# The evolution of Poland's trade position in travel services after its accession to the European Union

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### Abstract

Although shares of travel services in Poland's and European Union's services exports and imports have decreased since 2004, they are still very important parts of the economies. They boost revenues, create jobs, develop infrastructures, and enable cultural exchange. The aim of this study is to identify Poland's trade position in intra-EU and extra-EU trade in business and personal travel services and to assess changes that have taken place between 2004-2020. Changes in geographical and service-industry structures of Poland revealed comparative advantages while trade balance in international trade in travel services were examined. One of the main findings is that by 2020 Poland has improved its trade position, in comparison to 2004, in business travel services. At the same time Poland has diminished its trade position in personal travel services.

**Keywords:** intra-industry trade in services, international trade in travel services, IIT, RCA, revealed comparative advantages

JEL Classification: F140, F150, O140

# Introduction

The trend related to the servicisation of the economy is observed especially in the developed countries, where an increasing importance of services and slow deindustrialization is noticed. This trend is visible also in Poland after its accession to the European Union and delegation to the EU competences in selected areas, including determining the competition rules of the internal market and the common commercial policy (CCP)<sup>1</sup>. Even though services became one of the most important sectors worldwide, including in the EU, and dominate in the gross domestic products and job creation, they face large obstacles. For instance, in 2020 Poland's value added in services accounted for 57.2% of the GDP, the EU's 65.6% and the world's 65.3%<sup>2</sup> (World Bank 2024). Service sectors have also a significant share in the employment, e.g. in 2020 in Poland the employment in services accounted for 59% of the total employment, in the EU for 71% and in

<sup>1</sup> See Article 3 and 4 of the Treaty on the Functioning of the European Union, ELI: http://data.europa.eu/eli/treaty/tfeu\_2016/oj.
<sup>2</sup> In 2004 value added in services accou<sup>®</sup>ted for 56.4% in Poland. 63.4% in the EU and 64.1% in the world.

the world for 50%<sup>3</sup> (ILO 2024). However, services which represent more than half of the GDPs, account for much less than half of international trade, e.g. in 2020 the share in Poland's trade in services (exports plus imports) in the GDP reached 17.8%, while the EU's 25.2% and the world's 11.7%<sup>4</sup> (Our World in Data 2023). Of course, this partly might result from the fact that some services are not internationally tradable. However, due to the lack of international competition and the presence of regulations protecting local professions from competition, services are underprovided even in most of the EU member states<sup>5</sup> (Stefaniak and Ambroziak 2017). Despite the EU's efforts in creating the integrated single market, ensuring free movement of people, goods, services and capital within the EU as freely as within a single EU member state, there are still differences between the EU's and national regulations in terms of services trade policies. Such domestic regulations also impede intra-EU trade in the areas stipulated in *Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market*<sup>6</sup>. Similarly, despite the EU's CCP, there are substantial differences across the EU member states as regards services trade policies towards the rest of the world (Fiorini and Hoekman 2020).

Nevertheless, in the long run said differences shall decrease and services trade policies should converge among the EU member states, both regarding intra-EU and extra-EU trade. Therefore, it is reasonable to expect an increase in the importance of services in international trade, at the expense of goods. At the same time, it is reasonable to expect further liberalization of trade in services. The above shares of Poland's and EU's total trade in services in their GDPs in 2020 compared to 2004 suggest, after all, the effectiveness of efforts towards gradual liberalization of trade in services, both as a result of integrating the single market and as a result of the CCP.<sup>7</sup> The above expectations shall also concern travel services, which are still very important parts of the modern economies. They increase GDPs, create jobs, develop infrastructure and enable cultural exchange.<sup>8</sup>

