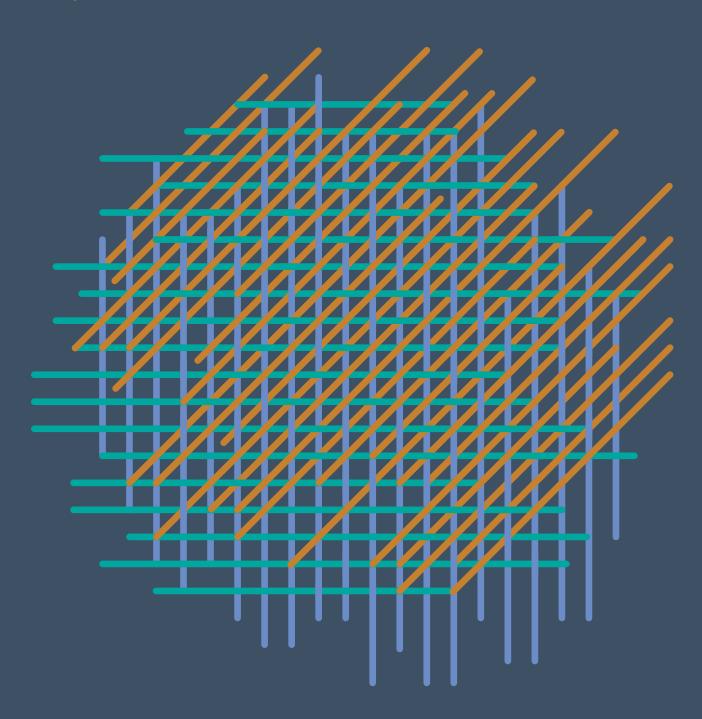
Integration within the European Single Market: accounting, computer, and construction services

A report prepared for the Polish Ministry of Foreign Affairs by CASE – Center for Social and Economic Research



Integration within the European Single Market: accounting, computer, and construction services

A report prepared for the Polish Ministry of Foreign Affairs by CASE – Center for Social and Economic Research

Published by:

Copyright © Ministry of Foreign Affairs, Warsaw 2019

Drafted by:

CASE – Center for Social and Economic Research al. Jana Pawła II 61/212 01-031 Warsaw Poland

Authors:

PhD Przemysław Kowalski PhD Anna Paulina Malinowska PhD Małgorzata McKenzie Krzysztof Głowacki

Proofread (pp. 1-52) by:

IURIDICO Legal & Financial Translations Sp. z o.o. at the request of the MFA

Design and typesetting by:

Paweł Osial

ISBN 978-83-66213-22-7

Contents

List of Tables	4
List of Figures	4
Acronyms and abbreviations	6
Reader's guide	7
Content and structure	7
Editorial note and relationship with the previous version	7
I. Trade in services within the Single Market	8
What are services and how are they traded across borders?	9
Poland and trade in services in the EU	10
Close-up on three Polish services sectors	11
Accounting and auditing services	11
Computer services	12
Construction services	13
Competitiveness	14
II. Barriers to trade in services and further liberalisation efforts	17
Barriers to trade in services: what they are	17
The Single Market in services	19
The Services Directive	21
A review of remaining barriers for trade in services within the Single Market in the three analysed sectors	22
Accounting and auditing services	23
Construction services	26
Recognition of qualifications	31
Computer services	33
The importance of the Digital Single Market for computer services and beyond	35
Economy-wide effects of intra-EU services trade integration at the country level across the three sectors	40
Estimated impact of further integration – the cases of Poland, Germany, Sweden, and Hungary	42
Sector-level costs of restrictions on trade in services	43
Offensive and defensive interests across all three sectors	44
SMEs	45
Summary and recommendations	46

References				
ANNEXES				
Annex 1: Sectoral statistics				
Annex 2: Revealed Comparative Advantage – methodology and results				
Annex 3: The OECD's Services Trade Restrictiveness Index				
MFN vs EEA	73			
Annex 4. Additional material on barriers in the three sectors in Poland, Germany, Hungary and Sweden	76			
Accounting and auditing services	76			
Computer services – existing barriers and challenges ahead	80			
Construction services – existing barriers and challenges ahead – additional information	83			
Full list of references (including for the Annex)	85			
List of Tables				
Table 1 Accounting, computer and construction service: modes of provision across borders Table 2 Ad valorem equivalents of barriers to trade, by sector and country	10 43			
List of Figures				
Figure 1 EU28 imports of services from the EEA and Switzerland, 2016	10			
Figure 2 Share of selected sectors in total Poland's exports of services in 2016	11			
Figure 3 Polish accounting, auditing & bookkeeping services exports, 2010–2016	12			
Figure 4 Polish computer services exports, 2010–2016	13			
Figure 5 Polish construction services exports, 2010–2016	14			
Figure 6 Cross-sectoral view of differences between intra-EEA and overall barriers				
for trade in services in 2017	20			
Figure 7 Accounting and auditing services EEA STRI in 2017	25 33			
Figure 8 Construction services EEA STRI in 2017 Figure 9 Cumulative number of data regulations	35			
	39			
Figure 10 Computer services EEA STRI in 2017	39			
ANNEXES - List of Figures				
Figure 1 Turnover in legal and accounting services in absolute terms and as share of the total business economy 2016	53			
Figure 2 Value added (at factor cost) as percentage of the production value in legal and accounting services as compared to the total business economy, 2016	54			
Figure 3 Number of enterprises in legal and accounting services in absolute terms and as a share of the total business economy, 2016	55			

figure 4 Number of persons employed in legal and accounting services in absolute erms and as a share of the total business economy, 2016	55
Figure 5 Average personnel costs in the sector relative to the whole economy, 2016	56
Figure 6 Wage-adjusted labour productivity in the sector relative	
o total economy, 2016	57
rigure 7 Investment per person employed in the sector relative	58
o the whole economy, 2016 Figure 8 Investment rate in the sector relative to the whole economy in 2016	58
Figure 9 Turnover in computer services in absolute terms and as a share	130
of the total business economy, 2016	59
Figure 10 Value added (at factor cost) as percentage of production value n computer services compared to the total business economy, 2016	60
Figure 11 Number of enterprises in computer services in absolute terms and as a share of the total business economy, 2016	60
Figure 12 Number of persons employed in computer services in absolute terms and as a share of the total business economy, 2016	61
Figure 13 Average personnel costs in computer services compared o the total business economy, 2016	61
igure 14 Wage-adjusted labour productivity in computer services compared o the total business economy, 2016	62
igure 15 Investment per person employed in the sector relative o the whole economy, 2016	62
Figure 16 Investment rate in computer services compared to the total ousiness economy, 2016	63
Figure 17 Construction sector turnover relative to the whole economy, 2016	63
Figure 18 Construction sector size relative to the whole economy, 2016	64
figure 19 Construction sector value added at factor costs relative o the whole economy, 2016	65
Figure 20 Persons employed in the sector relative to the whole economy, 2016	65
Figure 21 Average personnel costs in the sector relative to the whole economy, 2016	66
Figure 22 Wage-adjusted labour productivity in the sector relative o total economy, 2016	66
Figure 23 Investment per person employed in the sector relative o the whole economy, 2016	67
igure 24 Investment rate in the sector relative to the whole economy, 2016	67
Figure 25 Revealed comparative advantages in the accounting and auditing sector	69
Figure 26 Revealed comparative advantages in the computer services sector	70
Figure 27 Revealed comparative advantages in the construction services sector	72
igure 28 Intra-EEA STRI sector profiles	73
Figure 29 STRI in computer services: intra-EEA and MFN, 2017	74
Figure 30 Computer services EEA STRI vs MFN STRI in 2017	75
Figure 31 STRI in accounting services: intra-EEA and MFN, 2017	76
igure 32 Accounting services EEA STRI vs MFN STRI in 2017	79
igure 33 STRI in computer services: intra-EEA and MFN, 2017	80
Figure 34 Computer services EEA STRI vs MFN STRI in 2017	82
Figure 35 STRI in construction services: intra-EEA and MFN, 2017	83
Figure 36 Construction services EEA STRI vs MFN STRI in 2017	84

Acronyms and abbreviations

- EEA European Economic Area
- EEA STRI Services Trade Restrictiveness Index at the level of the European Economic Area
 - EU European Union
 - FDI Foreign Direct Investment
 - GATS General Agreement on Trade in Services
 - GDP Gross Domestic Product
 - ICT Information and Communications Technologies
 - IT Information Technology
 - MFN Most Favoured Nation
- MFN STRI Services Trade Restrictiveness Index at the level of the Most Favoured Nation
 - OECD Organisation for Economic Co-operation and Development
 - RCA Revealed Comparative Advantage
 - STRI Services Trade Restrictiveness Index

Reader's guide

Content and structure

This report analyses the extent of integration within the European Single Market in three services sectors, (1) construction, (2) IT/computer services, and (3) accounting and auditing services, and draws key conclusions in the context of future Single Market services liberalisation efforts. The main body of the report provides a comparative analysis of trade integration and recent trade developments within the three sectors, focusing on Poland's stakes in the agenda regarding liberalisation of trading in services. It assesses the still existing trade barriers, both for Polish services providers operating in the European Single Market and for foreign firms from other Single Market member states selling to customers in Poland. The discussion of potential benefits from further liberalisation of trade in these sectors for Poland is set in the broader context of the offensive and defensive interests in these sectors of three of Poland's EU partners: Germany, Hungary and Sweden.

The main body of the report is organised into three parts. The first one serves as the background for subsequent analyses, providing general information on trade in services in the EU and modes of the provision of services across borders, as well as presenting statistics on export competitiveness in the sectors of interest. The second part discusses the Services Directive and relevant liberalisation efforts within the Single Market. This is followed by a detailed analysis of the remaining barriers in the three sectors within the Single Market. The last section concludes and provides key policy recommendations.

The Annexes present additional sectoral statistics and information on economic characteristics, trade integration, and the remaining trade barriers identified in Poland and the three selected EU partners (Germany, Hungary and Sweden). Additional information on the OECD Services Trade Restrictiveness Index methodology used to assess the significance and implications of remaining trade barriers is also included.

Editorial note and relationship with the previous version

The study "Integration within the European Single Market: accounting, computer and construction services" was commissioned by the Ministry of Foreign Affairs (in consultation with the Ministry of Entrepreneurship and Technology) and prepared by the independent think tank CASE – Center for Social and Economic Research. It is intended as a Polish contribution to the ongoing discussion on the future of the Single Market at the highest political level as well as in the context of upcoming programming of the agenda of the next European Commission. The final version of the report reflects comments received regarding the previous versions.

I. Trade in services within the Single Market

It is estimated that services account for 70% of EU-wide GDP and employment. They are thus of **paramount importance to the creation and sustaining of jobs and economic growth in Europe**.

The functioning of the services sector has significant impact on the performance of other economic sectors. Services such as accounting and auditing, computer services, transportation and logistics underpin production in, inter alia, the manufacturing and agricultural sectors. In Poland, for example, services exported directly and embodied in manufacturing products account for more than 50% of the total value of exports.¹

Accessing such domestic or imported services is thus a key element of the competitiveness of the Polish economy in a wider context. However, service providers typically face higher barriers to trade within the EU Single Market as compared to producers of goods, which hinders their development. Some of these barriers can be overtly protectionist (e.g. discriminatory regulations catering to local industry lobbies), while others can be unintentional and stem from cultural, legal and economic differences between the EU Member States. It is often difficult to distinguish between the two cases. For example, trade barriers for services often take the form of requirements that foreign service providers register locally and meet local standards which are (sometimes only slightly) different from those in the home country, thus such obstacles create additional and typically substantial costs. However, some regulations which affect trade in services also serve important societal standards and goals which differ from one EU member to another: some barriers to trade in services cannot therefore be viably reduced. This and the fact that Poland is becoming a highly competitive supplier of services within the EU are the reasons why deliberation of further regulatory reforms at the EU level to advance liberalisation of services is of strategic interest to Poland.

See, for example, the services content of exports statistics in the OECD Trade in Value Added Database and OECD (2013), *Interconnected Economies*, OECD Publishing.

What are services and how are they traded across borders?

A service is typically defined as a "product that is not embodied in a physical good and that typically effects some change in another product, person, or institution". Its provision is typically associated with a transaction where no physical goods are transferred from the seller to the buyer, but the frontier between a good and a service is often blurred because, firstly, services often make up the value of and ensure functionality of traded physical products and, secondly, services are often tied to a sale of a physical product (e.g. after-sales services following a purchase of a car).

Being intangible, services are not manufactured, transported or stocked; they are usually produced and consumed simultaneously. In some cases the provision of services requires a geographical proximity between a producer and a consumer (e.g. in construction) but some services are traded successfully on large distances (e.g. IT services). Services can thus be traded in several ways, including:

- 1. cross-border trade (e.g. transport services or any services provided by electronic links such as e-mail);
- 2. consumption abroad (e.g. tourism, studying abroad);
- 3. foreign direct investment (FDI) (e.g. financial, insurance, or distribution service providers establish affiliates abroad);
- 4. movement of service professionals (e.g. a business consultant or an engineer to repair machinery).³

Needless to say, accounting consistently for all of the aspects of services trade is difficult and not all modes of trade in services are covered equally well in official services trade statistics.⁴ However, as far as the three services sectors considered in this study are concerned, according to estimates by Eurostat, trading across borders involves primarily cross-border supply by electronic means or service delivery through the presence of employees from one country in the territory of another (Table 1).⁵ Consequently, often a potential further expansion of trade in those services within the Single Market has to focus on the feasibility of exchanging electronic data, on restrictions on providing services as a foreign-registered firm and barriers to moving staff across borders. Further liberalisation of barriers to FDI would also help, although the barriers remaining within the Single Market which affect FDI tend not to be directly discriminatory and relate rather to more general impediments to establishing and doing business faced also by domestic companies.

² Deardorff's glossary of International Economics.

These are the four modes of trade in services as defined in the WTO's General Agreement on Trade in Services (GATS). As mentioned above, services are also used for the production of goods which cross borders. This observation and the significant content of services in the value of traded manufactured products have led some to call for adding the "fifth mode" of trade in services, to account for services embodied in trade in goods (Cernat and Kutlina-Dimitrova, 2014).

It has to be underlined that not all modes of trade in services are recorded in statistics for trade in services. In particular, of the four WTO modes of trade in services only the first the first two, cross-border trade (Mode 1) and consumption abroad (Mode 2), are covered, while trade in services through foreign presence (Mode 3) and movement of people (Mode 4) are not covered as well. The coverage of these modes in data for barriers to trade in services used later in this study is different and indeed there several aspects of Mode 3 and 4 are covered.

However, the provision of services through FDI and commercial presence abroad is probably underestimated in this approach.

Table 1 Accounting, computer and construction services: modes of provision across borders

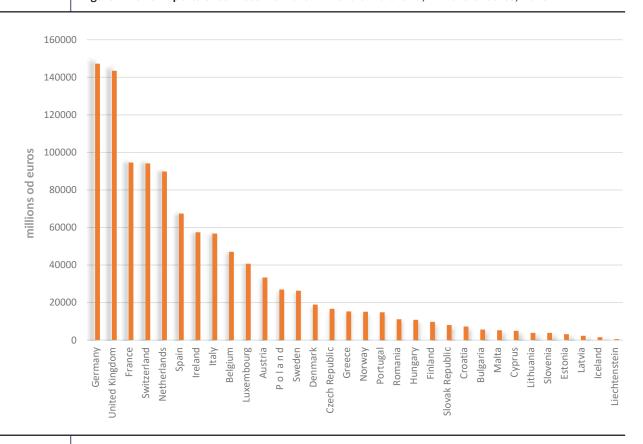
Service/mode of provision	Mode 1: supply by electronic means	Mode 4: movement of people
Accounting*	75%	25%
Computer services	50%	50%
Construction	-	100%

Source: Eurostat Services trade statistics by modes of supply in Statistics Explained at https://ec.europa.eu/eurostat/statistics-explained/index.php/Services_trade_statistics_by_modes_of_supply#Future_perspectives Note: The modes of provision of services were estimated for extra-EU trade.

Poland and trade in services in the EU

Services account for an important part of the GDP of developed economies. In the EU the share of services in GDP tends to be larger the more developed and the smaller the economies are. The shares range from 93% in Luxemburg (and above 80% in Cyprus, Malta, the UK, France, Belgium, Denmark, the Netherlands, Greece and Sweden) to 63% in Ireland (and below 70% in the Czech Republic, Romania, Hungary and Slovakia). Poland, with a 71% share of services in GDP, falls below the EU average (79%), but it still has quite a high share among the new EU Member States of Central Europe, especially given the relatively large size of its economy. This means that any measures improving the competitiveness and productivity of the Polish services sector are likely to have significant ripple effects throughout the economy.

Figure 1 EU28 imports of services from the EEA and Switzerland, millions of euros, 2016



Source: OECD Trade in Services statistics

^{*} Share of the broader category of professional and management consulting services.

EU accession was followed by a dynamic growth in the value of Poland's trade in services to and from the EU. During the period 2010–2016 the value of Poland's total services exports increased by 68%, much more than the growth of the country's total production. Exports destined for the Single Market grew by 66% and accounted for 80% of total exports of services in 2016. In that period Poland's imports of services expanded also, although at a slower rate. Since 2010 Poland has been a net exporter of services to the EU, and it has strengthened its net position.

Currently Poland is the 12th largest exporter of services within the Single Market (Figure 1). In 2016 the value of **Polish services exports was about a fifth of that of Germany, approximately equal to that of Sweden** and markedly higher than that of Hungary. This underlines Poland's robust potential as a services provider within the Single Market.

Close-up on three Polish services sectors

The three sectors studied in detail in this report, i.e. **accounting and auditing, construction, and computer services, together accounted for 15.5% of the more than €45 billion of services exported by the Polish economy in 2016 globally**, 9 with computer services contributing the most (8.9% of all of Poland's exports of services) (Figure 2).

1.4
3.1% 4.0
8.9%

1.6
3.5%

Accounting, auditing, bookkeeping, and tax consulting services

Computer services

Construction services

Other

Figure 2 Share of selected sectors in total Poland's exports of services in 2016, billions of euros

Source: OECD ITSS

Accounting and auditing services

Poland has been an important cross-border provider of accounting services in the Single Market. In 2016 it was the sixth largest provider of these services, after the UK, Germany, the Netherlands, Belgium and France. Of the €1.4 billion worth of accounting, auditing, bookkeeping and tax consulting services exported by Poland,

As measured by the growth in the nominal GDP. Exports of services grew more than three times faster than GDP in 2010–2016.

⁸ Which is the EU plus Norway, Iceland, Lichtenstein and Switzerland.

⁹ Almost 70% of this value was accounted for by exports to the EU28.

more than 70% went to the rest of the European Union. The largest EU recipient was Germany (13.5% of the total such exports), followed closely by the Netherlands (11.5%) and the UK. The most significant non-Single Market recipient of Polish accounting and auditing services was the USA (nearly 13% of such exports).

Overall, exports of accounting and auditing services to the Single Market have achieved an average annual growth rate of 23% over the last five years, which resulted in their value in that period nearly tripling (Figure 3). This, together with the fact that the above-mentioned countries are themselves important providers of the analysed services within the Single Market, suggests that **Polish accounting firms have been actively participating in the European international services supply chains**, where outsourced business processes play an important role.

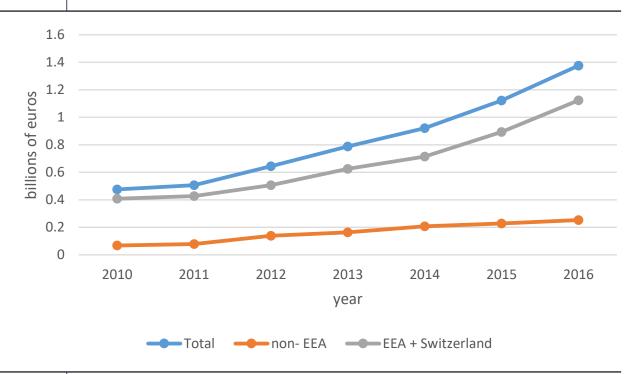


Figure 3 Polish accounting, auditing & bookkeeping services exports, 2010-2016

Source: OECD International Trade Services Statistics, last accessed on 18/10/18

Computer services

Computer services are the largest of the three categories of exported Polish services analysed in this study. However, in terms of national share in the overall value of intra-EU imports of computer services, Poland has not yet become an important supplier (see also the section on *Relative advantage* below). The three largest providers, according to data from 2016, are Ireland, Germany and the UK. Poland sells to the EU market about 10% of what the leader (Ireland) does.

Almost 64% of Poland's exports in this category were destined for EU markets. The largest markets of Polish exports were the UK (taking nearly 17%) and Germany (slightly more than 12%). Other significant export markets in the EU included Ireland (8.8%) and Sweden (5.3%). Computer services were also exported to the USA, which accounted for nearly 15% of the total value of exported computer services. Similarly to accounting services, these flows of services to other key computer services exporters point to corporate and value chain links between Polish services providers and European and American markets.

The growth of sales of Poland's computer services in recent years has overshadowed even the rapid growth in the sales of accounting services, with **the value of computer services exports having nearly quadrupled since 2010**. Sales within the Single Market were the main factor behind this increase, with exports there growing by more than €2 billion and accounting for the lion's share of the overall growth (Figure 4).

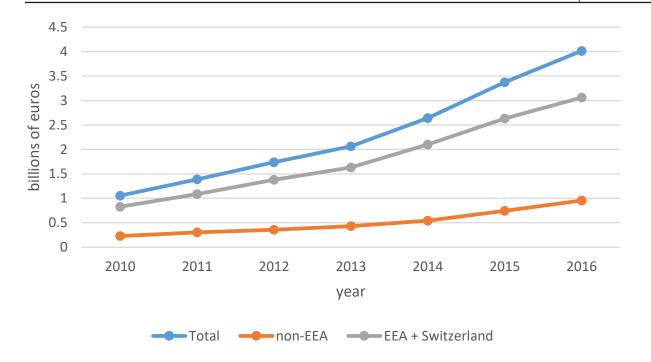


Figure 4 Polish computer services exports, 2010-2016

Source: OECD ITSS

Export sales were one of the main factors behind the sector's rapid expansion in Poland (see the *Computer services* section in part II of this report).

Construction services

Poland has traditionally been an important provider of construction services on the EU market, the fourth biggest provider of such services in 2016, although it supplied less than half of the amount proved by the leading nation (Germany). Notably, the value of Poland's exports of construction services to the EU were larger than those from much bigger economies, such as France and Italy, showing Poland's large competitive advantage with regard to these services.

In 2016 Poland exported €1.6 billion worth of construction services, with **the Single Market accounting for more than 90% of that**. Sales to Germany were a third of total construction services exports, with Belgium the second largest destination (11.7% of all construction services exports). Poland's other significant construction services export markets included Sweden (nearly 10%) and Norway¹⁰ (5%). With regard to exports outside of the Single Market, Polish construction firms sold 4% of their export services to Russia.

The export of construction services to the Single Market from Poland appears to have gained momentum in 2014, growing at approximately 15% annually in the

period from 2014 to 2016 (Figure 5), which coincided with a decline of such exports to non-EU markets.

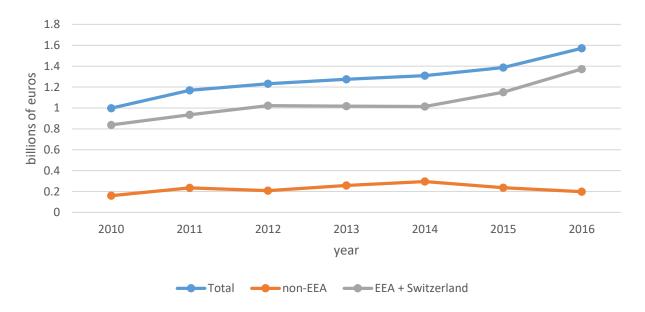


Figure 5 Polish construction services exports, 2010-2016

Source: OECD International Trade Services Statistics, last accessed on 18/10/18

Competitiveness

- Poland's relative advantages as compared the other participants of the Single Market seems to be currently in accounting & auditing and construction, but not yet in computer services, even though the noted dynamic export growth in the latter sector may point to strong competitiveness (see also Annex 2).
 - Overall, the pattern of noted comparative advantages in the sectors and countries under review suggests considerable potential for further gains from exports for Polish services providers operating in all these sectors. Identification of the most important remaining barriers impeding trade in these areas within the Single Market is thus of paramount importance.

A country is perceived as being competitive with regard to the provision of a certain service *if it can provide that service more cheaply than producers from other countries*. When such competitiveness is not constrained to a limited number of firms but instead builds on country-wide strengths, it is reflected in aggregate production and trade statistics. Then the country has a comparative advantage or, one could say, 'aggregate competitiveness' with regard to such services. Such advantages are also reflected in countries' trade patterns. With trade liberalisation a country which has a comparative advantage in a given sector may be expected to expand exports of those products while importing the products in which it does not have such an advantage.

Poland has a strong advantage in *accounting and auditing* services, and exports of Polish accounting, auditing, and bookkeeping services have been growing dynamically in recent years Moreover, Poland has the largest advantage in this sector among the four countries studied in this report and is the only one to have strengthened its position in the

period under review. This suggests a healthy competitive situation for Polish accounting services and an economic environment conducive to their growth. Further liberalisation of trade in accounting and auditing services within the Single Market is thus expected to benefit Poland.

The noted comparative disadvantage of German exports of accounting services and its decline in Sweden are not surprising, as accounting is relatively labour- and skill-intensive, with labour costs playing an important role in the delivery of services. Moreover, Germany and Sweden, as the owners of important physical and intangible capital, as well as technological leaders in sectors such as automotive, machinery, and, indeed, computer services, can employ resources available within their economies more productively by allocating those to these knowledge-intensive activities, thus maximising their benefits from trade. With the same quality services being available at a more competitive price somewhere else (for example in Poland), **those investing in Germany or Sweden are likely to be better off investing their efforts and capital in other sectors**, such as computer services. That is why Germany has remained a relatively insignificant supplier of accounting services within the Single Market. Similar factors are likely behind Sweden losing its comparative advantage in accounting services and expanding such advantage in computer services over recent years.¹²

In *computer services*, despite a rapid increase in exports over recent years, Poland still did not show an advantage in 2016. However, if recent trends are any guidance, it seems that Poland will likely have gained such an advantage. The reasons for Poland being relatively less specialised in the exports of these services as compared to Sweden or Germany need to be considered not only in a domestic, sectoral level but also in a broader economy and EU-wide context. At the sector level it may be that the domestic segment of digital technologies has remained insufficiently accessible to consumers and small and medium businesses, thus wasting opportunities presented by technological spill-overs from larger and more advanced (and often international) companies, which are more prevalent in economies such as Germany and Sweden. 13 However, the recent dynamic growth suggests that the competitiveness of the sector has improved. At the economy and EU-wide level it is, at the same time, clear that this recent rapid growth of exports has still not exhausted Poland's potential for specialisation in the sector. As provision of these services is sensitive to regulations covering crossborder movement of electronic data, liberalising changes at the EU level may provide a further boost and for Poland this is a strategic interest, while a potential increase in trade-restricting regulations in this area is a threat.

