

A Critical Look at the Evidence for Short-Termism
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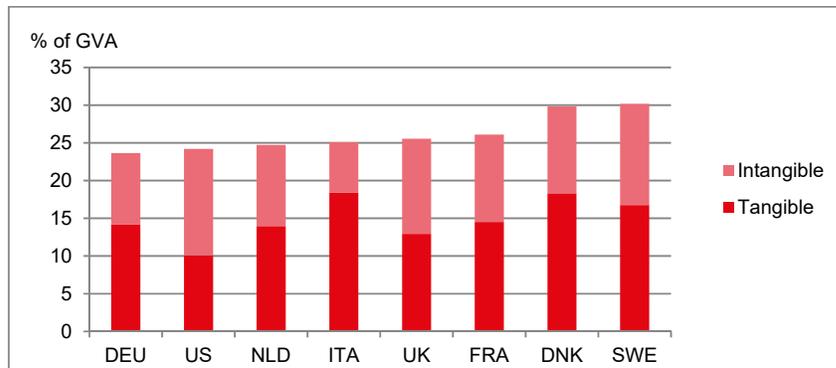
This is adapted from my 17/4/17s response to the UK government's Green Paper on Industrial Strategy. The full response is at <http://bit.ly/AlexIndStr>.

- 1.1 Before we start to design policies to improve investment, we must *critically* diagnose the extent of the underinvestment problem to begin with – just as medical diagnosis precedes medical treatment. The Green Paper prevents some compelling evidence that the UK underinvests in both fixed capital investment (p63) and R&D (p26) than other countries. However, the evidence is far from one-way.
- 1.2 First, it is unclear why we should measure investment using *inputs* (expenditure) rather than *outputs* (value created by the expenditure). We should not measure the quality of investment by simply the amount of money spent, without taking into account what it is spent on or the results of this expenditure.
 - 1.2.i To start with a simple analogy, Leicester City invested far less money than Manchester City in the 2015/16 football season but clearly invested far more effectively as they won the league.
 - 1.2.ii The Green Paper correctly recognises that it is a major problem that UK workers take five days to produce what a US, French, or German worker produces in four. UK workers “invest” more hours than foreign workers to generate the same output. Just as the output, not the input, is the correct measure for labour productivity, it is the correct measure for investment efficiency.
 - 1.2.iii Studies claiming underinvestment in the UK quote the UK's low level of investment as a % of GDP, or as a % of sales. But, it could be that the UK needs less fixed capital to generate the same amount of GDP or sales – perhaps because it has better machines or management practices. Using less labour to generate the same output is classified as “high productivity” but using less capital to generate the same output is classified as “underinvestment.”
 - 1.2.iv Turning from conceptual arguments to large-scale evidence, Brav, Jiang, Ma, and Tian (2018) highlight the incorrect inferences that can arise from measuring investment with inputs, rather than outputs.¹ Hedge fund activism leads to companies lowering R&D, the supposed “smoking gun” suggesting that hedge funds are short-termist. However, despite the fall in innovation input, innovation output actually improves, in terms of both the number and quality of future patents. Hedge funds lead to companies refocusing their R&D strategy. Responsible companies do not just invest willy-nilly; they do so judiciously.

¹ Brav, Alon, Wei Jiang, Song Ma and Xuan Tian (2018): “How Does Hedge Fund Activism Reshape Corporate Innovation?” *Journal of Financial Economics* 130, 237–264.

1.3 Second, *even if* we wish to measure investment using inputs, statistics using fixed capital investment are misleading in today’s intangibles-based economy. The statistics using R&D do not address this, because R&D is only one component of intangibles. The commonly-quoted investment figures ignore investment in training employees, advertising to build a brand, implementing superior management practices, or redesigning strategy, sales techniques, or production processes. The following Figure from The Purposeful Company Interim Report shows that, if intangible capital is included, the UK is less of a conspicuous outlier:

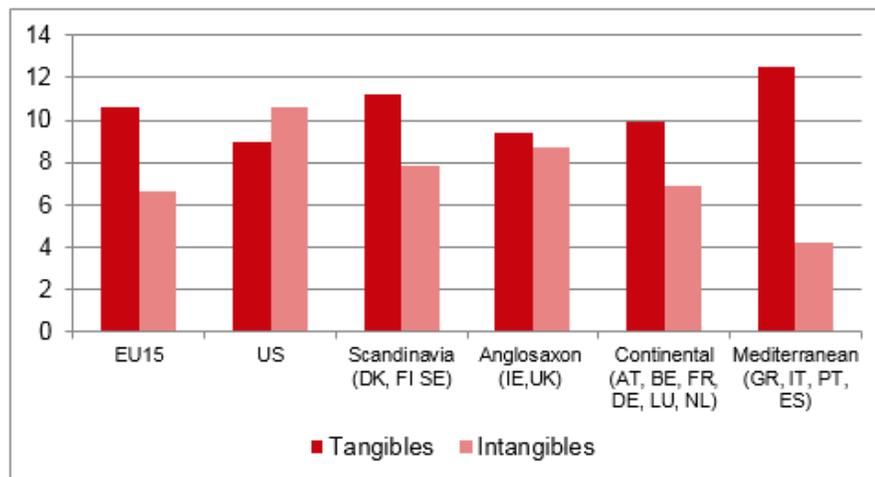
Figure 4.2: Total (tangible and intangible) market sector GVA shares (1995-2010)



Source: INTAN and Llewellyn Consulting.

