The European Union's Trade Relations with Brazil in 2004–2015

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Brazil's trade with the EU has been increasing, reflecting the growing role of Brazil in the world economy in 2004–2008. However, since the global economic crisis the growth rates have slowed down and bilateral trade flows have been declining. During 2004–2015, the EU trade balance with Brazil was mostly deficit and trade patterns were similar to each partner's general merchandise structure. The paper contains an analysis of EU-Brazil trade flows and balance as well as points to main factors contributing to trade development. Apart from economic conditions in the EU and Brazil, main factors affecting bilateral trade were: world prices of primary products and protectionist tendencies in Brazil's trade policy. There is still much growth potential when it comes to bilateral EU-Brazil trade, but whether it will be realized depends on improving trade rules and negotiating more favourable access to each other's markets, especially to Brazil's market.

Keywords: European Union, Brazil, bilateral trade relations.

Stosunki handlowe Unii Europejskiej z Brazylią w latach 2004–2015

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Obroty handlowe Brazylii z UE w latach 2004–2008 wzrastały, odzwierciedlając rosnącą rolę Brazylii w gospodarce światowej. Jednak od globalnego kryzysu gospodarczego stopy wzrostu zmniejszyły się, a bilateralne obroty zaczęły spadać. W latach 2004–2015 bilans handlowy UE z Brazylią miał przeważnie charakter deficytu, a struktura wzajemnego handlu była zbliżona do struktury całkowitego handlu obu partnerów. Przedmiotem analizy są przepływy handlowe i ich saldo oraz główne czynniki wpływające na wzajemne obroty. Oprócz koniunktury gospodarczej największe znaczenie miały światowe ceny surowców oraz tendencje protekcjonistyczne w brazylijskiej polityce handlowej. Istnieje znaczny potencjał rozwojowy w bilateralnych stosunkach handlowych UE–Brazylia, ale wzrost obrotów będzie zależał od poprawy reguł wzajemnego handlu oraz wynegocjowania bardziej korzystnych warunków dostępu do rynków, dotyczy to zwłaszcza rynku Brazylii.

Słowa kluczowe: Unia Europejska, Brazylia, dwustronne stosunki handlowe.

JEL: F10, F13, F60

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1. Introduction

When we include trade on the internal market, the EU is the largest exporter and importer of goods and services in the world. In 2015, its share in world exports was 33.7% and in the case of imports – 32.6%. Brazil's position is much weaker with respective shares of 1.2% and 1.1% (WTO, 2016, pp. 92–93). Nevertheless, possibilities for bilateral trade development are extensive due to complementary export specializations. Brazil's comparative advantage stems from agricultural products, raw materials and labour-intensive goods while the EU's concentrates on capital-intensive products.

A number of factors contribute to the development of trade relations between the EU and Brazil; the most important ones are: improving economic situation in Brazil, creation of the middle class in the Brazilian society and the activity of multinational corporations. However, there are certain barriers limiting bilateral trade, such as: Brazil's trade protectionism and measures against FDI inflow. A good opportunity to eliminate those lies within the swift completion of the negotiated agreement on economic cooperation between the EU and MERCOSUR.

The paper's main goal is to analyse EU trade relations with Brazil in 2004–2015. The analysis includes:

- 1) changes in value, dynamics and balance of trade including balances in selected product groups and with all individual EU countries,
- 2) Brazil's position as an EU trading partner,
- 3) changes of the merchandise structure of EU exports and imports to Brazil,
- 4) main factors affecting bilateral trade flows.

The analysis focuses on the period between 2004 and 2015, however in some cases, due to limited availability of data, it was narrowed to the most recent available statistics. The basic EU data include 28 member countries. Most of the aforementioned statistics were derived from the UNCTAD database. To a lesser extent, mostly to present factors of trade development – data from the IMF, Eurostat, OECD, The Conference Board and WTO was used.

2. Value, Dynamics and Balance of the EU Trade with Brazil

The growth rate of the EU trade with Brazil in 2004–2015 was markedly higher than the total EU trade growth. According to UNCTAD data, total EU exports in 2004–2015 grew by 45.8% while exports to Brazil increased by 123.6% (UNCTAD, 2017).

During the aforementioned period, one can clearly distinguish 3 stages based on trade dynamics. In 2004–2008, trade flows were growing constantly resulting in doubling of both bilateral exports and imports. This was accompanied by deepening of the EU trade deficit in 2004–2007 (see Figure 1).

