Digitization, Inequality and the Future of Economic Organisation

Abstract for the IIPPE 2019

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Digitization leads to contradicting tendencies regarding the degree of monopolisation in high income economies. On the one hand, there is the rise of „superstar“ firms (Autor et al. 2017, De Loecker/Eeckhout 2017) with ever-increasing market shares due to their innovation, productivity and thus competitiveness advantages, as well as the specific characteristics of sharing economies, which benefit large players (Furman/Seamans 2018). On the other hand, new technologies open up possibilities for small start-ups to gain market access through innovations. A priori there is thus no clear-cut effect of digitization on the degree of monopolisation. The situation is complicated further by second-round effects, as for instance large internet companies have started acquiring rising competitors, so that the counter tendency of new foundations may merge into a higher-level tendency of monopolisation. Furthermore, it remains an open question whether digitization and industry 4.0 (Pfeifer 2017, Reischauer 2018) are a qualitatively different development, and how this differs from the previously observed technological progress. However, if technological progress raises productivity and thus saves labour (Shaikh 2016), then the basic tendency will be one of concentration of capital in the hands of few firms. Possible consequences are unemployment (Ford 2015, Brynjolfsson/McAfee 2014), a falling labour share (Autor et al. 2017), and rising wealth inequality.

This paper will specifically investigate the question whether digitization leads to increasing concentration at the sectoral level in Germany. It will measure a multi-dimensional indicator set (Unger et al. 2017) to measure digitization, and use firm level data to estimate concentration. It will then connect this data with wealth data from the HFCS to map the connection between firm ownership in digitized sectors and wealth inequality. Finally, the paper will discuss policy measures for a stepwise reduction of inequality between income from labour and capital on the one hand, and wealth inequality on the other hand.

It is hoped that through this analysis a better our understanding of recent economic trends, such as technological developments, can be improved. This will in turn allow to better understand the future of economic organisation and the challenges faced by economics as a discipline in dealing with them.

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