Sweden has enjoyed a strong comparative advantage in exporting computer services to the EU over recent years, which can be linked to the country being one of the most advanced digital markets in the EU, both for producers and consumers. If Interestingly, Swedish SMEs account for around three quarters of the sector's exports and are highly productive. This is possible thanks to low costs of doing business and exporting, flexible labour markets, competitive product markets, and the presence of quality educational institutions (Falk and Hagsten, 2015). Germany recently started to display a comparative advantage in the EU market for computer services. This can be put down to the fact that although Germany was only middle-ranking among EU countries with regard to digitalisation, it has made progress since 2014. Its improved performance may be supported by the good level

Norway, although not an EU Member State, is part of the EEA and the Single Market.

¹² It is not clear why Hungary seems to have been losing its position since 2014, but the trend has correlated with the increase of the advantage in this sector in Poland.

¹³ As documented in the most recent Digital Economy and Society Index (DESI) 2018. Country Report Poland.

¹⁴ For details, see Digital Economy and Society Index (DESI) 2018. Country Report Sweden.

of digital skills found in Germany. However, it has been suggested that a shortage of ICT professionals may hamper the German economy's potential in the future.¹⁵

The unchanged and low competitive position of Hungary can be attributed to its below-average scores with regard to human capital, as about half of the population does not have basic digital skills, and there appears to be a low number of Hungarian STEM (science, technology, engineering and mathematics) graduates. Although the use of ICT by businesses and e-commerce has improved, Hungarian companies seem to be still far from fully exploiting the opportunities offered by digital technology.¹⁶

Poland continues to enjoy a highly advantageous and stable position compared to other EU countries with regard to exports of construction services, displaying an advantage approximately double that of Sweden or Hungary, the other two countries of those studied which showed a comparative advantage in this sector in 2016. This likely relates to not only the constantly attractive ratio of labour costs to skills, but also to the experience Polish construction firms gained during the transition period and the following boom in the domestic construction market in the 1990s and 2000s, and from providing construction services in EU markets on a large scale prior to the country's accession to the European Union.

Sweden's comparative advantage with regard to construction services has fluctuated on the border of being competitive over the last years. Swedish exports have been highly variable and the comparative advantage shown in 2016 was solely due to a spike in the country's exports in that particular year. Germany has a comparative disadvantage with regard to exporting construction services, most likely due to its high labour costs and relatively its strong competitive position in other capital- and technology-intensive activities.

¹⁵ Digital Economy and Society Index (DESI) 2018. Country Report Germany.

Digital Economy and Society Index (DESI) 2018. Country Report Hungary.

¹⁷ Not seen since 2009. It may be one-time phenomenon (see https://knoema.com/atlas/Sweden/topics/Foreign-Trade/Service-exports/Construction-services-exports).

II. Barriers to trade in services and further liberalisation efforts

Barriers to trade in services: what they are

Because of their intangibility and the way in which they are traded, services face different types of barriers to international trade compared to those faced by goods. Trading in services is not hindered by tariffs collected at the border but instead by **barriers to foreign establishment and various 'behind-the-border' domestic regulations, which take the form of local registration and certification requirements, norms and technical standards**. Discriminatory treatment of foreign services providers and outright market access barriers, combined with undue domestic (over)regulation, can negatively affect trading of services across borders.¹⁸

- Liberalisation of trade in services may offer sizeable economic gains, but is potentially challenging, since it requires changing regulations. When trade barriers take the form of outright discriminatory measures toward foreign providers, such as, for example, special requirements on foreign investors (e.g. limits on equity held by foreigners or a regulation that protects incumbent service suppliers from competition; see Dee, 2005), they can be relatively easily reformed, with significant trade-creating benefits.
- Liberalisation of the services sector may be greatly beneficial for a domestic economy, since the positive effects of liberalisation result not only from the pro-competitive effects of more open market access but also from domestic productivity gains from simplifying regulation. In some cases restrictive regulatory barriers, such as red tape, are also problematic for domestic services providers and potential market entrants. For example, an unnecessarily restrictive professional qualification requirement faced by foreign engineers in the construction sector does not only hamper the activity of foreign construction firms, it also harms Polish construction firms which also employ such engineers.
- Some restrictive regulations aim at achieving legitimate regulatory goals, such as preventing market failures (e.g. preventing abuse of power due to dominant position or information asymmetry) or making sure that individuals providing

services have appropriate qualifications and can interact meaningfully with local consumers (e.g. a requirement for lawyers to be able to practise in the country's language or legal tradition). In such cases lowering of barriers to trade in services involves changing domestic regulations, which may not only be difficult but also counterproductive.

• In the above cases as well as services providers **consumers are also significantly affected** (see also Box1).

In today's highly integrated and contestable markets, distinguishing between discriminatory or restrictive barriers for both foreign and domestic firms, and identification of barriers stripped of any domestic regulatory value at all or, indeed, singling out the barriers which while discriminatory may have legitimate domestic regulatory objectives, are far from being easy tasks. This is why, **despite the potentially significant gains to be had from lowering barriers for trade in services, such liberalisation has always been a formidable task in terms of economic policy-making**. This is also one of the reasons why the level of integration within the Single Market for services lags behind that for goods.

Box 1. Key findings from the OECD 2018 Report on Services Trade Restrictiveness

• Barriers for trade in services hinder the exporting of services

The OECD estimates reveal that the trade cost equivalent of barriers for trade in services largely exceeds the average tariff on traded goods. Trade costs arise both from policies that explicitly target foreign suppliers and from domestic regulations that fall short of best practice, for example in areas of competition policy and rule-making.

It is consumers and downstream firms who pay the cost of trade restrictions

Entry barriers allow incumbent firms to gain market power, limit competition, and delay innovation. The costs of a policy environment that reduces competition from new entrants, whether domestic or foreign, is ultimately borne by consumers and downstream business customers, who pay higher prices and enjoy less choice than they would in more competitive markets. The resulting price increases for domestic users of services can be quantified as equivalent to a sales tax on their purchases. Average estimates of the tax equivalent of restrictions on trade in services range from about 3% to almost 40%, depending on the sector and its initial market structure. In some segments of construction the average estimated sales tax equivalent is about 20%, and in some countries almost 80%, imposing substantial additional costs on manufacturing enterprises and eventually on final customers.*

• Regulatory co-operation can reduce trade costs

Regulatory differences are a source of trade barriers, as different regulations must be complied with by exporting firms, adding to their costs. Indeed, these differences become relatively more important as trade barriers come down to a level where firms start to consider entering multiple markets. Thus when markets are more open, trade costs imposed by the average degree of regulatory differences are estimated as being about 40% in *ad valorem* terms. While regulatory harmonisation can reduce trade costs, removing the most onerous restrictions, it is a prerequisite to maximise the gains from regulatory co-operation.

• Unrestricted movement of professionals is vitally important for trade in services

Apart from some specific sectors, such as construction, the cross-border movement of people does not normally account for a large share of trade in services, but it is essential for international business operations. The mobility of natural persons across international borders is particularly important for trading in business services, which in turn is an important channel for knowledge transfer.

The digital economy underpins trade in services

Liberalisation and pro-competitive reforms in the telecommunications sector are associated with a substantial reduction in trading costs for business services. The availability of high capacity networks at competitive prices is a necessary pre-condition for the digital transformation of knowledge-intensive services. Access to the professions and the services they provide is also essential.

• Services reforms help SMEs

Because they do not depend on the volume of work or the size of a firm, the costs of dealing with regulatory hurdles and complying with diverging regulations in every new market fall more heavily on small and medium-sized enterprises (SMEs). For micro firms engaging in cross-border trade, an average level of restrictiveness with regard to trade in services represents an additional 7% in trade costs compared to large firms. Establishing an affiliate abroad involves even higher costs: for a small firm an average level of restrictiveness with regard to trade in services is estimated to be the equivalent to an additional 12% tariff compared to large firms.

* Importantly, the above estimates refer to what are known as external MFN trade restrictions, applied to imports from outside of the European Economic Area. For example, the intra-EEA estimate of cross-border barriers in construction is four times smaller than the equivalent restriction faced by third countries. Therefore the respective tax equivalent and a possible gain following the removal thereof will be much smaller as well. However, it is reasonable to expect that the intra-EEA restrictions work like MFN ones, i.e. as equivalent taxes placed on the consumption of a service.

Source: A substantial part of this box is composed of excerpts from OECD Services Trade Restrictiveness Index: Policy trends up to 2018, January 2018.

The Single Market in services

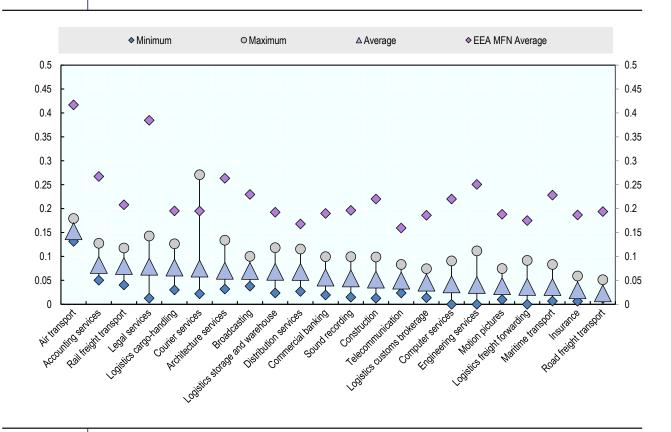
- Within the Single Market, thanks to the considerable liberalisation efforts by Member States to date, barriers faced by service providers from the EU in other European markets are lower than those faced globally (i.e. compared third countries or those faced by third-country firms in the EU market). The latest OECD data shows that the greatest concessions for Single Market participants have been obtained in services sectors, such as air transport, legal services, architecture services and, indeed, accounting services (Figure 6, see also Annex 3).¹⁹
- However, important barriers to cross-border trade in services still exist within the EU, as evidenced by the still low share of services in total intra-EU

Annex 3 provides some more insights on the extent of intra-EU integration achieved to date within the Single Market for services as compared to the most favoured nation (MFN) barriers which capture barriers applied by EU Member States to imports of services from outside the Single Market. It needs to also be stressed, however, that the liberalisation within the Single Market has had positive spill-overs to other service exporters, as with many trade in services concessions these cannot be really applied on a preferential basis.

trade (around 30% in 2017),²⁰ as opposed to the almost 70% share thereof in the EU's GDP.²¹ The restrictiveness of these barriers shows a strong variation across sectors at the EEA level. For example, computer services are among the least restricted within the Single Market; construction services are more constrained, but still below the Single Market average; accounting and auditing services are among the most restricted services when it comes to cross-border trade (Figure 6; OECD, 2018a). The elimination of existing barriers may bring substantial economic benefits to the EU.

• Digitisation has a significant impact on all sectors of the EU's economy, including multiple segments of the services market and their future performance. It is estimated that an **integrated Digital Single Market could add up to €415 billion** a **year to EU GDP**, the equivalent of up to 3% of the EU's GDP.²²

Figure 6 Cross-sectoral view of differences between intra-EEA and overall barriers for trade in services in 2017



Note: Minimum, average and maximum show, respectively, the minimum, average and maximum level of barriers to trade in services within the EEA, while the EEA MFN Average shows the average level of barriers faced in the EEA by services providers from outside the EEA. The indices take values between zero and one, with one being the most restrictive. They are calculated on the basis of the OECD's intra-EEA STRI regulatory database.²³ Source: OECD (2018a)

²⁰ Eurostat, BoP data.

²¹ Naturally, part of the difference is due to the fact that services are less tradeable than goods and that some aspects of the trade in services are difficult to measure.

²² Percentages calculated using the EU's GDP in 2015 in current prices.

The OECD's Services Trade Restrictiveness Index (OECD STRI) is a unique analytical tool, which provides comparative, numerical and qualitative information and assessment of barriers across Member States, including those faced by firms from outside and within the Single Market. It is used through the rest of this paper to assess the relative size of barriers in different sectors, as well as the potential economic benefits of the removal thereof.

The Services Directive

The most significant piece of secondary legislation which supports the Single Market in services is Directive 2006/123/EC, better known as the Services Directive.²⁴ It aims to realize the full potential of the services markets in Europe by removing legal and administrative barriers to trading. The simplification measures introduced by the Directive have increased transparency and made it easier for businesses and consumers to provide or use services in the Single Market.²⁵

The Services Directive covers service activities amounting to about 46% of the EU's GDP, including sectors such as retail, tourism, construction and numerous business services.²⁶ In essence, it covers all non-financial services except for communication, health, transport, certain social services and services provided by notaries and bailiffs.

The **Services Directive is complemented by a number of sector-specific regulations**, which provide the rules for services in a range of specific sectors (financial, transportation, telecommunications, postal services, and broadcasting sectors).

Box 2. Examples of benefits from the Services Directive

The Services Directive and the integration of the Single Market that followed after 2006 have alleviated several barriers to the free flow of services throughout the EU.

The Directive facilitated a number of reforms in EU Member States adding an estimated 0.9% to the EU's GDP over the last decade. It was estimated that, inter alia, as a result of the implementation of the Services Directive Germany, Hungary and Poland achieved GDP gains in the range of 0.5–0.7% each; Swedish GDP was estimated to have expanded by 1.1% for the same reason (EC, 2014: 11).

- For example, although other factors have been at work as well, the cross-border provision of computer services from Hungary to the rest of the EEA has been growing much faster since the implementation of the Services Directive, amounting to 9% per year on average in the period from 2011 to 2016.
- Similarly, thanks to the Services Directive Polish businesses are now free to outsource their accountancy and bookkeeping tasks to professionals in other EU Member States and vice versa. Cross-border export of accounting services from Poland to the EEA surged after the implementation of the Services Directive, with its growth being higher and higher almost every year and reaching 20% annually in the period 2015 to 2016.

In 2004 the European Commission proposed an ambitious directive (known as the Bolkestein Directive), which had an objective of removing the remaining barriers to intra-EU trade in services. However, the proposal met significant opposition from a few of the 'old' Member States, which were concerned about the possibility of 'social dumping', i.e. competition in one market of providers from countries with different wages, different burdens associated with social security contributions, and, generally, different levels of social and economic development. A markedly toned-down version of the proposal was ultimately approved by the European Parliament in 2006, with the deadline for the implementation by the Member States set as the end of 2009. The second key piece of EU legislation is Directive 2005/36/EC, the Mutual Recognition of Professional Qualifications Directive. It generally supports the principle of free movement of professionals by enabling a professional qualification granted in one Member State to be recognized in another for the purpose of allowing the holder to practice a regulated profession. Sector-specific provisions exist for auditors covered by Directive 2006/43/EC.

²⁵ The European Commission.

²⁶ Such as accounting and tax advice, computer programming, real estate, household support services, etc.

However, the implementation of the Directive remains incomplete and it is estimated that the **full implementation could add an extra 1.7% to the EU's GDP** (European Commission, 2017). According to this study, among the countries analysed here in greater depth Germany and Sweden would benefit the most from the completion of implementation processes, by 1.6–1.7% of their respective GDP. Gains attainable for Poland and Hungary would be in the range of 1% of their respective GDPs (EC, 2014: 11).

In recent years the EC has proposed different lines of action to further improve the efficient functioning of the Single Market for services. Specifically, the Commission has proposed a services package (announced in the Single Market Strategy of 2015) encompassing three initiatives concerning the proportionality test, the notification procedure and the European Services e-Card²⁷.

A review of remaining barriers for trade in services within the Single Market in the three analysed sectors

Despite the Services Directive and the other initiatives (e.g. the Professional Qualifications Directive, and the Internal Market Information System, to name just two), services sectors in the EU still seem to be less integrated than those in federal systems, such as, for example, the USA.

The empirical analyses conducted by the European Commission over the last three years, acting to support the Single Market Strategy launched in 2015, confirmed that the remaining barriers still hampered the chances of profitable businesses participation in trade in services, especially for small and medium enterprises (SMEs), and in particular with regard to construction and business services. For those two industries the EC reported that the major barriers boiled down to:

- cumbersome authorisation systems;
- registrations and notifications requirements/obligations;
- requirements regarding the legal form of suppliers of services, ownership structure, the allocation of voting rights and management positions;
- · multi-disciplinary restrictions;
- organisational requirements of health and safety standards;
- obligatory certification schemes;
- needs to uphold certain financial capacities (or, for example, to purchase professional indemnity insurance);
- inadequate enforcement of existing regulations;
- low levels of cross-border public procurement, accompanied by insufficient political support for structural reforms.

In addition, persisting international **differences in the regulations governing provision of professional services create difficulties in providing those services across borders**. Consequently, businesses from other European countries operating in sectors such as accounting face significant administrative barriers when expanding activities to some other countries and therefore incur high administrative costs (ECO-RYS, 2017).

Given the above, there are gains to be had from further liberalisation of services and it is **important to identify the sectors with the highest barriers and the largest potential for additional economic gains**. The reminder of this section uses state-of-theart data and analytical tools developed for this purpose and discusses the key remaining

As regards the proposals for European Services e-Card and reform of services notification procedure key players are unable to agree and an impasse has been reached.

barriers to cross-border trade in the three analysed services and the potential economic benefits from Poland's point of view stemming from the removal of such barriers.

Accounting and auditing services

The barriers to trade in accounting and auditing services within the Single Market are estimated to be the highest of the three analysed sectors. ²⁸ They refer mainly not so much to significant barriers to cross-border trade (although the costs of demanding formalities described in the section on *Construction services* also apply here) but instead to the generally high **regulatory requirements faced by auditors** in EU countries.

In addition to being relatively restrictive, the regulations pertaining to the accounting and auditing sector also vary greatly from one country to another and this is the sector with **one of the highest levels of heterogeneity of national regulations across the different countries** (OECD, 2018a). Heterogeneity of regulations creates additional costs to trading across borders in its own right, irrespective of the level of remaining barriers. For example, if an auditing firm provides its services in many different markets, heterogeneous requirements pertaining to the skills of managers in different EU markets increase the costs of compliance and may limit exports of these services to some of those markets.

Auditing services

Many of the auditing regulations are governed by the Statutory Audit Directive.²⁹ As far as cross-border provision of auditing services within the Single Market is concerned, the regulations relate to:

- 1. the requirement to establish procedures for the approval of statutory auditors who have been approved in other Member States;
- 2. the requirement that the maximum procedures for the approval of statutory auditors who have been approved in other Member States do not exceed an aptitude test in a local language and cover only the statutory auditor's adequate knowledge of the laws and regulations of that Member State in so far as relevant to statutory audits.

While both of these regulations can be seen as market access concessions for providers of services within the EEA, they actually leave considerable space for constraining auditing services markets to local auditors, particularly because the local aptitude tests can be a significant barrier to foreign providers and temporary licencing systems are absent in the majority of analysed countries. However, it can be argued that these aptitude tests are warranted by the responsibilities entailed in the auditing profession. A temporary licencing system, where, for example, some less sensitive activities can be practiced on the basis of a licence from a different Member State could nevertheless enable temporary access of foreign auditors in the short term and would increase the success rate of their local aptitude tests in a longer term.

Overall, within the Single Market the accounting and auditing professions, considered together, remain most 'protected' in Belgium, Austria, France, Portugal, Luxemburg and Italy. They are the least regulated, and the most 'open', in the UK, Ireland, Denmark and the three Baltic states.

²⁹ Directive 2006/43/EC as amended by Directive 2014/56/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2006/43/EC on statutory audits of annual accounts and consolidated accounts (Text with EEA relevance).

Accounting services

Accounting is not a regulated profession in many Member States, although there are still some trade-restricting requirements with respect to, for example, qualifications of managers of accounting firms. The profession of accounting is regulated in seven countries only, and to different degrees.

- France and Portugal, for example, have limiting requirements regarding licensing of managers of accounting firms, while Austria, Belgium, Greece, Luxemburg and Norway require managers to be locally licensed accountants.
- Belgium, France and Germany limit the joint exercising of activities of accountants and other professions (EC, 2017a), which is a precautionary, but also arguably trade restrictive, measure.
- In addition, some countries, for example France and Italy, **reserve simple accounting tasks for qualified professionals**, which not only restricts trade but also imposes additional burden on SMEs (EC, 2017a).

The Accounting Directive,³⁰ implemented by the Member States in 2015, provided a better operating framework for large companies trading cross-border. However, it allowed for so much **discretion in accounting standards for small enterprises located in different countries** that accountants dealing with the accounts of small companies across Europe have to exercise considerable care when reading, interpreting and comparing the information those contain (Lang and Martin, 2016), thereby limiting economies of scale and cross-border provision of such services. Heterogeneity of accounting standards for SMEs is also a barrier for the automatisation of businesses' accounting systems as well as digital reporting procedures for SMEs, and those costs will likely be passed on to SMEs, further squeezing the limited resources which those enterprises have to deal with bureaucratic procedures (SME Envoy Network, 2018).

In addition, some economy-wide **non-transparent regulatory and administrative procedures also pose a burden to the exporting of accounting and auditing services** to roughly half of the Member States, including Germany, Poland and Hungary (green bars in Figure 7). Intra-EEA barriers to competition exist across all but three³¹ EEA countries (inter alia Germany), usually in the form of minimum capital requirements (Sweden, Poland and Hungary),³² fee setting (Slovenia) and restrictions on advertising (Iceland and Portugal).

When looking at the main recipients in the EU of Poland's exports of accounting and auditing services,³³ it is clear that these are the countries where the burden of regulations in their respective sectors is below the EEA average. It further suggests that **Polish service providers are already working with partners located in countries where barriers are lowest**. In fact, the dynamic growth of business processes outsourcing centres in Poland, of which external accounting services form an important pillar, is most likely part of the picture here.

Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC (Text with EEA relevance).

³¹ Two exceptions being the UK and Ireland.

In line with the OECD Services Trade Restrictiveness Index data regarding Poland, Sweden, and Hungary, the barriers to competition assessed (Figure 7) include minimum capital requirements amounting to (in order of country appearance): PLN 50,000 for limited partnerships, PLN 5,000 for limited liability companies, PLN 100,000 for joint-stock companies; SEK 50,000 for corporations; HUF 3 million for limited liability companies and HUF 5 million for joint stock companies.

³³ Germany, the Netherlands and the UK.

Poland's own regulations governing auditing are at the EEA average (Figure 7). The explicit restrictions on foreign entry and movement of people refer to the auditors only and, except for the lack of a temporary licencing system for foreign auditors, are in line with the EU Statutory Audit Directive.

The accounting profession remains relatively open for partners from the EEA. The restrictiveness of the Polish regime is approximately on a par with the EEA average (Figure 7). However, the sector also covers the profession of tax advisors, **which is the most highly regulated of any of the EU countries**, by way of reserved activities and title protection (EC, 2017b). Economy-wide minimal capital requirements and the length of administrative procedures (which are also in place for other sectors) add somewhat to restrictiveness.

In general, the level of protection of the Polish accounting and auditing sector is broadly similar to that in Sweden and Germany. Poland is separated from those two economies only by the Netherlands. Hungary is relatively most restrictive, ranking six places lower than Poland, with restrictions to the movement of people as the most prominent barriers. Sweden, although less restrictive in overall terms, has greater restrictions on foreign entry. The quantitative results (Figure 7) are further confirmed by a qualitative study of national legislation, which showed that Hungary and Sweden are more restrictive by having additional licensing requirements on the members of boards of directors and managers in auditing firms³⁴ that are not present in Poland or Germany.

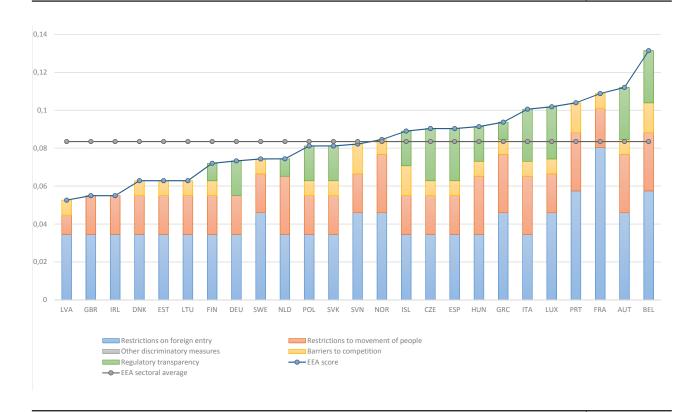


Figure 7 Accounting and auditing services EEA STRI in 2017

Source: OECD STRI 2017 data

³⁴ Both in Hungary and Sweden the majority of the members of boards of directors must be licensed professionals and at least one must be a locally licensed professional. Managers must also be locally licensed professionals.

Construction services

The regulations pertaining to **construction services**³⁵ **within the Single Market are moderately restrictive**, falling somewhere between the highly regulated accounting and auditing sector and the nearly barrier-free computer services, but they do **take the form of restrictions to cross-border provision of services more often than in other sectors**.

While certain intermediate services can be provided from the territory of one's home country, the final output is ultimately almost always delivered in the host country. Therefore, restrictions on the establishing of a (permanent) foreign presence or on temporary cross-border provision of services, as well as barriers to movement of professionals, pose significant difficulties for businesses aiming to operate internationally. These are unfortunately the areas where some of the most restrictive barriers have remained, namely:

- obtaining recognition of qualifications in regulated professions in other Member States is a challenging task;
- the administrative and regulatory barriers for companies aiming to export services still prevail and differ significantly across Member States;
- there are a large number of requirements and relevant authorities responsible for execution of administrative tasks;
- information is fragmented and often available only in the local language.

Thus dealing with the relevant legal regulations and (often individualised) requirements prove time-consuming and costly both for new entrants as well as established companies.

Below is a closer look at various requirements and administrative formalities³⁶ related to the provision of construction and other similar services across the borders of EU Member States.

Member States have put in place **horizontal authorisation schemes for new-ly-established service suppliers**, especially if their introduction can be linked to reasons related to the public interest or when positive effects for subsequent building permits and inspections can be expected (e.g. the requirement that social security payments are made (Italy) or that health and safety requirements are met (Spain)).³⁷ In some Member States that introduce such procedures compliance with the principle of mutual recognition³⁸ and the simplification-related aims³⁹ of the Services Directive remains sometimes problematic in practice. For example, the prior notification of temporary cross-border providers' technical and professional capacities, which is practised in some Member States, is in principle at odds with mutual recognition.

