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# The Belt and Road Initiative as a tool for promoting EU-China trade. Poland's case

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#### ABSTRACT

The aim of the study is to evaluate the potential role of the Belt and Road Initiative (BRI) for promoting EU – China trade, and especially Poland – China trade. We test two hypotheses: 1) Non-tariff barriers (NTBs), particularly related to railway transport, are significant for Poland – China trade, and 2) Poland – China trade fits railway transport well. Therefore, we start with a study of the significance of tariff and non-tariff barriers in mutual trade relations, including transport-related barriers. NTBs are mainly derived from the EU Market Access database, and as for transport-related barriers – the logistics performance index (LPI) is used. As the next step, we study the composition of bilateral trade in static and dynamic terms using the OECD TiVA database. In the light of the significant increase in NTBs on EU manufacturing products exported to China and the railway transport infrastructure performance in Poland, the BRI could become an effective tool for improving the business environment for EU exporters. By contrast, the BRI project is more suitable for China and the EU as a whole than for Poland in terms of commodity structure of bilateral trade.

Keywords: BRI, trade barriers, EU, Poland, China, trade in goods.

## 1. Context and methodology

As regards the EU – China relationship, trade in goods is the driving force in the Poland – China economic relations. Investment-related flows as well as cross-border e-commerce trade can cement the central role played by trade. Although it is almost 6 years since the BRI was launched, but it is still unclear whether Poland will be consigned to a 'corridor' status between China and Central and Western Europe (Schuhholz and Lehmacher, 2019).

The article seeks to identify factors influencing the BRI as a tool for promoting Poland's trade with China. The study concentrates on two main aspects. One is the nature of the main barriers affecting trade flows between the two countries. The other is the composition of Poland – China trade. Clearly, one should remember that the differences between the European and Chinese economic and political systems pose the greatest challenges to further relationships. On the other hand, the need for mutual cooperation has never been greater

than now, primarily considering environmental changes and rule-based multilateralism. The BRI project may fit well into this context by building climate-friendly infrastructure. In a joint report by Bruegel, Chatham House, China Center for International Economic Exchanges and the Chinese University of Hong Kong, the authors underline the potential of EU – China trade and investment linkages, which includes opportunities to build infrastructure in a climate-friendly way by combing China's Belt and Road Initiative and the EU's Juncker plan for strategic investments (more in: García-Herrero et al., 2017).

The development of trade in goods largely depends on trade barriers applied to bilateral trade. Therefore, we start with a study of the significance of tariff and non-tariff barriers in mutual EU – China trade relations, including transport-related barriers. Regarding NTBs, those are mainly derived from the EU Market Access database, and as for transport-related barriers – the logistics performance index (LPI) is used. One can expect that non-tariff barriers

are relatively more significant than TBs, even though there are no formal bilateral trade arrangements between the EU and China.

In this context, it is interesting to know how much Poland – China trade fits railway transport. The premise here is that railway connections are quicker but costlier than sea shipping, being more suitable for perishable or high value goods. Therefore, as the next step, we study the composition of bilateral trade in static and dynamic terms. We expect that the BRI could become an effective tool for reducing barriers to Poland – China trade.

The BRI initiative includes many corridors. According to a Chinese government document on the initiative, the project in its part devoted to the China – Europe corridor envisages the construction of land and sea connections, including the strengthening of 'China – Europe freight trains' (NDRC, 2015). In this analysis, we only consider the railway connection.

The economic effects of the BRI has been explored by many researchers since its official launch by President Xi Jinping in 2013 which is largely due to an immense geographical scope of this project and a large number of countries involved in it. For predicting trade effects of the BRI on trade flows the Gravity model has been widely used. This theoretical framework bases on Jan Tinbergen's description of the patterns of trade between countries as "proportional to the gross national products of those countries and inversely proportional to the distance between them" (Chaney, 2018). The latter including such variables as trade barriers (Hagemejer and Śledziewska, 2017). In 2018 OECD presented preliminary evidence of BRI effects on global trade (OECD, 2018). By using a Poisson pseudo-maximum likelihood estimator proposed by Santos Silva and Tenreyro (2006) to avoid biased estimates in the presence of heteroskedasticity, and consider cases where the dependent variable is equal to zero, they assessed that trade creation is less present in BRI-origin countries than in OECD-origin countries and that is related to weaker connectivity within the BRI (OECD, 2018). Poland was also included in the study as one of the BRI-participating economies, for it has a cooperation agreement with China. Two findings of this research concerning economic linkages between China and BRI-participating economies are worth being mentioned here, namely China exports and investments in the construction sector. Poland ranks first among EU BRI-participating economies (all EU-15 countries except Cyprus and Malta) as far as average Chinese exports for 1993-2017 are concerned, which is consistent with gravity theories of trade. Cumulative China investments in the construction sector from 2005 in Poland are ranked third in the group, after Hungary and Romania, even if Poland had a better average credit score over the period 2005-2017 (OECD, 2018).

