



# 25 years of the European Single Market

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25 years of the European Single Market

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# FOREWORD

In 1993, the European Single Market was created to make the lives of European citizens and businesses easier. Still today, 25 years after its establishment, the Single Market delivers on this promise giving European companies direct access to 500 million consumers and 26 million businesses; providing European consumers with greater choice and lower prices.

The report demonstrates that the Single Market has been key to maintain and improve the competitiveness of all the European economies. A great success story. However, that does not mean that we can rest at ease. SMEs still face regulatory and administrative uncertainty when doing business in other Member States. And the Single Market framework does not always reflect a reality in which goods, services and data are increasingly interlinked.

The report also reiterates that the EU is the largest exporter of goods and services of the world and the most dominant destination for foreign investments. In the past, we have succeeded in maintaining our European values in terms of high environmental standards, consumer rights and protection of workers without compromising the competitiveness of European businesses. On the contrary, due to a common Single Market framework, we have succeeded in making sustainability and responsible supply chains a competitive advantage.

That is why I am concerned about the fragmentation of the legal framework regulating the digital economy – both at national and EU level. More than ever, we need to find common solutions covering the entirety of the Single Market. Only then, we may influence the global norms. I know that it is a difficult task. But if we do not succeed in maintaining a coherent and clear legal framework across the EU offering the best conditions for small start-ups to scale their business, new business models will instead prosper and grow in China or in the US. Europe has a great opportunity to increase our competitiveness if we continue to build on what has worked over the past 25 years: The Single Market!



**Rasmus Jarlov**

Minister of Industry, Business and Financial Affairs

# EXECUTIVE SUMMARY

The aim of this report is to analyse the economic implications of the Single Market. To do this, we address three aspects of the Single Market. First, our examination demonstrates that becoming a member of the Single Market has significantly boosted the Danish economy.

Second, we evaluate whether similar effects are to be expected in other EU member states. It is shown that the economic benefits from being part of the Single Market is not limited to small open economies like Denmark – but are most likely to occur in every individual member state.

Finally, we examine the role of the EU in global markets. We show that the EU is a global leader in trade and international investment. Further, we demonstrate that EU member states take advantage of the EU being a powerful player on the global scene by participating in European value chains.

## **Significant boost to the Danish economy**

The European Single Market has boosted the Danish economy and contributed to higher living standards in Denmark. Today, the gross domestic product (GDP) in Denmark is five per cent higher than it would have been had Denmark not been a member of the Single Market. In 2016, this corresponded to a contribution of 13.2 billion EUR to the Danish economy, representing the isolated effect of the Single Market thus excluding the effects of globalization in general.

### *Households and families are better off*

The Single Market has a huge impact on ordinary life in Denmark by lifting living standards and income of Danish households and families. Consumption in Danish households is estimated to be six per cent higher than without the Single Market, meaning Danish households were able to spend an additional 7.7 billion EUR in 2016.

One way to illustrate the impact on ordinary life in Denmark is to consider a Danish household of a couple earning about average income. Due to the economic boost, the annual income is ten per cent higher. For such a household this corresponds to approximately 8,500 EUR extra to spend each year.

### *Companies take advantage of new business opportunities*

The Single Market is designed to allow goods, services, capital and people to move more freely across the EU. When goods and services move more freely, 500 million European consumers get easier access to Danish products in local stores, and 26 million businesses across the EU get better access to equipment, machinery and expertise from Denmark. Companies take advantage of these business opportunities and trade is generated. In fact, Danish exports are seven per cent higher (8.8 billion EUR in 2016) due to the membership of the Single Market.

Today, the Single Market is by far the largest market for Danish goods and services. In 2015, 58 per cent of Danish goods and services went to the EU (including the European Economic Area). In consequence, the Single Market is vital for employment and value

creation in Denmark. As of 2014, 578,000 Danish jobs were linked to the exports of goods and services to the Single Market. This corresponds to almost 21 per cent of total employment in Denmark.

When it comes to investment, EU member states also contribute to the Danish economy. Investments from outside potentially generate a wide range of benefits for both sides of the relationship. Investors and entrepreneurs bring new expertise in production, organization and distribution to Denmark. EU member states are the biggest foreign investors in Denmark, contributing to the increased productivity in Denmark.

Finally, free movement of labour makes it easier for Danish companies to attract labour from other EU member states. In doing so, the Single Market contributes to an expansion of the Danish workforce, which increases the production capacity of the country, fostering economic activity.

### **The Single Market contributes to growth in all EU member states**

The mechanisms through which the Single Markets boosts economic activity in Denmark work in other EU member states as well. Specifically, EU member states gain from trade, investment and labour mobility facilitated by the Single Market.

#### *Trade generates jobs*

In 26 out of 28 EU member states, trade conducted with the Single Market accounts for at least half of the total trade (relative to GDP). One reason is the absence of customs borders and the removal of regulatory obstacles to the free movement of goods and services. Also, historical ties and geographical proximity are of importance.

In the EU, 56 million jobs depend on trade within the Single Market. First, 20 million people are directly involved in producing exported goods and services. Further, 16 million people are employed producing inputs to the industries which directly export to the Single Market. Finally, another 20 million people are employed due to income caused by the direct and indirect exports.

Within the last decade, the EU13 members especially have tightened trade ties with other EU member states. In fact, some of the fastest growth rates for trade in goods were recorded among the new EU13 member states. Consequently, in East and Central European countries like the Czech Republic, Slovenia, Hungary, and Poland, at least one in five jobs are linked to exports to the Single Market.

Trade in services, however, is still modest in most EU member states, but trade in goods is dominant in almost all EU member states. As of 2017, the total value of EU trade in goods was almost three times as high as that of services. The relative dominance of trade in goods may be an indication of unrealised potential to increase trade in the services sector.

#### *Investments improve productivity*

EU member states are by far the most dominant investors in almost all individual country of the EU. In countries like Belgium, Italy and most EU13 member states, more than 80 per cent of international investments are held by investors from other EU

countries. In most other countries, more than 50 per cent of international investments are held by other EU member states.

The process of deregulation and harmonisation is an important driver for attracting foreign investments. Many barriers to capital flows have been removed, and the cost of doing business across EU borders is reduced. A recent study from the European Central Bank shows that, on average, joining the EU increased inward foreign direct investment (FDI) flows from other EU countries by 44 per cent. Such investment is an important source of knowledge and technology from outside.

#### *Transfer of knowledge and skills through labour mobility*

New employees bring new ways of thinking, new skills and knowledge. Also, they may fill labour shortages and increase job competition. In 2016, 11.8 million EU citizens of working age were living in another EU country than their country of citizenship. This corresponds to four per cent of EU citizens living in another EU country. EU movers are, in general, well integrated with labour markets in most countries. In 13 out of the 28 EU member states, the employment rate of EU citizens is higher than that of nationals.

Not only do the countries of destination benefit from labour mobility, but the sending countries also benefit when citizens return with new skills and knowledge. In fact, many movers eventually return making the decision to live abroad temporary. At the EU level, 680,000 nationals returned to their country of origin in 2016 after staying abroad. This corresponds to 60 per cent of the EU citizens emigrated in 2016.

#### **EU member states benefit from participation in European value chains**

Standing together, the members of the EU constitute a powerful player and an important voice on the global scene. In 2016, the EU was the largest exporter and second largest importer of goods and services. Furthermore, 28 per cent of world inward foreign direct investments are held by EU member states, making the EU a dominating investor in world markets.

#### *European value chains dominate exports within the EU*

The share of trade in intermediates to total trade of goods indicate to what extent a country is participating in global value chains. In 2016, exports of intermediates accounted for 51 per cent of all goods exported within the EU and 47 per cent of goods exported to countries outside the EU.

#### *SMEs gain access to world markets via European value chains*

One important aspect of the Single Market is to support SMEs and non-exporting firms to participate in the European value chains as upstream suppliers of intermediates to other SME's and larger companies engaged in international trade. In the Nordics, almost half of the SME exports in value-added terms is exported indirectly via other SMEs or large firms, showing that even non-exporters benefit from European values chains.

#### *Services play an important role in the European value chain*

Service is becoming increasingly important to trade as companies develop business models that increasingly include services. On average, a bit more than one-third of manufacturing exports consists of value-added originating in the services industries.

# 1 THE EUROPEAN SINGLE MARKET AND THE DANISH ECONOMY

In this chapter, we examine the economic impact of the European Single Market on the Danish economy. The analysis demonstrates that the European Single Market significantly and permanently has boosted economic activity in Denmark. Furthermore, how these benefits materialize through closer ties of increasing trade, foreign investment and labour mobility are highlighted.

## 1.1 BOOST TO THE DANISH ECONOMY

The European Single Market has boosted the Danish economy and contributed to higher living standards in Denmark. In fact, gross domestic product (GDP) in Denmark is five per cent higher than it would have been had Denmark not been a member of the Single Market. In 2016, this corresponded to a contribution of 13.2 billion EUR to the Danish economy, representing the isolated effect of the Single Market thus excluding the effects of globalization in general.

**Chart 1.1**  
Impact of the Single Market on the Danish economy



### **Boost to the Danish economy**

- GDP is 5% higher (13.2 billion EUR in 2016)
- Productivity up by 3.7%



### **Households and families are better off**

- Real wages are 10% higher (8,500 EUR extra to spend each year for a two-person household with an average income)
- Household consumption is 6% higher (7.7 billion EUR in 2016)



### **Companies take advantage of new business opportunities**

- Exports are 7% higher (8.8 billion EUR in 2016)
- Investments are 6% higher (3.6 billion EUR in 2016)

Source: Højbjerg Brauer Schultz (2017): Det indre markedes økonomiske betydning for Danmark.



### **Households and families are better off**

Economic activity generated by the Single Market has led to prosperity and higher living standards in Danish households. Consumption in Danish households is estimated to be six per cent higher than it would have been. In other words, the Danish households were able to spend 7.7 billion EUR more in 2016. One important reason is that real wages are ten per cent higher than they would have been. This is due to higher productivity from advances in trade and investment facilitated by the Single Market.

One way to illustrate the impact on ordinary life in Denmark is to consider a Danish household consisting of two persons earning an average income<sup>1</sup>. Due to the economic boost, annual income is ten per cent higher. For such a household, this corresponds to approximately 8,500 EUR extra to spend each year.

### **Companies take advantage of new business opportunities**

The Single Market is designed to allow goods, services, capital, and people to move more freely across the EU. Within the last 25 years, much effort has been devoted to achieving this vision: A common market has been established, barriers to trade and investment have been removed, legislation has been harmonized, and consumer rights have been aligned.

*When goods and services move more freely*, 500 million European consumers have easier access to Danish products in local stores, and 26 million businesses across the EU get better access to equipment, machinery and expertise from Denmark. As a result, production in Danish companies increases, fostering economic activity. There has been a lasting increase of seven per cent in Danish exports (8,8 billion EUR in 2016), caused by a growing demand from other EU member states and higher productivity, making the Danish economy more competitive.

*When capital moves more freely*, it becomes easier for people from other countries to invest in Danish companies or even establish a business. Investments from outside can potentially generate a wide range of benefits for both sides of the relationship. Investors and entrepreneurs bring new expertise in production, organization and distribution to Denmark. As a result, the productivity in Denmark rises, fostering economic activity. Investments are six per cent higher (3.6 billion EUR in 2016) than they would have been if Denmark had not been part of the Single Market.

*When people are able to move more freely*, it becomes easier to travel, work and study in other EU countries. The Single Market contributes to an expansion of the Danish workforce, which increases the production capacity of the country, fostering economic activity.

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<sup>1</sup> Based on standardized family types (LO-ægtepar i ejerbolig) developed by the Ministry for Economic Affairs and the Interior.

### **Behind the numbers: Estimating the economic impact of the Single Market**

The study is based on estimates from the gravity modelling literature, which distinguishes the specific effect of EU membership from all the other influences that determine trade and foreign direct investment. Midrange estimates have carefully been selected from peer-reviewed high-quality literature. These estimates are used to evaluate the long run impact on the Danish Economy (GDP, household consumption, trade, employment etc.) using a general equilibrium model of the Danish economy (ADAM). The baseline scenario is assumed to be the WTO-regime.

By nature, it is difficult to quantify the effect of something assuming it had not happened in the past. In this case if Denmark had not chosen to be part of the Single Market. In consequence, an analysis of this character will always be subject to considerable uncertainty.

In dept details on methodology are to be found in Højbjerg Brauer Schultz (2017): "*Det indre markedes økonomiske betydning for Danmark*".

## **1.2 THE MOST IMPORTANT MARKET FOR DANISH EXPORTS OF GOODS AND SERVICES**

In this subsection, we focus on Danish trade relations in the Single Market. As shown in the previous section, trade results in increased economic activity in Denmark. We specify what that means in terms of jobs and examine in detail the nature of Danish exports of goods and services to the EU.

