS 2 regions and the three macroregions, save for the Osijek, are foreign currency in the black.

GRAPH 2

Balance of regional balances of foreign currency inflows and outflows** per county, 2012

County statistics that reveal foreign currency positives and negatives, in which some have trading or capital surpluses, and some deficits, suggest a very ordinary question: is it good to be in the black and bad to be in the red? The answer to this question takes us to three situations: (a) a theoretically desirable balance, which from a series of (mainly structural) reasons is never achieved, particularly at the regional level, where the greater openness is positively correlated with opportunities for development; (b) a positive balance, which up to a certain surplus encourages economic development and does not invite criticisms from the surroundings; and (c) a negative balance, which with every greater percentage invites every greater balance of payments problems. Although at first glance the selection is simple one should not forget that we are now inside economic theory and practice, in which the obvious often deceives. Although the positive is good and the negative is bad, for a final estimate of success, the balance of payments of each regional unit has to be located in its national and regional economic framework, in the context of the economic analysis, so that we can give a more accurate answer to the previous question. In essence, this is not the task of this work. But for regional balances of payments not to be just a statistical display and live in isolation, they are correlated with GDP below.

TABLE 4

Total volume of foreign currency transactions (TVFCT) per unit of GDP and per capita, according to NUTS 2, macroregions and counties in 2012, Croatia = 100

NUTS 2, macroregion, county	TVCFT*/ GDP	UODT**/ GDP	TVCFT */ per capita	TVCFT **/ per capita
Zagreb or Central Croatian macroregion				
Zagreb County	99.6	93.8	75.8	71.4
Krapina-Zagora County	87.9	90.7	53.1	54.8
Sisak-Moslavina County	63.7	74.1	49.7	57.8
Karlovac County	65.5	77.3	48.0	56.5
Varaždin County	98.5	100.2	79.4	80.7
Koprivnica-Križevci County	58.6	70.8	52.0	62.8
Bjelovar-Bilogora County	63.1	76.0	41.8	50.3
Međimurje County	88.3	92.2	72.5	75.7
Total excl. Zagreb	81.7	86.1	62.0	65.2
City of Zagreb	113.6	95.5	205.7	172.9
Zagreb macroregion total	100.8	91.7	116.9	106.4
Osijek or Slavonian macroregion				
Virovitica-Podravina County	63.3	76.5	37.8	45.7
Požega-Slavonia County	68.9	82.5	40.3	48.2
Brod-Posavina County	75.7	85.1	42.8	48.1
Osijek-Baranja County	68.9	81.5	54.0	63.8
Vukovar-Srijem County	59.6	70.4	34.5	40.7
Osijek macroregion total	67.7	79.5	44.4	52.2
NUTS 2 – Continental Croatia	94.8	89.5	96.6	91.2
Rijeka or Primorje-Gorski Kotar macroregion				
Primorje-Gorski Kotar County	86.9	99.8	110.7	127.2
Lika-Senj County	77.2	97.2	57.4	72.2
Istria County	138.5	145.3	170.9	179.2
Rijeka macroregion total	106.1	117.0	128.4	141.6
Split or Dalmatia macroregion				
Zadar County	113.5	128.2	91.0	102.7
Šibenik-Knin County	168.1	173.2	126.9	130.8
Split-Dalmatia County	103.3	113.9	79.3	87.5
Dubrovnik-Neretva County	122.0	138.6	117.2	133.1
Split macroregion total	116.3	128.1	93.1	102.6
NUTS 2 – Adriatic Croatia	111.2	122.6	107.0	117.9
RC total	100.0	100.0	100.0	100.0

It is usual to measure the inclusion of some economy in international change by the share of imports and/or exports of goods and services in GDP. This is how economies are ranked and compared. Because of the heterogeneous structure of the balance of payments, it includes the funds, and so it is only exceptionally compared with GDP. Since the regional balances of payments presented in this paper are very specific, the arguments were set out on the preceding pages, and since the natural need of researchers is to compare and rank, the indicator of inclusion of given regional units in Croatian foreign currency transactions (at home and abroad) is defined. In the indicator the total volume of foreign currency transac-

tions of regional units (TVFCT), those on the inflow and outflow side, is first of all compared with the GDP of these units, and then with the Croatian average. In the result is the index of inclusion that locates (and ranks) regional units around the Croatian average. The same procedure is repeated for the second indicator, although here instead of GDP it is the populations of regional units that are placed in the denominator. Additional analytical gains would come from an indicator that would analyse foreign currency inflows and outflows separately, but this investigative pleasure must be reserved for some other occasion or some other analyst.

One country, two foreign currency economies. Or perhaps three, because the City of Zagreb is a story all to itself. With the honourable exception of Varaždin, all the counties in Continental Croatia are below the Croatian average in terms of the first indicator. The volume of foreign currency transactions in terms of GDP is somewhere between 58 and 85% of the Croatian average. In Adriatic Croatia, only Lika-Senj County shares the same fate. All the other counties, save the Split-Dalmatia per capita, are above the Croatian and even the Zagreb average.

Per capita indicators increase the regional differences. The Osijek macroregion is just above half of the Croatian average, and the Zagreb (not including Zagreb City) hovers at two thirds of this average. While the Split macroregion according to this indicator has come down to the Croatian average, the Rijeka macroregion is a serious rival to the City of Zagreb.

As already pointed out, all these differences do not have to mean that Adriatic Croatia is richer and that it's better to live and do business there, and that in Continental Croatia all of that is worse. What the numbers do show, however, is that there is a different degree of exposure among the counties to almost all instruments and measures of monetary policy (exchange rate, inflation, foreign currency interventions, interest rates and so on). This would require a selective approach to monetary (and fiscal) policy, although such a demand as a whole brings an ironical or sour smile to the face of someone in charge of this policy. In favour of such a demand, although unwillingly it is sometimes necessary to look for the heaviest artillery, constitutional and statutory regulation about regional equality in which there is an insistence of the link of local and regional developmental needs with the priorities of the development of the central level and the adoption of measures for the even development of units of local and regional self-government.

TABLE 5

Balance of sub-balances of regional balances of payments, 2012, in terms of NUTS 2, macroregions and counties in millions of euros

NUTS 2, macroregion, county	Trade in goods Exports (+) Balance*	Imports (-) Balance**	Trade in services Earnings (+) Balance*	Expenditures (-) Balance**	Tourist activity Foreigners (+) Locals (-) Balance	Direct investment From (+) to (-) abroad Balance	F.c. loans (+) and deposits (-) Balance
Zagreb or Central Croatian macroregion							
Zagreb County	-864	-549	84	35	-35	128	4,049
Krapina-Zagora County	42	17	-8	-27	-8	2	863
Sisak-Moslavina County	205	-19	11	-31	-12	7	179
Karlovac County	55	-133	4	-18	15	3	-36
Varaždin County	223	218	-2	-43	-19	44	303
Koprivnica-Križevci County	73	-139	4	-22	-15	6	188
Bjelovar-Bilogora County	-31	-200	1	-24	-12	23	79
Međimurje County	97	55	-2	-29	-12	2	-64
Total excl. Zagreb	-200	-749	93	-158	-97	213	1,139
City of Zagreb	-6,147	-1,865	105	756	-220	753	824
Zagreb macroregion total	-6,347	-2,614	198	597	-318	967	1,963
Osijek or Slavonian macroregion							
Virovitica-Podravina County	49	-60	-0.06	-18	-8	1	80
Požega-Slavonia County	33	-70	-1	-16	-8	1	38
Brod-Posavina County	-23	-155	15	-13	-14	3	113
Osijek-Baranja County	29	-466	10	-67	-38	1	751
Vukovar-Srijem County	-54	-232	1	-33	-17	-8	217
Osijek macroregion total	33	-984	26	-147	-85	-1	1,199
NUTS 2 Continental Croatia	-6,314	-3,598	224	450	-403	965	3,163
Rijeka or Primorje-Gorski Kotar macroregion							
Primorje-Gorski Kotar County	-31	-887	131	56	1,032	106	-174
Lika-Senj County	5	-125	-0.15	-13	167	4	-2
Istria County	15	-269	-4	-48	2,123	55	-349
Rijeka macroregion total	-10	-1,281	126	-5	3,322	165	-525
Split or Dalmatia macroregion							
Zadar County	25	-345	47	37	773	12	-126
Šibenik-Knin County	2	-55	100	78	319	-21	600
Split-Dalmatia County	-199	-841	-45	-110	1,075	46	-1,329
Dubrovnik-Neretva County	-46	-420	69	72	756	6	-148
Split macroregion total	-218	-1,662	171	76	2,923	43	-1,002
NUTS 2 Adriatic Croatia	-228	-2,943	297	71	6,245	208	-1,527
RC total	-6,541	-6,541	521	521	5,842	1,173	1,636

A look at the balance of sub-balances in table 5 will expand the understanding and more precisely indicate the need for and direction of action. In the mosaic of positive and negative foreign currency balances there are sufficient elements for a separate study to be written about each country. Particularly if the absolute amounts of the individual items presented in the tables at the end of the paper are used as analytical material as well.

