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# **Macroeconomic Determinants of the Labour Share of Income: Evidence from OECD Economies**

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## Macroeconomic Determinants of the Labour Share of Income: Evidence from OECD Economies

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**Summary:** The study investigates the relationships between the labour share of income and several macroeconomic variables – the GDP growth, inflation, unemployment, as well as GDP gap and capacity utilization – in industrialised economies between 1960 and the 2010s. Three complementary hypotheses that relate macroeconomic determinants to the labour share dynamics are considered: 'overhead labour' hypothesis, 'realization theory/wage lag' hypothesis and the 'rising strength of labour' hypothesis. The study employs a sequential procedure: testing for the stationarity properties of the variables, using bounds test to identify the presence of cointegrating relationships, and estimating long-run relationships using ARDL or OLS methods. The results show that all three hypotheses are supported only in a limited number of economies, whilst in the majority of cases only certain relationships are prominent. On the whole, the GDP growth rate, the unemployment rate, and to a smaller extent capacity are found to be the principal determinants of the labour share, while change in the level of prices is of subsidiary importance.

*Keywords:* labour share; time series; macroeconomic determinants

*JEL Classification:* C22, E25, J30

### 1. Introduction

The functional distribution of income between capital, labour and land, its determinants, and the broader and lasting economic implications have long been the central themes of classical economics and have remained an important area of investigation in contemporary economic thought (Kramer, 2011).

The analytical issues pertaining to functional distribution are numerous, including the relationship between factor income and personal income inequality (Ryan, 1996); multiple types of income and the relationship between the analysis of income at national and household levels (Atkinson, 2009: 5-8); the effect of factor income inequality on the social dynamics, and the effect on structural torsions in the society and broader prospects of capitalism (Glyn, Suttcliffe, 1972), the long-term stability or trends in the levels of wages and profitability (Kalecki, 1954; Kaldor, 1961; Blanchard, 2006; Feldstein, 2008), convergence and equalization in wages and profits (Vaona, 2011; Izyumov, Vahaly, 2014).

In the heterodox and Marxist economics, the dynamics of factor income distribution is analysed explicitly as a class conflict, whilst in the neoclassical school it is conceptualized as the variation in and divergence between wages and productivity. Being a salient political and policy issue, the problem of the factor income distribution attracted attention in the 1970s, when the post-war 'grand accord' between labour and capital (whereby organized labour was getting increases in real wages and share in economic prosperity in exchange for political loyalty and cooperation) started to unravel and to undergo a series of modifications, becoming a more liberal and less regulated order. Likewise, the issue became prominent in the post-GFC world, discussed in the context of persistent unemployment, deindustrialization, and the debate around stagnation and the deceleration of growth rates and the revival of profit rate (Brenner, 2006; Dumenil, Levy, 2004).

The majority of theoretical and empirical analyses concerned the structural factors behind the stagnation of real wages and the fall in labour share: the weakening of labour's collective bargaining power (Bassanini, Duval, 2006); privatization and deregulation (Torrini, 2005); globalization, trade openness and capital flow liberalization (Jayadev, 2007); the changing structure of the economy and the fall of labour share across and within sectors (De Serres et al, 2001; Lawless, Whelan, 2007); technological change and factor substitution (Acemoglu, 2003); demographic factors and the ageing population (Schmidt, Vosen, 2013).

Another section of the literature considers labour share in relation to the macroeconomic performance of the economy and specific macroeconomic variables (Weisskopf, 1979; Sherman, 1991). This focuses on empirical analysis in a limited number of economies (USA and Australia), given the economic data constraints and the earlier debates on the cyclicity of the wage and productivity that took place amongst US economists (Bernanke, Powell, 1986). The empirical methods include earlier generation techniques, such as Partial Adjustment Differential Equation Model (PADEM), ordinary least squares (without prior examination of the stationarity properties of the variables), and Johansen cointegration.

The purpose of the paper is to contribute to the analysis of macroeconomic determinants of labour share by introducing certain novelties. Firstly, in contrast to earlier studies that focused on a single economy, this paper considers a reasonably complete set of industrialised economies over a period of several decades, including the recent period after the global recession of 2008-09. Secondly, more advanced econometric techniques that address the

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