

Guo, Yuchen; Wech, Daniela

**Article**

## Trade, Jobs and Political Polarisation

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Yuchen Guo and Daniela Wech<sup>1</sup>  
**Trade, Jobs and  
 Political Polarisation**

Right-wing political movements and populism have recently been on the rise worldwide. In Europe, right-wing and nationalist parties, such as the Hungarian Fidesz, PiS in Poland, Front National in France and AfD in Germany are gaining power in elections. On the other side of the Atlantic, Donald Trump claimed victory in the 2017 US presidential election, after a campaign marked by nationalist and protectionist rhetoric. Indeed, one common feature among these new right-wing movements is that they are characterised by nationalism and anti-globalisation. More specifically, these populist movements are critical of trade liberalisation (e.g. TTIP and NAFTA), and appeal to the “losers” of globalisation. Indeed, since the 1980s the expansion of global trade has soared (ILO 2007). At the same time, income inequality and unemployment has increased in some countries (ILO 2007). It does not seem farfetched to suppose that there may be a relationship between these two trends. However, is trade globalisation to blame?

This article provides a synopsis of descriptive data and theoretical and empirical literature on the effects of trade on labour market outcomes and income distribution.

Firstly, we provide a descriptive overview of the development in trade volume and trends in employment among OECD countries. There does not seem to be a consistent relationship between trade and employment in the descriptive statistics. This is in line with the results in the empirical literature, since the employment effects of trade depend on regional-specific sector and worker characteristics.

Furthermore, we examine the relationship between trade and income dispersion. Our descriptive analysis reveals that the development of income dispersion somewhat parallels the positive trend of increasing trade. This observation is consistent with theoretical and empirical findings in the literature on this topic.

Lastly, we explore the political dimension of the effects of trade. Recent empirical studies find a positive association between trade exposure and political polarisation.

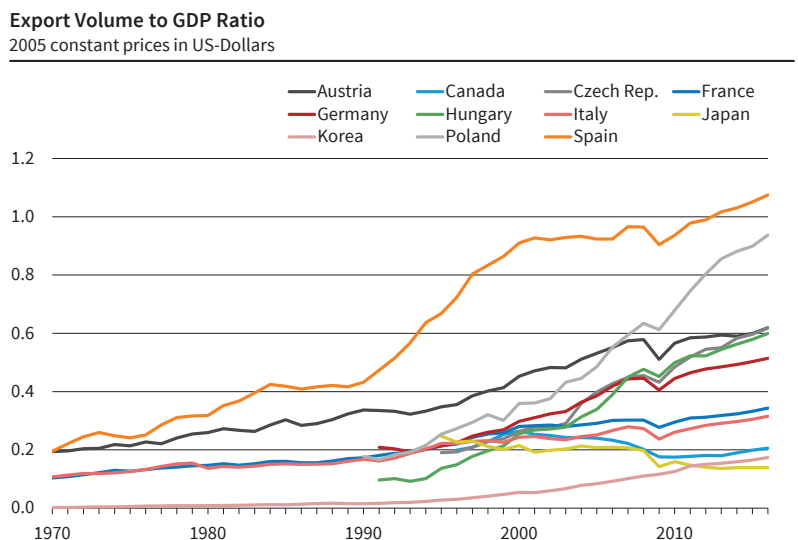
<sup>1</sup> ifo Institute (both).

**TRADE AND (UN)EMPLOYMENT**

Trade and, in particular, offshoring is often linked with the reallocation of jobs. In a theoretical model, the classical Stolper-Samuelson theorem (Samuelson and Stolper 1941), increasing trade can lead to decreasing employment, depending on the sector and skill level of the workforce. In the simplest set-up of the model, there are two countries, each relatively better endowed with low-skilled and high-skilled labour, respectively. Furthermore, there are two goods, one labour-intensive and one skill-intensive. In this setting, trade leads to a specialisation in production according to the relative endowment of human capital. Thus, the country endowed with a relatively large share of unskilled labour will specialise in the production of the labour-intensive good, which increases demand for low-skilled workers and thereby raises employment in this sector. Vice versa, the country with a higher share of skilled labour will focus on the production of the skill-intensive goods. As in the classic case of offshoring, this results in falling demand for low-skilled labour and decreases the employment rate of low-skilled workers. Thus, according to the Stolper-Samuelson theorem, trade can both increase and decrease employment depending on sector and workforce composition.

Figure 1 is a graphical representation of the development of the export volume of selected OECD countries from 1970 to 2016. For the purpose of this descriptive analysis, we restrict our analysis to export volumes and exclude net-export volumes. Our sample includes some of Central and Eastern Europe’s largest economies, as well as the NAFTA member states and Australia, Korea and Japan. For all 17 countries, the share of export volume to GDP measured at constant 2005 USD prices has been increasing. Most notably, export volume has increased almost six fold for Spain since the mid-1970s and for Poland since the 1990s. Further-

Figure 1



Source: OECD (2014).

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more, export volume has tripled for Germany, the Czech Republic and France since the 1990s. Although the expansion of export volume began at different points in time for the various countries, the trend of increasing export volumes is almost linear for all countries.