## 2. Impediments to Poland - China trade

## 2.1. Tariff barriers

The importance of the BRI project to Poland - China trade is related to how much room for improvement there is when it comes to trade barriers. There are two main groups of direct barriers, i.e. tariff and non-tariff barriers (TBs and NTBs respectively). There are also impediments indirectly affecting trade in goods, related to barriers to trade in services. Some services are pivotal to trade in goods; first of all, transport and distribution supply chains and, to a lesser extent, market bridging and supporting services. We use the terms of two out of the four clusters of services identified by the OECD in its report on services trade policies. For more information see (OECD, 2017). Firstly, let us consider tariff barriers.

Table 1 shows the level of tariffs applied in EU-China trade in 2016. The average tariffs imposed by the European Union on its WTO partners amounted to 10.8% for agricultural and 4.2% for non-agricultural products. The level of duties faced by EU exporters on the Chinese market was higher by 5 and 4.8 pps respectively. These differences change when tariffs are taken at their trade-weighted value, and they are less pronounced in agricultural goods trade.

Table 1: Tariffs applied to EU – China merchandise trade in 2016, percentage

Specification	Agricultui	al products	Non-agricultural products		
	simple	weighted	simple	weighted	
EU imports	10.8	8.7	4.2	2.8	
EU exports	15.8	12.5	9.0	8.2	

Note: EU imports: Simple average MFN and Trade-weighted average. EU exports: MFN average of traded tariff lines in bilateral exchange Source: based on WTO, Tariff profiles, accessed November 2018.

The analysis of trends in tariff barriers between the EU and China over the last 10 years presented in Table 2 leads to the conclusion that only flows in agricultural products showed quite a large decrease by 4.3 pps in simple tariffs on EU imports and by 4.2 pps in weighted tariffs on Chinese imports. Tariffs on non-agricultural products remained roughly the same

but one should bear in mind their already relatively low level.

Therefore, reductions in tariffs are still quite an important potential source of developing trade between Poland and China, especially with regard to agricultural products and Polish exports.

Table 2: Changes in tariffs applied to EU - China merchandise trade between 2006 and 2016 (pp)

Consideration	Agricultur	al products	Non-agricultural products		
Specification	simple	weighted	simple	weighted	
EU imports	4.3	3.6	-0.3	-0.1	
EU exports	0.6	4.2	0	0*	

Note: \* There is quite a substantial difference in trade-weighted levels of duties faced by EU exporters of non-agricultural products between the Tariff profiles and the WTO database. In the former, it is larger by 3.6 pps.

Source: based on the WTO database, http://data.wto.org, accessed: November 2018.

## 2.2. Non-tariff barriers

China's import restrictions on agricultural products also include sanitary and phytosanitary measures. In mid-January 2019, with the number of 13 out of 27, they constituted the largest group of barriers limiting access to the Chinese market for EU exporters (EC, Market Access database, accessed January 2019). Other trade-restrictive measures can be found in pharmaceuticals, medical devices, cosmetics and certain network industries. They take various forms.

As a review of the priority barriers to EU exports to China shows that problems with IPR enforcement belong to the oldest ones. Priority barriers are identified by the European Commission according to the conclusions of the Council of the European Union of 8 December 2008. Despite the legal changes introduced by China, this country remained the EU's biggest challenge in the area of intellectual property rights. According to the annual EC statistics, in 2017, 73% of the number of all suspected IPR-infringing goods seized at EU borders arrived from China. Interestingly, over the years (2014–2017), railway transport remained the least significant means of transport in terms of the number and value of goods detained (EC, 2018).