Construction services is often a misleading label for the sector encompassing, to a varying degree and depending on the definition accepted by analysts, services connected not only to erecting and servicing buildings but also handling issues such as electricity and mechanisation (to the extent it is reasonably needed in the construction services); therefore in this section we discuss barriers pertaining to the widest possible scope of "construction services".

The following sections have been prepared based on the information received from European Commission (2017). Administrative formalities and costs involved in accessing markets cross-border for provisions of accountancy, engineering and architecture services, unless explicitly stated otherwise.

This and the following paragraphs are based on the information retrieved from EU Publications on Simplification and mutual recognition in the construction sector under the Services Directive, 2016 p.212–218.

³⁸ Mutual recognition under an equivalence assessment is key for cross-border service suppliers, since building permits do not contain any specific provisions for temporary cross-border providers.

³⁹ The Services Directive acts to ensure that authorisation schemes and controls applicable to service providers align with the Directive's rules regarding administrative and regulatory simplification and mutual recognition.

- As regards **compulsory authorisation**, that appears to be "compulsory" in name only in some Member States. Certain EU countries do not require economic entities to go through such procedures (either with regard to establishing a permanent presence or providing temporary cross-border services). However, countries such as Poland and Germany *do* require formal authorisation to take place. If it is mandatory, economic entities are expected to comply with numerous regulatory requirements; while these are not administrative formalities per se, the requirement to comply with them is.⁴⁰
- Overall, it appears that the **federal organisation** of a country (e.g. Germany) is mirrored in complicated authorisation procedure(s), as usually both regional and national authorities become competent at some stage. Contacting a relevant regional authority (it could also be a regional Single Point of Contact) is usually the step initiating an authorisation process, since the regional (administrative) entity forwards the relevant paperwork to a ministry (or another relevant institution). However, even if countries are federally organised limitations in geographic scope of authorisations granted are rather rare, Germany being an exception here, with Bundesländer having their own authorisation schemes.
- As well as being restricted geographically, authorisations may prove temporary, forcing suppliers of services to undergo the same procedures at certain time intervals. The costs incurred by these repeated actions rapidly exceed the initial one-off financial burdens with which economic entities are faced when initiating the procedures for the first time. Indeed, certain paperwork, to an extent it being of permanent validity (e.g. qualification certificates), should not be required to be resubmitted annually.⁴¹
- On-line information and procedures handling do streamline administrative processes significantly, but if such tools are lacking (e.g. as regards building permits, digital procedures are not universally available across the EU) or inadequate, they create more obstacles than they aimed to resolve, both as regards accessing procedural information and submitting required paperwork.

For example, an EU-wide nexus of Single Points of Contact is actually unified in name only.

- In Germany every federal state has its own SPoC web page (1–6 language versions available depending on the region, with English being one of them⁴²) via which appropriate paperwork for both establishing a branch of a business as well as cross-border provision of services may be completed online, but the documentation needs to be posted. Similar electronic mechanisms are in place in Poland.
- In the Czech Republic signatures on documents must be notarised.
- In Luxembourg an appropriate VAT registration form must be collected in person.

⁴⁰ For example, while purchasing additional insurance in the constructions/engineering services sector is not an administrative formality, the actual submission of the said insurance policy is.

For example, in Germany the barriers for setting up permanent business presence do not exist, but temporary cross-border provision of services is limited to five years for natural persons and unlimited for legal persons. In Poland, on the other hand, time thresholds are absent in general. By contrast, in Italy authorisation for cross-border provision of services by both natural and legal persons expires after one year and can be renewed by the submission of new relevant documentation; for setting up a branch, the relevant authorisation is renewable on annual basis with a fee.

⁴² For example, the Hungarian PoSC appears to be available only in English.

• The administrative burden connected to the horizontal authorisation schemes and building permits appears to be too heavy, irrespective of country. Even though the digital procedures and equivalent documents required for the horizontal authorisation schemes are seemingly accepted universally, some countries (such as Bulgaria and Spain) require translations made by locally certified and registered professionals.

Other issues to be noted include the following.

- Technical standards are crucial for how works are conducted; given their multi-level importance, their mutual recognition could be feasible assuming that performance-based standards were adopted across the EU. However, as things are, the majority of EU Member States have resorted to a combination of prescriptive and performance-based standards.
- **Insurance regulations** are present in most EU Member States, but, due to the diverging requirements across the EU, mutual recognition procedures of equivalent insurance coverage are, in practice, absent. Even though a general principle exists, it is not used in most cases, as there are no specific procedures identifying equivalence of insurance coverage.
- With regard to **health and safety regulations** in particular, suppliers of construction services usually follow organisational regulations in line with their home country requirements implementing Directive 89/391/EEC.⁴³ Inter-company organisational frameworks can be avoided by outsourcing health and safety services in a company's home country. Given this caveat, cross-border providers of services are often forced to either restructure their organisational frameworks in this area locally (in the host country) or hire an appropriate local specialised provider of services.

Among the challenges that the businesses wishing to export to other Member States, either on a temporary cross-border basis or via an established market presence, must face, the amount of **data and information to be provided to and processed by** the relevant host Member State's authorities. This unnecessary administrative burden may turn out to be a natural deterrent which is more effective than any financial barrier.

As exemplified by Germany, the complexity and number of procedures appear unrelated to the level of economic and institutional development of a country, where one would expect a straightforward administrative route.

 Natural persons wishing to provide cross-border services on a temporary basis are faced with seven procedural steps leading to receiving of an official qualification title of "engineer"; that same administrative process for legal persons is significantly reduced to two stages.⁴⁴

⁴³ These regulations state that companies are to establish their internal health and safety frameworks.

In Germany companies' authorisation is voluntary – businesses have to obtain it if they carry the voluntary title of engineer in the company name.

For a detailed report on the prevalent discrepancies among selected EU Member States see: European Commission (2017), Administrative formalities and costs involved in accessing markets cross-border for provisions of accountancy, engineering and architecture services; the delivered information can be found on page 61 of the report.

- With regard to the requirements related to the submission of documents in order to obtain authorisation for temporary provision of services, Germany appears to have the most fragmented legislation in this area. While for legal persons the requirements appear unified, the ones applicable to natural persons differ across the country's regions: in Nordrhein-Westfalen the requirements include, for example, a higher education diploma, a certificate of residence (not older than six months), a certificate of membership in the home country, proof of good repute attested by the Chamber of the home country (or a different relevant certificate proving at least two years of full-time work in the last decade), certificates evidencing a minimum of 80 hours of additional training, and two construction designs. In other German regions natural persons may be asked to provide additional documents, such as a certificate of good character, a certification of solvency, or proof of professional indemnity insurance.
- By contrast, in Poland only those professionals providing the service in question are required to provide appropriate documentation.⁴⁵

On top of the multi-dimensional administrative burden, companies wishing to establish a permanent market presence or aiming at temporary cross-border provision of services have to face (sometimes significant and largely disproportionate) **financial costs**. The non-exhaustive exemplary list of potential costs discussed below may provide insights as to the areas where the most meaningful aggregate cost cuts could be achieved via simplification and procedural streamlining. While not insignificant per unit, these cost are usually incurred in several host countries and create marked financial burdens, if not direct market entry barriers, for applicants. Their existence provides potential for co-ordinated action and better information flow between the Member States, for instance by accepting a standardised testimony from a relevant professional or administrative body in the home country as confirmation that the applicant's status aligns with the host's legal conditions and requirements. To provide this discussion with empirical backing examples of costly procedures are presented below.⁴⁶

- Familiarisation with and understanding of formalities regarding setting up a permanent branch or providing services-cross border may cost about €447 in Germany and take up to 17 hours; in Poland both procedures are free of charge, while Italy charges €893 euros for the former procedure.
- Collecting the relevant paperwork from authorities is estimated at €73 euros in Germany for both types of procedures; while the cost in Poland is zero, in Luxembourg the charges for setting up a permanent presence and temporary provision of services amount to €1,081 and €52 respectively.
- The deceptively simple task of **completing forms** draws a €29 fee in Germany; Italian regulations demand €1,815 for setting up a branch, whereas Poland's regulatory framework does not burden applicants with further costs.

⁴⁵ Ibidem, p.75.

⁴⁶ Usually data is provided for Poland and Germany, and sometimes for another EU Member State.

- Formalities related to liability insurance may increase economic agents' financial costs by €194 (both types of procedures).
- Translation and certification requirements on average add another €589 in Germany for both types of procedures, while in the Czech Republic such fees up to €1,229.

In light of such glaring discrepancies between the Member States, the EC has continually aimed at facilitating the crossborder provision of, inter alia, construction services⁴⁷ through such proposals as the European Professional Card⁴⁸ and the European Services e-Card. The latter faced strong opposition from many EU Member States' and some stakeholders. The actions of unions included arguing that such an e-card would fail to address any of the real barriers⁴⁹ faced by businesses when they aimed to offer services in other Member States while raising the risk of fraud through bogus self-employment, undeclared work, fake posting and social dumping. Instead the existing measures, such as the Single Points of Contact, should be implemented correctly. Although there are worries around the issue of social dumping, it is clear that, even with Single Points of Contact, the administrative and regulatory barriers (even if significantly minimised), would be still present and weigh most heavily on small and medium businesses (SMEs) as well as self-employed cross-border providers of services. Solutions similar to the rejected e-card setting out to improve the situation should be reconsidered, if further integration and streamlining of services trade within the Single Market is to be achieved.⁵⁰

Concerns about social dumping with regard to cross-border provision of services were also a contributing factor behind the recently adopted new **rules on remuneration and working conditions of workers posted** to other Member States. ⁵¹ These regulations are of particular importance for the construction sector: in response to the demands made by the highest income EU countries, the framework has been revised so that from mid-2020 workers posted to another EU country are to be offered the same working and salary conditions as individuals in the receiving countries. Moreover, after the first 12 months of being posted (the period can be extended to 18 months), such individuals should be subject to the full set of the host country's conditions of employment. ⁵² This

⁴⁷ Accounting and IT services were among the other sectors covered by this initiative.

The procedure, currently available for general care nurses, physiotherapists, pharmacists, real estate agents and mountain guides, makes it easier for Europeans to work where their professional skills are needed https://ec.europa.eu/growth/single-market/services/free-movement-professionals/european-professional-card_en.

For example, the EC's services e-card initiative seemingly aimed to alleviate the regulatory issues related to insurance, but both the stakeholders as well as an impact assessment which accompanied the EC's proposal stated that insurance was not a valid barrier for cross-border provision of services. Indeed, the services e-card would be responding to a misidentified issue and would likely only add to the extant burdens of both service providers wishing to cross borders and host Member States' relevant authorities.

As proof, one may consider the impact assessment carried out by the EC in 2017 (in particular chapter 5 of the Proposal for a Directive of the European Parliament and of the Council on the legal and operational framework of the European services e-card introduced by Regulation; http://ec.europa.eu/transparency/reg-doc/rep/10102/2016/EN/SWD-2016-437-F1-EN-MAIN-PART-1.PDF last accessed on 18.01.2019).

Directive (EU) 2018/957 of the European Parliament and the Council of 28 June 2018 amending Directive 96/71/EC concerning the posting of workers in the framework of the provision of services (text with EEA relevance).

The recent amendments to the Posted Workers Directive bolster employees' rights. The new amendments limit the period during which the minimum employment conditions (as per the 96 Directive) have to be met to 12 months. However, this period may be extended up to 18 months by the host country's competent authority. Once that period is over the worker becomes entitled to nearly all mandatory employment rights applicable to local employees in the host country.

Two exceptions to this rule exist: 1) procedures, formalities and conditions relating to the conclusion and termination of employment contracts, including non-compete clauses; and 2) providing supplementary occupational pension schemes. The reform does not affect social security legislation. A posted worker remains subject to home country social security coverage during the first 24 months of a posting (see https://blogs. deloitte.ch/tax/2018/08/changes-to-the-european-directive-could-make-posting-workers-more-difficult-and-expensive.html for a more in-depth discussion).

measure involves construction services in particular, as 36% of total postings within the EU are concentrated in the sector and Poland itself posts close to half a million workers every year to other EU countries, the highest number of any of the EU Member States (EC, 2016).

Recognition of qualifications

Proper **transposition of an EU-wide legal framework**, comprising the European Qualifications Framework (EQF)⁵³ and the European Credit System for Vocational Education and Training (ECVET),⁵⁴ the Services Directive,⁵⁵ and the Professional Qualifications Directive (PQD),⁵⁶ is another important issue. The obstacles in workforce mobility do stem from *inadequate mutual recognition* of qualifications procedures among EU Member States. Tackling of such barriers should be an important focus point in, for example, Germany.⁵⁷

Varying **country-specific job requirements** and insufficient information on market entry prerequisites, both in terms of applying for jobs as well as taking part in public procurement bids reinforce the existing barriers. The issue is seen in both the 'old' EU as well as 'new' Member States: Hungary, suffering from information asymmetry and red tape in the field of public procurement, has had a highly concentrated construction sector, in which about 25% of contracts had a single bidder in 2016 and 9% of all public procurements were awarded without prior publication. ⁵⁸ Germany, one of the exemplary high-income 'core' EU countries, appears to have continually experienced reporting problems related to public procurement: domestic public buyers have been providing inadequate information, resulting in fewer public procurement opportunities being available at the EU level. Other, more general, issues include:

• The minimum training requirements set by EU-wide legal frameworks vary between the Member States, especially with regard to required training, mandatory traineeship, and national exams. For example, the duration of education and training periods for individuals aiming to become architects varies from a minimum of four years (Liechtenstein and Iceland) to seven years (Poland and Croatia) to a maximum of nine years (Bulgaria and Slovakia). On top of that, different educational paths need be considered as well: in Poland one has to follow the vocational higher education, whereas in Germany it is general post-secondary education (while in Austria and the Netherlands there are both general and vocational post-secondary routes). Furthermore, some Member States, such as Hungary, demand professional

For example overview of national qualifications framework developments in Europe 2017; doi:10.2801/44819 TI-01-18-118-EN-NISBN: 978-92-896-2226-4, 15/03/2018.

For example, ECVET in Europe; Monitoring report 2015 (published in June 2016).

Directive 2006/123/EC acts to remove bureaucratic barriers via increased transparency and easier access to cross-border services within the Single Market.

Directive 2005/36/EC, amended in 2013 by Directive 2013/55/EU, enables the movement of the professionals within the European Union by establishing rules for temporary mobility, establishment in another EU Member State, knowledge of languages and professional academic titles, as well as systems of recognition of qualifications in the construction services sector. The Directive applies directly to architects, as well as carpenters and upholsterers building contractors, civil engineers, building engineers, building insulators, building site co-ordinators/surveyors, site mechanics, crane operators, electrical engineers and technicians, floor layers and glaziers (European Commission, Recognition of professional qualifications in practice https://ec.europa.eu/growth/single-market/services/free-movement-professionals/qualifications-recognition_en as reported in: European Construction Sector Observatory - Analytical Report - Improving the human capital basis - April 2017 published 29/06/2017 pp. 40-41).

⁵⁷ The EU Single Market: Impact on Member States by American Chamber of Commerce to the EU, Brussles, 2017 p. 86.

⁵⁸ European Construction Sector Observatory - Country Profile: Hungary 2016; published June 2018, p. 23.

traineeships or state examination and registration in relevant domestic professional bodies.⁵⁹

- Despite the apparent unanimity as to the theoretical profession-specific scope of activities, some construction professions display marked variations as regards the interpretation of the activities which can be legally performed within their general category across the Member States. Such fragmentation⁶⁰ puts in place significant barriers, not only to the cross-border mobility of labour but also to the profession itself. These differences create tangible obstacles, especially in the case of professionals moving from a country with only a single category to one where a multi-category system is in place. For instance, in Poland civil engineers from countries applying a unitary educational system may not be allowed to perform all activities legally (Poland recognises four sub-categories of this profession).⁶¹
- The Member States have yet to implement a shared approach to the **recognition of qualifications** even though the PQD provides clear-cut theoretical rules. The varying frameworks across the EU limit labour mobility: for electricians, for example, the majority of Member States have introduced an automatic recognition procedure based on professional experience, 62 whiles others, such as Slovakia, rely on the general system of recognition.

In view of these issues there is a **need for a pan-European formalised certification of the sector-specific qualifications**, especially at the vocational level. For example, given the current legal status Polish vocational training may not be recognised abroad, but a large number of Poles working abroad in construction services are educated at the vocational level only. The current legal situation forces them to accept posts below their professional qualifications and lowers their socio-economic status. That said, if migrant professionals do acquire new skills in the host country, those cannot be legally recognised in Poland, should the workers decide to return.

With regard to European-level certification mechanisms, it should be borne in mind that those would prove especially beneficial for the Polish providers of construction services. Currently the domestic construction services industry consists mainly of small and medium businesses and sole proprietorships; given the tight competition in this market segment, companies strive to differentiate themselves and reach out to new customers by offering a wide (and growing) array of services. If an official pan-European certification measure existed, the holders thereof could gain significant competitive advantages and conduct their businesses in other Member States without losing the position they have achieved on their domestic market.

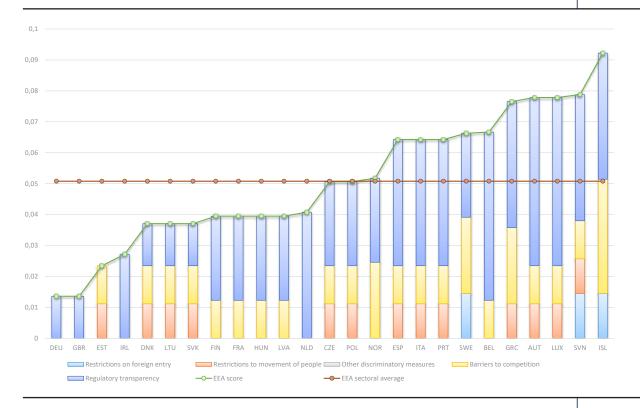
European Commission, Mutual evaluation of regulated professions – Overview of the regulatory framework in the business services sector by using the example of architects, October 2015. Available at http://ec.europa.eu/DocsRoom/documents/13382/attachments/1/translations/en/renditions/native As reported in: European Construction Sector Observatory – Analytical Report – Improving the human capital basis – April 2017 published 29/06/2017 pp. 42.

As well as civil engineers, unclear definitions and overlaps also affect other construction professions, such as electricians.

European Commission, Mutual evaluation of regulated professions – Overview of the regulatory framework in the construction sector by using the example of civil engineers. September 2015. Available at http://ec.europa.eu/DocsRoom/documents/12762/attachments/1/translations/en/renditions/native As reported in: European Construction Sector Observatory – Analytical Report – Improving the human capital basis – April 2017 published 29/06/2017 pp. 42, and the Act on Professional Associations of Architects and Civil Engineers (Ustawa o samorządach zawodowych architektów oraz inżynierów budownictwa, Dz.U. 2001 nr 5 poz. 42, 15 December 2000, last updated on 31 August 2016, Article 6(1)) and the Building Act (Ustawa Prawo budowlane, Dz.U. 1994 nr 89 poz. 414, 7 July 1994, last updated on 1 January 2017, Article 12) and http://www.doingbusiness.org/data/exploreeconomies/poland/dealing-with-construction-permits/ Website of the World Bank Group, Doing Business, Poland, Construction Permits.

⁶² As stated in the PQD Directive.

Figure 8 Construction services EEA STRI in 2017



Source: OECD STRI 2017 data

Computer services

IT services providers enjoy globally easier access to foreign markets than those in the other two analysed (and many other) services sectors. This relates to the fact that the development of this sector over the last three decades preceded its regulation. Some would even go as far as saying that this sector developed so quickly precisely because it was unregulated. That is also reflected in the relatively low level of average intra-EEA restrictions reported for computer services as compared to other sectors.

Within the EEA there appear to be only two kinds of restrictions barriers to competition and regulatory transparency. Indeed, restrictions on foreign entry, movement of people and other discriminatory measures within the EEA appear to be largely absent. The barriers that are in place relate to economy-wide market entry obstacles – the most prominent being capital requirements for starting a business, which are sector non-specific. However, they vary across countries and legal forms of economic agents.

The Digital Trade Restrictiveness Index (DTRI) released by the European Centre for International Political Economy for 2018 makes possible a tentative quantification of these issues. While the OECD intra-EEA STRI 2017 is a generalised metric, which points out **two major kinds of trade obstacles** in the area under discussion (i.e. the length and costs of starting a business (Germany, Hungary and Poland)⁶⁵ and minimum capital

In fact, at the OECD's Services Experts Meeting in Business Services held in 2008, at an early stage of the construction of the STRI, computer services were described a sector that can "serve as a benchmark free-trade sector" due to its low level of barriers to trade in OECD countries, including EEA countries. See also Nordås (2008 and 2018) and Puls Biznesu (2018).

⁶⁴ Measured by the OECD intra-EEA STRI.

And are the highest in Italy, Luxemburg, Spain, the Czech Republic, Belgium and Austria.

requirements (Sweden, Hungary and Poland)), the DTRI⁶⁶, which is calibrated to focus on the digital trade in particular, gives slightly different results. Nonetheless, it **does not apply to trade with the EEA region specifically**, but to a geographically heterogeneous sample of 64 countries.⁶⁷ In the ranking consisting of 65 places,⁶⁸ the European average comes 37th (0.21) in the overall DTRI, with three out of the four economies discussed here scoring worse marks.⁶⁹ In this context only Sweden ranks better, and not by much (40th with 0.2).

Two areas emerge as potentially problematic:70

Restrictions on data flows, usage, and access,⁷¹ with Germany being the most restrictive.⁷² The only other OECD economy among the top ten most restrictive countries in this area is South Korea (eighth). The rest of the sample do not perform very well either: all three countries rank much lower than the European average (29th with 0.24): Hungary comes 19th with 0.3, Poland appears to fare slightly better (22nd with 0.27) with Sweden close behind (24th with 0.26).

Establishment restrictions⁷³ in digital trade have potential for significant negative implications in the extent to which domestic businesses can profit from new foreign technologies by participating in know-how and technological spill-overs. The country-specific scores relating to this category cover the widest range of scores, with Germany and France as the most closed-off economies (ranking 11th and 10th respectively). The rest of the sample remains divided: Sweden scored below than the European average (in 38th position), while Poland and Hungary were ranked as even more open (45th and 54th positions respectively)⁷⁴ to foreign investors and technology suppliers likely participating in and benefitting more from inflowing foreign direct investment.

While the computer (or, more broadly, ICT) services sector has perhaps been a benchmark barrier-free sector, **the situation can change if the regulatory momentum prevails over the deregulatory cause**. Indeed, the digital dimension in business has been steadily gaining importance, yet this development has been accompanied by a growing number of data regulations (see Figure 9). The Digital Single Market is an EU-wide attempt to address those issues.

The underlying methodological differences and goals of the two metrics make them arguably difficult to compare directly. The Digital Trade Restrictiveness Index, tracking digital restrictions globally, is essentially different from the OECD metric, not only as far as its focus is concerned but also with regard to the level of disaggregation applied. Indeed, being calculated as a derivative of four subcomponents (each of which consists of a series of sub-areas measured), it provides a more detailed score relating to digital trade alone, while the OECD index relates to trade in services in general (both digital as well as traditional). The level of disaggregation, combined with the sole focus of the DTRI metric, calls for further discussion on potential trade-offs associated with the application of the index; in this context we would use both metrics as complementary.

⁶⁷ Relying on MFN basis.

The countries scoring the highest marks are at the top of the ranking; therefore the lower the position, the lower the restrictions.

⁶⁹ Germany comes 13th with a score of 0.33, Hungary 26th (0.23) and Poland 34th (0.22).

⁵⁰ Since the general DTRI is a simple average of the four sub-components, identification of problem areas is relatively easy.

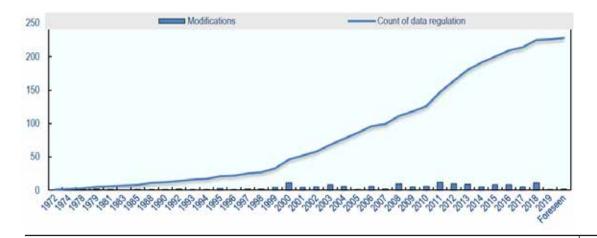
Covering issues related to data policies intermediate liability and content access. For a further disaggregation see: Digital Trade Restrictiveness Index April 2018; European Centre for International Political Economy (ECIPE); p.51–61; The logic behind the scores is that higher ranks are ascribed to economies exhibiting lower data traffic per capita – this appears important as businesses across all strata of activity rely on unhindered flow of data globally, not only within an economically and administratively unified area.

Rank seventh (0.41), with only one other European country scoring worse (France, fourth).

Including controls for areas such as: foreign investment restrictions, intellectual property rights metrics, competition policy and business mobility. For a further disaggregation see: Digital Trade Restrictiveness Index April 2018; European Centre for International Political Economy (ECIPE); p.36–50.

All the ranks retrieved from Digital Trade Restrictiveness Index April 2018; European Centre for International Political Economy (ECIPE); p.14–15.

Figure 9 Cumulative number of data regulations



Note: Data protection regulations include different types of regulation relating to data transfers and local storage requirements. Numbers are affected by the way in which regulations are structured, as this varies by country; some countries may have a single regulation covering a wide range of measures; others will have several different regulations covering, for example, restrictions on data flows for different types of data, and local storage requirements. Source: Casalini, F. and J. López González (2019).

The importance of the Digital Single Market for computer services and beyond

The Digital Single Market (DSM) has been an important factor for shaping the EU-wide business environment with regard to trade in goods and services. While it is conceivable that the digital progress and the 'traditional' Single Market will work to reinforce each other, the fact that the Single Market could potentially have trouble keeping up with the digital economy cannot be ignored. Specifically, two features of digital technologies could make the DSM require more attention:

- scale effects, including network effects, imply that a larger market can bring
 efficiency gains, incentivise innovativeness and enable even small firms to find
 customers for their products;
- heterogeneity of regulatory frameworks at the national level this refers to a wide range of solutions introduced at the domestic level, solutions which do not always act to streamline business processes and end up contributing to market fragmentation and generating additional fixed costs. These are, among others, differences in data protection regimes and challenges in *interoperability of technologies*. They generate fixed costs, which are particularly important for SMEs' financial planning.

The regulatory framework of the digital market is still a relatively new issue: thus it is fertile ground for political dissent and confusion, which not only elevates business risk but also contributes to market fragmentation. In the context of trade in computer-related services, **cybersecurity** (including appropriate certification schemes), **geo-blocking**, reforming **e-privacy regulatory frameworks as well as considerations regarding the**

development and implementation of AI⁷⁵ **and IoT**⁷⁶ appear to be the issues which are potentially most important and liable to raise uncertainty, both on the legal and ethical levels. Indeed, they present complex regulatory problems regarding data security (e.g. location-based profiling and geo-blocking), liability (e.g. intermediary liability), identification and authorisation mechanisms (including natural persons and economic agents required for management of contractual (business) relationships, attribution as well as liability).

