



EU EXPORTS TO THE WORLD: EFFECTS ON EMPLOYMENT AND INCOME

KEY FINDINGS

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In the current environment of high unemployment and uncertain growth outlook there is increasing pressure to better identify and understand the drivers of wealth creation and job opportunities in Europe. Globalisation being at the core of our economic system trade is naturally called to the forefront of this debate.

Trade has recently showed its worth as a stabilising source of global growth. For the European economy it is also the catalyst for the continuous process of restructuring and innovation that enables EU business and citizens to tap into the opportunities offered by an ever changing global market place. It is thus not surprising that the European Commission identified trade policy, and in particular the conclusion of the current trade negotiations agenda, as an important means to deliver on its EU 2020 Strategy to boost growth and jobs in Europe in the coming decade. President Juncker has made the conclusion of Transatlantic Trade and Investment Partnership - the most important bilateral trade agreement the EU has ever pursued - one of his top political priorities.

The ever more complex trade and investment networks however make the relationship between openness and labour markets increasingly difficult to map out. The accurate computation of the number of jobs (and associated income) that are supported by exporting activities in a given country requires going beyond the employment in exporting firms to take into account also the jobs in upstream activities, which increasingly span across borders.

Likewise, any reflection on the contribution of a given trade partner to sustain export-related employment and income in Europe must take into account not only the exports to that market but also its supply of inputs. The latter reflects the fact that, as global value chains expand, the competitiveness of EU exports (and therefore their capacity to sustain employment and generate income) is increasingly reliant on that of our trade partners. This also means that the employment mobilised to support EU exports is not confined to the European borders.

The European Commission's Joint Research Centre (DG JRC) and DG TRADE have just published a comprehensive set of indicators to shed light on the complex relationship between exports,



employment, and income¹. These indicators are grounded on the previous analysis done on the topic and on the latest release of the World Input-Output Database (WIOD)^{2,3}.

The comprehensive collection of facts and figures that this work generated points clearly to the **increasing importance of exports as a means to provide employment opportunities in Europe, which are on average better paying than in the rest of the economy**. Also significant is the evidence that citizens in all Member States benefit. Some do so because they work in firms that are selling directly outside the EU while others are employed by the suppliers of inputs to exporters that may be located in their own Member State or elsewhere in the EU. A **well-functioning Single Market is clearly an important pillar of EU competitiveness** in the global marketplace. Finally, it is worth noting that with the expansion of global value chains more and more of the employment base that is supported by EU exports is not confined to the European borders. This strengthens the realisation that in a globalised world **economic stakes are ever more interdependent**.

¹ Arto I., Rueda-Cantuche, J.M., Amores, A. F., Dietzenbacher, E., Sousa, N., Montinari and Markandya, A. (2015), "EU Exports to the World: Effects on Employment and Income", Luxembourg, Publications Office of the European Union. The report is available at: <http://ec.europa.eu/trade/policy/in-focus/trade-and-jobs/>.

² This analysis follows closely the one presented in the Chief Economist note "Extra-EU exports and employment" published in May 2012 (http://trade.ec.europa.eu/doclib/docs/2012/may/tradoc_149511.%2024.05.2012.pdf). The current work benefits from an update of the WIOD database and is therefore able to cover the period between 1995 and 2011 (although due to data constraints some indicators are only available up to 2009).

³ The WIOD database provides a time-series of world input-output tables for forty countries worldwide covering the period from 1995 to 2011. It was funded by the European Commission as part of the 7th Framework Programme. More information on the database is available at: <http://www.wiod.org>.



MAIN FINDINGS

MORE AND MORE JOBS IN EUROPE DEPEND ON EXPORTS TO THE REST OF THE WORLD

Being able to export is increasingly important for employment in Europe. The jobs that are supported by exports are not confined to the firms engaged directly in selling beyond the EU marketplace. They can also be found in the many companies that supply inputs used to produce the goods and services sold abroad.

