

Inequality, firms, ownership and governance

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ABSTRACT

Levels of productivity have been low in the UK since the financial crisis of 2008 for two reasons. First, the UK has a highly centralized banking sector that provides predominantly short-term working capital. As a result, small- and medium-sized enterprises are dependent on equity sources to fund their creation and expansion that are not readily available outside of London. Second, ownership of listed companies in the UK is exceptionally dispersed amongst global short-term asset management firms. This has had adverse consequences for productivity and inequality within as well as between firms and regions.

Key words: firms; inequality; productivity; regional disparities; investment; R&D

Introduction

The UK has experienced an exceptionally low level of productivity historically and internationally since the financial crisis of 2008. This is reflected in a marked variation in productivity across firms by size, age and sector. In particular, there is a high regional variation in productivity across the UK with substantial disparities between the South and East, and the rest of the country. This, in turn, is associated with considerable regional income and wealth inequality. Alongside its poor productivity performance, there has been an exceptionally low level of business investment (fixed capital formation) and high regional variation in R&D.

In this paper, I suggest that two factors have contributed to this record. The first is the financial system and the funding of, in particular, small- and medium-sized enterprises (SMEs). Having once successfully funded the Industrial Revolution through a local banking system, the UK now has a highly centralized banking sector that provides predominantly short-term working capital. As a result, SMEs are dependent on equity sources to fund their growth and expansion. However, a large proportion of this goes to firms in the south-east of the UK and there has been a failure to connect pools of capital in London with the regions.

The second factor is the ownership and governance of firms. The UK has an exceptionally dispersed form of ownership of listed companies and an absence of owners of significant blocks of shares. Furthermore, having once had locally based individual shareholders, holdings of shares have moved progressively from domestic relatively long-term institutional investors to global short-term asset management firms. The result has been the demise of long-term domestic, locally based shareholders.

The consequence has been that the UK has extinguished both local-based banks and local shareholders that had close relations with companies they financed and owned. Instead, finance, ownership and governance have become highly centralized and disconnected from business. The result is a high level of regional

disparities in financing and governance, and the replacement of long-term relationships between investors and firms with short-term, transactional engagements. Those engagements have become increasingly focused on shareholder returns at the expense of the interests of other parties, with adverse consequences for aggregate productivity, diffusion of productivity gains between firms, inequality within as well as between firms, and regional disparities.

The growing level of inequality in particular in the UK and US has been the subject of much discussion and analysis. Some of that work has focused on aggregate data but there has been increasing interest in firm-level data as not only further evidence of the underlying causes but also the contribution of firms themselves to societal inequality. This contribution could come from both within-firm variations between, for example, those at the top and bottom of organizations and between-firm variations, in relation to inter-firm differences in pay.

To date, the analysis of firms and inequality has predominantly focused on the US. The article in this collection by [De Loecker, Obermeier and Van Reenen \(2024\)](#) represents one of the first attempts to provide an analysis of firms in the UK. The authors have undertaken an extensive and thorough analysis, overcoming as best as possible the many data limitations involved in performing such an analysis.

[De Loecker et al. \(2024\)](#) record that much of the conventional understanding and evidence from firm-level data in the US on productivity, wages, inequality, sales, mark-ups, profitability and business dynamism also applies in the UK. They produce extensive evidence on this for the UK using two sources of data: the Business Structure Database, which contains the population of all UK firms since 1997, and UK incorporated firms in Historical Orbis from Bureau Van Dijk—the FAME database.

Current understanding and evidence from firm-level data from the US points to declining productivity growth, stagnating real wages amongst low-pay workers, growing wage inequality, falling

Received: May 22, 2023. Revised: September 24, 2023. Accepted: October 13, 2023

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labour share of income, increasing concentration and mark-ups, increasing heterogeneity of productivity, increasing sales and mark-ups of companies, and a decline in the proportion of workers in young firms.

The evidence from De Loecker et al. (2024) for the UK is that:

- there are more large firms in the US than in the UK;
- there has been a stalling of productivity since the financial crisis of 2008;
- there has been a growing dispersion in productivity between leading firms and followers;
- there are similar patterns of dispersion in wage and productivity growth, and similar movements of average wages and productivity;
- there are growing mark-ups and dispersion of mark-ups;
- there is increasing market concentration;
- in contrast to the US, there is no overall decline in labour share of income but the change in labour shares mirrors the dispersion in productivity, wages and mark-ups; and
- there are some pronounced differences between listed and unlisted firms.

Results for UK firms are therefore very similar to those of the US, with the exception of an absence of the decline in labour share of income observed in the US. A main implication of the analysis is that increasing wage inequality in the UK may be due at least in part to growing wage inequality across firms, which in turn reflects growing productivity differentials.

De Loecker et al. (2024) suggest and discuss seven potential explanations for the results relating to: ‘winners take most’, the growing significance of intangible assets, the slower diffusion of productivity benefits, globalization, weaker competition policy, regulation and trade union countervailing power. They find that institutional differences between the US and UK are not for the most part consistent with similar firm-level results observed in the two countries. The winner-takes-all hypothesis is concentrated in too small a segment of the UK economy for it to be a compelling explanation of UK results, and instead the intangible assets, diffusion and globalization stories may be more relevant. De Loecker et al. (2024) conclude that in terms of policy implications there may be justification for shifting the burden of proof in anti-trust and regulatory cases from affected parties to firms and for strengthening the countervailing power of labour.

Their paper is an important and insightful contribution to the literature. What I want to do in this commentary is to complement its results and conclusions by raising three sets of issues. First, there is the question of whether De Loecker et al. (2024) have sufficiently emphasized the distinguishing characteristics of the UK and provided an adequate account of them. There are three that are considered below: the productivity puzzle, regional disparities, and the capital investment shortfall and R&D regional disparities. Second, I present an alternative account for the UK evidence based on the finance of firms, and their ownership and governance. Third, I consider the implications of this for productivity and inequality. Finally, I summarize my conclusions.

The productivity puzzle

The productivity slowdown since the financial crisis of 2008 is exceptional on several scores. First, as Crafts and Mills (2019) show very clearly in Figs 1 and 2, it is the largest deviation in productivity and productivity growth from trend in 250 years.

Second, at an international level, Goldin et al. (2020) record that the productivity slowdown between 2005 and 2018 was particu-

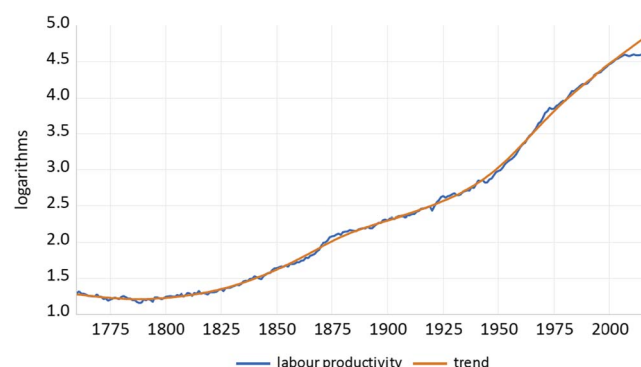


Figure 1: Logarithms of labour productivity, 1760–2008, with trend superimposed.

Source: Crafts and Mills (2019).

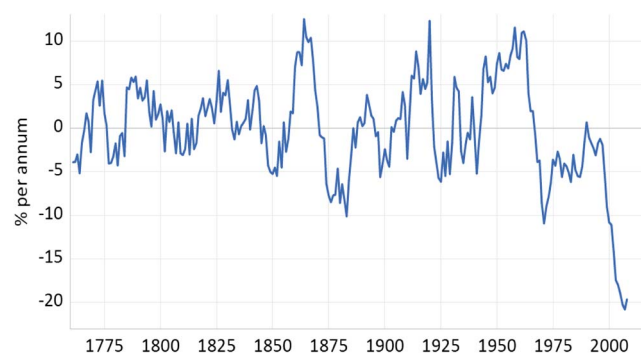


Figure 2: Cumulative ten-year ahead difference in productivity growth from trend growth, 1761–2008.

Source: Crafts and Mills (2019).

larly pronounced in the UK in comparison with France, Germany, Japan and the US (see Table 1).

As De Loecker et al. (2024) note and Fig. 3 shows, productivity growth in the UK has been concentrated in the highest productivity firms and followers have lagged appreciably behind, with the bottom 90% of firms accounting for the absence of productivity growth since the financial crisis. Table 2 shows that more productive firms are larger, older and foreign-owned, and Figs 4 and 5 record that top and bottom industries by productivity have changed little over time and are capital-intensive production and labour-intensive service industries, respectively.

So, productivity gains have failed to diffuse across the economy from leaders to laggards, from larger to smaller, from older to younger, from foreign to domestic firms, and from high-productivity to lower-productivity sectors, resulting in a large segment of the economy remaining locked in low levels of productivity. But firm type and sector are not the only respect in which there has been a failure of diffusion and inclusion in productivity growth. Spatial differences are even more pronounced.

Regional inequality

Figure 6 shows labour productivity by NUTS1 regions in the UK and selected European Union (EU) countries in 2014. It records that London has one of the highest levels of productivity in the EU but, with the exception of the South East, other regions come near the bottom.

Figure 7 shows labour productivity quartiles by broader NUTS2 regions and subregions for six European countries in 2014. It reinforces the observation of the high concentration of regions in

Table 1: Labour productivity slowdown and missing gross domestic product (GDP) per capita in five countries.

	LP growth 1995–2005	LP growth 2005–18	Slowdown	Per capita GDP, 2018	Missing per capita GDP, 2018
France	1.66	0.62	1.05	\$44 078	\$6341
Germany	1.69	0.83	0.86	\$51 507	\$5992
Japan	1.86	0.68	1.17	\$44 451	\$7225
United Kingdom	2.28	0.46	1.82	\$45 466	\$11 936
United States	2.51	1.01	1.50	\$62 117	\$13 127

Note: Growth of labour productivity per hour worked (LP), in percent, and GDP per capita, in 2018 PPP US dollars. Data are from the Conference Board.

Source: Goldin et al. (2020).

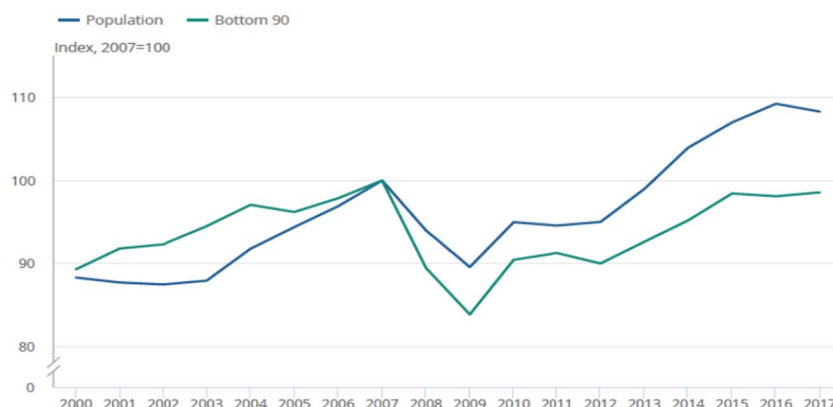


Figure 3: Productivity growth has been concentrated in the highest productivity firms since the financial crisis: 2000–17, constant price, Great Britain. Source: Office for National Statistics: Annual Business Survey (ABS) and Inter-Departmental Business Register (IDBR).