As can be seen from the Table, other 'old' Chinese restrictions include non-transparent, burdensome and costly certification and licensing procedures, limitations on corporate forms and ownership ceilings as well as on access to public tenders. Among the Chinese trade barriers recently reported to the Commission by EU companies one can find measures introduced by China under cybersecurity legislation. Generally, they exclude foreign

companies operating in certain industries from information systems or put them in a less competitive position, especially by obliging them to disclose sensitive information. The excessive reach of Chinese measures can be seen not only in the Cybersecurity Law. The scope of draft Cryptography Law covers products providing encryption as well as those using it; therefore, most ICT products fall into the categories.

A review of the measures listed above as regards the value that can be added in these sectors leads to the conclusion that EU companies are mostly preoccupied with Chinese barriers on high value-added products and that, with a few exceptions, they have been introduced since the outbreak of the financial and economic crisis in the past ten years. One can also conclude that, even though China joined the WTO in 2001, Chinese requirements vis-à-vis foreign enterprises considerably deviate from the international standards and global practices. In the light of the EU annual Report on Trade and Investment Barriers 2018, China displayed the largest increase in new barriers in 2017 (EC, 2017). In its report, the EC considers the prospects for the introduction by China of new barriers to be significant. Those new barriers announced by China would apply to low risk food and wine products. According to the EC, the impact of market access barriers introduced by China in 2017, excluding restrictions that are difficult to quantify (e.g. services, horizontal), accounted for more than one-third of the overall effect in industrial sectors and roughly half of the value of trade flows affected in the agricultural sector. Given that China remains one of the EU main trade partners, its trade policy has a significant impact on EU exports.

## 2.3. Logistic barriers

In order to measure Polish and Chinese trade logistic performance, the World Bank Logistics Performance Index (LPI) will be used. The drivers of this performance in both countries will be compared to the LPI top performer.

In a nutshell, the International LPI shows how easy it is to bring goods into a country. Basing on survey feedback from export companies, it measures six aspects of trade logistic performance (Arvis et al., 2014): 1) the efficiency of the clearance process by border agencies, including customs; 2) the quality of trade and transport infrastructure (including railroads); 3) the ease of arranging competitively priced international shipments; 4) the competence of logistic service providers; 5) the ability to track and trace consignments; 6) timeliness, i.e. the frequency with which shipments reach consignees within scheduled or expected delivery times. All components are rated from 1 (negative: very low / very difficult / hardly ever) to 5 (positive: very high / very easy / nearly always).

In terms of the LPI score, Germany was the top LPI performer in 2018 (see Figure 1). China performed slightly better than Poland and was ranked 26th, two places above Poland (World Bank, 2018).

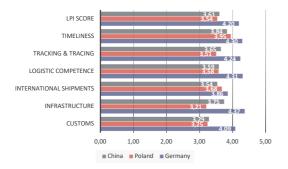


Figure 1. Performance on trade logistics in Poland, China and Germany in 2018

Source: based on the World Bank International LPI database, https://lpi.worldbank.org/international/global, accessed February 2019

In the case of China, the efficiency of the clearance process by border agencies was the weakest element, with regard to both the other categories and the gap to the leader. The quality of trade and transport infrastructure was ranked higher, the second best after timeliness. Unlike China and especially Germany, Poland scored poorly in this category, showing the most room for improvement in this field. Like China, Poland achieved the best result in the frequency with which shipments reach consignees within scheduled delivery times, scoring better than China. Poland also scored relatively

well in the ease of arranging competitively priced shipments, enjoying in this category the smallest gap to Germany.

For a more balanced picture, let us use a weighted aggregate score based on the four latest LPI ratings. The aggregated 2012-2018 results illustrated in Figure 2 show that the average LPI scores achieved by China and Poland were similar and amounted to 3.60 and 3.50 respectively. A comparison of the two graphs leads to the conclusion that the observations made with regard to LPI results for 2018 are also valid for the composite results. It may be concluded again that, generally, there is no significant difference between China and Poland. The largest gap to the disadvantage of Poland concerns the quality of trade and transport infrastructure.