The development of the ICT sector presents challenges which need to be addressed by regulators. The development of EU legislation in ICT has the potential to both prevent the development of new barriers to trade in services and establish new pan-European impediments.

The EU legislation creates an environment which enables the expansion of digital sector.

The EU appears to have excelled in this field, with its E-Commerce Directive (Directive $2000/31/EC^{77}$) guiding the cultivation of a thriving start-up digital economy. Indeed, the EU had 1.64 million jobs in the ICT sector, with Sweden, Luxembourg and the Netherlands scoring among the top five nations for "e-intensity" in 2015.

Also, since 2016 the EC has been working on a "connectivity package" (taking the form of Directive (EU) 2018/1972) which aims to equalise the EU in terms of connectivity.⁷⁸ In particular, online businesses, the profitability of which hinges on scale effects, depend on the quality of these actions. Indeed, **electronic communications** provides support for a wide variety of high-tech industrial and digital services,⁷⁹ as well as the economy as a whole. In this context, insufficient or unreliable connectivity would lead to significant GDP losses across the Member States.

Nevertheless, the achievements of the EU in the digital sector seems to be contested on the national as well as the EU level.

Some countries' regulatory frameworks appear to have headed in a different direction, introducing laws imposing greater responsibility on trade in digital services. With courts being more proactive in imposing liabilities on digital firms, the scheme does boil down to misplaced protectionism. Indeed, as long as international rules remain un-harmonised, conflicting national legal regulations will impede growth of international digital business. In this context such trade rules should act to: 1) **provide sufficient**

The AI4EU, a project acting to bring AI to small businesses, non-tech companies and public administrations in Europe, started in January 2019, bringing together 79 research institutes, SMEs and large enterprises across 21 European states and aiming to expand a focal point for artificial intelligence resources (such as, but not limited to, data repositories, computing power, tools and algorithms). The project is set to offer digital services and support to users of AI-related technology streamlining tests and integration in business conduct (including services and processes). The platform also aims to contribute to up- or re-skilling of the existing labour force, aiming to bring the EU to new levels of competitiveness as regards the digital economy and also providing new business opportunities for domestic and international market players of all sizes and legal forms (European Commission (2019), Digital Single Market: Artificial intelligence: 79 partners from 21 countries to develop an AI-demand-platform with €20 million of EU funding; Press release, https://ec.europa.eu/digital-single-market/en/news/artificial-intelligence-79-partners-21-countries-develop-ai-demand-platform-eu20-million-eu, last accessed on 22.01.2019).

The Internet of Things (IoT) focuses on creating of new ecosystems which cut across vertical areas, generating new markets for both hardware, software and services.

⁷⁷ Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (the Electronic Commerce Directive).

For example, the growth of Internet of Things services on a potential market of 500 million consumers hinges on a harmonised rollout of 5G networks (enabling smooth functioning of IoT) which, in turn, depends on co-ordinated policy actions so that the EU-wide digital sphere does not become fragmented.

⁷⁹ The ICT sector constitutes 4% GDP and 2.76% of the EU's jobs, with a labour productivity rate 44.45% higher than total labour productivity.

protections for online (digital) intermediaries for user conduct and content as regards enforcement of intellectual and non-intellectual property rights in related speech content; and 2) limit court intervention set to enforce extra-territorial judgements regarding online intermediaries.⁸⁰

The regime introduced by the EU in the 2000s (by way of the E-Commerce Directive) appears to be weakened from within by its inconsistent implementation and the DSM proposals acting to expand liability for online (digital) services and platforms. The DSM initiative does in fact contain proposals likely to undermine the E-Commerce Directive. If enacted, they will force greater liability across online services, threatening the development of the European digital economy. However, the EU should perhaps look for ways to boost growth of digital services rather than acting to limit online entrepreneurship.

Proposals concerning liability may lead to new barriers emerging.

Specifically, intermediary liability,⁸² one of the factors driving the restrictions on data flows, usage, and access, appears to be especially important, as certain jurisdictions provide conditional safe harbour mechanisms shielding intermediaries from users' actions. Such frameworks thus support innovation in services by providing intermediaries with enough legal certainty to allow them to engage in innovation-seeking without the risk of being prosecuted. Given the **recent regulatory confusion** surrounding the issue at the EU level, and its **potential to curb digital entrepreneurship**, this subject requires further attention.

Rules regarding international trading in computer and software services⁸³ need to be modernised, especially as far as liability regulations are concerned, they must be clear and consistent, applicable to Internet companies at all stages of development and encourage exports of digital services. The failure to modernise rules on intermediary liability can – and at times does – burden firms with significant penalties in one territory for business conduct considered lawful in most territories⁸⁴. This way, it reduces (especially as far as local SMEs are concerned) access to international markets, discourages localised digital entrepreneurship, and limits direct investment and entry by multi-national digital firms.

To give an example of the gravity of the situation, it is worth mentioning that, as recently as September 2018, the European Parliament approved amendments to the Copyright Directive; this new regulatory framework, in its initial form (2016), threatened the established law under the E-Commerce Directive and implied that the majority of digital services suppliers could be excluded from critical intermediary liability protection. In this context national solutions have surfaced, with the German one exemplifying, arguably, how things should not be done. Indeed, the new Act to Improve the Enforcement of Rights on Social Networks in June 2017 appeared to be largely in conflict with the E-Commerce Directive (especially Art. 3, 14 and 15 thereof) (see Spindler, G. (2017) Internet Intermediary Liability Reloaded – The New German Act on Responsibility of Social Networks and its (In-) Compatibility with European Law, 8 JIPITEC 166 para 1).

Which could be costly in terms of economic development: for example, time effects stemming from time saved by online searches generated by digital trade amounted to €140 billion in 2014 (results for the EU; based on Varian's (2013) method of converting time effects into monetary value; additionally consumer surplus achieved from online activities such as free search engines, platforms, social media, etc amounted to €22 billion – Thelle et al (2015) Online Intermediaries: Impact on the EU Economy, Copenhagen Economics, EDiMA pp. 40–43.

Regulations protecting intermediaries from liability for users' content are required for the dynamic advancement of technology and digital innovation; these regulatory frameworks make it possible for a wide range of ICT and software services providers to maintain a robust online environment without being held responsible for the content stored or moved across their platforms and networks. Without such frameworks in place services providers would be likely less willing to accept user-generated content lest they be held liable for potential legal infringements or criminal activity.

For example, buying and selling of software, storage of files, computing power to run an enterprise's own software suites as cloud computing services, integration with customers/suppliers, and supply chain management, to name but a few.

⁸⁴ Including their home countries.

Lack of EU-wide solutions may lead to fragmentation of the market.

Upgrading the existing tax frameworks to better respond to the changing business environment has been an important subject in this area.⁸⁵ The current debate centres around the **potential mismatch between where profits are taxed under the current framework and where (and how) digital activities generate value.**⁸⁶

Reaching unanimity at the political level should be motivated by negative effects which may materialise for the key industries and international trade relationships in the event of a prolonged the lack of agreement. Indeed, the most unwelcome scenario, in which all (or some) EU Member States adopt own digital tax measures, leads to a downright fragmentation of the internal market, creating new administrative obstacles for all relevant market players as well as national authorities. While for the former it may be a matter of 'only' additional costs related to adopting to new tax regulations, the latter will have to face renegotiations of the existing treaties, both at the EEA level and globally.

An EU-wide certification framework for cybersecurity⁸⁷ proposed by the EC in 2017 was not only a regulatory response to a growing number of cyber-attacks but also a way of rebuilding trust in digital products and services. Back in 2017 several relevant ICT certification schemes were active in the EU, which contributed to market fragmentation and the emergence of trade barriers within the Single Market. The common framework, including the NIS Directive (2016),⁸⁸ followed by a proposal regarding the EU Cybersecurity Agency, appears to have been agreed upon, delivering a comprehensive set of rules and technical conditions. The certificate is recognisable across the EU, facilitating business across borders and understanding of security features of services and goods. While harmonisation was appreciated, it has been pointed out that certification schemes needed be adaptable and flexible in the context of technological progress, considering the IoT, ICT products and services for the critical infrastructure, and cybersecurity services (as compared to other services and goods).

A 2013 study⁸⁹ surveying the experiences of Polish companies marketing their services and goods abroad appears to corroborate the OECD's assessment of the sector:

Among the key export barriers were insufficient transportation infrastructure, taxes, access to finance, foreign culture, and administrative regulations and policies.
 However, the latter only referred to the home government's support, which was found inadequate in areas such as organisation of trade missions and export aid.⁹⁰

Specifically, the taxpayer-reported rate is projected to apply to revenues obtained from the following activities: 1) the placing on a digital interface of advertising targeted at users of the said interface; 2) the making available to users of a multi-sided digital interface allowing them to find other users and to interact with them (also facilitating the delivery of goods and services directly between the users); and 3) the flow of data generated and collected about the users from their activities on the relevant digital interfaces (in: New digital tax policies: What, when, where, how and by whom? An excerpt from EY's Global Tax Policy and Controversy, Briefing Issue 22, August 2018).

There are, in the EC's reasoning, three reasons for such a state of affairs: 1) businesses easily deliver digital services to places where they are not physically present, which represents the 'scale without mass' case, in the EC's view; 2) digital business models rely heavily on mobile intellectual property assets; and 3) it is possible that the level of value derived from users' participation in digital activities enabled by some platforms (i.e. user value creation) has been heavily undervalued.

⁸⁷ European Commission (2017) State of the Union 2017: The Commission scales up its response to cyber-attacks, Press Release; http://europa.eu/rapid/press-release_MEMO-17-3194_en.htm last accessed on 18.01.2019.

Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union.

⁸⁹ Ministerstwo Gospodarki (2015), Analiza dotycząca eksportu usług oraz produktów ICT – raport "Informatyka polską specjalnością".

⁹⁰ ibidem.

- No impediments that could be described as regulatory barriers in foreign markets were reported.
- Similarly to other EEA countries, Poland does not impose significant restrictions on the internal computer services sector the only barriers in place are economy-wide requirements of minimum capital and costs of registering a business.

Computer services remain Poland's most dynamic sector in terms of exports growth (see the section titled *Poland's computer services exports*), supported by well-trained IT staff, who have provided quality services abroad at relatively low costs. ⁹¹ Examples of companies successfully expanding abroad, within and beyond the EEA region, include Asseco, Comarch, and LiveChat.

In 2013 the sales registered in the Polish computer services sector equated to 1.7% of the global market value. Yellow With the structure of the sector gradually maturing, the value generated by basic services (i.e. infrastructure installation and technical support) declined in relative terms, yielding ground to outsourcing services. While the sector continues to provide a wide and varied range of services, project services accounted for slightly more than a half of the services supplied (52% in 2013), of which system integration (25%), support services (29%) and outsourcing services (19%) were the most prominent. Yellow

Figure 10 Computer services EEA STRI in 2017



Source: OECD STRI 2017 data

⁹¹ Spotdata & AXA (2018), Sukcesy i aspiracje: Ekspansja zagraniczna polskich firm.

⁹² ABSL (2015) Rynek Usług IT w Polsce, p.4.

⁹³ Ibidem, p.12-13.

⁹⁴ Ibidem, p.12.

Economy-wide effects of intra-EU services trade integration at the country level across the three sectors

A recurring theme throughout literature is the recommendation to harmonise the regulations in the services sector across countries in order to reduce the entry costs of service providers and minimise hurdles for international trading in services. ⁹⁵ In the case of the EU, a more harmonised regulatory framework would result in economies of scale, increasing the competitiveness of the Union in a way analogical to the US economy and creating jobs in the process. ⁹⁶

Across the services market delays, or imperfect implementation of Single Market directives, affect Member States' business environments and hinder desirable integration-induced effects. Indeed, integration within the Single Market does not occur automatically once a directive has been incorporated in the national law – it is the practical application and enforcement of the rules and regulations therein that yield tangible economic effects.

According to the Single Market Scoreboard, by December 2017 around 5% of EU directives had not been transposed by one or more Member States. As approximated by transposition deficits documented in this publication, the four countries under review performed in various ways in this area, without any obvious pattern emerging. For example, Germany's transposition deficit amounted to 1.1% (which equates to 11 directives not notified⁹⁷), Poland's score was slightly higher, at 1.4% (i.e. 14 directives), while Sweden and Hungary were both at 0.3% (three directives in each country). As regards incorrectly transposed directives, Poland managed to halve its score (9 directives in December 2017 as opposed to 18 a year previously), Germany had incorrectly transposed 10 directives, while Sweden and Hungary had each incorrectly transposed eight directives, with the Hungarian performance markedly declining over the last three years.⁹⁸

Furthermore, **integration with the Single Market differs between Member States** when it comes to both progress made since EU accessions and in terms of the current level of integration.⁹⁹ The heterogeneity in the level of integration occurs due to the variation in *the level of similarity in policy conduct* and *economy-wide performance* between a given Member State and the 'core' EU.¹⁰⁰

• Poland's intra-EU services trade integration appears to be just below the 2016 EU average¹⁰¹ of 6.8% (Poland scored 6.5% in 2016) – in fact 2016 the indicator

⁹⁵ For example, Lifen (2011).

⁹⁶ See, for example, Warsaw Enterprise Institute (2018).

⁹⁷ The 11 directives in this case include (as per the above-mentioned website):

⁻ directives for which no transposition measures have been communicated

⁻ directives considered as partially transposed by Member States after they notified some transposition measures

⁻ directives considered as completely transposed by Member States, but for which the Commission has opened an infringement proceeding for non-communication and the Member State has not notified new transposition measures after the latest procedural step taken by the Commission. http://ec.europa.eu/internal_market/scoreboard/performance_by_governance_tool/transposition/index_en.htm#t_0_15.

http://ec.europa.eu/internal_market/scoreboard/performance_by_governance_tool/transposition/index_en.htm#t_0_15 last accessed on 21.01.2019.

This has been measured at several levels by way of the application of a proprietary weighted index (for more information see *The EU Single Market: Impact on Member States* by American Chamber of Commerce to the EU, Brussels, 2017 p. 26).

⁴⁰⁰ Austria, Belgium, Germany, Denmark, Greece, Spain, Finland, France, Ireland, Italy, the Netherlands, Portugal, Sweden, and the United Kingdom.

The exact figure for Poland was unspecified at the time of writing, the latest scorecard (based on data pertaining to 2016) is relatively vague and is missing certain information, e.g. the specific figure for the EU-wide averages. In fact, the scorecard makes only references to it, without giving the figure explicitly.

increased by 9% which was the third highest score in the EU. On the other hand, Germany seems to be poorly integrated with the EU market, in 2016; despite this fact, German integration has increased, amounting to 4.6% of GDP in 2016 (in 2015, the level of German integration equalled 4.5%; in terms of change in trade integration the country experienced a 2.3% growth). With regard to Sweden, its integration in terms of trading in services is above the EU average (7.5% of GDP in 2016), but it fell sharply in the period 2015–2016 (down 3.3 percentage points). Lastly, Hungarian integration for trading in services is above the EU average, at 11.6% of GDP in 2016 (with YoY growth of 0.5 percentage points).

• However, relative to the respective accession years, in 2015 Poland's current index of integration¹⁰² with the Single Market stood at 77.3 (in this case, the base year being 2004), above the EU average (75.9), Germany, and Sweden (71.7 and 69.5 respectively). But it was clearly below the Hungarian market (85.4).¹⁰³

The intra-EU integration in trading in services scaled by GDP grew by 0.82% across the EU, with Germany's and Hungary's scores mirroring the average, 104 while Poland and Sweden ranked significantly better. 105

• The 2015 Single Market integration ranking indicated that the 'new' Member States¹⁰⁶ had fared much better than the two 'core' countries: **Hungary ranked remarkably high (seventh position**), its performance driven by the outstanding records in the area of free movement of services,¹⁰⁷ but relatively lax with regard to transposition conformity.¹⁰⁸ **Poland scored markedly lower (14**th **position)**, faring poorly in integration regarding trade in services (23rd position).¹⁰⁹ The two 'old' Member States did not fare any better: **Germany**, performing particularly badly compared to the rest of the EU28 with regard to transposition and conformity

¹⁰² For a summary of the sub-components, see *The EU Single Market: Impact on Member States* by American Chamber of Commerce to the EU, Brussels, 2017, p.26.

The heterogeneity in the level of integration is due to the variation in the level of similarity in policy conduct and economy-wide performance between a given Member State and the 'core' EU. The level of economic homogeneity is a derivative of GDP per capita, unit labour costs at current prices, interest rates on long-term government bonds, public debt scaled by GDP, and value-added tax rates (Bertelsmann Foundation, 2014). However, in the assessment of integration levels with the Single Market, the adoption and implementation of Single Market legislation plays a significant role. The extent of Member States' integration with the Single Market (relative to markets for both goods and services) varied considerably across the levels of integration shaping a Member State's aggregate Single Market participation. The resultant summary metric combined data on the applied Single Market socio-economic freedoms (apart from free movement of people), implementation of EU regulatory tools by Member States, and information pertaining to the extent to which the economic policies and performance of a given Member State align with the EU average (for more information refer to p.26 of The EU Single Market: Impact on Member States by American Chamber of Commerce to the EU, Brussels, 2017).

^{104 +0.85%} and +0.9% respectively. *The EU Single Market: Impact on Member States* by American Chamber of Commerce to the EU, Brussels, 2017, p.59.

^{+1%} and +2.68% respectively, ibidem p.59. Moreover, the results for Poland appear to have improved markedly in the period 2010–2015: in the preceding period (2008–2010) the indicator amounted to 0.2 (The EU Single Market: Impact on Member States by American Chamber of Commerce to the EU, Brussels, 2017, p.61).

¹⁰⁶ Joining the EU in 2004.

The rank scored by a country in this area captures the importance of trade in services (as percentage of a country's GDP) or differences in the share of intra-EU trade in total trade in services. Hungary ranked third and fourth for integration in terms of free movement of goods and capital respectively. Movement of capital is quantified as the stock of foreign direct investment The outcome is scaled by the country's GDP so that performance across countries can be assessed.

The regulatory quality and enforcement of EU law at the national level.

As regards free flows of goods and capital Poland was in 11th and 13th places, but came 26th in terms of regulatory conformity; all data from *The EU Single Market: Impact on Member States* by American Chamber of Commerce to the EU, Brussels, 2017, p.30.

deficits¹¹⁰ of EU directives, was ranked 20th; Sweden took the 23rd position, ahead of Germany as far as trading in services was concerned (13th vs 24th, respectively).

Against this backdrop, and focusing on the three sectors at hand (especially the construction services sector), **Germany** may further benefit from eliminating the **floor** and ceiling tariff rates for architects and engineers, as well as transposing Directive 2013/55/EU regarding the recognition of professional qualifications. Some Member States would tangibly profit from proper transposition and application of Directives 2014/23/EC 2014/24/EC, 2014/25/EC on public procurement and concessions.

Estimated impact of further integration – the cases of Poland, Germany, Sweden, and Hungary

The benefits of the Single Market integration as a whole have been measured at an aggregate level in numerous studies^{III}:

- Izkovitz et al. (2009) suggested beneficial longer-term outcomes of further EU Single Market integration: an **increase of** EU GDP of **2.2**% **with each unit of growth in integration**.
- Aussilloux et al. (2011) argued that **elimination of all the remaining barriers** within the EU could boost the EU's GDP by 14%.
- Decreux's (2012) results brought further confirmation of these hypotheses indicating that reduction of the remaining market barriers in the EU by half would increase level of the EU's GDP by 4.7%.

An econometric simulation¹¹² assuming that all Member States would achieve their highest possible level of integration with the Single Market and a 50% growth in intra-EU trade in services showed:

- Increases in the GDP per capita, amounting on average to 0.59% (EU28), between a minimum of 0.42% (Hungary) and a maximum of 0.61% (Sweden). The results for Poland and Germany equalled 0.51% and 0.59% respectively (+€411 and +€151 per household, respectively).
- The level of consumption per household increased by €222 in Germany and €219 in Sweden, whereas only by €89 in Poland and €53 in Hungary.

¹¹⁰ The former is defined as the gap between the number of Single Market directives adopted by the EU and those transposed in Member States while the latter captures the percentage of the directives which were incorrectly transposed. For the full matrix see: http://ec.europa.eu/internal_market/scoreboard/performance_by_governance_tool/transposition/index_en.htm#maincontentSec2.

Their design, encompassing aggregate derivatives of the usual combination of the *free flow of goods*, *services*, *people*, *and information*, does not allow to assess the economic effects of the services market integration in separation, they provide a general quantitative background for further analyses focused solely on trade in services.

The simulation excludes, for technical reasons, data on free movement of people. According to the source, data on the share of Member State employment relating to employees coming from other EU countries has been available for the couple of decades, but this information pertain only to the inward movement of individuals and does not account for the outward movement of EU Member State workers to other EU countries. While the relevant information could probably be shown by data on intra-EU remittances on individual-level (both inbound and outbound), the data on the geographical breakdown of these flows has been limited to the last few periods (for an detailed discussion see: *The EU Single Market: Impact on Member States* by American Chamber of Commerce to the EU, Brussels, 2017, p.26).

- The level of investment in the entire economy increased by €3,566 mln in Germany and €646 mln in Sweden, whereas only by €439 mln in Poland and €98 mln in Hungary.
- As regards **job-creation potential**, ¹¹³ the empirical results were indicative of significant disparities between the four economies: the greatest gains could materialise in Germany (+231,400 jobs), closely followed by Poland (+80,700 jobs). Sweden and Hungary stand to gain considerably less: the Hungarian economy would grow by only 17,600 new workplaces, while Sweden's labour market might expand by additional 28,400 workplaces. ¹¹⁴

Sector-level costs of restrictions on trade in services

Using OECD data on barriers to trade in services¹¹⁵ and taking into account both existing and already described restrictions as well as market structures, Rouzet and Spinelli (2016) quantified the economic effects of services trade liberalisation. Based on these estimates and comparing them with the still existing services barriers within the EEA (see sections above), *ad valorem* tariff equivalents of trade barriers have been calculated for exporters in the three sectors (Table 2).

Table 2 Ad valorem equivalents of barriers to trade, by sector and country

Sector	Tariff equiv	Tariff equivalents faced in the Single Market by exporters from:				
	Poland	Germany	Hungary	Sweden		
Accounting and auditing	3%	4%	4%	4%		
Construction	3%	4%	3%	3%		
Computer services	1%	2%	1%	1%		
	Tariff equiv	Tariff equivalents faced by EEA service providers in:				
	Poland	Germany	Hungary	Sweden		

	Tariff equivalents faced by EEA service providers in:				
	Poland	Germany	Hungary	Sweden	
Accounting and auditing	7%	2%	3%	4%	
Construction	5%	1%	2%	7%	
Computer services	3%	1%	2%	1%	

Note: Sectoral estimates of ad valorem equivalents for each analysed country from Rouzet, D. and F. Spinelli (2016, 21–23) were proportionately scaled down taking into account the respective ratios of MFN to intra-EEA trade restrictions. In order to obtain ad valorem equivalents as perceived by the firms from a given country, ad valorem tariff equivalents for other Single Market players were averaged using export weights related to specific destinations.. Source: own calculations based on estimates from Rouzet, D. and F. Spinelli (2016) and the OECD Services Trade Restrictiveness database.

¹¹³ Relative to the actual number of workplaces recorded in 2015.

The case of Hungarian moderate gain, and Germany's remarkable gain, is likely linked to the country's default rank (for 2015). Hungary came seventh in the ranking, hence its smallest gains from further integration with the Single Market, while Germany's score placed it on 20th position. Based on the econometric simulation presented in *The EU Single Market: Impact on Member States* by American Chamber of Commerce to the EU, Brussels, 2017, p.44–50.

These estimations were performed using measures of trade in services barriers estimated at the MFN level. For more on the distinction between the MFN and Single Market barriers see Annex 3.

Accounting and auditing

The absolute size of these estimates should be taken with a grain of salt, as they depend on several methodological assumptions underlying them, However, most of these assumptions are common across sectors and trading countries, and that is why relative differences are more informative than absolute levels. One point of comparison are tariffs on traded physical goods, which are nil with the Single Market. In this context the positive and in some cases moderately high tariff equivalents estimated for services suggest that this kind of trade faces indeed higher barriers.

Using this methodology, on average Polish exporters of accounting and auditing services are estimated to face barriers equivalent to tariffs of 3% when selling their services elsewhere in the Single Market. In comparison, barriers currently faced by German, Swedish and Hungarian accounting and auditing firms elsewhere in the Single Market are equivalent to 4% tariff. Again, while not high in absolute terms, in relative terms Polish exporters face on average barriers which are 25% lower than those faced by firms from Germany, Sweden and Hungary.

At the same time, barriers in the Polish accounting and auditing market faced by other EEA providers amount to 7% *ad valorem* equivalent, which is more than double the barriers typically faced in the three other markets. As the restrictions in the sector are close to the EU average, the relatively high equivalent is due to the market structure in Poland. This is to say that there are significant benefits to be gained from the liberalisation in the domestic market (most likely the liberalisation of the tax advisor profession).

Construction

Polish construction firms face on average the equivalent of a 3% *ad valorem* tariff when selling their services in the Single Market. The same tariff equivalent is faced by construction firms from Hungary and Sweden, while it is slightly higher for German construction firms.

Barriers in the Polish construction market have, in turn, been estimated at a 5% tariff equivalent. Among the four countries, only the Swedish market is more protected (a 7% ad valorem equivalent). Hungary and Germany do not seem to significantly protect their construction markets.

Computer services

Trade in computer services faces negligible barriers within the Single Market across the analysed countries, as shown by the estimated *ad valorem* equivalents of 1%-2%.

Nevertheless, the Polish computer services market is still estimated to have moderate protection (a 3% *ad valorem* equivalent), which again stems from not formal barriers to trade but rather from market structure, which in turn relates to insufficient competitive pressures and lower levels of development of the Polish digital market as compared to other EU countries.

Offensive and defensive interests across all three sectors

To sum up, the three analysed sectors are all protected, although to varying degrees; on average Polish exporters appear to face barriers of 3% when selling their **accounting & auditing as well as construction services** to other EEA states. As regards the former sector, this result is one percentage point (or 30%) lower than that which was recorded for exporters from the three other economies, while calculations for the latter sector did not show any differences. However, Poland's accounting and auditing and construction

markets appear relatively protected, with 7% and 5% *ad valorem* equivalents respectively and at least double the levels in the three other countries. **Computer (ICT) services** providers from all the four countries face low barriers when exporting their products to other Single Market states; in this context Poland's market is moderately protected (with a 3% *ad valorem* tariff) and likely to benefit from further developments, both digital as well as related to trade liberalisation.

