

Poland's Extra-EU Trade After the EU Accession

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Abstract

When Poland joined the European Union (EU) on May 1, 2004, it transferred its national competences in the field of external trade policy to the EU institutions. As a result, on the one hand, as of that date Poland may neither change duties on goods imported from outside of the EU, nor may it conclude trade agreements with third countries. Nowadays, Poland's intra-EU trade has reached ca. 65-75% of its total foreign trade at the expense of the exchange with the rest of the world. Although the aforementioned numbers are high, they have not changed substantially since Poland's accession to the EU. However, due to the legal circumstances and limited national competences in the shaping of external trade relations, one could expect that geographic and product structure of Polish foreign trade havr changed and reshuffled over the last few years. Therefore, the article aims to identify changes in both directions and products in Poland's extra-EU imports and exports since the EU accession. To this end, we analysed changes in the value of Poland's foreign trade with partners from outside of the EU as well as some indices that show the concentration of Poland's trade and similarities or differences to the EU average. In order to get a closer look at Poland's position, we compared the aforementioned indices to those reported for other Visegrád Group (V4) countries. We examined changes that took place in the period of 2004-2019 and have identified trends in Poland's extra-EU trade that provide evidence of its greater similarity to the EU average, an effect of EU integration and higher diversification in the mix of partners from outside the EU.

Keywords

Poland, Extra-EU trade, European Union, Common Commercial Policy, Foreign Trade Policy

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Introduction

European Union (EU) membership requires a potential Member State to abide by specific goals, principles, and legal rules stemming from primary (treaties) and secondary (directives, regulations, and decisions of EU institutions) law. As a consequence, when Poland joined the European Union on May 1, 2004, it transferred its national competences in the field of external trade policy to the EU institutions. As a result, on the one hand, as of that date, Poland may neither change duties on goods imported from outside of the EU, nor may it conclude trade agreements with third countries. At the same time, Polish interests shared and approved at the EU level can be more effectively secured through both EU trade agreements and EU trade instruments as the EU is the most powerful regional integration organisation in the world. Moreover, Poland, as an EU Member State, can benefit from free trade within the EU internal market, which has clearly enhanced the country's economic integration with other partners in the grouping. This specific dependence and the need for having intra-Community trade between the Member States became especially visible during the first wave of the COVID-19 pandemic in 2020 when the free movement of goods within the European Single Market was put at risk (Ambroziak, 2021).

Nowadays, Poland's intra-EU trade has reached ca. 65-75% of its total foreign trade at the expense of the exchange with the rest of the world. Although the Poland's overall foreign trade increased substantially, the aforementioned proportions have not changed since 2004. This means that the value of Poland's extra-EU trade increased proportionately to Poland's intra-EU trade. However, due to the aforementioned legal circumstances and limited national competences in the shaping of external trade relations, one could expect that geographic and product structure of Polish foreign trade changed and reshuffled in the last few years. Therefore, the article aims to identify changes in both directions and products in Poland's extra-EU imports and exports since the EU accession as well as trends compared to the EU as a whole, in order to find out if trade-related consequences of Poland's relations with third countries follow those of the EU.

To this end, we presented, first, the main limits, obligations, opportunities, and challenges for Polish foreign trade policy since accession to the EU, deriving from legal framework and the international requirements of the EU. Then, we analysed changes in the value of Poland's foreign trade with partners from outside of the EU in terms of exports to and imports from third-party countries. Next, some indices showing concentration and similarities of Poland's trade to the EU average are presented to identify tendencies observed since joining the EU. In order to get a closer look at Poland's position, we compared the aforementioned indices to those for other Visegrád Group (V4) countries, whose starting points of EU membership were similar. Joining the EU together in 2004, they face similar external factors because they are located in this same part of Europe, and they should represent similar foreign trade and investment opportunities as they are viewed as one group of the Central European Countries. We examined changes in the period 2004-2019 based on the Eurostat Database. Data for products were aggregated for the sectors of economy or for 21 sections of the Combined Nomenclature (CN) while top 35 external EU trade partners, whose share in the extra-EU trade is the highest, were selected to examine geographic directions of trade. Finally, we draw conclusions about

consequences of recent and possible future developments in Polish foreign trade with third-party countries.

Limits and Challenges for Poland's Foreign Trade Policy as the EU Member State

According to one of the so-called Copenhagen criteria related to Poland's accession to the EU, the EU membership presupposes the candidate's ability to take on the obligations of membership, including the adherence to the aims of political, economic, and monetary union (European Council, 1993). That means that all the EU principles and rules binding on the day of accession, as well as those pertaining to the areas of the EU exclusive competence, have to be approved unconditionally. One of them is the Common Commercial Policy adopted as part of the exclusive competence of the Union (art. 3 of the Treaty on the Functioning of the European Union - TFUE). That triggered the need to transfer precisely specified competences from the national to the EU level. Such a transfer took place based on the Accession Treaty (2003) and Art. 90 of the Constitution of the Republic of Poland (1997), which stipulates that "the Republic of Poland may, by virtue of international agreements, delegate to an international organization or international institution the competence of organs of State authority in relation to certain matters." Hence, from the legal viewpoint, since 1 May 2004, Poland can no longer pursue an autonomous trade policy vis-à-vis third-party countries (from outside EU).

Pursuant to Art. 207 TFUE, the common commercial policy shall be based on uniform principles, particularly with regard to changes in tariff rates, the conclusion of tariff and trade agreements relating to trade in goods and services, and the commercial aspects of intellectual property, foreign direct investment, the achievement of uniformity in measures of liberalisation, export policy, and measures to protect trade such as those to be taken in the event of dumping or subsidies. Thus, from the day of EU accession, Poland has been bound with Council, European Parliament, and Commission regulations, which are directly binding upon the Member States and provide the basis for the implementation of the Common Commercial Policy instruments as well as with trade agreements concluded by the EU with third-party countries. In this latter case, for trade agreements that provide for the creation of a free trade area or a customs union, decisions on the negotiating mandate and the conclusion of the agreement are taken by the Council acting by a qualified majority.

Hence, there might be cases when the decision on both the adoption of a legal act concerning trade instruments and the conclusion of a trade agreement with regard to which a Member State expressed its misgivings will nevertheless enter into force. Based on Art. 238 TFEU, a qualified majority shall be defined as at least 55 % of the members of the Council representing the participating Member States, comprising at least 65 % of the population of these States (the current share of the population of Poland in the total EU-27 population is 8.5%; while for all the V4 countries, it is 14.2%). The requirement of unanimity has been maintained for a narrow group of economic relations between the EU and third-party countries (Art. 131 TFUE) in the field of: cultural and audio-visual services, where these agreements risk prejudicing the Union's cultural and linguistic diversity; as well as in the field of trade in social, education, and health services, where these agreements risk seriously disturbing the national organisation of such services and undermine the responsibility of Member States for delivering them.