Although there are many studies concerning Poland's trade in services, very few provide insight into Poland's international trade position in travel services defined as business and personal travel services, from both the geographical and sectoral perspectives. Thus, the aim of this study is to identify trade positions of Poland in business and personal travel services with partners from both within and outside the EU market between 2004-2020. This paper contains the following research hypothesis: between 2004-2020 Poland has strengthened its trade position in business and personal travel services (proof: positive answers to the research questions (Q1) and (Q2)). Within the scope of this hypothesis, the following research questions will be analyzed: (Q1) whether in 2020 the RCA index and/or the LFI index concerning business travel services has increased in comparison to 2004 and (Q2) whether in 2020 the RCA index and/or the LFI index calculated for personal travel services has increased in comparison to 2004 and (Q2) whether in 2020 the RCA index and/or the LFI index calculated for personal travel services has increased in comparison to 2004. As regards the years 2019-2020, the analysis of the above research questions will also be performed in the context of the relationship between trade in those travel services and the COVID-19 pandemic.

To answer the research questions and verify the hypothesis, the RCA index proposed by Balassa (1977) and the index of international specialization proposed by Lafay (1990) were calculated. To address the question concerning the relationship between trade in travel services and the COVID-19 pandemic, a detailed analysis for the period 2019-2020 was conducted. Descriptive statistic tools were used in the study. The data was gathered on the Balance of Payments ('BoP') basis, using two datasets, i.e. EBOPS 2002 and EBOPS 2010.

<sup>&</sup>lt;sup>3</sup> In 2004, in Poland 53% of the total employment was in services, in the EU 64% and in the world 42%.

<sup>&</sup>lt;sup>4</sup> In 2004 the share of trade in services in the GDP of Poland was 10.9%, the EU 15.2% and the world 10.5%.

<sup>&</sup>lt;sup>5</sup> As mentioned in the literature, this concerns especially members of the Euro area. In turn, services were highly competitive in countries like Sweden and the UK, non-euro members (Wyplosz, 2006).

<sup>6</sup> ELI: http://data.europa.eu/eli/dir/2006/123/oj.

<sup>&</sup>lt;sup>7</sup> See also the OECD's Services Trade Restrictiveness Index providing a snapshot of services trade barriers in many sectors.

<sup>&</sup>lt;sup>8</sup> In 2022, the Travel & Tourism sector contributed 7.6% to the global GDP (an increase of 22% from 2021 and only 23% below 2019 levels) (WTTC 2024).

The work is divided into four main parts. Part one (*Research review*) outlines the theoretical background of the revealed comparative advantages (RCA) concept, necessary to understand the empirical results presented in part three (*Empirical results*). Issues regarding RCA measurement methods are widely discussed in the literature, and thus, in this work only selected literature was presented. Part two (*Methodology and data collection*) provides information on the methodology of the research, data collection and limitations of the research. Part three (*Empirical results*) presents the most important results of the analysis regarding changes in Poland's trade position. Part four (*Discussion*) presents a concise discussion of the results, considering Poland's exports and imports of business and personal travel services from the geographical and sectoral perspectives. The article ends with conclusions and suggestions for directions for further research.

# **Research review**

Over the last two decades efforts towards liberalisation of trade also positively contributed to the growth of services' share in international trade. Countries tend to export products which make intensive use of those production factors in which they are comparatively rich and import those which intensively use production factors in which they are comparatively poor. This is supported by the one of the oldest theories of trade. i.e. the theory of RCA, which is still used in analysing the position of countries in trade in goods and, increasingly, in services. For example, the relevance of that theory to the international specialization in tourism was discussed by Sinclair and Stabler (1997). Webster et al. (2007) examined RCA in tourism. The RCA index developed by Balassa (1965) was used by Nowak et al. (2013, 24-26) to investigate long-term patterns of an international division of the tourism production. When it comes to the EU's trade in services, Stefaniak and Bak (2018) assessed competitiveness of the EU's services exports using the RCA index. Zaharieva (2020) assessed competitiveness of the EU's members in international services trade, using i.a. RCA indices. Adigwe (2021) assessed trade competitiveness between the European countries in comparison to the European market as a whole using the RCA index. As regards Poland, for instance Seyoum (2007) analysed competitiveness of selected services: business, financial, transport and travel services in developing countries (including Poland) in relation to that of world based on RCA indices for the period 1998-2003 (largely based on contributions of Balassa 1977; and Vollrath 1991). According to him, Poland had revealed comparative advantages in all used indices in case of transportation and travel services. Stefaniak-Kopoboru and Kuczewska (2016) analysed the exports specialization of the Visegrad countries in trade in services (at a sector level and not an industry level), using the adjusted RCA index. Their analysis revealed that Poland had comparative advantages i.a. in travel services. Wosiek and Visvizi (2021) analysed the comparative advantages and specialization using the Visvizi-Wosiek RCA (VWRCA) index on the example of Poland in 2010–2019. According to them, the market developed most intensively i.a. in travel services.