As has been explained in the section on *Competitiveness* above, with trade liberalisation a country which is relatively efficient at providing certain services will be expected to gain from liberalisation and expand exports of these services, even if it itself opens up its market to import competition. In fact, a competitive sector is likely to increase its productivity further following liberalisation and the gains will be proportionate to the size of trade barriers faced in export markets and imposed on imports in the domestic market, although they will also depend on additional factors, such as, for example, the initial market structure. Poland displays competitive advantages compared to the other participants of the Single Market in accounting & auditing and construction, and the observed recent dynamic growth in exports also points to a strong competitive position in computer services.

SMEs

International expansion via intricate niche strategies or the provision of highly customised services to selected clients are business options often pursued by small and medium companies. In this context, the rise of the digital economy has seemingly opened up numerous opportunities for small businesses to go global. The high hopes attached to progress in digitalisation notwithstanding, barriers put in place by services regulatory frameworks and high fixed costs of entry still pose significant challenges for SMEs.

- The external factors, with barriers to competition and regulatory transparency most prominent among them, were felt throughout the three sectors to varying degrees.¹¹⁶
 - Assuming a business environment with an average level of index of restrictiveness of trading in services of o.2 (although it is worth remembering that in this analysis we deal with restrictions several times lower) would translate into an extra tariff of approximately 14% on SMEs' cross-border exports of specialised services relative to considerably larger companies (as regards trade in standardised services, the extra tariff is markedly lower, amounting to approximately 4%).
 - In a more restrictive business environment (of STRI equal to 0.3) the additional burden increases to more than 20% of extra tariffs for the smallest businesses dealing in customised services.
 - All else equal, on top of all the sunk and fixed costs of establishing a permanent corporate presence, regulatory restrictions appeared to add a tariff of nearly 30% on sales of specialised services and approximately 8%–9% of extra tariff for standardised services sold via foreign affiliates for SMEs¹¹⁷ in comparison to large companies.

In accounting and auditing services -678.5 and -39.23 respectively, in the construction sector -377.4 and -100.3 respectively and in computer services -300.5 and -61.6 respectively (Rouzet, D. and F. Spinelli (2016), Services Trade Restrictiveness, Mark-Ups and Competition, OECD Trade Policy Papers, No. 194, OECD Publishing, Paris, pp.41-42 and 44).

¹¹⁷ With a turnover greater than €400 million; authors' own work based on the research presented in OECD (2017), Services Trade Policies and the Global Economy, OECD Publishing, Paris, pp.74–75.

- Company-specific factors with regard to trade restrictions appear to affect firms' price margins in a relatively unilateral fashion across the three analysed sectors¹¹⁸.
 - Company size was a moderately significant factor in computer services mitigating the potentially achievable price margins by 0.6 to 1.1. The greatest impact, between -2.11 and -1.3, depending on the model specification, was recorded for the most sophisticated accounting and auditing sector.
 - On the other hand, company growth (in sales) appeared to increase that company's margins (in this case the accounting sector recorded the lightest effects, between 1.9 and 2.0, depending on the model specification, as opposed to construction and computer services, where in both cases the impact was comparable in magnitude varying between 2.0 and 2.29).

As regards the costs of entry, those are much more difficult to absorb for companies whose export revenues constitute only a small fraction of their total turnover. In contrast to their large counterparts, which rely on their business networks and financial means to provide them with better tools to deal with regulatory demands, SMEs are usually unable to pass compliance costs on to their customers. Such circumstances prove often discouraging for SMEs, preventing them from expanding internationally or, if they do enter foreign markets successfully, to record significantly lower turnover.

Summary and recommendations

Poland is moderately restrictive when considered against the Single Market backdrop, protecting the three analysed services sectors either at, or slightly above, the EU average, implying on the one hand that EU-based service suppliers have already enjoyed a relatively uncompromised access to the Polish market and, on the other hand, that there is still potential for Poland to liberalise its own policies, with benefits for its own economy and its EU trading partners.

Moreover, as an efficient services supplier, Poland has mainly offensive interests when it comes to further negotiations on liberalisation of services trade within the Single Market. It ranks at an advantageous 12th position in terms of the size of services exports within the EU market. Furthermore, the very strong estimated competitive position of Polish service exporters, particularly with regard to accounting and construction services, suggests that further liberalisation of the internal market is unlikely to undermine the competitive position of Polish firms in these segments. It will instead open further opportunities for them.

The country indeed has considerable offensive interests in further liberalisation in all three of the sectors analysed here (and beyond), but these are endangered by some possible future unfavourable policy scenarios. These scenarios concern the proposed regulatory tightening at the EU and member state levels in certain areas. There is feasible proof that further restrictive regulations may emerge in certain areas (for example, with regard to posted workers in the construction sector or in the digital economy). Therefore, even though by all appearances Poland has achieved a leading position in the cross-border provision of construction and accounting services *and* has been developing an advantage in computer services, **preventing new restrictions and erasing the existing ones are paramount**.

All the results reported in this section should be interpreted assuming the *ceteris paribus* rule; if multiplied by 100, the reported co-efficients should yield a percentage change in the change in the dependent variable assuming a unit growth of a given explanator.

But it is not only Poland that could reap gains from further intra-EU integration in trading in services. Several economic modelling simulations show there are considerable gains to be had for all countries. For example, one study considered in this report estimates that, under the assumption of achieving: 1) the highest possible levels of integration with the Single Market by all the Member States and 2) a 50% growth in intra-EU services trade, all the Member States have significant potential of ameliorating their economic standing with increases in GDP per capita amounting to an average of o.6% in the EU28 and varying between a minimum of o.4% (in Hungary) and a maximum of o.6% (in Sweden). Poland and Germany would gain o.5% and o.6% respectively (and in absolute terms that would bring an additional €411 and €151 per household, respectively).

In this context, joint policy efforts should focus on **equal distribution of benefits from liberalisation of trading in services among the different EU economies** through co-ordinated, EU-level policy actions. These efforts should also take into account the importance of regulatory convergence. Special focus is required in the areas of the highest growth potential, such as business and construction services, where providers could profit from better access to digital technologies and freer exchange of data.

To ensure that the joint policy efforts are not wasted and individual EU Member States' voices are heard in the discussion, it remains of paramount importance that a dialogue based on high quality policy analysis is established. Accompanied by relevant robust empirical evidence provided by the EC and EU Member States, such a debate could produce ambitious policy schemes and solutions to specific problems and barriers at the sector level. Indeed, given the sensitivity of the underlying problems, a sectoral approach would probably be the most desirable, instead of horizontal initiatives. Additionally, it is conceivable that past experiences derived from failed co-operation (as regards, for example, the European Services E-card initiative) combined with qualitative and quantitative cross-country research could provide the much-needed starting point for engaging in public consultations with business and political stakeholders.

However, some horizontal approaches also have great potential. In the digital sphere, for example, following the implementation of the 2016 NIS Directive¹¹⁹ and the 2018 EU General Data Protection Regulation, amendment of the existing regulatory frameworks pertaining to e-privacy is already under development by the relevant EU authorities. These propositions, despite strengthening law enforcement and shielding users from aggressive content, also provide new business opportunities, both for traditional firms as well as digital ones. While the over-riding aim has been streamlining of the digital market as a whole, the EU-wide regulatory efforts carry considerable policy uncertainty and risk of overregulation, not only in the context of particular national interests¹²⁰ but also misalignment with the existing DSM goals. These factors may deter the development of start-ups and capital inflows before the envisaged reform has been agreed upon and transposed into national law. If successful, the regulatory change will likely result in a levelling of the EU market, providing unified, and clear-cut requirements and relaxation of barriers to trade in all analysed services through a boost to the digital economy and boosting the regional competitiveness levels. Assuming Poland's internal digital market continues to develop dynamically, the potential gains to be had from the relevant reforms may materialise in the further expansion of, inter alia, sales of Poland's computer and accounting services to other EU markets.

¹¹⁹ Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union.

¹²⁰ One such most recent example is the move of the French Commission nationale de l'informatique et des libertés (CNIL) against Google for alleged breach of European privacy regulations while providing digital services pertaining to ad placement (Commission nationale de l'informatique et des libertés (2019), La formation restreinte de la CNIL prononce une sanction de 50 millions d'euros à l'encontre de la société GOGLE LLC; Press release: https://www.cnil.fr/fr/la-formation-restreinte-de-la-cnil-prononce-une-sanction-de-50-millions-deuros-lencontre-de-la last accessed on 22.01.2019).

Auditing and accounting

As regards further services trade liberalisation efforts within the EU Single Market in accounting and auditing services, it appears in Poland's interest is in insisting on reductions in the degree of 'over-regulation' of the auditing sector. Simplification of the existing regulations could focus on licensing requirements for different tiers of management in some EU countries, such as France, Belgium, Sweden and Norway. On the other hand, such initiatives need to be considered with much care, as these procedures mitigate business and financial risk across all strata of economic activity where provision of transparent and quality financial and accounting data is required. The remaining limitations on the movement of people associated with requirements for auditors to sit local exams are a similar example of the barriers which on the one hand acts to guarantee consistency and professional integrity but on the other hand contribute to the profession's relative inaccessibility and alleged language bias.

These obstacles translate into still considerable barriers for Polish exporters wishing to sell their services elsewhere in the EEA. Still, the same barriers are approximately 25% higher when faced by German, Swedish, and Hungarian exporters accessing the EEA market for accounting and auditing services. However, **this segment of Poland's market is also markedly protected**, with accounting and auditing services providers based elsewhere in the EEA faced with barriers sometimes double those they encounter in Germany, Sweden and Hungary. **But**, since these barriers are estimated to arise from the specific market structure, **liberalisation of these services would likely have economically important positive productivity effects**. However, despite these promising projections, the precautionary nature of some of the regulations currently in force, particularly in auditing services, also needs to be taken into account.

Computer services

Computer services has for years been a benchmark sector for free trade in services worldwide; however, given the current trends and tendencies observed not only within the EU but globally as well, its remarkable position has been slowly waning. With issues regarding e-Privacy, cybersecurity, AI, cloud computing, data flows, and intermediary liability gaining more importance (not from an economic view, but first and foremost a national security perspective), the DSM has come under the threat of misplaced over-regulation driven by ethical, technological, fiscal, and legal issues. Indeed, these issues need to be carefully considered, so that they do not thwart the development of the EU digital economy and, in an extreme scenario, do not cause not only economic but also Internet fragmentation¹²¹ brought on by diverging regulatory frameworks of individual Member States as well as overall policy confusion and uncertainty.

Currently, the **level of restrictiveness of barriers to trade in computer services in Poland is slightly higher than in other EEA countries**, a situation stemming from horizontal restrictions rather than specific regulatory requirements imposed on IT services providers wishing to export to foreign markets. All the same, the relative inaccessibility of digital technologies in Poland's internal market is emerging as the key impediment to the future development of the sector (and digital economy as a whole). In this context, policy action should support the internal digital market and its alignment (both regulatory and technology-wise) with the EU economy. **It is in Poland's interests to promote digitalisation efforts, in particular by improving access to high-speed internet, cloud storage and e-government.**

¹²¹ The Chinese Internet censorship being a case in point here.

Poland should pay particular attention to the computer services sector and advocate co-ordinated policy action where appropriate for boosting the security of trade in digital services, but with an aim of not damaging the relatively barrier-free environment found there. There are several reasons underpinning this insight: firstly, the sector's potential in terms of value added and innovation generation is much higher than that of most other segments, including accounting & auditing and construction services. Further development in the area of digitalisation, particularly as regards the DSM, may help use this potential and diversify the economy towards the more knowledge and technology-intensive services. Secondly, exports are essential to Polish IT services, acting as a stimulus for the segment's development. Thirdly, if a widescale liberalisation across sectors proves difficult or impossible, it may be more effective to defend the relatively barrier-free status rather than to bring down the existing barriers elsewhere.

Construction

Construction services face moderate and heterogeneous barriers in different Member States, but they are relatively more exposed to costly administrative procedures related to accessing markets of other Member State. Currently numerous **impediments encompass both legal conformity as well as barriers to the movement of people**, among which **the lack of mutual recognition of qualifications** seems the most important. To improve this situation the issue of **country-specific professional requirements** and **transparency of the prerequisites of entering the market**, both in terms of applying for a job as well as taking part in public procurement should be addressed, so that both become more unified and clear-cut.

Amelioration in both the **transposition of the EU-wide legal framework**, comprising the European Qualifications Framework (EQF)¹²² and the European Credit System for Vocational Education and Training (ECVET),¹²³ the Services Directive, ¹²⁴ and Professional Qualifications Directive, as well as enforcement of the regulations, **should yield positive effects**. Gains would not only accrue for Poland but would extend to **Germany** which is likely to reap benefits from eliminating the **floor and ceiling tariff rates for architects and engineers** as well as transposing Directive 2013/55/EU on the **recognition of professional qualifications**. Some Member States, on the other hand, **stand to gain** from proper transposition and application of Directives 2014/23/EC, 2014/24/EC and 2014/25/EC on **public procurement and concessions**.

It has to be borne in mind that **mandatory certification schemes do not align well with the pan-European Services Directive**. In principle, these procedures focus on ensuring that services suppliers met a particular level of industry-specific standards, which are both set and then verified by external independent national official entities. In this context, mandatory certification processes of certain services providers come across as disproportionate – especially given the fact that these processes are country-specific and impossible to adopt a universal authorisation process across the EU.

As regards **regulatory and administrative frameworks** pertaining to horizontal authorisation and building permits, construction services providers may reap significant gains from **simplification** of the relevant procedures and **popularisation of handling cases online**.

¹²² For example Overview of national qualifications framework developments in Europe 2017; doi:10.2801/44819TI-01-18-118-EN-N ISBN: 978-92-896-2226-4 15/03/2018.

For example, ECVET in Europe; Monitoring report 2015 (published: June 2016).

¹²⁴ Directive 2006/123/EC acts to remove bureaucratic barriers via increased transparency and easier access to crossborder services within the Single Market.

The **costs of posting construction workers** to higher-income countries are likely to increase in the near future as a result of the adopted revision of the relevant rules. It is still unclear how the sector will tackle this change; however, these developments are likely to undermine the sector's competitive edge. In this light, considering any measures that would ensure a right balance on the Single Market between social aspects and the four freedoms is necessary. The eventual **implementation of a tool similar to the proposed e-card**¹²⁵ **could strengthen exports of Polish construction services**. It is in Poland's interests to support such an initiative and to help with the work aimed at fine tuning it so that the future initiative responds to the concerns of both trade unions¹²⁶ as well as national governments and to monitor its implementation. Similarly, efforts aimed at extending the European Professional Card to other professions are worth being pursued.

¹²⁵ As regards the Services e-Card an impasse has been reached.

For an in-depth account of the joint position and the critique of the services e-card prepared by seven social partners (European Federation of Building and Woodworker, European Construction Industry Federation, Insurance Europe, UNI Europa, Association of Mutual Insurers and Insurance Cooperatives in Europe, BIPAR the European Federation of Insurance Intermediaries, and European Federation of Cleaning Industries) see Employers and trade unions criticise fundamentally flawed European Commission proposals for a EUROPE-AN services e-card http://www.efbww.org/pdfs/Services_e_card_Joint_%20position_GB.pdf 19.12.2018.

References

Act on Professional Associations of Architects and Civil Engineers (Ustawa o samorządach zawodowych architektów oraz inżynierów budownictwa, Dz.U. 2001 nr 5 poz. 42, 15 December 2000, last updated on 31 August 2016)

American Chamber of Commerce to the EU (2017), The EU Single Market: Impact on Member States by, Brussels

Aussilloux, V., Emlinger C., and Fontagne, L. (2011), What benefits from completing the Single Market?, La lettre du CEPII, No. 316

Benz, S. (2017), Services trade costs: Tariff equivalents of services trade restrictions using gravity estimation, OECD Trade Policy Papers, No. 200, OECD Publishing, Paris,

http://dx.doi.org/10.1787/dc607ce6-en

Bertelsmann Foundation (2014), 20 Jahre Binnenmarkt, Wachstumseffekte der zunehmenden europaischen integration

Building Act (Ustawa Prawo budowlane, Dz.U. 1994 nr 89 poz. 414, 7 July 1994, last updated on 1 January 2017, Article 12)

Cedefop (2016), ECVET in Europe. Monitoring report 2015 (published: June 2016)

Cedefop (2018), Overview of national qualifications framework developments in Europe 2017, Publications Office of the European Union

Cernat, L. and Kutlina-Dimitrova, Z. (2014), *Thinking In a Box: 'A Mode 5' Approach to Services Trade*, DG TRADE Chief Economist Note

Code de Commerce, version consolidée au 25 novembre 2018

Dee, P. (2005), A compendium of barriers to services trade, paper prepared for the World Bank, available at https://www.gtap.agecon.purdue.edu/resources/download/3492.pdf

Decreux, Y. (2012), Completing Single Market II' in HM Government and CEPR 'Twenty Years On: The UK and the Future of the Single Market, Centre for Economic Policy Research

Deloitte Tax Blog Changes to the European Directive could make posting workers more difficult and expensive, posted on 27/08/2018, available at https://blogs.deloitte.ch/tax/2018/08/changes-to-the-european-directive-could-make-posting-workers-more-difficult-and-expensive.html

Directive (EU) 2018/957 of the European Parliament and of the Council of 28 June 2018 amending Directive 96/71/EC concerning the posting of workers in the framework of the provision of services

Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System

Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market

Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications

ECORYS (2017), Administrative formalities and costs involved in accessing markets cross-border for provisions of accountancy, engineering and architecture services. Final Report

European Commission (2018), Digital Economy and Society Index (DESI) 2018. Country Report Poland, at https://ec.europa.eu/digital-singlemarket/en/desi

European Commission (2017), Administrative formalities and costs involved in accessing markets cross-border for provisions of accountancy, engineering and architecture services; https://publications.europa.eu/en/publication-detail/-/publication/5c8a6c62-44e3-11e7-aea8-01aa75ed71a1 19.12.2018

European Commission (2017), LAB-FAB-APP: Investing in the European Future we want, Report of the independent High-Level Group on maximising the impact of EU Research & Innovation Programmes

European Commission (2016), *Posted Workers in the EU. Factsheet*, at https://ec.europa.eu/social/BlobServ-let?docld=15181&langld=en

European Commission (2016), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on reform recommendations for regulation in professional services, COM/2016/0820, http://www.ipex.eu/IPEXL-WEB/dossier/document/COM20160820.do

European Commission (2015), A Single Market Strategy for Europe – Analysis and Evidence, Commission Staff Working Paper SWD(2015) 202 final

European Commission (2015a), A Digital Single Market Strategy for Europe – Analysis and Evidence. Commission Staff Working Document Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Brussels

European Construction Sector Observatory (2016), Country Profile: Hungary

European Commission (2014), Services: tapping the potential for growth and jobs. Commission contribution to the European Council of 20–21 March 2014

European Parliament (2017), Introducing a European services e-card EU Legislation in Progress by European Parliamentary Research Service at http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608704/EPRS_BRI(2017)608704_EN.pdf 19.12.2018

European social partners of cleaning, insurance, and construction sectors joint statement (2017), *Employers and workers jointly criticise fundamentally flawed proposals for a European services e-card* at http://www.efbww.org/pdfs/Services_e_card_Joint_%20position_GB.pdf 19.12.2018

EU Publications (2016), Simplification and mutual recognition in the construction sector under the Services Directive, at https://publications.europa.eu/en/publication-detail/-/publication/3e6f95eb-c658-11e5-a4b5-01aa75ed71a1 last accessed on 13.12.2018

Insurance Europe (2017), EC proposal for a European services e-card: the position of Europe's insurers at https://www.insuranceeurope.eu/sites/default/files/attachments/Insurance%20Europe%20position%20 -%20services%20e-card.pdf, last accessed 19.12.2018

Izkovitz, F., Dierx, A., Kovacs, V., And Sousa N. (2007), Steps towards a deeper economic integration: the Internal Market in the 21st century. A contribution to the Single Market Review, European Commission, European Economy, Economic Papers No. 271, January

Falk M. and E. Hagsten (2015), Export Behaviour of Micro Firms in the Swedish Computer and Business Service Industries, Economics e-journal, Vol. 9, 2015-32 | 15 October 2015 | http://dx.doi.org/10.5018/economics-ejournal.ja.2015-32

Kąkol. M. (2018), Evaluation of Poland's revealed comparative advantage in international trade in services [in:] Proceedings of the 5th International Multidisciplinary Scientific Conference on Social Sciences & Arts SGEM 2018, Volume 5, Issue 1.1, 19–21 March 2018, Vienna, Austria, pp. 641-652

Lange, M. and R. Martin (2016), *The New Accounting Directive: A Harmonised European Accounting Framework?* European Federation of Accountants and Auditors for SMEs

Lorenzani, D. and J. Varga (2014), *The Economic Impact of Digital Structural Reforms*, European Economy, Economic Papers 529 | September 2014 http://ec.europa.eu/economy_finance/publications/economic_paper/2014/pdf/ecp529_en.pdf

Miroudot, S. and Pertel K. (2015), *Water in the GATS: Methodology and results*, OECD Trade Policy Papers, No. 185, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jrs6k35nnf1-en.

Nordås, H. et al. (2014), Services Trade Restrictiveness Index (STRI): Computer and Related Services, OECD Trade Policy Papers, No. 169, OECD Publishing, Paris http://dx.doi.org/10.1787/5jxt4np1pjzt-en

OECD (2017), Services Trade Policies and the Global Economy, OECD Publishing, Paris, https://doi.org/10.1787/9789264275232-en

OECD (2018a), Intra-EEA STRI Database: Methodology and Results

OECD (2018b), OECD Economic Surveys. European Union, June, at http://www.oecd.org/eco/surveys/European-union-2018-OECD-economic-survey-overview.pdf

Rouzet, D. and Spinelli, F. (2016), Services Trade Restrictiveness, Mark-Ups and Competition, OECD Trade Policy Papers, No. 194, OECD Publishing, Paris http://dx.doi.org/10.1787/5jln7dlm3931-en

SME Envoy Network (2018), Barriers for SMEs on the Single Market

World Economic Forum, *The Global Competitiveness Report* 2016–2017, http://www3.weforum.org/docs/GCR2016-2017/05FullReport/ TheGlobalCompetitivenessReport2016-2017 FINAL.pdf

World Bank Group: Doing Business. Measuring Business Regulations. Poland at http://www.doingbusiness.org/data/exploreeconomies/poland/dealing-with-construction-permits/ last accessed on 11.12.2018

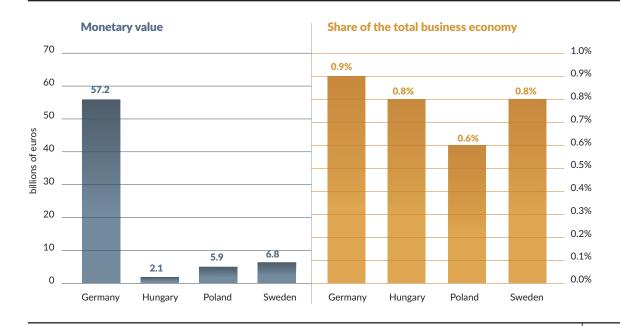
ANNEXES

Annex 1: Sectoral statistics

Accounting and auditing services sector¹²⁷

With over 57 billion euros of turnover in 2016, Germany's legal and accounting sector is almost four times larger than the legal and accounting sectors of the remaining three countries combined (Figure 1). It also makes up the highest share of the total business economy, at 0.9%, ahead of Sweden (0.8%), Hungary (0.8%), and Poland (0.6%).

Figure 1 Turnover in legal and accounting services in absolute terms (left axis, billion euros) and as share of the total business economy (right axis), 2016



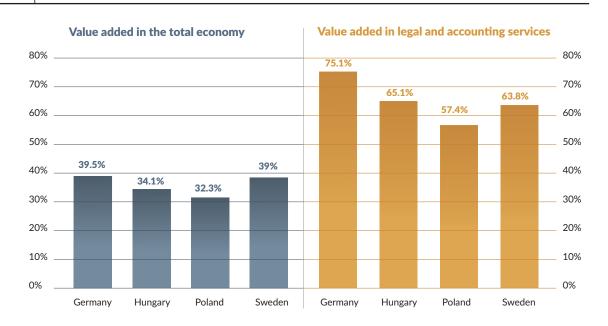
Source: Eurostat, last access 22.10.18

¹²⁷ In this section, we follow the classification of sectors as per Eurostat. In particular, we use NACE Rev. 2's category M69: Legal and accounting activities as a proxy for the accounting and auditing sector. Also, please note that the total business economy does not include financial and insurance services (Eurostat code: B-N_S95_X_K).

Legal and accounting services can be considered as relatively 'high value added' as demonstrated by the high ratios of gross income from operating activities after adjustments for operating subsidies and indirect taxes, more commonly known as value added at factor costs, to the value of production. Such value added was markedly higher in this sector as compared to other sectors on average in all four countries (Figure 2). This can be explained by the strong reliance on intangible capital in the sector (know-how, brand, expert knowledge) and relatively low operating costs (as compared to sectors relying more on physical capital).

In Germany's legal and accounting services sector, at 75%, this share was higher than in the other economies in our group, while Poland's share of 57% was the lowest. These ratios may be informative of the countries' competitive positions in the global legal and accounting services industry, but they can also in principle suggest market entry barriers that create rents which may be contributing to the high value added figures. Perhaps interestingly in this context, Swedish industry also recorded a relatively low ratio (64%) despite the fact that its economy-wide ratio came very close to the German one.

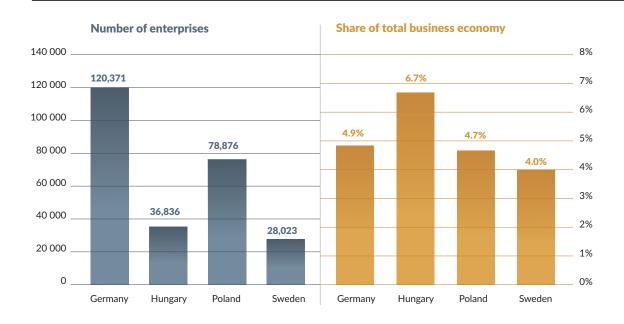
Figure 2 Value added (at factor cost) as percentage of the production value in legal and accounting services as compared to the total business economy, 2016



Source: Eurostat, last access 22.10.18

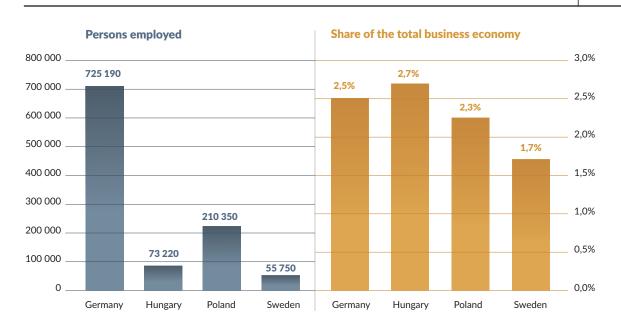
German legal and accounting services also recorded the largest number of companies in the sample (over 120 000), ahead of Poland (almost 79 000), Hungary (almost 37,000), and Sweden (just over 28 000) (Figure 3). Hungary, nevertheless, is the economy in which those companies make up the largest share of all companies, 6.7%, compared to values between 4% and 5% in the remaining countries. Employment in the sector appears to have followed the pattern of enterprise counts. Germany had the largest employment in the sector (over 715 000), much ahead of the other three countries (Figure 4).

