

The UK and the EU: Jobs and trade¹

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The UK is going through a somewhat stormy period in its relationship with the EU. David Cameron has promised to renegotiate the UK's relations with the EU and to hold a referendum should he get re-elected. There are commentators and politicians who clearly favour the withdrawal of the UK from the EU and indeed Cameron himself has not ruled out campaigning for the UK to leave. Clearly this option is also being considered by other EU countries with Angela Merkel indicating that if the UK proved too difficult about any renegotiation that she would rather see the UK leave. A YouGov survey in the autumn of 2013 suggested significant caveats amongst the business community regarding the nature of the UK's relationship with the EU³. Others argue strongly against this position. A recent survey by the manufacturer's organisation the EEF found strongly in favour of the UK remaining within the EU and on strengthening the relationship⁴; some express concern about the risks that the current uncertainty may pose to investment in the UK⁵, and the CBI has warned that benefits of EU membership were being buried by negative media coverage⁶.

Those in favour of withdrawal typically cite the overbearing control that "Brussels" has on UK policy matters and take an optimistic view with regard to the feasibility of the UK (re-) negotiating its relationship with the EU as well the complex web of trade agreements that the EU, and hence the UK currently has with trading partners around the world, as well as citing concerns about unfettered migration. Those against point to the economic interdependence between the UK and the EU, manifested in part by the significant share of the UK's trade that is with the EU, are much less optimistic about the scope for (re-) negotiations, and express concern about the consequent absence of the UK at the EU decision making table, and point to the net benefits arising from EU-UK free movement of labour⁷.

Positions on this are clearly as much (if not more) political as economic. Nevertheless it is important to understand the ways in which the UK is interlinked not just to the EU but also the rest of the world. If we just look at the trade numbers then we see that the share of the EU in the UK's trade is close to 50%. This is true whether you look at import or exports, and is also true if you take just trade in goods, or trade in goods and services. The bottom line is that the EU is an important destination for UK exports and an important supplier of imports. This is already well known – and does little to persuade the naysayers, and is self-evidently important to those with a more positive view of the EU.

The preceding is based on gross trade figures. Gross trade exports capture the value of all that is exported by the UK, but they do not capture the value of UK economic activity embodied in those exports nor does it capture the extent of jobs / employment linked to those exports. Of £100 worth of UK exports, a certain

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³ "Britain and the European Union: What business thinks", YouGov poll conducted for Business for Britain, 2013

⁴ "Manufacturing: Our future in Europe – Stronger Leadership, a stronger economy", EEF, The Manufacturers' Organisation.

⁵ UK could find itself tied to the EU but with no say", Brian Groom, Financial Times, Sep 28th 2014.

⁶ "Business urged to speak out against eurosceptics", Elizabeth Rigby & Sarah Gordon, Financial Times, 7 November, 2014.

⁷ "The fiscal effects of immigration to the UK", Dustmann, C & Frattini, T, Economic Journal, 2014

proportion, for example £30, of that will contain intermediate imports from abroad. It is of course also possible that those intermediates actually contain some UK value added arising from intermediates at earlier stage of production which the UK had previously exported abroad, which were then used to produce the good imported by the UK. Hence embodied in the £30 of imported intermediates, there could be £5 of UK value added. In this case, the sum of the value of all UK economic activity embodied in UK exports which is often referred to as 'value-added exports' would be £75. A classic example, frequently cited, relates to Chinese exports of the iPhone. China is a major iPhone exporter, yet Chinese value added (economic activity) embodied in the iPhone has been calculated to be no more than around 4%.⁸

Recent data improvements allow us to capture such flows⁹. When you look at the value-added trade figures, for 2011, once again the share of the EU in the UK's exports is around 50% which confirms the earlier figure. The top 5 destination countries for the UK are, in order of importance: the US, Germany, Netherlands, Ireland and France who between them account for nearly 40% of the UK's exports.

However, some of these exports are UK intermediates which are then used by the destination countries in turn in their exports. The top 5 countries which use the UK's goods in their exports are, again in order of importance, and with their shares in brackets: Germany (12%), Ireland (11.9%), Netherlands (10.2%), Luxembourg (9.1%), and Belgium (5.6%). In the top 10 countries there are only two non-EU countries – the US (4.8%) and China (3.3%). This already suggests that the way in which the UK is integrated with EU countries in comparison to non-EU countries may be quite different.