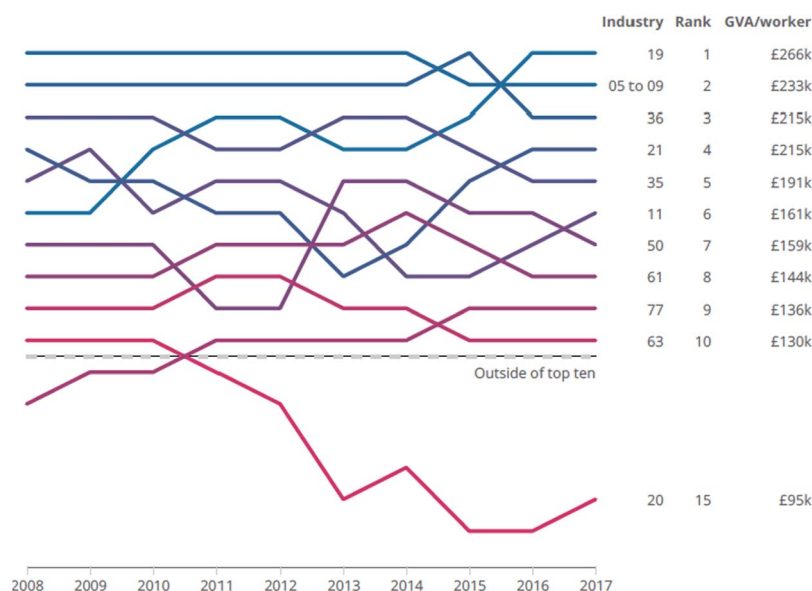


Figure 4: Top-ranking industries by productivity have changed little and are predominantly capital-intensive production industries: 2008–17, current price, Great Britain.

Note: The keys are as follows: 05–09, mining and quarrying; 11, manufacture of beverages; 19, manufacture of coke and refined petroleum products; 20, manufacture of chemicals and chemical products; 21, manufacture of basic pharmaceutical products and pharmaceutical preparations; 35, electricity, gas, steam and air conditioning supply; 36, water collection, treatment and supply; 50, water transport; 61, telecommunications; 63, information service activities; and 77, rental and leasing activities.

Source: Office for National Statistics: ABS and IDBR.

the UK in the lowest quartile of productivity and the comparative sparsity of regions in the other quartiles. The UK has one of the highest levels of divergence in labour productivity across its regions of any major industrialized country (Raikes et al. 2019; Davenport and Zaranko 2020; McCann 2020).

Figure 8 shows that marked disparities in labour productivity between London and the South East and the rest of the

country prevailed throughout the twentieth century. There was convergence during the first half of the century, resulting in lower levels of disparity between 1950 and 1970, but substantial divergence thereafter and a return by the end of the century to the levels observed near the beginning.

In contrast, while Fig. 9 shows that London is one of the NUTS1 region in the EU with the highest net disposable household

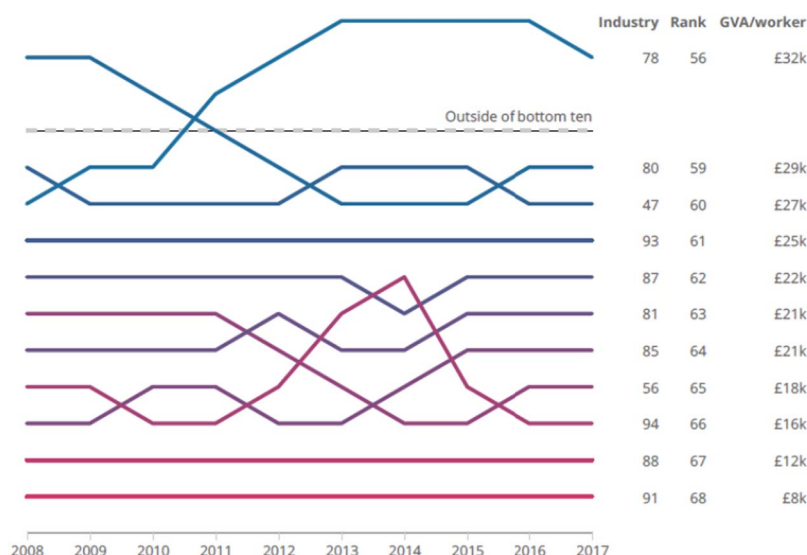


Figure 5: Bottom-ranking industries by productivity have changed little and are predominantly labour-intensive service industries: 2008–17, current price, Great Britain.

Note: The keys are: 47, retail trade, except of motor vehicles and motorcycles; 56, food and beverage service activities; 78, employment activities; 80, security and investigation activities; 81, services to buildings and landscape activities; 85, education; 87, residential care activities; 88, social work activities without accommodation; 91, libraries, archives, museums and other cultural activities; 93, sports activities and amusement and recreation activities; and 94, activities of membership organizations.

Source: Office for National Statistics: ABS and IDBR.

Table 2: Larger, older, foreign-owned firms were more productive, on average: 2017.

	GVA per worker (£000)	
	Mean	Median
Employment band		
1–9	43.4	24.0
10–49	45.4	29.4
50–99	53.0	35.0
100–249	53.4	36.7
250–999	56.6	37.0
1000 and over	45.5	27.5
Age band		
2 years or younger	41.7	24.3
3–5 years	43.2	24.6
6–10 years	55.2	29.1
11–20 years	50.6	25.9
21 years or older	51.2	33.4
Ownership		
Domestic	43.8	27.1
Foreign-owned	79.4	41.7

Source: Office for National Statistics: ABS and IDBR.

income per head, other parts, such as the South West and Scotland, are better off than the average levels of some countries, such as Finland, Italy and the Netherlands, and all UK regions are better off than the average of several EU countries.

Differences in the cost of living in part account for this and, in particular, as Fig. 10 shows, once account is taken of housing costs, then London moves from being near or at the top of UK regions' household income to being at the median.

Nevertheless, the influence of housing costs reveals a second form of inequality—and that is in wealth. As Fig. 11 shows, there is a substantial disparity in household wealth between the South and East of England and the rest of Great Britain, and Fig. 12 shows that property accounts for a substantial proportion of that

variation. Those variations in property values may have significant effects on, amongst other considerations, labour mobility and the ability of businesses to use property as a form of collateral for borrowing.

Productivity variations may therefore be reflected in at least one of income and wealth disparities across the UK. The question that this then raises is what accounts for the substantial variation of productivity across companies, sectors and regions and the failure of productivity improvements to diffuse across companies, sectors and places. The first possible explanation is the UK's dire record on fixed capital formation.

Fixed capital formation and R&D

Figure 13 shows that fixed capital formation has been a consistently lower percentage of GDP in the UK than in any other G7 country over the period 2005–17. Even more strikingly, Table 3 shows that fixed capital formation was, on average, a lower percentage of GDP in the UK over the 20-year period 1997–2017 than in any other OECD country, with a level of gross fixed capital formation as a proportion of GDP more than 15% below the next lowest country.

Table 4 records that the contribution of government expenditure on capital formation was low in the UK relative to other G7 countries over the 20 years from 1997 to 2017 but it was not as low as in Germany. However, the UK's non-government spend on capital formation was the lowest of any G7 country. So, the problem was therefore not just low government spend but, more significantly, very low non-government (i.e. business) spend.

One potential explanation is that the UK is a relatively small manufacturing country and more focused on services, high tech and R&D than fixed capital formation. The first indicator that this is not an adequate explanation is the relatively low level of investment in information and communications technology (ICT) and intellectual property products in the UK since the financial crisis, as shown in Fig. 14. More significantly, R&D intensity relative to

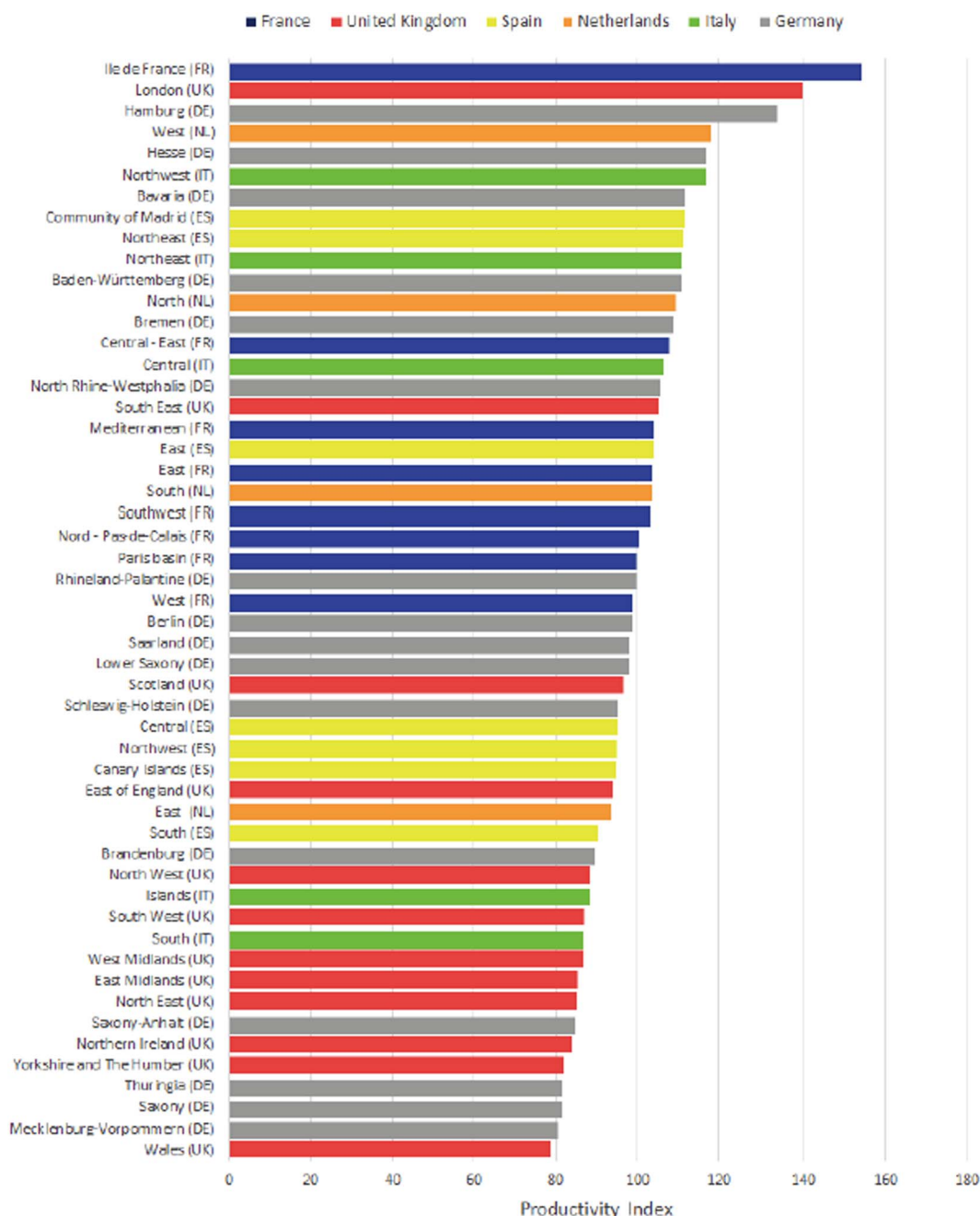


Figure 6: Labour productivity by NUTS1 regions: 2014.
Source: Office for National Statistics; Eurostat.