Nevertheless, the above-mentioned measures may turn out to be insufficient in the analysis of international competitiveness in trade in services understood as an international trade position in business and personal travel services. In case of a country with high intra-industry trade (IIT), what concerns Poland, more suitable would be the LFI index (Lafay 1990), simultaneously considering exports and imports.

Thus, to assess Poland's position in international trade in business and personal travel services two indices were taken into account, namely the Balassa's RCA index (exports shares; Equation 1) and LFI index (a net trade position assessing whether a country achieves better results than its trade in services in general; Equation 2). Both indices determine whether a given country has comparative advantages in a given group of products (a service industry). Although the purpose of calculating them is similar, the interpretation of results is different. The RCA index presents shares of a given service industry exports in Poland's world (alternatively intra-EU or extra-EU) services exports relative to analogical shares of the same service industry exports in EU's world (alternatively intra-EU or extra-EU) services exports. The goal of the analysis is to determine whether those shares of a given group of services (business or personal travel) in Poland's exports of services are higher than the respective shares of a given group of services in the EU's exports of services (if the RCA > 1, Poland has comparative advantages; otherwise, Poland does not have comparative advantages). In turn, the LFI index considers each service industry contribution according to the respective importance in trade. The aim of this analysis is to consider exports and imports simultaneously and to capture IIT flows. The larger the value of the LFI index is, the higher the degree of specialization, while a negative value of the LFI index point out a lack of specialization.

The Balassa index is one of the most widely used index of international trade specialization (Nowak et al. 2013, 24-26). It was recognized as a reliable indicator for measuring competitiveness in services trade (e.g. Wyszkowska-Kuna 2016). In this study the following RCA index developed by Balassa was used:

#### Equation 1.

$$RCA_{ij} = \frac{X_{ij}}{\sum_{j=1}^{n} X_{ij}} / \frac{X_{wj}}{\sum_{j=1}^{n} X_{wj}}$$

where:  $X_{ij}$  and  $X_{wj}$  denotes exports of the *j*-th group of services to a given market by the reference country *i* (Poland) and the group of countries *w* (the EU). If RCA>1, it means that a given country *i* has a comparative advantage disclosed in exports to a specific market. If RCA<1, it means that this country does not have such an advantage.

In turn, the LFI index considers each product's contribution according to the respective importance in trade. For a given country *i* and for any given product *j*, the LFI index is defined as follows:

#### Equation 2.

$$LFI_{j}^{i} = 100 * \left(\frac{X_{j}^{i} - M_{j}^{i}}{X_{j}^{i} + M_{j}^{i}} - \frac{\sum_{j=1}^{n} (X_{j}^{i} - M_{j}^{i})}{\sum_{j=1}^{n} (X_{j}^{i} + M_{j}^{i})}\right) * \frac{X_{j}^{i} + M_{j}^{i}}{\sum_{j=1}^{n} (X_{j}^{i} + M_{j}^{i})}$$