The solutions outlined above basically eliminate the possibility to pursue an autonomous trade policy (the possibilities are somewhat greater with regard to exports outside the EU). However, attention needs to be paid to two issues: Poland's involvement in EU decision-making and the position of Poland as an EU Member State on the international stage. In the first case, through its EU membership, Poland may impact the works of EU institutions, starting with the European Council, which brings together heads of states and governments and provides political impulse for the advancement of European integration and external relations, including economic relations with third-party countries through the European Commission, working with experts from the Member States, the Council, and its preparatory bodies consisting of representatives of all the EU Member States up to the European Parliament, whose members are directly elected and whose role has been clearly gaining in prominence in recent years. Given the above, there is much room for a Member State to put forward its own, sometimes even distinct, position, including potential consequences of the conclusion of an agreement or putting specific trade instruments in place. Finally, it needs to be stressed that such position of a Member State may be just a reflection of temporary political goals of the present government and does not necessarily coincide with the real political, economic, and social interest of the country at international level.

However, the above solutions should be seen not as limitations but as challenges and benefits for both government administration whose task is to make sure that the interests of its country are duly considered in the legislation and in international agreements, as well as for entrepreneurs engaged in international operations. First, an open trade policy of the EU which encourages the development of relations with countries from outside the EU intensifies competition in the domestic market and forces out innovative changes in enterprises. It may, however, be a threat to them if the EU fails to respond or responds too late to unfair practices of partners from third countries. In the face of such situations occurring increasingly more frequently, the European Commission has launched the modernization of trade policy instruments and proposed solutions that would protect the EU market against unfair competition (European Commission, 2021). Secondly, the position of the entire EU, as a surely powerful partner in global trade, is much stronger than the position of an individual, middle-sized Member State. As a result, new trade instruments introduced at the EU level, e.g., with a view to protect the market against dumping and trade sanctions, are definitely much more effective and painful to countries vis-à-vis which they have been applied. Under such circumstances, the position of Poland in international trade relations is undoubtedly stronger than if it acted individually.

Attention should also be paid to treaty provisions which stipulate that the common commercial policy shall be conducted in the context of the principles and objectives of the Union's external action. It means that interventions undertaken with respect to the conclusion of trade agreements as well as the execution of existing agreements and obeying trade regimes to certain extent depend on the EU foreign policy. As a result, we may observe joint EU actions taking place in relation to, e.g., the Russian Federation after it invaded Ukraine and occupied Crimea (Ambroziak, 2017, 2018), as well as during the EU-US tariff war (Moens & Vela, 2020). No doubt the power of EU arguments, as the richest integrational grouping in this part of the world, is stronger than the positions of its individual Member States.

Considering the historical context, economic needs, and challenges combined with the current political circumstances, the EU has developed an extremely elaborate pyramid of preferences in external trade: beginning with granting the most-favoured nation (MFN) treatment status resulting from the GATT/WTO, through special preferences for developing countries, free trade area and customs union, and up to the most advanced forms of cooperation within selected components of the common market (Figure 1.).

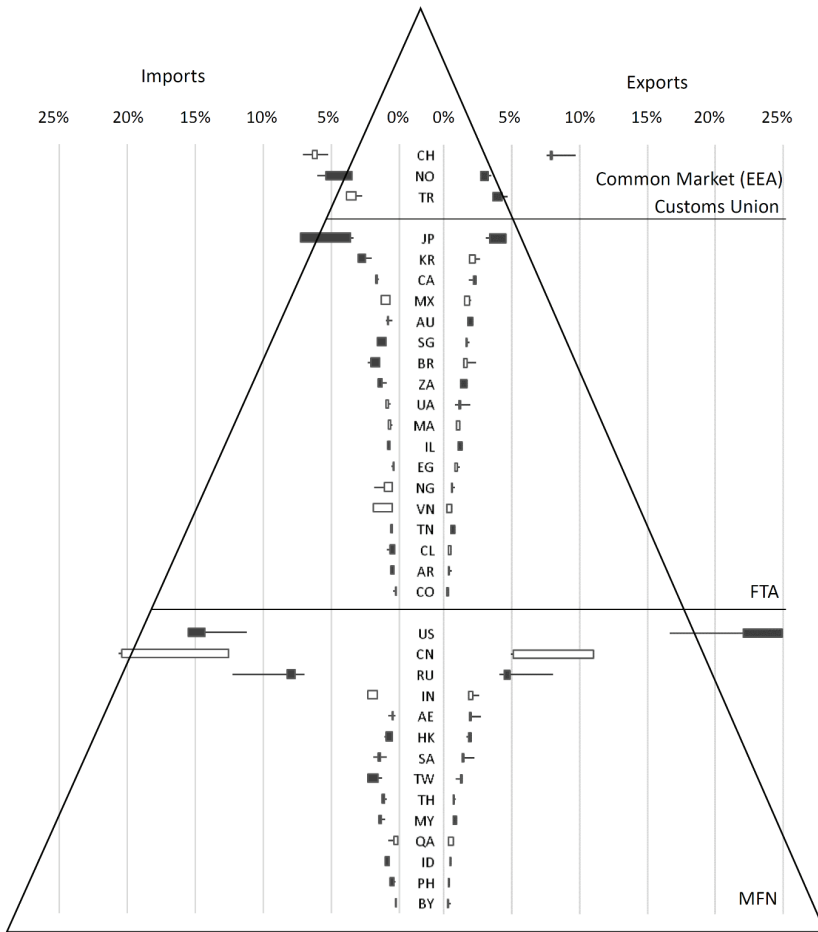
At the top of the pyramid of EU trade preferences that is composed of the top 35 trade partners, there is Switzerland, which, despite not being a member of the European Economic Area (EEA), has concluded many agreements with the EU that have in practice brought it closer to the common market with the EU, followed by Norway as an EEA member (their total share in extra EU exports and imports was 10.6% and 9.9%, respectively). The third country in the group of the biggest beneficiaries of EU trade preferences is Turkey, which established a customs union with the EU in 1995 and whose share in extra-EU trade was respectively 3.6% and 3.9%.

Further down on the pyramid of EU trade preferences consisting of 35 of the EU top trade partners, there are countries with which the EU concluded agreements that have already led to the establishing of free trade areas or such areas that are planned to be created. This group includes countries which signed such agreements many years ago as well as new partners such as: Japan, Canada, New Zealand and Australia, Mercosur countries, Vietnam, and Singapore. Their share in the total value of EU exports reached only 23.7% and 21.2% in imports (according to data for all the EU trade partners, the share of those covered by EU Preferential Trade Agreements is 13.4% and 14% for exports and imports respectively, E. Kawecka-Wyrzykowska, 2020). Nevertheless, new agreements are expected to facilitate bilateral trade and foster their position in the EU trade.

