

## The contradiction between income distribution and growth – It's all about the wealth!

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The contradiction – or lack thereof – between economic growth and (income) distribution has been at the centre of the economic debate for centuries. In the view of the Classical Economists and Marx, economic growth is mainly driven by capital accumulation which depends on profits and thus the functional income distribution. A shift of the distribution in the favour of workers (i.e. a lower profit share) would reduce the growth rate of the economy. In these models, there is thus a clear contradiction between the interests of workers and capitalists regarding the distribution of income. Furthermore, there is a contradiction between growth and distribution, because a more equal income distribution would harm capital accumulation and thus economic growth. However, for Marx, the functional income distribution was determined by a reserve army of workers which tied wages firmly to subsistence level.

Neoclassical economics, which came about in the late 19<sup>th</sup> century, shifted the focus of economic theory to the allocation of scarce resources by efficient markets. In neoclassical growth theory, economic growth is primarily driven by supply, i.e. technological change and population growth. Neoclassical economics disposes of the idea of different socioeconomic groups or classes with different interests, and states that the distribution of income among the factors of production, i.e. labour and capital, is technologically determined. There is thus no class conflict; however, there is a trade-off between more equality and growth.

Post-Keynesians brought classes and thus conflicting interests back into growth theory. In Post-Keynesian theory, economic growth is driven by capital accumulation and thus aggregate demand. Building on the works of Michal Kalecki, Post-Keynesians developed models in which a more equal income distribution (i.e. a lower profit share) would unambiguously increase capital accumulation and thus economic growth. In these models the saving rate of capitalists is assumed to be higher than those of workers, and a higher profit share would consequently reduce demand and the growth rate. This outcome hinges upon a strong effect of demand (which is reflected by capacity utilization) on investment (as opposite to a weak effect of profitability). Demand and growth are thus 'wage-led'. In these models, there is a conflict of interest between workers and capitalists regarding income distribution equal to Classical/Marxian economics. In contrast to the preceding theories, however, a shift in the income distribution in favour of workers would stimulate growth, so that there is no contradiction between a more equal income distribution and faster economic growth. The aim of these models was to explain stagnation in 'mature' economies, in which the functional income distribution had shifted in favour of capitalists.

In their seminal paper, Bhaduri and Marglin (1990) extended these models and allowed for a direct (and thus stronger) positive effect of the profit share on capital accumulation. In their model, the effect of a change in the functional income distribution on growth is ambiguous and cannot be determined a priori. A rise in the profit share on the one side reduces consumption because of differential saving rates for workers and capitalists. On the other side, a higher profit share increases investment. The overall implication for demand can be positive or negative, depending on the magnitude of the two effects. The model thus opens up the possibility of 'profit-led' growth, in which a more unequal income distribution raises capital accumulation and thus the growth rate. In this case, we are back at Classical/Marxian economics, where we are confronted with a conflict between a more equal income distribution and higher economic growth.

The possibility of both wage-led and profit-led growth in the Bhaduri and Marglin (1990) model, which permitted both for a contradiction and a consistency or confluence of growth and a more equal distribution, triggered a lively debate in Post-Keynesian economics. The bulk of this literature (e.g. Stockhammer and Ederer 2008, Stockhammer et al. 2009, Onaran and Galanis 2014) aimed at empirically analysing whether demand and growth in a certain economy are wage-led or profit-led. Most of the contributions find that small and open economies are typically profit-led whereas larger, more closed economies or the world economy as a whole are wage-led. Some recent contributions to this debate emphasize non-linearities and the possibility of regime-switching, or focused on the possibilities of wage-led growth in the context of developing economies.

A typical feature of these models is that they do not take wealth and the wealth distribution into account. Wealth however is usually very unequally distributed between groups (Rehm and Schnetzer 2015) and classes (Rehm et al. 2016), which has important consequences for income distribution and thus economic growth. On the one hand, owning a part of the capital stock in the form of productive wealth entitles to profit income. On the other, the wealth distribution itself is determined by the distribution of incomes and (differential) saving rates, since wealth is accumulated over time. A change in functional income distribution has thus immediate (short-run) implications for demand, but also (long-run) effects on wealth accumulation and distribution, which in turn have repercussions on income distribution and growth. These implications have been neglected by the wage-led/profit-led debate so far.

We aim to close that gap by building a Post-Keynesian model in the tradition of Bhaduri and Marglin (1990) which incorporates an endogenous wealth distribution (Ederer and Rehm 2018; Ederer and Rehm 2019). We distinguish between the short-run and the long-run and show that a rise in the profit share may decrease (wage-led) or increase (profit-led) demand and growth in the short-run. A rise in the profit share, however, entails a more unequal distribution of wealth in the long-run, because capitalists accumulate more wealth over time than workers. A rising wealth concentration in turn entails a higher share of profits accruing to capitalists, which shifts income distribution in their favour. This unambiguously reduces demand and growth because the saving rate of capitalists is higher than those of workers. The negative (long-run) effect of wealth distribution on consumption is not counteracted by a positive effect on investment as it is the case with the (short-run) effect of a shift in the functional income distribution. Incorporating the distribution of wealth into the Bhaduri-Marglin type of model thus makes wage-led demand regime even more wage-led in the long-run, whereas it makes a profit-led regime less profit-led or even wage-led. The model thus mitigates to a certain extent the contradiction between a more equal income distribution and economic growth that was reintroduced by Bhaduri and Marglin (1990).

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