where are exports and imports of product *j* (a service industry) of a country *i* (Poland) towards and from the rest of the world, respectively. According to the index, the comparative advantage of a country *i* in the production of an item *j* is measured by a deviation of a product *j* normalized trade balance from the overall normalized trade balance, multiplied by the share of trade (imports and exports) of product *j* in total trade. The LFI index measures each group's contribution to the overall normalized trade balance and in consequence. A positive value of the LFI index indicates existence of comparative advantage in a given item (a service industry). The larger the value is, the higher the degree of specialization, while a negative value point out a lack of specialization (Alessandrini et al. 2007). The LFI index was computed by Zaghini (2003) for 208 items of the 3-digit SITC classification. Reyes (2014, 1-11) using the Balassa index and the LFI index, examined revealed comparative advantages of the first six ASEAN member nations for the period 2007-2011 with relation to commodities. In turn, Stefaniak and Ambroziak (2021) used revealed symmetrical comparative advantage (RSCA) and LFI indices to compare intra-EU and extra-EU trade in information and communication technology services.

### Methodology and data collection

The analysis covers the period 2004-2020, i.e. seventeen years after Poland's accession to the EU. The sectoral structure was determined by the BoP classification proposed by the OECD at the 3-digit level (Table 1). During determining an 'industry' a similar approach was applied by Zaghini (2003).<sup>9</sup> In this study two datasets were used, i.e. EBOPS 2002 (data until 2009) and EBOPS 2010 (data since 2010).

<sup>&</sup>lt;sup>9</sup> See also Kawecka-Wyrzykowska 2016; Kawecka-Wyrzykowska et al. 2017, 29 with respect to calculation of IIT in goods.

According to the OECD (MSITS 2010, 52), business travel services cover the acquisition of goods and services for own use or to be given away, by persons whose primary purpose of travel is for business. It does not include the sales or purchases that they may undertake on behalf of the enterprises they represent. Examples of persons travelling for business purposes include carrier crews stopping off or laying over; gov-ernment employees on official business; employees of international organizations on official business; employees travelling to economies where they are not resident on behalf of their employing enterprise; self-employed individuals travelling for business purposes; and border, seasonal and other short-term workers who are not resident in the economy in which they are employed by an employer being resident in that economy. The business activities undertaken while travelling may include production or installation works, sales campaigns, market exploration, commercial negotiations, missions, conferences, conventions, other meetings, and other business activities undertaken on behalf of an enterprise resident in another economy.

According to the OECD (MSITS 2010, 52), personal travel covers goods and services acquired by persons going abroad for purposes other than business, such as taking holidays, participation in recreational and cultural activities, visits to friends and relations, pilgrimage, education and health related purposes. MSITS 2010 recommends a breakdown of personal travel into three subcomponents based on the primary purpose of personal travel: health related, which includes expenditures for medical services, other health care, food, accommodation and local transport, acquired by persons travelling for medical reasons; education related, which includes expenditures for tuition, food, accommodation, local transport and health services, acquired by non-resident students; and other, which includes expenditure by those travelling neither for health nor for education as primary purposes (it is usually the largest component of travel services).

Services are supplied across national borders by one of four modes: cross-border supply (Mode 1, known as 'cross-border'), supply to a service consumer who moves to the country of the service supplier (Mode 2, known as 'consumption abroad'), supply by a service supplier who moves to the country of the consumer (Mode 3, known as 'commercial presence') and supply through the temporary movement of natural persons (Mode 4, known as 'presence of natural persons'). This study concentrates on the BoP services transactions at the major services level. The data concerning business and personal travel services cover (at major services components) consumption abroad (Mode 2).