This can be seen by looking at the employment embodied in the UK's exports to different destinations; and then also UK employment embodied in our partner's exports. So, instead of looking at the trade flows, we are looking at the jobs directly and indirectly involved in the UK's trade with its partner countries.

Take first the share of UK employment embodied in exports – call these "export jobs". In 2011, the data reveals that just over **25% of the UK's total employment were jobs associated with exports**. This share has risen from 22% in 1995. In terms of bottom line numbers: in 1995 there were 6.2 million export jobs in the UK, and this had risen to just over 8.3 million by 2011. What is striking is the increasing importance of service sector export jobs, which reflects the growing significance of services in the UK economy. In 1995 these accounted for just over 50% of the export jobs, while in 2011 the share had risen to over **65%, or 5.4 million jobs**. Similarly we see a substantial rise in the share of intermediates (both goods and services). **The share of intermediate export jobs rose from 60% in 1995 to 67% in 2011.**

Table 1 provides a snapshot of the UK's export jobs. The first two columns show that of all these export jobs just over 45%, **or 3.78 million jobs, arose from UK exports to the EU** and 54.5% from exports to non-EU countries. The table also shows the most important EU and non-EU destinations when considering the UK's export jobs. It is worth noting that the share of the EU in the UK's export jobs has declined from 50% in 1995. This reflects the smaller share of the EU in the UK's exports driven by changes in demand in the importing countries. With the rapid growth in world trade of emerging economies such as China and India their share has naturally grown. Hence, the change in real GDP over this period for the EU countries was just over 30%, while the change in real GDP for non-EU countries was just under 55%. So the substantially faster GDP

⁸ Xing & Detert (2010) "How the iPhone Widens the United States Trade Deficit with the People's Republic of China", ADBI working paper.

⁹ See for example the WIOD or TiVA databases.

growth, in non-EU countries has, not surprisingly, driven the larger increase in the associated exports and export jobs.

Table 1: UK “export jobs” for selected countries						
	from UK exports		From exports by the partner		UK-partner export jobs: share by country	
Countries	2011 (1000's)	Share of total	2011 (1000's)	Share of total	2011	1995
Australia	161.4	1.9	18.8	0.9	11.6	11.3
Canada	249.4	3.0	45.4	2.1	18.2	23.8
China	417.8	5.0	81.4	3.7	19.5	16.2
USA	952.32	11.4	100.9	4.6	10.6	9.4
Non-EU Tot	4536.5	54.5	707.9	32.6	15.6	13.5
France	443.4	5.3	116.2	5.3	26.2	21.5
Germany	869.8	10.5	278	12.8	32.0	21.2
Ireland	444.7	5.3	258.6	11.9	58.2	41.8
Italy	269.8	3.2	60.2	2.8	22.3	20.6
Netherlands	371.6	4.5	165.2	7.6	44.5	35.9
EU Total	3783.4	45.5	1464.5	67.4	38.7	27.3
Total export jobs	8319.9	100.0	2172.4	100.0	26.1	18.2

Source: WIOD database, using the TradeSift software

As with the value-added trade numbers above, we can also calculate the number of UK jobs associated with the partner countries’ exporting activities. This can be seen in the third and fourth columns, where once again we can distinguish between the EU, and non-EU countries. This reveals that **in 2011 there were 1.46 million UK jobs arising from the exports of the EU countries, while only half that amount (0.7 million jobs) were associated with the exports of non-EU countries.**

This reveals a substantial structural difference between the nature of the economic integration of the UK with the EU, and with the rest of the world, which can then be seen from the last two columns of the table. For each destination these give the share of the UK’s export jobs to that destination which derive from each partner country’s exports (we call these “UK-partner export jobs”). So, if you look at the EU Total, we see that in 2011 **of the 3.8 million jobs arising from the UK’s exports to the EU, 1.46 million, or 38.7%, derive in turn from the EU’s exports.** Hence these are jobs linked to UK intermediates being exported to the EU, and which are then being used in the exports of the EU. This level of integration varies across the EU countries, and in the table is highest with respect to Ireland and lowest with respect to Italy – but in each case is significantly higher than with respect to non-EU countries. Hence, of the 4.5 million UK jobs associated with exports to the rest of the world, only 15.6% of these jobs in turn come from the exports of the rest of the world. It is also worth noting that the pattern is very similar when looking just at services (not reported here).