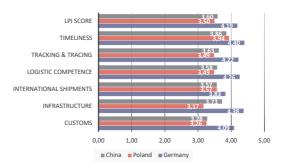


Figure 2. Performance on trade logistics in Poland, China and Germany, aggregated results 2012–2018

Source: based on the World Bank International LPI database, https://lpi.worldbank.org/international/aggregated-ranking, accessed February 2019

Poland's scores have a rather narrow confidence interval, which facilitates analysis over time. Trends for the individual components of the LPI in 2007–2018 are presented in Figure 3. The most significant improvements occurred over the first three years and the scores rose over the following time interval for customs, infrastructure, international shipments and logistics quality, although the line became flatter. The scores for all components also improved over the last two years, except customs.

The progress made by Poland with regard to logistic performance resulted in a change in the country's distance to the best performer. Over the period, Poland reduced the gap from 36% in 2007 to 21% in 2018. Despite the continuous improvement in the perception by respondents of Poland's infrastructure (with the exception of 2014), this component has always been ranked lowest.

Poland's 2018 LPI results for the logistics environment confirm that assessment. As shown in Table 3, the quality of railway transport infrastructure and services are evaluated in Poland at the lowest level compared with other modes of transport. The percentage of dissatisfied respondents is higher in Poland than in China and Germany.

It is worth noting, though, that the LPI and its indicators highlight that the physical movement of goods is supported by a broad range of servi-

ces involving activities beyond transportation. The World Bank Connecting to Compete report 2018, looking in detail at the logistics environment, revealed that 'reliability is typically much more important than speed' (Arvis et al., 2018).

The importance of opened markets free of administrative and logistic barriers, in particular due to such projects as the BRI, depends on how close the trade links are between Poland and China and to what extent the project fits into the commodity structure of these ties.

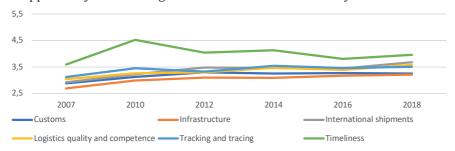


Figure 3. Logistic performance by component in Poland, 2007–2018

Source: based on the World Bank International LPI database,
https://lpi.worldbank.org/international/scorecard/line/254/C/POL/2018#chartarea, accessed February 2019

Table 3: Selected domestic LPI results for Poland, China and Germany by mode of transport, 2018, % of respondents

Mode of transport	Level of fees and charges high/very high		Quality of infrastructure low/very low			Quality of services high/very high			
	PL	CN	DE	PL	CN	DE	PL	CN	DE
Maritime/ports	0	33	47	0	0	0	100	58	95
Air/airports	50	8	58	33	0	0	50	71	95
Road/s	0	9	27	0	18	14	67	58	95
Rail	0	33	25	50	9	23	0	42	62

Source: based on the World Bank Domestic LPI database, https://lpi.worldbank.org/domestic/environment\_institutions/2018/C/POL#chartarea, accessed February 2019.

#### 3. Poland - China trade

In compliance with Article 206 of the Treaty on the Functioning of the European Union, Poland is a member of the EU customs union. Therefore, Poland shares not only common tariffs and non-tariff barriers with other EU Member States but also its territory. Once entered into the EU market, imports enjoy free movement within the EU. Therefore, we will take a look at both Poland – China and EU – China trade flows. Yet, before examining that, let us consider whether and to what degree the process of deindustrialisation can be observed in the analysed economies.

## 3.1. Manufacturing in Poland

Figure 4 below shows the gross value added (GVA) of manufacturing in Poland compared to China and the EU. It turns out that the decline in manufacturing did not apply to Poland. In fact,

over the last ten years, the share of manufacturing in Poland's economy slightly grew by 1 pp, compared with a decrease by 1 pp in the EU and 3 pps in China.

As Figure 5 shows, the growth rate of Polish manufacturing exports kept pace with the increase in total exports and, as a consequence, the share of manufacturing in Poland's total exports remained quite stable, fluctuating slightly between 61% and 63% over the last years. Between 2005 and 2015, the value of manufacturing exports rose by 115%, 3 pps above the growth rate of exports.