In this place, merely a basic impression.

Something has been already said about goods trade and services trade with foreign countries from the perspective of consolidated regional balances. In this balance sheet, just as in the balance of services, a change of registration of import from the address of the firm that has implemented imports of goods and services to the potential final purpose of the import has spread the negative county balances into the whole Croatian space. The foreign currency balance of tourism has without any doubt divided Croatia into two parts. The households and corporate of continual Croatia spend more on going abroad than they earn in foreign currency terms from foreign tourists. The balance of foreign investments is negative only in two counties (Vukovar-Srijem, Šibenik-Knin). And finally, the balance of foreign currency loans and deposits. Non-financial corporate show a negative balance in all counties, and the balance of households, and still more the total balance of loans and deposits of both residents, once again tells of a bipartite foreign currency and economic Croatia.

GRAPH 3
Balance of imports* (+) and exports* (-) according per county, 2012

■ <=0
■ >0

GRAPH 4
Balance of goods exports* (+) and imports (-) per country, 2012

■ <=0
■ >0
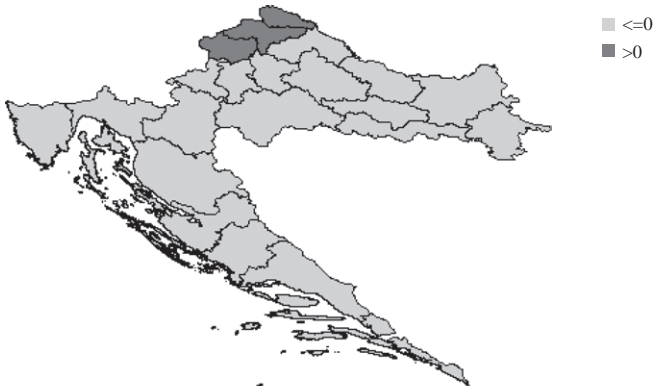
GRAPH 5

Balance of earnings* (+) and expenditures (-) on services per county, 2012
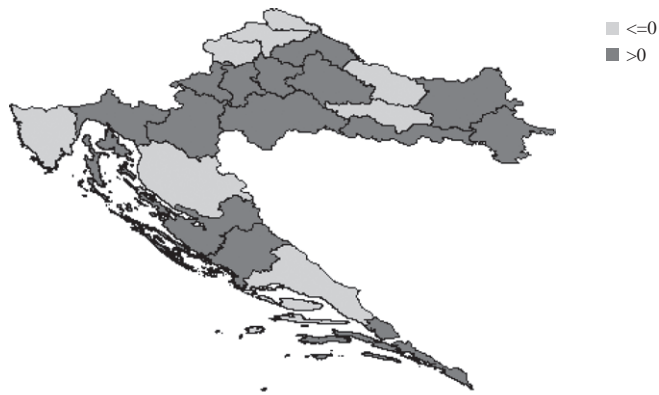
GRAPH 6

Balance of earnings* (+) and expenditures** (-) per county, 2012
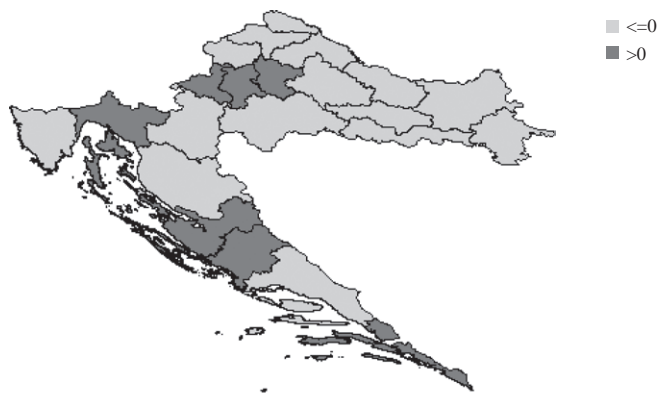
GRAPH 7

Balance of foreign currency earnings (+) and expenditures (-) from tourism per county, 2012

GRAPH 8

Balance of direct investments to (-) and from (+) foreign countries, per county, 2012

GRAPH 9

Balance of foreign currency loans (+) and deposits (-) of non-financial corporates per county, 2012

GRAPH 10

Balance of foreign currency loans (+) and deposits (-) of households per county, 2012

GRAPH 11

Balance of foreign currency loans (+) and deposits (-) of non-financial corporates and households per county, 2012

■ <=0
■ >0

5 CASE STUDY: EXPOSURE TO FOREIGN CURRENCY RISK, OR, THE EFFECTS OF A CHANGE IN THE EXCHANGE RATE OF THE KUNA ON THE GDP OF THE REGIONS

The purpose of making a regional balance of payments is to provide a data base for the economic analysis of the effects of the foreign currency activities of the region founded on macroeconomic aggregates. Because of the meagre information base of the regional level in Croatia, only a few variables can be correlated. How vigorously some economic variable will react to the change of some other variable with which it is interdependent shows us the coefficient of elasticity. Having at our disposal information about the foreign currency transactions of the regions allows us to calculate GDP elasticity to changes in the exchange rate of the national currency.

In every macroeconomics textbook you can read that, with certain elasticity conditions, devaluation will improve the foreign trade balance. What happens if we factor into the analysis the other segments of the balance of payments? Elementary economic logic will tell us of the consequences of depreciation (or devaluation) of the domestic currency to every individual resident (Babić, 2000). Let us go in order.

The depreciation of the domestic currency will, immediately after the announcement of the new exchange rates, increase the value of foreign claims and claims contracted with a foreign currency clause. Earnings related to foreign currency outputs on foreign and domestic markets are increased. On the other side, that of liabilities, the costs for the procurement of raw materials and foreign equipment will be increased by the amount of the exchange rate change, and the costs of interest payment on foreign currency loans and loans with a foreign currency clause as well. All the necessary data for the calculation of this effect are contained in the balances of payments of the regions displayed above.

Households in Croatia have more assets than liabilities, which in the event of a depreciation of the domestic currency will result in positive effects for the assets of this sector, as compared with its liabilities. If the statistical circumstances were more favourable (if remittances from abroad and foreign pensions were not included) the positive effect of this resident in the calculation would be still more marked.

The financial sector too is powerfully involved in the matter of depreciation. Foreign currency loans and loans with a currency clause would become more expensive by the amount of the depreciation. Repayment instalments would be increased by the same amount. At the same time, owners of foreign currency deposit accounts would send their hearty thanks to the Central Bank governor who had signed the decision to depreciate.

General government does not exist in the balances of payments, and in the calculation that follows this sector is not effected by depreciation. Accordingly, if only for heuristic reasons, it should be said that with this resident, foreign liabilities (particularly foreign debt) are preponderant, each devaluation will increase them by the same percentage because in every payment the government has to sell kuna.

Table 6 shows the results of two calculations of a hypothetical depreciation of the kuna applied to the regional balance of payments conditions of 2012. This is the reason for the base exchange rate for the kuna being taken as 7.5172 for one euro, the average in that year. In columns 2 and 3 of the table a one-percent deprecation of the kuna is calculated, which has the significance of coefficient of elasticity of GDP on changes in the exchange rate of the domestic currency. In columns 4 and 5 come the results in the case of a ten-percent devaluation. Although the last two columns could have been omitted, a concession was made to the managers of exporting companies who, every year, once again demand depreciation of about that much. Here too, as in the previous calculations, the results are shown for both versions of regional balances of payments obtained by a different treatment of the allocation of the imports of goods and services.

The result is, once again, the same story. Half of the country would win by a depreciation, half would lose. And not a random half of the counties, scattered here and there, but grouped very clearly in terms of geography and the economy. Only to prove the principle that the exception confirms the rule, there is however Međimurje, the only county that would have a positive effect expressed in the percentage of GDP in Continental Croatia, and Šibenik-Knin, the only one with a negative effect in Adriatic Croatia.

The extent to which (in the ERFCBP** version) a potential depreciation would affect the existing regional differences in development, if for a moment we leave out the City of Zagreb, is shown by the following figures. In the thirteen counties of depreciation losers, in 2012, about 49% of the population of Croatia produced about 35% of GDP. On the other hand are the seven winning counties, in which

33% of the population produced 32% of Croatian GDP. There are two important depreciation effects on regional disparities. The first, the better off, would be additionally distanced from those weakest in development; the second, if we look at them as a whole, is that if there were a ten-percent depreciation, the better off would reach the Croatian GDP average.