GDP shown in Fig. 15 was about average in 2017 for EU countries in the private sector and well below average in the public sector. Furthermore, as Table 5 shows, approximately half of UK business R&D is performed by non-UK owned businesses in the UK. So, the UK does not stand out as an R&D intensive economy.

Where the UK does stand out is in relation to the spatial disparity of R&D and its concentration in London, the South East and East of England, as shown in Fig. 16 for 2018 and in Table 6 for the 11 years since the financial crisis.¹

In summary, the UK is a country with exceptionally low private-sector capital investment and only average private-sector

R&D-intensive investment, with a wide variation in regional spend on R&D. If low investment lies at the heart of the UK's poor productivity record and its wide regional variation, then the question this raises is what might be its cause. There are many possibilities but one that warrants further serious consideration is finance.

Finance

The financial sector is clearly one of the great success stories of the UK, at least until the financial crisis, which revealed some of its stark deficiencies. However, there is a more serious deficiency that underpins it and that is its regional concentration, not simply in terms of the agglomeration of financial institutions in the

¹ The Office for National Statistics has unfortunately been unable to publish reliable regionally disaggregated fixed capital formation estimates for the UK since the beginning of the 2000s.

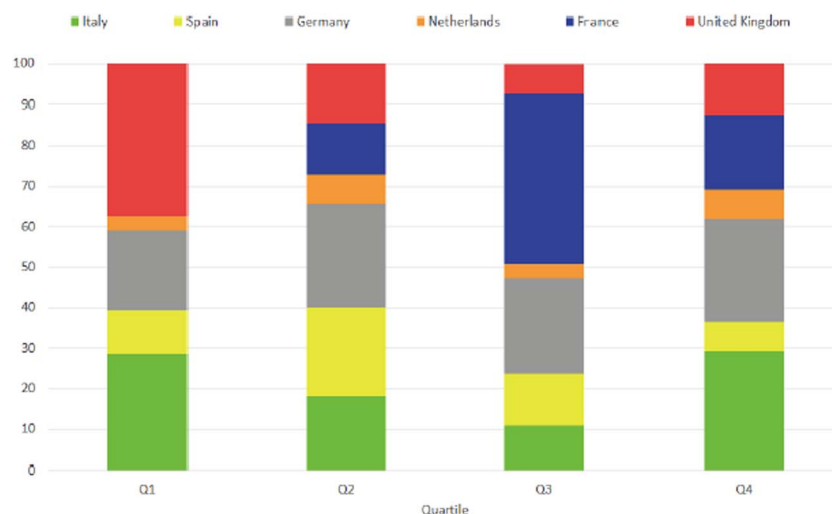


Figure 7: Productivity quartiles of NUTS2 and NUTS2 subregions: 2014.
Source: Office for National Statistics; Eurostat.

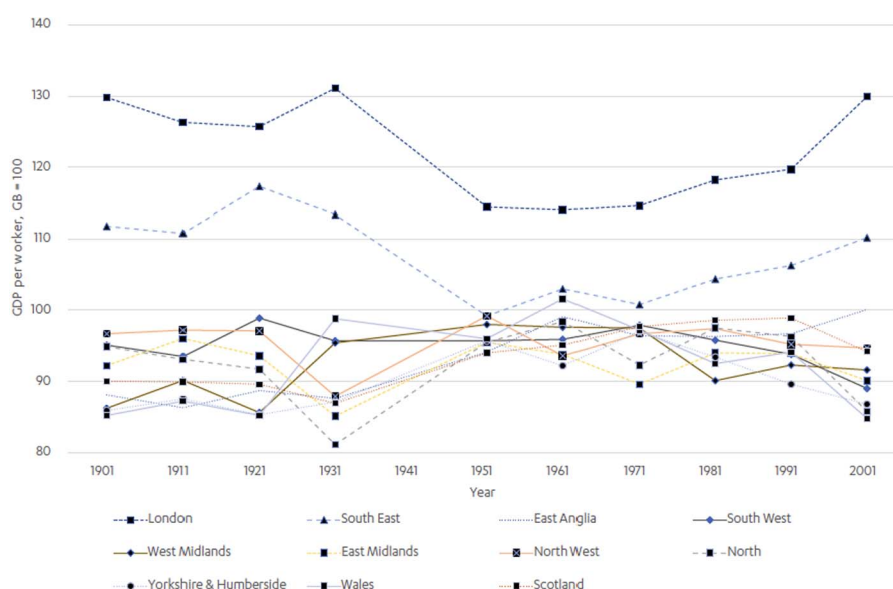


Figure 8: Trends in regional disparities in Great Britain during the twentieth century (GDP per worker).
Note: Data for 1941 are missing in the source data, so a dummy value is created such that there is a constant linear change between 1931 and 1951.
Source: National Infrastructure Commission (2020).

City of London, but more significantly in regard to their lack of connectedness with the rest of the country, in particular in relation to small and growing businesses.

Figure 17 shows the high level of bank lending in London and the South of England. It records that the distribution of bank lending is very closely aligned with the distribution of the SME population across regions.

However, Fig. 18 shows that a high proportion of bank lending is very short term in nature in the form of bank overdrafts and credit cards rather than loans, mortgages and leasing. As a result, as Fig. 19 records, a high proportion of SMEs are reluctant to use external finance to grow and develop their businesses.

Instead, they look to equity finance to fund growth and development. However, this is where regional divergences are found to be very pronounced. As Fig. 20 shows, equity deals and investment are heavily concentrated in London, disproportionately in

relation to the number of SMEs, and Fig. 21 records a high level of concentration of private equity (PE) and venture capital (VC) investment in London and the South East.

Table 7 records that a large proportion (typically between 70% and 80%) of PE and VC investment is not start-up and early stage, or even later stage VC or growth capital, but management buy-outs and other forms of corporate restructuring. Furthermore, Table 8 shows that two-thirds of the small proportion of equity investing that goes into VC is concentrated in London and the South East. Figure 22 shows how rapidly equity deals have concentrated in London over the last decade and Fig. 23 records that between 50% and 60% of business angels are located in London and the South East.

In summary, while the distribution of bank finance to SMEs is in line with their location in the UK, it is short term in nature and ill-suited to financing their growth and development. SMEs are dependent on PE and VC for that. Most PE and VC are not directed

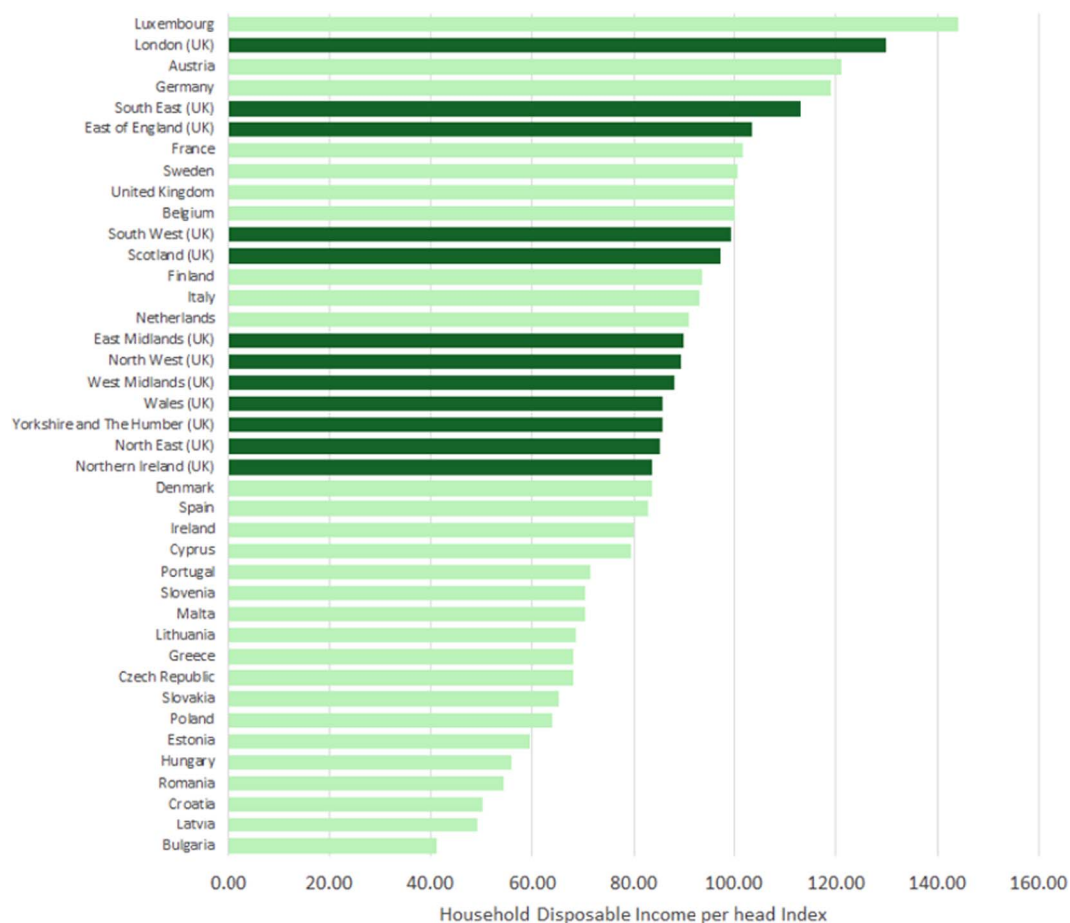


Figure 9: Net disposable household income per head by UK NUTS1 regions and selected EU country averages: 2014 (index UK = 100). Source: Office for National Statistics; Eurostat.