To observe simultaneously changes and final values of the RCA and LFI indices, the 'product mapping' concept of Widodo (2009) was exploited. However, this concept was modified by using the RCA (non-symmetric) index (Equation 1) instead of the RSCA (symmetric) index provided by Dalum et al. (1998) and Laursen (1998), as well as the LFI index (Equation 2) instead of the trade balance index provided by Lafay (1992) (*TBI<sub>ij</sub>* = (*exports<sub>ij</sub>* - *imports<sub>ij</sub>*)/ *exports<sub>ij</sub>* + *imports<sub>ij</sub>*)) (see Table 2). Such a mapping would allow to locate groups of services in which Poland has a very good trade position (Group A) and in which Poland has begun to build a trade position (Groups B and C). In relation to studies concerning trade in goods a similar approach was used e.g. by Capobianco-Uriarte et al. (2021) using export competitiveness maps in the European tomato market, Pawlak (2021) in estimating the competitive position of the EU agri-food sector in transatlantic trade and Jambor et al. (2016) in an overview of competitiveness of different nations in global agriculture and food trade. In case of research on trade in services, similar approach was also used by Stefaniak and Ambroziak (2021) and Ambroziak and Stefaniak (2022), using, instead of the RCA index, the RSCA index.

EBOPS 2010	EBOPS 2002	Digit level	Industry
SDA	237	3	business travel
SDB	240	3	personal travel

Table 1. Sub-categories (industries) of travel services

Source: Own elaboration

LFI>0	Group C	Group A							
	Lack of exports specialization in product <i>j</i> (RCA<1)	Exports specialization in product <i>j</i> (RCA>1)							
	International trade specialization in product <i>j</i> , including	International trade specialization in product <i>j</i> , including							
	IIT flows (LFI >0)	IIT flows (LFI >0)							
LFI<0	Group D	Group B							
	Lack of exports specialization in product <i>j</i> (RCA<1)	Exports specialization in product <i>j</i> (RCA>1)							
	Lack of international trade specialization in product <i>j</i> ,	Lack of international trade specialization in product <i>j</i> ,							
	including IIT flows (LFI <0)	including IIT flows (LFI <0)							
	RCA<1	RCA>1							

Table 2. Service mapping matrix

Source: Own elaboration, based on the concept provided by Widodo (2009)

# **Empirical results**

The analysis has revealed that the RCA indices calculated for business and personal travel services performed better in case of Poland's extra-EU exports than in case of Poland's intra-EU exports (Figures 1 and 2). A similar conclusion may concern the LFI indices calculated for business and personal travel services (Figure 3). In 2020 in comparison to 2004, Poland has increased the RCA indices (as regards to exports to partners from the outside EU) and LFI index (both in intra-EU and extra-EU trade) in business travel services and decreased the RCA and LFI indices in personal travel services (both in intra-EU and extra-EU trade). In 2004 LFI indices noted positive values in case of trade in personal travel services (both in intra-EU and extra-EU trade). Whereas in 2020 the LFI index noted a positive value only in case of trade in business travel services with all partners (the index calculated for trade with partners from the EU had a negative value, what points out to the lack of specialization in this area).

Referring to the differences between 2019 and 2020, in case of business travel a huge increase of the RCA index calculated for Poland's extra-EU exports is observed (increase from 5.02 in 2019 to 9.1 in 2020). This is related to a faster decrease in the participation of this type of services in the total EU's services ex-



Source: Own calculations based on OECD.

Figure 1. Comparison of RCA indices calculated for Poland's global and intra-EU exports of business and personal travel services



Figure 2. The RCA indices calculated for Poland's extra-EU exports of business and personal travel services.



Figure 3. Comparison of the LFI indices calculated for Poland's global and intra-EU trade in business and personal travel services.

ports compared to Poland (OECD 2022). As regards personal travel services, there are no big differences between RCA and LFI indices calculated for 2019 and 2020.

In order to observe simultaneously changes and final values of the RCA and LFI indices, the 'product mapping' concept was used (Table 3). Such a mapping allows to find out groups of services in which Poland has a strong trade position (Group A) and in which Poland has begun to build a trade position (Groups B and C). The RCA and LFI indices as well as exports shares concerning 2004, 2019 and 2020 are presented in Table 3 (2019 is indicated as the last year before the COVID-19 crisis).

