

Cernat, Lucian; Sousa, Nuno

**Article**

## The Trade and Jobs Nexus in Europe: How Important Are Mode 5 Services Exports?

CESifo Forum

**Provided in Cooperation with:**

Ifo Institute – Leibniz Institute for Economic Research at the University of Munich

*Suggested Citation:* Cernat, Lucian; Sousa, Nuno (2015) : The Trade and Jobs Nexus in Europe: How Important Are Mode 5 Services Exports?, CESifo Forum, ISSN 2190-717X, ifo Institut - Leibniz-Institut für Wirtschaftsforschung an der Universität München, München, Vol. 16, Iss. 4, pp. 65-67

This Version is available at:

<https://hdl.handle.net/10419/166625>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

## THE TRADE AND JOBS NEXUS IN EUROPE: HOW IMPORTANT ARE MODE 5 SERVICES EXPORTS?

LUCIAN CERNAT AND NUNO SOUSA\*

Faced with high unemployment policymakers across Europe are under pressure to better identify the drivers of new job opportunities. Trade is naturally called to the forefront of this reflection. However, today's complex trade and investment networks make the relationship between openness and labour markets increasingly difficult to map out. Even the accurate quantification of the number of jobs (and associated income) that are supported by exporting activities in a given country is nowadays a complex exercise. It requires going beyond employment in the exporting firms to also take into account the many jobs in upstream activities, which increasingly span across borders. The European Commission's Joint Research Centre (DG JRC) and DG TRADE have recently published a comprehensive set of indicators (see Arto *et al.* 2015) that does just that, using the information contained in the latest release of the World Input-Output Database (WIOD).<sup>1</sup> This extensive body of evidence puts forward a good case for the importance of exporting firms as providers of good employment opportunities for EU citizens. It also points out the shifting profile of the jobs that EU exports support across Europe and beyond.

### More and more jobs in the EU are supported by exports to the rest of the world

Between 1995 and 2011 employment across the EU supported by exports to the rest of the world has in-

\* European Commission. The views expressed herein are those of the authors and do not necessarily reflect an official position of the European Commission.

<sup>1</sup> 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>.

creased by 67 percent to reach 31.1 million jobs. This has outpaced the overall employment creation in Europe. As a result the jobs supported by exports represented 14 percent of total employment in 2011, up from 9 percent in 1995.

The sales of goods and services to the United States, China, Russia, and Turkey alone supported almost 11 million jobs in the EU, reflecting the importance of these large markets for those working in Europe. In addition, the geographic footprint of export-supported employment across Member States sheds light on the intra-EU production chains that underpin EU export competitiveness. In 2011, on average 84 percent of the employment supported by extra-EU sales of goods and services was in the Member State from where the shipments were made (down from 87 percent in 1995). The remaining 16 percent (13 percent in 1995) of the jobs were in other Member States that supplied inputs. Germany is clearly a main hub in these intra-EU value chains. German exports to the rest of the world supported over 6 million jobs in Germany but also 1.3 million jobs across the rest of Europe. French exports to the rest of the world were the second most important driver of export-related jobs in other Member States (around 500,000 jobs), followed by Italy (370,000 jobs) and Britain (340,000 jobs).

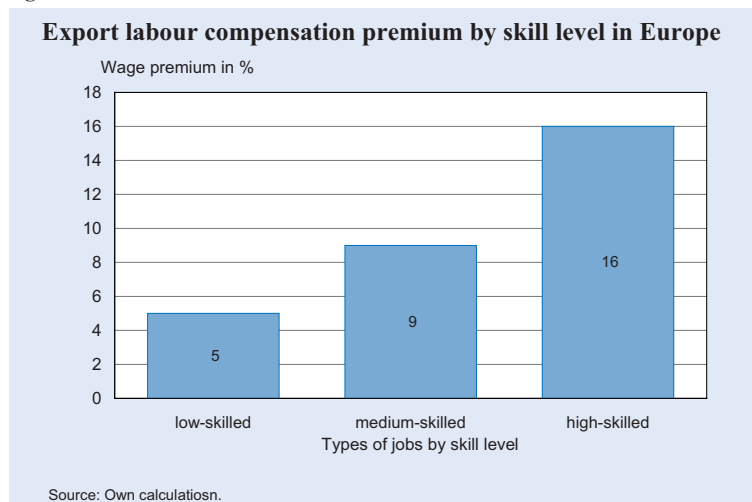
The value chains of European exporters also span beyond the EU borders as they increasingly rely on foreign inputs. This clearly shows in the employment data. EU exports to the rest of the world support a growing number of jobs outside its borders reaching a total of 19.2 million in 2011 (10 million more than in 1995).

### Exports support good and better paid jobs

Exporting activities have contributed to the upgrading of the EU employment base. Around half of export-supported jobs in the EU are medium-skilled (this share has been fairly constant since 1995). However the share of high skilled jobs in employment supported by exports increased from 14 percent in 1995 to 24 percent in 2009, while the share of low skilled jobs fell from 38 percent in 1995 to 25 percent in 2009. This



Figure 1



mirrored the changes in the structure of EU total employment.

But what it is even more interesting is that the new data show that on average export-related jobs in the EU are better paid than jobs in the rest of the economy. In 2009 the labour compensation premium for export-supported jobs was apparent across the full spectrum of skills: ranging from 5 percent for low-skilled jobs and 9 percent for medium-skilled jobs, to 16 percent for high-skilled jobs (see Figure 1).

