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## Article

# An Analysis of International Trade of Montenegro Using Statistics on the Operations of Transnational Corporations' Affiliates

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## **An Analysis of International Trade of Montenegro Using Statistics on the Operations of Transnational Corporations' Affiliates**

**Abstract:** Most of the international trade today takes place through transnational corporations that have changed its structure and directions of activity. The scope of international transactions that occur within transnational corporations is increasingly replacing the classical cross-border forms of import and export of goods and services.

The transition process and the opening of Montenegro towards the rest of the world has had its influence on significant inflows of foreign direct investments and the presence of a large number of companies controlled by foreign capital. If we neglected the sales data of foreign corporations' affiliates we would attain a distorted picture of the position of Montenegro in international trade. Through the analysis of the application of FATS statistics, which monitor the operations of these companies in Montenegro, we discovered the economic variables to which the foreign affiliates have made the greatest contribution. Our goal is to assess the benefits of Montenegro's participation in international trade. The focus of the work is on the calculation of the export of Montenegro through the application of this new statistical concept.

**Keywords:** globalization, transnational corporations, international trade, FATS statistics.

**JEL classification:** F15 i F23

## Introduction

The last thirty years have been marked by an intense process of globalization. Globalization entails the removal of barriers for free trade and a closer integration of national economies, and may therefore be considered a driver for the welfare of everyone in the world, especially for the poor (Stiglitz 2002, p.9). The liberalization of capital and trade flows has dynamically intensified, as well as the free movement of factors of production. The resulting changes have led to the interconnectedness and interdependence between countries and the creation of new conditions in the world economy. The main drivers of these processes are transnational corporations, whose total number at the beginning of the 21<sup>st</sup> century has reached the figure of 82,000, and the number of their affiliates abroad 807,000. Their strength is best demonstrated by the fact that, in 2014, foreign affiliates of transnational corporations employed 75 million workers, generating USD 36 billion in sales and USD 8 billion in value added. Given that the world export of goods and services amounted to USD 23.4 billion in the same year, it is obvious that the sales of foreign affiliates exceeded the global exports by 50%. The exports of the affiliates of transnational corporations in 2014 amounted to a total of USD 8 billion, and therefore the foreign affiliates' exports constituted 1/3 of the world exports. If we subtract their exports from the total sales amount of foreign affiliates, we are left with the information on foreign affiliates' sales in their host countries. These sales in 2014 amounted to USD 28 billion, and were 20% higher than the total world exports (United Nations Conference on Trade and Development -UNCTAD, 2015). Therefore, the operations of foreign affiliates rapidly became an important part of international economy (Li, Whalley & Chen, 2010).

Given that international trade is an important part of the world economy, the statistical data about it must be credible and comparable. The need for statistical information on foreign trade is evident. In addition to the public sector, this data represents an important source of information for the private sector and for individuals. The most important use of foreign trade statistics is in compiling balances of payments, national accounts and some short-term statistics. It can also be of great assistance to companies for market research and the selection of commercial strategies. According to Kozlow (2006), in order to obtain information needed for assessing the economic impact of transnational corporations, it is necessary for companies to undertake direct research on the operations of their foreign affiliates, or alternative assessment methods. For the further development of FATS statistics, it is also necessary to organize the discussions surrounding it, so that the compilers may meet the needs of statistical data users (Yamaguchi, 2005).

As we have seen, exports of foreign affiliates exceed by far the exports of the parent countries of these companies. Classical foreign trade statistics do not take into account the exports carried out by affiliates of foreign companies, recording only the export of goods and services carried out between the countries. All this provides us with a wrong representation of the foreign trade of a country. Therefore, in the analysis of international trade it is necessary also to monitor the movement of foreign direct investments, i.e. to monitor the activities of transnational corporations, which the current system of analysis does not permit.

This new statistical tool, which is based on the operations of transnational corporations and the monitoring of capital by its “nationality”, both for goods and services, is called *Foreign Affiliates Trade Statistics - FATS*. Thus, the international trade statistics, according to the FATS concept, imply that the sales of affiliates are attributed to the country of the capital’s origin, rather than to the country from which the export had occurred.

International organizations have begun their activities related to the implementation of FATS statistics only by the end of the 20<sup>th</sup> century, while the World Trade Organization started publishing information on the application of FATS in 2003. However, the USA has started collecting and ordering data on their companies’ global operations already in the 1950s, together with the data on foreign companies operating on its market.

