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# Why did the wage share fall? Industry level evidence from Austria

Alexander Guschanski, Özlem Onaran

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## 1. Introduction

There has been a significant decline in the share of wages in GDP in both developed and developing countries since the 1980s. This was accompanied by another trend towards greater inequality in personal income distribution, particularly by increases in income shares of the top 1% of the distribution.<sup>1</sup> These developments indicate a clear reversal of the trends towards relatively egalitarian income distribution during the post-war era. This paper analyses the determinants of the wage share (labour compensation as a ratio to value added) using sectoral data for Austria, while also comparing our results with selected OECD countries.

Previous research has highlighted processes such as technological change, financialisation, globalisation, changes in government policy, personal income inequality, and labour market institutions to explain the decline in the wage share. Since many of those factors are either determined on a sectoral level or have developed differently across sectors and countries, a sector-by-country analysis has several advantages over previous research that uses country-level data or pools countries with different institutional frameworks. Furthermore, while country-level analysis always faces the question whether the decline in the wage share captures changes in sectoral composition rather than a decline of the wage share within sectors, we are able to isolate the within sector development of the wage share, and are able to abstract from changes in the sectoral composition. In fact, we find little evidence to attribute the decline in the country-level wage share to a change in the sectoral composition of the economy, since the wage share decreased in most of the sectors simultaneously.

We compile a comprehensive sector-level dataset of nine OECD countries (Austria, Denmark, France, Germany, Italy, Spain, Sweden, the UK, the US) for the period of 1970 to 2011,<sup>2</sup> which allows us to trace the developments in the wage share across high and low skilled sectors and within manufacturing and service industries. Our findings provide new insights with regard to the drivers of falling wage share. By conducting country specific estimations, we analyse how institutional differences in industrial rela-

tions, as well as social security and welfare regimes affect the wage share. While Austria is the focus of our analysis in this paper, we compare our results with estimations for Denmark, France, Germany, Italy, Spain, the UK, and the US.<sup>3</sup>

We confirm previous research based on the analysis of pooled aggregate county data attributing the decline in the wage share to financialisation, globalisation and a decline in bargaining power of labour; however, we find that these factors impact countries and skill groups within countries differently. Thereby we confirm the utmost relevance of country specific institutional setting in determining income distribution. In Austria, union density and household debt appear to be the strongest drivers of the decline in the wage share. Although we also find evidence for some negative impact of technological change, albeit not robust, our results indicate that the increase in income inequality is not inevitable but can be altered by political and institutional decisions.

The remainder of the paper is organised as follows. Section 2 provides a short review of the theoretical literature the determinants of functional income distribution from the perspective of different schools of thought as well as an overview of the empirical literature. Section 3 introduces our data and the stylised facts. Section 4 presents our estimation methodology and expected results based on the theoretical considerations introduced in section 2. Section 5 presents the estimation results and section 6 concludes.

## 2. Literature review

The issue of increasing personal income inequality, in particular earnings inequality, has attracted a significant amount of research. In contrast, changes in functional income distribution, i. e. the fall in the share of wages in GDP have only recently been the subject of research with an aim to pin down the effects of technology, globalisation, and changes in the bargaining power of labour. Different economic schools of thought developed distinct starting points for their analysis of functional income distribution.

The neoclassical approach, which also forms the basis for the New Keynesian analysis, starts with a production function with two factors: capital and labour. The relative income shares of labour and capital are determined by technology. If a firm produces in a fully competitive market with full-capacity utilisation and the production function is characterised by constant elasticities of substitution between capital and labour the relative income shares of the productive factors are determined by their marginal productivity which is technologically given by the employment elasticity of output. Hence, the focus on technological change which characterises