The second stage was brought about by the global financial and economic crisis and its aftermath. In 2009, EU28 exports to Brazil decreased by 23% and in the case of imports – by 30%. Reversion of this trend appeared fairly quickly and in 2010–2011 growth rates temporarily returned to their pre-crisis levels. Crossing over to the third stage came about in 2012. From then on, there was a significant decrease in EU imports from Brazil and in 2014–2015 export flows also shrank. The crucial reason for the downturn of trade was a worldwide decrease in prices of raw materials and agricultural products which also caused a global trade slowdown. Another contributing factor was the lowering demand in the EU market as a result of the second wave of the economic crisis.

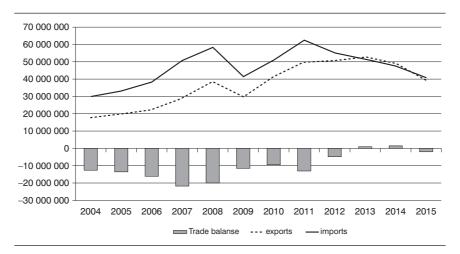


Fig. 1. EU28 trade with Brazil in 2004–2015 – value of exports, imports and trade balance in USD ($^{\prime}$ 000). Source: UNCTAD (2017).

The largest EU economies, in particular Germany, France, Italy, the Netherlands, the UK, Spain and Belgium, had the strongest impact on the bilateral EU-Brazil trade. In 2015, the combined share of these economies in EU exports to Brazil amounted to 87.5% and in the case of imports – 86.4%. Furthermore, the level of concentration of trade within the top 7 trading partners increased both in terms of exports and imports since their respective shares in 2004 were 86.3% and 83.1%.

In 2004–2012 and in 2015, the EU trade balance with Brazil was at a deficit. A slight surplus occurred only in 2013–2014. According to UNCTAD, the largest deficits existed in two product groups: 1) crude materials, inedible, except fuels and 2) food and live animals. What is more, the deficits continued to deepen in 2004–2011. A reversal of this trend appeared only in 2012. Smaller deficits were registered in the case of: 1) Beverages and tobacco, 2) Mineral fuels, lubricants and related materials and 3) Manufac-

tured goods. These goods are mostly low-tech, highly labour-intensive and resource-intensive. Surpluses pertained to two groups in particular and they were continuously growing during the analysed period. The greatest surplus occurred in machinery and transport equipment reaching USD 20 bn in 2011–2014. Half of that was maintained in the case of chemicals and related products. In the remaining product groupings, trade was rather balanced or the disequilibrium was not statistically relevant.

The analysis of individual EU countries' trade balances with Brazil reveals that a small group of countries contributes to a lion's share of the total EU-Brazil trade deficit. The largest deficit occurred in the case of the

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
[0] Food and live animals	-8.9	-9.0	-9.6	-13.7	-14.8	-12.0	-13.1	-16.4	-14.5	-14.1	-13.1	-11.7
[1] Beverages and tobacco	-0.5	-0.5	-0.4	-0.5	-0.5	-0.7	-0.7	-0.7	-0.6	-0.5	-0.4	-0.5
[2] Crude materials, inedible, except fuels	-8.1	-9.5	-10.7	-13.9	-17.7	-11.2	-15.9	-19.9	-16.7	-16.2	-15.3	-11.9
[3] Mineral fuels, lubri- cants and related mate- rials	-0.3	-0.8	-1.0	-1.4	-2.3	-1.3	-1.7	-1.9	-1.3	-0.9	-0.6	0.0
[4] Animal and vegetable oils, fats and waxes	0.0	-0.1	-0.5	-0.5	-0.6	-0.1	0.1	-0.1	0.1	0.1	0.2	0.1
[5] Chemicals and related products, n.e.s.	2.9	2.7	2.8	3.3	3.7	4.2	5.9	6.7	7.2	8.2	8.6	7.3
[6] Manufactured goods	-2.3	-2.2	-3.2	-4.2	-2.4	-0.3	0.2	-1.1	0.7	1.7	0.4	-1.1
[7] Machinery and transport equipment	4.3	5.9	6.6	9.2	14.1	9.7	15.3	19.8	17.7	19.8	19.0	13.9
[8] Miscel- laneous manufactured articles	0.0	-0.1	0.0	0.2	0.5	0.6	1.1	1.9	2.2	2.7	2.6	1.8
[9] Commodities and transactions, n.e.s.	0.4	0.1	-0.1	-0.2	0.3	-0.2	-0.6		0.6	0.2	0.2	0.1

Tab. 1. EU28 trade balance with Brazil by sector in USD billion. Source: UNCTAD (2017).