TABLE 6

Effect of a depreciation of the kuna against the euro on percentage of GDP of the regions, 2012

NUTS 2, macroregion, county	Difference in % GDP			
	Kuna/euro exchange rate 7.5172→7.5924 (>1%)		Kuna/euro exchange rate 7.5172→8.2689 (>10%)	
	RFCBP*	ERFCBP**	RFCBP *	ERFCBP **
Zagreb or Central Croatian macroregion				
Zagreb County	-0.440	-0.333	-4.397	-3.326
Krapina-Zagora County	-0.071	-0.123	-0.711	-1.230
Sisak-Moslavina County	0.024	-0.169	0.236	-1.694
Karlovac County	0.117	-0.101	1.174	-1.005
Varaždin County	-0.039	-0.071	-0.395	-0.708
Koprivnica-Križevci County	-0.114	-0.341	-1.144	-3.410
Bjelovar-Bilogora County	-0.121	-0.360	-1.210	-3.596
Međimurje County	0.156	0.084	1.558	0.841
Total excl. Zagreb	-0.114	-0.194	-1.138	-1.945
City of Zagreb	-0.431	-0.095	-4.315	-0.954
Zagreb macroregion total	-0.303	-0.135	-3.033	-1.354
Osijek or Slavonian macroregion				
Virovitica-Podravina County	-0.075	-0.319	-0.747	-3.191
Požega-Slavonia County	-0.030	-0.281	-0.297	-2.812
Brod-Posavina County	-0.143	-0.318	-1.432	-3.179
Osijek-Baranja County	-0.305	-0.538	-3.052	-5.383
Vukovar-Srijem County	-0.277	-0.476	-2.769	-4.761
Osijek macroregion total	-0.226	-0.446	-2.263	-4.456
NUTS 2 Continental Croatia	-0.289	-0.191	-2.894	-1.914
Rijeka or Primorje-Gorski Kotar macroregion				
Primorje-Gorski Kotar County	0.365	0.124	3.647	1.242
Lika-Senj County	0.457	0.088	4.575	0.875
Istria County	0.964	0.840	9.642	8.397
Rijeka macroregion total	0.599	0.395	5.989	3.954
Split or Dalmatia macroregion				
Zadar County	0.704	0.431	7.038	4.314
Šibenik-Knin County	-0.236	-0.330	-2.356	-3.304
Split-Dalmatia County	0.615	0.418	6.151	4.179
Dubrovnik-Neretva County	0.772	0.464	7.717	4.644
Split macroregion total	0.557	0.338	5.572	3.385
NUTS 2 Adriatic Croatia	0.578	0.367	5.778	3.667
RC total	-0.015	-0.015	-0.146	-0.146

GRAPH 12

Positive and negative effects of a hypothetical depreciation per county, 2012

Discussion about the result of each individual county would dilute the essence of this analysis. But at least the leading results among the potential winners and losers should be brought out. In the S version of regional balances of payments, the biggest losers are Zagreb County, City of Zagreb, Osijek-Baranja, Vukovar-Srijem and Šibenik-Knin Counties. In this version of payments balances the winners are all the Adriatic counties apart from Šibenik-Knin. In the E version, the positives are less positive, the negatives more negative, and only the City of Zagreb profits.

At the end, it is important to mention once again, that all the previous calculations hold *ceteris paribus*, that is, in a situation of an isolated influence of foreign currency transfers on economic development. How the effects of depreciation might work if the amount of it, for example, to spill over, in its entirety, through prices, as a result of great exchange rate price elasticity, to end consumers, or, if users might not be able to pay off their loans are issues the answers to which exceed the limits of this paper.

6 CONCLUSION, OR, WHO THINKS THAT FROM THE ANGLE OF FOREIGN CURRENCY LOCALISM THE REGIONAL DIMENSION SHOULD BE DROPPED

It is very clear that the very mention of the regional aspect in the economy of international trade arouses doubts as to the credibility of the methodological apparatus this aspect uses, and then the results based on it. After all it is semantically dubious to apply something international, between nations, then, to smaller territorial units, components of a single nation (and a single economy). If to this is added the unquestionable national monetary integrity, any efforts to build up the statistical and methodological apparatus capable of helping to give answers to many questions about the level to which the regions are involved in international goods and foreign currency flows, and the quality of that involvement, or concerning the influence of monetary policy measures on regional economies, seems futile. It would be possible to carry out many analyses if one were in possession of regional corporate

accounts in which the trade of a region with the surroundings, both domestic and foreign, were registered. However, analysts of the regional economy of Croatia cannot do this, since quite simply such accounts are not drawn up in Croatia.

But what will happen if some analyst insists on wasting his time and attempting, what is more, to present the results of his barren attempts to the public? The public on the whole likes what is attractive. The occasional attraction, even if founded on a dubious methodological framework, can be found in this paper. The academic public, however, requires academic arguments. This public weighs and judges whether there are sufficiently strong arguments in a paper for it to be considered relevant.

Below are what, in this sense, can be found above in this paper.

Above all, the statistics that have been kept in the last sixty years about the situation of the regional Croatian economy moved along the curve of a normal distribution with a temporally precisely determined maximum. The movement was upwards, quantitatively and qualitatively, up to the moment when the first and last regional statistical bulletin was issued (CBS, 1994). Since then, there have been ever fewer regional statistics (save for the demographic), and there are none that are published and capable of being used in the making of regional balances of payments. Accordingly, this paper, implicitly, argues for the restoration of regional economic statistics to the public, for a published regional step forward by the CBS.

Secondly, about the methodology of drawing up regional balances of payments. For the compilation of these balances, the template of the national balance of payments was used, the idea being to territorialise the items, that is, distribute them over the Croatian regional units. From this point of view the ideal regional balance of payments was determined without the items of general government. On the way from the ideal, because of the non-existence of all the necessary data, regional balances of payments were transformed into what is objectively possible. They became a systematic depiction of the values of accessible economic transactions of regional residents that, no matter whether with foreign countries or with domestic residents, were carried out in a foreign currency or in the domestic currency with a foreign currency clause in a given period. Conceived in such a way, regional balances of payments should in great part be considered foreign currency balances. The final result of the gap between theory (the ideal balance) and statistical practice (what is objectively possible) is the regional balances of payments shown in the paper, in which the balances of goods and services and the balances of capital and financial transactions are shown, while the balance of transfers and earnings, because of problems with data, is omitted. One more important change happened on the way from the national to the regional balances. The criterion of national accounts "domestic-foreign" in the regional short-term balances of capital and financial transactions was replaced by the "foreign currency-kuna" criterion, according to which all financial transactions of regional residents in foreign currency or kuna with a currency clause, those abroad and those at home, then, is the content of this segment of regional bal-

ances of capital and financial transactions. The paper, then, explicitly offers a methodology for drawing up the balances of payments of the Croatian regions.

Analysis of data from the regional balances of payments identifies important regional differences, in both consolidated balances and in each individual sub-balance. However, it is pointed out in the paper that the differences do not have to mean that some county or region is wealthier or more developed than others that show worse balance of payments performance. What is stressed in the paper is that the different level of county exposure to foreign currency risk potentially requires a selective approach to economic policy.

For an assessment of the foreign currency (and overall international) position of individual regional units, two indicators are used. The first quantifies the involvement of the regions in foreign currency transactions and transactions with a foreign currency clause; the second, used in the Case Study is the coefficient of elasticity of GDP to the kuna exchange rate. Never mind that the first identifies the strength and rate of involvement, and the second a marginal change of a variable, both of them, from the position of the foreign currency balance, indicate the powerful bipartite nature of the Croatian economic space, already recognised in the procedure in which Croatia was divided into Continental and Adriatic. In the event of a depreciation of the kuna, where foreign currency transactions as compared to other economic aggregates are treated *ceteris paribus*, important regional losses and gains would occur, which, according to the results of this analysis, would lead to a great developmental inequality in Croatia. This paper wishes to transform the attractiveness of the results obtained, irrespective of their restrictions in theory and practice, into an invitation for additional research into the influences of measures of economic, and in particular monetary, policy, on regional development.

Well, that was that. Was it worth the effort? Can what has been put forward stand up to academic critiques? Even if the answers to these questions are negative, the author spent three jolly research months on them.