### **One in five jobs in Denmark is linked to the Single Market**

Trade within the Single Market is vital for employment in Denmark. In 2014, 578,000 jobs were linked to exports of goods and services to the Single Market, accounting for almost 21 per cent of total employment in Denmark - almost 133,000 people in the manufacturing industry alone. This means that every other employee in Danish manufacturing is employed linked to exports to the Single Market. In the service sector, 17 per cent of employment can be linked to Denmark's exports to the Single Market.

Exports to the Single Market generate activity in every region of Denmark - between 20 and 23 per cent of employment in each region. In the Capital Region of Denmark, most of the employment linked to exports to the Single Market is within the service sector. In the western regions of Denmark (Jutland), most activity is generated in the industrial and agricultural sectors. These differences reflect general differences in business structures between regions.

### **The Single Market accounts for more than two-thirds of Danish exports of goods**

The Single Market is the most important market for Danish exporters of goods. Around 68 per cent of Danish exports of goods in 2017 were to the Single Market. EU15 accounts for most of these exports, but the EU13<sup>2</sup> countries have become increasingly important. Exports of goods to the EU13 countries have increased by more than 20 per

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<sup>2</sup> EU13 are Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia.

cent since 2007, whereas the value of exports to EU15<sup>3</sup> is largely the same today as in 2007.

**Chart 1.2**  
Exports of goods, 2017

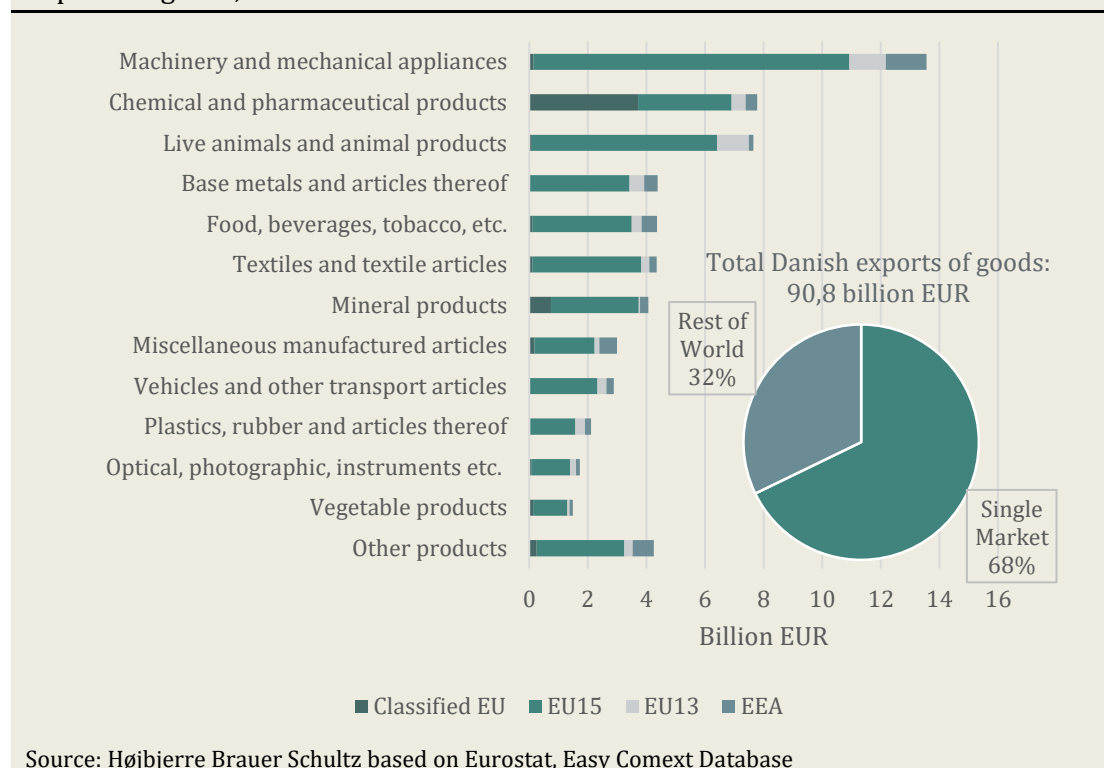


Chart 1.2 shows Danish exports of goods to the EU for major product groups<sup>4</sup>. Like in most other EU countries, machinery and mechanical appliances constitute a significant share. In Denmark, these accounted for 22 per cent (14 billion EUR) of all goods exported to the EU in 2017.

### The Single Market provides Danish consumers with greater choice

Besides having raised overall income levels and, thereby, household consumption by 6 per cent, the Single Market also grants access for Danish consumers to buy high-quality specialised goods from other countries in the Single Market. In 2017, around 76 per cent of Danish imports of goods is from the Single Market.

<sup>3</sup> EU15 are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom.

<sup>4</sup> Top-level headings are from the standard international trade classification (SITC).

### CASE: The consumer benefits of imports from the Single Market

Imports have considerably positive benefits – including from a consumer perspective. Faster access to new products and services through imports is just one of the positive effects for consumers of increased cross-border trade. In addition, importing products exposes Danish manufacturers to competition, which may result in lower consumer prices. Finally, access to imported products may also guide product development. For example, the consumer demand for imported lactose-free milk has led Danish food companies to step up the development of lactose-free products themselves.

However, it is important that national and EU consumer protection rules are respected and enforced in relation to imported products and services including safety, environmental, health, and data protection standards.

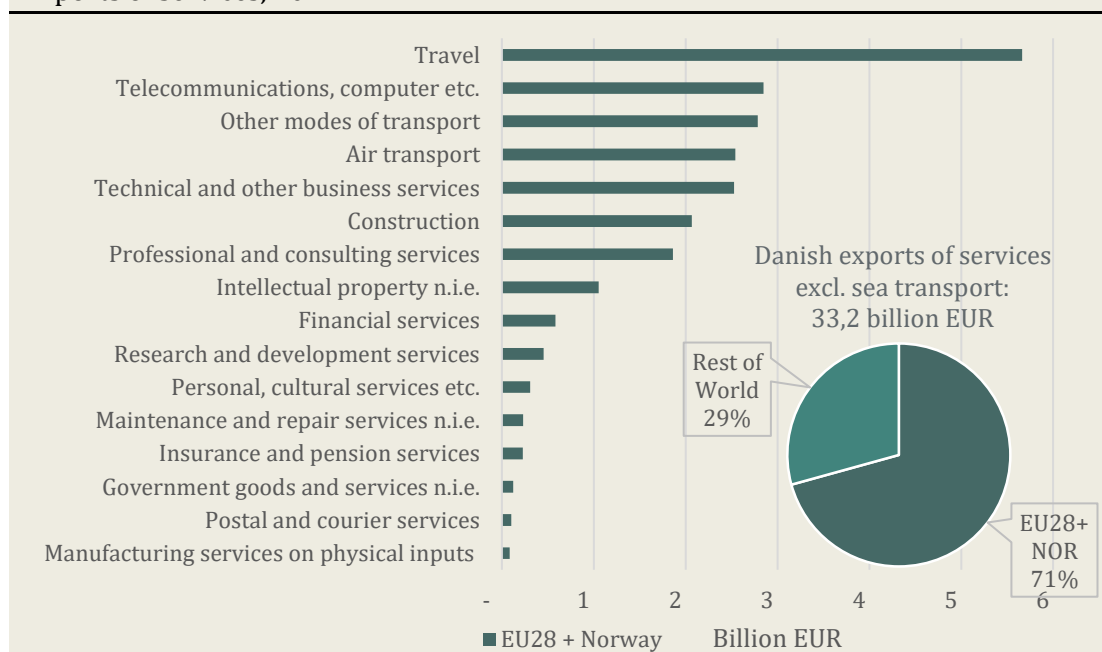
*The Danish Consumer Council*

### The Single Market is also the most important market for exports of services

Although the value of trade in services with the Single Market is well below the value of trade in goods, the Single Market is also the most important market in terms of Danish trade in services. Around 71 per cent of Danish service exports in 2017 were exported to the Single Market when disregarding sea transport.<sup>5</sup> As for imports, the number is around 75 per cent.

**Chart 1.3**

Exports of services, 2017



Note: Sea transport is not included in the pie chart because the very globalised value chains make it difficult to correctly allocate the export.

Source: Højbjerg Brauer Schultz based on Statistics Denmark

<sup>5</sup> Sea transport is not included because the industry generally has highly globalised value chains, making it difficult to allocate the revenue and export statistically correctly.

### **Potential to increase trade in services**

For both the export and import of services, the distribution of trade with the Single Market indicates that barriers to trade are larger for some services than others. The most exported and imported group of services is sea transport, which represents about 25 per cent of the total value of Danish service exports to the Single Market and 20 per cent of the total value of imports. The second and third most traded services with the Single Market are travel services, including business and personal travel, and telecommunications and IT services.

Barriers are slowly being removed in more sectors, facilitating more trade. The largest growth in Danish exports over the last 10 years (2007-2017) is generated in services: insurance and pension, construction and telecommunications, and computer and information services. For these three groups, exports have more than doubled since 2007.

#### **CASE: EU consumer protection rules ensure that consumers may safely buy products and services from retailers across the Single Market**

The EU legislates to protect consumer safety and rights - including in rapidly evolving areas like e-commerce. The European Consumer Centres advise consumers and offer help with cross-border disputes.

Thanks to a common EU consumer protection framework, consumers may purchase goods and services across the entirety of the Single Market. The EU rules ensure that consumers are protected in terms of receiving adequate and accurate information, having the possibility of cancelling a purchase, and enjoying a minimum of legal warranty. In addition, EU legislation includes important consumer protection rules on payment services, entitling the consumer to recover unauthorized payments.

On the contrary, it can be difficult to enforce consumer rights in relation to retailers located outside the EU; for example, it can be difficult to ensure that products meet the European safety standards.

*The Danish Consumer Council*

Analyses indicate that there is unrealised potential when it comes to trade, specifically of services.<sup>6</sup> In Denmark, trade in services still has a much lower value than trade in goods. Gross trade as a per cent of GDP in Denmark is around 41 per cent for goods but only 18 per cent for services (excl. sea transport). But trade in services with the Single Market has increased much more significantly during the last 10 years than the trade in goods.

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<sup>6</sup> To support the Single Market Strategy, the European Commission has several economic analyses, which underline the potential to decrease barriers and increase trade in services. For an overview, see: [https://ec.europa.eu/growth/single-market/services/economic-analysis\\_en](https://ec.europa.eu/growth/single-market/services/economic-analysis_en)

### **CASE: The Single Market provides unique possibilities for service providers to perform cross-border tasks**

DEKO is one of Scandinavia's leading suppliers of glazed partitions solutions and one of Denmark's largest carpentry businesses specializing in designing partitioning solutions for offices and public buildings. Exporting partitioning solutions is the only way for the company to grow, as the Danish market is largely covered.

The Single Market for services implies that DEKO may provide its products and assembly services across the entirety of the Single Market and post its specialized workers to perform the tasks. Although the company exports its products to 50 countries in Africa, Asia, Europe, and the Middle East, DEKO only undertakes assembly services within other EU and EEA countries. Outside the Single Market, the company almost exclusively exports its products only.

Although the Single Market provides unique possibilities for service providers to deliver cross-border services, posting workers to perform the assembly work is still demanding.

In 2015, DEKO entered the cruise ship market, installing partitioning solutions and doors on large cruise ships. To offer its products and services, DEKO OCEAN uses subsuppliers from Denmark, Norway, Poland, Sweden, Germany, and Hungary, but many countries mean just as many rules. DEKO finds that although the documentation requirements across the EU have become easier, it is still very demanding to get an overview of all the specific rules for each country.

*The Danish Construction Association*

## **1.3 EU MEMBER STATES ARE THE BIGGEST FOREIGN INVESTORS IN DENMARK**

In this subsection, we focus on international investment (foreign direct investment) in Denmark, made by other EU member states. First, we elaborate on the importance of international investments. Second, we show that the EU is the biggest foreign investor in Denmark.

### **Why attract international investment?**

Free movement of capital is a key factor in the Single Market, providing efficient financial markets. For European citizens, free movement of capital secures the ability to open a bank account abroad and make investments, where the return is highest. For companies, it means being able to invest in and own other European companies as well as raising money where it is cheapest<sup>7</sup>.

When people from other countries decide to invest in companies in another country, the recipient country can benefit in several ways. Investors and entrepreneurs bring new expertise in production, organization and distribution. They want their investment to prosper and thus have incentives to transfer new knowledge and skills or make new technology available. They may also provide access to new markets and improve the training and qualifications of the local workforce.

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<sup>7</sup> The European Commission, <https://ec.europa.eu/commission/>

The extent to which the potential is unleashed depends on the engagement of investors and the absorptive capacity of the recipient country (among other things). The benefits of foreign ownership typically materialize as productivity gains. In Denmark, it has been demonstrated that productivity in foreign-owned companies is almost 20 per cent higher compared to domestic companies<sup>8</sup>. Existing evidence confirms similar positive impacts of international investment in other EU countries<sup>9</sup>.