By joining the EU, Poland has become a party to all trade agreements concluded by the EU as of the date of Poland's accession. Today, Poland is also actively engaged in working out new treaty solutions that consider an ever-wider product scope (goods and services) as well as an adequately adapted depth of liberalization. The Polish Foreign Policy Strategy 2017-2021 includes, inter alia, the following tasks to be accomplished (MSZ, 2017):

- to favour geographic diversification in economic activities in particular by developing cooperation with Asian, African, Middle East, and Latin American countries;
- to seek to promote provisions in trade agreements negotiated by the EU that are favourable for Poland;
- to continue identifying and eliminating barriers to access to extra-EU markets that are particularly cumbersome for Polish exports;
- to support international efforts, especially those undertaken by the World Trade Organisation (WTO), that help in strengthening the global trade system in line with the economic interests of Poland.

The above tasks result from the assumption underpinning the Strategy according to which the worsening of the international environment in global trade may adversely affect the Polish economy. This is a clear declaration of Poland in favour of trade liberalisation,



US - United States	IN - India	ZA - South Africa	VN - Viet Nam
CN - China	MX - Mexico	UA - Ukraine	TN - Tunisia
CH - Switzerland	AE - United Arab Emirates	MA - Morocco	CL - Chile
RU - Russia	HK - Hong Kong	IL - Israel	ID - Indonesia
TR - Turkey	AU - Australia	EG - Egypt	PH - Philippines
JP - Japan	SG - Singapore	TH - Thailand	AR - Argentina
NO - Norway	BR - Brazil	MY - Malaysia	BY - Belarus
KR - Korea	SA - Saudi Arabia	QA - Qatar	CO - Colombia
CA - Canada	TW - Taiwan	NG - Nigeria	

Figure 1. Pyramid of the EU trade preferences (shares of top 35 countries in extra EU trade in 2019 in percentage).

Source: Own calculations based on Eurostat DataBase.

which, however, should ensure mutual benefits. The Polish foreign policy framework confirms that, so far, gradual liberalisation of global trade has brought concrete positive effects to the Polish economy- hence, the support of Poland for the negotiations of free trade agreements with different countries across the world.

Nevertheless, the major EU trade partners continue to be countries not covered by any preferences, mainly the USA, China, and the Russian Federation. These are also countries with which the EU experiences conflicts or even trade wars rather than considering trade facilitations. The observed drop in the position of Russia in extra-EU trade is the effect of two parallel processes. First, it links with the imposition of new barriers to trade under the retaliation policy pursued by the EU in response to human rights violation perpetrated in Russia and in its relations with other countries, including Ukraine. Second, the EU, including Poland, gradually restricts imports of energy raw materials and is actively searching for new suppliers and a new energy mix that would be much less reliant on natural gas and crude oil or other fossil fuels. Poland has unambiguously identified its goals as diversification of supplies and the expansion of the network infrastructure of natural gas, crude oil, and liquid fuel (Council of Ministers, 2019; Ministry of Climate and Environment, 2021).

When it comes to the USA and China, the former is losing in importance in favour of the latter. The drop in the US share in EU trade was especially visible in relation with the economic downturn 2008-2010, and then, despite some increases, the volume of trade has not recovered to pre-2008-2010 levels. On the other hand, Chinese expansion in investment and trade since the country's WTO accession in 2001 and following the financial crisis 2008-2010 has become a fact. Reinforced by initiatives, such as the Belt and Road Initiative or China's programme of economic growth, this expansion has produced substantial increases in the country's share in trade for all its trade partners across the globe, including the EU and Poland. Looking at the Strategy of the Polish Ministry of Foreign Affairs, attention needs to be paid to planned attempts of seeking cooperation opportunities with partners from outside Europe, in particular with China, in the delivery of infrastructural projects in our region. This fits into the EU agenda designed to normalise relations with China in this area manifested by the conclusion of the EU-China Comprehensive Agreement on Investment in December 2020 (EU-China, 2020, Ambroziak, 2020).

Poland's Position in Extra-EU trade

Polish extra-EU trade grew significantly over the period covered by the research 2004-2019: from EUR 11.7 bn for exports and EUR 17.7 bn for imports in 2004 to EUR 47.8 bn and EUR 73.4 bn in 2019, respectively (Figure 2.). It meant an extremely high, more than triple, increase in both exports and imports (309.2% and 313.8%, respectively) while the EU-28 recorded 115.5% and 100.4%, respectively. When comparing the results for Poland to other V4 countries, which also joined the EU, one may observe a similar dynamic in the growth of exports for Slovakia (324.4%) and the Czech Republic (318.8%), but for imports, it remained much lower. The convergence in the dynamics in changes in the extra-EU and intra-EU trade was confirmed by the Pearson's coefficient for the period 2004-2019, which revealed strong correlation between changes in the exports of Poland

and of the EU (exports 0.887 and imports: 0.9303) (Table 1.). Thus, the extra-EU trade of Poland evolved largely along the same lines as for the rest of the EU, both during the crisis (2008-2010) as well as in the years of relative prosperity, although at clearly much higher growth dynamics. A similarly strong correlation was also found for exports and imports for the examined EU Member States in extra-EU trade, which confirms not just the opening to the extra-EU trade but significant engagement in international cooperation.

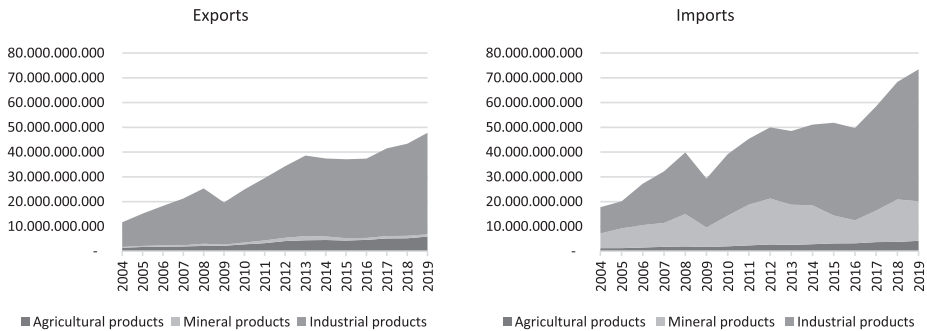


Figure 2. Poland’s extra EU trade in 2004-2019 (in EUR)

Source: see Figure 1.

Table 1
V4 intra and extra-EU trade dynamics in 2004-2019 compared to EU-28

	2005/04	2009/08	2014/13	2019/18	2019/04	Pearson index ¹ : extra v. intra EU trade	Pearson index: MS v. EU
Extra-EU exports							
EU	11.0%	-16.4%	-1.9%	4.0%	115.5%	0.8959	X
PL	29.7%	-22.4%	-3.0%	10.2%	309.2%	0.7905	0.8874
HU	28.0%	-21.0%	-7.2%	4.5%	188.8%	0.8662	0.8579
SK	11.5%	-19.7%	-7.6%	5.4%	324.4%	0.8916	0.8037
CZ	28.2%	-17.6%	1.5%	6.8%	318.8%	0.8234	0.9080
Extra-EU imports							
EU	15.2%	-22.0%	0.0%	3.7%	100.4%	0.9339	X
PL	13.4%	-26.5%	5.4%	7.5%	313.8%	0.9013	0.9303
HU	5.0%	-25.7%	-8.1%	9.7%	86.7%	0.7779	0.8468
SK	21.4%	-26.1%	-9.0%	-3.2%	205.5%	0.9178	0.8651
CZ	3.1%	-26.0%	4.4%	4.0%	245.7%	0.8631	0.8680

Source: Own calculations based on Eurostat DataBase.