Table A1

Area and population of RC per NUTS 2*, macroregion** and county in 2011

NUTS 2, macroregions* and counties of Croatia	Area (km²)	%	Population	%	Pop. den. (inh./km²)
Zagreb or Central Croatian macroregion					
I Zagreb	3,060	5.41	317,606	7.41	103.8
II Krapina-Zagora	1,229	2.17	132,892	3.10	108.1
III Sisak-Moslavina	4,468	7.89	172,439	4.02	38.6
IV Karlovac	3,626	6.41	128,899	3.01	35.5
V Varaždin	1,262	2.23	175,951	4.11	139.4
VI Koprivnica-Križevci	1,748	3.09	115,584	2.70	66.1
VII Bjelovar-Bilogora	2,640	4.66	119,764	2.80	45.4
XX Međimurje	729	1.29	113,804	2.66	156.1
Total	18,762	33.15	1,276,939	29.80	68.1
City of Zagreb	641	1.13	790,017	18.44	1,232.5
Zagreb macroregion total	19,403	34.28	2,066,956	48.24	106.5
Osijek or Slavonian macroregion					
X Virovitica-Podravina	2,024	3.58	84,836	1.98	41.9
XI Požega-Slavonia	1,823	3.22	78,034	1.82	42.8
XII Brod-Posavina	2,030	3.59	158,575	3.70	78.1
XIV Osijek-Baranja	4,155	7.34	305,032	7.12	73.4
XVI Vukovar-Srijem	2,454	4.34	179,521	4.19	73.4
Osijek macroregion total	12,486	22.06	805,998	18.81	64.5
NUTS 2 – Continental Croatia	31,889	56.34	2,872,954	67.05	90.09
Rijeka or Primorje-Gorski Kotar macroregion					
VIII Primorje-Gorski Kotar	3,588	6.34	296,195	6.91	82.5
IX Lika-Senj	5,353	9.46	50,927	1.19	9.5
XVIII Istria	2,813	4.97	208,055	4.86	74.0
Rijeka macroregion total	11,754	20.77	555,177	12.96	47.2
Split or Dalmatia macroregion					
XIII Zadar	3,646	6.44	170,017	3.97	46.6
XV Šibenik-Knin	2,984	5.27	109,375	2.55	36.6
XVII Split-Dalmatia	4,540	8.02	454,798	10.61	100.2
XIX Dubrovnik-Neretva	1,781	3.15	122,568	2.86	68.8
Split macroregion total	12,951	22.88	856,758	19.99	66.1
NUTS 2 – Adriatic Croatia	24,705	43.65	1,411,935	32.95	57.15
RC total	56,594	100.00	4,284,889	100.00	75.0

* Pursuant to Article 43 of the Official Statistics Law (OG 103/03, 75/09, 52/12) the CBS determines the National Classification of Spatial Units. In August 2012 the EC accepted the proposal for the division of the RC into two NUTS 2 regions, that is, Continental and Adriatic Croatia. The use of the new classification for the purpose of the Cohesion Policy started when Croatia joined the EU, i.e. on July 1, 2013.

** Regionalisation according to: Hrvatska enciklopedija, Internet edition, Leksikografski zavod Miroslav Krleža, Zagreb, 2013-2015.

Source: CBS, Census of population, households and dwellings, 2011; CBS, Statistical Bulletin, 2014.

Table A2

GDP of the RC per NUTS 2, macroregion and county in 2012

NUTS 2, macroregions, counties	GDP millions of euros	%	Per capita GDP in euros	Croatia = 100
Zagreb or Central Croatian macroregion				
Zagreb	2,481	5.64	7,812	76.1
Krapina-Zagora	823	1.87	6,193	60.4
Sisak-Moslavina	1,380	3.14	8,003	78.0
Karlovac	968	2.20	7,510	73.2
Varaždin	1,454	3.31	8,264	80.6
Koprivnica-Križevci	1,052	2.39	9,102	88.7
Bjelovar-Bilogora	813	1.85	6,788	66.2
Međimurje	958	2.18	8,418	82.1
Total excl. Zagreb	9,929	22.59	7,776	75.8
City of Zagreb	14,675	33.38	18,576	181.1
Zagreb macroregion total	24,604	55.97	11,903	116.0
Osijek or Slavonian macroregion				
Virovitica-Podravina	520	1.18	6,129	59.7
Požega-Slavonia	468	1.06	5,997	58.5
Brod-Posavina	920	2.09	5,802	56.6
Osijek-Baranja	2,452	5.58	8,039	78.4
Vukovar-Srijem	1,065	2.42	5,932	57.8
Osijek macroregion total	5,425	12.34	6,731	65.6
NUTS 2 – Continental Croatia	30,029	68.31	10,452	101.9
Rijeka or Primorje-Gorski Kotar macroregion				
Primorje-Gorski Kotar	3,873	8.81	13,076	127.5
Lika-Senj	388	0.88	7,619	74.3
Istria	2,633	5.99	12,655	123.4
Rijeka macroregion total	6,894	15.68	12,418	121.0
Split or Dalmatia macroregion				
Zadar	1,398	3.18	8,223	80.2
Šibenik-Knin	847	1.93	7,744	75.5
Split-Dalmatia	3,583	8.15	7,878	76.8
Dubrovnik-Neretva	1,208	2.75	9,856	96.1
Split macroregion total	7,036	16.01	8,212	80.0
NUTS 2 – Adriatic Croatia	13,930	31.69	9,866	96.2
RC total	43,959	100.00	10,259	100.0

Source: CBS, Communication no. 12.1.6. Gross Domestic Product for the RC, NCSU, level two and counties for the 2000-2012 period (ESA 2010), Zagreb, 13 March 2015.

TABLE **A3**

International goods trade of the RC in mil. euros♦ – exports* and imports* per NUTS 2, macroregion and county in 2012

NUTS 2, macroregions, counties	Export*	%	Import*	%	Balance	Coverage (Export/Import)
Zagreb or Central Croatian macroregion						
Zagreb	362.1	3.77	1,226.2	7.59	-864.1	29.53
Krapina-Zagora	319.8	3.33	278.2	1.72	41.6	114.95
Sisak-Moslavina	488.1	5.08	282.8	1.75	205.3	172.62
Karlovac	222.4	2.32	167.4	1.04	55.0	132.87
Varaždin	752.3	7.83	529.5	3.28	222.8	142.07
Koprivnica-Križevci	247.8	2.58	174.6	1.08	73.2	141.96
Bjelovar-Bilogora	98.7	1.03	129.4	0.80	-30.7	76.30
Međimurje	406.9	4.24	310.1	1.92	96.7	131.20
Total excl. Zagreb	2,898.0	30.17	3,098.0	19.19	-200.1	93.54
City of Zagreb	3,525.5	36.70	9,672.1	59.90	-6,146.6	36.45
Zagreb macroregion total	6,423.5	66.87	12,770.1	79.09	-6,346.6	50.30
Osijek or Slavonian macroregion						
Virovitica-Podravina	130.6	1.36	81.7	0.51	48.9	159.80
Požega-Slavonia	101.5	1.06	69.0	0.43	32.5	147.11
Brod-Posavina	182.8	1.90	205.8	1.27	-23.0	88.82
Osijek-Baranja	434.93	4.53	406.1	2.52	28.6	107.04
Vukovar-Srijem	159.3	1.66	213.4	1.32	-54.1	74.66
Osijek macroregion total	1,008.8	10.50	976.0	6.04	32.9	103.37
NUTS 2 – Continental Croatia	7,432.3	77.37	13,746.0	85.13	-6,313.8	54.07
Rijeka or Primorje-Gorski Kotar macroregion						
Primorje-Gorski Kotar	535.3	5.57	565.9	3.50	-30.6	94.59
Lika-Senj	17.4	0.18	12.2	0.08	5.3	143.32
Istria	698.1	7.27	682.7	4.23	15.5	102.27
Rijeka macroregion total	1,250.9	13.02	1,260.8	7.81	-9.8	99.22
Split or Dalmatia macroregion						
Zadar	168.1	1.75	142.6	0.88	25.5	117.86
Šibenik-Knin	255.7	2.66	253.3	1.57	2.4	100.94
Split-Dalmatia	475.2	4.95	674.4	4.18	-199.3	70.45
Dubrovnik-Neretva	23.5	0.24	69.9	0.43	-46.4	33.60
Split macroregion total	922.5	9.60	1,140.3	7.06	-217.8	80.90
NUTS 2 – Adriatic Croatia	2,173.4	22.62	2,401.1	14.87	227.7	90.52
Regions total	9,605.7	100.00	16,147.1	100.00	-6,541.4	59.49
Unassigned	23.0	0.24	67.3	0.42	-44.3	34.14
RC total	9,628.6	100.24	16,214.4	100.42	-6,585.7	59.38

♦ *Average euro/kuna exchange rate in 2012 = 7.5172.*

* *Data per county obtained pursuant to the classification of firms that have exported from and imported into the county or municipality or city in which they are registered according to the Register of Business Entities.*

Source: CBS, Communication no. 4.2.4, Trade in goods of the RC with foreign countries in terms of counties, cities and municipalities in 2012 – final figures, Zagreb, 13 June 2013.