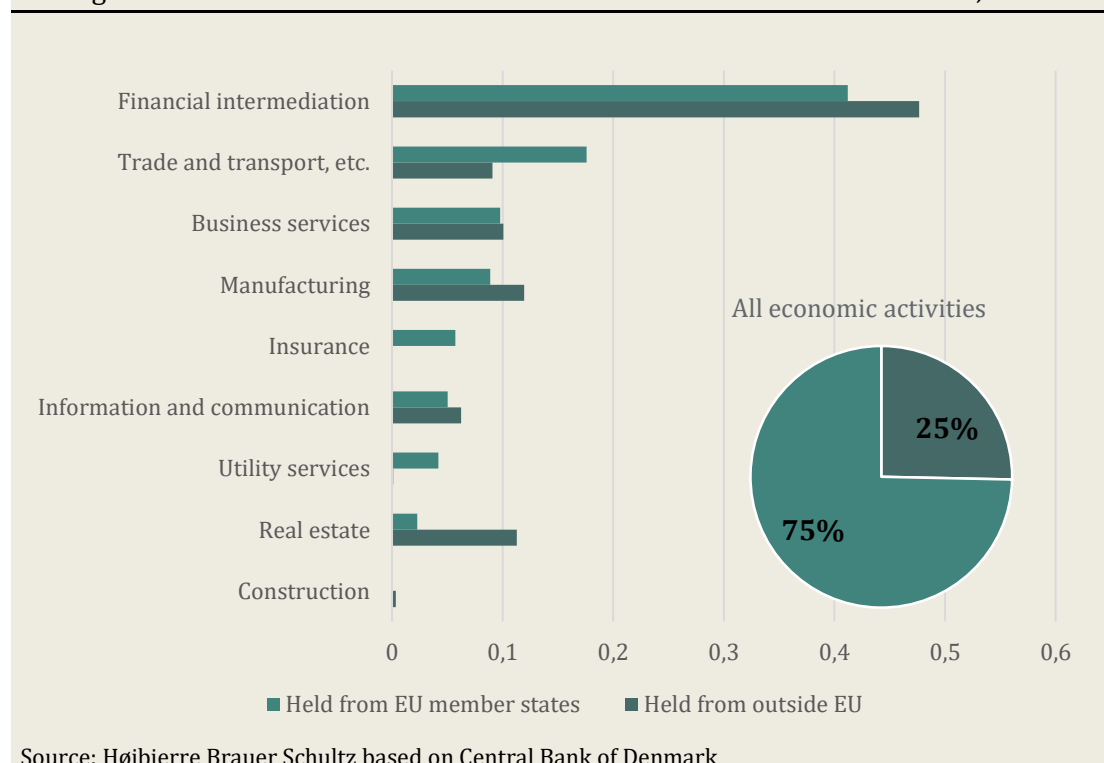
### EU is a major investor in Denmark

EU member states of the EU are by far the most important foreign investors in Danish companies. In 2015, the market value of investment positions held by investors from the EU amounted to 515 billion DKK, which corresponds to 75 per cent of total foreign investment in Denmark.

The activity structure of the EU's inward FDI-stock was dominated by financial and insurance activities. Financial intermediation activities held 41 per cent of the EU inward positions, whereas almost half (48%) was held by countries outside the EU of which activities of holding companies accounted for more than 60 per cent.

Manufacturing was the second largest activity when looking at investments held from outside the EU, whereas trade and transport were the second largest when looking at inward positions from the Single Market.

**Chart 1.4**  
Foreign direct investment held from EU member states and from outside EU, 2016



Source: Højbjerg Brauer Schultz based on Central Bank of Denmark

<sup>8</sup> Erhvervs- og Vækstministeriet (2011): "Internationale virksomheder", Økonomisk Tema nr. 11.

<sup>9</sup> ECB Economic Bulletin, Issue 4 / 2018, page 61.

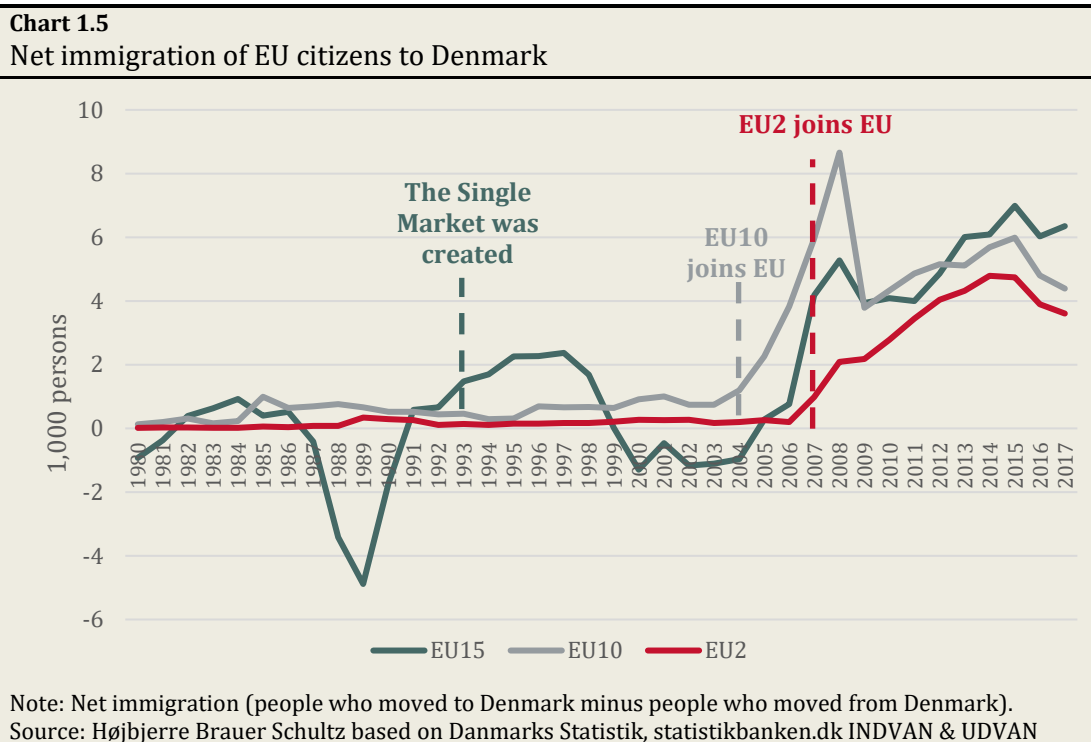
## 1.4 FREE MOVEMENT OF LABOUR DECREASES THE RISK OF BOTTLENECKS

In this section, we focus on the free movement of labour, demonstrating that it has contributed positively to the Danish labour force. Further, we show that labour from other EU countries tends to concentrate in industries where labour shortage is high decreasing the risk of bottlenecks.

Free movement of workers is a fundamental principle of the Single Market. EU citizens are entitled to look for a job in another EU country, to work there without needing a work permit, to reside there for these purposes without needing a residence permit, to remain for a certain period even after employment has ended, and to enjoy equal treatment with national workers.<sup>10</sup>

### ***The free movement of labour has contributed positively to the Danish labour force***

The free movement of labour creates the opportunity for EU citizens to seek employment in other countries and creates easier access for companies to attract workers with the right competencies from other EU countries.



Generally, more EU citizens have moved to Denmark to work than Danish citizens have moved to another EU countries. Net immigration of EU citizens to Denmark has increased as seen in Chart 1.5. In January 2018, citizens originating from EU countries represented 3,5 per cent of the Danish population.<sup>11</sup> As a result, EU citizens have increased the labour force available to Danish companies.

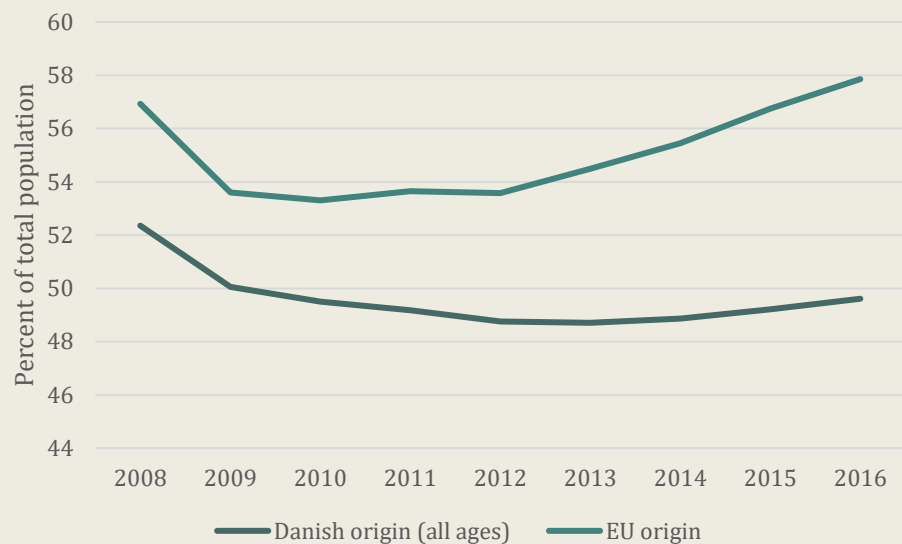
<sup>10</sup> Source: The European Commission - <http://ec.europa.eu/social/main.jsp?catId=457&langId=en>

<sup>11</sup> Source: Danmarks Statistik, statistikbanken.dk FOLK2



The EU citizens contribute to the Danish labour force as most of them are employed. Since 2008, a larger share of the population with EU origin is participating in the Danish labour market and contributing to production than people of Danish origin. In 2016, 58 per cent of people who originated from EU28 countries were employed, compared to 50 per cent for people of Danish origin (cf. chart 1.6). In other words, a larger share of the population with EU origin is participating in the Danish labour market and contributing to production than people of Danish origin. This is partly explained by the age distribution of the citizens. Most citizens with EU origin are working age, whereas the population of Danish origin consists of a larger share of children and pensioners. When looking at people in the working age population, 16-64 years of age, the people with EU origin have a slightly lower employment rate than people of Danish origin.

**Chart 1.6**  
Share of population employed



Note: Citizens with EU28-origin are identified based on their country of origin, not their citizenship. The statistics only covers the EU-countries with most people in Denmark. The following countries are included: France, Italy, the Netherlands, Spain, United Kingdom, Sweden, Germany, Lithuania, Latvia, Poland, Hungary, Bulgaria and Romania.

Source: Højbjerg Brauer Schultz based on Danmarks Statistik, statistikbanken.dk RAS208.

***The free movement of labour has decreased the risk of bottlenecks in Danish industries with labour shortages***

Workers from other EU countries often seek employment in the industries where employers are struggling to find qualified labour in Denmark, potentially leading to positive productivity effects. One of the main arguments in economic theory for migration having a positive effect on productivity is that it extends the labour market,

giving both workers and employers the opportunity to optimize their productivity. In other words, workers will seek positions where their skills can create the largest return thereby improving productivity.

Disregarding the construction industry, the three industries with the largest number of unsuccessful recruitment attempts per 100 employees are Accommodation and food

service activities, Agriculture, forestry and fishing and Administrative and support service activities<sup>12</sup>. At the same time, these industries are some of the industries with the largest share of employees with EU/EEA citizenship (cf. chart 1.7).

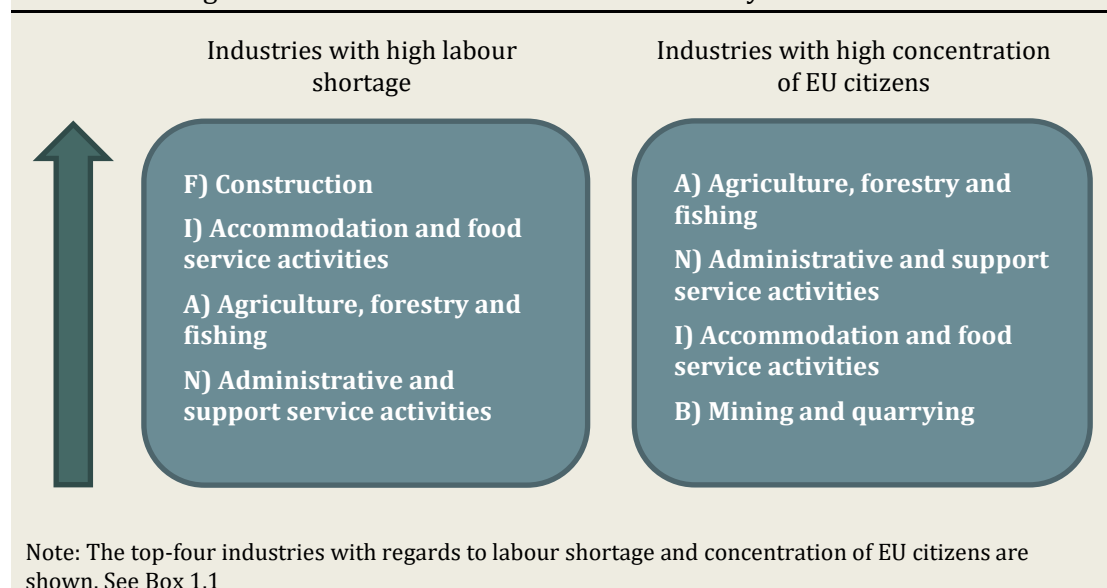
**Box 1.1**  
Statistical correlation: industry labour shortages and EU citizens' concentration in the industry

The Danish Agency for Labour Market and Recruitment collects data on the recruitment situation in the Danish labour market on a biannual basis. Their data include an estimate of the number of unsuccessful recruitment attempts made by companies, such as the number of times the companies tried to hire a person with a specific skill-set but failed to find a match for the position. This number is an indicator of the lack of a workforce in local labour markets.