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	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Austria	-0.1	0.0	-0.1	0.1	0.3	0.3	0.5	0.5	0.9	0.7	0.5	0.4
Belgium	-0.7	-0.8	-1.3	-2.1	-1.5	-0.5	0.2	-0.2	0.3	1.5	1.2	-0.3
Bulgaria	-0.2	-0.3	-0.4	-0.3	-0.3	-0.2	-0.1	-0.1	-0.1	0.0	-0.1	0.0
Croatia	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.2	-0.2	-0.1	-0.1	0.0
Cyprus	-0.1	-0.1	-0.2	-0.2	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0
Czech Republic	-0.1	0.0	0.0	-0.1	-0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Denmark	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.4	0.3	0.5	0.4	0.3
Estonia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finland	0.1	-0.2	-0.2	-0.2	0.0	0.2	-0.2	0.0	0.0	-0.2	-0.1	0.0
France	-0.8	-0.7	-0.5	-0.6	-0.7	-0.4	-0.2	-0.1	0.5	1.8	1.9	1.9
Germany	0.1	-0.5	-1.5	-2.0	-1.0	0.3	1.3	0.0	1.7	3.4	2.0	1.8
Greece	-0.3	-0.3	-0.1	-0.3	-0.3	-0.2	-0.3	-0.1	0.0	0.0	-0.1	-0.1
Hungary	0.0	-0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.2	0.1
Ireland	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	-0.3
Italy	-1.1	-1.1	-1.5	-1.7	-0.8	0.4	0.7	0.8	2.0	2.5	2.1	0.7
Latvia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lithuania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Luxembourg	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1

Malta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands	-4.3	-4.0	-4.1	-6.3	-7.9	-6.0	-6.7	-8.8	-7.7	-10.0	-6.3	-4.8
Poland	-0.4	-0.3	-0.4	-0.4	-0.2	-0.5	-0.4	-0.6	-0.4	-0.3	-0.6	-0.6
Portugal	-0.9	-1.0	-1.2	-1.5	-1.5	-0.8	-0.8	-1.3	-1.0	-0.1	-0.3	-0.3
Romania	-0.4	-0.5	-0.6	-0.5	-0.5	-0.4	-0.3	-0.5	-0.2	-0.1	0.1	-0.1
Slovakia	-0.1	-0.1	-0.1	0.0	-0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Slovenia	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.2
Spain	-1.0	-1.3	-1.3	-2.4	-2.2	-1.3	-1.1	-1.4	-0.7	0.6	0.2	-0.4
Sweden	0.2	0.3	0.4	0.5	0.6	0.4	0.9	1.3	1.1	0.9	0.7	0.2
United Kingdom	-1.8	-2.1	-2.5	-3.0	-2.9	-2.3	-3.2	-2.7	-1.0	-0.5	-0.4	-0.2

Tab. 2. EU28 members' trade balance with Brazil in USD billion. Source: UNCTAD (2017).

Netherlands. However, this can be explained by the so-called 'Rotterdam effect'. It means that the bulk of imports from Brazil arrives in the EU by sea through Dutch ports, such as Rotterdam. This results in an artificially higher share of this country in bilateral EU-Brazilian trade but also in the deficit. Other countries had much smaller deficits – usually between USD 300 and 500 million. These were: Poland, Spain, Belgium, Ireland and Portugal. On the other side of the spectrum, the EU countries with the greatest surpluses were: Germany, France, Italy, Austria and Sweden. Nevertheless, Sweden was the only one with the surplus throughout the whole period, and in the case of the others – it appeared during the crisis of 2008–2009.

3. Brazil's Position in the EU Foreign Trade

In general, Brazil's role as EU trading partner is not very impressive. In 2004–2013, its share in EU28 exports increased from 0.49% to 0.87%. From 2014, it started declining to reach 0.72% in 2015. If we exclude intra-EU trade, the numbers look slightly better – Brazil's share in extra-EU exports is 1.8% (in 2015) but it is also a downward trend. Brazil plays a more important role in the case of imports to the EU. Its share kept growing in 2004–2011 – from 0.8% to 1%. This changed after 2012 and resulted in a 0.78% share in total imports in 2015. In the case of extra-EU imports, Brazil's share was 1.9% and on a downward trend as well (Eurostat, 2017b).

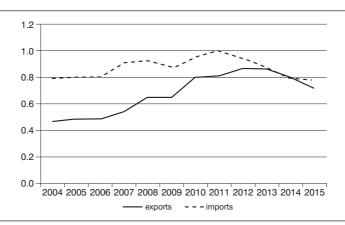


Fig. 2. Brazil's share in EU exports and imports (in %). Source: UNCTAD (2017).