The mapping matrix points to the following changes in Poland's trade position in 2020 as compared to 2004: a position increase from group B to A of business travel services and a drop of personal travel services

Group C Lack of exports specialization (RCA<1) International trade specialization, including IIT (LFI >0)				Group A Exports specialization (RCA>1) International trade specialization, including IIT (LFI >0)					
	2004		2019	2020		2004		2019	2020
					§personal travel	34.57%*	§business travel	6.35%*	5.25%*
Group D Lack of exports specialization (RCA<1) Lack of international trade specialization, including IIT (LFI <0)				Group B Exports specialization (RCA>1) Lack of international trade specialization, including IIT (LFI <0)					
Lack Lack of inte	of expo rnationa	Group D orts specializatior I trade specializa (LFI <0)	n (RCA<1) tion, inclu	uding <b>II</b> T	E Lack of inter	xports spe national tr	Group B ecialization (RCA ade specializatio (LFI <0)	.>1) on, inclue	ding <b>II</b> T
Lack Lack of inte	c of expo rnationa 2004	Group D orts specializatior I trade specializa (LFI <0)	n (RCA<1) tion, inclu 2019	uding IIT 2020	E Lack of inter	xports spe national tr 2004	Group B ecialization (RCA ade specializatio (LFI <0)	.>1) on, inclue 2019	ding IIT 2020

Table 3. Service mapping matrix - results regarding business and personal travel services

\* share in Poland's total services exports.

Source: Own calculations based on OECD.

from group A to D (Table 3). The findings lead to the conclusion that Poland has improved its trade position in business travel services and diminished its trade position in personal travel services. However, even though Poland has improved its trade position in business travel services, their share in Poland's total services exports for 2019 and 2020 were lower than in 2004 (8.6% in 2004, 6.4% in 2019 and 5.3% in 2020).

### Discussion

Changes in Poland's trade position in business and personal travel services resulted from country-specific and industry-specific determinants. These factors should be assessed in comparison to other economies.

Factors behind's the improvement of Poland's trade position in business travel services are related especially to the opening of Poland's economy after its accession to the EU and country's competitiveness compared to other destinations and the related inflow of foreign investments. This was associated with relative political and economic stability, reduction of the technological gap, socio-cultural similarity to Western economies and relatively low costs of qualified labour, which contributed to the inflow of foreign investments. The above, in turn, resulted in decline in demand for imports of this type of services and increased in share of exports thereof to countries outside the EU.

In turn, the decrease of Poland's trade position in personal travel services resulted from a decline of its shares in the country total exports compared to the EU. The decrease in share of personal travel services exports in Poland's total services exports is related to the faster growth of the other service industries, including business and high-tech knowledge intensive services. This is also related to relatively poorer export offer of Poland compared to the EU (including health and education related personal travel services), social conditions and a lower demand for work trips (other than business travel) due to the improved situation of employees on the domestic market.

As regards the industry's structure of travel services, in 2004 the greatest share in Poland's services exports was noted in personal travel services (34.6%) while business travel services share was 8.6% (Figure 4). In 2020 personal travel services noted 7.2% thereof (13.6% in 2019) and business travel services 5.2% (6.4% in 2019).

In 2004 the share of personal travel services' in Poland's services imports was 20.3% while the business travel share was 15.4% (Figure 5). In 2020 the share of personal travel services in Poland's imports of services was 9.3% (16.9% in 2019) while business travel services share was 3.9% (4.4% in 2019). Poland's net trade in personal travel services was worsened not only by the COVID-19 crisis, but also the general tendency was unfavourable, particularly since the Global Financial Crisis which explains faster decline in exports shares compared to imports shares.

![](_page_8_Figure_1.jpeg)

Source: Own calculations based on OECD

Figure 2. The RCA indices calculated for Poland's extra-EU exports of business and personal travel services.