According to the FATS concept, data is expressed at the level of one economy and may be collected as *inward* and *outward*. The *inward FATS* encompasses statistics on the activities of foreign affiliates operating in the country of the statistics compilers, while the *outward FATS* includes statistics on the activities of affiliates operating abroad that are controlled by the economy which compiles the statistics. The basic components that need to be defined when generating FATS statistics are: the country of origin of the capital, the method of data aggregation (by the country, according to industrial activities or according to the product), determination of variables, the method of collection and presentation of data (UN, EC, IMF, OECD, UNCTAD, WTO, 2012). It is recommended that the collected FATS variables should include at least these following basic measurements of foreign affiliates’ operations: sales (turnover), employment, value added, export and import of goods and services, and the number of companies.

Larger economies have started declaring their FATS statistics much earlier than the smaller ones due to the fact that their compilation is very expensive and complicated. For smaller countries, statistics on international trade according to the FATS concept has just started developing, and due to financial and resource con-

straints, these countries cannot collect data on all foreign companies operating in their economies, or for all of their companies operating abroad, but they resort to the method of sample collection, and the statistics based on this concept are carried out every second or third year (Bjelić et al, 2010). In Montenegro, there has been no activity in the application of FATS statistics until 2014, when a pilot study on the operations of affiliates controlled by foreign business entities was conducted for the reference year 2013.

As it has already been stated, globalization is a process that cannot be avoided. Each country must carefully consider the effects of this process, in order to take advantage of the benefits it may provide. Therefore, the trade policy makers must be provided with the right information on the internationalization of its economies and on the complex relations within transnational corporations. The research done by using FATS statistics, which is analysed in this work, raises an additional question: which are the benefits that Montenegro has from its involvement in international trade? How many local production factors are contained in the Montenegrin export product? (Bjelić et al, 2010).

## **1. Position of Montenegro in international investment flows and international trade**

### **1.1. Montenegro in international investment flows**

For countries of the Western Balkans, including Montenegro, participation in global flows of foreign direct investment is a vital issue. Of late, foreign capital has significantly influenced the increase of the economic activity in these countries. The level of foreign investment in countries of the Western Balkans had been very low until 2005, while in the period 2005-2007, there was an expansion of capital flows in the region. Individually, Serbia and Croatia have managed to attract most foreign investment, while Montenegro is distinguished by a high inflow of FDI per capita. Most of the capital came from European Union countries, primarily in the banking sector and the telecommunications sector. The financial crisis influenced a decline in foreign investments in the region, except in Albania and Montenegro, which recorded increases in 2009. The consequences of the crisis were felt also in the following years, so the inflow of foreign capital in Western Balkan countries in 2012, for example, constituted only a third of the foreign capital that had been invested in the region in the record year of 2008.

Table 1 shows that there are significant differences in the inflow of foreign direct investment per capita among countries of the region. In the period from 2008

to 2014, Montenegro had the highest average inflow of FDI per capita, in the amount of USD 1,237, followed by Croatia with the inflow of USD 563, and then Serbia and Albania with the influx of USD 321. In the analysed period, Montenegro registered the record inflow of FDI per capita of USD 2,466 in 2009. Interestingly, the cumulative FDI inflow per capita in the same year in all the countries in the region was one third less than the inflow per capita made by Montenegro (UNCTADSTAT, 2015). According to the data of the European Bank for Reconstruction and Development, Montenegro ranked first among all world economies analysed, based on the inflow of FDI per capita in 2008 of USD 1,186. In the same year, based on its share of FDI in GDP, Montenegro was ranked first in the group of Central and Eastern Europe countries (European Bank for Reconstruction and Development – EBRD, 2008).

**Table 1: FDI inflow per capita and in GDP percentage in the Western Balkan countries**

	Average FDI inflow per capita 2008-2014 (USD)	FDI inflow per capita in 2009 (USD)	Average FDI inflow in GDP percentage 2008-2014	FDI inflow in GDP percentage in 2009
Albania	321	316	8,1	8,3
Bosnia and Herzegovina	125	65	2,7	1,5
Croatia	563	707	3,9	4,9
Macedonia	157	279	3,2	2,1
Serbia	321	340	6,1	6,9
Montenegro	1,237	2,466	17,9	36,9

Source: UNCTADSTAT, 2015, *Foreign direct investment: Inward and outward flows and stock, annual*, 1980-2014, New York and Geneva, Internet, <http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96740>, 09/10/2015. Authors' calculation.