**The growing importance of mode 5 services exports**

Despite the growing number of jobs in the EU that are supported by services exports to the rest of the world (from almost 5 million in 1995 to over 11 million in 2011), manufacturing exports are still responsible for around 60 percent of all EU jobs linked to exports. However, manufacturing exports support in fact many services jobs, thanks to the so-called mode 5 services (see Cernat and Kutlina-Dimitrova 2014). In 2011 mode 5 services exports (i.e. services inputs embodied in exports of the primary and manufacturing sectors) were behind 40 percent of the total employment supported by goods exports (up from 31 percent in 1995). This amounted to a total of 8 million jobs in 2011 as shown in Figure 2. On aggregate mode 5 services exports also accounted for a sizeable share of to-

tal EU exports (around 414 billion euros) in 2011. This ‘servicification’ of employment is particularly strong in the exports of machinery, electrical and transport equipment, and chemical industry.

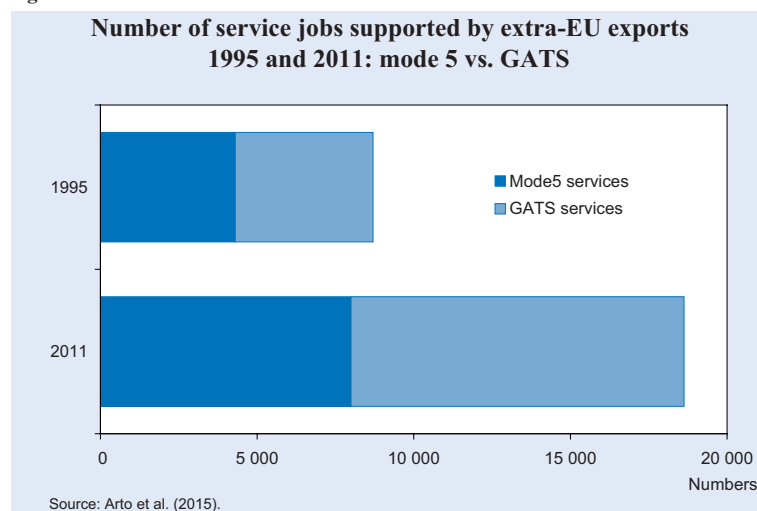
The contribution of mode 5 services exports to the overall number of export-supported jobs differs across Members States. In the case of Germany for instance, mode 5 service exports supported more jobs than all GATS services combined. Interestingly, the data also show that this servicification

of the employment base of manufacturing exports is increasingly spanning borders as EU exporters rely on global supply chains also for services inputs. In 2011 around 38 percent of foreign jobs supported by EU manufacturing and primary goods exports are found in services.

**What is the most adequate policy response?**

With this short note we wanted to highlight some new insights from the most recent and comprehensive data on the relationship between exports and employment in Europe. First, we noted that an increasing percentage of European jobs depend on the ability of EU-based firms to export goods and services to the rest of the world. Second, we noted that the data confirm the prior that these jobs tend to be medium or high skilled and better paid than the average. And finally we highlighted that the nature of these jobs is shifting with the

Figure 2



changes of production arrangements of EU firms. In this context we called the attention to the growing and invaluable contribution of mode 5 exports in providing employment opportunities in Europe. As this phenomenon is due to grow in importance in the future, not least because of the acceleration of the digital content of goods, it raises some pressing policy questions.

Despite the importance of mode 5 services exports the trade rules remains somewhat unclear. In many respects, mode 5 services are treated as goods: unlike GATS services, most mode 5 services pay duties when crossing borders even though the same service could be delivered separately (e.g. *via* mode 1) and subsequently incorporated duty-free after importation into the final product. However, a small subset of mode 5 services is already covered by specific WTO rules, notably Article 8 of the WTO Customs Valuation Agreement, which offers them preferential treatment under certain conditions. But that article dates back to the GATT era and clearly fails to reflect how technology has advanced since. For instance, design and engineering services are covered but software (a service that hardly existed at the time of those negotiations) is not.

This opens up a number of trade policy questions to consider, both at multilateral and bilateral level. For instance, could the custom valuation rules be revised to treat key mode 5 services (e.g. design, engineering, ICT services) equally (as opposed to the current narrow definition of duty-free treatment allowed by the WTO customs valuation rules)? Could trade facilitation rules be changes to better reflect the complex interplay between goods and services? Should mode 5 services feature specifically in future plurilateral negotiations? Does the current set of WTO rules allow the issue to advance in the context of bilateral settings via deep and comprehensive FTAs?

Regardless of the answers to these questions, two conclusions are clear already. First, services are becoming increasingly 'exportable'. Second, given the profound technological transformation of production processes that have blurred the dichotomy between services and manufacturing mode 5 services exports will probably account for a growing share of global trade flows, supporting millions of jobs in Europe and around the world. Should global trade rules be changed to better nurture this reality?

## References

- Arto I., J.M. Rueda-Cantuche, A.F. Amores, E. Dietzenbacher, N. Sousa, L. Montinari and A. Markandya (2015), *EU Exports to the World: Effects on Employment and Income*, Luxembourg: Publications Office of the European Union, <http://ec.europa.eu/trade/policy/in-focus/trade-and-jobs/>.
- Cernat, L. and Z. Kutlina-Dimitrova (2014), *Thinking in a Box: A "Mode 5" Approach to Service Trade*, Chief Economist Note 01/2014, DG TRADE, European Commission.