Brazil's position differed in various product groups. The largest shares pertained to the following 3 types of merchandise: 1) Chemicals and related products (1.11%); 2) Animal and vegetable oils, fats and waxes (1.11%) and

3) Machinery and transport equipment (0.89%). Shares of the remaining goods were much smaller. As mentioned, Brazil plays a stronger role as a source of EU imports – this is mostly due to imports of 3 categories of merchandise: 1) Crude materials, inedible, except fuels (7.47%); 2) Food and live animals (3.17%); and 3) Beverages and tobacco (1.49%)

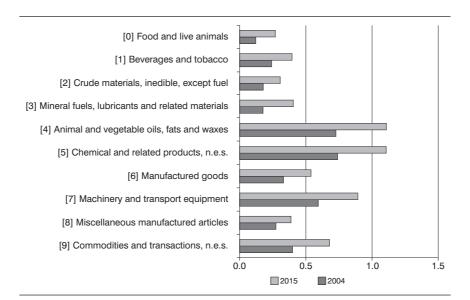


Fig. 3. Brazil's share in EU exports (in %). Source: UNCTAD (2017).

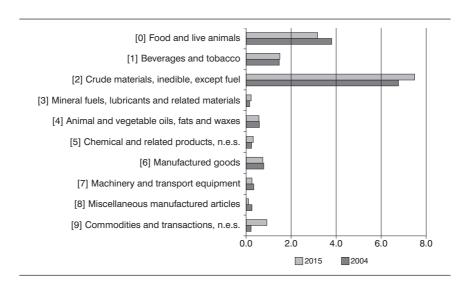


Fig. 4. Brazil's share in EU imports (in %). Source: UNCTAD (2017).

Three conclusions can be drawn from data on Brazil's position as EU trading partner. Firstly, in the case of exports – the share of Brazilian market increased in all of the groups. Secondly, in the case of imports, the changes were not as straightforward. In four groups, Brazil increased its share, but the most significant improvement occurred in crude materials, inedible, except fuels. Furthermore, the deepest share decrease pertained to what seems to be the traditional Brazilian specialization, which is food and live animals.

4. Merchandise Structure of the EU-Brazil Trade

The merchandise structure of EU28 exports to Brazil in 2015 was monopolized by two groups: 1) Machinery and transport equipment (46.7%) and 2) Chemicals and related products (14.8%). There were high shares in the case of Manufactured goods (9.7%) and Miscellaneous manufactured articles (6.5%). These are the same categories as in the case of total EU exports, so EU exports to Brazil are a straightforward reflection of the EU export specialization.

	2004	2006	2008	2010	2012	2014	2015
[0] Food and live animals	1.5	1.6	1.6	2.0	2.0	2.6	2.7
[1] Beverages and tobacco	0.7	0.9	0.7	0.8	0.9	0.9	0.8
[2] Crude materials, inedible, except fuels	0.9	1.1	1.1	1.0	1.0	1.1	1.0
[3] Mineral fuels, lubricants and related materials	1.6	1.9	2.5	3.4	6.5	4.5	3.0
[4] Animal and vegetable oils, fats and waxes	0.5	0.6	0.6	0.6	0.6	0.7	0.6
[5] Chemicals and related products, n.e.s.	23.0	20.4	19.0	21.8	21.1	23.0	24.8
[6] Manufactured goods	10.9	12.6	12.7	12.0	11.3	10.7	9.7
[7] Machinery and transport equipment	50.1	51.3	51.4	48.7	45.3	46.3	46.7
[8] Miscellaneous manufactured articles	6.6	6.4	5.8	6.1	6.3	6.9	6.5
[9] Commodities and transactions, n.e.s.	4.3	3.3	4.7	3.6	5.0	3.1	4.1

Tab. 3. Merchandise structure of EU28 exports to Brazil in 2004–2015 (in %). Source: UNCTAD (2017).

The main conclusions related to the merchandise structure of EU-Brazil exports in 2004–2015 are as follows. Firstly, the shares of various groups remained relatively stable and the extent of changes was quite limited. Secondly, six product groups increased their shares, but only three of them by more than 0.1 pp. These were: Chemicals and related products (1.8 p.p.), Mineral fuels, lubricants and related materials (1.4 p.p.) and Food and live animals (1.2 p.p.). Thirdly, a decrease occurred in the case of four

groups, but only in two it was by more than 0.2 p.p. These were: Machinery and transport equipment (-3.4 p.p.) and Manufactured goods (-1.2 p.p.). Fourthly, all these changes appear to be negative in terms of EU trade competitiveness. There was a decline in trade in capital-intensive goods in which the EU seems to have a comparative advantage and an increase in the shares of resource-intensive products.

Similarly as in the case of exports, two categories of merchandise overshadowed EU imports from Brazil in 2015. These were: Food and live animals (31.0%) and Crude materials, inedible, except fuels (29.8%). The two following groups (Manufactured goods and Machinery and transport equipment) were 3 times lower. Thus we can conclude that the EU-Brazil trade is mostly inter-industry and the resemblance of trade structures is slight (Muriel and Terra, 2009).