The importance of foreign direct investments in the Western Balkans countries is best illustrated by its share in the gross domestic product. For example, in the period 2008-2014, these funds accounted for 17.9% of GDP in Montenegro, 8.1% of GDP in Albania, and 6.1% of GDP in Serbia. Bosnia and Herzegovina had the lowest share of FDI inflow of 2.7% of GDP. In 2009, Montenegro achieved a record percentage of FDI inflow in GDP, when its share amounted to 36.9%. All these indicators point to a significant impact of foreign investments on the economies of these countries.

The period of expansion of foreign investment in these countries has caused an increase in the economic activity, low inflation and a reduction in unemployment. However, even in the years of growth, countries in the region registered the current account deficit, as a result of their rapid development. It was mostly

covered from the inflow of foreign investments. The main reasons leading to these deficits are the low competitiveness of these countries and their serious imbalances (Jaćimović, 2010). The reduction of the levels of foreign direct investment during the crisis had a significant impact on the economic downturn in the Western Balkans countries. This was reflected in the increase of the budget deficit, which in some countries reached a level higher than the one prescribed by the Maastricht criteria. There was a simultaneous decline in both exports and imports, which brought to an even greater current account deficit. For these reasons, the current account deficit is a problem in the region. These countries try to finance the imbalances in the balance of payments with foreign investments. Therefore, foreign investments represent a good source for covering the payment balance deficit because they do not incur international liabilities, and have other advantages, too. However, this method of financing the deficit is hardly enough, so that these countries have to borrow abroad. Accordingly, it is very important for all the Western Balkan countries to continuously make efforts to create conditions for stronger FDI inflows in the future (Kovačević, 2009).

As is well known, Montenegro entered the process of transition with a ten years delay, only at the end of 1989. However, political events and sanctions halted the first steps of its transition. After ten years of economic stagnation, the adoption of a number of reform laws and the implementation of activities that promoted the development of economic freedom, Montenegro became the investment destination of noteworthy foreign investors. The largest inflow of foreign capital into the country was realized by investments through privatization.

Montenegro has been recording an extremely high inflow of foreign direct investment since 2005, and since then it has been one of the top European transition economies. Only in the period 2005-2009, total foreign investments amounted to EUR 3 billion. In this period, Montenegro recorded the highest FDI inflow per capita. In 2009, Montenegro had the highest FDI inflow in the amount of 1,066.5 million. Among countries the region, only Albania also achieved a growth of FDI inflow in the year after the beginning of the financial crisis. In the following year, there was a decrease of 48.2%, and this trend was continued in 2011, when foreign direct investments amounted to 29.5% less than in 2010. Net FDI inflow in 2012 amounted to EUR 461.6 million or 18.6% more compared to the previous year. The inflow of foreign direct investments in 2013 in the amount of EUR 323.9 million represents the lowest level in the past ten years. Net FDI inflow in 2014 amounted to EUR 353.9 million, which is an increase of 9.3% compared to the previous year. In the first nine months of 2015, net FDI inflow amounted to EUR 526.4 million, which is 101.6% more than in the same period of the previous year (Central Bank of Montenegro – CBM, 2015).

In relative terms, if considering the values per capita or as GDP percentage, Montenegro remains the regional leader. For example, in 2013, with its lowest FDI level in the past ten years, Montenegro was still the first in the region according to the level of FDI of 10.13% of its GDP. Also, in 2011, when one of the lowest FDI inflows was recorded, the FDI per capita in Montenegro amounted to USD 899, and was three times higher than these values in Albania and Macedonia, and 40% more than the FDI inflow per capita in Serbia (UNCTADSTAT, 2015).

The global financial crisis, which influenced the flows of foreign direct investment on the global scale, has also affected Montenegro. However, it is reasonable to expect high FDI inflows in the years to come as well, considering the still untapped significant potentials with which to attract foreign investors, especially in the field of tourism (Valdanos, Jaz, Buljarica, Velika Plaža, etc.) and the implementation of major infrastructure projects.

## 1.2. Montenegro in international trade

Montenegro's participation in international trade is negligibly low. According to the World Trade Organization (WTO, 2014), Montenegro exported goods worth USD 494 million in 2013, while its import of goods totalled to USD 2.3 billion. Thus, Montenegro's total foreign trade exchange with the world amounted to USD 2.8 billion in 2013. On the list of 194 most significant world importers of goods, with the European Union taken as a single subject of international trade, Montenegro was 150<sup>th</sup>. With such an export achieved, it ranked 166<sup>th</sup> on the list of major exporters of goods.