Figure 3 Number of enterprises in legal and accounting services in absolute terms (left axis) and as a share of the total business economy (right axis), 2016



Source: Eurostat, last access 22.10.18

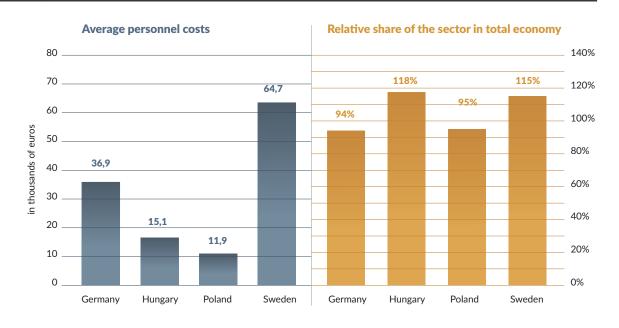
Figure 4 Number of persons employed in legal and accounting services in absolute terms (left axis) and as share of the total business economy (right axis), 2016



Source: Eurostat, last access 22.10.18

The legal and accounting services sector appeared very cost-intensive, with average personnel costs¹²⁸ much exceeding the average economy-wide costs (Figure 5). This does not come as a surprise, since the industry as such focuses on highly specialised and customised services which require highly-skilled individuals who usually need to keep their knowledge up to date to remain competitive in the quickly changing market. Cross-country differences however likely reflect a wider set of factors, including the level of average remuneration. Sweden recorded the highest absolute value of individual averaged personnel costs, which incidentally translated into 115% of the country-wide average. The same pattern was identified for the remaining economies, with the Hungarian industry-level average personnel costs reaching 118% of the economy-wide average. Sector-specific costs per individual employed were lower than the country average only in Germany and Poland: the 36.9 thousand euros observed in the German legal and accounting services equalled 94% of the country average, while in Poland these figures reached 11.9 thousand euros and 95% respectively.

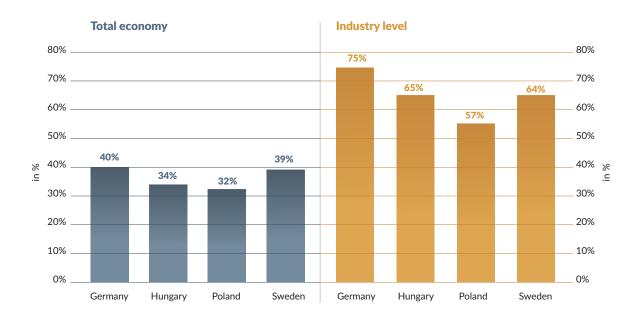
Figure 5 Average personnel costs in the sector relative to the whole economy, 2016



Source: Eurostat, last access 22.10.18

According to the Eurostat definitions: personnel costs are defined as the total remuneration, in cash or in kind, payable by an employer to an employee (regular and temporary employees, as well as home-workers) in return for work done by the latter during the reference period. Personnel costs are made up of wages, salaries and employers' social security costs. They include taxes and employees' social security contributions retained by the employer, as well as the employer's compulsory and voluntary social contributions. Average personnel costs (or unit labour costs) equal personnel costs divided by the number of employees (persons who are paid and have an employment contract).

Figure 6 Wage-adjusted labour productivity in the sector relative to total economy, 2016



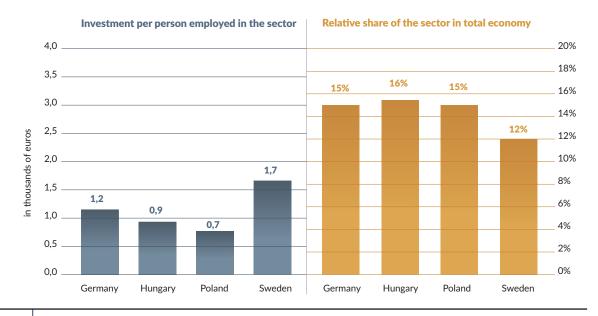
Source: Eurostat, last access 22.10.18

Wage-adjusted labour productivity¹²⁹ in the sector was above the economy-wide level in all our countries. The ratio was again highest in Germany (75%), while Hungarian and Swedish indices were lower (65% and 64% respectively), with Polish one visibly behind (57%). As far as divergences between sector-specific and economy-wide productivity are concerned, Germany boasts the highest score, reaching slightly more than 35 percentage points. Again, Hungary comes second - with its economy-wide ratio of 34% and the difference between the two considered metrics amounting to 31 percentage points. The relative differences in Poland and Sweden are similar, despite the gap in economic development – in both countries the divergence of around 25 percentage points was recorded.

Investment per individual employed in the legal and accounting services sector in 2016 was quite low relative to the economy-wide average, geographical size and economic development of the country notwithstanding (Figure 7). This is understandable, given the nature of the sector – it is far less investment-intensive than other sectors (such as construction services). The 1.7 thousand euros recorded in Sweden translated into about 12% of the economy-wide average; German investment at sector level equalled slightly less – 1.2 thousand euros, however, in relative terms it represented around 15% of the country-level average. In relative terms too, investment per individual employed in the sector in Poland was comparable to the expenditures recorded in Germany. In absolute terms, however, it amounted to a somewhat meagre 0.7 thousand euros. These ratios placed the country behind Hungary, which not only boasted the highest investment per person employed relative to the whole economy (16%) but also spent about 0.2 thousand euros more than Poland in absolute terms.

¹²⁹ It is defined as value added divided by personnel costs which is subsequently adjusted by the share of paid employees in the total number of persons employed, or more simply, apparent labour productivity divided by average personnel costs (expressed as a ratio in percentage terms). Given that this indicator is based on expenditure for labour input rather than a headcount of labour input, it is more relevant for comparisons across activities (or countries) with very different incidences of part-time employment or self-employment. (Eurostat glossary).

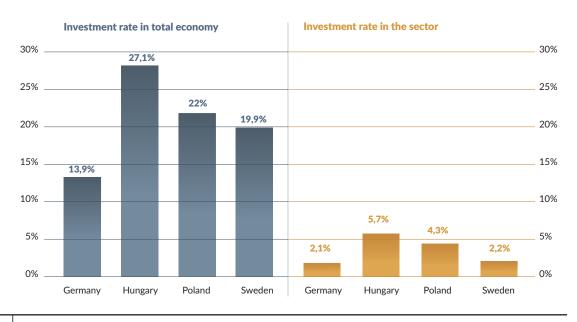
Figure 7 Investment per person employed in the sector relative to the whole economy, 2016



Source: Eurostat, last access 22.10.18

The economy-wide investment rate¹³⁰ was also significantly above the sector-specific one regardless of the country under consideration and there were important differences across countries both in absolute and relative terms (Figure 8). In relative terms, Poland and Hungary turned out as the most investment-intensive (judging by the percentage point difference between the sectoral ad the country-wide rate) while Germany came last. This could be indicative of the differences in starting points in the these sectors' levels of development and the catching up between the less advanced Central European and the more advanced Western European economies.

Figure 8 Investment rate in the sector relative to the whole economy in 2016



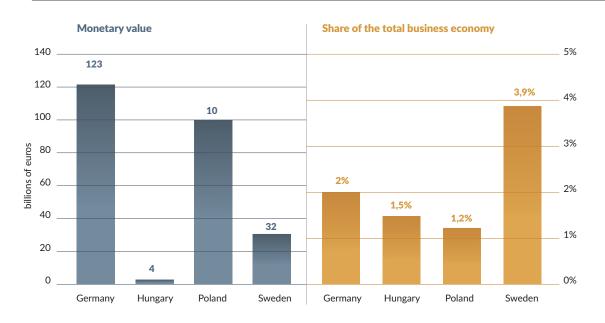
Source: Eurostat, last access 22.10.18

¹³⁰ Understood as the ratio of total investment and value added at factor costs.

Computer services sector¹³¹

At first glance, computer services account for a larger share of national economies in terms of turnover than the previously discussed accounting and auditing services. Germany's computer services sector is again the largest but in Sweden the sector accounted for nearly 4% of the economy-wide turnover. Poland recorded the lowest relative turnover of 1.2%. It was also lower, in relative terms, than in Hungary.

Figure 9 Turnover in computer services in absolute terms (left axis, billion euros) and as share of the total business economy (right axis), 2016



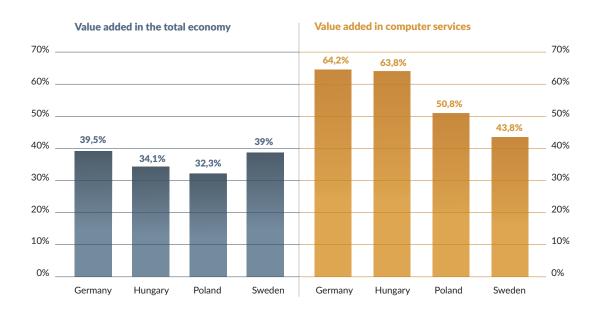
Source: Eurostat, last access 22.10.18

Computer services recorded also much higher value added shares than other sectors on average, but lower than the ones observed for the legal and accounting sectors irrespective of country (Figure 10). Interestingly, Sweden had the lowest share in the sector and this share was the closest to the economy wide one. This observation stands out particularly against the backdrop of the remaining economies.

Poland had nearly 62 000 active computer services enterprises in 2016 which placed the country on the second position, just after the much larger economy of Germany (Figure 11). However, when contrasted with the fact that Polish computer services sector came third as far as sectoral turnover and value added were concerned may be testimony to its relatively low productivity (but there is also evidence that labour costs are lower in this sector in Poland and Hungary). Swedish and Hungarian industries seem to use their resources more efficiently, even if their sectors are significantly smaller than in Poland. Like in the case of turnover, Sweden's computer services sector accounted for the largest share of the economy in terms of sector size compared to the other countries. Employment in computer services displayed a similar pattern as the one observed for the number of enterprises (Figure 12).

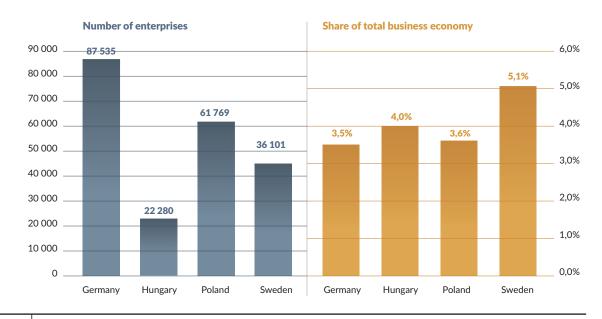
¹³¹ In this section, we follow the classification of sectors as per Eurostat. In particular, we identify computer services with NACE Rev. 2's category *J62*: Computer programming, consultancy and related activities. Also, please note that the total business economy does not include financial and insurance services (Eurostat code: B-N_S95_X_K).

Figure 10 Value added (at factor cost) as percentage of the production value in computer services compared to the total business economy, 2016



Source: Eurostat, last access 22.10.18

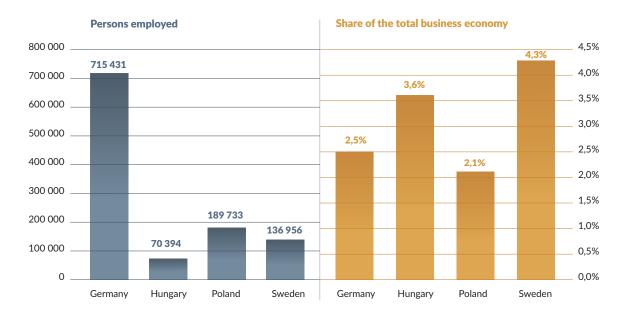
Figure 11 Number of enterprises in computer services in absolute terms (left axis) and as a share of the total business economy (right axis), 2016



Source: Eurostat, last access 22.10.18

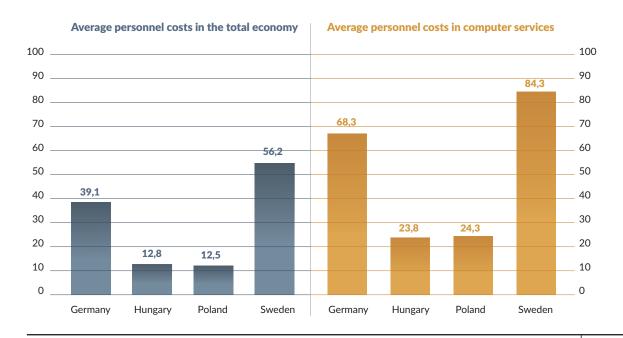
Sweden and Germany had relatively high labour costs and Poland and Hungary low ones—both on average across the economy and in the computer services industry. Across all studied economies though, the sector-specific costs linked to highly specialised labour force dwarf the economy-wide averages.

Figure 12 Number of persons employed in computer services in absolute terms (left axis) and as share of the total business economy (right axis), 2016



Source: Eurostat, last access 22.10.18

Figure 13 Average personnel costs in computer services compared to the total business economy, thousands euros, 2016

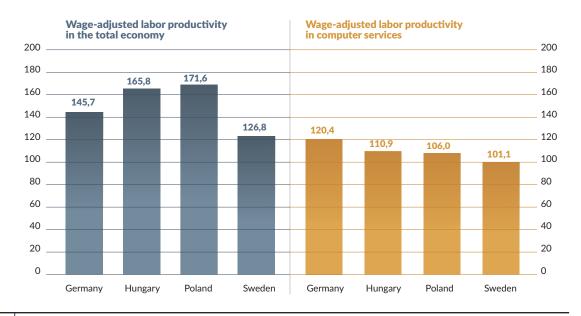


Source: Eurostat, last access 22.10.18

Surprisingly, irrespective of the geographical location and country size, wage-adjusted labour productivity at the sector level never exceeded the economy-wide average. These differences are particularly outstanding in Poland where the wage-adjusted productivity in the whole economy dwarfed the sector-level metric by more than 60 percentage points. A similar divergence was recorded for Hungary, while markedly smaller divergences were observed in the two developed countries. Based on the available data

we may venture a tentative conclusion indicative of underlying issues within the sector which restrict labour productivity. Among these a number of reasons may be named, insufficient investment in technology and human capital to name but two of them.

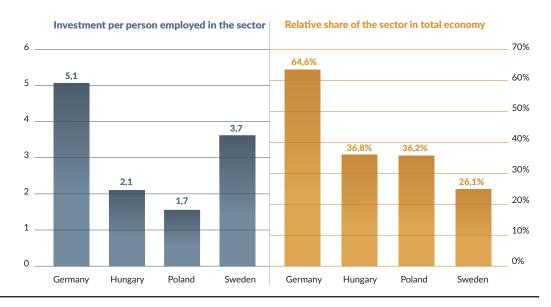
Figure 14 Wage-adjusted labour productivity in computer services compared to the total business economy, 2016



Source: Eurostat, last access 22.10.18

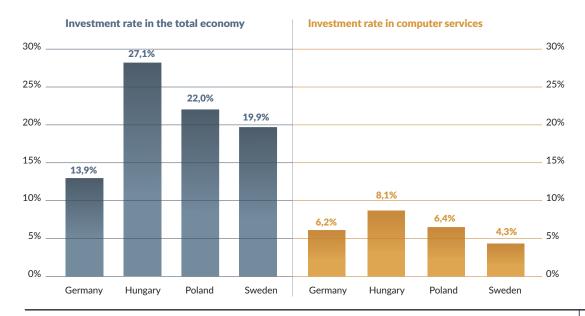
Irrespective of country, the investment per individual employed in computer services never exceeded the economy-wide average (Figure 15). In Germany it came close to 65% - markedly the highest score among the four economies. The current data may be surprising, especially that the computer services industry with its fast technological progress is, by far and large, investment-intensive. Investment rates paint a similar picture (Figure 16)

Figure 15 Investment per person employed in the sector (in thousands) relative to the whole economy, 2016



Source: Eurostat, last access 22.10.18

Figure 16 Investment rate in computer services compared to the total business economy, 2016

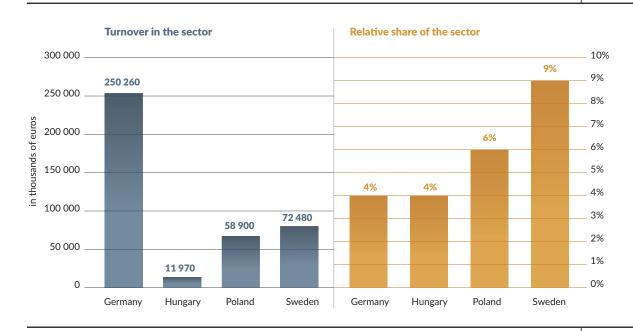


Source: Eurostat, last access 22.10.18

Construction services sector¹³²

Construction services take up the highest share of national economies among all the three service sectors considered. Construction accounted for 9% of Swedish total business turnover – significantly more than in Poland (6%) or Hungary and Germany (4%). In absolute terms, Germany yet again appears to have had the highest turnover, reaching over 250 million euros, incomparably more than Sweden, Poland, and Hungary.

Figure 17 Construction sector turnover relative to the whole economy, 2016



Source: Eurostat, last access 19.10.18

In this section, we follow the classification of sectors as per Eurostat. In particular, we identify construction services with NACE Rev. 2's category F: Construction. Also, please note that the total business economy does not include financial and insurance services (Eurostat code: B-N_S95_X_K).

In terms of number of active enterprises in the market, Germany, with its nearly 360 thousand entities, took the lead in 2016 but Poland with its over 264 thousand businesses did not fall far behind (Figure 18). In Sweden only 101 thousand active companies were registered despite the high share of the sector in the total economy's turnover reported above, suggesting, again large potential differences in size of firms and productivity. These differences may be less sector-specific and may have more to do with differences in the overall economic structures as suggested by the relatively similar shares of the sector in the total economy: Polish construction services accounted for 16% of the total economy, followed closely by Germany (15%), with Sweden (14%) and Hungary (12%) not far behind.

Absolute number of entreprises in the sector Relative share of the sector 400 000 358 920 18% 350 000 16% 16% 15% 300 000 14% 14% 264 440 **12**% 250 000 12% 200 000 10% 8% 150 000 101 860 6% 100 000 63 870 4% 50 000 2% 0% 0 Germany Poland Sweden Germany Hungary Poland Sweden Hungary

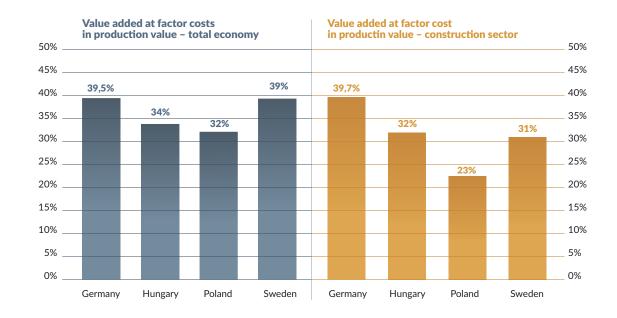
Figure 18 Construction sector size relative to the whole economy, 2016

Source: Eurostat, last access 19.10.18

In contrast with accounting and legal or computer services, value added in construction services accounted for smaller shares of output, suggesting this is a relatively 'low value added' activity. This was particularly the case in Poland, but also in Sweden. At this point it needs be noted that construction services, in contrast to for example accounting and auditing services, are relatively investment-intensive and burdened with relatively high operating costs. Moreover, gross profits generated by industry are often seasonal (winter being the low season) and more correlated with the economic cycles than the other two industries.

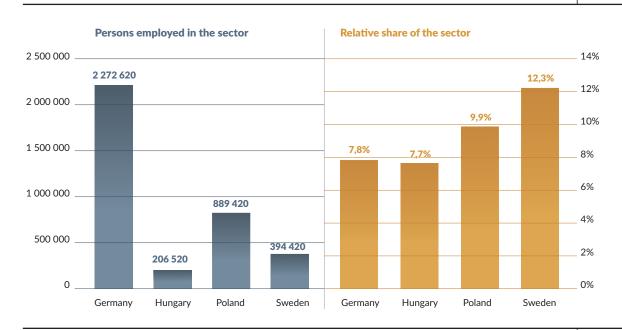
Slightly more than 2.2 million people worked in German construction services in 2016 – the number accounted for 7.8% of the whole German workforce (*Figure 11*). In Poland, nearly one tenth of the total labour force found employment in construction services, which translated into nearly 890 thousand jobs. Sweden had the highest industry-level personnel costs, equalling 54.4 thousand euros per individual employed. Personnel-related costs per person employed in the industry were significantly lower in Poland and in Hungary, where they reached 10.9 thousand euros 8.9 thousand euros respectively. These differences reflected largely differences in personnel costs across these economies (Figure 21).

Figure 19 Construction sector value added at factor costs relative to the whole economy, 2016



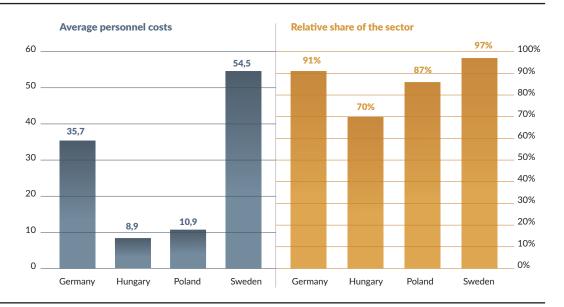
Source: Eurostat, last access 19.10.18

Figure 20 Persons employed in the sector relative to the whole economy, 2016



Source: Eurostat, last access 19.10.18

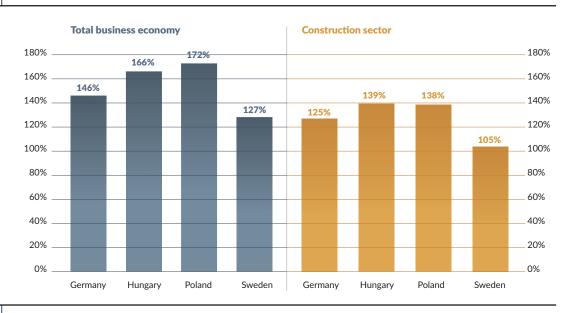
Figure 21 Average personnel costs in the sector relative to the whole economy, 2016



Source: Eurostat, last access 19.10.18

Labour productivity in the construction sector was lower than in other parts of the economy in all countries.

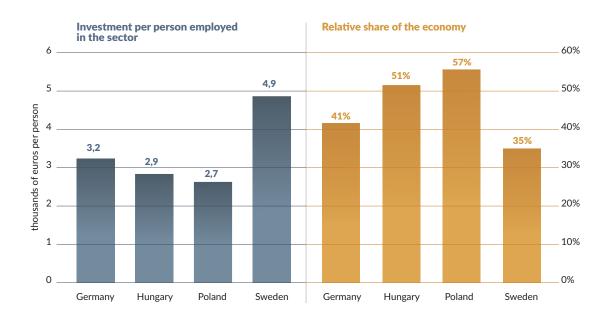
Figure 22 Wage-adjusted labour productivity in the sector relative to total economy, 2016



Source: Eurostat, last access 19.10.18

Swedish investment per individual employed in the sector at 4.9 thousand euros ranked the highest among the four countries in 2016 (Figure 23). At the same time it represented only 35% of investment per person economy-wide. In that same period German industry-level investment amounted to 3.2 thousand euros (41% of the average country-level investment). Despite lower investment outlays per person employed than in Germany and Sweden in absolute terms, in Poland and Hungary, construction services appeared relatively investment-intensive (with 57% and 51% of the economy-wide average).

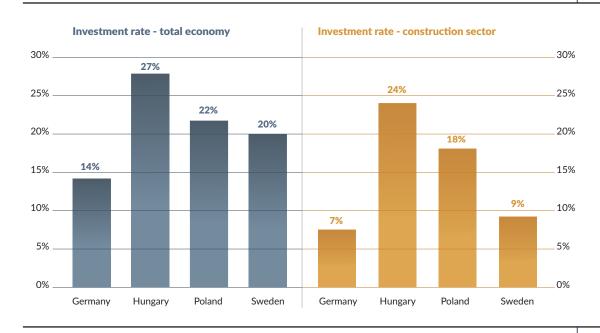
Figure 23 Investment per person employed in the sector relative to the whole economy, 2016



Source: Eurostat, last access 19.10.18

This picture is broadly confirmed by the investment rates which at the industry level were always significantly lower than the average rate recorded economy-wide (Figure 24). Poland and Hungary again appeared to engage more in investment activities in this sector and the gaps with respect to the rest of the economy were the smallest.

Figure 24 Investment rate in the sector relative to the whole economy, 2016



Source: Eurostat, last access 19.10.18

Annex 2: Revealed Comparative Advantage – methodology and results

Since Balassa's concept is based on the Ricardian trade theory, the RCA index interpretative implications are the following: if, in line with Ricardian assumptions, differences observed in relative productivity can serve as indication of trade patterns, then the observable trade patterns can be legitimately used to deduce the unobservable differences in relative productivity. At this point it needs to be noted that the observed trade patterns in international trade may, and usually, are distorted by government interventions in form of tariffs and price controls to name but few. These forces may indeed cause certain biases as far as countries' comparative (dis)advantages are concerned. In this analysis we acknowledge thus that protectionist policies implemented by governments such as tariffs or export subsidies may introduce significant distortions in RCA indices, however, given the scope and country sample of the current study we believe them to be of marginal significance. As far as the significance of the metric is concerned, pinpointing of the exact causes underpinning a country's current situation based only on this single score is burdened with serious risk of overlooking important socio-economic and political factors. Having said that, the results calculated using historical data should by no means be treated as final conclusions as to the comparative advantages of each country at sector level. Instead, we propose to consider them as guidelines and quantitative as well as generic approximations of the observed trade patterns. Given the scope of the current analysis focused mainly on barriers to trade, we do not delve deeply into reasons behind the obtained RCA results.