- Between 1995 and 2011, the EU jobs supported by exports to the rest of the world increased by 67% to reach **31.1 million**. This amounted to an additional 12.5 million jobs supported by exports since 1995. In 2011 on average each billion euros of EU exports supported 14,000 jobs across the EU.
- The exporting activity of EU-based firms has become an increasingly important driver of employment opportunities across Europe. The share of EU employment supported by sales of goods and services to the rest of the world over total employment increased from 9% in 1995 to 14% in 2011. In 2011 **one in seven EU jobs was supported either directly or indirectly by exports to the rest of the world**.
- In 2011, the exports to the rest of the world from the **manufacturing sector** still supported the majority of jobs linked to exports (61%) across the EU. The “machinery, transport equipment” industry supported 9.6 million jobs, the “other non-metallic and basic metals” industry 2.9 million and the “chemicals” sector around 2 million.
- However, the contribution of the exports of **services** has been increasing: in 2011 they were responsible for 36% of the EU employment supported by exports (up from 26% in 1995). The extra-EU exports of the “transport, trade and business services” industry supported almost 10 million jobs across the EU.



- Still, the exports of the manufacturing sectors continue to be the most important driver of export-supported employment not just across manufacturing but also in the services sectors. In 2011, almost half of the EU employment (8 million jobs) in the service sectors was supported by **mode 5 exports** to the rest of the world (i.e. services embodied in exports of the primary and manufacturing sectors). This illustrates well the “servicification” of the pool of employment that is supported by the EU manufacturing exports.
- The importance of the enabler role of the “transport, trade and business services” industry to EU exporting activities stands out from an employment perspective: the sector hosts around half (15.7 million jobs) of the total employment supported by exports from the EU to the rest of the world.
- Exporting activities have contributed to the **upgrading of the employment base across the EU**. Around half of export-supported jobs in the EU are medium-skilled jobs (this share has been fairly constant since 1995). However the share of high skilled jobs increased from 14% in 1995 to 24% in 2009 while the share of low skilled jobs fell from 38% in 1995 to 25% in 2009. This mirrored the structure of EU employment in 2009 and its evolution over time.
- The decomposition of EU value added in exports to the rest of the world also reflects the **importance of labour skills**: the compensation⁴ of medium and high skill labour accounted for 55% of the total EU value added exported in 2009 (up from 47% in 1995). Compared to 1995, the share of compensation to low-skilled labour has fallen to 12% in 2009 (from 19% in 1995) while the share of returns to capital stayed constant (at around 32%).
- On average **EU export-related jobs are better paid** than jobs in the rest of the economy, which reflects the productivity edge of exporting firms. The data for 2009 showed that this wage premium benefits export-supported jobs across the full spectrum of skills: this export wage premium ranges from 5% for low-skilled jobs, 9% for medium-skilled jobs to 16% for high-skilled jobs.

⁴ Labour compensation includes compensation to employees and the remuneration of self-employed. The compensation to employees in turn consists of wages (including social security of employees) and social security contributions of employers.



THE NUMBER OF JOBS SUPPORTED BY EXPORTS IS INCREASING IN ALL MEMBER STATES

The importance of exports for job opportunities is apparent across the whole EU, reflecting the fact that the construction of an increasingly integrated Single Market continues to go hand-in-hand with openness to the rest of the world.

- In 2011 Germany hosted the biggest number of jobs supported by EU exports to the rest of the world (7.1 million), followed by the United Kingdom (3.9 million), Italy (3.1 million), and France (2.6 million).
- Compared to 1995 the export-supported employment increased in almost all Member States⁵. The Member States with the strongest increases in relative terms between 1995 and 2011 were Luxembourg (296%), Ireland (187%), Malta (147%), Greece (126%), Spain (126%) and Austria (121%).
- Only in Greece (7%), Portugal (8%) and Spain (9%) did the exports of the EU to the rest of the world support less than 10% of total employment in 2011. In contrast, the EU sales of goods and services to the rest of the world supported 1 in every 3 jobs in Luxembourg; 1 in every 4 jobs in Ireland, and one fifth of all jobs in Malta and in Hungary.

THE EXPORT COMPETITIVENESS OF EACH MEMBER STATE BUILDS ON THE COMPETITIVENESS OF THE OTHERS

The relationship between the Member States' labour markets and the exporting activities of firms from across the EU is ever more intricate due to the deep economic integration that characterises the European Single Market. The growing importance of intra-EU production chains supplying inputs to European exporters is apparent in the geographical distribution of jobs supported by extra-EU exports.

⁵ The only exception is Latvia where it decreased by 15%.