In the international trade in services, Montenegro exported services worth USD 1.4 billion in 2013, while its imports of services amounted to USD 534 million, which means that its total foreign trade in services totalled USD 1.9 billion (WTO, 2014). With such trade volume, Montenegro ranked 114<sup>th</sup> among the most important world exporters of services and 157<sup>th</sup> among the top global importers of services.

By comparing the foreign trade exchange of Montenegro with its domestic product, we get its foreign trade coefficient, which in 2013 amounted to 62.2%. This high ratio reflects the fact that foreign trade is a very important activity for the Montenegrin economy, and that the country is increasingly more open to international economic cooperation. According to the World Trade Organization, the average annual foreign trade exchange of Montenegro per capita for the period 2011-2013 amounted to USD 7,598.

Montenegro's participation in the world import of goods and services in 2013 was equal and amounted to 0.1%, while the participation of Montenegro in the world export of services amounted to 0.03%. The share of its export of goods in the same year was very small, i.e. not measurable (WTO, 2014). Therefore, due to its size and a small market and economic power, Montenegro cannot influence global developments. Consequently, it must accept the rules of the international market and fight for the best position that will contribute to its faster development.

Montenegro has been recording a continuous deficit in the foreign merchandise trade with the world. In the reporting period (Table 2), the largest deficit of EUR 2.083 million was recorded in 2008, which was 44.3% more than in 2007. A deficit decrease that started in 2009, due to the economic downturn and the reduced volume of trade caused by the economic crisis, continued in the next three years. In 2012, there was an increase in foreign trade deficit due to the reduction in exports of 19.2%. The trade deficit in 2013 was 4% lower compared to the previous year, while in 2014 it increased to the amount of EUR 1,451 million. Each year, the deficit was greater than the value of the export of goods.

**Table 2: Foreign trade of Montenegro 2005-2014, in millions of EUR**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Export of goods	369	441	455	416	277	330	454	367	376	333
Import of goods	1.043	1.457	2.073	2.530	1.654	1.657	1.823	1.821	1.773	1.784
<i>Balance of the trade in goods</i>	-674	-1.016	-1.618	-2.114	-1.377	-1.327	-1.369	-1.454	-1.397	-1.451
Export of services	330	418	674	751	680	747	906	998	994	1.031
Import of services	134	221	234	351	296	337	317	385	341	340
<i>Balance of the trade in services</i>	196	197	440	400	384	410	589	613	653	691
TOTAL EXPORTS	699	859	1.129	1.364	1.028	1.077	1.360	1.365	1.370	1.364
TOTAL IMPORTS	1.177	1.678	2.307	2.124	1.950	1.994	2.140	2.206	2.114	2.124
TRADE BALANCE	-478	-819	-1.178	-760	-922	-917	-780	-841	-744	-760

Source: for goods: Statistical Office of Montenegro, Statistical yearbooks for the selected years, except 2014, - Communication number 65 from 06 May 2015-Foreign trade exchange of Montenegro in 2014; for services: Central Bank of Montenegro, Annual reports of the chief economist for the selected years, except for 2013 and 2014-Annual Macroeconomic Report of the Central Bank of Montenegro.

In foreign trade exchange of services with the world, Montenegro has been achieving a surplus that has been constantly growing, and which reached the level of EUR 691 million in 2014, or 5.5% more than in the previous year. Positive trends in foreign trade exchange of services are the result of favourable develop-

ments in the field of tourism and transport. In all the years during the period 2005 - 2014, except for 2006, the surplus value was greater than the value of imported services.

The analysis of the position of Montenegro in international investment flows shows the great extent of dependence of economic development on foreign capital. The foreign trade of Montenegro records a constant deficit in the foreign trade in goods. However, the analysis of international trade of Montenegro would be incomplete if, in addition to traditional trade flows, it did not include the activity of foreign affiliates, as will be done in this work. Therefore, the existing concept of international trade statistics of Montenegro does not match its economic context, in which a large number of foreign affiliates operate. It does not collect statistics on their international trading transactions. For this reason, classical statistics should be complemented by a new approach of international trade analysis, which would take into consideration the operations of these very important subjects in the economy of Montenegro.

## **2. Statistics on the operations of affiliates of foreign companies in Montenegro**

Influenced by the impressive growth of foreign investment in the past decade, in 2014 the Statistical Office of Montenegro introduced the foreign affiliates' statistics (FATS) as a regular statistical survey. The report on the conducted pilot study on the operations of affiliates controlled by business entities based outside of Montenegro was published for the reference year 2013.