In addition, the figure and narrative below shows that intangibles are particularly important in the UK:

Figure 4.3: Tangible vs. intangible GDP shares (average between 1995–2009)



Source: Corrado, Haskel, Jona-Lasinio and Iommi (2013)

1.4 Evidence on the UK’s poor labour productivity should similarly be interpreted with caution. These figures do not deal properly with the problem of measuring service sector productivity in an economy that is 79% services², and do not make meaningful international comparisons, e.g. ignoring differential unemployment rates. On certain measures of labour productivity,

² <http://visual.ons.gov.uk/five-facts-about-the-uk-service-sector/>

France is superior to the UK but has a much higher unemployment rate, and it is not unreasonable to assume that the UK's higher employment rate includes a marginal tranche of workers with below-average productivity.

- 1.5 There are many academic and practitioner studies claiming that “underinvestment” and “short-termism” are problems, but they should also be interpreted with caution. I consider a 2017 study by the McKinsey Global Institute which finds “that companies we classify as “long term” outperform their shorter-term peers on a range of key economic and financial metrics”. The reason for choosing this study as an example is that McKinsey is a premier organisation that I deeply respect, and produces very influential studies whose conclusions are supported by the evidence. (It would be easy to poke holes in a lower-quality study.) However, short-termism is such a complicated topic that it is difficult for even the most elite researchers to nail down the issue conclusively.
 - 1.5.i The study claims that if all companies had adopted longer-term horizons, this would have added \$1 trillion in investor returns, 5 million jobs, and \$1 trillion in GDP. With such huge numbers, it is not surprising that the research has had substantial effect, similar to a weight-loss pill that promises that you will lose weight overnight. However, while most discerning people would not take the weight loss claim, many have done so with the long-termism claims. For example, a *Harvard Business Review* article writes that the above claims “had me at hello” – the writer accepted them uncritically because he wanted to believe that the claims are true.³
 - 1.5.ii The study constructs an index of five measures for a company's horizon, and finds that these measures are associated with long-term performance. However, most of these measures are measures of earnings quality, not short-termism. For example, one measure is accruals, and it is well-known since Sloan (1996) that accruals are linked to low returns, since it suggests low-quality earnings.⁴ The “margin growth”, “quarterly management”, and “difference between EPS growth and true earnings growth” are also measures of earnings quality. Essentially, the study finds that companies with higher-quality earnings perform better (which is already well-known), rather than companies with a long-term outlook perform better.
 - 1.5.iii The one measure that is not a measure of earnings quality is investment. However, here reverse causality is a major issue. It may not be that higher investment causes higher future performance, but when a company expects positive future prospects, it should invest more today. (Indeed, this is what management consultancies tell their clients).
 - 1.5.iv Indeed, many other experts also argue that “short-termism” is more nuanced than studies claim, e.g. Larry Summers's *FT* article “The jury is still out on corporate short-termism” and other writings. Note that, if anything, I have an interest in accepting uncritically any evidence that short-termism is a problem, since the bulk of my own research is on the importance of addressing short-termism. Despite this, I still must be

³ Martin, Roger L. (2017): “What If Investors Who Held Their Shares Longer Got More Voting Power?”

⁴ Sloan, Richard (1996): “Do Stock Prices Fully Reflect Information in Accruals and Cash Flows about Future Earnings?” *Accounting Review* 71, 289-315.

critical of the evidence. Short-termism is a problem, but how to measure it, and what causes it, is far more nuanced than commonly believed.

1.5.v The authors use the technical jargon “natural experiment” to suggest that they have identified causality, rather than correlation. “Natural experiment” is indeed a valid methodology to identify causality, so using these words may convince some readers that the authors have done so. However, the researchers do not conduct even close to a natural experiment.

- They use “natural experiment” to describe companies that changed from a short-term to a long-term outlook. A natural experiment is an exogenous shock which comes from outside the system, for example a law change. (This is similar to a clinical trial, where the experimenter chooses randomly whether the patient gets the drug or the placebo – the patient has no control over this choice). However, moving from a short-term to a long-term outlook is an endogenous choice that the firm controls. It may well be that, when firms expect the outlook to be positive anyway, this is when they are able to invest more and improve the five components of their index. (This would be similar to a clinical trial where the patient chose whether she gets the drug or placebo, which is invalid)
- For further detail, please see “A Layman’s Guide to Separating Causation from Correlation ... and Noticing When Claims of Causality are Invalid” (www.alexedmans.com/correlation)

1.5.vi While the authors do state that their methodology “does not enable us to assert causality between long-termism and outperformance or short-termism and underperformance”, this is more a fine-print disclaimer, similar to a mutual fund that advertises its past performance but then has a footnote saying that “past performance is not a guide to future returns”.

- The statements that a longer-term outlook would have added \$1 trillion in investor returns, 5 million jobs, and \$1 trillion in GDP, which McKinsey heavily advertised, are causal statements.
- The authors initially titled their *HBR* article “Finally, Proof That Managing for the Long Term Pays Off”, which is also a causal statement. (This can be seen from the article’s URL, <https://hbr.org/2017/02/finally-proof-that-managing-for-the-long-term-pays-off>). Due to reader concern, *HBR* subsequently changed the title from “Proof” to “Evidence”.

1.6 Note that none of the above is to argue that underinvestment is not a problem in the UK. Any attempts to improve the output of investment, and labour productivity, will be critically important to the UK’s future. They are only to be critical on identifying the causes of underinvestment and low productivity, the specific areas, and the magnitude of the problem. Again, using a medical analogy, even if we accept that something is an issue, the *causes* determine the nature of the treatment (e.g. surgery or medicine), the *specific areas* determine the scope of the treatment (which area to treat), and the *magnitude* determines the severity of the treatment (e.g. amputation or a cast).