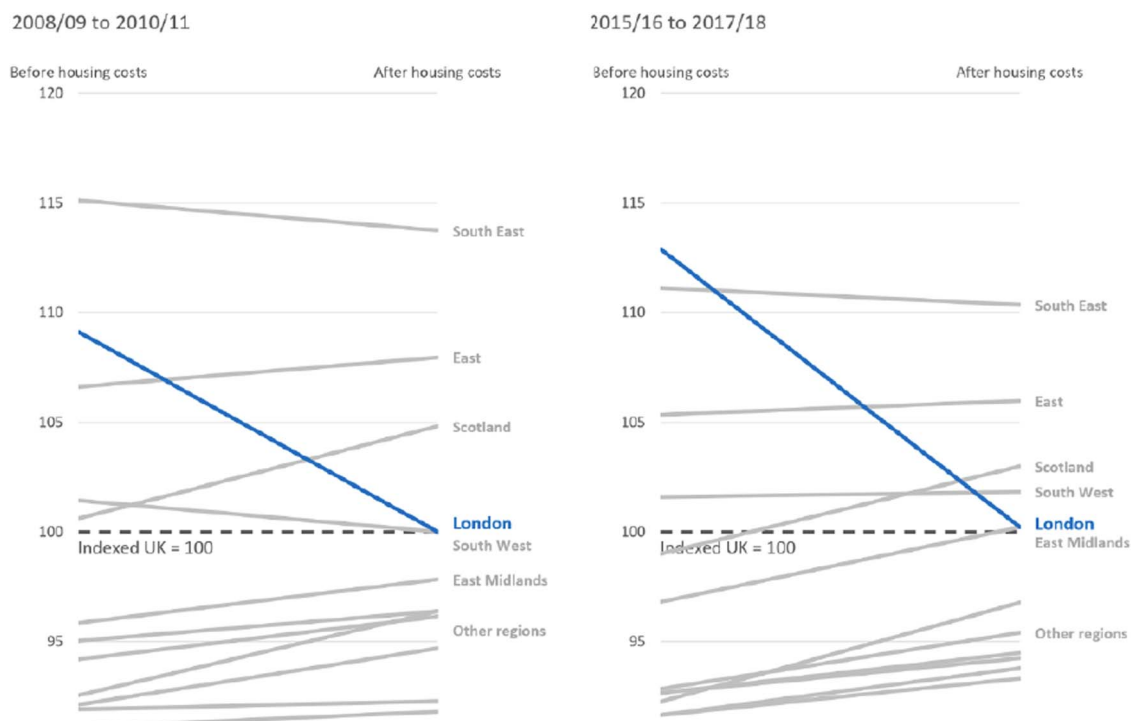


Figure 10: Median weekly equivalized household income for all individuals in average FYE 2018 prices, indexed UK = 100, NUTS1 regions: FYE 2009–11 and FYE 2016–18. Source: Office for National Statistics and Department for Works and Pensions.

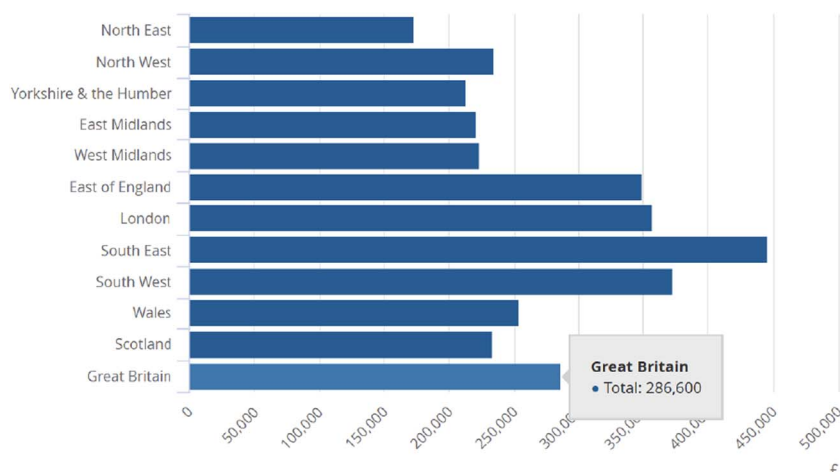


Figure 11: Median total household wealth by region: Great Britain, April 2016 to March 2018.
Source: Office for National Statistics: Wealth and Assets Survey (WAS).

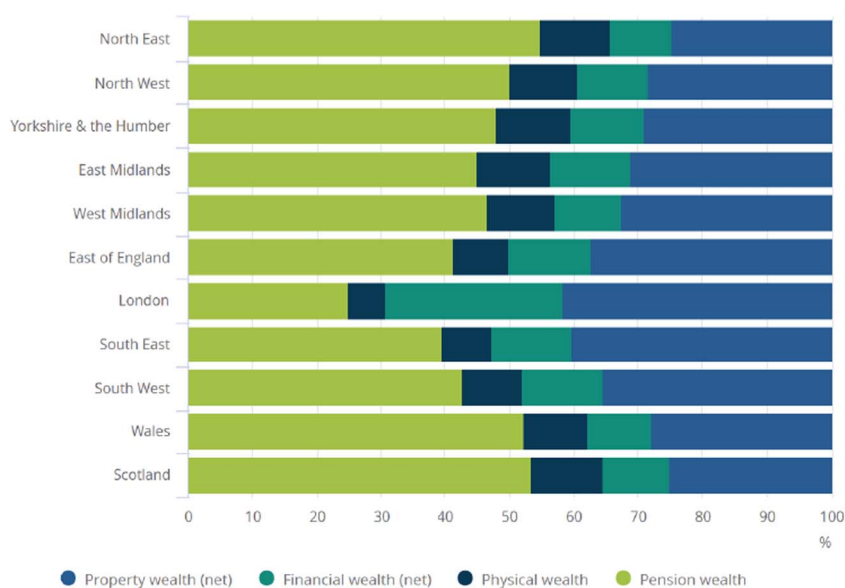


Figure 12: Proportional contribution of the components of total wealth by region: Great Britain, April 2016 to March 2018.
Source: Office for National Statistics: WAS.

towards the start-up and scale-up of companies but to buy-outs and corporate restructurings, and the small proportion that take the form of angel investing and VC are heavily concentrated in London and the South East. There is therefore a serious problem of connecting the UK's international capital markets in London with the financing of SMEs in the regions. But the problem is not just limited to the financing of SMEs. There is a problem with the ownership and governance of UK firms more generally.

Ownership and governance

The UK is an outlier in terms of the ownership of its large companies listed on UK stock markets. The UK's form of ownership is often described as being Anglo-American to contrast it with that in the rest of the world and, in particular, with Continental Europe and the Far East. The Anglo-American system is characterized by large stock markets comprising companies with widely held, dispersed, predominantly institutional shareholders.

Figure 24 shows the ownership of 26 843 companies listed on stock markets in 85 countries around the world in 2012. It records

that a large proportion of them (46%) are owned by families. Family ownership is the most important form of ownership of even the largest listed companies in most countries around the world.

Tracing ownership through to the ultimate holders of shares, it is possible to determine the extent to which listed companies are controlled by particular shareholders. Using a Shapley-Shubik index of control, [Aminadav and Papaioannou \(2020\)](#) find that a large proportion of companies around the world are controlled by at least one dominant shareholder with only 9% being widely held without a dominant shareholder (see [Fig. 25](#)).

However, [Fig. 26](#) shows that one country stands out as having an exceptionally low proportion of controlled firms—the UK—with the US not far behind. The level of dispersion of ownership and control of listed companies in the UK is unusually high.

There are several reasons for this, in particular regulatory. The UK places more emphasis on minority investor protection than other countries, including the US. Until recently, the UK had

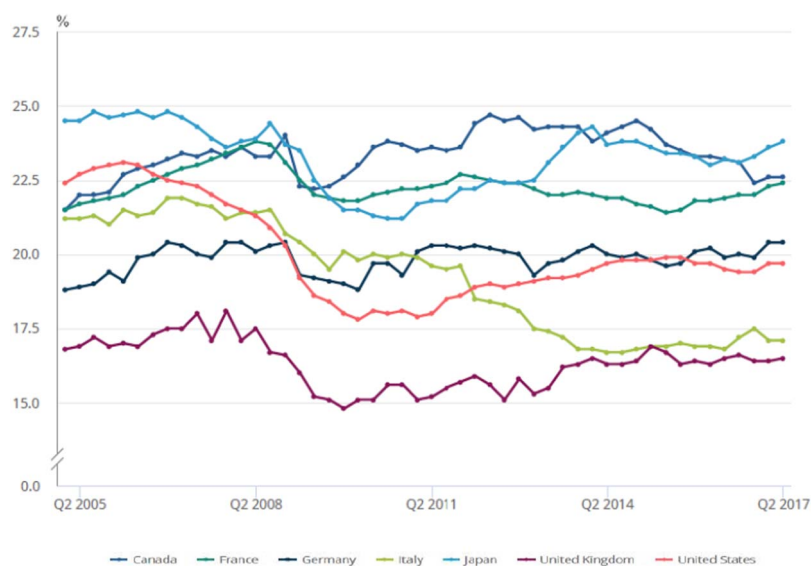


Figure 13: Gross fixed capital formation as a percentage of GDP between G7 nations: Quarter 1, 2005 to quarter 1, 2017. Source: OECD and Office for National Statistics.

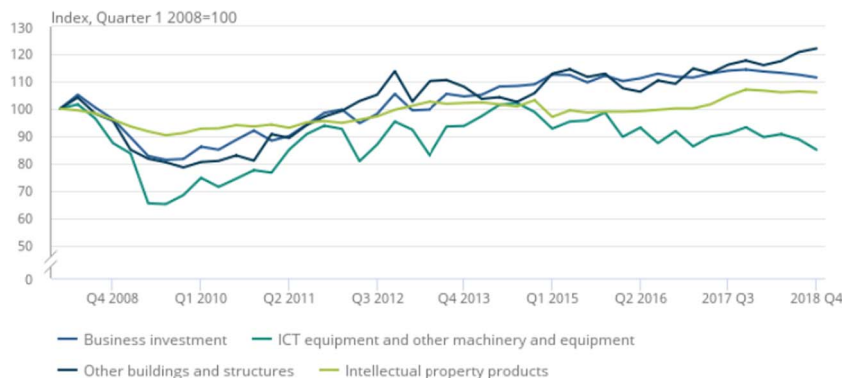


Figure 14: Investment in ICT has been particularly weak since the financial crisis.

Note: Total business investment levels and selected components, chained volume measure, seasonally adjusted, UK, quarter 1 (January to March) 2008 to quarter 4 (October to December) 2018.

Source: Office for National Statistics.

Table 3: Average gross fixed capital formation as a percentage of GDP, by country: Quarter 1 (January to March) 1997 to Quarter 2 (April to June) 2017.

Country	1997–2017	Country	1997–2017
South Korea	30.8	New Zealand	22.1
Estonia	28.3	Iceland	21.8
Czech Republic	28.0	Portugal	21.7
Australia	26.5	France	21.7
Slovak Republic	25.9	Colombia	21.5
Latvia	25.0	Lithuania	21.0
Japan	24.6	Netherlands	20.9
Spain	24.6	United States	20.8
Switzerland	24.1	Denmark	20.6
Slovenia	24.0	Germany	20.5
Ireland	23.7	Israel	20.2
Austria	23.5	Costa Rica	20.2
Sweden	22.4	South Africa	19.8
Belgium	22.3	Greece	19.7
Finland	22.3	Luxembourg	19.6
Canada	22.2	Italy	19.6
Norway	22.1	United Kingdom	16.7

Source: OECD and Office for National Statistics.

Table 4: Average percentage contribution of government and non-government sectors to gross fixed capital formation (GFCF) and GDP: 1997–2017, G7 nations.