The development of statistics on activities of foreign affiliates is in accordance with the Regulation of the European Union no.716/2007, which defines the methodology for the collection, accounting, checking and publication of data on the operations of foreign affiliates. The legal basis is further complemented by the Regulation no. 747/2008 regarding the definitions of characteristics which are collected in this study and the application of classification NACE Rev.2, and the Regulation No. 364/2008, which defines the technical format for the transmission of data on foreign affiliates statistics and the variations that will be granted to Member States (Statistical Office of Montenegro-MONSTAT, 2014).

In its FATS statistics, the Statistical Office conducts the research of:

- *Outward foreign affiliates statistics* (OFATS statistics), which describes the activities of business entities abroad controlled by business entities residing in Montenegro.

- *Inward foreign affiliates statistics* (IFATS statistics), which describes the activities of business entities based outside of Montenegro.

The data sources are business entities that operate in Montenegro and that are controlled by business entities outside the country, as well as business entities abroad under the control of business entities based in Montenegro. Data is collected through special questionnaires drafted for the purpose of this research.

The framework used for the *outward foreign affiliates statistics* is the Register of the Central Bank of Montenegro on foreign direct investments. The variables that were collected in this study are: turnover, number of employees, and number of enterprises.

For the *inward foreign affiliates statistics*, the framework used is the Business Register of the Statistical Office of Montenegro, as well as the register obtained from the Central Bank of Montenegro. The characteristics collected are: the number of enterprises, turnover, production value, value added at factor cost, total purchases of goods and services, total purchases of goods and services purchased for resale in the same condition as received, staff costs, gross investment in material assets, and the number of employees. It covers all activities except for financial operations and insurance operations.

FATS statistics entails the publication of data on the macro level. According to the Law on Official Statistics and System of Official Statistics, foreign affiliates in Montenegro are obliged to submit the relevant data that is considered confidential and is not published. Therefore, individual company data is protected.

The obtained data, which is based on the conducted research on the operations of foreign affiliates in Montenegro, was published in the report "Statistics on Domestic Affiliates for 2013". Some 250 companies were taken into consideration, i.e. all companies with the production value exceeding EUR 250,000, and value added of EUR150,000.

According to sectoral activities, in 2013, foreign affiliates in Montenegro operated mostly in the trade sector (53%), followed by the services sector (31%), the construction sector (11%), and the industrial sector (6%). According to the country of origin of the capital, 65% of the surveyed companies, which are controlled by commercial entities outside of Montenegro, are based in six countries. The country with the largest share is Serbia (27%), followed by Russia with a share of 10%, Slovenia with 8%, the Netherlands and Cyprus with 7% and Croatia with 6%.

The application of the FATS concept to international trade statistics of Montenegro provided us with information on the operations of foreign affiliates, as shown in Table 3. By analysing data on the turnover, production value, intermediate consumption, and gross value added we will see the extent of the influence of foreign companies on the economy of Montenegro.

**Table 3: Activities of foreign affiliates in Montenegro in 2013, in thousands of EUR**

Sector	Turnover	Production value	Intermediate consumption	Gross value added
Wholesale trade and retail trade and repair of motor vehicles and motorcycles	536.023	87.500	45.754	41.746
Construction	27.483	27.053	18.628	8.425
Industry	383.397	365.631	196.824	168.807
Services	288.678	270.654	132.297	138.357
Total:	1.235.581	750.838	393.503	357.335

Source: Data received from MONSTAT, based on authors' written request.

The *turnover* of foreign affiliates in Montenegro amounted to EUR 1,236 million in 2013. Observed by the sectors, the largest share in foreign affiliates' turnover was achieved by the sector of wholesale and retail trade and the sector of repair of motor vehicles and motorcycles (43%), while the lowest share was achieved by the construction sector (2%). Given the fact that the 2013 turnover of all companies operating in Montenegro amounted to EUR 6,374 million (Monstat, 2014), we conclude that foreign affiliates accounted for 19.4% of total turnover.

The analysis of *production value* indicates that foreign affiliates accounted for a large part of the total value of production in Montenegro in 2013. The production value of all enterprises in Montenegro realized in 2013 amounted to EUR 3,281 million (Monstat, 2014), while the production value realized by companies that are controlled by companies outside Montenegro amounted to EUR 751 million. Therefore, foreign affiliates' participation in the total production value amounted to 22.8%. The largest share in the production value of foreign affiliates has been achieved in the industrial sector (49%) and the services sector (36%).