![](_page_8_Figure_4.jpeg)

Source: Own calculations based on OECD.

Figure 2. The RCA indices calculated for Poland's extra-EU exports of business and personal travel services.

The analysis performed from the sectoral perspective may suggest that factors influencing RCA in business and personal travel services are related to the membership in the EU. While EU accession may not have contributed to increasing Poland's intra-EU exports of these services relative to analogical shares of the analogical service industry exports in EU's intra-EU services exports. It also may not have contributed to net trade position in personal travel services (Poland has not achieved better results in this industry compared to its trade in services in general). However, it seems that EU membership contributed to net trade position in business travel services (Poland has achieved better results in this industry compared to its trade in services in general).

As regards the geographical structure, Poland's exports of business travel services in 2004 were directed to Germany (70.1%) and the USA (3.6%), and in 2020 to Germany (28.2%), the Czech Republic (11%), Slovakia (8%), Russia (6.1%) and Lithuania (4.7%). In turn, imports in 2004 came from Germany (45.5%), the USA (10.7%), the UK (9.9%) and Italy (6.4%), and in 2020 from Germany (36.8%), the UK (14%), the Netherlands (6.7%) and France (5.1%). Whereas personal travel services in 2004 were directed to Germany (69.1%), the Czech Republic (5.3%) and the USA (4.2%), and in 2020 to Germany (56.9%), the Czech Republic (12.8%) and Slovakia (7.8%). In turn, imports in 2004 came from Germany (26.9%), the Czech Republic (13.8%), Slovakia (9.3%) and Italy (6.1%), and in 2020 from Germany (27.7%), the Czech Republic (16.9%), Slovakia (8.2%) and Italy (4.9%).

The analysis concerning the geographical structure has revealed that Poland observed the highest exchanges with developed economies, other EU member states having the lowest trade barriers and the smallest limitations in the movement of people for personal and professional purposes. The above initially confirms the theory that the size of the trading partners, distance between them and trade barriers seem to be the most important factors influencing international trade (cf. Ambroziak 2013; and Czarny 2002).

### Conclusions

The analysis has revealed that not all the results are consistent with the assumptions made in the research hypothesis within which the research questions were analyzed. A positive answer to the research question (Q1) was obtained in case of trade in business travel services (increase of the RCA index in extra-EU trade and increase of the LFI indices both in intra-EU and extra-EU trade; however, in case of intra-EU trade the LFI index in 2020 was below zero). In case of personal travel services an answer to the research question (Q2) was negative (decrease of the RCA and LFI indices, both in intra-EU and extra-EU trade).

The factors behind the success in trade in business travel services are related not only to the opening of Poland's economy, but also to its competitiveness compared to other destinations, relatively low costs of highly qualified labour and reduction of technological gap, which have contributed to the inflow of foreign investments. The above, in turn, resulted in decline in demand for imports of this type of services and increased their exports to non-EU states. The decrease of Poland's trade position in personal travel services resulted from decline of its shares in Poland's total exports compared to the EU. This is also indirectly related to relatively poorer export offer of Poland compared to the EU (including health and education related personal travel services).

The obtained results confirm the increasing importance of the service sector, which should be treated as one of the main engines for Poland's future growth and an innovation catalyst. Moreover, this study constitutes a contribution to the discussion on possible actions to be taken at the macro-, meso- and microeconomic levels in order to change economic policies and develop strategies for the development of the service sector, including travel industries, having also in mind demographic challenges and global trends as Environmental, Social, and Governance (ESG) factors, Artificial Intelligence (AI), strengthening supply chains and sectors offering protection against various types of risk.

Due to the above, there is a need of further research on trade position in intra-EU and extra-EU trade in business and personal travel services of the remaining EU member states as well as on determinants influencing trade position, taking into account geographical and sectoral approaches.

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