Country	Average share of GFCF		Average spend on GFCF as a percentage of GDP	
	Government	Non-government	Government	Non-government
Canada	16.3	83.7	3.6	18.5
France	17.8	82.2	3.9	17.8
Germany	10.6	89.4	2.2	18.3
Italy	13.9	86.1	2.9	16.8
Japan	24.1	75.9	6.0	18.6
United Kingdom	14.4	85.6	2.4	14.3
United States	18.7	81.3	3.9	17.0
G7 average	16.6	83.4	3.5	17.3

Source: Organisation for Economic Co-operation and Development and ONS.

rules prohibiting the use of dual class shares by premium listed companies on the London Stock Exchange, which holders of large blocks of shares in many other countries, including the US, use

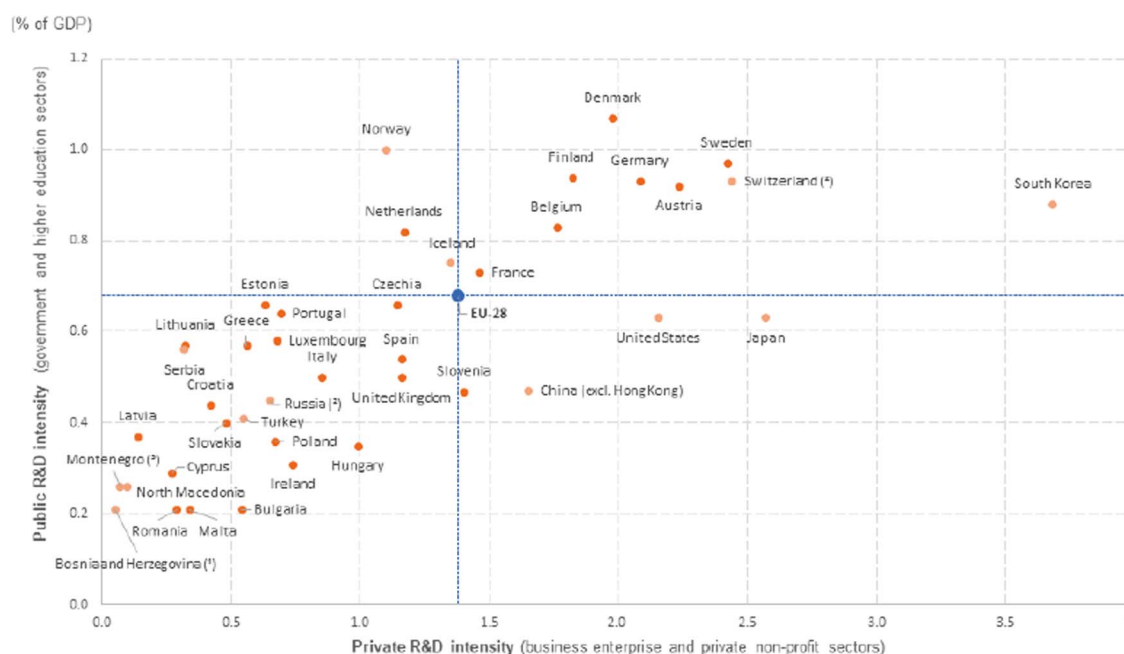


Figure 15: Gross domestic expenditure on R&D by sector and country: 2017.
Note: (1), (2) and (3) denote 2014 data, 2015 data and 2016 data, respectively.
Source: Eurostat (online data code: rd_e_gdrtot).

Table 5: Expenditure on R&D performed in UK businesses by country of ownership of businesses: 2020.

Country	Total (£ millions)
Total of all countries	26 937
United Kingdom (UK)	13 485
United States (US)	5282
Netherlands (NL)	1193
India (IN)	1094
France (FR)	942
Japan (JP)	912
Germany (DE)	636
Luxembourg (LU)	430
Switzerland (CM)	402
Italy (IT)	260

Source: Office for National Statistics.

Table 6: Breakdown of R&D performed in UK businesses by country or region: expenditure 2008–19, percentage of total.

United Kingdom	100
England	90.6
North East	1.6
North West	7.9
Yorkshire and the Humber	3.9
East Midlands	7.4
West Midlands	9.1
East of England	20.7
London	12.3
South East	20.5
South West	7.1
Wales	1.7
Scotland	6.4
Northern Ireland	2.3

Source: Office for National Statistics.



Figure 16: Per head R&D performance regional and country breakdown (£ per head, 2018).
Source: Office for National Statistics, gross expenditure on R&D; House of Commons Library calculations.

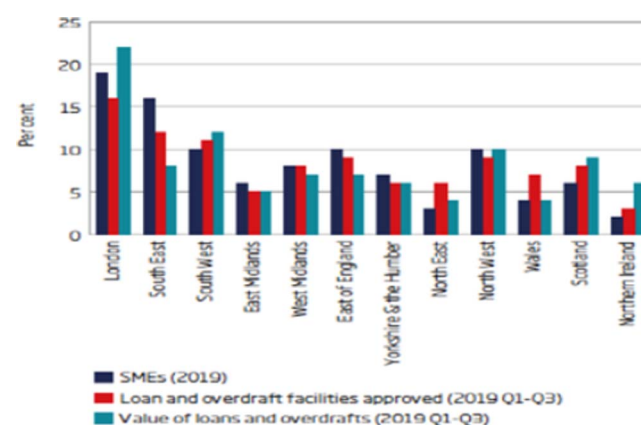


Figure 17: Bank lending and the SME population in 2019.
Source: British Business Bank, Small Business Finance Markets, 2019.

Table 7: UK investment by investment stage.

Investment stage	Number of companies			% of companies			Amount invested (£m)			% of amount invested		
	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017
Seed	100	77	60	8	7	7	57	43	46	1	0	0
Start-up	129	99	54	10	9	6	113	83	58	1	1	1
Other early stage	339	311	202	28	29	24	457	270	207	5	3	2
Later stage venture	81	81	72	7	7	8	320	229	150	3	2	1
Bridge equity financing	12	2	8	1	0	1	11	1	3	0	0	0
Total venture capital	661	570	396	54	52	47	958	626	463	9	6	4
Growth capital	376	351	259	31	32	31	1820	2281	991	18	23	9
Total growth capital	376	351	259	31	32	31	1820	2281	991	18	23	9
MBO/MBI	113	102	106	9	9	12	4928	3835	4677	48	39	45
Secondary buyout	12	25	16	1	2	2	965	2315	1565	9	24	15
PIPE	0	0	0	0	0	0	0	0	0	0	0	0
Public to private	6	2	4	0	0	0	1100	273	1296	11	3	12
Add-on/bolt-on/build-up acquisition	24	15	26	2	1	3	211	175	649	2	2	6
Infrastructure	10	4	11	1	0	1	64	25	77	1	0	1
Total buyout	165	148	163	13	14	19	7269	6623	8263	72	68	79
Refinancing bank debt	14	11	3	1	1	0	67	210	537	1	2	5
Replacement capital			12			1			108			1
Rescue/turnaround	16	10	16	1	1	2	48	37	119	0	0	1
Total other stages	30	21	31	2	2	4	115	247	763	1	2	7
Total	1198	1073	817	100	100	100	10163	9776	10481	100	100	100

Note: The number of companies in some investment stage categories and their subtotals add up to more than the total number of companies invested in. This is due to some companies receiving more than one investment within the year at different investment stages. Some investment stages have been amalgamated where there are instances of single deals, in order to preserve confidentiality.

Source: BVCA (2020).

Table 8: Investment stage by region of the UK.

Regions	Venture capital			Growth capital			Buyout			Other stages		
	Amount (£m)		Percentage	Amount (£m)		Percentage	Amount (£m)		Percentage	Amount (£m)		Percentage
	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017
London	526	326	229	55	52	49	756	711	339	42	31	34
South East	130	60	71	14	10	15	181	155	157	10	7	16
South East & London	656	386	300	68	62	65	937	866	496	51	38	50
South West	10	62	12	1	10	3	130	185	126	7	8	13
East of England	122	67	33	13	11	7	61	9	18	3	0	2
West Midlands	12	15	14	1	2	3	66	141	43	4	6	4
East Midlands	7	10	7	1	2	1	55	121	73	3	5	7
Yorkshire and The Humber	31	11	18	3	2	4	166	94	48	9	4	5
North West	54	24	8	6	4	2	254	602	92	14	26	9
North East	26	12	1	3	2	0	64	34	20	4	1	2
Scotland	19	19	48	2	3	10	34	57	53	2	2	5
Wales	13	17	18	1	3	4	44	140	21	2	6	2
Northern Ireland	10	3	3	1	0	1	10	31	0	0	1	0
Other (1)	0	0	0	0	0	0	0	0	0	0	0	0
Total	958	626	463	100	100	100	1820	2281	991	100	100	100

Note: (1) Other includes Channel Islands, Jersey and Isle of Man.
Source: BVCA (2020).

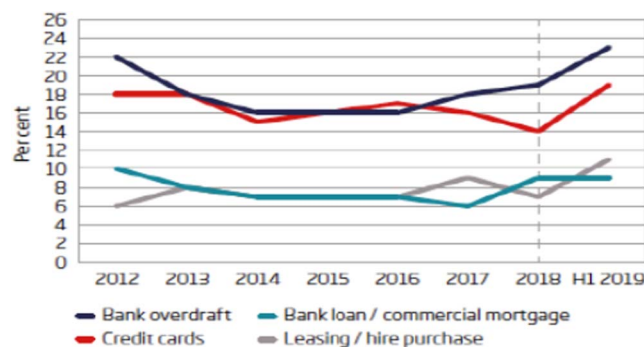


Figure 18: Use of core finance products by SMEs.
Source: British Business Bank, Small Business Finance Markets, 2019.

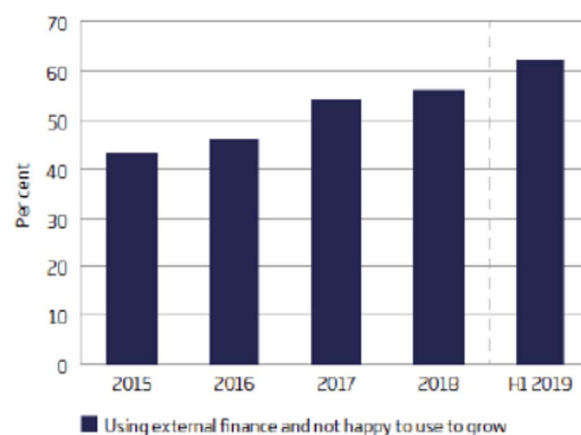


Figure 19: Proportion of SMEs reporting that they are not happy to use external finance to grow and develop their business.
Source: British Business Bank, Small Business Finance Markets, 2019.