The value of *intermediate consumption* of the businesses operating in Montenegro that are controlled by entities outside of Montenegro amounted to EUR 394 million in 2013. The industry sector and the service sector accounted for 84% of the intermediate consumption of foreign affiliates. Comparing the intermediate consumption of foreign affiliates with the intermediate consumption of all companies operating in Montenegro (EUR1.942 million), we take note of their significant share of 20%.

In 2013, foreign affiliates in Montenegro realized a *gross value added* in the amount of EUR 357 million. The highest gross value added was achieved by the industrial and service sectors, which accounted for 86% of total gross value added attained by affiliates in Montenegro. Given that the gross value added of all companies operating in Montenegro in 2013 amounted to EUR 1,139 million (Monstat, 2014), it is noted that the 27% share of foreign affiliates represents a significant segment of the total amount.

Considering the activities of foreign affiliates in Montenegro, we have seen that operations of the affiliates of foreign companies are very important for its economy. Foreign capital was mostly present in the trade sector and the service sector, and most often it came from Serbia and Russia. Foreign affiliates made the largest contribution to generating gross value added. Through the analysis by industry of the four variables, we noticed that foreign affiliates were most active in generating gross value added, intermediate consumption and production values in the industrial sector, while the biggest turnover was generated in the sector of wholesale and retail trade and repair of motor vehicles and motorcycles.

Therefore, in Montenegro, as in other countries, transnational companies represent very active economic participants, but their potential is far from being fully exploited.

### 3. Calculating Montenegro's exports by using the FATS concept

The calculation of Montenegro's exports by using the FATS concept will be done for the sector of goods, although the author's initial intention was to calculate the export of Montenegro for the sector of tourism as the most important export products of Montenegro. Namely, in international trade, Montenegro generates constant surplus in the services sector, and its share in the total export of goods and services in 2014 was as high as 74%. Tourism accounted for 66% of total service revenues achieved in 2014. According to the estimates of the World Travel and Tourism Council, the direct impact of tourism on the gross domestic product of Montenegro in 2012 amounted to 9.9%, while the employment generated by tourism accounted for 17.6% of total employment (Government of Montenegro, 2013). Despite the strong influence of tourism on the economy of Montenegro, the idea of the authors could not be implemented for several reasons. Like in most countries that generate significant revenue from tourism, the data on annual revenue in Montenegro is collected on the basis of the assessment done by the Central Bank of Montenegro. The assessment itself is prepared based on the data obtained by the Statistical Office of Montenegro on the number of overnight

stays of foreigners, with the addition of an estimate on the number of unregistered tourists, which is then multiplied by the estimated daily spending per tourist. This number is further supplemented by the data on health and education services. Another reason is the lack of accurate records on accommodation facilities which Montenegro offers. Private accommodation constitutes a significant segment of the total accommodation capacities in Montenegro. According to the latest official report of the Statistical Office as of 2011, Montenegro had 157,697 accommodation facilities, of which only 18.1% were hotel facilities. Many international institutions' studies speak of a much larger number of accommodation facilities, and a more unfavourable structure (300,000 beds, 13% of which in hotel accommodation). This is corroborated by the fact that a significant number of units is owned by foreigners (mainly from former Yugoslav countries and Russia), though this is not supported by a single record, as the data is collected separately by municipal administrations. Moreover, a large number of these accommodation units are used for renting, which further complicates the assessment of tourism revenues.

Based on the above, one can imagine how difficult it would be to assess the revenues from tourism and how many inadequacies there are in the official estimates. If we compared the statistics provided by the Central Bank of Montenegro with tourism revenues as registered through payment system transactions and the banking system, we would see that the data of the official statistics is doubled. All this indicates that the estimate-based statistics are rather unrealistic. According to the rules of FATS statistics, services provided to non-residents by the affiliates of transnational companies are attributed to the country of origin of capital, rather than to the country where the investment is realized. In Montenegro, the global hotel brands are present in their high quality capacity (4\* and 5\*), which account for 24% of the hotel accommodation offer. However, they make up only 5.6% of the total accommodation capacity. Knowing that high-profit hotel accommodation, which is mostly foreign owned, generates the highest revenue per guest per day and has the longest season, it would not be sufficiently representative for the calculation of exports due to its small share in total tourism revenues. In the future, it is necessary to develop new models of service statistics, which may represent the developments in this area in a reliable and quality manner.