	2004	2006	2008	2010	2012	2014	2015
[0] Food and live animals	30.7	25.8	26.3	27.4	28.1	30.4	31.0
[1] Beverages and tobacco	2.0	1.5	1.4	2.1	1.9	1.8	1.9
[2] Crude materials, inedible, except fuels	27.5	28.4	31.0	32.1	31.2	33.2	29.8
[3] Mineral fuels, lubricants and related materials	1.9	3.6	5.6	6.1	8.3	5.9	2.9
[4] Animal and vegetable oils, fats and waxes	0.3	1.5	1.4	0.3	0.4	0.3	0.4
[5] Chemicals and related products, n.e.s.	3.6	4.7	6.3	6.2	6.3	5.7	5.8
[6] Manufactured goods	14.1	15.7	12.4	9.5	9.2	10.2	11.9
[7] Machinery and transport equipment	14.9	12.9	10.0	9.7	9.4	7.8	10.7
[8] Miscellaneous manufactured articles	3.8	3.7	3.0	2.8	1.7	1.7	1.9
[9] Commodities and transactions, n.e.s.	1.3	2.1	2.5	4.0	3.5	2.9	3.7

Tab. 4. Merchandise structure of EU28 imports from Brazil in 2004–2015 (in %). Source: UNCTAD (2017).

Changes within the merchandise structure of imports were more noticeable in 2004–2015, but still they did not alter the substantial nature of imports. There was an increase in the case of: Crude materials, inedible, except fuels (2.3 p.p.), Chemicals and related products (2.2 p.p.), Mineral fuels, lubricants and related materials (1.0 p.p.), and to a lesser extent in Food and live animals and Animal and vegetable oils, fats and waxes. A relatively high rise occurred in Commodities and transactions, n.e.s. (2.5 p.p.). The declines of shares pertained to four categories of merchandise: Machinery and transport equipment (4.2 p.p.), Manufactured goods (2.1 p.p.), Miscellaneous manufactured articles (1.9 p.p.) and Beverages and tobacco (0.1 p.p.).

5. Main Factors Contributing to the Development of Bilateral EU-Brazil Trade Flows

A number of factors can be named that contributed to all the trends that occurred in the EU-Brazil trade in 2004–2015. Those can be classified as either more general – affecting global trade flows – or particular to the bilateral trade relations.

The general ones include the condition of the world economy or trends in world merchandise prices and the particular ones are bilateral trade policy, exchange rates and activities of the multinational corporations. What seems to have affected the EU-Brazil trade in 2004-2015 the most is the global economic situation and growth dynamics in the EU as well as Brazil. According to the IMF (see Figure 5), high economic growth in 2004-2007 boosted bilateral trade flows. Average worldwide GDP growth was 5.3%, in Brazil - 4.7% and in the European Union -3.0% (IMF, 2017). There was a slowdown in 2008 but the growth rate remained positive. Recession occurred in 2009, affecting predominantly developed countries and in particular the EU. Global product decreased by 0.1% in 2009, in Brazil GDP diminished also by 0.1% and in the EU by 4.3%. Signs of recovery appeared in 2010 and GDP stabilized in 2011–2015 reaching the 3.5% worldwide average. However, in the case of the EU, slight recovery in 2010–2011 was followed by another slowdown starting in 2012. Brazil's GDP, after a boost of 7.5% in 2010, also clearly decelerated in 2011-2014 and entered a recession in 2015, when GDP growth was only 3.8%.

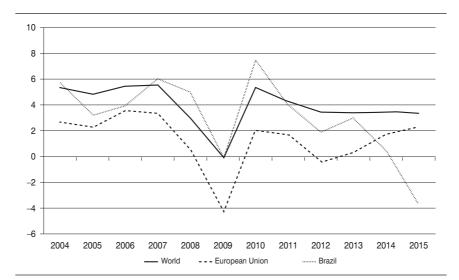


Fig. 5. Real GDP growth rate in 2004-2015 (in %). Source: IMF (2017).

The following indicators are usually considered as main factors of economic growth: investment, employment growth, labour productivity growth and total factor productivity growth. The data in Table 5 include basic macroeconomic indicators for the EU and Brazil divided into two main research periods: 1) 2004–2007 and 2) 2008–2015. Brazil experienced much higher growth rates in 2004–2007 surpassing the EU by 1.7 p.p. After 2008, both economies clearly slowed down. The EU growth rate in 2008–2015 was 0.5% and Brazil's was 2.3%. GDP growth in Brazil contributed to the improvement of per capita GDP which, in turn, was positively affecting domestic demand. Strong growth in formal employment and real wages, combined with initiatives such as the conditional cash transfer programme Bolsa Familia, has lifted millions of Brazilians from poverty and has created a growing lower-middle and middle class of consumers who can now afford imported manufactured goods. The recent economic growth has also fostered an upper class keen on high-end EU imports (GED, 2014, p. 13).