In the same period, Polish goods sent to the Chinese market experienced more dynamic changes in terms of value and proportion between manufacturing and total exports. In 2015, the value of total and manufacturing exports to China was around six times higher than a decade earlier, whereas manufacturing represented 67% of total exports.

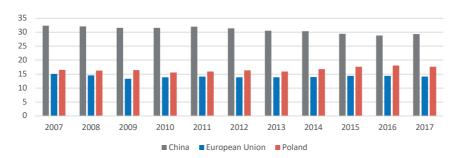


Figure 4. GVA of manufacturing in Poland, China and the EU, % of GDP, 2007–2017

Source: based on the World Bank data, https://data.worldbank.org/indicator/NVIND.MANEZS?end=2015&locations=EU-PL-CN&name\_desc=false&start=2000&view=chart, accessed February 2019

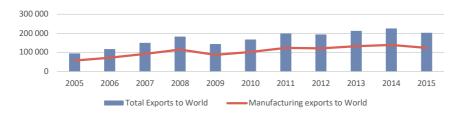


Figure 5. Poland's total and manufacturing exports to the world market, 2005–2015, USD million Source: Based on OECD data, https://stats.oecd.org/Index.aspx?DataSetCode=TIVA\_2018\_C1#, accessed February 2019

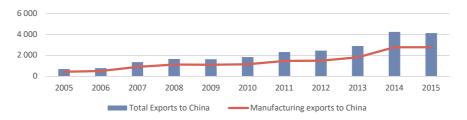


Figure 6. Poland's total and manufacturing exports to China, 2005–2015, USD million Source: based on OECD data, https://stats.oecd.org/Index.aspx?DataSetCode=TIVA\_2018\_C1#, accessed February 2019

## 3.2. Development and structure

The EU and China are each other's secondlargest market for exports and imports, after the US. Table 4 shows that despite the permanent negative balance for the EU, the value of its gross exports to China rose faster than the value of gross imports with a growth rate higher by 77 pps at the end of the period covered. That was mainly due to the large reduction in gross imports in 2009. The drop in exports in terms of annual rate was half as much as in gross imports (10% against 20%).

The EU imports of intermediate products suffered the most from the economic crisis even if their value was below the value of final products imported by the EU from China between 2007 and 2014. On the EU export side, the value of intermediate goods and services exceeded the value of final products throughout the reference period.

Table 4: EU - China bilateral trade, 2006 - 2015, USD million

Specification	2006	2009	2012	2015
EU EXP	101,993.1	142,537.1	260,571.3	297,189.2
EU IMP	164,272.7	220,670.1	315,152.6	352,184.6

Source: Council of the European Union of 8 December 2008.

Manufacturing goods dominate overwhelmingly the EU and Polish merchandise trade with China (see Table 5). The share of agricultural goods is most noticeable in exports, especially in the whole Union, with a positive balance there. But even there they accounted for 2% of EU exports.

Figure 7 shows that this positive balance

evolved steadily from 2011, mainly due to the increase in EU agricultural exports. EU exports of agricultural goods to China were characterised by the highest rate of growth over the last decade, comparing to EU imports of agricultural goods from China as well as to EU – China flows in manufacturing products.

Table 4: EU's and Poland's merchandise trade with China in 2015, USD million

Specification	Exp	oorts	Imports		
	Agricultural	Manufacturing	Agricultural	Manufacturing	
EU	4,138.4	208,150.9	2,125.5	311,732.1	
Poland	34.9	2,775.7	77.1	18,321.8	

Source: Council of the European Union of 8 December 2008.

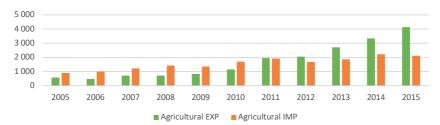


Figure 7. EU trade with China in agricultural goods, 2005 – 2015, USD million Source: Council of the European Union of 8 December 2008

As shown in Figure 8, the latter also grew more rapidly on their export side, although at a more moderate rate. The EU – China trade in manufacturing products was also more affected by the economic crisis in 2009, especially EU manufacturing imports. It can hardly be explained by the extent of offshoring since in 2015 intermediate products represented about 50% of EU manufacturing imports, which was below the levels observed in agricultural goods but also in

EU exports. Nevertheless, the deficit steadily narrowed compared to all trade in manufacturing goods, with the exception of 2007 and 2008.

