

# The impact of institutions on wage polarization: a cross-country comparison

(preliminary title)

— Extended abstract —

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In this paper, we characterize cross-country differences in the impact of institutions<sup>1</sup> on wage polarization<sup>2</sup> by comparing, for several European countries and the US, the evolution of the wage structure in both the public and private sectors between 1995 and 2015.

We decompose the change in hourly wage quantiles into a part due to the evolution of the pricing of workers characteristics — that is, the wage structure — and a part due to the change in the distribution of these characteristics. The counterfactuals required for such an aggregate decomposition are built using an adjusted version of the reweighting approach introduced by DiNardo, Fortin and Lemieux (1996) and refined by Firpo, Fortin and Lemieux (2018).

We operate this decomposition exercise for both the public and private sectors, assuming — based on empirical evidence — that the two sectors differ in their degree of institutionalization of the wage-setting process. We then capture the impact of institutional forces on the polarization of the wage structure by looking at the between-sector difference in the change of this wage structure.

Compared with other schemes, our strategy has several advantages which can be linked to its two main features. First, we make use of an *aggregate* rather than a detailed decomposition method. While the latter implies the economically undesirable assumption that belonging to the public sector is an individual characteristic priced on the labor market, the former entails the more realistic assumption that workers' characteristics are priced differently according to the sector, due notably to the difference in the degree of institutionalization of the wage-setting process.

Second, we study the impact of belonging to the public sector rather than the impact of isolated institutional features such as union coverage or membership. This has several desirable implications. First, it allows us to take into account the effect of institutional characteristics that are not located at the micro-level, such as the degree of centralization and coordination of the bargaining process. Moreover, our estimates encompass the interactions — and thus the potential complementarities, as emphasized by the *Varieties of*

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<sup>1</sup>Following North (1990), Hall and Soskice (2001) define institutions “as a set of rules, formal or informal, that actors generally follow, whether for normative, cognitive or material reasons.” They also emphasize the fact that, from this perspective, markets are a specific type of institutions, which are “marked by arm’s length relations and high levels of competition” and embedded in a “legal system that supports formal contracting and encourages relatively complete contracts.” In the context of this paper, we define institutions as institutions — in the sense of Hall and Soskice (2001) — which are not of the ‘market’ type. They thus include standard labor market institutions such as collective bargaining and employment protection legislation, but are not limited to these.

<sup>2</sup>Wage polarization is defined as the simultaneous growth of high and low wages, relative to wages at the middle of the distribution, that has been observed in the US during the 1988-2004 (see e.g. Autor et al., 2006) and the 1990-2016 (see e.g. Fortin and Lemieux, 2018) periods.

*Capitalism* approach introduced by Hall and Soskice (2001) — between different institutional features operating at different levels. Last but not least, our strategy allows extended cross-country comparisons (we compare fifteen European countries and the US). Data on public sector membership is indeed available at the micro-level for an important number of European countries. More particularly, it is available in harmonized European Community and European Union micro-datasets which also cover, for the time periods we are interested in, the other variables required for our decomposition exercise. This is not the case for data on core institutional features such as union coverage or membership.

The anonymized datasets used in our decomposition exercise are the European Community Household Panel for the 1994-1996 period and the European Union Statistics on Income and Living Conditions for the 2014-2016 period. We decompose the change in wage ventiles between these two periods.

Our results indicate that depending on the political economy of the country considered and on the reforms of the public sector that have been undertaken, the impact of the set of institutional features exhibited by this sector can be of three main types. First, this impact can be anti-polarizing. In that case, workers located near the middle of the wage distribution benefit from institutional mediation in comparison with those located at the bottom and top end of the distribution. This is the case for countries such as Germany and the Netherlands. Second, the institutional difference between the public and the private sector can simply mitigate wage polarization. In that case, it flattens the pattern of change in wage quantiles: their growth is still higher at the bottom and the top of the distribution, but the difference with the middle is less important than in the previous case. Ireland and the US exhibit such a pattern. Finally, important institutional reforms of the wage-setting process may have been undertaken in the public sector. In this last case and due to some catch-up phenomenon, the polarizing pattern can be even more important in the public than in the private sector. This is the case for Portugal and the UK.