

Higher qualification and its transfer into innovation are bound to new knowledge, which ultimately can only be produced by human beings. In an innovation-driven economy the new knowledge will be partly stored in private firms and property rights may augment capital intensity, but production of tacit and explicit knowledge takes place in the „knowledge industry“ with high labour intensity and only product innovation may need high capital intensity. In an innovation-driven economy, labour gains of importance and higher labour productivity depends less on capital intensity, than on qualification. Both in current production¹³ and in R&D qualification has become a limiting factor and wages are not solely a residuum. If we distinguish between simple and qualified work¹⁴ the total quantity of labour inputs may have risen and only the labour-saving effect of prevailing high capital intensity reduces the employment efficiency of economic growth. If the high innovative capacity of the knowledge economy would be applied for augmenting resource productivity, capital intensity could be reduced and more employment would be created. More labour would be needed¹⁵ and wages would not fall. Contrary to a mechanistic price substitution „intelligent production“ (grids, networks etc.) will spare natural capital for which higher labour inputs are a precondition. Europe 2020 has specified a comprehensive European innovation system, which includes growingly R&D for higher resource efficiency, but the general orientation toward higher labour productivity by higher capital intensity prevents an effective transition to lower growth.

High economic growth with growing capital intensity entails also redistribution. If we distinguish between quantities and prices and quantitative labour intensity has risen, this does not imply that in terms of prices, i.e. the wage-profit relation must rise. Neoclassics and Postkeynesians agree that the volume of profits depends on the price volume of investments ($P = (I)$) and higher capital intensity in terms of prices augments the profit quota also in cases where the physical labour intensity has risen. In fact, the wage quota has diminished considerably during the last decades. As production is mainly determined by physical quantities and income distribution depends on social relations (J. St. Mill) income distribution may have decoupled from the system of quantities. Rough estimations of deflated factor productivities can hardly explain income distribution. During the last five decades deflated labour productivity grew about threefold of productive capital productivity, which would have declined, if resource productivity would not have marginally risen. Even if the income shares (P/L) would have remained constant large explanatory gaps exist, possibly due to the enormous accumulation of unproductive financial capital.

4. Economic growth, economic welfare and globalisation

Higher resource productivity can contribute to a reduction of distributional tensions by a higher consumption quota, but the decoupling of prices and quantities will still remain and higher surpluses in terms of prices enhances economic growth. Therefore, economic growth in industrial countries can be reduced by real capital exports and not by export surpluses. Higher resource productivity allows a higher consumption quota in industrial countries and lower capital intensity makes