TABLE A4

International trade in goods of the RC in millions of euros♦ – exports* and imports**, per NUTS 2, macroregion and county in 2012

NUTS 2, macroregions, counties	Export*	%	Import**	%	Balance	Coverage (Export/Import)
Zagreb or Central Croatian macroregion						
Zagreb	362.1	3.77	911.3	5.64	-549.3	39.73
Krapina-Zagora	319.8	3.33	302.3	1.87	17.5	105.78
Sisak-Moslavina	488.1	5.08	506.9	3.14	-18.8	96.29
Karlovac	222.4	2.32	355.6	2.20	-133.2	62.54
Varaždin	752.3	7.83	534.1	3.31	218.2	140.85
Koprivnica-Križevci	247.8	2.58	386.4	2.39	-138.6	64.13
Bjelovar-Bilogora	98.7	1.03	298.6	1.85	-199.9	33.05
Međimurje	406.9	4.24	351.9	2.18	55.0	115.62
Total excl. Zagreb	2,898.0	30.17	3,647.1	22.59	-749.2	79.46
City of Zagreb	3,525.5	36.70	5,390.5	33.38	-1,864.0	65.40
Zagreb macroregion total	6,423.5	66.87	9,037.6	55.97	-2,614.1	71.07
Osijek or Slavonian macroregion						
Virovitica-Podravina	130.6	1.36	191.0	1.18	-60.4	68.35
Požega-Slavonia	101.5	1.06	171.9	1.06	-70.4	59.06
Brod-Posavina	182.8	1.90	337.9	2.09	-155.2	54.08
Osijek-Baranja	434.9	4.53	900.7	5.58	-466.0	48.26
Vukovar-Srijem	159.3	1.66	391.2	2.42	-231.9	40.72
Osijek macroregion total	1,008.8	10.50	1,992.7	12.34	-983.9	50.63
NUTS 2 – Continental Croatia	7,432.3	77.37	11,030.3	68.31	-3,598.0	67.38
Rijeka or Primorje-Gorski Kotar macroregion						
Primorje-Gorski Kotar	535.3	5.57	1,422.6	8.81	-887.3	37.63
Lika-Senj	17.4	0.18	142.5	0.88	-125.1	12.24
Istria	698.1	7.27	967.2	5.99	-269.0	72.18
Rijeka macroregion total	1,250.9	13.02	2,532.3	15.68	-1,281.4	49.40
Split or Dalmatia macroregion						
Zadar	168.1	1.75	513.5	3.18	-345.4	32.73
Šibenik-Knin	255.7	2.66	311.1	1.93	-55.4	82.20
Split-Dalmatia	475.2	4.95	1,316.1	8.15	-840.9	36.10
Dubrovnik-Neretva	23.5	0.24	443.7	2.75	-420.2	5.29
Split macroregion total	922.5	9.60	2,584.5	16.01	-1,662.0	35.69
NUTS 2 – Adriatic Croatia	2,173.4	22.62	5,116.8	31.69	-2,943.4	42.48
Macroregions total	9,605.7	100.00	16,147.1	100.00	-6,541.4	59.49
Unassigned	23.0	0.24	67.3	0.42	-44.3	34.14
RC total	9,628.6	100.24	16,214.4	100.42	-6,585.7	59.38

♦ *Average euro/kuna exchange rate in 2012 = 7.5172.*

* Export: Data per county obtained pursuant to the classification of firms that have exported from and imported into the county or municipality or city in which they are registered according to the Register of Business Entities.

** Import: Estimate of imports per county obtained by dividing RC total imports according to the county structure of GDP.

Source: CBS, Communication no. 4.2.4. Trade in goods of the RC with foreign countries in terms of counties, cities and municipalities in 2012 – final figures, Zagreb, 13 June 2013.

TABLE A5

International trade in services of the RC in million euros[♦] – earnings and expenditures*, per NUTS 2, macroregion and county in 2012

NUTS 2, macroregions, counties	Earnings	%	Expenditures	%	Balance
Zagreb or Central Croatian macroregion					
Zagreb	120.6	5.94	36.1	2.39	84.4
Krapina-Zagora	1.6	0.08	9.7	0.64	- 8.1
Sisak-Moslavina	16.2	0.80	5.3	0.35	11.0
Karlovac	15.0	0.74	10.5	0.70	4.4
Varaždin	7.2	0.36	8.9	0.59	- 1.7
Koprivnica-Križevci	14.0	0.69	9.7	0.64	4.3
Bjelovar-Bilogora	4.0	0.20	3.2	0.21	0.9
Međimurje	4.2	0.21	6.1	0.40	- 1.9
Total excl. Zagreb	182.8	9.00	89.4	5.92	93.4
City of Zagreb	1,259.7	62.01	1,154.7	76.46	105.0
Zagreb macroregion total	1,442.5	71.01	1,244.1	82.38	198.4
Osijek or Slavonian macroregion					
Virovitica-Podravina	0	0.00	0.1	0.00	- 0.1
Požega-Slavonia	0.1	0.01	1.2	0.08	- 1.1
Brod-Posavina	18.4	0.91	3.0	0.20	15.4
Osijek-Baranja	17.4	0.86	7.1	0.47	10.3
Vukovar-Srijem	3.5	0.17	2.2	0.14	1.3
Osijek macroregion total	39.4	1.94	13.6	0.90	25.8
NUTS 2 – Continental Croatia	1,482.0	72.95	1,257.7	83.28	224.2
Rijeka or Primorje-Gorski Kotar macroregion					
Primorje-Gorski Kotar	189.0	9.30	58.2	3.85	130.8
Lika-Senj	0.001	0.00	0.2	0.01	- 0.2
Istria	42.7	2.10	47.0	3.11	- 4.3
Rijeka macroregion total	231.7	11.40	105.4	6.98	126.3
Split or Dalmatia macroregion					
Zadar	85.4	4.20	38.2	2.53	47.1
Šibenik-Knin	106.6	5.25	6.6	0.44	100.0
Split-Dalmatia	12.6	0.62	58.1	3.84	- 45.4
Dubrovnik-Neretva	113.3	5.58	44.2	2.93	69.1
Split macroregion total	317.9	15.65	147.1	9.74	170.8
NUTS 2 – Adriatic Croatia	549.6	27.05	252.5	16.72	297.2
RC excl. tourism	2,031.6	100.00	1,510.2	100.00	521.4
Unknown county (tourism)**	7,609.9	374.58	1,611.4	106.70	5,998.6
RC total	9,641.5	474.58	3,121.6	206.70	6,520.0

[♦] *Average euro/kuna exchange rate in 2012 = 7.5172.*

* Data per county obtained pursuant to the classification of firms that have had earnings or expenditures in the county or municipality or city in which they are registered according to the Register of Business Entities.

** The item unknown county refers to the services that cannot be assigned to a county, and mostly relate to travel services (tourism) the expenditures of which cannot be geographically divided because of the shortcomings of the method of estimation.

Source: CNB, Statistics Sector, July 2013.

Drawn up in alignment with the Metodologija za razmjenu usluga s inozemstvom <http://www. hnb.hr/statistika/razmjena-usluga-inozemstvom/h-obuhvat-metodologija.pdf >.

