Understanding the weakness in business investment:
A cross-country analysis

By: Dennis Dlugosch, Max Glanville, John Hooley, Fatih Ozturk and Ben Westmore

OECD

OECD Economics Department Working Papers

Understanding the weakness in business investment: A cross-country analysis

N°1836

OECD

ABSTRACT/RÉSUMÉ

Understanding the weakness in business investment: a cross-country analysis

Weak investment has weighed on potential output growth in advanced and emerging economies since the global financial crisis (GFC), despite historically low cost of capital and strong corporate profitability. This paper documents shortfalls in business investment across OECD countries and examines their drivers, drawing from national accounts and firm-level data. On a weighted average basis, real business investment is around 23% below the level that would have been observed without the permanent downward level shift that followed the GFC. Subdued aggregate demand and elevated uncertainty appear to explain around half of this shortfall, with the remainder likely linked to more structural factors. Notably, the most pronounced changes in the composition of investment have occurred across asset classes rather than industries, reflecting the shift toward a more digital and knowledge-based economy, with increased investment in software and data, ICT hardware, and R&D. Changes in corporate behaviour also appear to have been important—including increased cash holdings and persistently high required rates of return on investment, despite lower capital costs. Taken together, these trends lend support to explanations for investment weakness related to financing challenges for intangibles, increased corporate caution, weakening competitive pressures, and declining business dynamism.

JEL Codes: D24; E22 ; G31; G32; G35; O16

Keywords: Investment, cost of capital, balance sheets, uncertainty, digital transition, economic outlook

Comprendre la faiblesse de l'investissement des entreprises : une analyse transnationale

La faiblesse de l'investissement a pesé sur la croissance potentielle de la production dans les économies avancées et émergentes depuis la crise financière mondiale, malgré un coût du capital historiquement bas et une forte rentabilité des entreprises. Cette étude documente les déficits d'investissement des entreprises dans les pays de l'OCDE et examine leurs causes, en s'appuyant sur les comptes nationaux et les données au niveau de l'entreprise. L'investissement réel des entreprises est inférieur d'environ 23 % en moyenne par rapport au niveau qui aurait été atteint sans la baisse permanente qui a fait suite à la crise financière mondiale. La faiblesse de la demande globale et la montée de l'incertitude semblent expliquer environ la moitié de ce déficit, le reste étant probablement lié à des facteurs plus structurels. Notamment, les changements les plus prononcés dans la composition de l'investissement se sont produits dans les classes d'actifs plutôt que dans les industries, reflétant le passage à une économie plus numérique et basée sur la connaissance, avec des investissements accrus dans les logiciels et les données, le matériel TIC et la R&D. Les changements dans le comportement des entreprises semblent également avoir été importants, notamment l'augmentation des liquidités et la persistance de rendements élevés, malgré la baisse des coûts du capital. Dans l'ensemble, ces tendances confirment les explications de la faiblesse de l'investissement liées aux problèmes de financement des actifs incorporels, à la prudence accrue des entreprises, à l'affaiblissement des pressions concurrentielles et à la baisse du dynamisme des entreprises.

Codes JEL: D24; E22 ; G31; G32; G35; O16

Mots clés: Investissement, coût du capital, bilans, incertitude, transition numérique, perspectives économiques

Table of contents

Tables

Figures

Understanding the weakness in business investment: A cross-country analysis

Dennis Dlugosch, Max Glanville, John Hooley, Fatih Ozturk, Ben Westmore[1]

1. Introduction and summary

Weak capital accumulation has been a key factor behind persistently sluggish potential growth across OECD economies. Following the global financial crisis (GFC), fixed investment declined sharply in many countries, and the subsequent recovery was modest. Investment was further disrupted by the COVID-19 pandemic, with another muted rebound. Growth in business investment—the largest component of total investment— has been particularly subdued and is a central contributor to weak productivity growth.

A broad literature has studied the weakness in business investment in advanced economies, and several hypotheses have been proposed to explain this weakness (see Dottling, Gutiérrez & Philippon 2017, for a summary). These range from insufficient aggregate demand—which has limited firms' incentives to expand capacity even in the context of low interest rates (Rachel & Summers, 2019)—to heightened economic uncertainty, which discourages irreversible investment (Bloom, 2009), and the increasing share of low-investment-intensity sectors, such as services (Barkai, 2020; Crouzet & Eberly, 2019). Changes in corporate behaviour, including increased financialisation and a preference for shareholder payouts over capital spending, have also been associated with declining investment (Davis, 2017). Structural shifts in the composition of economic activity—most notably the rising importance of intangible assets—may further contribute to subdued investment, as these assets behave differently from physical capital and are often under-measured in traditional statistics (Haskel & Westlake, 2018; Corrado, Hulten & Sichel, 2009).