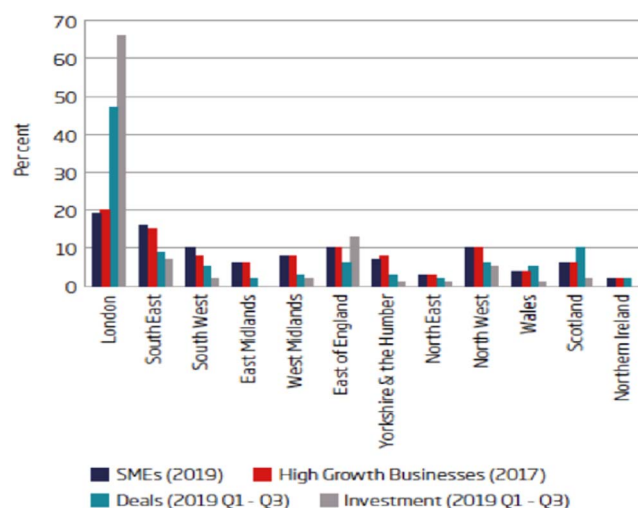


Figure 20: Equity deals, investment and high growth businesses, 2019.
Source: British Business Bank, Small Business Finance Markets, 2019.

to retain control.² The UK has mandatory bid rules, which do not exist in the US, that limit the ability of shareholders to acquire blocks of shares in companies without bidding for all the shares,

² FCA, Listing Rules (Listing Regime Enhancements) Instrument 2014 (FCA 2014/33). This has recently been amended to allow dual class share structures within premium listings; see <https://www.fca.org.uk/publication/policy/ps21-22.pdf>.

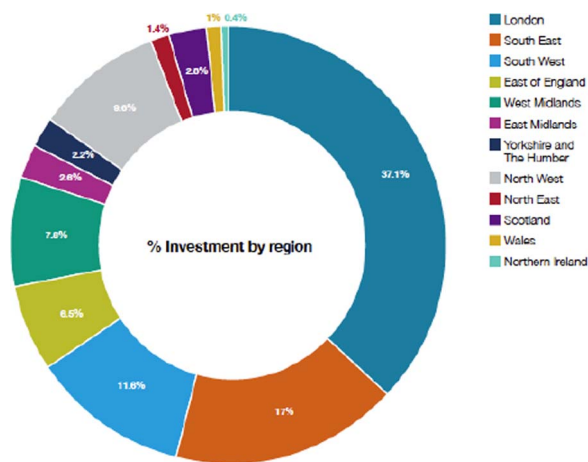


Figure 21: Private equity and venture capital investments by region in the UK: 2019.

Source: BVCA (2020).

and it has more stringent disclosure rules on shareholdings than in the US.

Furthermore, block holders are at risk of being classified as ‘insiders’ unable to trade their shares if they are party to privileged information, acting in concert if they engage collectively with other shareholders and in violation of related party transactions if they do not fulfil conditions on ‘arms-length’ transactions in their dealings with companies.

Still more significantly, UK company boards have less protection against threats of takeovers. The use of poison pills in the US is prohibited in the UK by restrictions on ‘frustrating actions’ being deployed by target companies, the absence of ‘staggered boards’ that can delay the replacement of members of the boards of target firms in the US, and stronger removal rights of directors in the UK deriving from one-year terms of the office of director.

Together, these rules represent a significant discouragement for shareholders to acquire controlling blocks of shares in companies, to engage actively with companies in which they invest, and to support their achievement of long-term value creation. UK companies in turn have fewer means of protecting themselves against markets in corporate control in the form of takeovers and short-term activist investors than in virtually any other country in the world. The result is that UK firms are under unusually intense and continuous pressure to maximize their share prices—and the problem is getting worse.

The reason it is getting worse is not only the emergence of hostile takeovers in the UK in the 1960s and then hedge fund activism in the 2000s, but also the changing nature of the ownership of UK firms. The disappearance of family ownership started in the early part of the 20th century as stock markets grew rapidly from the beginning of the century. However, initially, the impact of this on UK companies was limited because, while ownership became more dispersed, it remained in the hands of individual locally based shareholders who invested in stock markets that were established in cities all over the UK. Campbell, Rogers and Turner (2016, p. 6) note that ‘[e]xchanges opened (or were reconstituted in some cases), for example, in Oldham (1875), Dundee (1879), Cork (1886), Belfast (1897), Cardiff (1892), Halifax (1896), Greenock (1888), Huddersfield (1899), Bradford (1899), Swansea (1903), Nottingham (1909), and Newport (1916)’.

The fact that shareholders were locally based meant that there was a mutual interest of investors in promoting the flourishing

Table 9: Beneficial ownership of UK shares.

	Percentage			
	2012	2014	2016	2018
Rest of the world	53.3	53.7	53.9	54.9
Individuals	10.6	12.4	12.3	13.5
Unit trusts	9.5	9.1	9.5	9.6
Other financial institutions	6.6	7.1	8.1	8.1
Insurance companies	6.2	5.9	4.9	4.0
Pension funds	4.7	3.0	3.0	2.4
Public sector ⁽¹⁾	2.5	2.6	1.1	0.9
Private non-financial companies	2.3	2.0	2.2	2.6
Investment trusts	1.7	1.8	2.1	1.4
Banks	1.9	1.4	1.8	2.1
Charities	0.6	1.1	1.0	0.5
Total	100.0	100.0	100.0	100.0

Note: At 31 December for 2012, 2014, 2016 and 2018. (1) Public sector comprises local government, central government and public corporations. Source: Office for National Statistics.

of local companies and of directors in protecting local investors, even in the absence of regulatory rules requiring them to do so. However, in the aftermath of World War II, those locally based individual investors were replaced by institutional investors, predominantly life insurance companies and pension funds, headquartered in London, and, as Fig. 27 shows, individual share ownership declined rapidly. Local stock markets merged, closed and eventually consolidated in one market in London and the local ties between investors and companies were severed.

This mirrored an equivalent profound shift in funding that had occurred in the 19th century. The industrial revolution was funded in large part out of a large number of local banks situated all over the country. Those banks had strong relations with companies in their locality. However, as a consequence, they were heavily exposed to their local economies and when the economies failed, so too did the local banks. Therefore, there were repeated banking crises, which prompted the Bank of England to promote the merger of banks and the shifting of their headquarters from the regions to London. The result was that, by the beginning of the 20th century, there were five main banks headquartered in London.

So, during the course of 150 years, the British financial system shifted completely from a locally based relationship banking and then stock market economy to a highly concentrated banking and institutional investment system headquartered in London. The consequences were twofold. First, there was a complete inversion from relatively unregulated long-term relationship investing to highly regulated, short-term transactional financing. The second was that British corporate finance and ownership changed from being highly decentralized and dispersed around the country to being located in basically one place—London.

But things were to get even worse, because initially, at least, the new shareholders of companies were relatively long-term domestic institutional investors—pension funds and life insurance companies—and, as Fig. 27 shows, their combined shareholdings increased to over 50% by the 1980s. However, Fig. 27 and Table 9 also show that their shareholdings declined from the 1990s to a point that their combined holdings are now approximately 6%. In their place have come global shareholders investing, in particular, through mutual funds and asset management firms. As a result, even the national base of shareholding has been eroded and relatively long-term institutions have been increasingly replaced by short-term asset managers.

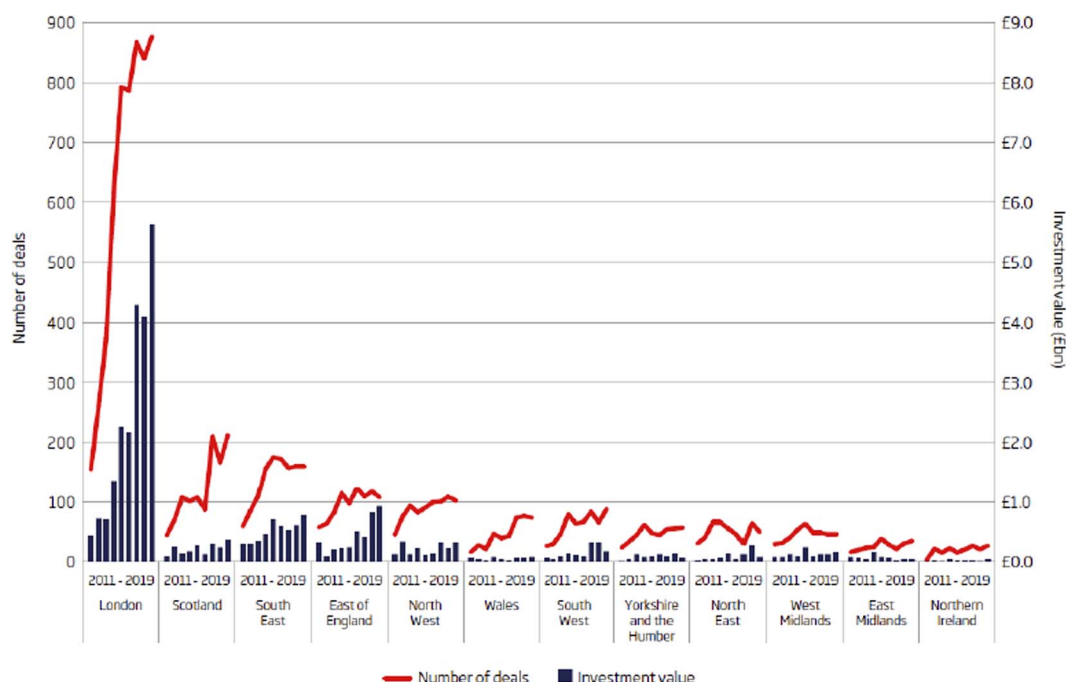


Figure 22: Number and value of equity deals over time by area.

Source: British Business Bank, Small Business Finance Markets, 2019.

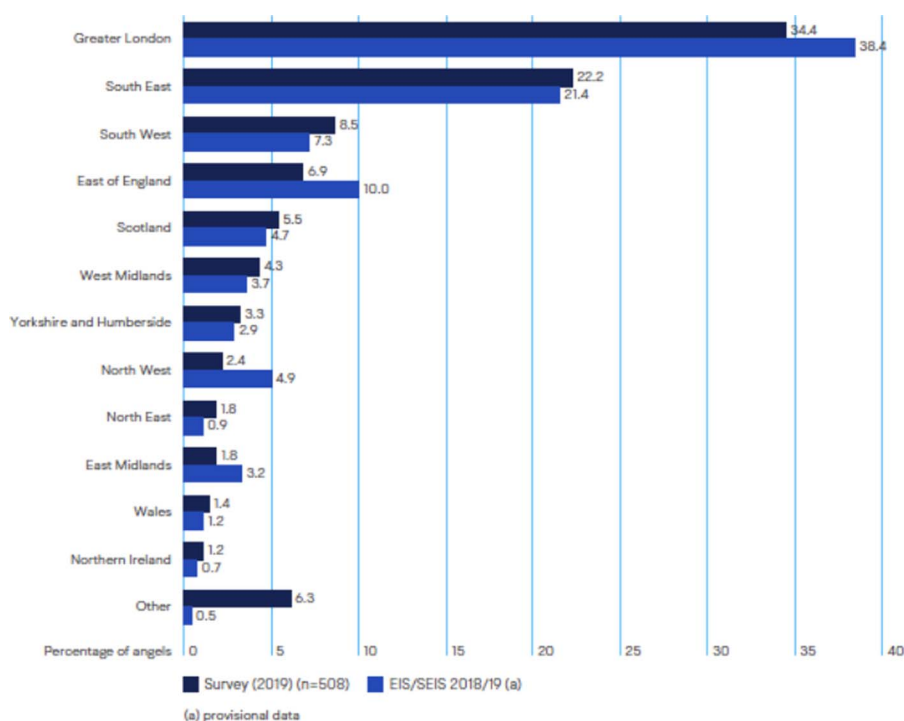


Figure 23: Location of business angels in the UK.