The development of Poland – China trade in agricultural goods was less stable compared to EU – China trade and displayed a deficit over the whole period, although its size diminished from 2013 in relation to total trade flows (see Figure 9).

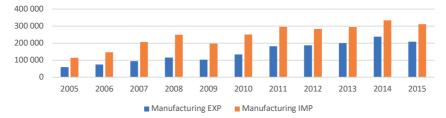


Figure 8. EU trade with China in manufacturing goods, 2005 – 2015, USD million Source: Council of the European Union of 8 December 2008

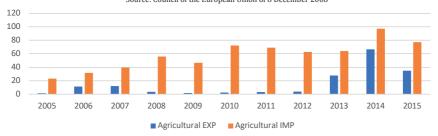


Figure 9. Polish trade with China in agricultural goods, 2005 – 2015, USD million Source: as in Table 4

As for the EU as a whole, Poland had a deficit in bilateral trade with China in manufacturing products throughout the period under examination. However, Poland's deficit was

larger when compared to the trade value. The deficit to exports and imports ratio was more than three times higher in Poland and amounted to 74% in 2015.

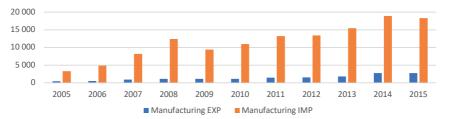


Figure 10. Polish trade with China in manufacturing goods, 2005 – 2015, USD million
Source: Council of the European Union of 8 December 2008

Figure 11 shows that despite a massive increase in the value of high-technology exports of Poland of nearly seven times between 2004 and 2017, the most substantial change was related to the strong, long-term upward trend in

Chinese high-technology exports with a growth rate of 200%. The EU high-technology exports growth was less than one-ninth of it. As a result, the EU and Chinese flows became closer to each other in terms of value.

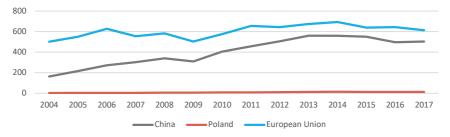


Figure 11. High-technology exports of Poland, China and the EU, 2004 – 2017, USD billion

Source: based on the World Bank World Development Indicators, https://data.worldbank.org/indicator/TX.VAL.TECH.CD, accessed February 2019

The share of high and medium-high technology sectors remained stable in the EU over the period under examination (see Figure 12). These sectors represented a large part of EU exports to China, reaching more than three-fourths of total value each year. With the excep-

tion of 2009 and 2015, the value of EU exports of high and medium-high technology products to China increased steadily in absolute terms from 2005. As a result, EU exports rose in value by 264% between 2005 and 2015.

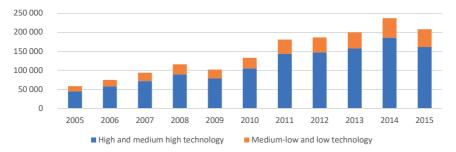


Figure 12. EU exports of high and medium-high technology products to China, 2005 - 2015, USD million

Notes: The division of manufacturing sectors into two groups was based on the Eurostat high-tech classification of manufacturing industries (https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:High-tech\_classification\_of\_manufacturing\_industries]. The group of high and medium-high technology sectors includes: Computers, electronic and electrical equipment, Chemicals and non-metallic mineral products; Machinery and equipment, ne.c.; Transport equipment. Other manufacturing sectors classified under the 'Medium-low and low technology' name are as follows: Food products, beverages and tobacco; Textiles, wearing apparel, leather and related products; Wood and paper products; printing; Basic metals and fabricated metal products; Other manufacturing; repair and installation of machinery and equipment.

Source: Council of the European Union of 8 December 2008; Author's calculations; accessed March 2019

A more detailed analysis of the structure of EU exports of high technology products to China shows that exports of chemicals and pharmaceutical products increased most over that period with a growth rate of 370% (see Figure 13).