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TABLE A6

International trade in services of the RC in million euros[♦] – earnings and expenditures*, per NUTS 2, macroregion and county, 2012

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NUTS 2, macroregions, counties	Earnings	%	Expenditures	%	Balance
Zagreb or Central Croatian macroregion					
Zagreb	120.6	5.94	85.2	5.64	35.3
Krapina-Zagora	1.7	0.08	28.3	1.87	-26.6
Sisak-Moslavina	16.2	0.80	47.4	3.14	-31.2
Karlovac	15.0	0.74	33.3	2.20	-18.3
Varaždin	7.2	0.36	50.0	3.31	-42.7
Koprivnica-Križevci	14.0	0.69	36.1	2.39	-22.2
Bjelovar-Bilogora	4.0	0.20	27.9	1.85	-23.9
Međimurje	4.2	0.21	32.9	2.18	-28.7
Total excl. Zagreb	182.8	9.00	341.1	22.59	-158.3
City of Zagreb	1,259.7	62.01	504.2	33.38	755.6
Zagreb macroregion total	1,442.5	71.01	845.3	55.97	597.3
Osijek or Slavonian macroregion					
Virovitica-Podravina	0	0	17.9	1.18	-17.9
Požega-Slavonia	0.1	0.01	16.1	1.06	-16.0
Brod-Posavina	18.4	0.91	31.6	2.09	-13.2
Osijek-Baranja	17.41	0.86	84.2	5.58	-66.8
Vukovar-Srijem	3.5	0.17	36.6	2.42	-33.1
Osijek macroregion total	39.4	1.94	186.4	12.34	-146.9
NUTS 2 – Continental Croatia	1,482.0	72.95	1,031.6	68.31	450.3
Rijeka or Primorje-Gorski Kotar macroregion					
Primorje-Gorski Kotar	189.0	9.30	133.1	8.81	55.9
Lika-Senj	0.001	0.00	13.3	0.88	-13.3
Istria	42.7	2.10	90.5	5.99	-47.7
Rijeka macroregion total	231.7	11.40	236.8	15.68	-5.2
Split or Dalmatia macroregion					
Zadar	85.4	4.20	48.0	3.18	37.3
Šibenik-Knin	106.6	5.25	29.1	1.93	77.5
Split-Dalmatia	12.6	0.62	123.1	8.15	-110.5
Dubrovnik-Neretva	113.3	5.58	41.5	2.75	71.8
Split macroregion total	317.9	15.65	241.7	16.01	76.2
NUTS 2 – Adriatic Croatia	549.6	27.05	478.6	31.69	71.1
RC services excl. tourism	2,031.6	100.00	1,510.2	100.00	521.4
Unknown county (tourism)**	7,609.9	374.58	1,611.4	106.70	5,998.6
RC total	9,641.5	474.58	3,121.6	206.70	6,520.0

[♦] *Average euro/kuna exchange rate in 2012 = 7.5172.*

* Data per county obtained by dividing the total expenditures on services of the RC according to the country GDP structure.

** The item unknown county refers to the services that cannot be assigned to a county, and mostly relate to travel services (tourism) the expenditures of which cannot be geographically divided because of the shortcomings of the method of estimation.

Source: CNB, Statistics Sector, July 2013.

Drawn up in alignment with the Metodologija za razmjenu usluga s inozemstvom <http://www. hnb.hr/statistika/razmjena-usluga-inozemstvom/h-obuhvat-metodologija.pdf >.

TABLE A7

Foreign currency earnings from tourism in 2012, million euros♦, estimate according to NUTS 2, macroregions and counties

NUTS 2, macroregion, counties	Daily spending	Foreign overnight stays in commercial accommodation	%	Foreign currency earnings
Zagreb or Central Croatian macroregion				
Zagreb	53.77	1.8	0.05	3.2
Krapina-Zagora	53.77	2.5	0.06	4.4
Sisak-Moslavina	53.77	1.3	0.03	2.2
Karlovac	53.77	14.0	0.36	24.8
Varaždin	53.77	2.1	0.06	3.8
Koprivnica-Križevci	53.77	0.5	0.01	0.8
Bjelovar-Bilogora	53.77	0.5	0.01	0.8
Međimurje	53.77	1.8	0.05	3.2
Total excl. Zagreb	53.77	24.4	0.63	43.2
City of Zagreb	104.86	101.1	2.61	179.2
Zagreb macroregion total	88.52	125.4	3.24	222.4
Osijek or Slavonian macroregion				
Virovitica-Podravina	53.77	0.4	0.01	0.7
Požega-Slavonia	53.77	0.3	0.01	0.5
Brod-Posavina	53.77	0.9	0.02	1.6
Osijek-Baranja	53.77	2.5	0.06	4.4
Vukovar-Srijem	53.77	1.0	0.03	1.8
Osijek macroregion total	53.77	5.0	0.13	8.9
NUTS 2 – Continental Croatia	86.36	130.5	3.37	231.4
Rijeka or Primorje-Gorski Kotar macroregion				
Primorje-Gorski Kotar	57.55	624.3	16.14	1,107.0
Lika-Senj	56.18	96.4	2.49	171.0
Istria	63.79	1,226.1	31.70	2,174.1
Rijeka macroregion total	61.25	1,946.8	50.33	3,452.1
Split or Dalmatia macroregion				
Zadar	78.04	464.2	12.00	823.1
Šibenik-Knin	53.77	197.2	5.10	350.0
Split-Dalmatia	69.64	678.5	17.54	1,203.2
Dubrovnik-Neretva	92.63	450.7	11.65	799.2
Split macroregion total	73.92	1,790.7	46.30	3,175.2
NUTS 2 – Adriatic Croatia	66.73	3,737.5	96.63	6,627.3
RC total	67.24	3,868.0	100	6,858.7

♦ *Average euro/kuna exchange rate in 2012 = 7.5172.*

Source:

1) *Overnight stays of foreign tourists per county of the SBC, Statistical Reports 1491/2013, Table 2.12. Beds, arrivals and overnight stays of tourists per country, city and municipality in 2012, pp. 61-68.*

2) *Average daily tourist spending.*

   2.1) Institute of Tourism, Tomas 2012, Views and spending of tourists in Croatia, Table B27. Average daily spending of tourists (commercial accommodation) in euros per county.

   2.2) For the City of Zagreb: Institute of Tourism, Tomas 2014, Views and spending of tourists and visitors to Zagreb, Zagreb 2013, pp. 41-43.

   2.3) For the counties: Zagreb, Krapina-Zagora, Sisak-Moslavina, Karlovac, Varaždin, Koprivnica-Križevci, Bjelovar-Bilogora, Virovitica-Podravina, Požega-Slavonia, Brod-Posavina, Osijek-Baranja, Vukovar and Međimurje estimate at the level of the lowest daily spending level of the Institute of Tourism.

3) *Balance of Payments, DZS, Statistical Annual Report 2014, tab. 22-11, Balance of payments of the RC, p. 407.*

TABLE A8

Tourist activity of the domestic population in 2012, travels abroad. Estimate according to NUTS 2, macroregions and counties in millions of euros♦

NUTS 2, macroregion, counties	Business	Private	Travels abroad by domestic population
Zagreb or Central Croatian macroregion			
Zagreb	21.7	16.5	38.3
Krapina-Zagora	7.2	5.5	12.7
Sisak-Moslavina	3.7	10.2	13.9
Karlovac	2.6	7.2	9.7
Varaždin	12.7	9.7	22.4
Koprivnica-Križevci	9.2	7.0	16.2
Bjelovar-Bilogora	7.1	5.4	12.5
Međimurje	8.4	6.4	14.8
Total excl. Zagreb	72.7	67.9	140.6
City of Zagreb	111.3	288.3	399.6
Zagreb macroregion total	184.0	356.2	540.2
Osijek or Slavonian macroregion			
Virovitica-Podravina	0.6	8.4	9.0
Požega-Slavonia	0.6	7.6	8.1
Brod-Posavina	1.1	14.9	16.0
Osijek-Baranja	2.9	39.6	42.5
Vukovar-Srijem	1.3	17.2	18.5
Osijek macroregion total	6.4	87.7	94.1
NUTS 2 – Continental Croatia	190.4	443.8	634.2
Rijeka or Primorje-Gorski Kotar macroregion			
Primorje-Gorski Kotar	17.9	57.0	74.9
Lika-Senj	1.0	2.9	3.9
Istria	12.2	38.8	50.9
Rijeka macroregion total	31.1	98.6	129.8
Split or Dalmatia macroregion			
Zadar	13.7	36.4	50.2
Šibenik-Knin	8.3	22.1	30.4
Split-Dalmatia	35.2	93.4	128.6
Dubrovnik-Neretva	11.9	31.5	43.3
Split macroregion total	69.2	183.3	252.5
NUTS 2 – Adriatic Croatia	100.3	282.0	382.2
RC total	290.7	725.9	1,016.5

♦ *Average euro/kuna exchange rate in 2012 = 7.5172.*

NB: Used for the estimate were data from the publication "Tourist activity of the domestic population in 2012", CBS and IZTZG [Institute of Tourism] from April 2013, by regions of permanent dwelling that in this publication represent statistic units (Zagreb, N. Croatia, Slavonia, Lika, Kordun and Banija, Istria, Kvarner and Gorski Kotar, Dalmatia) being disaggregated with the use of data about country GDP into counties and then aggregated into macroregions.