The share of employees with EU/EEA citizenship is based on salary registers for November and include all people with a positive salary. The total number of employees in the industry is based on Danish register data for the end of November and includes people whose primary occupation is as an employee.

**Chart 1.7**

Labour shortage and EU citizens' concentration in industry



These statistics indicate that the incoming labour force from other EU/EEA countries tends to concentrate in industries where the labour shortage is high thereby serving as a remedy for bottlenecks in the Danish labour market. However, this is only the case if labor mobility is temporary. Otherwise, mobility contributes to a permanent increase in the workforce.

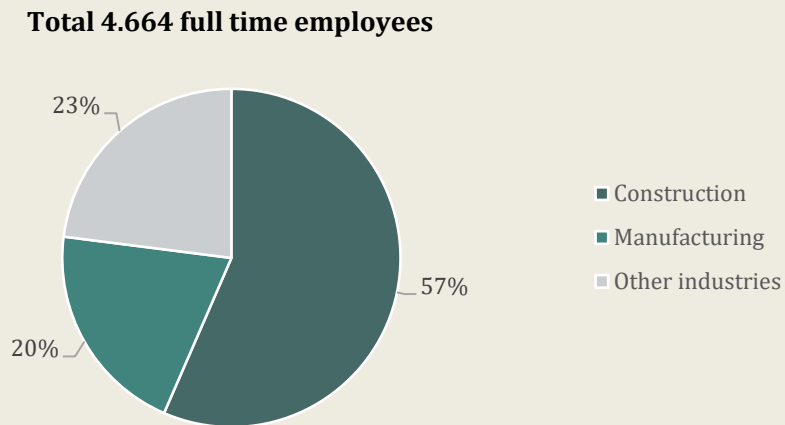
***Contracting service providers cross-border – another way to alleviate bottlenecks***

The construction industry has a very high number of unsuccessful recruitments but a relatively low number of employees with EU/EEA citizenship. Many companies from

<sup>12</sup>E.g. travel agents and cleaning

other EU countries are providing their services in the construction industry in Denmark, bringing with them labour from abroad (cf. chart 1.8); hence, companies from other EU countries cover demand for contraction services in Denmark that cannot be met by Danish companies due to production constraints. By doing so, contracting service providers from other EU countries are also decreasing the risk of bottlenecks in the construction industry.

**Chart 1.8**  
Full-time employees working in Denmark for foreign service providers, 2017



Source: Højbjerg Brauer Schultz based on Jobindsats.dk

## 2 THE SINGLE MARKET IN A EUROPEAN PERSPECTIVE

While the first chapter provided knowledge of the impact of the Single Market on the Danish economy, the focus of this chapter is to evaluate whether similar effects are to be expected in other EU member states. It is shown that economic benefits from being part of the Single Market is not limited to small open economies like Denmark – but are most likely to occur in every individual member state.

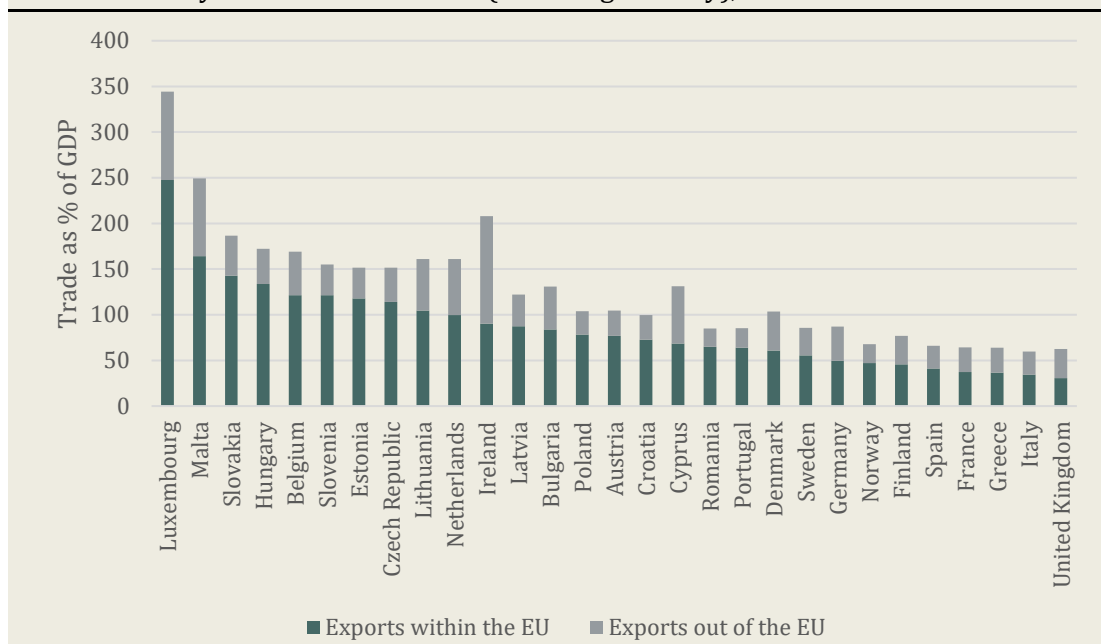
### 2.1 EU TRADE IN GOODS AND SERVICES PLAYS A CRUCIAL ROLE IN ALL EU COUNTRIES

This subsection focuses on the integration of the individual EU member states via trade within the Single Market. When people watch television, buy groceries or drive to work, they consume goods and services produced in other countries, and trade is generated. Correspondingly, when companies manufacture and sell products, the machinery and intermediates from other countries are used, and again, trade is generated. One way to sum up how much consumers and companies are dependent on international trade is to consider the value of total trade (sum of imports and exports) of a country relative to national economic output (GDP). In economics, this measure is referred to as the trade intensity of a country and uncovers the degree of exposure of a country to trade.

#### **The Single Market is the most important market**

In 26 out of 28 countries, trade conducted within the Single Market accounts for at least half of total trade (relative to GDP). One reason is the absence of customs and the removal of other regulatory obstacles to the free movement of goods and services within the Single Market. Also, historical ties and geographic proximity are important.

**Chart 2.1**  
Trade intensity in EU member states (including Norway), 2016



Source: Højbjerg Brauer Schultz based on Eurostat.

Note: Trade intensity measured as the value of exports plus imports of service and goods relative to GDP.

### EU13 member states are heavily integrated into the Single Market

The integration into the Single Market differs considerably across the member states. The EU13 member states are heavily integrated into the Single Market. In these countries, the trade to GDP ratio is above 150 per cent and is driven by the Single Market. In fact, some of the fastest growth rates for trade in goods were recorded by the new EU13 member states. One reason is their rapid integration into global markets, particularly the European Single Market.

Other countries are to a lesser degree integrated into the Single Market, typically, the big European economies. These countries are, in general, less exposed to international trade due to their large domestic markets. In the UK and Ireland, the Single Market accounts for less than half of their trade, even though the economic activity stemming from trade ties with the EU is considerable.

In some countries, special circumstances affect trade intensity. Trade intensity in Luxembourg and Malta is very high, primarily due to activities within the financial sector.

### Trade in services is still modest in most EU member states

Trade in goods is dominant in almost all EU member states. Looking at all the EU member states together, the total value of trade in goods in 2017 was almost three times that of services.

As stated in the previous chapter, the relative dominance of trade in goods may be an indication of an unrealised potential of trade in services. Trade in services is restricted in different ways. Many services are regulated and bound by national legislation, and some of these barriers could be removed to unleash the full potential of service trade.

The nature of services also restricts trade itself. In contrast to goods that can be boxed and shipped, some services require the provider to be physically present; for instance, a haircut. Being in Frankfurt, you cannot get a haircut from a barbershop in Copenhagen. The same logic applies to construction, health care, education and so forth.

In EU13 member states, the level of both exports and imports of services remain at the lowest. In fact, the EU13 member states accounted for only five per cent of total EU service trade. The share of trade in goods is twice as high. On the other side, big European economies such as Germany, the United Kingdom, and France account for 40 per cent of the EU service trade.

Some countries differentiate themselves by accounting for an extraordinarily large share of total EU service trade relative to their size: Ireland, Luxembourg, the Netherlands, Belgium, Luxembourg, Malta, and Cyprus.

**CASE: Access to the large European market means more business opportunities as well as new knowledge**

Kompleet A/S specializes in retail design and construction of restaurants, shops, showrooms, and fairs. The company employs 40 people from Denmark, Germany, the United Kingdom, and Iceland and carries out short and specialized projects across the Single Market including in Sweden, Norway, Finland, Estonia, Latvia, the United Kingdom, and the Netherlands.

The possibility of delivering the company's know-how and services throughout the Single Market is important and allows the company to scale cross-border. The staff has also gained new knowledge from doing business abroad, both personally and professionally.

The design concept of a specific store is developed in continuous dialogue with the customer. To do the actual shop fitting, Kompleet typically posts a site Manager and a couple of craftsmen but hires local freelance staff. For tasks requiring authorization such as electrical installations, it is often necessary to hire local subcontractors. Building materials are most often purchased locally and equipment, such as lifts, is rented locally.

It is important for Kompleet to comply with all the relevant rules and do things in accordance with local rules and regulations; however, when entering a new market, it is burdensome to get the full overview of all the different requirements that the company, its subcontractors, and suppliers need to comply with, including:

- Where to register or notify the company before commencement of work,
- Tax and VAT rules,
- Building regulations and product rules,
- Different disciplines and responsibilities in the construction process,
- Conditions of employment, rules on social security and taxes as well as notification of posted employees,
- Different rules for different nationalities in a project team working on the same task, and
- Requirements related to the working environment, special ID cards for construction workers, certificates and employee approvals (lack of recognition of professional qualifications), or approval schemes for equipment and machinery.

Kompleet would appreciate having one single authority in each country that could provide the company with a checklist of all the things that are required for the job.

*The Danish Construction Association*

## 2.2 56 MILLION JOBS LINKED TO EU TRADE

In this section we examine how trade results in economic activity in terms of job generation in individual EU member states. It is shown that trade facilitated by the Single Market generates a significant number of jobs in each member state.

### **56 million jobs depend on trade**

Trade in goods and services within the Single Market is a significant source of employment. In total, 56 million jobs depend on trade within the Single Market. First, 20 million people are directly involved in producing exported goods and services. Further, 16 million people are employed producing inputs to the industries that directly export to the Single Market. Finally, another 20 million people are employed due to the increased income caused by the direct and indirect exports. Often, these are in services such as restaurants and hotels.

### **As high as 23 per cent of total employment is linked to Single Market trade**

The number employed due to the Single Market as a share of total employment in each country is a measure of the importance of the Single Market to the national economy. In East and Central European countries like the Czech Republic, Slovenia, Hungary, and Poland at least one in five employed is linked to exports to the Single Market. Furthermore, in small open economies such as the Netherlands, Belgium, Luxembourg, Austria, and Ireland, exports to the Single Market are also an imperative driver of employment. In the Netherlands, almost one out of three jobs (27 per cent) are related to exports to the Single Market.