It needs be noted that the indicator takes numerous forms as there has been a proliferation of variations of the metric since its introduction in 1965. However, RCA's most common version is known as the Balassa index (Balassa, 1965), and in our study it takes the following form:

$$RCA_{MS}^{S} = \frac{E_{MS}^{S}/E_{MS}^{t}}{E_{EU_{2}8}^{S}/E_{EU_{2}8}^{t}}$$

where:

RCA $_{MS}^{S}$ is a Member State 's revealed comparative (dis)advantage in service E_{MS}^{S} is a Member State 's exports of service to the EU28 E_{MS}^{t} is a Member State 's total services exports to the EU28 E_{EU28}^{S} is the EU's exports of service to the EU28 E_{EU28}^{t} is the EU's total services exports to the EU28

On a most basic level, the Balassa Index aims to determine whether a country enjoys a 'revealed' comparative advantage without touching on the reasons thereof. In other words, the Balassa Index compares the share of a Member State's exports of service in this Member State's total exports to the share of the EU28's exports of service in the EU28's total exports. A Member State has a comparative *advantage* in service if this service accounts for a *larger* share of its exports than on average in the EU28. Conversely, a comparative *disadvantage* in services sector may be identified, assuming this sector accounts for a *smaller* share of its exports than on average in the EU28.

The analysis below relies on just described Balassa's revealed comparative advantage (RCA) index. Here, we paint a picture of a given Member State vis-à-vis the other participants of the Single Market. Scores obtained for the Polish sectors are compared to the respective results achieved by German, Swedish and Hungarian firms selling their services at the Single Market.

Accounting and auditing services

Both Hungary and Poland have enjoyed very advantageous positions as far as exports of accounting, auditing, and bookkeeping services were concerned. While Poland has strengthened its position over the last two years by 13% to achieve, in 2016, the RCA Index score of 4.08, the Hungarian presence in the sector have steadily weakened (Figure 25). The Swedish exports of accounting and auditing services have assumed a similar trend and the country's revealed comparative advantage has all but disappeared in 2016. The data gathered for the German exports in the considered sector revealed that, despite certain amelioration within the last few years, the economy remains at a clear comparative disadvantage.

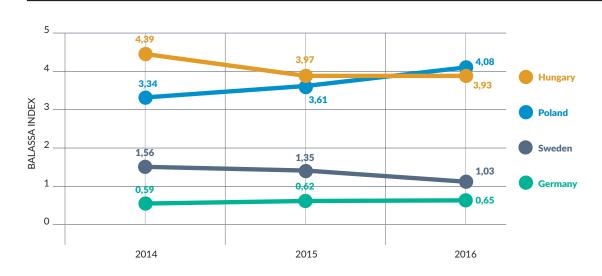


Figure 25 Revealed comparative advantages in the accounting and auditing sector

Source: Authors' calculations based on the data retrieved from the OECD International Trade Services Statistics, las access 15/10/18

Computer services

Sweden had the highest, although declining, revealed comparative advantage in computer services in 2014–2016. With reference to the sectoral characteristics described in the Annex, we could probably link Sweden's computer services relatively high RCAs to the observed relative high value added shares in output (nearly 44% in comparison to 39% for the whole economy) and their impressive share in the job market, providing around 4% of the total work places. On the opposite side of the spectrum was Hungary, which scored the lowest notes that remained vastly unchanged throughout the period. Again, it remains difficult to identify the exact causes of the observed situation, especially that the computer services sector in Hungary appeared, at a glance, to be dynamically developing – more specifically, it enjoyed the highest pace of investment from among the country sample and recorded value added at factor costs second only to the German economy.

It does not appear that Poland possesses any comparative advantage in the export of computer services to the EU, as indicated by the value of the index being below 1 (see Figure 26)



Figure 26 Revealed comparative advantages in the computer services sector

Source: Authors' calculations based on the data retrieved from the OECD International Trade Services Statistics, las access 15/10/18

The reasons for it may be still relatively low access of consumers and companies to digital technology. Even though Poland has made some progress in the integration of digital technology, other EU countries have been progressing faster. The main challenges in the digitalisation of enterprises in Poland are the lack of awareness of opportunities, limited access to a digitally skilled workforce and the lack of funding. Moreover, Polish enterprises are reluctant to invest in upskilling their employees in digital skills or in new technologies (EC, 2018). This may indicate that, although the export of computer services is surging, the successful firms may be rather isolated clusters, with the whole low level of digitalisation of the economy hampering positive spillovers.

However, one can see that the relative, low position of Polish computer services exports has been steadily improving. As the provision of this type of services is sensitive to regulations of the cross-border movement of electronic data, the recent changes at the EU level, may provide a further boost.¹³⁴

In general, this recent upward trend in the relative advantage of provision of computer services may indicate that Poland is closer to having a competitive position in – at least some – high human capital intensive, knowledge economy sectors. Traditionally, Poland has scored well only in labour and labour and capital intensive sectors vis-à-vis the EU.

Construction services

Poland continues to enjoy highly advantageous and stable position vis-à-vis other EU countries in the sales of construction services. Its latest RCA of a staggering 2.80 is the highest recorded within the country sample in the year 2016 and does not come as

¹³³ As documented in the most recent Digital Economy and Society Index (DESI) 2018. Country Report Poland.

More on this subject is when discussing barriers to trade in service.

a surprise as Poland has for years enjoyed comparative strength in labour- and capital and labour-intensive sectors as compared to the other EU countries.¹³⁵

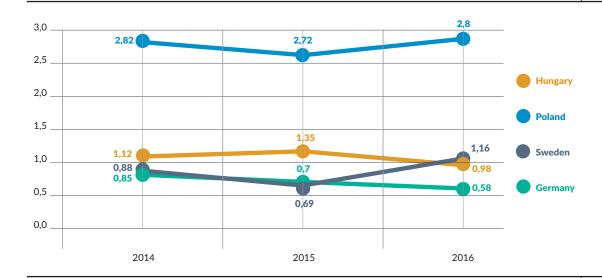


Figure 27 Revealed comparative advantages in the construction services sector

Source: Authors' own based on the data retrieved from the OECD International Trade Services Statistics, las access 15/10/18

Annex 3: OECD's Services Trade Restrictiveness Index

OECD's Services Trade Restrictiveness Index (OECD STRI) is a unique analytical tool, which provides comparative, numerical and qualitative information and assessment of barriers across Member States, including those faced by firms from outside and within the Single Market. It is used through the rest of this paper to assess the relative size of barriers in different sectors as well as the potential economic benefits of their removal.

The latter type of barriers are summarised in the European Economic Area version of the STRI (henceforth EEA STRI) which accounts for the concessions the EEA members have made between themselves to facilitate trade within the Single Market and which covers 25 EEA countries (all the EU28 Member States except Bulgaria, Croatia, Cyprus, Malta, and Romania and two other EEA countries, i.e. Iceland, and Norway) and Switzerland. The methodology organises the different barriers into five separate categories covering:

 restrictions to foreign entry, which encompass information regarding issues such as but not limited to foreign equity limitations, prerequisites of residency or nationality of the management or/and members of boards of directors, and screening of foreign investment, capital controls, restrictions on data flows and industry-specific rules;

Such as production of cars and car parts in manufacturing or in the service sectors: manufacturing services on physical inputs owned by others, construction, personal, cultural and recreational services, maintenance and repair services and transport (see Kąkol, 2018, on RCAs in Polish exports of services).

¹³⁶ Switzerland, while not a member of the European Economic Area, participates in the European Single Market; a comparison between restrictions still in place vis-à-vis other Single Market partners and the third countries is provided in Appendix 3. In general, restrictions hampering third countries (MFN) are markedly higher.

- 2. restrictions on movement of people, which contain data and information on issues such as visa quotas, duration of stay for foreign natural persons providing services in numerous forms (intra-corporate transferees, contractual services suppliers, and independent services providers); this policy area also includes data regarding recognition of foreign qualifications and licensing of individuals and business entities in regulated professions;
- 3. other discriminatory measures that is to say issues related to discrimination of foreign services suppliers (insofar as tax regulations, subsidies, and public procurement are concerned) as well as instances where national standards are identified as divergent from internationally accepted ones;
- **4. barriers to competition** including information pertaining to anti-trust regulations, state-ownership of significant companies, and the extent to which state-owned enterprises enjoy potential privileges;¹³⁷ industry-specific pro-competitive regulations regarding network industries are also included in this category;
- 5. **regulatory transparency** containing information on consultations and dissemination prior to legal acts entering into force as well as data pertaining to procedures pertaining to establishing a business, obtaining a visa or a specific license.

The first three policy areas cover measures pertaining usually to market access and national treatment; the fourth category encompasses information on the quality of pro-competitive regulation, while the last one delivers information regarding the level of transparency of administrative procedures.

How does the OECD STRI account for the trade restrictiveness of regulations?

Even though a core set of measures is reported in the OECD STRI database for all sectors, the way they enter the restrictiveness index for the particular sector is subject to differences across sectors. For example, information on foreign equity ceilings is usually included for all industries, but their weights and interactions with other types of measure are often sector-specific. Additionally, some measures are specific to a given sector or may be associated with a higher weight in the index as they reflect the underlying nature and market structure.¹³⁸

To reflect as much as possible the true nature of services trade restrictions, the STRI methodology transforms the qualitative information regarding regulation into binary scores, non-binary policy measures are broken down to multiple thresholds and organises it in a certain logical hierarchy where complementary measures, for example, are grouped together and scored as null provided no measure in the bundle under consideration is in any way restrictive. In other cases, if one restriction renders others invalid, this is reflected in accounting for the different regulations in the index.

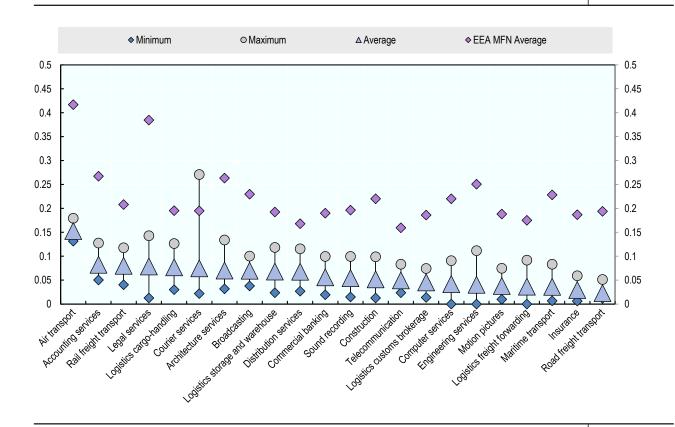
¹³⁷ For instance being exempt from competition laws and similar regulations.

¹³⁸ For example, there are certain policies related to pro-competitive regulation or matters linked to procedures of obtaining licenses in regulated professions (such as the construction and accounting and auditing sectors).

MFN vs EEA

In this section, we illustrate the differences between the barriers to trade in services from the perspective of the Most Favoured Nation (MFN) principle on the one hand and from the perspective of the European Economic Area (EEA) on the other hand. The MFN perspective applies to barriers that emerge in services trade with the socalled third countries, i.e. countries from outside of the European Single Market. ¹³⁹ The EEA perspective, on the other hand, focuses exclusively on the barriers to trade in services that still exist within the European Single Market, which is composed of the 28 countries of the European Union and the four countries of the European Free Trade Association (EFTA – Iceland, Lichtenstein, Norway, and Switzerland). While the Services Trade Restrictiveness Index available on the OECD's website assumes the MFN perspective (MFN STRI), in our report, we have used the EEA STRI, obtained directly from the OECD, to focus in detail on the European Single Market.

Figure 28 Intra-EEA STRI sector profiles
Intra-EEA STRI average, minimum and maximum scores by sector, 2017



Note: The indices take values between zero and one, one being the most restrictive. They are calculated on the basis of the intra-EEA STRI regulatory database.

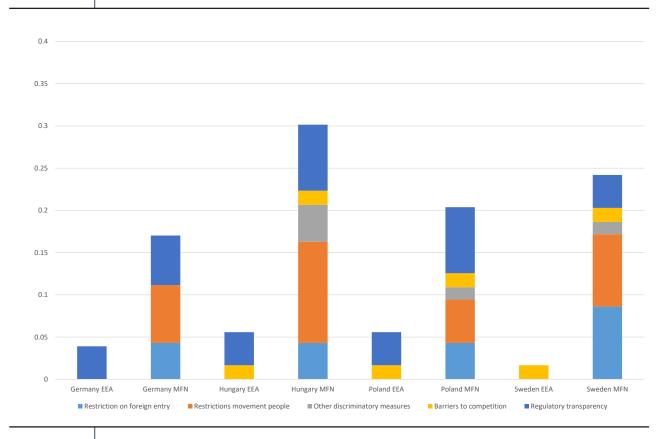
Source: OECD (2018a)

We use the computer services sector to exemplify the differences between the MFN STRI and the EEA STRI.

¹³⁹ The term 'Most Favoured Nation' itself refers to the status of equal treatment in international trade that the members of the World Trade Organization (WTO) grant one another.

Example of Computer services

Figure 29 STRI in computer services: intra-EEA and MFN, 2017



Source: OECD STRI 2017 data

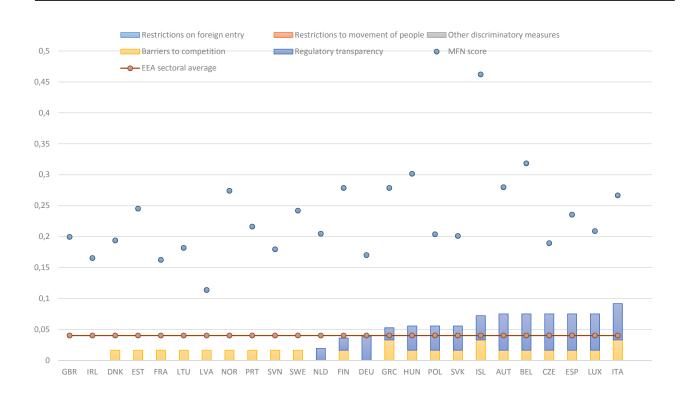
In general, the EEA-level country scores do not necessarily reflect the MFN notes – for instance, even though both Italy and Luxembourg appear to be the most restrictive within the EEA region, this does not automatically make them the most restrictive according to the MFN classification. Italianly, in contrast to their EEAlevel scores, the UK's and Ireland's MFN scores are by no means the lowest among the whole set of countries depicted below. As regards the most restrictive economy according to the MFN scale, Iceland takes the lead, with its minimum capital requirements, restrictions on advertising (adverts must be in the Icelandic language), insufficient procedures regarding public legislative consultations and communication of the newly-passed legal acts to the public within an inadequate time prior their entry into force. Interestingly, the lowest MFN-level notes belong to Latvia and France (the latter scoring very significant notes in the accounting and auditing sector).

The obvious divergence between the EEA and MFN scores requires brief commentary. First, in regulatory transparency, as far as the MFN scores are concerned, all the country results stem from economy-wide regulations – these are the most restrictive in Poland and in Hungary (in both cases, apart from the costs pertaining to establishing a company, business visas for third-country nationals and the time required for processing thereof are contributing factors), whereas in Germany and Sweden they are much lighter.

¹⁴⁰ Indeed, both Italy and Luxembourg appear to be in the middle of the MFN scale, with both Belgium and Austria preceding them (while all these economies, save for Italy, score equally on the EEA scale).

Second, restrictions to movement of people¹⁴¹ stem from economy-wide regulations and encompass issues such as limitations on the duration of stay and labour market tests for different categories of third-country nationals. Third, restrictions to data flows to third countries constitute the dominant part of restrictions to foreign entry across the four economies. At this point it is worth noticing that Sweden is the only country which upholds additional barriers pertaining to the nationality or residence of professionals occupying either managerial jobs or holding posts on boards of directors. Lastly, with regard to third-country nationals, Hungarian regulations on public procurement procedures are the most complicated and thus the MFN score turns out the highest.¹⁴²

Figure 30 Computer services EEA STRI vs MFN STRI in 2017



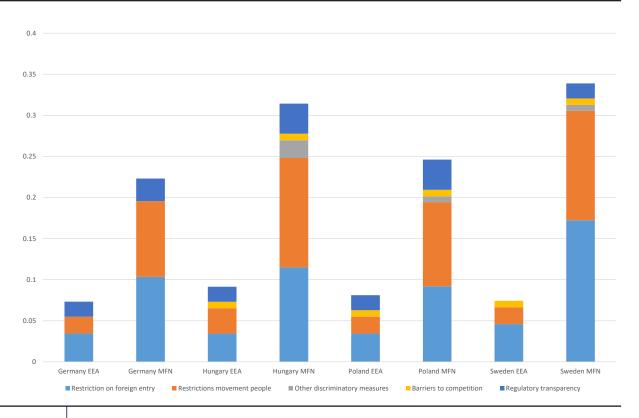
¹⁴¹ These barriers appear most restrictive in Hungary and Sweden.

¹⁴² In the two remaining cases (Poland and Sweden) these barriers are marginal and pertain to the lack of direct prohibition of discriminatory treatment of third-country suppliers.

Annex 4: Additional material on barriers in the three sectors in Poland, Germany, Hungary and Sweden

Accounting and auditing services

Figure 31 STRI in accounting services: intra-EEA and MFN, 2017



Source: OECD STRI 2017 data

To eliminate the risk of confusing accountancy and bookkeeping services with auditing services, it is essential to observe that the former include the recording of revenues and expenses, preparation of periodical accounts, and maintenance of ledgers. Conversely, the latter is a statutory requirement which entails the verification of accounts by an independent and qualified third party. In line with the recent Accounting Directive, ¹⁴³ such procedures are only required for certain entities, such as listed companies, credit institutions, and insurance undertakings, large and medium businesses. Such procedures have to be conducted only by an approved statutory auditor or a company officially approved by the competent authorities of a EU Member State (as stated in the Statutory Audit Directive¹⁴⁴).

We identify three main types of barriers in the accounting and auditing services:

- barriers to foreign entry;
- 2. barriers to **crossborder supply**;
- 3. barriers to movement of people;
- 4. regulatory transparency.

Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC.

¹⁴⁴ Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audit of annual accounts and consolidated accounts.

With regard to the restrictions on **foreign entry** in the auditing services, the differences between the EEA-level and MFN scores in each country reflect the stark discrepancies in procedures regarding establishing commercial presence. The Directive 2006/43/EC stipulates EU-wide legal regulations providing EU Member States with a basic, mandatory framework defining thresholds and barriers in the auditing services market. Indeed, the EU regulations demand that both the majority of voting rights (*up to a maximum of* 75%¹⁴⁵) and the majority of members (in case that there are no more than two members, at least one of those members) of the administrative (managerial) body of an audit firm are required to be *statutory auditors*¹⁴⁶ or, alternatively, other audit firms certified in any of the EEA Member States. With respect to boards of directors, *at least one* member needs to be a licensed professional (in fact, the OECD data also point out another restriction pertaining to boards of directors, according to which *majority of their members* need be licensed professionals).

The Swedish law goes further and prohibits commercial association between accountants or auditors and other professionals. ¹⁴⁷ This particular aspect provides food for thought – the general approach to legal frameworks in the area of *accounting* differs from country to country reflecting the strength and importance of national traditions and different development paths of these professions as well as divergent regulatory stances regarding the perceptions of independence, quality, and verification. For example, Hungary regulates the accounting profession while certain Member States do not acknowledge the need for independence, as *accounting and bookkeeping* services are usually subject to outsourcing. In line with this logic, a service supplier is always bound by the national (or international) accounting standards to ensure the quality and transparency of accounting records. On the other hand, some Member States introduced level regulations close to those related to auditing services.

According to the World Bank data, German law does not allow branches and provision of services via legal forms such as GmbH & CoKG¹⁵⁰ and EWIV.¹⁵¹ Similar to the Hungarian regulations, majority of owners have to be locally-qualified resident professionals, while up to 49% of votes may belong to third-country companies or individual accountants under the condition that their qualifications are significantly similar to the German ones.

While neither German nor Hungarian regulations differentiate between accounting and auditing in terms of establishing a foreign commercial presence, both Polish and Swedish laws acknowledge certain differences. The legislation is more detailed for the *auditing services* – more specifically, Polish regulations demand that an auditing company functioning as a limited partnership must be wholly owned by auditors (or audit companies) licensed in an EU state. If not, the said business entity must be majority-owned and controlled by professional individuals and/or audit companies licensed in an EU state and obtain membership in the National Chamber of Statutory Auditors.

For example, the threshold is 51% in Hungary (as per Act LXXV of 2007 on the Chamber of Hungarian Auditors, the Activities of Auditors, and on the Public Oversight of Auditors) and 75% in France (as per Code de Commerce, Livre II, Titre II, Chapitre V, Section V, Article L225-218 – https://www.legifrance.gouv.fr/affichCode.do;jsessionid=964242AAFE35564EF7C5CC5A64D7E817.tplgfr41s_3?idSection-TA=LEGISCTA000006161275&cidTexte=LEGITEXT000005634379&dateTexte=20030103).

¹⁴⁶ As per Articles 4, 6, and 12 of the Directive 2006/43/EC, statutory auditors must enjoy good repute, have adequate educational qualifications, and training, among other requirements.

¹⁴⁷ Auditor act (Revisorslag (2001:883), accepted 2001-11-29, last amended 2017-06-07, §10).

¹⁴⁸ Other Member States which regulate the profession of the accountant include the Czech Republic, Malta, Norway, Belgium, Greece Italy, Austria, Luxembourg, France and Romania.

¹⁴⁹ Commission staff working document on the outcome of the peer review on legal form, shareholding and tariff requirements under the Services Directive (2013), COM (2013)/676, Brussels, 2.10.2013, SWD 402 final. p.18.

¹⁵⁰ German limited commercial partnership (KG) consisting of a general partner (GmbH) and a limited partner (members of the GmbH).

¹⁵¹ Europäische Wirtschaftliche Interessenvereinigung (European Economic Interest Grouping (EEIG)).

As reflected by the OECD data, the Swedish law is the most restrictive among the countries in the sample. ¹⁵² In particular, as regards auditing services, active auditing businesses in form of companies are prohibited explicitly from engaging in any other form of business activity (including accounting services). As regards Swedish sole-proprietorships, the individual in question is obliged by law to disclose any other business activity in which they engage which are not directly linked to auditing services. ¹⁵³ Ownership (or, more specifically, control measured by the number of votes) by third-country licensed professionals is subject to restrictions differing according to the legal form of the business entity in question. Polish restrictions concerning accounting companies are in line with the relevant EU-wide regulations and only require a majority of board directors (or managers) must be EEA-licensed professionals or audit companies.

The information retrieved from the World Bank Services Trade Restrictions Database also highlights certain issues related to **cross-border supply** of accounting and auditing services. While this means of supply is prohibited in Hungary (both relative to accounting and auditing services), Poland's regulatory framework provides stark contrast and foregoes any restrictions in this area.

Germany's and Sweden's regulations require that the business entity in question obtain an official approval – put differently, the would-be services provider must meet prerequisites which include, broadly speaking, professional and educational standards as well as an established commercial presence.

Restrictions pertaining to the **movement of people** are similar (in legal terms) across the four countries. With regard to all the considered countries' legislation on the matter, foreign-licensed individuals are allowed to practice professionally under certain conditions. ¹⁵⁴ Specifically, regulations foresee that residency may be required in certain cases; ¹⁵⁵ preconditions regarding education and work experience may be waived after aptitude tests for EEA-nationals, however, both EEA-citizens and third-country nationals must pass a local examination. ¹⁵⁶ In Sweden accounting is not a regulated profession yet a temporary system registering third-country auditors remains in place; ¹⁵⁷ the extant regulations offer an alternative to becoming a 'statutory auditor' and performing non-statutory audits, public sector bookkeeping and accounting with only three or four years of relevant higher education.

With regard to Poland specifically, the law in force recognises foreign *accounting* licences automatically and does not restrict intra-corporate transferees (ICTs) or individual professionals (IP) entry, but it does impose numerical ceilings for small scale entrepreneurs (SSEs). There are no restrictions for entry of ICTs in the *auditing services*;¹⁵⁹

¹⁵² The Swedish metric is around 33% higher for the Swedish sector relative to the other three countries.

¹⁵³ Section 9 to 10 of the Auditor act (Revisorslag (2001:883), accepted 2001-11-29, last amended 2017-06-07).

Relevant legal acts include: in Germany: Public Accountant Act (Wirtschaftsprüferordnung WPO par. 134, 5 November 1975, last updated on 17 July 2017 (BGBI. I p. 2446) and Commercial Code (Handelsgesetzbuch HGB, last updated 11 March 2016 (BGBI. I S. 396), §§238-335); in Poland Act on Auditors and the Auditors' Chamber (Ustawa z dnia 11 maja 2017 r. o biegłych rewidentach, firmach audytorskich oraz nadzorze publicznym, Dz.U. 2017 poz. 1089, 21 june 2017), in Hungary Government decree No 93/2002 on the registration of accountants (93/2002. (V. 5.) Korm. Rendelet a könyvviteli szolgáltatást végzők nyilvántartásba vételéről, implemented 4 June 2002, last amended 1 January 2017) and Act C of 2000 on Accounting (2000. évi C. törvény a számvitelről, implemented 1 January 2001, last amended 16 June 2016) and in Sweden Auditor act(Revisorslag (2001:883), accepted 2001-11-29, last amended 2017-06-07, §§2,16b).

¹⁵⁵ An obligatory prerequisite in the German auditing services but not in the accounting profession.

Directive 2006/43/EC (Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC, Article 14).

¹⁵⁷ The system enlists only those third-country auditors who hail from the countries to which the EC has granted a transitional period under decision 2008/627/EC.

Possible after meeting the above-discussed conditions.

