

## **WAGE INEQUALITY IN FRANCE HASN'T GROWN, BUT THE COST OF A SKILLED WORKER HAS: New research on employer social security payments may solve longstanding paradox**

Increasing demand for skilled workers around the developed world has widened wage inequality since the 1980s – but, mysteriously, apparently not in France. Research by **Antoine Bozio, Thomas Breda and Malka Guillot**, to be presented at the annual congress of the European Economic Association in Geneva in August 2016, finds a possible explanation for this: high rates of mandatory employer social security contributions for France's high earners.

While most research into the impact on inequality of skill-biased technological change (SBTC) has used the relative gross wages paid to skilled and unskilled workers to measure its impact, the authors point out that in France during the 1980s and 1990s the cost to employers of skilled labour rose more quickly than gross wages because the employers' social security contributions became uncapped.

Analysing administrative data from 1976 to 2010, the study demonstrates that labour cost inequalities, as seen from the employer's point of view, have actually increased in France by more than 15% at the same time as net and gross wage inequalities have decreased by 5-10%. The authors point out that even if gross wage inequality in France bucks the OECD trend, French employers have still felt the global changes in the demand for labour: it's just the taxation structure that has been different.

They conclude: 'The French case is not an exception in terms of labour cost wage inequalities, and cannot be used as an example against skill-biased technological change: in France too, employers have been willing to pay increasingly more to hire skilled rather than unskilled workers.'

### **More...**

The researchers outline their study: in a context of growing wage inequality within many developed countries since the 1970s, it is becoming increasingly important to understand what drives this trend. Figure 1a shows the long-term increase in wage inequality for several OECD countries, except for France.

The explanations of these secular trends in widening wage inequality in developed countries have been debated. First, the hypothesis that technological change was the driving force behind these trends, named 'skill-biased technological change' (SBTC), rests on the idea that modern information technology has shifted the demand for labour in favour of skilled workers: those using computer technology see their productivity increase while unskilled workers see their tasks replaced by computerisation.

Second, the hypothesis that institutional changes are the main cause for widening inequality has been put forward with particular attention to the impact of the minimum wage in the United States, but also unionisation and economic deregulation.

In this debate, a consensus in favour of labour demand-side explanations for the rise in inequality has emerged. The case of France, where inequality did not rise (see Figure 1a) casts doubts on these explanations. It is indeed hard to claim that France did not experience global technological changes such as computerisation.

We revisit the French evidence with a simple argument: that the relative demand for skilled and unskilled labour depends on their relative product wages (or labour costs) rather than their relative gross wages. The main difference between the two measures of wage inequality comes from changes in employer social security contributions (SSCs) at different points of the wage distribution.

Employee SSCs are at the origin of the difference between gross and net wages. For some countries, the difference is small and only marginally change the overall picture on widening inequality.

In France, employer SSCs have changed dramatically over time and across the wage distribution. France has had historically high employer SSCs. But during the 1980s and 1990s, two sets of policies have radically transformed the distribution of employer SSCs: first, in the 1980s, a number of contributions have been 'uncapped', applied to all earnings above the threshold. Second, during the 1990s, reductions in employer SSCs around the level of the minimum wage have been implemented.

Over 40 years, these successive policies mean that employer SSCs have been reduced on low earners and increased on high earners, leading to a very different picture when one looks at labour cost inequality or gross wage or net wage inequality. Using administrative data spanning from 1976 to 2010, we show in Figure 1b that labour cost inequalities have actually increased in France by more than 15%, while net and gross wage inequalities have decreased by 5-10%.

The French case is therefore not an exception in terms of labour cost wage inequalities, and cannot be used as an example going against SBTC: in France too, employers have been willing to pay increasingly more to hire skilled rather than unskilled workers.

France also exemplifies the fact that institutional factors, like taxation, can have powerful impacts on the evolution of net wage inequality. The impact of employer social security contributions on net wage inequality is however hard to assess, as it depends fundamentally on the ultimate incidence of these taxes and on their impact on employment or incentives to educate, an issue where robust evidence is hard to find.

