1. Introduction

Improving business investment is a high priority for the Department of Business and Trade. To deliver a more productive economy, businesses need to invest to become more efficient and innovative. Ultimately, investment in productive capital is required to take advantage of UK's skilled labour force and business specialisms, for example, by providing and enhancing infrastructure and machinery.

Evidence suggests that the UK underperforms on business investment. The UK consistently ranks in the bottom 10% of OECD countries for overall investment intensity and has had the lowest share of investment in GDP among G7 countries for 24 out of the last 30 years¹.

Understanding the causes for our low investment performance is essential to improve our growth prospects, as research has shown that the UK's weakness in investment accounts for a large proportion of our productivity gap with other countries². While it is well documented that the UK has consistently underperformed its peers in terms of investment, it is not clear why.

This new analysis has been carried out to help fill evidence gaps in business investment research, as we have limited information on the patterns and profiles of those businesses who are and are not investing. As this is experimental research, the analysis should be interpreted with caution, as the data used is subject to revisions and the methodology is still being refined.

2. Data source(s)

This research primarily relies on Annual Business Survey (ABS) microdata, enabling a detailed analysis of investment trends at the firm level and allowing us to explore patterns across various industries and firm sizes. The ABS microdata in particular allows for insights into the specific characteristics of individual firms, meaning that we can examine in detail their distribution, rather than relying on group averages.

The ABS is an annual survey of businesses covering firms in the production, construction, distribution, and services industries. The ABS provides a number of high-level indicators such as total business turnover, capital expenditure, purchases, and total employment costs.

The ABS is the largest business survey conducted by the Office for National Statistics (ONS) in terms of the combined number of respondents and variables it covers (62,000 questionnaires despatched in Great Britain, with around 600 different questions asked). In Northern Ireland, the survey is conducted by the Northern Ireland Statistics and Research Agency (NISRA), and questionnaires are sent to around 11,000 businesses.

¹ The Institute for Policy Research (2024), Revealed: Investment in UK is lowest in G7 for third year in a row, new data shows, <u>link</u>

² Reenen and Yang (2023), Cracking the Productivity Code: An international comparison of UK productivity, <u>link</u>

High-level results from the ABS survey are published on the <u>ABS release page</u> on the ONS website. The ONS also provides accredited researchers access to ABS microdata to conduct detailed analysis through its secure data portal, the Secure Research Service.

We have also explored linking the ABS microdata with other ONS surveys such as the Management Expectations Survey (MES). This was a helpful exercise to understand how management skills can affect business investment decisions. <u>Read the ONS guidance for a better understanding of the MES methodology</u>.

3. Measuring business investment

The ABS asks businesses to report their capital expenditure on the acquisition of assets such as land, buildings, machinery, equipment, computer software, patents, and architectural/engineering plans, among others (refer to Section E of the <u>ABS Questionnaire</u> <u>2018</u>). In the questionnaire, businesses are asked to provide the total value spent on acquiring these capital assets over the past year, subtracting any disposals. We use this variable (wq600) as a measure of their total investment expenditure, which serves as the best available proxy for business investment.

4. Reporting methodology

This analysis primarily uses the ABS dataset, maintained by the ONS. The ABS dataset covers a representative sample of businesses in Great Britain rather than the entire business population. Notably, businesses in Northern Ireland are excluded from this analysis.

The ABS is a sample taken from the non-financial business population. We use the ABS survey design weights to gross the sample to be representative of the non-financial business population.

Adjusting for negative GVA

The inclusion of businesses with negative output can significantly skew aggregate results. For instance, many startups have negative output during their early years – because their costs exceed their revenues, until they break even. Including these businesses when calculating average investment intensity (investment over GVA) skews the figures, as the negative GVA cancels out some of the positive GVA at the sector or economy level. To prevent this distortion, we have excluded businesses with negative GVA from our analysis.

Defining super investors

Early results of our analysis revealed that investment was heavily concentrated among a small number of businesses, with most of total investment in a given period coming from a few large investors.

We have classified the biggest investors in a given period as "super investors", using two different methodologies:



Each methodology has its strengths and weaknesses:

- Classifying super investors using the investment intensive (1) methodology may be biased towards smaller firms with lower levels of GVA, as investment here is a relative measure.
- Contrastingly, the outright investment (2) methodology may be biased towards larger firms with larger capacity to invest.

We have tracked the largest investors for the period of 11 years, both in terms of investment intensity and investment size.

5. Strengths and limitations of the data

Strengths of ABS data:

The ABS is the main resource for understanding the detailed structure and performance of businesses across the UK and is also a large contributor of business information to the UK National Accounts.

The ABS microdata can be used to explore investment trends at the firm-level, which can be helpful to analyse patterns across different industries, ownership type, and size bands.

Data can be also linked to other datasets, such as the Management and Expectations Survey (MES) and the Quarterly Capital Acquisition Survey (QCAS). This can provide researchers with more information in terms of the profile of businesses who are investing and the type of assets in which they are investing.

Limitations of ABS data:

As discussed, the ABS is not a longitudinal dataset and therefore the same businesses do not consistently appear each year. Larger firms are better represented since they are surveyed annually, unlike smaller firms, which are only sampled two years consecutively.

The two different methodologies for classifying super investors can affect the average results of categories that include SMEs, particularly in terms of size and sector distribution. This challenge is not of a concern when it comes to larger firms, as they are likely to appear on the data for the entire period analysed.

There are also more general concerns on the quality of the data. The nature of a sample survey means that firms may not respond to the survey accurately and the sample may not be fully representative of the population. We rely on the firms' best knowledge on how to respond at the time of the submission of the questionnaire and the size of the survey to support accurate representation.

5.B Further considerations

Following previous ONS publications, we have excluded the Real Estate (SIC 68) industry due to the volatility in its responses to the ABS survey and other data quality concerns. For instance, businesses in the Real Estate industry often engage in large capital transactions to acquire property from one another (i.e. transfers of assets rather than new assets). These transactions significatively overshadow those in other industries, whose capital transactions are more representative of the broader economy.

We have also excluded businesses with zero employment (empment), as well as businesses with null turnover (wq550) and total purchase (wq499).

It is also important to note that due to ONS quality control and revisions, this research may not align with official statistics.

This analysis has been conducted with the latest ABS version at the time of publication.

6. Users of the analysis

This analysis is intended for the following key users:

- Experts and researchers on business investment
- Policymakers, including HM Government

7. Further information and feedback

For additional comments or further information on the methodology used in this analysis, please contact:

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