Against this backdrop, this paper examines recent developments in investment and their drivers across a broad set of OECD economies, drawing from a range of sources, including national accounts and firm-level data.[2] It assesses the extent of the investment shortfall by analysing trends in capital accumulation and investment since the GFC and the COVID-19 pandemic, and estimates business investment 'gaps'—highlighting the portion of the weakness not accounted for by demand-side factors. The paper evaluates traditional determinants of business investment, such as the user cost of capital, profitability, and uncertainty. It also examines several structural changes in the investment landscape—including the rising importance of digital and intangible assets, increasingly cautious corporate financial behaviour, and declining business dynamism—and considers how these developments may offer insights into alternative explanations for persistent investment weakness.

The paper's key findings are as follows:

- Investment growth has been persistently weak across OECD economies since the GFC. Real business investment remains 23% below its pre-GFC trend. The weakness has been broad based: in no OECD country has real business investment fully returned to its pre-2008 trend. However, there is notable cross--country heterogeneity, with investment having been relatively strong in some countries, such as the United States and France.

- Around half of the shortfall in business investment appears related to weakness in aggregate demand and higher policy uncertainty:

  o An investment accelerator model suggests around one third of the shortfall can be related to demand. The remaining shortfall can be interpreted as an investment 'gap' that is not accounted for by output developments. A decomposition of these investment gaps indicates that structural factors following the COVID-19 shock have also contributed to the unexplained slowdown: on average roughly one-quarter of the gap stems from investment developments since 2020.

  o Elevated uncertainty has also contributed to the shortfall. Estimations from a VAR model suggest that the increase in uncertainty during recent years may have reduced annual investment growth by 0.4 percentage points on average across OECD countries, accounting for approximately one-sixth of the overall shortfall in business investment.

  o Other neoclassical factors seem to have played a more limited role. Measures of the user cost of capital have declined substantially over recent decades due to historically low borrowing costs, falling relative prices of investment goods, and lower corporate taxes. Corporate profitability has remained strong and forward-looking Tobin's Q measures suggest market valuations have been conducive to investment in fixed capital. Sectoral composition factors also do not appear to have been important as declines in investment have been driven by within-sector trends rather than by shifts in economic activity toward less capital-intensive sectors.

- Several changes in the investment landscape have emerged, offering insights into additional explanations for persistent investment weakness:

  o The transition to a digital and knowledge-based economy has led to a shift in the asset composition of investment, with increased focus on intangible assets such as software and data, as well as complementary tangible assets like ICT hardware.

---

[2] Excerpts from this paper were also featured in the special chapter, *Reigniting Investment for More Resilient Growth*, published in the June 2025 edition of the OECD Economic Outlook.

- o Changes in corporate financial behaviour are also evident. Firms have allocated a smaller share of retained earnings and borrowed funds to productive investment, instead accumulating financial assets or distributing earnings to shareholders through dividends and share buybacks. Required rates of return on investment (the "hurdle" rate) applied by firms when making investment decisions have remained high despite the fall in the user cost of capital. These patterns coincide with signs of declining competition, reflected in rising mark-ups, increased firm concentration, and reduced business dynamism.

  - o Taken together, these trends lend support to explanations for investment weakness related to financing challenges—particularly for intangible assets—and weakening competitive pressures.

- Addressing the weakness in business investment will require a comprehensive set of policies. Key priorities include reducing uncertainty through transparent, rules-based trade, tax, and regulatory frameworks, and tackling structural barriers to investment by enhancing competition, reducing regulatory burdens, addressing skills shortages and alleviating financing constraints.

The paper is structured as follows. Section 2 outlines cross-country developments in capital accumulation and investment. Section 3 analyses traditional drivers of business investment and assesses the extent to which they explain recent investment outcomes. Section 4 documents several recent structural trends in the investment landscape — including changes in industrial composition, asset types, corporate financial behaviour, and market dynamism — and explores their relationship to alternative explanations for investment weakness, such as financing constraints and declining competition. The final section concludes by highlighting relevant policy priorities to support a sustained recovery in business investment.

2. Cross-country developments in capital accumulation and investment

2.1 Trends in total economy capital accumulation and investment

Underlying growth prospects have weakened considerably over the past two decades, both in advanced and emerging-market economies. Weak growth in the capital stock has been an important factor behind the slowdown in potential output per capita growth in many countries, alongside a decline in multi-factor productivity (MFP) growth. Potential output per capita growth fell by 0.8 percentage points in the median advanced country and 0.9 percentage points in the median emerging-market economy between the 2002-2008 period and 2024. A decomposition of this decline in potential GDP per capita growth shows that weaker growth in capital per worker accounted for 0.5 percentage points in the median advanced country, and 0.3 percentage points in the median emerging-market country. The slowdown in capital accumulation has weighed on potential growth across nearly all countries (Figure 1, Panel A), including those with relatively strong overall growth performance, such as India and China.