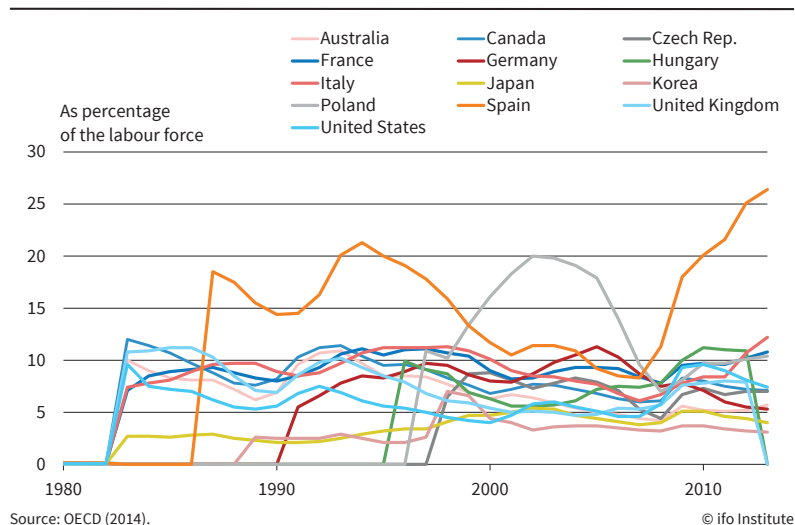
No such clear-cut picture emerges in the development of (un)employment. Figure 2 shows the development of unemployment rates (total, men and women) in selected OECD countries. The time-series of the unemployment rates from 1970 to 2013 does not follow a unified, positive trend. Instead (with the exception of Spain), unemployment rates follow a cyclical trend within a country-specific range. Thus, there does not seem to be an apparent relationship between trade volumes and unemployment rates, contrary to what the Stolper-Samuelson theorem predicts.

In accordance with our preliminary descriptive analysis, the empirical literature on the employment effects of trade remains inconclusive. Empirical results indicate both positive and negative effects of trade on employment rates. Dauth et al. (2014), for example, examine the effect of intensified trade between Germany and Eastern Europe and China on the German labour market between 1988–2008. Exploiting administrative panel data and using trade flows between Germany and other countries as instruments, the authors find mixed results. Regions that host import-dependent industries experienced significant job losses due to increased trade with the East. On the contrary, increasing trade exposure has positive and significant effects on the employment rate in regions specialising in export-oriented sectors. Overall, the authors estimate that the positive effect dominates in export-oriented regions, creating approximately 450,000 new jobs in Germany. The OECD finds that trade and the associated increase in foreign demand sustains a significant fraction of jobs in most countries, ranging from 7% in the US to 25% in France, Germany and Korea (OECD).

Furthermore, Autor et al. (2013a) find negative effects of trade on employment in import-dependent sectors for the US. The authors focus on the employment changes in over 700 commuting zones between 1988 and 2007 due to exposure to Chinese import competition. Paralleling the theoretical Stolper-Samuelson theorem, the authors find that intensified import exposure has a negative effect on employment, particularly for low-skilled labour.

Figure 2

Harmonised Unemployment Rates



TRADE AND INCOME DISTRIBUTION

Another dimension of the effect of trade on the labour market is wages, in particular, earnings distribution. In the theoretical set-up of the traditional Stolper-Samuelson theorem, the specialisation of skill-intensive labour increases demand for skilled workers. This causes a skill-premium in the wage and thus drives income dispersion between skilled and unskilled workers, i.e. inter-sectoral dispersion. In the data, the corresponding trend of increasing wage dispersion is observable. Recalling that Figure 1 reveals a positive and linear trend in the expansion of export volumes, Figure 3 also shows a (weak) positive trend in income dispersion, measured as the earnings ratio between the 9th and 1st decile, for both men and women.

Some countries exhibit an initial increase in income dispersion in the 1980s and 1990s and a decrease to initial levels in recent years, as seen in Australia, Hungary, Japan and Korea.

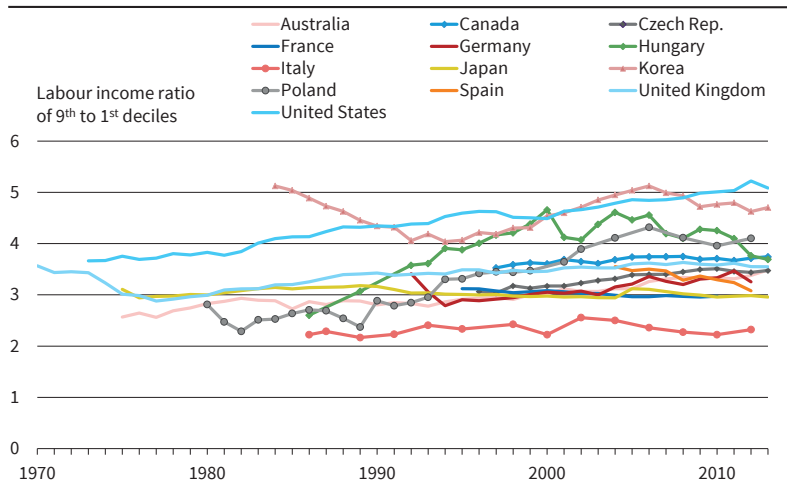
However, the income spread follows a positive trend for the majority of countries in our sample. Most prominently, income dispersion increased in the US, from a 9/1 decile ratio of 3.83 in 1980 to a ratio of 5.08 in 2013. Similar trends are observable in Canada, the Czech Republic, Germany and the United Kingdom. Overall, the trend for income spreads seems to be increasing, and is in line with the theoretical prediction of the Stolper-Samuelson theorem.