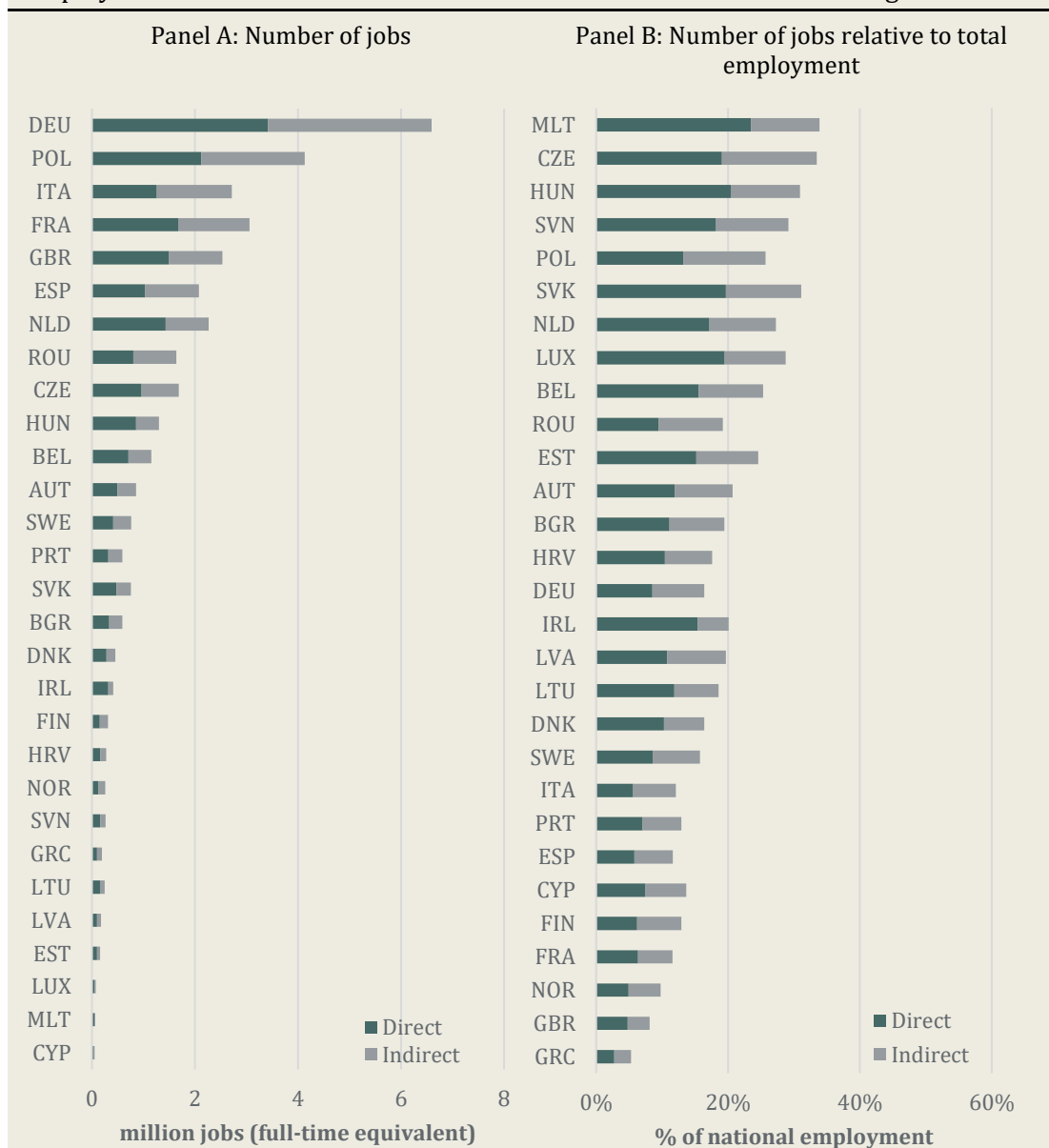
#### **Behind the numbers: Calculating the employment content of direct exports**

The direct effect measures the number of people directly involved in producing exported goods, calculated as the direct exports from each industry in a country to the Single Market. This is converted to a number of employed by using the relationship between production and the total employed in the industry.

The indirect effect measures the number of people employed producing inputs to the industries who directly export to the Single Market. This is identified for each industry by its row in the Leontieff inverse matrix. By multiplying this row with the industry's direct exports and converting to employed persons, the indirect effect is found.

The induced effect measures the number of people employed due to the increased income caused by the direct and indirect exports. This effect is calculated by incorporating wages in the input-output table, calculating the Leontieff inverse, and taking the difference between the effect of indirect exports from the model with and without wages in the input-output table.

**Chart 2.2**  
**Employment in individual EU member states linked to trade with the Single Market**



Source: Højbjerg Brauer Schultz based on WIOT input-output tables and Eurostat  
 Note: Direct and indirect employment effects of exports to the Single Market, 2014

**Many people employed in the large EU member states**

The number of jobs employed due to exports to the Single Market is most significant in the large European economies. In Germany, 6,6 million people are employed due to the exports of goods and services to the Single Market. Also, in large countries such as Poland, Italy, France, and the United Kingdom, the number of people employed is very significant.



## 2.3 IN MOST EU MEMBER STATES FDI IS MAINLY HELD BY OTHER EU MEMBER STATES

In this section we focus on international investment in EU member states and show that when looking at each individual member state, other EU member states are major investors in almost all countries. As shown in the previous chapter, international investment has the potential to stimulate economic growth by transferring new knowledge and skills.

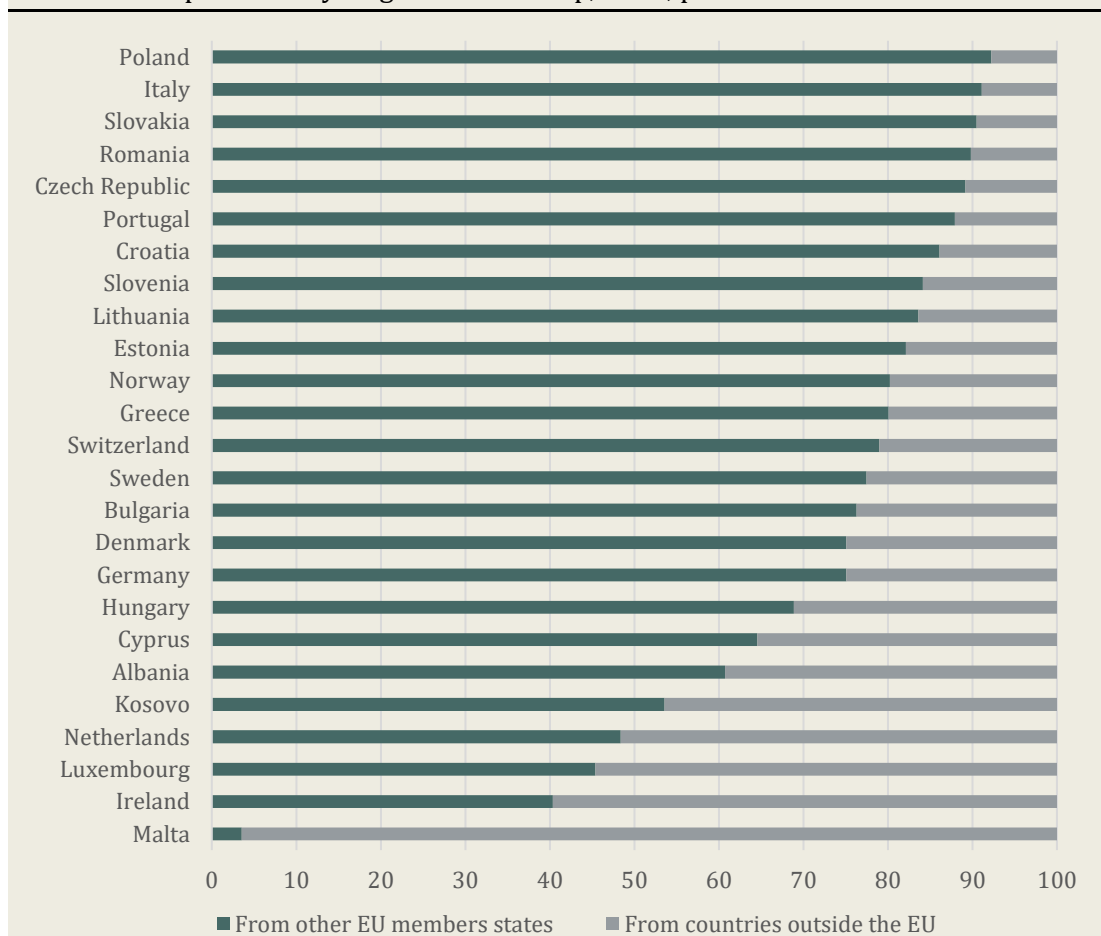
Together, EU member states are by far the most important investors in almost all individual member states of the EU. In countries like Belgium, Italy and most EU13 member states, more than 80 per cent of international investments are held by investors from other EU countries. In most other EU countries, more than 50 per cent of international investments are held by other EU member states.

The Single Market is a major driver for these results. The process of deregulation and harmonisation has stimulated investments across the EU member states. Barriers to capital flows have been removed, and the cost of doing business across the borders between its members is reduced. A recent study from the European Central Bank shows that, on average, joining the EU increased inward FDI flows from other EU countries by 44 per cent but did not have a significant impact on a country's capacity to attract FDI from non-EU countries<sup>13</sup>.

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<sup>13</sup> ECB Economic Bulletin, Issue 4 / 2018

**Chart 2.3**  
Inwards FDI positions by origin of ownership, 2016, per cent



Source: Højbjerg Brauer Schultz based on Eurostat and Central Bank of Denmark  
Note: Data not available for Spain, France, Latvia, Austria, Finland, United Kingdom

International investments from outside the EU dominated only in few member states such as Malta, Ireland, Luxembourg, and the Netherlands, where investors from outside the EU held more than 50 per cent of the total international investment positions in these countries.

## 2.4 LABOUR MOBILITY SUPPORTS TRANSFER OF KNOWLEDGE

In this subsection, we examine labour mobility across the EU member states and show that labour mobility is at a constant level. Further, we examine how countries from where the labour originates also benefit from labour mobility.

Labour mobility is a key element in the Single Market and may be beneficial for both workers and employers. The decision to live in another EU country is often driven by professional or personal aspirations, such as the desire to learn, improve one’s career, earn a better salary, or simply find a job. Labour mobility affects the labour market of the destination country. New employees bring new ways of thinking, new skills, and knowledge, and they may fill labour shortages and increase job competition.

### 11.8 million live in another EU country – most in Germany and the UK

In 2016, 11.8 million EU citizens of working age (20-64) were living in another EU

country than their country of citizenship<sup>14</sup>. This is five per cent more than in 2015, which is a similar increase to the one in previous years. Despite the increase, the share of movers to the total EU population is about constant. In 2016, the number of EU citizens living in another EU country made up 3.9 per cent of the population. In 2015, the share was four per cent.

Germany and the UK remain by far the main destination countries, hosting almost 50 per cent of all movers, and their number of EU-28 movers was growing faster than the EU average compared to 2015. The other three main countries of residence (Italy, Spain and France) only saw small growth in the number of movers. However, the countries with the highest share of EU movers to national population were Luxembourg (44%), Liechtenstein (20%), Switzerland (17%), Cyprus (12%), and Ireland (10%).

### **EU movers are well integrated on labour markets in most countries**

At the EU28 aggregate level, as well as in the 13 individual countries of destination, EU28 employment rates of EU citizens are higher than that of nationals. At the aggregate EU28 level, 72 per cent of nationals are employed, whereas 75 per cent of citizens from other EU member states are employed.

In some countries like the Czech Republic, Italy, Luxembourg, Slovakia, and the United Kingdom, the employment rate of EU citizens is higher than that of nationals. In other countries like Croatia, Estonia, Poland, and Sweden the employment rate of nationals is higher than that of EU citizens.

### **The decision to live abroad is often temporary**

The countries of destination are not the only ones who may benefit from labour mobility. The sending countries also benefit from labour mobility when returning citizens have acquired new skills and accumulated knowledge in the other country. Remembering that EU movers, in general, are well integrated in the labour markets, bringing back new skills and knowledge is likely to be the case for many nationals returning home from other EU countries.

In fact, many movers eventually return to the country of origin, making the decision to live abroad temporary. At the EU level, 680,000 nationals returned to their country of origin in 2016 after living abroad, which corresponds to about 60 per cent of the EU citizens who emigrated in 2016<sup>15</sup>.

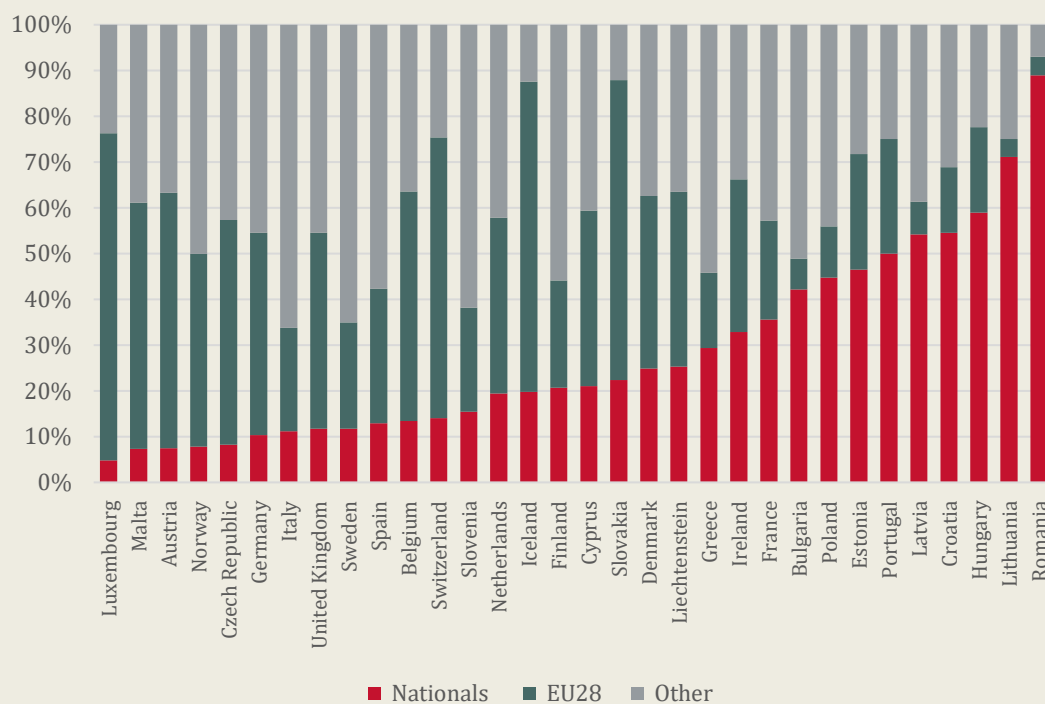
In most EU13 member states, nationals make up a substantial part of incoming movers. In Bulgaria, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, and Romania, nationals made up at least 40 per cent of incoming movers in 2016.

