

# IARIW-ESCoE Conference

## “Measuring Intangible Assets and Their Contribution to Growth”

---

### Management Quality as an Intangible Asset: Initial Results from the Management and Expectations Survey 2020

*Jakob Schneebacher, UK ONS, jakob.schneebacher@ons.gov.uk*

*Josh Martin, UK ONS, josh.martin@ons.gov.uk*

Intangible assets, previously hidden within total factor productivity estimates (TFP) in production functions, are increasingly measured and treated as inputs in their own right. This crucially not only allows us to estimate their contribution to output and output growth explicitly, but also to treat intangible asset accumulation as an economic choice. One intangible important to output, growth and productivity is managerial or organisational capital, as demonstrated for instance by Bloom et al. (2013), Broszeit et al. (2016) and ONS (2017).

Businesses devote significant resources to improving their efficiency, instituting improvements to their processes and organisational structure –investments in what we might call “organisational capital”. In the intangibles measurement literature, this investment has usually been measured through purchases of consultancy services or similar, and the time cost of managers in the business (see Martin, 2019). Squicciarini and Le Mouel (2012) however outline another method: to gather information from companies about their management practices, and then valuing these in some way.

This project represents an attempt to measure as accurately as possible the current distribution of managerial capital across businesses in the UK and to examine its determinants and effects: the Management and Expectations Survey 2020 (MES 2020). The MES 2020 is a large, representative survey undertaken by the ONS in collaboration with ESCoE (Economic Statistics Centre of Excellence) researchers. It follows in the footsteps of (and expands upon) an earlier survey, MES 2017.

This paper first describes the survey design and sampling methodology underlying MES 2020, and how they allow the data to be linked with other surveys and administrative datasets. MES 2020 is a stratified random sample that was sent to roughly 50,000 businesses, drawn from the Annual Business Survey (ABS) and MES 2017, in early November 2020. Respondents were asked about their management practices in both 2019 and at the time of completing the survey (in late 2020/early 2021), as well as industry and firm level expectations for the upcoming year and various firm-level characteristics. The sample frame of MES 2020 was designed to facilitate linkage with several other relevant surveys, such as MES 2017 and multiple waves of the ABS. This raises the possibility of answering a rich set of questions surrounding asset accumulation, input complementarity and firm productivity. This paper suggests some answers, and outlines research avenues for others.

We then provide initial empirical results from the MES 2020. First, we ask: are the responses we receive representative? We present estimates of response rate determinants and explain ways to deal with selection issues. Second, we ask: how well-managed are UK businesses today? We break down the results along the dimensions of size, industry, high-level region and ownership type, in line with similar studies, and provide some descriptive regressions of the determinants of management practices. The level of both size and industry detail in MES 2020 is significantly greater than in the earlier wave. Third, we ask: how has the distribution of managerial capital changed over time, both since the last wave in 2017, and also during the economic upheaval created by CoVID-19? We hope that our results may shed some additional light on the performance of businesses during a time of disruption to usual work practices and smooth supply chains.

Finally, MES allows us to examine changes in management practices at the firm-level, enabling us to tie differences in organisational capital between firms to economic choices made by those very same firms. By linking MES 2020 with other business survey data, including the Annual Purchases Survey run by ONS, we can estimate the effect of inputs into organisational capital formation (such as purchases of consultancy services and the hiring of managerial labour) on management practices. Together, these insights help to validate the approach taken in the intangible investment measurement literature.

Overall, MES 2020 represents an attempt to expand and refine measurement of an important type of intangible asset, managerial practices. We hope it provides a starting point for more in-depth analysis surrounding the role of managerial capital. How is it accumulated? How does it enter (and perhaps shape) the production function? What is its marginal contribution to output, and output growth? More precise data, and better integrated data, create the space to answer these important questions.