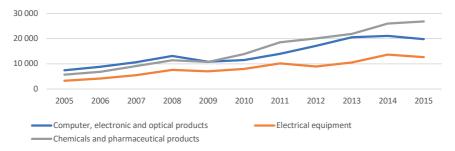


Figure 13. EU exports of high technology products to China, 2005 – 2015, USD million Source: Council of the European Union of 8 December 2008

An analysis of the EU import side shows that the share of high and medium-high technology products was 10-12 pps lower in EU imports but, even then, it amounted to 60-67% and showed more visible changes over the last de-

cade (Figure 14). Nevertheless, one can hardly see any clear pattern of those changes. The growth rate was lower in EU imports than in EU exports by 100% between 2005 – 2015.

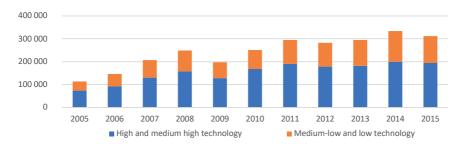


Figure 14. EU imports of high and medium-high technology products from China, 2005 – 2015, USD million

Source: Council of the European Union of 8 December 2008

The EU displayed a negative balance in trade in high and medium-high technology products with China from 2005 (Figure 15). The ratio be-

tween the debt and the value of trade dropped to a single-digit level from 2012, reaching its lowest level of 3.5% two years later.

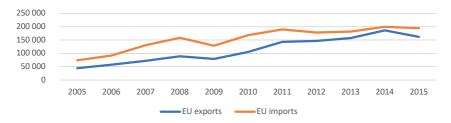


Figure 15. EU bilateral trade in high and medium-high technology products with China, 2050 – 2015, USD million Source: Council of the European Union of 8 December 2008

The trends in Poland's exports to China differed in terms of share of high and medium-high technology products in the total value of Polish sales on the Chinese market (see Figure 16). It amounted to 60% in 2015 and was 18 pps lower than the level observed in the whole Union. It also fluctuated strongly througho-

ut the period covered. Nevertheless, the value of Polish exports of high and medium-high technology products to China grew steadily in absolute terms from 2015 except for 2012, exceeding the growth rate for the EU at 552% against 264%.

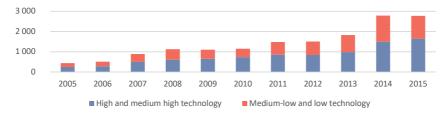


Figure 16. Polish exports of high and medium-high technology products to China, 2005 – 2015, USD million

Source: Council of the European Union of 8 December 2008

A different sector, namely electronic equipment, was a frontrunner in terms of growth in Poland (Figure 17). It increased 14 times between 2005 and 2015, outpacing computer,

electronic and optical products but, first of all, chemicals and pharmaceutical products. As a result, it took the leading position over the latter.

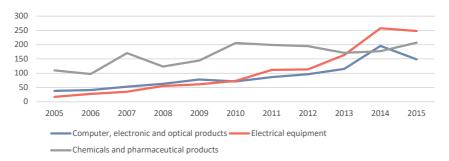


Figure 17. Polish exports of high technology products to China, 2005 – 2015, USD million

Source: Council of the European Union of 8 December 2008

The share of high and medium-high technology products in Polish imports from China amounted to 70%, thus exceeding the corresponding ratio for exports by 10 pps in 2015 (Figure 18). As with EU exports, there is no clear pattern in the way it changed over the whole

period under analysis. Similarly, to the EU, the growth rate in Polish imports of high and medium-high technology products from China was lower than in exports, despite reaching a high level of 433%.

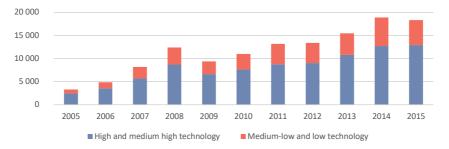


Figure 18. Polish imports of high and medium-high technology products from China, 2005 – 2015, USD million Source: Council of the European Union of 8 December 2008

Transport equipment was a growth driver for EU and Polish exports to China. Classified as medium-high technology, that sector grew in the EU and Poland by, respectively, 578% and 2875% between 2005 and 2015. In the EU, a strong increase concerned motor vehicles, trailers and semi-trailers with a growth rate of 768%.