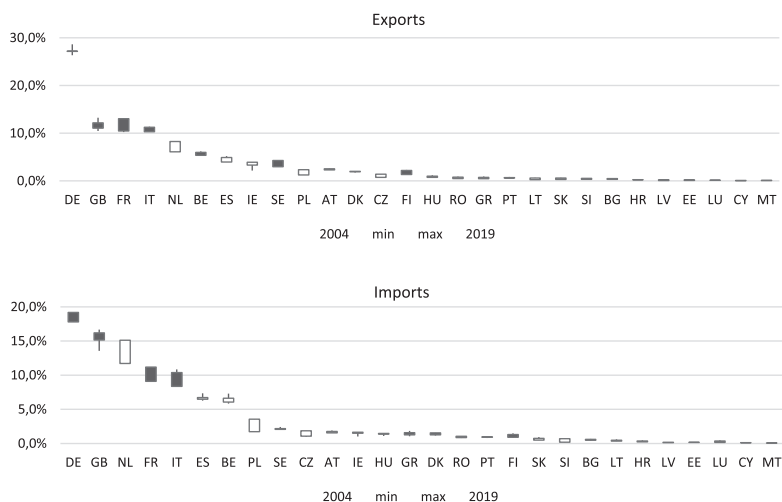
The aforementioned increase in Poland’s extra-EU trade should be seen as particularly high as Poland’s intra-EU trade reported almost the same dynamics (391.2% for exports and 300.9% for imports). When it comes to intra-EU trade, one needs to stress that on the day of accession, all physical (customs checks at the border), technical (various technical requirements), and fiscal (different tax systems) barriers were abolished, which largely helped in increasing trade flows between Poland and other EU Member States. Similar

1 Pearson index: a linear correlation Pearson coefficient measures the dependence (not causal relationship) between variables. It assumes values < 0.2 – no linear dependence; 0.2 – 0.4 – weak dependence; 0.4 -0.7 – moderate dependence; 0.7 – 0.9 – rather strong dependence; > 0.9 – very strong dependence.

dynamics of trade with non-EU countries suggests that trade terms and conditions created by the EU were favourable for Polish entrepreneurs (exporters and importers alike), whose offerings were welcomed by third-party countries.

As a consequence of such a significant increase in trade with non-EU countries, Poland's position as an EU trading partner for third-party countries has changed significantly, rising from 13th to 10th place in exports and from 10th to 7th in imports (Figure 3.). Despite these changes, Poland still does not belong to the leading EU Member States, who could dictate conditions in the EU's international trade with third-party countries.

This is because, as mentioned earlier, intra-EU trade is the most important for Poland although some trends of change can be observed. In the first year of Poland's EU membership, the share of extra-EU exports in Poland's total foreign sales was about 19.4% while for imports it was 24.6%. As for exports, after several years of significant increases in the share of extra-EU sales (2012-2014), its value returned to its original level (20.1% in 2019). The picture is slightly different for non-EU imports, where there has been a significant increase in the share of global imports from 24.6% in 2004 to 31% in 2019 (with a sharp rise to 32.3% in 2012) (Figure 4.). Similarly, although at slightly lower levels, intra EU v. extra EU trade developed in the other V4 countries. This means, therefore, that in their case there was greater dependence through deeper integration with the EU internal market than for Poland.



Notes:

- black bar (down bar): a decrease in a value/percentage; the top of the bar: a value/percentage for 2004, the bottom of the bar: a value/percentage for 2019;
- white bar (up bar): an increase in a value/percentage; the top of the bar: a value/percentage for 2019, the bottom of the bar: a value/percentage for 2004;
- the vertical line – observations of a value/percentage during the period under research (ranged from the highest to the lowest)

Figure 3. Changes in the shares of EU Member States in extra-EU exports and imports in 2004-2019.

Source: see Figure 1.

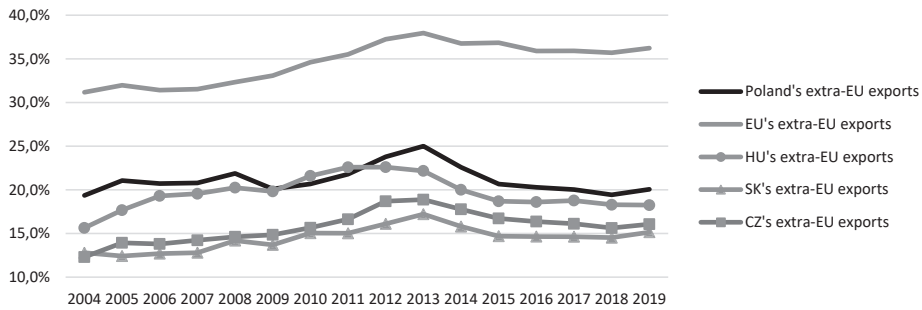


Figure 4. Share of the V4 countries' extra-EU trade in their foreign trade

Source: see Figure 1.

Geographical Distribution of Poland's Extra EU export

As already indicated, Poland's trade relations with third-party countries are based not on national but on EU treaty solutions. In recent years, the EU has significantly expanded its trade preference pyramid presented above. The Uruguay Round, which ended with the creation of the WTO in 1995, was followed by an exceptional increase in the number of bilateral trade agreements. To be considered as Regional Trade Agreements, under which mutually granted preferences do not have to be extended to other countries under the MFN clause, they should provide for the creation of either a free trade area or a customs union. However, the assumption that the treaty legal framework for relations with third-party countries translates unambiguously into a geographical structure for the external trade of EU Member States is not entirely correct. It is necessary to take into account issues such as local, regional, and international economic factors, traditional cooperation ties, historical links, or political relations in the international arena as well as geographical proximity, transport costs, production costs, and market size.

An example of this is Poland, for which Russia is still the largest non-EU buyer of Polish products, although the country's share fell significantly from 19.9% in 2004 to 15.6% of all Polish exports to third countries in 2019 (Figure 5.). It is worth noting, however, that this trend has not been constant over the period studied. The country's position in Poland's external exports increased in the years just after accession to 23.8% in 2008. However, subsequent embargoes imposed by Russia on agri-food products originating in the EU countries, including Poland, significantly undermined the role of this country in Polish exports outside the EU (Ambroziak, 2017, 2018). For the EU as a whole, Russia's share in EU exports is much lower, less than 5%. However, Russia has also maintained its high position in the other V4 countries (in HU, a decrease from 10.6% to 8.8%, an increase in the Czech Republic from 11.3% to 13.3%, and in Slovakia from 9.5% to 12.0%). This is interesting as the EU has no agreement on trade facilitation in place with Russia and the still existing embargoes make foreign trade more difficult rather than easier.