¹⁵⁹ In Sweden, in the auditing services sector entry is possible only for ICTs, SSEs or IPs are not allowed whereas in the accounting sector both ICTs, SSEs, and IPs are allowed without restrictions.

on the other hand, SSEs from non-EU states are subject to certain regulatory numerical ceilings and procedures in order to obtain permit for stay. ¹⁶⁰ In Hungary, on the other hand, a relevant administrative body runs a separate register for auditors coming from third countries, however, not for the purposes of temporary licensing. Hungarian restrictions regarding movement of people are, in relative terms, 50% more pronounced than in the three remaining states. Indeed, individuals holding foreign-issued professional licences may practice in Hungary only if authorised by the relevant authority in their home country to carry out statutory activities (e.g. audits) and pass an aptitude tests conducted in Hungarian. States outside the EEA region must provide reciprocity for Hungary to allow their citizens professional practice. Alternatively, foreign-licensed individuals may become 'certified accountants' by authorization of the Ministry of Finance. ¹⁶¹

Observed in Sweden, Poland, and Hungary, barriers to competition (both on the EEA and MFN levels) pertain to the minimum capital requirements regarding establishment of new business entities.¹⁶²

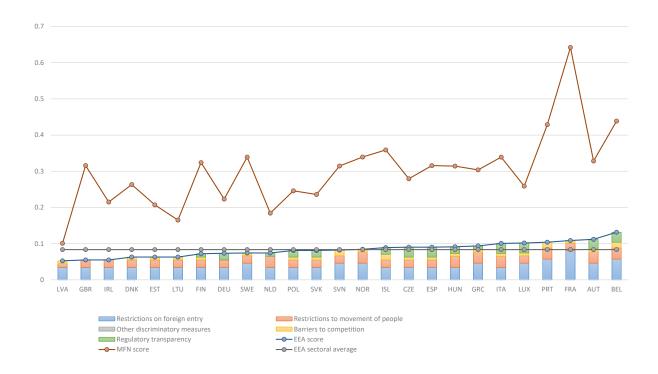


Figure 32 Accounting services EEA STRI vs MFN STRI in 2017

Source: OECD STRI 2017 data

The UK is the second least restrictive country at the European Single Market, when trade in accounting services is considered, while Germany is awarded the eight position - Poland is on the 11th position among the listed economies. The highest EEA STRI score in the present case equals around 0.1314 (Belgium) while the most pronounced barriers in the construction services translated into an EEA STRI score of 0.0922 (Iceland). Again, the MFN STRI notes do not translate directly into the EEA STRI scores, but there is a certain

Specifically, in Poland they are allowed without restrictions, however, in Germany these individuals are not granted a permit to stay unless It is particularly in public interest.

This route requires a university degree in a relevant discipline and a three-year period of professional experience (the experience may be obtained in a third country assuming it provides reciprocity.

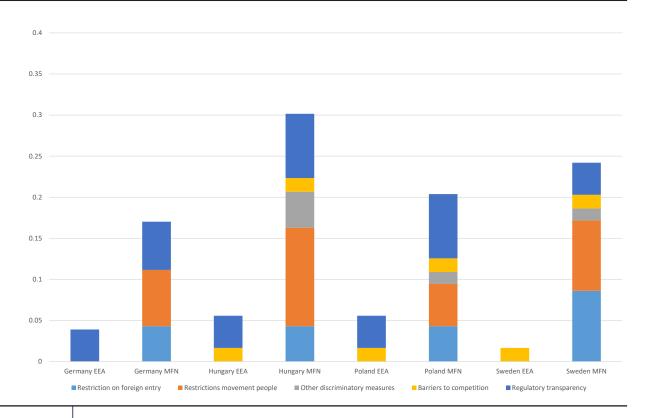
¹⁶² Briefly described in the section offering a cross-sectoral perspective on the extant services trade barriers.

correlation. For example, France boasts the highest MFN STRI score while its EEA STRI is only the third highest in the country sample. On the other hand, the UK, with the second lowest EEA STRI score, appears score very highly in the MFN STRI scale (the 11th place).

Looking at the disaggregated EEA STRI scores, it seems that barriers to foreign entry are present irrespective of country size and level of economic development (or the development of the financial and legal systems in the case of auditing and accounting services). They are the highest in France (mainly due to strict rules pertaining to recognition of foreign qualifications, ownership and management limitations), Portugal (both accounting and auditing services are regulated professions and an EEA-issued license is required to practice along with strict ownership regulations of companies), and Belgium (both accounting and auditing services are regulated professions, moreover, nationality is required for license allowing professional practice). On the other hand, Italy, Austria, and Sweden to name but a few, scored relatively low notes. The limitations to movement of people appear as the second most important barrier: more specifically, in most countries (including for example Norway, Hungary, Austria, and Belgium among others) the barriers are, from a quantitative point of view, equal and mostly stem from horizontal economy-wide restrictions. Issues related to regulatory transparency seem much less pronounced (as opposed to construction services) – the highest scores in this area are observable for Austria, Belgium, Luxembourg and the Czech Republic.

Computer services - existing barriers and challenges ahead

Figure 33 STRI in computer services: intra-EEA and MFN, 2017



Barriers in as many as three areas of regulation vanish in the EEA STRI compared to the MFN methodology in the computer services sector (Figure 33). Specifically, in none of the four countries do we observe any barriers related to foreign entry, movement of people, and other discriminatory measures. Put differently, within the EEA, there are only two kinds of barriers:

- regulatory transparency. Barriers related to regulatory transparency all the countries in the sample except Sweden. These deficiencies relate to the procedures and costs of establishing a business. These barriers have appeared across all three sectors analysed in this report, however, according to the OECD expert-judgement based methodology each time they are ascribed different weights. In this case, each barrier contributes about 0.01954 to the overall country score in the category;¹⁶³ and
- 2. barriers to competition. Germany is the only country in the sample which does not display any EEA-relevant barriers to competition. In the case of the three remaining economies, these limitations take form of minimum capital requirements and contribute equally at the industry-level to the score of each country. Like in the case of regulatory transparency, minimum capital requirements are important contributing factors across all the three analysed sectors.

The structure of barriers in the computer services sector in the four countries in the sample presented above is in line with the general sector-level analysis provided by OECD¹⁶⁴ (2014; p. 13). It must be noted that these barriers do not necessarily create a particularly prohibitive business environment, but that they are simply the only substantial regulatory barriers in place. Importantly, the most relevant barriers to cross-border trade in computer services, i.e. the ones pertaining to temporary movement of natural persons, appear insubstantial. On a similar note, the EEA-level market seems free of barriers to establishing foreign commercial presence (which may, in fact, be treated as substitute to cross-border trade in some cases).

The obvious divergence between the EEA and MFN scores requires brief commentary. First, in regulatory transparency, as far as the MFN scores are concerned, all the country results stem from economy-wide regulations – these are the most restrictive in Poland and in Hungary (in both cases, apart from the costs pertaining to establishing a company, business visas for third-country nationals and the time required for processing thereof are contributing factors), whereas in Germany and Sweden they are much lighter. Second, restrictions to movement of people¹⁶⁵ stem from economywide regulations and encompass issues such as limitations on the duration of stay and labour market tests for different categories of third-country nationals. Third, restrictions to data flows to third countries constitute the dominant part of restrictions to foreign entry across the four economies. At this point it is worth noticing that Sweden is the only country which upholds additional barriers pertaining to the nationality or residence of professionals occupying either managerial jobs or holding posts on boards of directors. Lastly, with regard to third-country nationals, Hungarian regulations on public procurement procedures are the most complicated and thus the MFN score turns out the highest.¹⁶⁶

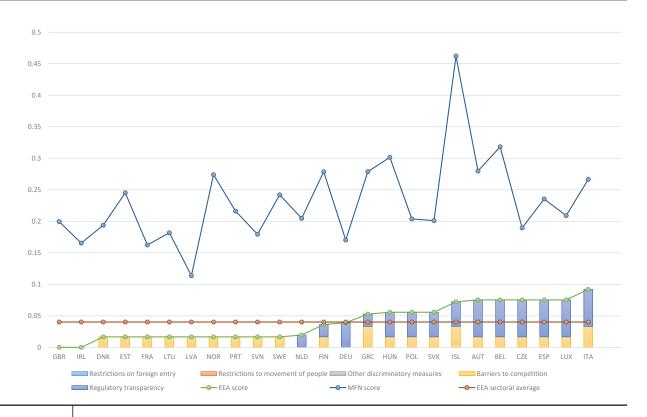
¹⁶³ In other words, since the scores across the three relevant economies equal slightly 0.03908 we can conclude that there are two separate barriers of identical weight.

¹⁶⁴ Nordås, H. et al. (2014).

¹⁶⁵ These barriers appear most punitive in Hungary and Sweden.

¹⁶⁶ In the two remaining cases (Poland and Sweden) these barriers are marginal and pertain to the lack of direct prohibition of discriminatory treatment of third-country suppliers.

Figure 34 Computer services EEA STRI vs MFN STRI in 2017



Source: OECD STRI 2017 data

Figure 34 above delivers contextual information pertaining to the relative position of the countries in the sample. This perspective shows that at the EEA level, restrictions on foreign entry, restrictions on movement of people, and other discriminatory measures disappear not only in the four analysed economies, but indeed are absent in all the countries for which the STRI EEA is available. Thus, only barriers to regulatory transparency and to competition restrict trade in services in the sector. As opposed to the two previous sectors, in this case Germany does not score relatively the lowest notes among the four countries, in fact it is preceded by Sweden (where only barriers to competition appear). The UK and Ireland appear restriction-less at the EEA level.

A detailed look at the disaggregated EEA-level scores implies that geographical region, size, or economic advancement notwithstanding, regulatory transparency appears a prevalent problem in the computer services sector. Italy (where the law does not foresee public consultation prior to passing legally binding acts and elevated company registration costs appear the most problematic), Luxembourg (similar to Italy, public consultations prior to passing legal acts are very limited, moreover the regulations pertaining to the publication of newly-passed laws are inadequate), and Spain (where the prevalent problems are linked to the costs and time needed to establish a company) appear to experience the largest barriers in this aspect. Moreover, Italy is also the one economy which scores the highest notes (next to Iceland and Greece who score lower notes in the area of regulatory transparency) with regard to barriers to competition (it appears that Italian government owns at least one major company in the computer services sector).

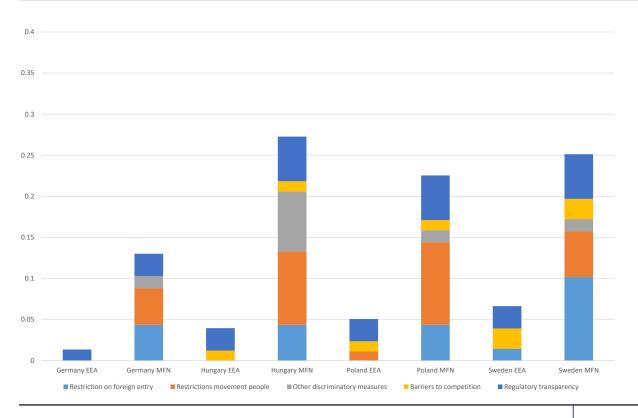
Eight countries receive the same score as Sweden (Denmark, Estonia, Lithuania, Latvia, Norway, Portugal, and Slovenia), all, like Sweden, due to minimum capital requirements (Sweden's score is also close to the Netherlands'). The Dutch barrier comes from a different policy area and relates to the cost of registering a business (4.5% of the per capita income at the time of compilation, 4.4% presently). The German note comes closest to the Finnish

score, although the latter relates to restrictions to regulatory transparency (the number of days to register a business amounting to 14) and barriers to competition (minimum capital requirements), whereas the former stems only from the number of days required to register a business. Slovakia's barriers are driven by a similar combination of factors.¹⁶⁷

In general, the EEA-level country scores do not necessarily reflect the MFN notes – for instance, even though both Italy and Luxembourg appear to be the most restrictive within the EEA region, this does not automatically make them the most restrictive according to the MFN qualification. Similarly, in contrast to their EE-Alevel scores, the UK's and Ireland's MFN scores are by no means the lowest among the whole set of countries depicted above. As regards the most restrictive economy according to the MFN scale, Iceland takes the lead, with its minimum capital requirements, restrictions on advertising (adverts must be in the Icelandic language), insufficient procedures regarding public legislative consultations and communication of the newly-passed legal acts to the public within an inadequate time prior their entry into force. Interestingly, the lowest MFN-level notes belong to Latvia and France (the latter scoring very significant notes in the accounting and auditing sector).

Construction services – existing barriers and challenges ahead – additional information

Figure 35 STRI in construction services: intra-EEA and MFN, 2017



Barriers to competition – minimum capital requirements – and barriers to regulatory transparency – the number of days and procedures to register a business – although the latter have deteriorated in the mean-time (from 11.5 days and 6 procedures to 26.5 days and 8 procedures), which may worsen Slovakia's score once the new edition of the Index is released.

¹⁶⁸ Indeed, both Italy and Luxembourg appear to be in the middle of the MFN scale, with both Belgium and Austria preceding them (while all these economies, save for Italy, score equally on the EEA scale).

The observed services trade restrictions in the four countries under detailed scrutiny are contextualised by information plotted in Figure 36 below. As regards construction services, it appears that Germany indeed has the lowest score according to the EEA methodology. In these two particular cases the MFN STRI also reflects the EEA STRI scores. However, this is not always the case, as evidenced by Iceland, Greece, Norway, Belgium, and Hungary which all appear to receive the highest notes on the MFN STRI scale, a result which does not necessarily translate into their EEA STRI scores.

A more in-depth look at the disaggregated EEA STRI sector-specific scores reveals that irrespective of geographical region, country size or the level of economic development, issues pertaining to regulatory transparency seem prevalent, especially in Belgium (with issues related to the timely publication on newly-passed laws and general costs of obtaining construction permits being the major determinants of the recorded EEA STRI value), the Netherlands, and surprisingly Austria (where no specific regulations determine the public comment procedure and the costs related to sector-specific documentation management are significant contributing factors to the overall sector-level score) and Luxembourg (where, apart from the factors listed for Austria, there appears to be a very general economy-wide regulation pertaining to procedures guarding the entry into force of newly-passed legal acts). Interestingly, very few countries display any barriers to foreign entry - in most cases these boil down to economy-wide regulations; on the other hand, barriers to competition do seem omnipresent, indeed, they are the most pronounced in Iceland (which happens to have the highest sector-specific EEA STRI 2017 score created, in most part, by horizontal, economy-wide restrictions; at the industry-level state-owned enterprises contribute to the creation of barriers to completion), Greece (where, apart from economy-wide regulations, restrictions on public procurement and state-owned enterprises play important parts in limiting pro-competitive market regulations), Norway (where mostly horizontal measures contribute to relatively high barriers to competition), and – indeed – Sweden.

0.4 0.3 0.2 0.1 GRR EST IRL DNK FIN FRA HUN LVA NLD CZE POL NOR IΤΑ PRT SWF REI GRC ALIT HIIX Restrictions on foreign entry Restrictions to movement of people Other discriminatory measures Regulatory transparency → MFN score

Figure 36 Construction services EEA STRI vs MFN STRI in 2017

Full list of references (including for the Annex)

Benz, S. (2017), Services trade costs: Tariff equivalents of services trade restrictions using gravity estimation, OECD Trade Policy Papers, No. 200, OECD Publishing, Paris, http://dx.doi.org/10.1787/dc607ce6-en

Geo-Blocking: a new Regulation enters into force, EUR-Lex (accessed 23.11.2018), https://eur-lex.europa.eu/content/news/geo-blocking-regulation-enters-into-force.html

European Centre for the Development of the Vocational Training (2015), ECVET in Europe, Monitoring report 2015

European Centre for the Development of the Vocational Training (2017), Overview of national qualifications framework developments in Europe; doi:10.2801/44819, last accessed 20.11.2018

European Commission (2013), Commission staff working document on the outcome of the peer review on legal form, shareholding and tariff requirements under the Services Directive, SWD 402 final, Brussels, 2.10.2013

European Commission (2015a), National Reform Programme 2015 of Hungary, http://ec.europa.eu/europe2020/pdf/csr2015/nrp2015_hungary_en.pdf, last accessed 20.11.2018

European Commission (2015b). Update of the study on the economic impact of the Services Directive https://ec.europa.eu/docsroom/documents/13327/attachments/1/translations/en/renditions/pdf, last accessed 20.11.2018

European Commission (2016), Proposal for a Directive of the European Parliament and of the Council on the legal and operational framework of the European services e-card 2016/0402 (COD)

European Commission (2017a), Digital Single Market – Making the Most of the Digital Opportunities in Europe, https://ec.europa.eu/digital-single-market/en/policies/shaping-digital-single-market

European Commission (2017b), Commission Staff Working Document – Impact Assessment accompanying the Proposal for a Directive of the European Parliament and of the Council on the legal and operational framework of the European services e-card, COM/2016/0823 final - 2016/0402 (COD)

European Commission (2017c), Country Report Hungary https://ec.europa.eu/info/file/96717/download_en?token=Lx0tciqQ, last accessed 20.11.2018

European Commission (2017d), European Construction Sector Observatory – Analytical Report – Improving the human capital basis, April 2017, published 29.06.2017

European Commission (2017e), Literature Review on Taxation, Entrepreneurship and Collaborative Economy, available at: http://www.case-research.eu/en/literature-review-on-taxation-entrepreneurship-and-collaborative-economy-100425

European Commission (2018a), European Construction Sector Observatory. Country profile Poland

European Commission (2018b), European Semester Country Report – Poland; https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-poland-en 1.pdf, last accessed 20.11.2018

European Commission (2018c), Shaping the Digital Single Market, https://ec.europa.eu/digital-single-market/en/policies/shaping-digital-single-market

European Commission (2018d), Digital Single Market. Roaming, available at: https://ec.europa.eu/digital-single-market/en/roaming

European Commission (2018e), The Directive on security of network and information systems (NIS Directive), available at: https://ec.europa.eu/digital-single-market/en/network-and-information-security-nis-directive

European Parliament (2016), *Understanding the Single Market for services*, http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/586673/EPRS_BRI(2016)586673_EN.pdf, last accessed 22.11.2018

GDPR Alliance (17.05.2018), The General Data Protection Regulation (GDPR) In A Nutshell, available at: https://medium.com/@GDPR_alliance/the-general-data-protection-regulation-gdpr-in-a-nutshell-2f02290dbd0d

Gouvernement.fr (06.10.2017), Regulation of the Digital Economy in France and Europe, available at: https://www.gouvernement.fr/en/regulation-of-the-digital-economy-in-france-and-europe

Gouvernement.fr (22.08.2018), Digital Technology: a New International Regulatory Framework, available at: https://www.gouvernement.fr/en/regulation-of-the-digital-economy-in-france-and-europe

Government Transparency Institute (2015), The Political Economy of Grand Corruption in Public Procurement in the Construction Sector of Hungary, http://www.govtransparency.eu/wp-content/uploads/2015/11/ACRVolume3_Ch4_Hungary.pdf, last accessed 20.11.2018

Górecki, J. et al. (ABSL) (2015), Rynek usług IT w Polsce, available at: https://www.google.com/url?sa=t&rct=-j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=2ahUKEwjf9dLhyqvfAhXxmlsKHe_gCHkQFjACe-gQIBhAC&url=https%3A%2F%2Fabsl.pl%2Fwp-content%2Fuploads%2F2016%2F05%2Fraport_it_2015_ENv151210.pdf&usg=AOvVaw21JOm0RLxKL2uli_fve7Eh

Lifen, X. (2011), The Study on Regulation Policy of International Services Trade, in: Innovative Computing and Information, International Conference, ICCIC 2011, Wuhan, China, September 17-18, 2011, proceedings

Lorenzani, D. & Varga, J. (European Commission) (2014), The Economic Impact of Digital Structural Reforms, available at: https://www.google.pl/search?ei=IVEaXJCPF4LmrgSI9oiwBg&q=The+Economic+Impact+of+DigitalStructural+Reforms&oq=The+Economic+Impact+of+DigitalStructural+Reforms&gs_I=psy-ab.3..35i304i39j0i22i30.302989.302989.303140...0.0..0.73.73.1.....0....1j2..gws-wiz.ElqcxlxDlp4

 $\label{lem:ministry} \ Ministry of the Economy of Poland (2013), \\ Analiza \ dotycząca \ eksportu \ usług \ oraz \ produktów \ ICT - raport "Informatyka polską specjalnością", \\ https://www.google.pl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=r-ja&uact=8&ved=2ahUKEwiyjpvukuPeAhUHDMAKHZXZBolQFjADegQlBRAC&url=http%3A%2F%2Feregion.wzp.pl%2Fsites%2Fdefault%2Ffiles%2Fanaliza_dotyczaca_eksportu_uslug_oraz_produktow_ict. \\ pdf&usg=AOvVaw0Np9hCHD-hsoHqKD-W6P2C$

Miroudot, S. & Pertel K. (2015), *Water in the GATS: Methodology and results*, OECD Trade Policy Papers, No. 185, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jrs6k35nnf1-en

Nordås, H. (2008), *Trade and Regulation: Computer Services and other Business Services. Services Experts Meeting in Business Services*, https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=r-ja&uact=8&ved=2ahUKEwjK4oCbrOXeAhVDDCwKHcWZCysQFjAAegQICBAC&url=https%3A%2F%2Fw-ww.oecd.org%2Fsite%2Ftadstri%2F40822843.pdf&usg=AOvVaw1ys25jBnbZxBLIDhgutxeW

Nordås, H. et al. (2014), Services Trade Restrictiveness Index (STRI): Computer and Related Services, OECD Trade Policy Papers, No. 169, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jxt4np1pjzt-en

Nordås, H. (2018), What drives trade in services? Lessons from the Nordics, https://www.tandfonline.com/doi/full/10.1080/00036846.2018.1430334

OECD (2017), Services Trade Policies and the Global Economy, OECD Publishing, Paris, https://doi.org/10.1787/9789264275232-en

Puls Biznesu (15.02.2018), Eksport usług: Branża IT sobie radzi, z budownictwem gorzej, https://www.pb.pl/eksport-uslug-branza-it-sobie-radzi-z-budownictwem-gorzej-905674

PwC (2016). Assessing the Size and Presence of the Collaborative Economy Across Europe

Rouzet, D. & Spinelli, F. (2016), Services Trade Restrictiveness, Mark-Ups and Competition, OECD Trade Policy Papers, No. 194, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jln7dlm3931-en

SpotData & AXA (2018), Sukcesy i aspiracje. Co polskie firmy osiągnęły w globalnej ekspansji, a co jeszcze przed nimi, https://axa.pl/biznes/majatek-i-oc/eksport-i-programy-miedzynarodowe/raport-axa-i-spotdata/

Szczepański, M. (2016), *Understanding the Single Market for services*, https://www.google.com/url?sa=t&rct=-j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwjduNOVq-jeAhVGiywKHRxX-AtQQFjAAegQICRAB&url=https%3A%2F%2Fec.europa.eu%2Fgrowth%2Fsingle-market%2Fservices_en&usg=AOvVaw3-ifVxuLnAOrtdj04VzPHf

Transparency International (2015), High Level Event on the Ózd Integrity Pact Pilot Project to increase Transparency in Public Procurement, High_Level_Event_on_the_Ozd_Integrity_Pact_Pilot_Project_to_increase_Transparency_in_Public_Procurement

Ward, S. & Pham, C. (2018), *Traders must be geo-blocking compliant by 3 December 2018*, https://www.lexology.com/library/detail.aspx?g=cb0ce7eb-5628-4bbe-8e00-7146dac91c33

Warsaw Enterprise Institute (2018), Bariery i utrudnienia dla polskich firm w Unii Europejskiej.

World Bank (2018), Doing Business. Country Report Poland

World Economic Forum, *The Global Competitiveness Report* 2016–2017, http://www3.weforum.org/docs/GCR2016-2017/05FullReport/ TheGlobalCompetitivenessReport2016-2017_FINAL, last accessed 20.11.2018

Wruck, P. (Deutsche Bank Research) (2015), *Updating the single market: Will Europe's digital strategy succeed?*, available at: https://www.dbresearch.com/PROD/RPS_EN-PROD/Updating_the_single_market%3A_Will_Europe%E2%80%99s_digital_/RPS_EN_DOC_VIEW.calias?rwnode=PROD000000000435631&ProdCollection=PROD000000000044302#

Legal acts:

France

 $Commercial\ Code\ (Code\ de\ Commerce), \ https://www.legifrance.gouv.fr/affichCode.do; jsessionid=964242AAFE35564EF7C5CC5A64D7E817.tplgfr41s_3?idSectionTA=LEGISCTA000006161275\&cidTexte=LEGITEXT000005634379\&dateTexte=20030103, last access 20.11.2018$

Germany

Commercial Code (Handelsgesetzbuch HGB)

Public Accountant Act (Wirtschaftsprüferordnung WPO)

Hungary

Act C of 2000 on Accounting évi C. törvény a számvitelről, implemented 1 January 2001, last amended 16 June 2016

Act LXXV of 2007 on the Chamber of Hungarian Auditors, the Activities of Auditors, and on the Public Oversight of Auditors

Civil Code (2013. évi V. törvény a Polgári Törvénykönyvről, implemented 15 March 2014, last amended 2016, Articles 3:161(4) and 3:212(2))

Government decree No 93/2002 on the registration of accountants (93/2002. (V. 5.) Korm. Rendelet a könyvviteli szolgáltatást végzők nyilvántartásba vételéről

Public Procurement Authority, Hungarian Public Procurement Rules, http://www.kozbeszerzes.hu/nyelvi-verziok/hungarian-act-on-public-procurement/

Poland

Act on Auditors and the Auditors' Chamber (Ustawa z dnia 11 maja 2017 r. o biegłych rewidentach, firmach audytorskich oraz nadzorze publicznym, Dz.U. 2017 poz. 1089)

Act on Professional Associations of Architects and Civil Engineers (Ustawa o samorządach zawodowych architektów oraz inżynierów budownictwa, Dz.U. 2001 nr 5 poz. 42, 15 December 2000, last updated on 31 August 2016, Article 6(1))

Building Act (Ustawa Prawo budowlane, Dz.U. 1994 nr 89 poz. 414, 7 July 1994, last updated on 1 January 2017. Article 12)

Commercial Companies Code (Kodeks spółek handlowych, Dz. U. 2000 Nr 94 poz. 1037, 15 September 2000, last updated on 13 July 2017, Articles 126, 154, 308)

Sweden

Auditor act (Revisorslag (2001:883)), accepted 2001-11-29, last amended 2017-06-07

Corporate act (Aktiebolagslag (2005:551), adopted 2005-06-16, last amended 2017-05-24, Chapter 1 § 5)

The Budget Act (Budgetlag (2011:203) 03.10.2011, last changed by 2014:866)

European Union

Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications

Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC

Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market

Directive 2013/34/EU of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC

Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System ('the IMI Regulation')

Proposal for a Directive of the European Parliament and of the Council on the legal and operational framework of the European services e-card, European Commission 2016/0402 (COD)

Regulation (EU) 2018/302 of the European Parliament and of the Council of 28 February 2018 on addressing unjustified geo-blocking and other forms of discrimination based on customers' nationality, place of residence or place of establishment within the internal market and amending Regulations (EC) No 2006/2004 and (EU) 2017/2394 and Directive 2009/22/EC (Text with EEA relevance)

Treaty on European Union and the Treaty on the Functioning of the European Union, doi:10.3000/1977091X-.C_2012.326.eng

(Footnotes)

- 1 Deardorff's glossary of International Economics.
- For example, there are certain policies related to pro-competitive regulation or matters linked to procedures of obtaining licenses in regulated professions (such as the construction and accounting and auditing sectors)