	2004–2007	2008–2015								
Gross	domestic product, constant prices	(percentage change)								
European Union	3.0	0.5								
Brazil	4.7	2.3								
Growth of	Growth of labour productivity per person employed (ercentage change)									
European Union	1.6	0.4								
Brazil	1.6	0.8								
Growth o	f total factor productivity (estimat	ted as a Tornqvist index)								
European Union	0.6	-0.5								
Brazil	1.4	-1.3								
	Employment growth (percenta	ge change)								
European Union	1.3	0.0								
Brazil	3.1	1.4								
Un	employment rate (percentage of t	otal labour force)								
European Union	8.4	9.5								
Brazil	10.3	8.1								
_	Investment rate (percentage	of GDP)								
European Union	22.2	20.3								
Brazil	18.2	20.9								

Tab. 5. Main macroeconomic indicators in the EU and Brazil in 2004–2015. Sources: own calculation based on: Gross domestic product, unemployment rate, investment rate: IMF (2017); Growth of labour productivity, growth of total factor productivity and employment growth: The Conference Board (2017).

The basic assumption of new 21st century theoretical models of foreign trade is higher labour productivity of exporting companies compared to those targeting solely the domestic market. Only the most productive enterprises can be engaged in exporting activity since it requires bearing additional cost to expand to foreign markets (Melitz, 2003). In 2004–2007, labour productivity growth in both economies was identical – 1.6%. After 2008, it declined to 0.4% in the EU and 0.8% in Brazil. Low labour productivity dynamics limits Brazil's export opportunities, and the competitive gap is widening. A comparative analysis of labour productivity levels in Brazil and developed countries, including the EU, is not favourable to Brazil. In 2015, Brazil's labour productivity was only 31% of French productivity, 32% in the case of the Netherlands, 34% – Germany and Italy, but also only 48% of labour productivity in Poland (The Conference Board, 2017).

Main factors of low labour productivity in Brazil were low capital expenditure per person employed and a low growth rate of total factor productivity (TFP) which is connected to slow technological advancement. In 2004–2007, TFP growth in Brazil was twice the EU rate, 1.4% and 0.6% respectively. In 2008–2015, the dynamics in both cases was negative, but the decline was much more pronounced in Brazil (-1.3%).

The situation on the Brazilian labour market improved significantly due to economic reforms and GDP growth. An increasing employment rate – in 2004–2007 by an average of 3.2% and in 2008–2015 by 1.4% – resulted in a decrease in unemployment rate from 10.3% to 8.1%. At the same time, in the EU lower GDP and employment growth resulted in an increase in the unemployment rate from 8.4% in 2004–2007 to 9.5% in 2008–2015.

For many years, low investment rate notably limited economic growth and labour productivity in Brazil. However, in recent years there has been an improvement in that respect which could lead to an increase in competitiveness on the global market. A certain difficulty stems from a low rate of infrastructural investment which has been on a downward trend recently (Paiva, 2010). It raises transport costs and thus is a hindrance to Brazil's export attractiveness (Limao and Venables, 2001). The Global Competitiveness Report 2016–2017 classified Brazil in the 114th position (out of 138) in terms of port infrastructure, 111th in terms of road infrastructure and in the 95th in terms of air transport infrastructure (WEF, 2016).

In the case of the EU, a lot is being said on the issue of the so-called secular stagnation. L. Summers claims that too high a savings rate and too low an investment rate are the main barriers to economic growth of developed countries (Summers, 2016). Since the link between investment and trade is very strong, the consequence is slowdown in trade flows. Declining investment results in diminishing imports demand in developed countries and that contributes to a fall in exports of machinery and intermediate goods (Freund, 2016; Mucha-Leszko, 2016).

It is clear that world prices had a significant impact on the EU-Brazil trade in 2004–2015. It mostly stemmed from deflationary tendencies in the case of natural resources and agricultural product prices thus affecting strongly EU imports from Brazil. Since 60% of incoming merchandise was in the form of food and live animals and crude materials and their prices were declining, so were imports from Brazil in value terms. This was particularly strong in 2012–2015 and coincided with the decline in prices. According to the WTO, the trend of decreasing export prices began in 2012–2013. Prices of food and beverages as well as agricultural raw materials decreased in 2012–2015 by 21% and in the case of minerals and non-ferrous metals by 45%, energy by 50% and petroleum by 47%.

	2011	2012	2013	2014	2015
Food and beverages	100	96	96	93	79
Agricultural raw materials	100	87	89	91	79
Minerals and non-ferrous metals	100	83	79	71	55
Energy	100	101	97	89	50
Crude petroleum	100	102	99	90	47

Tab. 6. Export prices of selected primary product groups in 2011–2015 (2011=100). Source: WTO (2016, p. 161).