- In 2011, on average 84% of the employment supported by extra-EU exports was in the Member State that ultimately exported to the rest of the world (down from 87% in 1995), while the remaining 16% (13% in 1995) of the jobs were in other Member States from where inputs to produce the exports were purchased.
- In Slovakia, the Czech Republic, Estonia, Belgium and Poland more than 25% of the employment supported by extra-EU exports was driven by the exports of other Member States. In contrast, in Greece, Cyprus, Ireland and Lithuania it was less than 10%.
- The pivotal role of the German economy stands out in the intra-EU production sharing that underpins the EU exports. In 2011, the exports of Germany to the rest of the world supported around 6.2 million jobs in Germany but also 1.3 million jobs in other Member States: 200,000 jobs in Poland, 140,000 in Italy, 130,000 in the United Kingdom, and 120,000 in both the Czech Republic and France. Germany also hosted the largest number of jobs that were dependent on the exports by other Member States to the rest of world (almost 900,000 jobs in 2011). These are jobs in firms based in Germany that supply inputs to exporters located elsewhere across the EU.
- Other major EU economies are also key in the export-led intra-EU value chains. After Germany, the sales of goods and services from France to the rest of the world were the second most important driver of export-supported employment in other Member States (around 500,000 jobs), followed by Italy (370,000 jobs) and the United Kingdom (340,000 jobs).
- When it comes to hosting of employment supported by the exports of other Member States' exports to the rest of the world, the UK stands out with over 720,000 jobs in 2011, followed by Poland (490,000), Italy (400,000) and France (350,000).

EU EXPORTS SUSTAIN AN INCREASING NUMBER OF JOBS BEYOND EUROPEAN BORDERS

Given the expansion of global value chains and the fact that EU exports increasingly rely on foreign inputs it is not surprising that the employment supported by EU exports is not confined to the European borders. This adds another dimension to the importance of the EU in the context of an increasing globalised and interdependent world economy.



- The exports of the EU to the rest of the world support an increasing number of jobs outside its borders reaching a total of 19.2 million in 2011 (up almost 10 million from 1995). On average each billion euros of EU exports to the rest of the world supported around 8,600 jobs in the rest of the world.
- There are some marked differences across Member States: each billion euros of extra-EU exports from the Netherlands, the Czech Republic, Denmark, Belgium, Estonia, Finland, Slovakia and Slovenia supported more than 10,000 jobs in the rest of the world. In contrast, each billion euros of exports to the rest of the world from Luxembourg, Romania, Latvia, and Greece and supported less than 6,000 jobs outside the EU.
- The type of “foreign” jobs supported by the EU exporting activities also sheds some light about the nature of the parts of the production chain that have been located abroad. In 2009, the majority were low skilled jobs (57%); medium skilled jobs represented 34% and high skilled jobs 9%.

TRADING WITH KEY PARTNERS: A TWO-WAY STREET FOR JOBS

In a production-sharing economy the trade relationship with a given partner must be assessed not only from the perspective of the value of the sales of goods and services to that market but also from the standpoint of the importance of that partner as a supplier of inputs to be used by EU exporters. Both aspects of the trade relationship have implications for jobs.

- In 2011, 35% of the EU employment supported by extra-EU exports was driven by sales to the US (15%), China (10%), Russia (6%), and Turkey (4%).
- This means that in 2011 almost 4.7 million jobs in the EU were dependent on exports to the US market; over 3 million jobs were dependent on EU sales of goods and services to China, and almost 2 million were dependent on the imports from Russia.
- The **employment supported by US imports** is important for all Member States but it is especially striking in Ireland, Spain, the United Kingdom, the Netherlands, and Belgium. In those Member States EU exports to the US were responsible for over 20% of the jobs supported by exports (in the case of Ireland it was almost 1 in 4 jobs).



- The **exports to the Chinese market** are also increasingly important for jobs in the EU. In Finland and in the Netherlands more than 15% of the employment supported by exports was driven by Chinese imports from Europe.
- It is also striking the **importance of the Russian market** for some Member States. More than 15% of the jobs supported by extra-EU exports in Estonia, Slovakia, Lithuania and Poland were due to sales to Russia.
- Due the sourcing of inputs beyond the EU, in 2011 EU exports to the world generated 5.1 million jobs in China (this represents a quarter of the “foreign employment” supported by EU exports), 2.2 million jobs in India, 1.1 million jobs in Russia, 900,000 jobs in Brazil, and 740,000 jobs in the US.

Full study available at:

<http://ec.europa.eu/trade/policy/in-focus/trade-and-jobs>

<https://ec.europa.eu/jrc/en/event/pressmedia-event/presentation-dg-jrc-dg-trade-study-trade-and-jobs>