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<sup>14</sup> This subsection draws on the European Commission (2018): "2017 annual report on intra-EU labour mobility".

<sup>15</sup> Due to data limitations, the previous country of residence covers both EU and non-EU countries.

**Chart 2.4**  
Composition of immigration by citizenship, 2016



Source: Højbjerg Brauer Schultz based on Eurostat  
Note: Restricted to working age (20-64 years).

## 2.5 UNLOCKING THE POTENTIAL OF THE EUROPEAN DATA ECONOMY

Data is changing the nature of our economies. It may improve existing goods and services as well as facilitate the creation of new business models. Furthermore, the use of data may significantly enhance the productivity of companies, providing for a better use of items such as machinery and supply chains among others.

European regulation has, in effect, ensured that data might flow freely across the Single Market – just like goods, services, capital, and labour. This implies that private businesses and public authorities may store and process data anywhere in the EU.

### Enormous potentials in the free flow of data

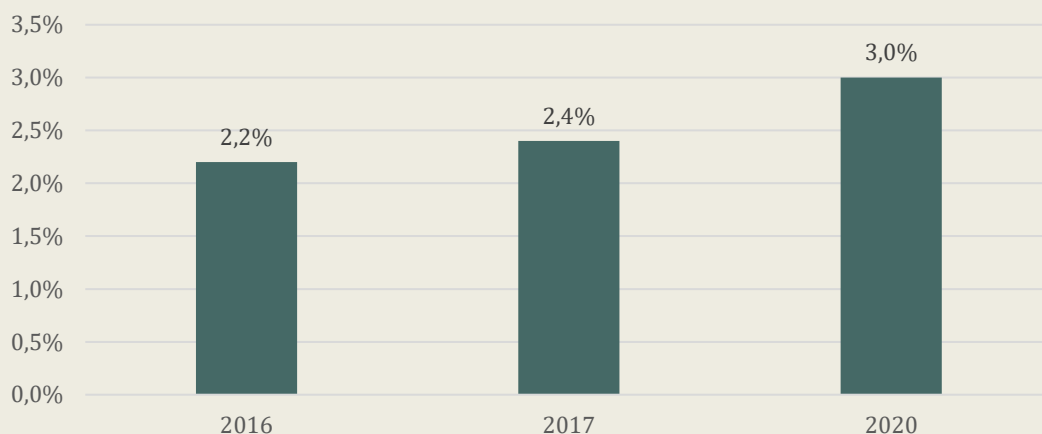
According to the European Commission, the value of the EU data economy was more than 285 billion EUR in 2015, representing over 1.94 per cent of the EU GDP<sup>16</sup>.

According to a study conducted on behalf of the European Commission, taking away obstacles to data mobility is expected to generate additional growth of GDP by up to four per cent by 2020<sup>17</sup>.

<sup>16</sup> European Commission, 2018, <https://ec.europa.eu/>

<sup>17</sup> Deloitte, 2016, Measuring the economic impact of cloud computing in Europe.

**Chart 2.5**  
Data Economy share of total EU GDP



Source: Højbjerg Brauer Schultz based on datalandscape.eu

IT and technology are expected to continue becoming an increasing part of most people's private and working lives. At the same time, we are in a situation in which companies face extensive challenges as regards recruitment in a variety of technical, digital and scientific fields. This may diminish the potential of a technological and digital transformation, and thereby the competitiveness of companies.

#### **CASE: Data centre services facilitate the interconnectivity of the European data economy thanks to a common EU framework on the free flow of data**

Interxion is a European provider of data centre services. Headquartered in the Netherlands, it has established data centre locations in several member states including Austria, Belgium, Denmark, France, Germany, Ireland, Spain, Sweden, and the United Kingdom. The company's core offering is carrier and cloud neutral colocation, which includes the provision of space, power, and a broad selection of connectivity options to network and clouds. This is all housed in a secure environment where customers can store and connect computing, networks, and IT infrastructure.

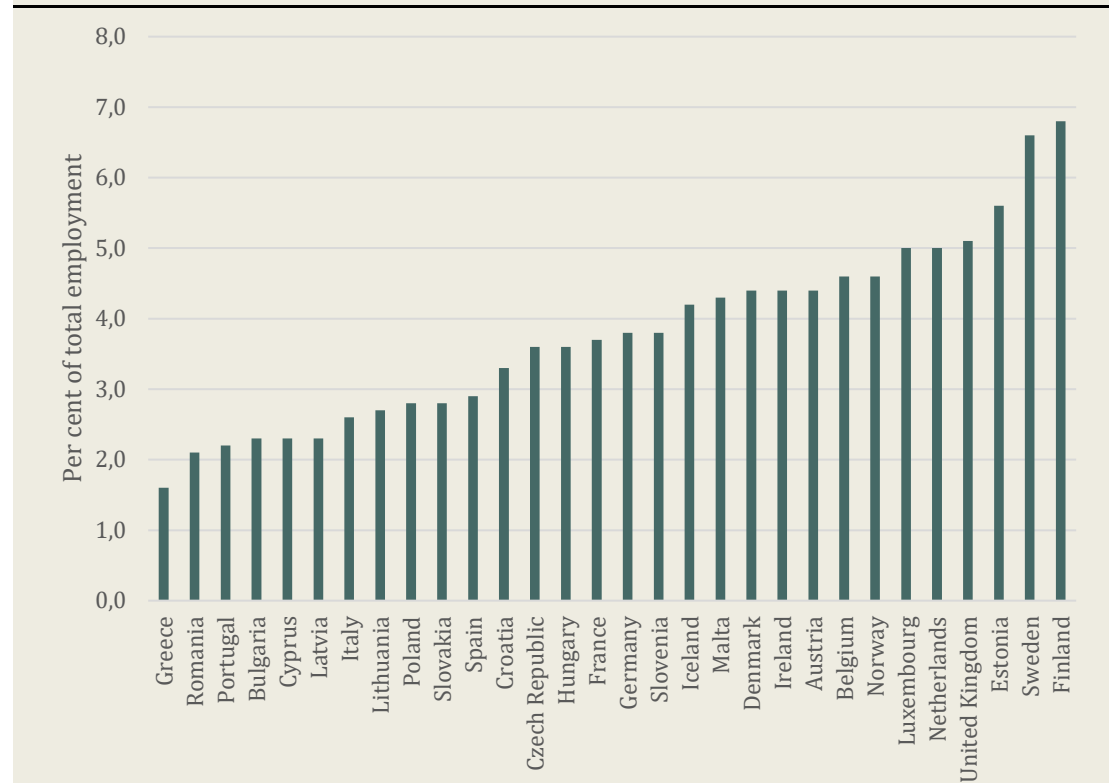
As a result of the regulation on the free flow of data and the General Data Protection Regulation, data may flow freely between member states within the Single Market as long as the common rules are followed, including the framework for the protection of personal data. As a result, companies may store their data anywhere in the EU and use the data gathered in different European markets to improve their productivity and global competitiveness. This allows Interxion's customers to make full use of the economies of scale of the large European market, improving global competitiveness as well as the interconnectivity of the European data economy. For example, Interxion's data centres may – without facing regulatory barriers – act as data hubs, connecting customers with other data centres, companies, and networks across the EU.

When transferring data outside the EU, different national setups for data protection and supervision persist as well as data localization requirements in some countries. This may complicate the transfer of data and lead organizations to change their IT strategies in suboptimal ways.

*The Danish Chamber of Commerce*

Demand for digital skills will only grow in future. The EU agency Cedefop estimates that demand for science, technology, engineering and maths (STEM) skills in Denmark will rise by 12 per cent between 2013 and 2025, in the EU as a whole. The lack of STEM skills is a challenge throughout the EU.

**Chart 2.6**  
IT specialists share of total employment, 2017



Source: Højbjerg Brauer Schultz based on Eurostat

Note: IT specialist is defined by OECD classification: People with IT specialist skills are able to develop, operate and maintain IT systems. They work with IT at a level that requires formal training to take care of their job function, such as programmers and software developers.

### **The EU framework on protection of personal data provides enhanced consumer protection**

The EU Data Protection Regulation came into force on May 25, 2018 and contributed to higher consumer information protection. The Regulation provides consumers with several rights in terms of transparency, data control, and deletion. The fact that it is applicable across the EU ensures that the rules are uniform across borders, and enforcement is strengthened through enhanced cooperation in the EU. In addition, the rules contribute to higher IT security through enterprise requirements to carry out privacy implication analyses, integrate data protection into IT solutions, report security breaches, etc.

*The Danish Consumer Council*

### **Challenges of the data economy**

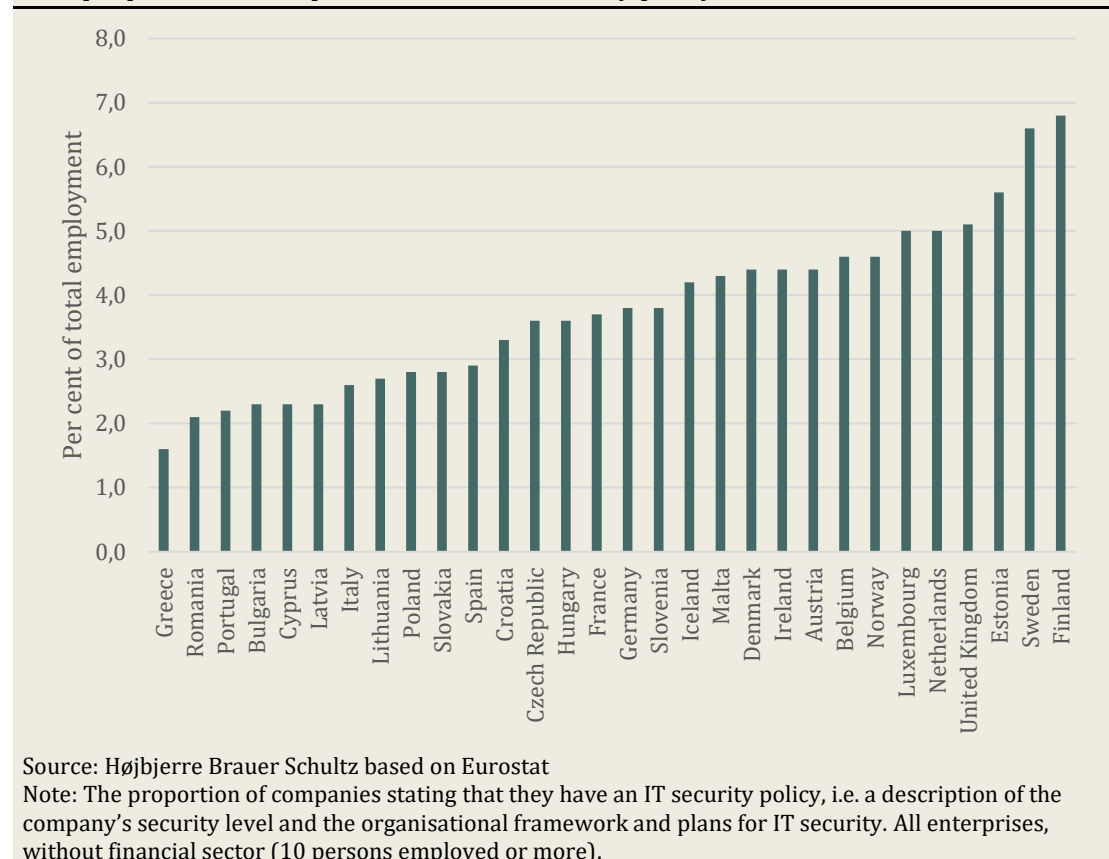
The importance of the data economy also poses challenges that often demand a European response. Data about our online behaviour and business secrets are becoming an increasingly large part of day-to-day life. This means that data leaks and cyber

attacks can have major consequences for both companies and society as a whole, requiring cybersecurity and privacy protection to be put in place.

Cyber espionage and cybercrime pose a serious threat to European businesses. However, only 32 per cent of companies in the EU have an IT security policy. Cyber attacks can have major economic consequences for both individual companies and society as a whole: direct losses due to damaged systems or loss of data, and indirect costs in the form of loss of trust and credibility with customers, and indirect costs in the form of weakened company credibility and loss of customer confidence.