Our analysis provides suggestive evidence that employer SSCs are shifted in the long run onto employees, and can therefore reduce gross wage inequality. Our suggestive findings question the relevance of the taxation tools used for reducing inequalities. The combination of a relatively high minimum wage and employer SSC deductions for low-wage earners in France might however be compared to more direct income tax credit policies.

We are currently extending this research to other countries in order to pin down the relationships between labour supply and net wages on the one hand, and labour demand and labour cost on the other hand. This will help to understand how differences in tax systems across countries have contributed to shape the evolution of their wage inequalities.

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Taxes and Technological Determinants of Wage Inequalities: France 1976-2010

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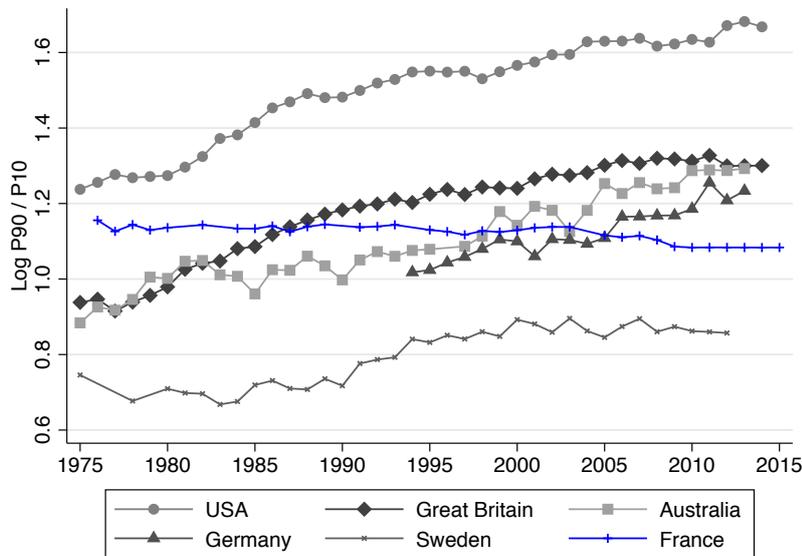
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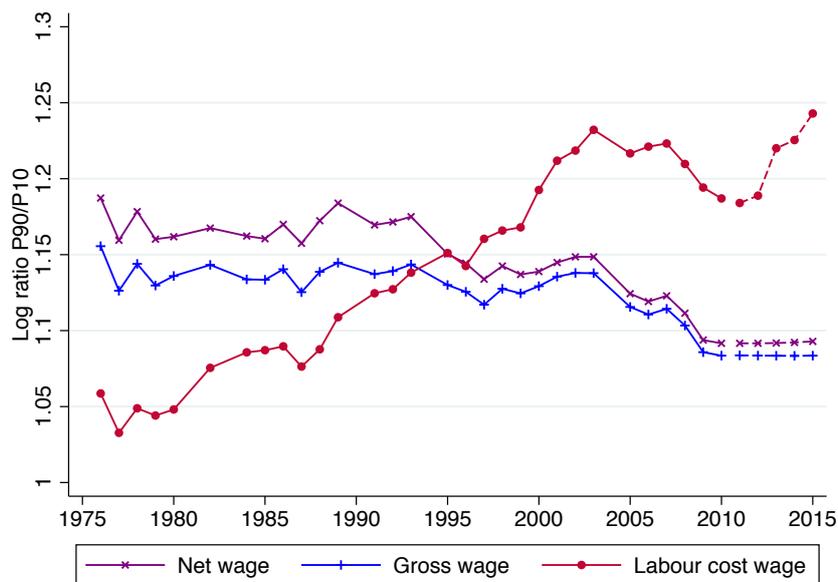
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**Figure 1 - P90-P10 ratio, full-time male workers, 1975-2015**

(a) OECD comparison (gross wages)



(b) Results for France



Note: The series are log ratio of threshold values of the wage distribution, the P90-P10 log wage gaps.

Sources:

- All countries but France: OECD data. Earnings are weekly gross wages (monthly for Sweden) of full-time (and full-year for Sweden) working men.
- For France: DADS data 1976-2010, extrapolation after 2010; wages computed by the authors. Wages are net, gross and labour cost wages of male workers of the private sector working full-time full-year.