The empirical literature on this topic finds evidence of positive effects of trade on inequality for trade within sectors, rather than between sectors. This discrepancy is largely due to theoretical shortcomings in the traditional Stolper-Samuelson theorem. For instance, since only the most productive firms enter the export-market, a skill-premium is only paid for those competitive firms. The Stolper-Samuelson theorem does not account for firm heterogeneity within the

Figure 3

**Earnings Dispersion, 1970–2013**

Total male and female



Source: OECD (2015).

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same sector. These heterogeneities can arise from firm-specific technology shocks, differences in workforce composition or search and matching frictions in the labour market (see Goldberg and Pavcnik 2007 or Helpman et al. 2016).

Helpman et al. (2016) extend the traditional Stolper-Samuelson theorem and take matching frictions into account, and show empirically that most of the wage inequality associated with trade stems from within-sector wage dispersion. Exploiting Brazilian firm-level data from 1986–1995, the authors find that in comparison to a counterfactual closed economy, exposure to trade increases wage dispersion by 10–20% of the standard deviation of log wages in Brazil.

**TRADE AND POLITICAL POLARISATION**

The discussion to date has shown that the effects of trade on employment and income dispersion are ambiguous. While the effect of trade on inequality is largely positive, the effects on employment depend on sector and labour force characteristics. Nonetheless, even with regard to employment, trade is mostly found to be positive for most economies, to the extent that rightist rhetoric of job-losses due to trade is an oversimplification of the facts.

However, political radicalisation and polarisation might be a direct effect of trade itself. A recent strand of empirical literature examines the relationship between trade liberalisation and political extremism.

In a study with German data, Dippel et al. (2016) find that trade exposure has significant effects on the vote-share of parties from the extreme right spectrum. The authors use German poll data and data on import competition and export opportunities at a county-level from 1987–2009. The authors regress the change in vote-share of extreme-rightist on changes in net trade

exposure. Their results indicate that an increase by one standard deviation in import competition increases the vote-share of extreme rightist parties by 0.12 percentage points. Moreover, exposure to export opportunities significantly lowers rightist vote shares. This result parallels the results of Dauth et al. (2014), who find the corresponding effects of the different types of trade exposure on employment rates (see above). After controlling for socio economic characteristics and initial voting preferences, the qualitative results by Dippel et al. (2016) also remain unchanged.

Similarly, Colantone and Stanig (2017) find that increased trade competition from Chinese imports is positively associated with support for nationalist and radical-right parties in various European countries. The authors exploit electoral data from 1988–2007 and instrument Chinese imports to Europe with Chinese imports the US. Their instrumental variable estimates indicate to the US that about one fourth to one third of the variation in electoral success for radical political parties can be accounted for by increased import competition.

Paralleling Dippel et al. (2016) and Colantone and Stanig (2017), Malgouyres (2017) suggests that for France between 1995–2012 a one standard deviation increase in imports per worker is associated with an increase in the far-right election share of around 7% of a standard deviation.

Consistent with the above mentioned studies with European data, Autor et al. (2016) find similar results for the US. The authors analyse the effects of the increasing trade integration between the US and China on the outcomes of congressional elections 2002–2010. Autor et al.'s results indicate that districts with higher import exposure are associated with an increased likelihood of electing a conservative Republican.

**CONCLUSION**

Populist parties from the rightist political spectrum are becoming increasingly powerful. A common statement by right-wing extremists is that trade liberalisation is detrimental to native labour markets and increases income inequality. This article took a closer look at these claims by examining the data behind them. Our descriptive analysis and the literature on this topic indicate that trade exposure can lead to unemployment, especially in regions with increased import competition. However, the overall net effect of trade on employ-

ment rates is positive in the majority of countries in our sample. Furthermore, there is some evidence that trade exposure does indeed raise earnings dispersion. However, recent literature suggests that this is due to intra-sectoral firm heterogeneity.

Lastly, empirical studies find evidence that increasing trade exposure, and especially import competition, is directly associated with political polarisation.

Although the rightist claim that trade destroys jobs cannot be sustained by empirical findings, there is some evidence that trade increases earnings dispersion. However, inequality and distributional concerns are not only an effect of trade liberalisation, but are increasingly pressing issues of society stemming from multiple sources. In this context, trade globalisation is utilised by populists' rhetoric as a combat term. It is therefore especially important not to oversimplify things, but to highlight the complex and indirect effects of underlying the mechanisms.

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