Interindustry Differences in Rates of Return – New Evidence from Germany

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Researchers have found plenty of evidence that profit rates vary considerably across industries. Moreover, existing evidence suggest that these interindustry differences in rates of return are not temporary but tend to persist. This is at odds with standard theories of open and (perfectly) competitive markets that underlie, for instance, applied empirical work in growth accounting.

At the same time, several studies have shown that the profit rate (as defined in economics) is not adequately measured by the accounting rate of return. The latter - in commercial as well as in national accounts - is calculated as operating profit related to a number of classified, mostly tangible, assets. Recent research on intangible capital has made transparent that these assets cover only a part of the total capital employed in firms. Moreover, depending on their industry, firms are exposed to different degrees of risk. Since capital employed in more risky firms demands a risk premium, rates of return have to be adjusted accordingly.

These issues are central to our analysis of interindustry differences in rates of return. We proceed in two steps. Initially, we use data on German industries to study sectoral differences in rates of return, as conventionally measured. We document the magnitude, structure and persistence of these differences and relate our empirical results to the explanations for such differences that have been offered in the literature. To do so, we take advantage of the EUKLEMS database with its detailed information at the sectoral level. It allows us to follow German industries over a period of more than 25 years.

In the second part of our analysis, we focus on the five most recent years (1999 - 2003) in our data, for which we have the most detailed information. It combines EUKLEMS data with additional information from the INNODRIVE project on intangible capital and the dispersion of return rates between firms within an industry. We use this combined data to study if and how return rate differences change if we adjust for sectoral differences in intangible capital and risk aversion.