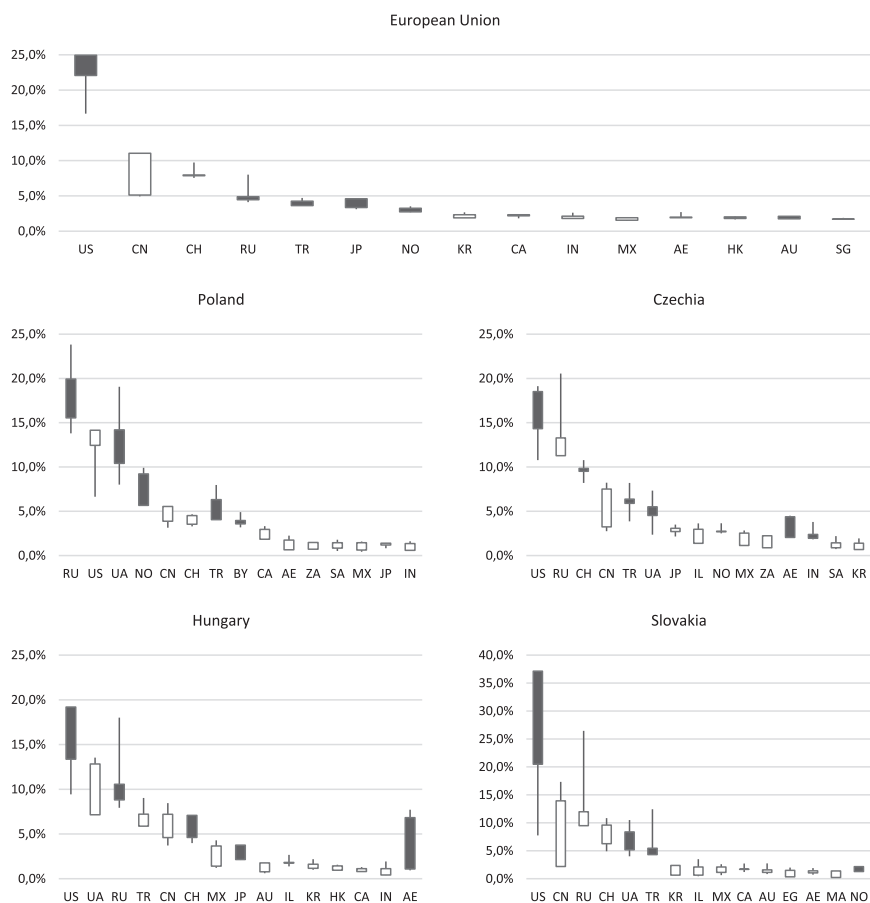


Figure 5. Geographical distribution of extra-EU exports in 2004-2019

Source and Notes: see Figure 1 and 3.

On the other hand, a significant increase in the position of Poland's exports was recorded by the USA (from 12.4% to 14.2% of Poland's extra EU trade), thanks to industrial products offsetting the significant decrease in the US share in mineral product exports (Figure 6.). As for the remaining V4 countries, the USA still remained the most important partner of their exports, albeit with a declining position. The several percent share for these countries' exports is well below the EU average in 2019. At the same time, it is worth noting that this partner's share of total EU exports fell from 24.9% to 22.1% during the period under review. A trade agreement between the EU and the US would certainly be supportive for EU exports as it is precisely the trade in manufactured goods that is most affected by technical barrier restrictions in the US market (Czarny et. al., 2017).

Ukraine ranked third in terms of the reception of Polish goods (a significant decline in exports of industrial products accompanied by increasing sales of mineral products) but, similarly to Russia, with a significantly decreasing share from 14.2% to 10.4%. A

similar trend in trade with Ukraine was recorded by the Czech Republic and Slovakia and a significantly increasing one by Hungary (from 7.2% to 12.8%). It is worth noting that Ukraine, as a trade partner, is relatively important from the point of view of the neighbouring countries in the region while definitely not for the EU as a whole (20th place), for which the share of exports of the EU as a whole hardly moved from 1.1% to 1.2% in 2019, despite the fact that since 1 September 2017, the Association Agreement, on the basis of which the free trade area is being created, has been in force (EU-AU, 2014). Such a slight increase in sales to Ukraine can be attributed to both the economic uncertainty related to the unstable situation in the eastern part of the country and the short duration of the agreement.

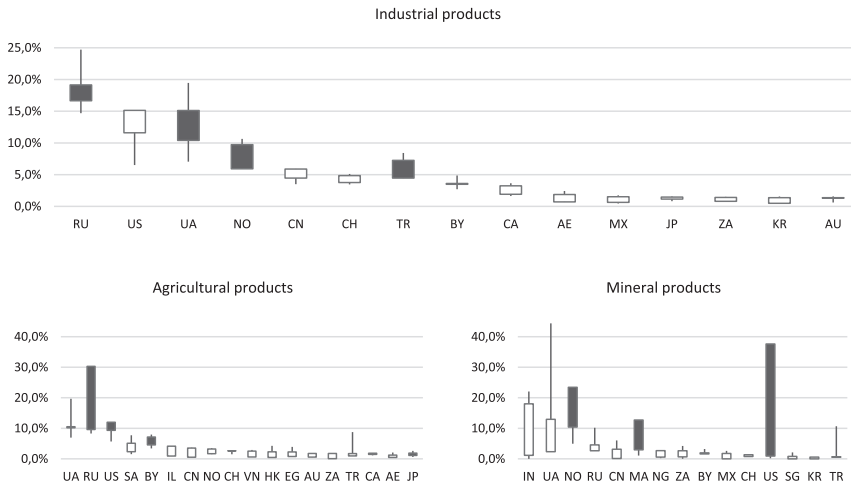


Figure 6. Geographical distribution of Poland’s extra-EU exports in 2004-2019 broken down by products

Source and Notes: see Figure 1 and 3.

In the top fifteen of the remaining recipients of Polish exports, decreases in the share of exports were recorded by Norway and Turkey, mainly caused by manufactured goods. In the remaining cases, there was a definite increase in the share of other countries, including above all China, Switzerland, and Canada, also principally due to industrial goods. It is worth noting that the EU does not have a signed FTA with China while the other two countries are covered by mutual EU trade preferences (EU-CH, 1972; EU-CA, 2017). China’s high ranking in Polish exports of primarily agri-food products has been indirectly enforced by the aforementioned Russian embargoes but also by Poland’s external economic policy supporting the expansion of companies into Southwest Asian markets. It is worth noting that more and more important recipients of Polish exports, especially agricultural ones, are becoming: Israel, Norway, Vietnam, Hong Kong, Egypt, Australia, and South Africa, i.e., countries that have concluded relevant bilateral trade agreements with the EU, on the basis of which Poland, as an EU Member State, benefits from trade preferences granted to European products.