As the EU, Poland recorded a negative balance with China in high and medium-high technology products trade (Figure 19). However, the value of trade rose steadily, with one exception in 2009. The ratio between the debt and the value of trade remained at a high level, mostly above 80%. Its lowest level of 77% was recorded in 2015

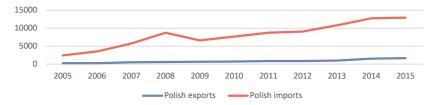


Figure 19. Polish bilateral trade in high and medium-high technology products with China, 2005 – 2015, USD million

Source: Council of the European Union of 8 December 2008

#### 4. Conclusions

The study aimed to evaluate the role of the Belt and Road Initiative for EU – China trade relations, and especially for Polish trade. Two main aspects were analysed. Firstly, we studied the nature of the main barriers affecting mutual trade. Secondly, the composition of Poland – China trade was examined.

The analysis indicates that tariff and non-tariff barriers remain an important determinant of future development of trade between Poland and China. This conclusion especially concerns Polish exports, as duties imposed on the Chinese market are 5 pps higher. Moreover, over the last decade the level of tariffs on manufacturing products remained the same. In addition, China introduced non-tariff restrictive measures targeting products in which the EU displays its export specialisation vis-à-vis its Chinese partner. The trade measures introduced by China only in 2017, excluding restrictions on services and of horizontal nature, accounted for more than one-third of the overall effect in industrial sectors and roughly half of the value of trade flows affected in the agricultural sector. The new trade obstacles can be found in particular in pharmaceuticals, medical devices, cosmetics and some network industries. Among those measures, one should mention the requirement to disclose sensitive information introduced by China under cybersecurity legislation. It covers not only products providing encryption but also products using it. Therefore, most ICT products fall into those categories.

In the light of the above findings, especially the significant increase in non-tariff barriers on EU manufacturing products exported to China, priority should be given to efforts to reduce trade barriers. The BRI could become an effective tool for improving the business environment for EU exporters. Although it would not change the trade measures applied by the two economic partners directly, negotiations and other forms of cooperation accompanying the project could influence commercial policy indirectly.

As railway transport remains the means of transport being the least affected by the problem of the infringement of intellectual property rights in terms of the number and value of goods detained, the BRI might also have a positive impact in that area. The significance of that is all the greater because IPR protection and enforcement in China are not effective. At the same time, China remains the EU's biggest challenge as almost three-fourths of all suspected IPR-infringing goods seized at EU borders arrive from China.

While the BRI project can impact Chinese administrative measures indirectly by easing the trade negotiations between the EU and China, it might directly reduce transport barriers by improving connectivity. This analysis shows that the most room for improvement in transport infrastructure exists in Poland. The country scored poorly in this category not only when compared to the best performing Germany but also to China.

The importance of the BRI as a tool of improving transport infrastructure in Poland is even greater since one can expect that the role of EU cohesion funds that mostly contributed to the improvements that occurred in Polish transport infrastructure will diminish in the next EU financial perspective. As the analysis shows, despite the continuous improvement in the perception by respondents of Poland's infrastructure (with the exception of 2014), this

logistic component has always been ranked lowest. From that point of view, the BRI project should be seen as a driver for reducing logistic barriers to trade, especially given the fact that, according to the LPI survey, within this category rail infrastructure is the element to elicit general dissatisfaction. The quality of railway transport infrastructure and services are evaluated in Poland at the lowest level compared with other modes of transport. The percentage of dissatisfied respondents is higher in Poland than in China and Germany.

By contrast, the BRI project is more suitable for China and the EU as a whole than for Poland in terms of commodity structure of bilateral trade. The share of high and medium-high technology products in the total value of Polish sales on the Chinese market amounted to 60%

in 2015, being 18 pps lower than the level observed in the whole Union and 10 pps lower in Polish imports. Poland also recorded a negative balance with China in trade in high and medium-high technology products. The ratio between the debt and the value of trade remained at a high double-digit level, mostly above 80%. On the other hand, the development of Polish exports of high and medium-high technology products to China is more dynamic than in the EU (552% against 264%) and China (433%). As far as perishable agricultural products are concerned, they represent a small proportion of Poland - China trade. Further analysis should take into account the measurement of bilateral trade in value added terms.

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