For that reason, the FATS concept will be applied to the calculation of Montenegro's exports of goods in 2009. According to the Statistical Office, the export of goods of Montenegro in that year amounted to EUR 277,011 thousand, which is 36.1% less compared to 2008. Montenegro's export of goods is dominated by products of the metal industry, and 2009 was the last year in which the biggest exporter of goods in Montenegro (the Aluminium Plant Podgorica) was in ma-

jority foreign ownership. Although the value of exports in 2009 was the smallest in the past decade, due to falling metal prices and reduced production, this is the reason for which that year was chosen for the study.

The first step in the research was the selection of about a dozen major exporters of goods from Montenegro that are in majority foreign ownership. The selection of companies was carried out by the authors, by researching Montenegro's exports according to their activities on the basis of official statistical reports, and then by the analysis of financial and audit reports of these companies.

After defining the list of the largest foreign exporters and the value of their exports, the sales revenues were determined from the available annual accounts of these companies. This data was needed in order to get the information on domestic sales of foreign affiliates. This information was determined by subtracting the revenues generated by the export of goods from their total sales revenue.

The third step was the intended study of the sales that Montenegrin transnational companies achieve abroad. Given that the lists of the largest transnational companies in the world published by UNCTAD do not include any of the companies from Montenegro, it was necessary to look for another source of information. We addressed the Statistical Office of Montenegro in order to receive information on the sales of Montenegrin companies abroad from the pilot study on the operations of foreign affiliates in 2013, which we planned to later customize to year 2009 based on the outflow of foreign direct investments in Montenegro. However, the response of the Statistical Office was negative due to the confidential nature of the requested data, given that the survey covered only 20 companies, and in some cases with only one company active in the sector. Knowing that in the previous period Montenegro had a small outflow of foreign direct investments, resulting in a small number of affiliates abroad, we decided not to consider this data, rather certain that it would not significantly affect the calculation.

Finally, as the last step, the export of Montenegro was calculated by the FATS concept, using the information on eight foreign companies that, according to the authors of the study, are among the largest exporters of goods in Montenegro. It is important to note that it was not possible to receive data from company Hemomont, the first and the largest drug factory in Montenegro, which is in majority ownership of the Hemofarm Vršac.

**Table 4: Operations of foreign affiliates in Montenegro (Sales revenue, export and domestic sales), 2009, in thousands of EUR**

N	Name of the exporter	Majority ownership of the exporter	Activity	Sales revenue	Export	Domestic sales
1.	Aluminium Plant Podgorica	"CEAC Holdings Limited", Cyprus -58,73%	manufacture of aluminium	78.943	73.365	5.578
2.	Ironworks Nikšić JSC Nikšić	"MN Specialty Steels Limited", Holland -59,28%	manufacture of iron	39.604	27.603	12.001
3.	Jugopetrol JSC Kotor	"Hellenic Petroleum International S.A", Greece -54,4%	exploitation and transport of oil and oil products	114.887	15.987	98.900
4.	Industry of beer and juices "Trebjesa" JSC Nikšić	"StarBev company", Czech Republic -74,66%	manufacture of beer	27.300	2.300	25.000
5.	Bauxite mines JSC Nikšić	"CEAC Holdings Limited", Cyprus -63,63%	bauxite extraction	5.829	403	5.426
6.	Nikšić Mill JSC Nikšić	"Agroglobe" d.o.o., Serbia - 69,91%	manufacture of mill products	4.113	1.326	2.787
7.	Daido metal Kotor	Daido Metal Co Ltd, Japan-85,61%	manufacture of bearings and gears	3.381	3.348	33
8.	Galenika Montenegro LTD	Galenika JSC Belgrade, Serbia-75%	manufacture of pharmaceutical products	2.848	119	2.729
Total:				276.905	124.451	152.454

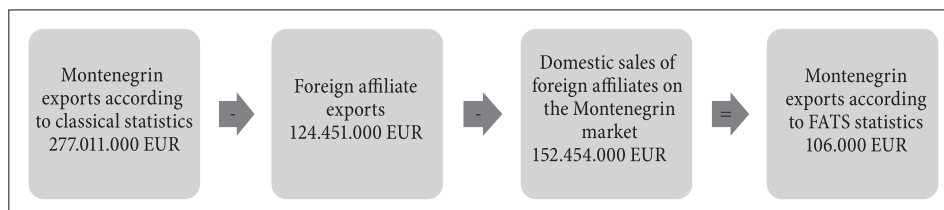
Source: Companies' databases and the Commission and the Securities and Exchange Commission of Montenegro, Internet, <http://www.scmn.me>.