Polish exports of agricultural, mineral, and industrial products outside the EU are characterised by a relatively low and decreasing level of concentration² (Table 2). The concentration ratio for the remaining V4 countries in the case of agricultural and industrial products looks similar (although in the case of Slovakia it is much higher). The situation is slightly different in the case of mineral products, including energy products, for which Poland recorded the relatively lowest concentration index among the V4 countries.

Table 2
Concentration index of extra-EU exports of the V4 countries in 2004-19

	Agricultural products		Mineral products		Industrial products)	
	Index	Change between 2004-19	Index	Change between 2004-19	Index	Change between 2004-19
EU-28	0.14	-0.06	0.17	-0.24	0.18	-0.01
PL	0.12	-0.21	0.26	-0.17	0.17	-0.04
CZ	0.18	-0.10	0.38	0.17	0.14	-0.03
HU	0.20	-0.14	0.88	0.51	0.15	-0.04
SK	0.26	-0.12	0.84	0.18	0.21	-0.15

Source: see table 1.

The EU's common commercial policy and, within this framework, common trade instruments, including bilateral agreements, may, over a long run, facilitate the convergence of both the geographical and commodity structure of exports of individual Member States towards the EU patterns. However, as already mentioned, non-legislative economic, social, historical, and political factors should be taken into account. In the case of Poland, the similarity index of product structures³ (at the level of 21 CN sections) was relatively high in 2019 (0.80) and slightly lower for the most important 35 trading partners (0.59) (Table 3.). However, there was an upward trend in both cases, which means that Polish exports are slowly becoming convergent with the EU's external exports although definitely more so for the commodity structure than for the main suppliers. This is also confirmed by the comparison with other V4 countries, which recorded lower values of the export similarity index in relation to the analysed 21 groups of goods, and is at similar or much higher values (the Czech Republic and Slovakia), taking into account export directions outside the EU.

2 The Concentration Index (Herfindahl–Hirschman Index, 1945) measures the degree of concentration of the international trade of a country (the degree of export/import market/country of origin concentration for each category of products). If the country trades with only a few countries its trade concentration ratio is high. If it trades with many countries, the trade concentration ratio is low. Technically, trade concentration is measured with the Herfindahl index: the sum of the squares of the trade shares with each individual trading partner.

3 Trade Similarity Index (Finger and Kreinin, 1979) measures the similarity between exports/imports of any two countries (one of the V4 country and the EU-28, as a whole) to a third countries (outside the EU) in terms of 21 groups of products and 35 Top trade partners. The index is based on the share of each product/partner in one of the V4 country's and the EU-28 total exports/imports and is calculated as the sum of the minimum value for each product/partner.

Table 3
Export similarity index of Poland and other V4 countries

	21 groups of products (CN sections)		35 Top trade partners	
	Index	Change between 2004-19	Index	Change between 2004-19
PL	0.80	0.06	0.59	0.10
CZ	0.71	-0.06	0.69	0.02
HU	0.79	0.05	0.58	-0.06
SK	0.61	0.01	0.70	0.08

Source: see Figure 1.

Structure of Poland's extra-EU import

Poland's extra-EU imports are, to some extent, derivatives of geographical directions in which exports expand. The main extra-EU suppliers of goods to the Polish market are China (industrial goods), whose share significantly increased from 13.1% in 2004 to 28% in 2019, Russia (mineral products), which registered a significant decrease from 28.7% to 19.4%, followed by the USA (agri-food and mineral products) with a slight increase to 7.4% (Figure 7.). Noteworthy is the position of the fourth country: Korea, whose share in Polish imports increased from 3.4% to 5%. This is important because, just as China, the USA and Russia are the dominant suppliers of goods to the EU as a whole, Korea has definitely chosen the V4 markets for its expansion. Compared to exports to Poland, the country increased its share even more in imports of the Czech Republic (to 5.9%), Hungary (to 10.3%), and Slovakia 22.9% (becoming the unquestionable leader in the latter country). Other suppliers, both to the Polish market and to other EU Member States, including other V4 countries, achieved much smaller shares below 5%, reporting either slight decreases or slight increases.

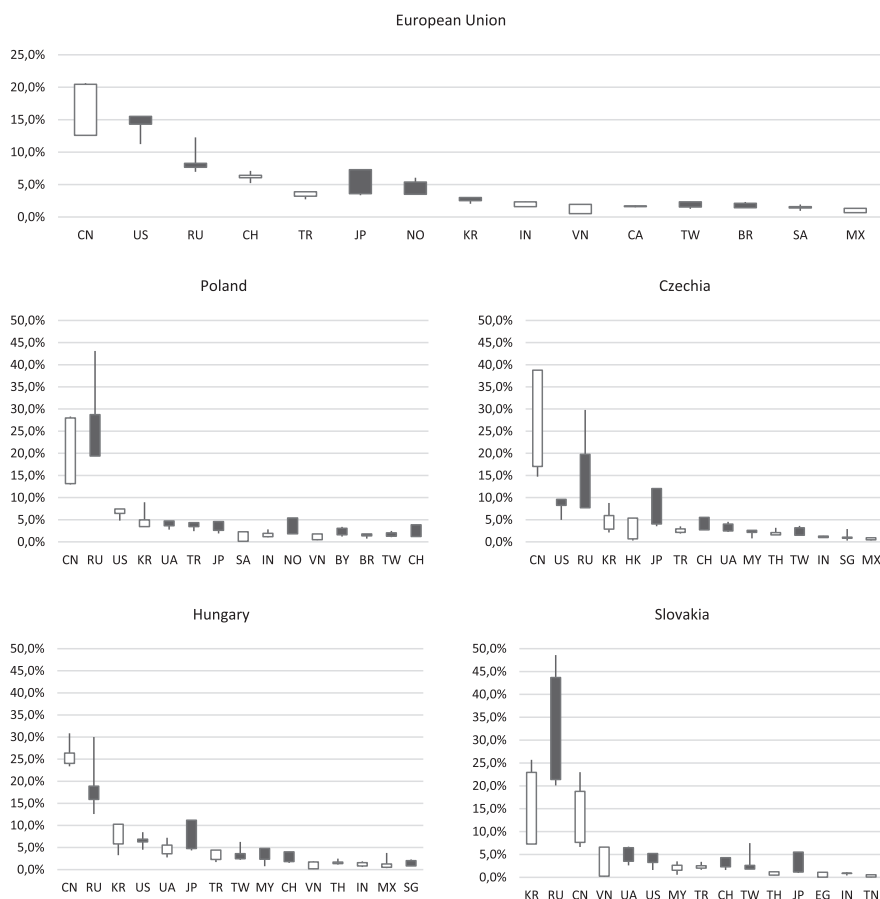


Figure 7. Geographical distribution of extra-EU imports in 2004-2019

Source and Notes: see Figure 1 and 3.