TABLE A9

Foreign currency balance sheet of tourism in the RC in 2012. Estimate per NUTS 2, macroregion and county in million euros♦

NUTS 2, macroregion, counties	Revenue (foreign tourists)	%	Expenditures (foreign travel)	%	Balance
Zagreb or Central Croatian macroregion					
Zagreb	3.2	0.05	38.3	3.76	-35.1
Krapina-Zagora	4.4	0.06	12.7	1.25	-8.3
Sisak-Moslavina	2.2	0.03	13.9	1.37	-11.7
Karlovac	24.8	0.36	9.7	0.96	15.1
Varaždin	3.8	0.06	22.4	2.21	-18.6
Koprivnica-Križevci	0.8	0.01	16.2	1.60	-15.4
Bjelovar-Bilogora	0.8	0.01	12.5	1.23	-11.7
Međimurje	3.9	0.05	14.8	1.45	-11.9
Total excl. Zagreb	43.2	0.63	140.6	13.83	-97.4
City of Zagreb	179.2	2.61	399.6	39.31	-220.4
Zagreb macroregion total	222.4	3.24	540.2	53.14	-317.8
Osijek or Slavonian macroregion					
Virovitica-Podravina	0.7	0.01	9.0	0.89	-8.3
Požega-Slavonia	0.5	0.01	8.1	0.80	-7.6
Brod-Posavina	1.6	0.02	16.0	1.57	-14.3
Osijek-Baranja	4.4	0.06	42.5	4.18	-38.1
Vukovar-Srijem	1.8	0.03	18.5	1.82	-16.7
Osijek macroregion total	8.9	0.13	94.1	9.25	-85.1
NUTS 2 – Continental Croatia	231.4	3.37	634.2	62.39	-402.9
Rijeka or Primorje-Gorski Kotar macroregion					
Primorje-Gorski Kotar	1,107.0	16.14	74.9	7.37	1,032.1
Lika-Senj	171.0	2.49	3.9	0.38	167.1
Istria	2,174.1	31.70	50.9	5.01	2,123.2
Rijeka macroregion total	3,452.1	50.33	129.8	12.76	3,322.3
Split or Dalmatia macroregion					
Zadar	823.1	12.00	50.2	4.94	772.9
Šibenik-Knin	349.7	5.10	30.4	2.99	319.3
Split-Dalmatia	1,203.2	17.54	128.6	12.65	1,074.6
Dubrovnik-Neretva	799.2	11.65	43.3	4.26	755.9
Split macroregion total	3,175.2	46.29	252.5	24.84	2,922.7
NUTS 2 – Adriatic Croatia	6,627.3	96.62	382.2	37.60	6,245.1
RC total	6,858.7	100.00	1,016.5	100.00	5,842.2

♦ *Average euro/kuna exchange rate in 2012 = 7.5172.*

Sources and methodology of the estimate: see tables 6 and 7.

TABLE A10

Direct investments, liabilities and assets, per NUTS 2, macroregion and county in 2012 in million euros♦

NUTS 2, macroregion, counties	Liabilities	%	Assets	%	Balance (liabilities-assets)
Zagreb or Central Croatian macroregion					
Zagreb	-33.4	-3.01	-161.0	253.39	127.6
Krapina-Zagora	4.5	0.40	2.4	-3.79	2.1
Sisak-Moslavina	6.8	0.61	0.0	0.00	6.8
Karlovac	2.3	0.21	-0.3	0.50	2.7
Varaždin	51.5	4.64	7.902	-12.44	43.6
Koprivnica-Križevci	-3.7	-0.33	-9.6	15.04	5.9
Bjelovar-Bilogora	22.6	2.04	-0.1	0.15	22.7
Međimurje	1.2	0.11	-1.0	1.50	2.1
Total excl. Zagreb	51.7	4.67	-161.6	254.37	213.4
City of Zagreb	870.6	78.49	117.3	-184.67	753.3
Zagreb macroregion total	922.4	83.15	-44.3	69.70	966.7
Osijek or Slavonian macroregion					
Virovitica-Podravina	0.8	0.07	0.0	0.00	0.8
Požega-Slavonia	0.8	0.07	0.0	0.00	0.8
Brod-Posavina	4.0	0.36	0.6	-0.94	3.4
Osijek-Baranja	-17.5	-1.57	-19.0	29.83	1.5
Vukovar-Srijem	-8.2	-0.74	0.0	0.00	-8.2
Osijek macroregion total	-20.1	-1.81	-18.4	28.89	-1.7
NUTS 2 – Continental Croatia	902.3	81.34	-62.6	98.59	964.9
Rijeka or Primorje-Gorski Kotar macroregion					
Primorje-Gorski Kotar	101.0	9.10	-5.1	8.13	106.1
Lika-Senj	3.5	0.32	0.0	0.00	3.5
Istria	45.6	4.11	-9.6	15.08	55.2
Rijeka macroregion total	150.1	13.53	-14.7	23.20	164.8
Split or Dalmatia macroregion					
Zadar	-22.5	-2.02	-34.8	54.83	12.4
Šibenik-Knin	-20.9	-1.89	0.01	-0.02	-21.0
Split-Dalmatia	92.8	8.37	47.3	-74.39	45.6
Dubrovnik-Neretva	7.4	0.67	1.4	-2.22	6.0
Split macroregion total	56.9	5.13	13.8	-21.80	43.0
NUTS 2 – Adriatic Croatia	207.0	18.66	-0.9	1.40	207.8
RC total	1,109.2	100.00	-63.5	100.00	1,172.8

♦ *Average euro/kuna exchange rate in 2012 = 7.5172.*

Source: Croatian National Bank, Statistical Sector, July 2015.

For the FDI methodology see <http://www.hnb.hr/statistika/strana-ulaganja/h-info-nova-metodologija.pdf >. More detailed explanations about the introduction of the BPM6 (Assets and Liabilities Principle) instead of BPM5 (Direction of Investment Principle) at <http://www.hnb.hr/statistika/esa-2010/h-esa-prezentacija-skudar.pdf >.

NB: Negative investment in bonds is most often recorded when: (1) a firm in the RC partially or totally pays off a loan given by a foreign creditor with which the Republic of Croatia is affiliated, (2) a firm in the RC pays out a profit share to a foreign investment in an amount greater than the profit made in the same period, and (3) a firm in the RC in which there is a registered foreign investment has negative profits in any amount. If the situation is reversed (a firm outside the RC that is affiliated with an investor in the RC), then negative investment is recorded in Assets.

TABLE A11

Foreign currency loans from credit institutions to non-financial corporates per NUTS 2, macroregion and county at the end of 2012 in million euros◆

NUTS 2, macroregion, counties	Foreign currency loans	The interest on these	Loans with a foreign currency clause	Interest on these	Foreign currency loans total	%
Zagreb or Central Croatian macroregion						
Zagreb	114.5	1.2	338.6	5.8	453.1	4.89
Krapina-Zagora	14.6	0.3	82.3	0.9	96.9	1.05
Sisak-Moslavina	15.2	0.1	80.1	0.9	95.2	1.03
Karlovac	11.2	0.1	72.5	0.99	83.7	0.90
Varaždin	65.7	1.0	299.4	3.6	365.1	3.94
Koprivnica-Križevci	70.8	0.4	103.9	1.3	174.7	1.89
Bjelovar-Bilogora	8.9	0.2	117.4	2.0	126.3	1.36
Međimurje	20.5	0.5	113.3	1.5	133.8	1.44
Total excl. Zagreb	321.4	3.8	1,207.5	16.9	1,528.9	16.50
City of Zagreb	1,129.8	15.9	2,527.6	41.2	3,657.4	39.47
Zagreb macroregion total	1,451.1	19.7	3,735.1	58.1	5,186.2	55.97
Osijek or Slavonian macroregion						
Virovitica-Podravina	0.4	0.01	74.74	0.7	75.1	0.81
Požega-Slavonia	3.9	0.04	61.7	0.8	65.6	0.71
Brod-Posavina	8.4	0.1	138.8	1.9	147.2	1.59
Osijek-Baranja	48.0	0.7	633.8	8.7	681.8	7.36
Vukovar-Srijem	8.1	0.1	163.7	1.5	171.8	1.85
Osijek macroregion total	68.8	0.9	1,072.7	13.7	1,141.5	12.32
NUTS 2 – Continental Croatia	1,519.9	20.6	4,807.8	71.9	6,327.7	68.29
Rijeka or Primorje-Gorski Kotar macroregion						
Primorje-Gorski Kotar	111.4	1.6	543.8	8.3	655.2	7.07
Lika-Senj	3.6	0.04	51.8	0.5	55.4	0.60
Istria	114.9	1.5	417.9	6.8	532.8	5.75
Rijeka macroregion total	230.0	3.1	1,013.4	15.6	1,243.4	13.42
Split or Dalmatia macroregion						
Zadar	40.3	0.5	258.3	3.7	298.6	3.22
Split-Dalmatia	245.4	3.9	661.8	10.3	907.2	9.79
Šibenik-Knin	21.1	0.3	199.4	1.9	220.5	2.38
Dubrovnik-Neretva	22.4	0.2	245.6	4.3	268.0	2.89
Split macroregion total	329.2	4.9	1,365.2	20.2	1,694.4	18.29
NUTS 2 – Adriatic Croatia	559.2	8.0	2,378.6	35.8	2,937.8	31.71
RC total	2,079.1	28.6	7,186.4	107.7	9,265.5	100.00

◆ *Average euro/kuna exchange rate in 2012 = 7.5172.*

Source: Croatian National Bank, Statistical Sector, July 2015.