Another factor affecting bilateral trade flows after 2004 was fluctuations of dollar/euro and Brazilian real/euro exchange rates. Due to the fact that the lion's share of Brazil's foreign trade is invoiced in US dollars and the share of the euro is less than 5%, the euro-dollar relation is much more significant. We can easily distinguish two main stages in terms of the euro-dollar exchange rate. Until June 2008, the tendency of the euro towards appreciation was predominant negatively affecting export competitiveness. Since July 2008, despite some fluctuation, the main trend has leaned towards depreciation of the euro to the dollar (Eurostat, 2017b).

The activity of multinational corporations is another meaningful factor of bilateral trade development. It can be easily revealed using basic indicators such as foreign direct investment flows or more complex ones describing economy's engagement in international fragmentation of production or trade within global value chains.

Within BRIC countries, Brazil is the top destination market for foreign direct investment by multinationals originating in the EU and one of the top total EU FDI destinations. EU investment in Brazil surpasses what has been invested in China. The share of Brazil in extra-EU investment stock increased from 4.7% to 6% in 2010–2014. In 2014, 31.6% of extra-EU FDI was destined for the Brazilian market. The top EU investors in Brazil were: Italy, Sweden, Germany and Luxembourg.

	2010	2011	2012	2013	2014
Flows	14.8	6.5	7.9	8.4	31.6
Stock	4.7	5.1	5.0	5.2	6.0

Tab. 7. Brazil's share in extra-EU FDI flows and stock in 2010–2015 (in %). Source: Eurostat (2017a).

A good method to show the connection between activity of multinationals and trade is by the degree of integration with global value chains. The main stumbling block in using this method is selection of right measures. The most popular one is the share of foreign value added in gross exports. Gross exports include domestic direct and indirect value added that is exported to other countries plus foreign value added which encompasses previously imported foreign components, parts and materials used in the production process.

In terms of Brazilian competitiveness, integration with global value chains and imports of intermediate goods as well as capital goods can significantly improve productivity (Grossman and Helpman, 1991; Amiti and Konings, 2007). The taxation of imported producer services under the CIDE tax, with effective tax rates between 40% and 50%, makes this particularly pronounced for inputs from producer services. Difficulties in obtaining tax credits for intermediate inputs in indirect taxes, such as the "physical credit" system, distort incentives towards excessive vertical integration of firms, and also stand in the way of stronger trade in intermediate inputs (OECD, 2015, p. 74). The export performance of Brazil's industry is particularly affected by tariffs on intermediate inputs. Information on intraand inter-sectoral input-output linkages of Brazilian industry can be used to illustrate the large potential of reductions in import tariffs for raising Brazilian industrial exports (Johansson and Olaberria, 2014).

Due to protectionist tendencies and fiscal burdens, the degree of Brazilian integration with global production networks is among the weakest in the world. According to OECD-WTO Trade in Value Added database, the share of foreign value added was only 11%, much smaller than in the case of other developing countries. In Argentina, it was 12%, in India – 22%, China – 33% and Mexico – 40% (OECD, 2017). Changes in Brazil's share of foreign value added were also not too favorable. It was between 11.5% and 13.5% in 2000–2007 and after 2008 it fell by 2 p.p. reaching 10–11% in 2009–2011. When it comes to links with the EU value chains, the share of EU components and parts in Brazilian foreign value added to gross exports was 26.3% in 2011 and it was on an upward trend.

Current trade relations between the EU and Mercosur are governed by an inter-regional Framework Cooperation Agreement which entered into force in 1999. In addition, the EU and individual Mercosur countries have bilateral Framework Cooperation Agreements, which also establish a structure for dealing with trade-related matters – agreement with Brazil was signed in 1992. The EU-Mercosur negotiations re-launched in May 2010. Ten negotiation rounds that took place mostly focused on rules (as opposed to market access commitments) before negotiations were paused in 2012. On 11th May 2016, the EU and Mercosur exchanged offers for the first time since the re-launch, followed by a negotiation round in October 2016.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Foreign value added share of gross exports	11.4	13.6	12.9	12.6	12.7	11.7	11.6	11.8	12.5	10.1	10.5	10.7
EU share in Brazil's FVA to gross exports	24.7	17.6	17.3	17.6	17.3	19.1	23.4	23.6	23.7	23.9	24.5	26.3

Tab. 8. Share of foreign value added in Brazil's gross exports and the EU share in Brazil's FVA in 2000–2011 (in %). Source: OECD (2017).

Apart from that, there were two agreements on bilateral cooperation signed between the EU and Brazil: 1) the Science and Technology Cooperation Agreement signed in 2005 and 2) EU-Brazil Strategic Partnership started in 2007 and resulting in a number of bilateral summits.