In particular, small and medium-sized enterprises are lagging behind on this issue. In Denmark, only 25 per cent of companies with fewer than 50 employees increased their investment in IT security in 2017, while the equivalent figure for companies with over 100 employees was 47 percent<sup>18</sup>.

**Chart 2.7**  
The proportion of companies with an IT security policy, 2015



Companies' use of data must also take into account privacy protection and responsible behaviour. This means that responsible, ethical processing of information is important. In future, IT security and responsible processing of data are expected to become significant competition parameters, in that companies that are good at protecting their data will be regarded as trustworthy business partners.

<sup>18</sup> Statistics Denmark, 2017

# 3 PARTICIPATION OF EU MEMBER STATES IN EUROPEAN VALUE CHAINS

In this subchapter, we examine the role of the European Union on global markets. First, we demonstrate that the EU is one of few global leaders when it comes to trade and international investment. Second, we show that EU members gain from participation in European value chains and, by doing so, take advantage of the EU as a powerful player and voice in global markets.

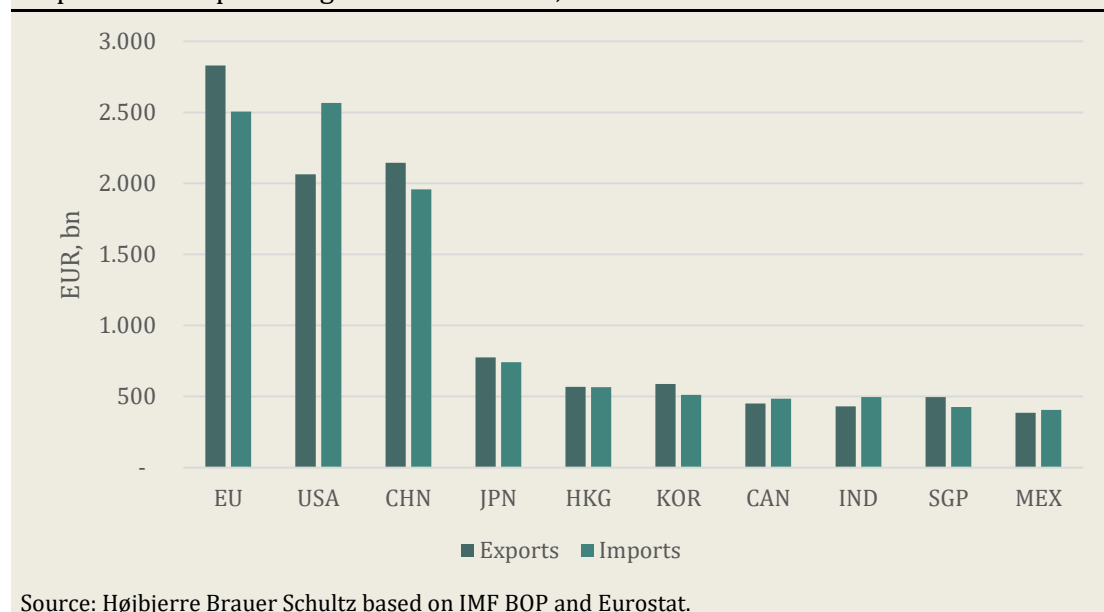
## 3.1 EU – GLOBAL LEADER IN TRADE AND INVESTMENT

In this section, we focus on the integration of the EU into the world economy. Trade policies of the EU members with third countries are managed by the EU. In other words, the EU legislates on trade matters and concludes international trade agreements on behalf of the EU member states. In that perspective, the countries of the European Union face the world as one Single Market when it comes to trade.

### EU global leader in trade

Standing together, the EU countries constitute a powerful player and an important voice on the global scene. The EU is one of three world leaders in trade. In fact, in 2016 the EU was the largest exporter and the second largest importer of goods and services. The total value of exports amounted to 2.830 billion EUR, which corresponds to exports of almost eight billion each day. The value of imports was 2.507 billion EUR in 2016. The US and China are also powerful players in world trade, but other countries accounted for lower levels of trade.

**Chart 3.1**  
Exports and imports of goods and services, 2016



Source: Højbjerg Brauer Schultz based on IMF BOP and Eurostat.

Looking at the EU, the value of exports considerably exceeds the value of imports. In 2016, the EU had a trade surplus of 304 billion EUR - the largest trade surplus ever recorded. The EU is followed by China (surplus of 226 billion EUR) and other Asian

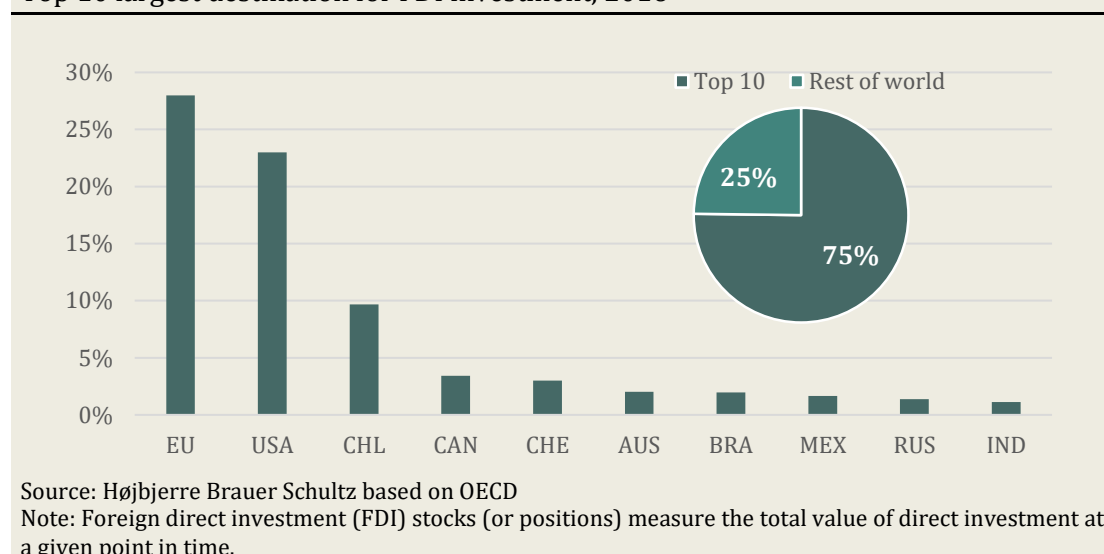


countries. Both the United States and India have trade deficits. Within the EU, trade balances differ across member states. Some countries such as Germany, the Netherlands, and Italy have surpluses, whereas others such as the UK and France have deficits.

### The EU is the dominant destination for international investment

The European Union and the United States are the two dominant destinations for FDI-investments in the world. In 2016, the EU accounted for 28 per cent of world inward FDI-stocks followed by the United States, holding 23 per cent of the total inward stock. Other countries hold significantly less FDI-inward stock even though several of these are large economies. The top ten largest destinations for FDI investments hold just above three quarters of total inward FDI-stock.

**Chart 3.2**  
Top 10 largest destination for FDI investment, 2016



In the EU, international investments have become increasingly important. The ratio of EU-28 inward stocks of FDI to GDP have consistently increased from 2008 to 2015. In 2008, the inward FDI-stock to GDP amounted to just 20 per cent, rising to 39 per cent in 2015. A similar development can be detected for outward FDI positions.

### 3.2 SMEs BENEFIT FROM PARTICIPATING IN EUROPEAN VALUE CHAINS

In this section we examine the importance of trade in intermediate goods of EU member states. We demonstrate that EU member states, to a high degree, participate in European value chains, exploiting the benefits of specialisation. Further, we show that SMEs and non-exporting firms do take advantage of European value chains.

#### Why are European value chains important?

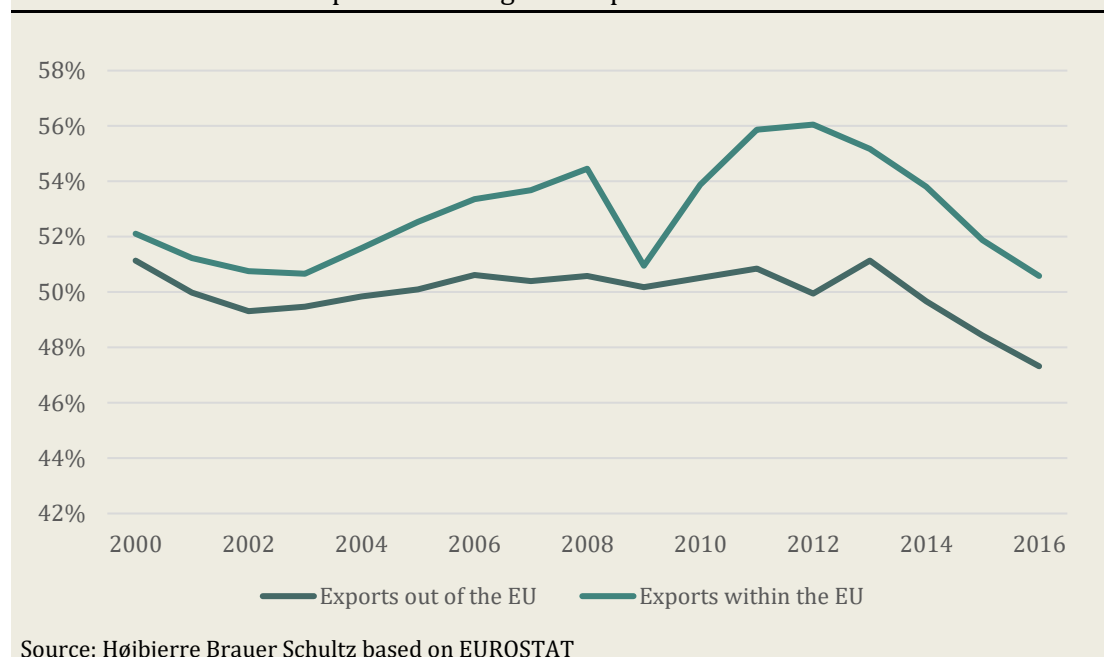
A refrigerator manufacturer may use intermediates such as a compressor from Italy, insulating foams from Germany, and electronic parts from France. When buying these parts from outside, the company can focus on efficient assembly, sales, logistics, and innovation (product design, energy efficiency, etc.).

In economics, the process of focusing on the production of a limited scope of goods to gain efficiency and trade for other goods is called specialisation. Better access to intermediaries allows for greater economic specialisation; hence, participating in the European value chain allows member states to produce more efficiently. The Single Market allows companies in all EU member states, smoothly and with minimum obstacles, to participate in European value chains. By doing so, even small companies with limited resources that enter global markets are able to tap into the “European Factory,” becoming powerful players in the world markets.

### Exports of intermediates dominate

The share of trade in intermediates to total trade of goods indicates to what extent a country is participating in global value chains. In 2016, exports of intermediates accounted for 51 per cent of all goods exported within the EU and 47 per cent of goods exported to countries outside the EU. Within the EU, the next highest shares were recorded for consumption goods (25 per cent of total trade inside the EU), whereas capital goods accounted for 16 per cent of total trade inside the EU.

**Chart 3.3**  
Share of intermediate exports in total goods exports



Source: Højbjerg Brauer Schultz based on EUROSTAT

The share of intermediate goods in total trade for the EU28 has been increasing since the beginning of the millennium, 2012 – with exception to a drop following the global financial and economic crisis in 2008. After 2012, the share of intermediates of total exports, both within and outside the EU, has been declining. Nevertheless, intermediaries still account for around half of goods exported and remains an important driver of trade both within and outside the EU.

### **CASE: The Single Market facilitates European value chains**

A Danish manufacturer of construction products exports its products to several European countries including the United Kingdom. The products consist of various parts that are produced in various member states. These parts are assembled into the final product in a factory in Eastern Europe employing 2500 people. Each week, the assembly factory sends 30-40 trucks to the UK with products sold to the British market.

Due to Single Market regulation and free trade across European borders, it is possible for this manufacturer to establish and maintain a profitable European value chain. Furthermore, the Single Market framework has resulted in a gradual removal of national regulations that protected national markets for construction products. As such, market access for construction products has improved across Europe.

However, local requirements and national rules still cause numerous barriers to trade with construction products in Europe. For example, some parts of the product are covered by a special British standard that the product must comply with in order to be sold on the British market.