The methodology follows <http://www.hnb.hr/statistika/statisticki_pregled/hmetod.pdf >, or tables D5 Statistical Review of the CNB for Institutional Sectors.

TABLE **A12**

Foreign currency loans of credit institutions to households per NUTS 2, macroregion and county at the end of 2012 in million euros◆

NUTS 2, macroregion, counties	Foreign currency loans	Interest on these	Loans with a foreign currency clause	Interest on these	Foreign currency loans total	%
Zagreb or Central Croatian macroregion						
Zagreb	1.8	0.069	1,243.9	7.7	1,245.7	9.40
Krapina-Zagora	0.3	0.005	301.0	2.1	301.2	2.27
Sisak-Moslavina	0.4	0.019	402.6	2.2	403.1	3.04
Karlovac	0.4	0.004	260.5	1.5	260.9	1.97
Varaždin	0.6	0.009	423.9	2.5	424.5	3.20
Koprivnica-Križevci	0.4	0.003	266.5	1.7	266.9	2.01
Bjelovar-Bilogora	0.04	0.001	254.4	1.5	254.5	1.92
Međimurje	1.8	0.009	245.5	1.3	247.2	1.87
Total excl. Zagreb	5.7	0.120	3,398.2	20.4	3,403.9	25.68
City of Zagreb	12.2	0.137	3,631.1	21.8	3,643.3	27.49
Zagreb macroregion total	17.9	0.257	7,029.3	42.2	7,047.2	53.17
Osijek or Slavonian macroregion						
Virovitica-Podravina	0.07	0.001	159.2	1.0	159.3	1.20
Požega-Slavonia	0.01	0.000	162.4	1.0	162.4	1.23
Brod-Posavina	0.3	0.011	339.8	2.1	340.1	2.57
Osijek-Baranja	0.2	0.006	824.1	4.9	824.2	6.22
Vukovar-Srijem	0.04	0.001	331.2	2.0	331.2	2.50
Osijek macroregion total	0.6	0.019	1,816.6	10.8	1,817.2	13.71
NUTS 2 – Continental Croatia	18.5	0.276	8,845.9	53.1	8,864.4	66.88
Rijeka or Primorje-Gorski Kotar macroregion						
Primorje-Gorski Kotar	0.3	0.004	1,067.5	5.4	1,067.8	8.06
Lika-Senj	0.4	0.008	117.5	0.7	117.9	0.89
Istria	0.7	0.015	812.5	4.5	813.2	6.14
Rijeka macroregion total	1.4	0.027	1,997.5	10.6	1,998.9	15.08
Split or Dalmatia macroregion						
Zadar	3.0	0.071	483.1	2.9	486.1	3.67
Šibenik-Knin	0.04	0.002	224.1	1.8	224.1	1.69
Split-Dalmatia	4.8	0.074	1,199.3	7.1	1,204.1	9.09
Dubrovnik-Neretva	6.4	0.078	469.3	2.2	475.7	3.59
Split macroregion total	14.2	0.225	2,375.9	14.0	2,390.1	18.03
NUTS 2 – Adriatic Croatia	15.6	0.252	4,373.3	24.6	4,389.0	33.12
RC total	34.1	0.527	13,219.3	77.6	13,253.4	100.00

◆ *Average euro/kuna exchange rate in 2012 = 7.5172.*

Source: Croatian National Bank, Statistical Sector, July 2015.

The methodology follows <http://www.hnb.hr/statistika/statisticki_pregled/hmetod.pdf >, or tables D5 Statistical Review of the CNB for Institutional Sectors.

TABLE A13

Foreign currency deposits of non-financial corporates per NUTS 2, macroregion and county at the end of 2012 in million euros♦

NUTS 2, macroregion, counties	Foreign currency deposits	Interest on these	Deposits %
Zagreb or Central Croatian macroregion			
Zagreb	65.5	0.4	2.86
Krapina-Zagora	48.4	0.1	2.11
Sisak-Moslavina	27.4	0.1	1.20
Karlovac	18.0	0.1	0.79
Varaždin	45.9	0.4	2.00
Koprivnica-Križevci	15.4	0.1	0.67
Bjelovar-Bilogora	6.3	0.1	0.27
Međimurje	45.7	0.2	2.00
Total excl. Zagreb	272.6	1.6	11.90
City of Zagreb	1,093.8	7.3	47.74
Zagreb macroregion total	1,366.4	8.9	59.64
Osijek or Slavonian macroregion			
Virovitica-Podravina	21.5	0.7	0.94
Požega-Slavonia	6.4	0.02	0.28
Brod-Posavina	15.7	0.2	0.69
Osijek-Baranja	28.1	0.04	1.23
Vukovar-Srijem	12.9	0.04	0.56
Osijek macroregion total	84.6	0.9	3.69
NUTS 2 – Continental Croatia	1,451.0	9.8	63.33
Rijeka or Primorje-Gorski Kotar macroregion			
Primorje-Gorski Kotar	127.8	0.7	5.58
Lika-Senj	2.1	0.02	0.09
Istria	381.8	3.2	16.67
Rijeka macroregion total	511.7	3.9	22.34
Split or Dalmatia macroregion			
Zadar	61.2	1.0	2.67
Šibenik-Knin	11.4	0.1	0.50
Split-Dalmatia	130.1	0.1	5.68
Dubrovnik-Neretva	125.6	0.9	5.48
Split macroregion total	328.3	2.9	14.33
NUTS 2 – Adriatic Croatia	840.0	6.7	36.67
RC total	2,291.0	16.5	100.00

♦ *Average euro/kuna exchange rate in 2012 = 7.5172.*

Source: Croatian National Bank, Statistical Sector, July 2015.

NB: Foreign currency deposits include foreign currency deposits and kuna deposits with a currency clause.

The methodology follows <http://www.hnb.hr/statistika/statisticki_pregled/hmetod.pdf >, or tables D5 Statistical Review of the CNB for Institutional Sectors.

TABLE A14

Foreign currency deposits of households per NUTS 2, macroregion and county at the end of 2012 in million euros♦

NUTS 2, macroregion, counties	Foreign currency deposits	Interest on these	Deposits %
Zagreb or Central Croatian macroregion			
Zagreb	1,229.6	19.2	6.61
Krapina-Zagora	263.9	4.7	1.42
Sisak-Moslavina	292.0	3.6	1.57
Karlovac	363.1	5.1	1.95
Varaždin	440.2	7.1	2.37
Koprivnica-Križevci	237.8	3.5	1.28
Bjelovar-Bilogora	295.0	4.4	1.59
Međimurje	399.2	4.2	2.15
Total excl. Zagreb	3,520.7	51.8	18.94
City of Zagreb	5,383.3	77.6	28.95
Zagreb macroregion total	8,904.0	129.3	47.89
Osijek or Slavonian macroregion			
Virovitica-Podravina	132.8	2.0	0.71
Požega-Slavonia	183.2	3.3	0.99
Brod-Posavina	358.3	5.1	1.93
Osijek-Baranja	727.3	11.5	3.91
Vukovar-Srijem	273.0	3.8	1.47
Osijek macroregion total	1,674.6	25.7	9.01
NUTS 2 – Continental Croatia	10,578.6	155.1	56.90
Rijeka or Primorje-Gorski Kotar macroregion			
Primorje-Gorski Kotar	1,769.3	22.0	9.52
Lika-Senj	172.9	2.8	0.93
Istria	1,313.5	17.8	7.06
Rijeka macroregion total	3,255.7	41.8	17.51
Split or Dalmatia macroregion			
Zadar	849.	9.9	4.57
Šibenik-Knin	519.6	4.2	2.79
Split-Dalmatia	2,623.1	38.5	14.11
Dubrovnik-Neretva	765.7	9.4	4.12
Split macroregion total	4,757.8	61.9	25.59
NUTS 2 – Adriatic Croatia	8,013.6	103.7	43.10
RC total	18,592.2	258.8	100.00

♦ *Average euro/kuna exchange rate in 2012 = 7.5172.*

Source: Croatian National Bank, Statistical Sector, July 2015.

NB: Foreign currency deposits include foreign currency deposits and kuna deposits with a currency clause.

The methodology follows <http://www.hnb.hr/statistika/statisticki_pregled/hmetod.pdf >, or tables D5 Statistical Review of the CNB for Institutional Sectors.

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