What is then striking is the comparison between 1995 and 2011. This reveals that the UK’s engagement in EU supply chains has risen significantly over time. In 1995 27.3% of the jobs in the exports of the UK to the

EU, derived from the EU's exports, and this had risen to 38.7% by 2011. Once again we see a rise in such integration with regard to each of the EU countries in the table. Conversely, a different pattern emerges when looking at non-EU countries. There is, perhaps not surprisingly, a clear increase with China while the share has declined for Canada, and remained relatively constant for the US and Australia.

The preceding was focussed on total trade and contains no sectoral disaggregation. In Table 2 we list the 10 most important sectors (out of 35 sectors) in terms of the UK's export jobs to the EU. The first two columns give the number of jobs associated with the UK's exports of these sectors to both the EU and non-EU countries. So if you take the first row we see that there were 826.3 thousand jobs directly associated with the UK's exports of business services to the EU. There are three interesting features from this table. First, we see from the last row that UK export jobs are fairly highly concentrated - these 10 sectors account for nearly 70% of the UK's EU export jobs. Second, we see again the importance of service sector jobs – 6 of the ten sectors are service sectors.

Thirdly, and in the final two columns we again see the much greater integration of the UK with the EU, than with non-EU countries. These columns give the share of UK jobs derived from EU exports and non-EU exports. Hence, of the 826.3 thousand UK jobs associated with the UK's exports of business services to the EU, 46.1% of these are intermediates which are then used in the EU's exports. This contrasts with 15.9% of the UK's export jobs to non-EU countries in the same sector. This much higher linkage between the UK and the EU, in comparison to the UK and non-EU countries is seen in all the sectors, and with respect to both manufacturing and services.

Table 2: UK "export jobs" by sector					
Countries	Sector*	UK export jobs (1000's)		UK-partner export jobs: shares	
		EU	Non-EU	EU	Non-EU
Business services	S	826.3	807.6	46.1	15.9
Financial Intermediation	S	349.9	496.2	50.0	16.9
Retail Trade, except of Motor Vehicles	S	203.6	227.5	34.2	15.3
Chemicals and Chemical Products	M	200.2	141.7	38.3	16.8
Basic Metals and Fabricated Metal	M	189.6	214.6	49.9	24.5
Post and Telecommunications	S	186.7	171.2	38.3	16.2
Transport Equipment	M	182.9	252.9	27.2	11.7
Wholesale and Commission Trade	S	163.8	195.1	35.1	15.3
Electrical and Optical Equipment	M	160.2	201.5	33.0	16.6
Community, Social & Personal Services	S	120.2	133.7	31.9	14.3
Total (share)		68.3%	62.6%		

*S=Services; M=Manufacturing
Source: WIOD database, using the TradeSift software

The last 15 or so years have seen a structural change in the UK's exports with a growing importance of services. Non-EU countries are growing in importance as a destination for UK exports, and therefore also UK export jobs; and this is almost certainly driven by the faster growth of these countries. However, this data suggests that **UK employment is very closely tied to EU partners via value-chains in a way that non-EU**

export jobs are not. This is no doubt in part driven by the closer proximity of the EU, but it is also hard not to believe that this is not driven by the greater regulatory approximation derived from the EU's Single Market. Closer value chain engagement is also likely to reflect higher quality relationships based on longer-lived transactions and closer contractual forms, in comparison to "ship and forget" trade that appears more characteristic of non-EU trade.

Given the importance of the EU for the UK in terms of trade and jobs, the growing importance of intermediate and services exports, and the nature of the value-chain engagement, a policy which may impact negatively on this clearly needs serious justification, and that justification should not just be political. UK export jobs may be vulnerable to changes in the terms of the relationship, economic and institutional, between the UK and the EU. Uncertainty with respect to the UK's position in the EU, as well as any subsequent policy changes can easily impact negatively on value-chain driven trade and the jobs associated with that trade. Leaving the Single Market may threaten a substantial number of UK jobs and not just in the manufacturing heartlands vulnerable to the rise of Asia but also in the services sectors which has been the area where growth in employment has been the greatest over the last two decades.

No doubt the UK, even if outside of the EU will continue to trade with the EU as well as with the rest of the world, but there is a clear risk of destabilising long lived relationship based transactions with key partner countries. The UK is currently part of the EU decision making process which directly impacts on nearly 50% of its gross trade and value-added trade, and is directly associated with nearly 3.8 million jobs. While those decisions may not be perfect, and while the decision making process may have its drawback it is surely better to be a constituent member, than some form of observer.

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