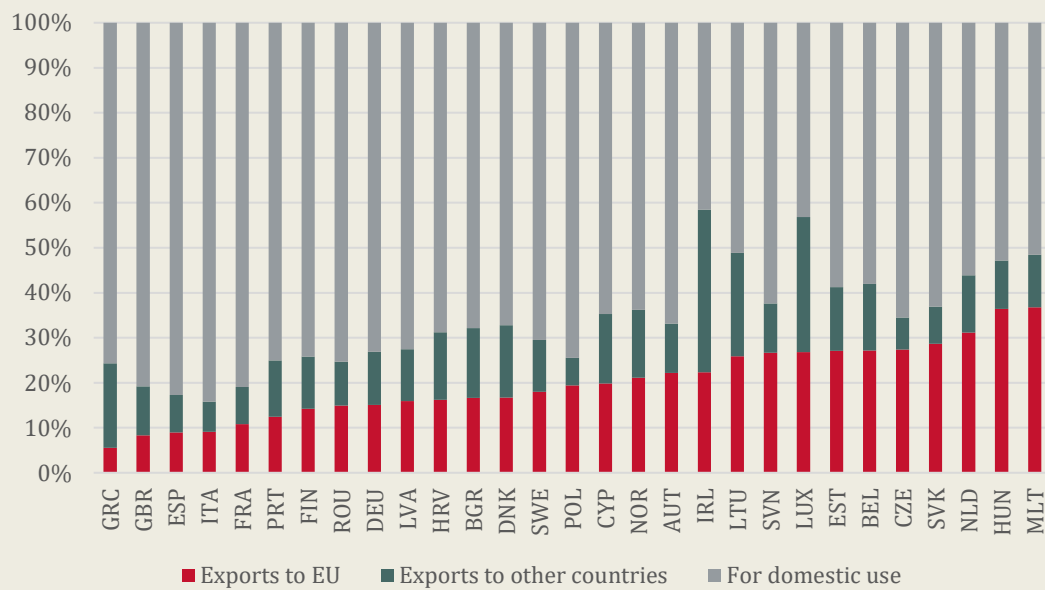
*The Confederation of Danish Industry (DI)*

### **EU13 member states have become important suppliers of intermediate goods**

Intermediate inputs produced in a country can be used in domestic production of that country, or it can be exported to be used in production processes in other countries. The share of inputs produced to be used as inputs in other EU countries gives an indication of the integration of production among EU member states.

In particular, the countries who ascended to the EU in 2004 and the Benelux appear to export high shares of intermediate inputs to other countries in the Single Market. In many EU13 member states, 25-30 per cent of intermediates produced are exported and used in production in other EU member states, suggesting that they are heavily implicated in supply chains in other member states. These countries have become important suppliers of intermediate goods to manufactures in Germany, Italy, France among others.

**Chart 3.4**  
Exports of intermediates to the EU, share of intermediates produced, 2014



Source: Højbjerg Brauer Schultz, based on WIOT input-output tables

### SMEs participate in European value chains

One important aspect of the Single Market is to support SMEs and non-exporting firms to participate in the European value chains as upstream suppliers of intermediates to other SMEs and larger companies engaged in international trade. The Single Market supports this process by having removed internal borders and customs within the EU member states and removed or reduced other regulatory obstacles to the free movement of goods and services.

#### CASE: The Single Market facilitates EU based companies' integration in global value chains

A Danish manufacturing company sells specialized articles to the automotive industries in the United Kingdom. These articles are produced in Denmark with input which the manufacturer imports from China. Even though there are no major car manufacturers based in Denmark, the Single Market implies that small Danish companies may easily export their products to large European manufacturers of motor vehicles thereby taking part in global value chains.

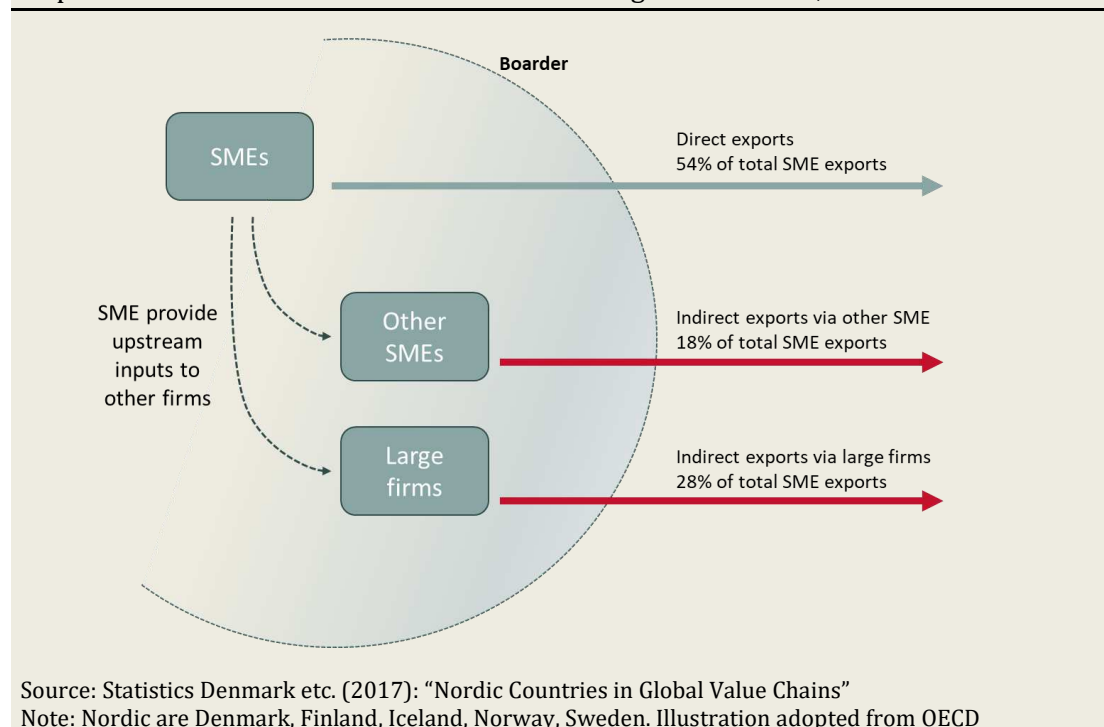
Thanks to the EU Customs Union, the Danish manufacturer may export inputs to large EU partners without paying customs duties and without being exposed to burdensome customs controls at the borders between the EU countries. Thus, the EU Customs Union enhances the competitiveness of the production inputs from other companies based within the Single Market.

*The Confederation of Danish Industry (DI)*

To illustrate the importance of international trade to the SMEs, consider exports in value-added terms. Exports in value-added terms only include the value added of the production process within the firm and excludes the value of intermediates from

domestic and foreign supplies<sup>19</sup>. In the Nordics, almost half of the SME exports in value-added terms are exported indirectly via other SMEs or large firms. This shows that even non-exporters with limited resources benefit from global value chains.

**Chart 3.5**  
Exports in value-added terms of Nordic SMEs to global markets, 2014



### 3.3 SERVICE PLAYS AN IMPORTANT ROLE IN GLOBAL VALUE CHAINS

This section highlights the importance of service in international trade relations. As shown in chapter 2, cross-border trade in services generally represents a relatively small share of total trade. In this section, it is demonstrated that services play a more important role in exports than is evident from traditional trade statistics.

#### Services sold bundled with goods

First, companies have traditionally either produced a good or a service. In consequence, economic activity is statistically recorded apart either as economic activity from companies producing goods or from companies producing services. This distinction is, however, misleading when looking at modern business models, especially with manufacturing companies who have developed business models that increasingly include services. For example, aftermarket services such as installation, maintenance, support, and repair have become an integrated part of the product. As a result, manufacturing firms are responsible for a significant share of services sales and exports.

#### The value of service is 'hidden' in goods exports

Second, manufacturing industries depend on a range of input services when producing goods, but the value of these input services is embedded in the price of the goods. In

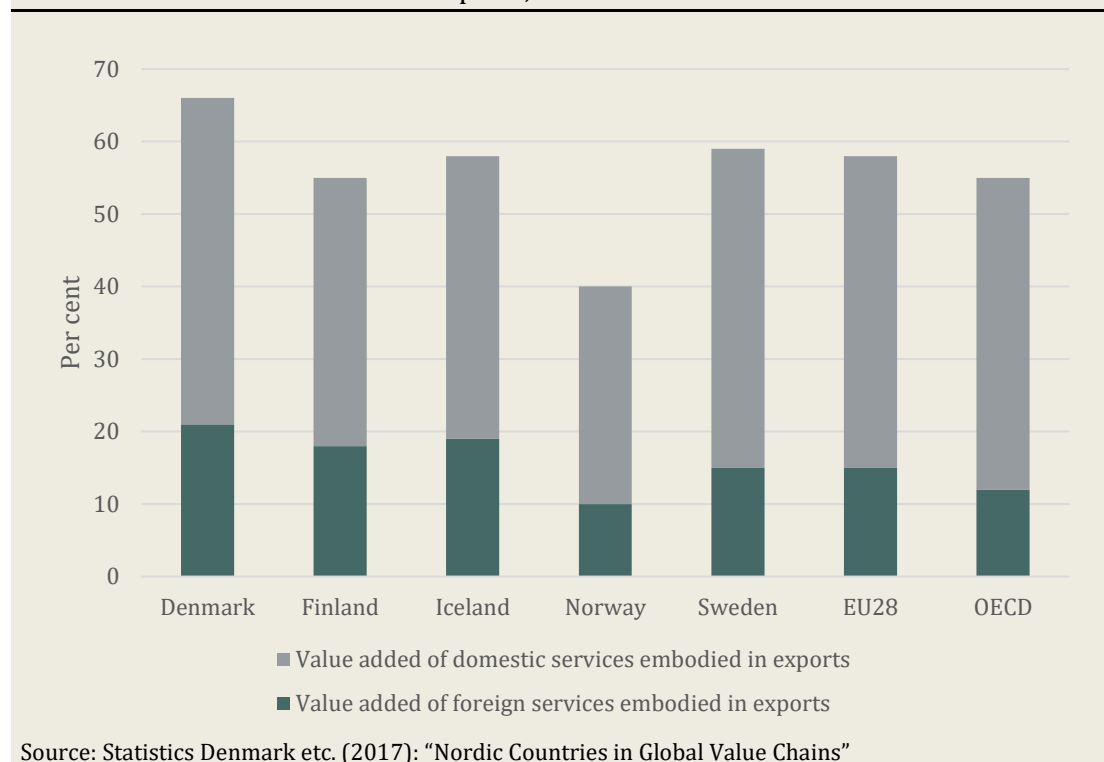
<sup>19</sup> Exports measured by including the value of intermediates are *gross exports* or often just exports, and these are reported in trade statistics.

other words, in trade statistics, the value is reported as trade in goods. But in fact, service industries are essential to manufacturing by providing efficient transportation, wholesale and retail services, specialised business services such as accounting and legal services for manufacturing exports.

### Services account for a much larger share of sales or exports

As a result, services account for a much larger share of sales or exports. One way to illustrate this is to look at flows in value-added terms. On average, a bit more than one-third of manufacturing exports consists of value-added originating in services industries. For example, for OECD countries, gross exports of services account for only 31 per cent of gross exports, but services account for more than half of exports in value-added terms. In Denmark, Sweden, and Iceland, this is even higher, and even in Norway – dominated by its mining industry, which requires few additional inputs, including services – services account for nearly 40 per cent of total exports in value-added terms, almost twice as high as the share in gross terms.

**Chart 3.6**  
Services content of value-added exports, 2011



### **CASE: An increasing interlinkage of goods and services in the Single Market**

A Danish company manufactures and sells production plants to customers in the food industry. As part of the contract, the Danish manufacturer installs the plant in the customers' factory buildings and performs after sales service such as installation and maintenance of the plant.

As the manufacturer is delivering a product as well as a range of services the company is subject to many different national requirements when exporting to other EU countries. For example, there may be national requirements for:

- Type-approval, insurance for safety reasons, etc.,
- Qualifications of employees, certificates of employee competencies, local safety certificates, documentation of work ability and health, etc.
- Other occupational health and safety requirements,
- Information on posted workers and remuneration of posted workers,
- Various tax matters, including registration of employees at local tax authorities,
- Use of vehicles and machines to perform the service,
- Permission if the work, e.g. requires transportation of very large items.

To find out which rules to comply with on the customer's market, the company must consult several different information webpages. Some are national, others are European, which makes it difficult for the company to get a comprehensive and workable overview of all the rules, as they must comply with the required documents as well as the competent authorities to be contacted.

*The Confederation of Danish Industry (DI)*

## **3.4 IMPORTANT TO COPE WITH CHALLENGES OF INTERNATIONALISATION**

This reports documents that the Single Market has contributed to the Danish economy by raising living standards in Danish households and providing companies with business opportunities. Further we show that similar economic benefits most likely have occurred in other EU member states.

While the Single Market has contributed positively for the many, attention should also be directed towards the challenges of internationalisation. It is important to note that these challenges do not originate in the Single Market but are a result of an ongoing global transformation in general. Technological advances and increasing international co-operation continuously alter demand for skills and knowledge. This process has been ongoing for centuries and has led to considerable higher levels of living standards.

Internationalisation increases the need for implementing a comprehensive policy programme to reap the benefits as described in this study while addressing adjustment and distributional concerns. Such policies should seek to improve the functioning of labour markets, strengthen access to education and training, and ensure adequate social safety nets that cushion the impact on those adversely affected without obstructing the process of adjustment<sup>20</sup>.

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<sup>20</sup> OECD (2007): "OECD Employment Outlook."; IMF (2007): "World Economic Outlook, April."

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