Source: British Business Bank and UK Business Angels Association, the UK Business Angel Market, 2020.

One of the consequences of the growing dominance of dispersed, anonymous, international ownership of companies and markets in corporate control has been a substantial decline in the number of companies listed on the UK stock market. As Fig. 28 shows, the number of listed companies has halved from the beginning of the millennium until now from 2000 to 1000 firms, having halved from around 4000 firms in the 1960's. This reflects a declining number of firms choosing to come to the stock market so that, by 2015, new listings had fallen to approximately

the number of de-listings. In effect, companies have voted with their feet by exiting through going private and merging rather than entering through initial public offerings.

But the more serious effects of the changing nature of the financing, ownership and governance of UK firms were in relation to their real performance—aggregate productivity and divergences in productivity across firms, sectors, and regions of the country, with consequential effects on inequality in income and wealth.

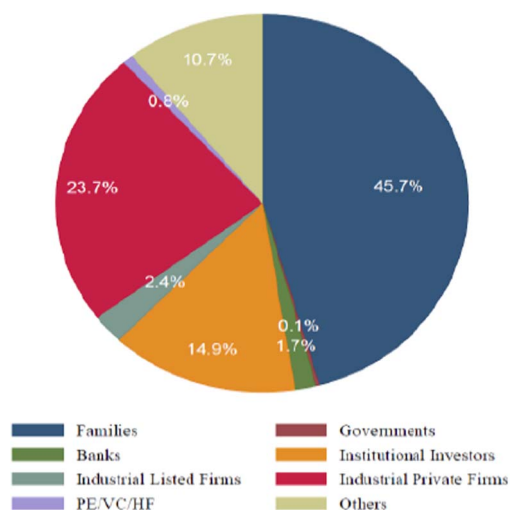


Figure 24: Ownership type of 26 843 listed companies in 85 countries in 2012.

Source: Aminadav and Papaioannou (2020).

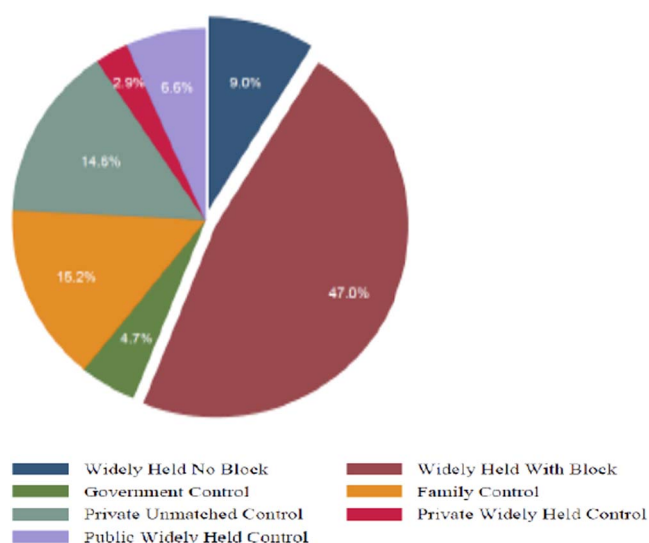


Figure 25: Type of control in 26 843 listed companies in 85 countries in 2012.

Source: Aminadav and Papaioannou (2020).

Implications for productivity and inequality

Discussions of ownership and governance have taken place largely independently of the real economy. They are perceived to be more relevant to the financial performance of firms and returns to investors than to questions around productivity and inequality. This separation between ownership and governance, on the one hand, and the real economy, on the other, reflects the view that has prevailed for the last 60 years that the sole purpose of business is to generate financial returns for their shareholders. According to this thesis, it is not the role of business to engage in larger questions around economic or social performance.

This view was encapsulated in Milton Friedman's doctrine that 'there is one and only social purpose of business [...] to increase profits so long as it stays within the rules of the game' (Friedman 1962), sometimes restated as 'the business of business is business'. However, the last few years have seen a fundamental reconsideration of whether the doctrine is valid today or indeed ever has been at any time in the past.

The concern the doctrine raises is that it elevates the significance of one party in society, namely shareholders, above all others. Proponents of the doctrine assert that this brings clarity and simplicity to the objectives of firms, promotes corporate efficiency and avoids mixing business and politics. To the extent that there are conflicts between corporate and social objectives, then it is the role of governments and regulators, not directors of companies, to reconcile them.

However, there is a growing recognition that while the doctrine might bring clarity and simplicity, it does so in relation to the wrong objective. The purpose of the business is not to promote the interests of shareholders but those of its customers, societies and the natural world in which it operates. In the process, it provides benefits to those who contribute to the corporate purpose, including, but not exclusively, shareholders, and in particular to employees as well as shareholders.

The problem is not just a distributional one of the prioritizing of shareholders over employees or other stakeholders but of the objective of the firm. By placing the success of the company at the heart of its purpose, UK company law is promoting a singular rather than a collective and communal objective. Instead, as the British Academy's Future of the Corporation programme argues, and it is increasingly coming to be realized, a corporate purpose should not just be about the shareholder or the company but 'the other' (British Academy 2018, 2019). It should be viewed in terms of producing not just profits but solutions to problems that we face as individuals, societies and the natural world, and it should be doing this in a way that is commercially viable, financially sustainable and profitable. It is not about philanthropy, charity or public support, but business.

The British Academy programme defines the purpose of a corporation as being to 'produce *profitable* solutions to the problems of people and planet, not profiting from producing problems for either'. This focus on problem solving recognizes that the profits of a firm should be seen as a derivative not a primary objective, derivative of the process of producing solutions and not earned at the expense of others. The objective of the firm is not singular or reflexive of its shareholders or own interests but plural in respecting the protection of all and the promotion of some.

What that does is to shift the focus from the company and its shareholders to its customers, communities, societies and environment. It emphasizes the collective and communal as well as the competitive, and it promotes markets and competition in 'runs to the top' in solving problems rather than profiting from creating them. The supposed economic efficiency of the Friedman doctrine rests on a series of propositions around competitive markets and regulatory effectiveness that simply do not hold in practice. As a consequence, the notion that a strict separation can and should be drawn between business, on the one hand, and government, regulators and the public sector, on the other, is naïve and damaging for the promotion of both economic success and social well-being more generally.

The UK has gone further than nearly any other country in embracing the notion of 'shareholder primacy' based on the Friedman doctrine in its regulatory rules. As a result, the UK financial system is characterized by a system of dispersed, anonymous investors who have little interest in the performance of the individual stocks in which they invest and cannot be held responsible for the actions they take. What matters more to diversified shareholders are global systemic risks relating to social, political and regulatory disturbances. They have little interest in individuals, communities or the natural world, except in so far as they have regulatory, political or reputational repercussions.

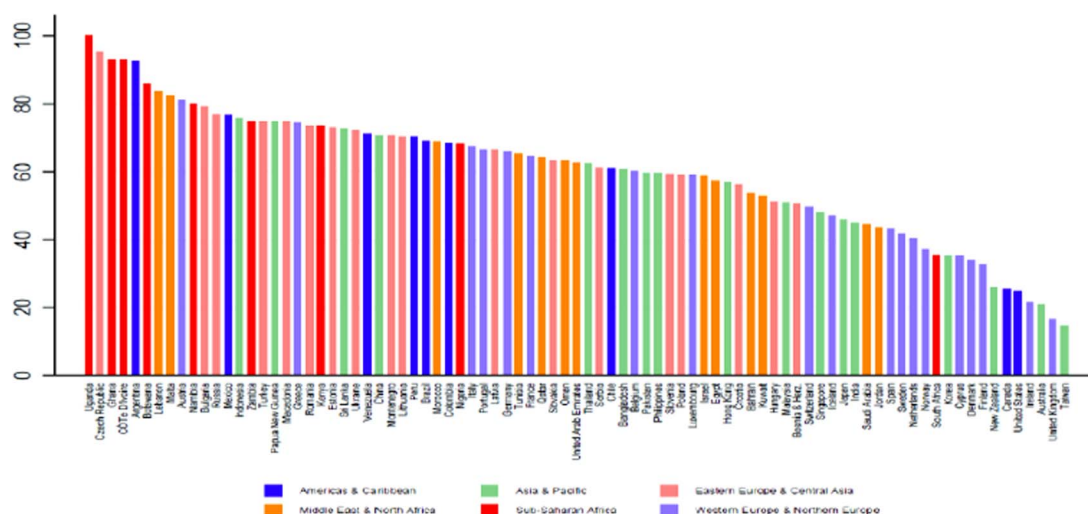


Figure 26: Share of controlled firms in 26 843 listed companies in 2012.

Source: Aminadav and Papaioannou (2020).

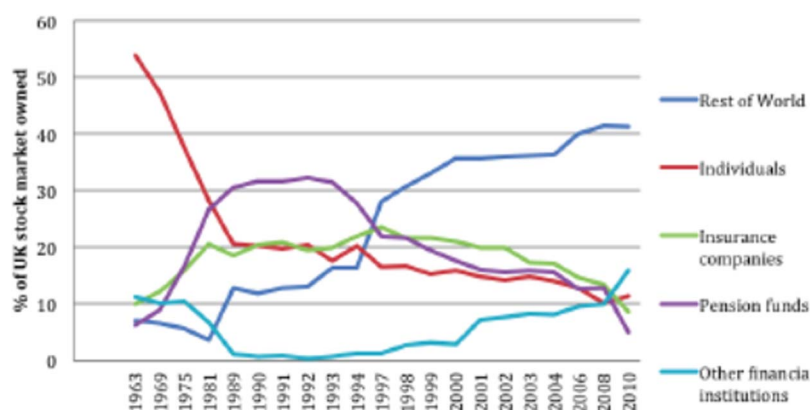


Figure 27: Registered ownership of UK listed firms, 1963–2010.

Source: Office for National Statistics.

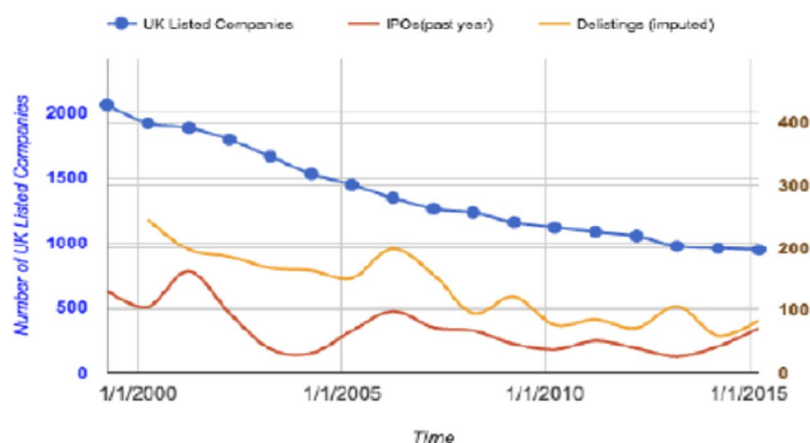


Figure 28: Number of UK listed companies, initial public offerings and de-listings, 2000–15.