Similar to the EU structure of geographical directions of origin of imports to the Polish market was revealed in the case of industrial goods. For all extra-EU imports, the top three remained unchanged. The clear leader was China, with a share increasing to 37.9% in 2019, followed by Russia and the USA (9.1% each) (Figure 8.). At the same time, it is worth noting the declining positions of suppliers such as Turkey, Japan, Taiwan, Switzerland, and Norway, in favour of increasing shares of Korea, India, Vietnam, and Qatar. This shows a shift away from traditional suppliers to Poland, with whom the EU had free trade agreements concluded for many years, to new exporters from countries with which either free trade agreements have already been concluded or negotiations on trade liberalisation are underway. Despite this change, the concentration index of Polish imports in 2019 changed little compared to 2004 and amounted to 0.2. It was at a similar level to that recorded for the other V4 countries, however, significantly higher than the declining index for the EU-28 (0.09) (Table 4.).

The geographical structure of agricultural imports to Poland is definitely different, with a dominant and growing position of Ukraine in recent years (16.8%), a decrease

in the share of Argentina to 10.8% (although in 2007 it was 22.4%), an increase in the position of Norway to 9.5% (although in 2008 it was only 3.1%), and Brazil to 8.8% (although in 2016 it was 3.5%). This shows quite significant fluctuations in the ranking of suppliers of agricultural commodities to the Polish market due to climate change, higher price fluctuations, and other market conditions in recent years. At the same time, it should be stressed that the EU concluded quite significant agreements liberalising access to its market both with Ukraine and Mercosur countries, which may facilitate certain stabilisation and strengthen their position in Polish imports of agri-food products. In the case of this commodity group, the concentration index, i.e., a kind of dependence on non-EU suppliers, increased in the V4 countries, including Poland, to 0.33, while in the entire EU, it is only 0.24 (by 0.17 and 0.05 points, respectively).

When it comes to mineral products, this category obviously includes oil, natural gas, and coal, whose imports are gradually being diversified by Poland. This manifests itself in a sharp decline in the share of Russia to 57.7% in 2019, as well as Ukraine and Belarus, in favour of an increase in the position of Saudi Arabia (to 10%), Nigeria (3.5%), and Australia and the USA (2.8% and 2.5%, respectively). Such a narrow group of suppliers resulted in a concentration index value more than twice as high for Poland compared to the EU (0.61 to 0.32) although it was significantly lower compared to the indices for Hungary and Slovakia (0.78 and 0.82).

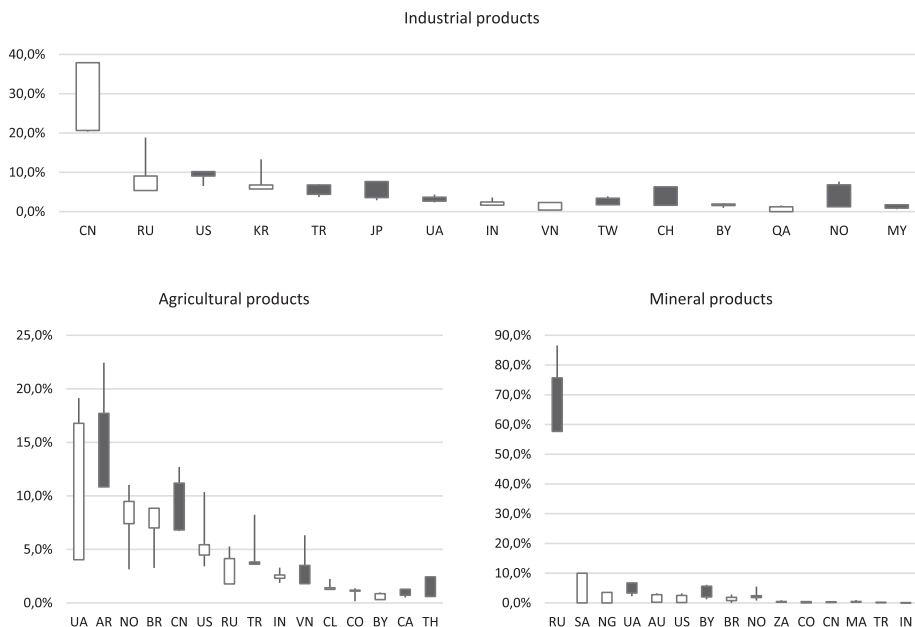


Figure 8. Geographical distribution of Poland’s extra- EU imports in 2004-2019

Source and Notes: see Figure 1 and 3.

Table 4
Concentration index of extra-EU imports of the V4 countries in 2004-19

	Agricultural products		Mineral products		Industrial products)	
	Index	Change between 2004-19	Index	Change between 2004-19	Index	Change between 2004-19
EU-28	0.09	-0.05	0.32	-0.04	0.24	0.05
PL	0.20	0.01	0.61	-0.17	0.33	0.17
CZ	0.15	0.00	0.62	-0.17	0.39	0.17
HU	0.26	0.01	0.78	-0.05	0.29	0.05
SK	0.20	0.04	0.82	-0.05	0.32	0.15

Source: see table 1.

The above analysis of the commodity and geographical structure of Polish imports is relatively consistent with that of the EU, including V4 (Table 5), although the values obtained by Polish imports (0.88 and 0.63 respectively) are higher than those recorded for exports as well as being the highest among the V4 countries. Taking into account an upward trend, it can be concluded that as in the case of Poland's exports as well as imports, the list of main suppliers is approaching that observed for the whole EU.

Table 5
Import similarity index of Poland and other V4 countries

	21 groups of products (CN sections)		35 Top trade partners	
	Index	Change between 2004-19	Index	Change between 2004-19
PL	0.88	0.04	0.63	0.01
CZ	0.68	-0.14	0.62	-0.03
HU	0.76	0.05	0.61	0.01
SK	0.74	0.00	0.50	0.03

Source: see Table 1.

Conclusions

Poland's foreign trade with non-EU countries, like that of the other V4 countries, behaved to a large extent similarly to the EU as a whole although the dynamics was much higher. This observation applies both to the crisis period (2008-2010) and the remaining years of relative prosperity. This shows that Poland is significantly involved not only in the EU internal market, of which it is undoubtedly a beneficiary, but also in extra-EU trade. This is particularly visible when considering the dynamics of intra- and extra-EU trade. Similar dynamics in trade with non-EU countries indicates that both the trade conditions created at the EU level were favourable for Polish entrepreneurs (both exporters and importers) as well as their offer gained interest in third-party countries. Consequently, Poland's position as a partner in extra-EU trade has increased although it is still much lower than it could be expected.