Analysing Table 4, we may see that the total export of the selected eight foreign affiliates constitutes 44.9% of the export of goods of Montenegro in 2009. In addition, their sales revenues, i.e. their exports increased by the value of the sales on the Montenegrin market, are almost the same as the export of goods of Montenegro. The export of only one foreign company, the "CEAC Holdings Limited", represents 26.6% of Montenegro's export of goods.

The calculation of Montenegro's exports by the FATS method was done in the following way. First, we subtracted the exports of foreign affiliates in Montenegro (amounting to EUR 124,451 thousand) from the export of Montenegro as calculated by classical statistics (EUR 277,011 thousand). Then, from this result, we subtracted the domestic sales of foreign affiliates on the market of Montenegro (EUR 152,454 thousand). Finally, we got the value of exports of Montenegro according to FATS statistics, which amounts to only EUR 106 thousand. As previously stated, this calculation did not take into account the value of the sales of

Montenegrin affiliates on the foreign markets, which is normally added to the classical export and increases the export value according to FATS.

**Picture 1: Calculation of Montenegrin export in 2009 according to FATS statistics**



Therefore, the calculation of exports of Montenegro using the FATS methodology, based on the variables of eight foreign companies operating on the market of Montenegro, shows that the value of exports resulting from this new approach is lower than the value of exports calculated using the usual approach for as much as EUR 276,905 thousand, or 99.9%. If the analysis included all foreign exporters of goods in Montenegro, the calculation of exports by FATS statistics would result in a negative value. This study has allowed us to perceive the extent of participation of companies with majority foreign ownership in the Montenegrin export of goods. The relevance of this issue is especially conspicuous because of the fact that the high rates of foreign affiliates' participation in Montenegro's export of goods exacerbate the already bad situation in its underdeveloped export sector. For these reasons, it is important for the FATS statistics to describe the actual situation and to show how much export Montenegro actually generates, and how much is actually generated by foreign affiliates. The challenge for Montenegro, but of other countries as well, is to establish the best possible relationship with the global trade network and to achieve the greatest possible benefits from it. Hence, it is of utmost importance for a country to determine how much the domestic economy actually contributes to the creation of an export product. This is made possible by a new statistical concept, which follows the technological process of creating products and services, and quantifies the contribution of the country via the built-in added value.

## 5. Conclusion

The results of this study bring to the conclusion that globalization is an extremely complex process, particularly in terms of its statistical monitoring and measurement. Each country must carefully consider the effects of this process in order to take advantage of the benefits it may provide. Transnational companies, whose

activities are not registered by official statistics, have become the dominant participants in international trade.

Therefore, classical foreign trade statistics should be complemented by the statistics that monitor international production, i.e. statistics on the activities of transnational companies. Trade policymakers must have the right information on the internationalization of their economies and the complex relations within transnational companies. Because of the proven importance of the application of this new statistical instrument in the implementation of adequate foreign trade policy, it is necessary to continue working on its development and methodological adjustment in order to achieve global comparability.

Based on the analysis of the use of this new foreign trade analysis approach to the economy of Montenegro, we have found its significant positive impact on our economy.

The research conducted on the calculations of the export of Montenegro by using the FATS concept showed how much companies with the majority foreign ownership participate in the export of goods of Montenegro. The result is typical for developing countries, i.e. the export value obtained by this new approach is almost 100 percent lower than the export value obtained through the classical approach. This emphasizes the significance of the foreign affiliates' participation in Montenegro's exports. Consequently, by using FATS statistics, we determined how much the actual export of Montenegro is, and how much of its export is controlled by foreign capital.

We have shown that the new instruments in the analysis of foreign trade statistics are essential. The data obtained by classical statistics no longer suffice. By complementing the new methods with those that have been in use for a long time, we will obtain better quality data on the mobilization of domestic resources on the basis of exports and imports and get the real picture of the position of Montenegro in the international division of labour. Maintaining the best foreign policy to take advantage of all the benefits of the globalization process will largely depend on the development of new statistical concepts and their methodological adjustment to the terms of global comparability.

The development of FATS statistics is heading towards the calculation of foreign trade by newly added values, which may most accurately indicate the benefits of a country and its exporters in a situation where international trade is dominated by global value chains.

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