Source: Franks and Mayer (2017).

This is not true of dominant holders of blocks of shares who are identifiable and substantially invested in individual stocks. They cannot hide behind a veil of anonymity like holders of index funds. As a consequence, surveys show that they are more trusted in particular by the employees of firms.³

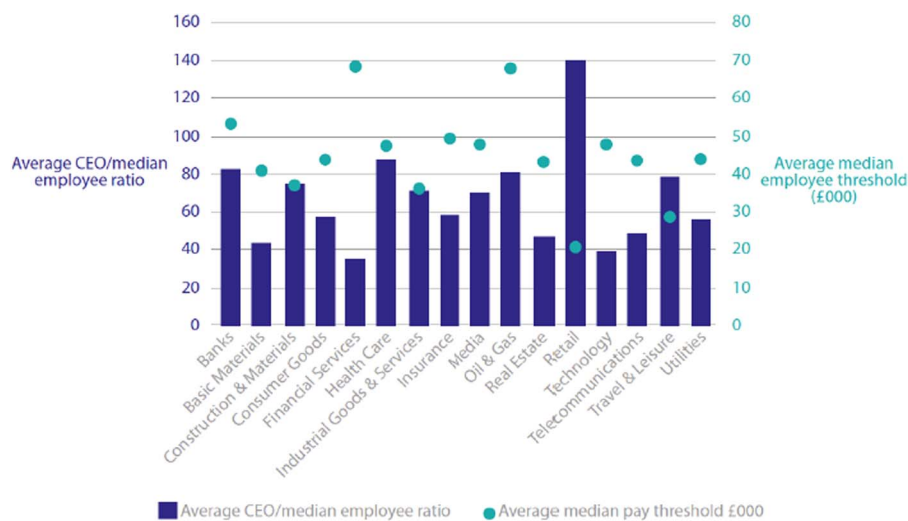
³ See the 2017 Edelman report, 'Special Report: Family Business', <https://www.edelman.com/research/family-business-trust>.

What this implies is that it is not only the allocation of control between shareholders and employees that matters but so too does the nature of the ownership of shares. The existence of identifiable, long-term committed shareholders has a significant effect on the policies that companies adopt and the degree to which they account for benefits beyond short-term financial returns. In essence, the system that has emerged in the UK is at an extreme

Table 10: Ten highest CEO/median employee ratios in the FTSE 350 in the UK: 2019–20.

Company	Index	Industry	CEO/median employee ratio
Ocado	100	Retail	2605
JD Sports	100	Retail	310
Tesco	100	Retail	305
Watches of Switzerland	250	Retail	262
GVC Holdings	100	Travel & leisure	229
Morrisons	100	Retail	217
CRH	100	Construction & materials	207
WH Smith	250	Retail	207
Astra Zeneca	100	Health care	190
Serco	250	Industrial goods & services	190

Source: Kay and Hildyard (2020).

**Figure 29:** CEO/median employee pay ratios and median pay thresholds by industry in the FTSE 350 in the UK, 2019/20.

Source: Kay and Hildyard (2020).

of rent extraction, which prioritizes returns for shareholders over capital investment and training.

This is of fundamental importance not just in relation to the observation of exceptionally low levels of capital expenditure in the UK but also the demise of a domestically owned UK manufacturing industry from a position of dominance in sectors such as electrical engineering, electronics and chemical engineering to near extinction in 60 years (Mayer 2013).

It is reflected in a failure of companies to form partnerships with other organizations in the public and private sectors. The sole preoccupation on financial returns has created a fundamental conflict between the interests of public and private sectors, between utilities and regulators, and between commercial and not-for-profit organizations.

This is reflected in a disappointing performance of public-private partnerships and private finance initiatives because of the divergent interests between public organizations in public welfare and private companies in making money (Estrin and Pelletier 2018; Palcic and Reeves 2019). It has resulted in a failure of large parts of the privatized utilities to fulfil their promise, and repeated conflicts between regulators and regulated companies in response to unacceptable performance of privatized firms.⁴

⁴ See the 2021 Sustainability First report 'Regulation for the Future: The Implications of Public Purpose for Policy and Regulation in Utilities', <https://www.sustainabilityfirst.org.uk/publications-project-research-reports/242-regulation-for-the-future>.

It is not just the ownership and control of companies that has been the cause of a failure of productivity and inequality across firms and regions. So too has finance. The financial crisis was not—as is often suggested—a global phenomenon. It was essentially a US and UK collapse with a few other European countries feeling the repercussions of what happened in the UK and the US. The consequence for the UK has been particularly devastating because of its dependence on its financial sector and the even greater decoupling it has caused of the City of London from the rest of the country.

One of the main victims was the commercial banking sector, with the result that the dwindling support that SMEs in the regions received from the banking sector was even further undermined. As a result, SMEs around the country became increasingly dependent on equity sources that were also heavily concentrated in London and the South East. Concentration of financial institutions in London has in all likelihood contributed to the extreme levels of regional productivity inequality recorded in this commentary. Also, the demise of UK productivity and its devastating regional effects may well have its origins, at least in part, in UK exceptionalism in the ownership, control and financing of its corporate sector.

One manifestation of the UK system of ownership and governance is the disparity of income it has created within as well as across firms. UK companies have recently been required to provide data on pay ratios in their organizations and so, for the

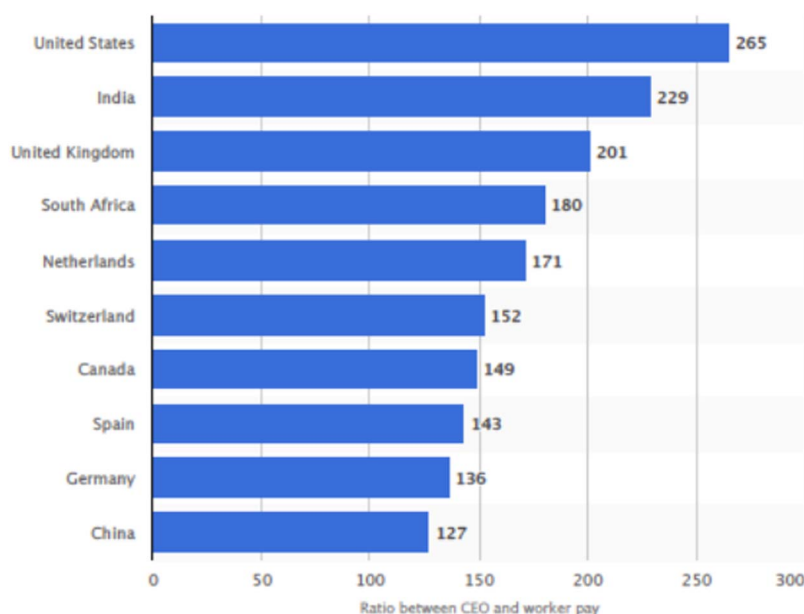


Figure 30: International comparison of ratio between CEO and average worker pay in 2018.
Source: Statista, 2021.

first time, it has been possible to document them reasonably accurately. Table 10 shows the ten highest ratios of CEO to median employee pay in FTSE 350 companies in 2019–20 and Fig. 29 shows the average ratios and median pay thresholds by sector. Table 10 also records the prevalence of the highest ratios in the retail sector and Fig. 29 shows the exceptionally high average CEO/median employee ratio and low median employee threshold in each sector. International comparisons of pay ratios are of questionable accuracy but, to the extent that they are valid, Fig. 30 suggests that ratios of CEO to average pay are particularly high in the US and UK.

Conclusions

This commentary records that the UK has experienced an exceptionally low level of productivity historically and internationally since the financial crisis of 2008. This has been reflected in a marked variation in productivity across firms by size, age and sector. In particular, there are large regional variations in productivity across the UK with substantial disparities between the South and East, and the rest of the country. These in turn are associated with considerable regional income and wealth inequalities. Alongside its poor productivity performance, the UK has recorded an exceptionally low level of business investment (fixed capital formation) and high regional variation in its R&D.

As suggested in this commentary, there are two factors that might have contributed to this. The first is the financial system and the funding of, in particular, SMEs. Having once successfully funded the industrial revolution through a local banking system, the UK now has a highly centralized banking sector that provides predominantly short-term working capital. As a result, SMEs are dependent on equity sources to fund their growth and expansion. However, a large proportion of this goes to firms in the south-east of the UK and there has been a failure to connect pools of capital in London with the regions.

The second factor is the ownership and governance of firms. The UK has an exceptionally dispersed form of ownership of listed companies and an absence of owners of significant blocks of shares. Furthermore, having once had locally based individual

shareholders, holdings of shares have moved progressively from domestic relatively long-term institutional investors to global short-term asset management firms. The result has been the demise of long-term domestic, local shareholders.

The consequence has been that the UK has extinguished both locally based banks and local shareholders that had close relations with companies they financed and owned. Instead, finance, ownership and governance have become highly centralized and disconnected from business. The result is a high level of regional disparities in financing and governance, and the replacement of long-term relationships between investors and firms with short-term, transactional engagements. Those engagements have become increasingly focused on shareholder returns at the expense of the interests of other parties, with adverse consequences for aggregate productivity and the diffusion of productivity gains between firms, inequality within as well as between firms, and regional disparities.

The implication of this commentary is that attention needs to be given to the laws—in particular, the UK Companies Act (2006)—and regulations, particularly those pertaining to finance, ownership and investment, that underpin the UK financial, ownership and governance system. This in no way detracts from the significance of the factors that De Loecker et al. (2024) consider to be important in contributing to the UK's productivity and firm inequality performance—'winner takes most', technology, intangible assets, competition policy, regulation, countervailing union power, and globalization are all clearly significant contributory factors. Instead, this commentary suggests that underpinning them is a consideration that has received inadequate attention to date—and that is the nature of the UK's financial, ownership and governance arrangements.

De Loecker et al. (2024) provide some tantalizing hint of this when they discuss significant differences between companies that are listed on the UK stock market and those that are not. What this commentary suggests is that future research using individual firm data could usefully extend that analysis to provide a more formal evaluation than has been possible in this commentary of how ownership, governance and financing of firms have influenced their productivity, profitability, employ-

ment, wages and shares of income, both over time and across firms.

ACKNOWLEDGEMENTS

I am grateful to Robert Joyce, Philip McCann and participants in the IFS Deaton Review of Inequalities Workshop, May 2021, for helpful comments on a previous draft of this commentary.

FUNDING

This commentary was written for the IFS Deaton Review of Inequalities, funded by the Nuffield Foundation (grant reference WEL/43603). The views expressed are those of the authors and not necessarily the Foundation.

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