The expanded pyramid of EU trade preferences has not significantly affected the list of Poland's top three non-EU trading partners. The Russian Federation is still the largest recipient of Polish products. This mainly concerns industrial products, as agri-food products are subject to successive embargoes used as retaliation within the framework of difficult relations with the EU. On the other hand, from the import point of view of

Poland, as well as of the other V4 countries, the position of Russia is dominant in the trade in mineral products (petroleum, gas). However, even here the role of this country is decreasing in favour of new suppliers of raw materials from outside the EU. The situation with China is slightly different: it recorded high dynamics of trade with Poland, especially in supplies of industrial products to the Polish market. Trade with the USA is also growing, although to a lesser extent, in exports of industrial products and imports of minerals.

As far as Poland's trade partners outside the big three are concerned, the trade preference pyramid presented at the outset definitely favours geographical de-concentration of both Polish imports and exports as well as approximation to the general trends observed in the EU. In the case of countries ranked fourth and further down in Poland's extra-EU trade, differences in their proportions are relatively small. This means a relatively low level of concentration of Polish trade with individual extra-EU countries. Particularly noteworthy is the relationship with Korea, which seems to have chosen the V4 countries, including Poland, as a starting point for expansion for the rest of the EU, and the free trade agreement with the EU will certainly strengthen its position on the list of major extra-EU partners.

There are also other countries on this list, with quite different statuses and degrees of trade relations with the EU. This is especially true of those that have long established FTAs or customs unions: Norway, Switzerland, Mexico, South Africa, Egypt, and Turkey (albeit with a declining position) as well as those that have just concluded agreements to facilitate trade: Canada, Japan, Australia, Brazil, Argentina, and Vietnam. This group also includes countries that have not yet concluded such agreements: the United Arab Emirates, Saudi Arabia, Hong Kong, and India.

This growing diversity of partners from outside the EU should be assessed very positively in the context of the need to diversify suppliers and customers, especially in times of crisis or when barriers or restrictions are imposed by individual countries. Threats associated with overdependence on non-EU supplies, especially of raw materials and processed products of strategic importance, became the subject of debate in the EU in the first year of the COVID-19 outbreak. It seems that Poland's point of view in this regard is similar to that of most Member States: there is a need for greater diversification of extra-EU trade.

It seems that, the analysis of the EU's pyramid of preferences needs further examination of not only recently concluded EU free trade agreements but also those in force for many years. They provided for a much more in-depth integration. The customs union established between the EU and Turkey is noteworthy here. As we should expect a much stronger position of Turkey in extra-EU trade of all EU Member States, this area requires definitely further research.

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References

- Accession Treaty (2003) Treaty between the Kingdom of Belgium, the Kingdom of Denmark, the Federal Republic of Germany, the Hellenic Republic, the Kingdom of Spain, the French Republic, Ireland, the Italian Republic, the Grand Duchy of Luxembourg, the Kingdom of the Netherlands, the Republic of Austria, the Portuguese Republic, the Republic of Finland, the Kingdom of Sweden, the United Kingdom of Great Britain and Northern Ireland (Member States of the European Union) and the Czech Republic, the Republic of Estonia, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Republic of Hungary, the Republic of Malta, the Republic of Poland, the Republic of Slovenia, the Slovak Republic, concerning the accession of the Czech Republic, the Republic of Estonia, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Republic of Hungary, the Republic of Malta, the Republic of Poland, the Republic of Slovenia and the Slovak Republic to the European Union, OJ L 236, p. 17–930.
- Ambroziak, A. A. (2017). Wpływ embarga Federacji Rosyjskiej na eksport jabłek z Polski w latach 2004–2015 (title in English: The impact of Russian Federation's embargo on exports of apples from Poland in 2004–2015, *Roczniki Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich*, T. 104, z. 1, pp. 22–29, DOI: 10.22630/RNR.2017.104.1.2.
- Ambroziak, A. A. (2018). Russia's embargo on the Polish apple exports. *BRE Review - Baltic RIM Economies*, 3, 33.
- Ambroziak, A. A. (2020). Polityka Unii Europejskiej w związku z inwestycjami zagranicznymi Chin (title in English: EU policy towards China's Foreign Investments) [in:] Radło M.J. (ed.) (2020). *Inicjatywa Pasa i Szlaku. Chińska ekspansja, nowe łańcuchy wartości i rosnąca rywalizacja*, Oficyna Wydawnicza SGH.
- Ambroziak, A. A. (2021) Does the European Single Market Exist in the Era of a Coronavirus Pandemic? The Case of Intra and Extra-EU Trade in COVID-19-related Products, *Studia Europejskie-Studies in European Affairs* 25(1), 63–83, DOI: 10.33067/SE.1.2021.3.
- Constitution of the Republic of Poland (1997) of 2nd April, 1997, OJ No 78, item 483.
- Council of Ministers (2019) The 2030 National Environmental Policy. Annex to the Resolution of the Council of Ministers of 16 July 2019, MP 794.
- Czarny E. Kuźnar A., & Menkes J. (2017) *The Impact of the Transatlantic Trade and Investment Partnership on International Cooperation*, Berlin, Germany: Peter Lang Verlag.
- European Commission. (2021). Proposal for a Regulation of the European Parliament and of the Council on foreign subsidies distorting the internal market, COM(2021) 223 final, 5.5.2021.
- European Council. (1993). Conclusions of the Presidency, 21–22 June 1993.
- EU-CH. (1972). Agreement between the European Economic Community and the Swiss Confederation, OJ L 300, 31.12.1972, p. 189–280.
- EU-UA. (2014). Association Agreement between the European Union and its Member States, of the one part, and Ukraine, of the other part, OJ L 161, 29.5.2014, p. 3–2137.
- EU-CA. (2017). Comprehensive Economic and Trade Agreement (CETA) between Canada, of the one part, and the European Union and its Member States, of the other part, OJ L 11, 14.1.2017, p. 23–1079.
- Finger, J.M., & Kreinin, M. E. (1979) A Measure of Export Similarity and Its Possible Uses, *Economic Journal*, 89, pp. 905–912.
- Kawecka-Wyrzykowska, E. (2020) Importance and motives of preferential trade agreements in the EU's external trade, *Economics and Business Review*, Vol. 6 (20), No. 3, 3–22, DOI: 10.18559/eb.2020.3.1.
- Ministry of Climate and Environment. (2021). Energy Policy of Poland until 2040, MP 264.
- Moes B., Veka J.H. (2020) EU keeps its shield up in the US trade war, [www.Politico.eu](https://www.politico.eu/article/eu-us-trade-tariffs-airbus-boeing-valdis-dombrovskis/) (available at: <https://www.politico.eu/article/eu-us-trade-tariffs-airbus-boeing-valdis-dombrovskis/>).
- MSZ. (2017). Polish Foreign Policy Strategy 2017–2021, Ministry of Foreign Affairs, Poland.
- Treaty on the Functioning of the European Union (2012), Consolidated version, PJ C 326, / 47–390.