Nevertheless, Brazil is one of the countries that have resorted to a high number of potentially trade-restrictive measures according to the European Commission (Figure 6). In 2014, Brazil became a WTO member having initiated the highest number of anti-dumping investigations against EU exports. After a steady trend in the past years, and following the completion of the modernization process of the Brazilian TDI law, 7 new anti-dumping

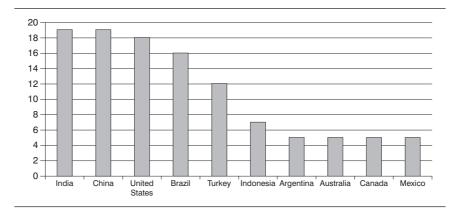


Fig. 6. TDI measures in force against the EU at the end of 2015. Source: European Commission (2016b).

investigations (compared to 3 in 2013) were initiated, involving a total of 10 EU members. Those investigations resulted in 8 new measures against EU exports in 2015 (all antidumping – AD) out of total 37 actions. Thus Brazil was the main contributor of new trade defence instruments in 2015 and the 4th in terms of measures in force as of the end of 2015 (European Commission, 2016b).

The Brazilian market is considered to be highly protected with an average applied customs duty of 13.5% (data for 2015). There was renewed resurgence of protectionism in Brazil in 2013–14. The average tariff is high compared to the EU (5.1% average applied MFN in 2015) but this is just the tip of the iceberg regarding new protectionist legislation. After the breakout of worldwide recession in 2008, the Brazilian government announced its intention to apply a series of defensive trade mechanisms (antidumping, safeguards and countervailing measures). This affected mainly automotive and electronic products and was based on new instruments depending on local content requirements - their legality under WTO rules was questioned by Brazil's trade partners. The most pronounced step came in September 2011, when the Brazilian government imposed a 30% increase in the IPI (industrialized products tax) for vehicles with less than 65% of their value added originating in Brazil, Mercosur countries or Mexico (Mendes, 2012). In response, the EU launched a WTO case against Brazil (DS472) on discriminatory tax advantages in the automotive, electronics and technology sectors, for which a panel was composed on 17th December 2014. In July 2014, Brazil also reintroduced the "Reintegra" programme which provides export subsidies in the form of tax advantages to domestic companies that export 50% or more of their production. The programme now covers most of Brazil's exports. Another example of Brazil's recent protectionist tendencies is the increase in the rates of social security taxes for imported goods in June 2015 with a higher increase for certain specific categories of products (e.g. pharmaceuticals, cosmetics and tyres) (European Commission, 2016a).

6. Conclusions

The analysis of bilateral EU-Brazil trade relations in 2004–2015 carried out in the paper allowed the following concluding remarks to be formulated.

Firstly, trade dynamics in the analysed years was varied. The best results were achieved in 2004–2008 and 2010–2011. In 2009, due to the global economic crisis, trade links were weakened. And from 2012 onwards, the value of bilateral trade was declining. The bulk of trade with Brazil was carried out with a limited number of largest EU countries such as Germany, France, Italy and the Netherlands. Trade balance was deficit, which was particularly strong in agricultural and raw materials trade.

Secondly, Brazil's role in the EU trade has been limited and on a downward trend. Only in the case of food and live animal imports, it was noticeable.

Thirdly, changes in the merchandise structure of bilateral exports and imports were slight and the trade composition remained fairly stable. Exports were monopolized by machinery and transport equipment and chemical products and imports consisted mostly of food and live animals and raw materials.

Fourthly, main factors contributing to EU exports to Brazil after 2004 were Brazilian government economic reforms aimed at fighting poverty and improving economic conditions. It resulted in the creation of middle class and increased demand for high-value imported goods from Europe. Economic stability was contributing to imports of capital goods by Brazilian corporations. The second factor positively affecting EU exports to Brazil was investment activity of European corporations and increasing production linkages. Main barriers to the development of exports stemmed from trade restrictions limiting access to the Brazilian market. A chance to overcome that lies within successful completion of EU-Mercosur agreement negotiations.

Fifthly, EU imports from Brazil were mainly shaped by world raw materials prices, the economic situation in the EU and Brazil as well as barriers of low-quality transport infrastructure in Brazil. The merchandise structure of Brazil's exports consisted mainly of agricultural products and raw materials and their prices have been deflationary in recent years. Thus the value of Brazilian exports to the EU has been declining. The negative tendencies were deepened by economic stagnation in the EU and low demand growth in 2009–2015 and on the other hand, a clear slowdown of economic growth in Brazil in 2014–2015. Brazil's export opportunities were also limited due to a large gap in labour productivity and low-quality port and road infrastructure.

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