The aggregate slowdown in capital accumulation also masks notable cross-country differences (Figure 1, Panel B). In the advanced economies, capital stock growth has been particularly weak in Japan, Italy, Greece and Portugal during the past 15 years. The United States has observed steadier growth, albeit still below levels observed in the period before the GFC. Capital stocks in emerging-market economies have grown slightly faster on average than in advanced economies, reflecting greater investment needs. Nevertheless, some major emerging-market economies, such as Brazil, Argentina and South Africa, have seen weak capital stock growth, while others, such as Chile, have experienced high growth rates, but still a marked slowdown in capital stock growth over the past two decades.

Figure 1. Weak capital accumulation has held back growth

A. Contribution of capital deepening to the change in the growth of potential output per capita between the 2002-08 average and 2024
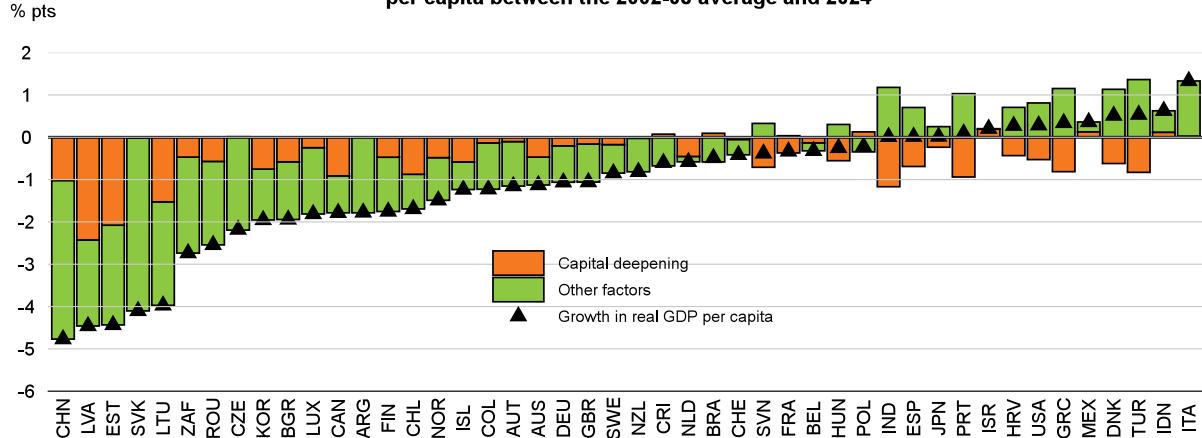
B. Annual growth rate of the capital stock
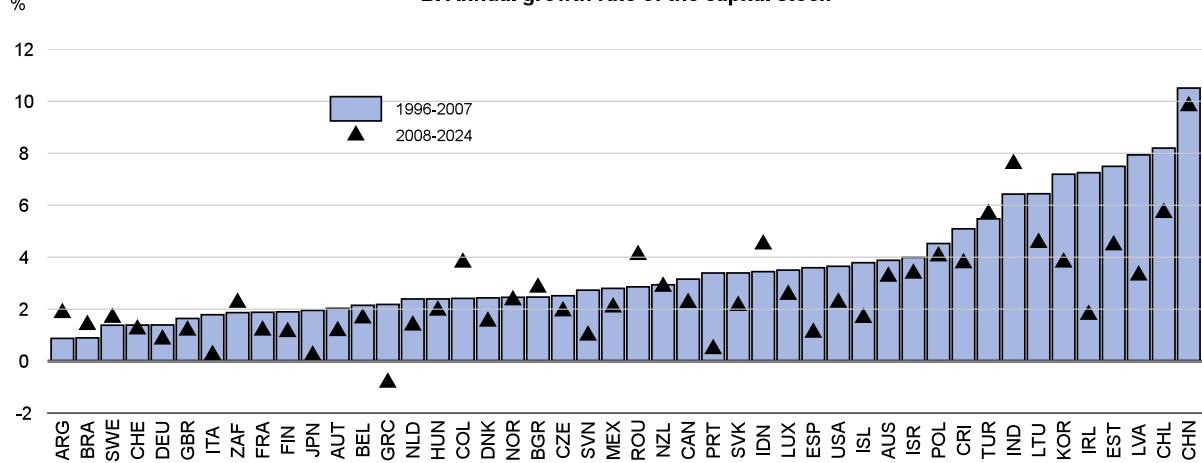
Note: Panel A: Other factors include changes in labour utilisation and multi-factor productivity. Capital deepening is the rate of change in the capital stock per worker. Panel B: annual average growth rate of the capital stock at constant prices.
Source: OECD Economic Outlook 117 database; and OECD calculations.

The slowdown in capital accumulation largely reflects the lasting impact of two major shocks – the GFC and the COVID-19 pandemic – which led to notable declines in real investment from which most economies have recovered only partially. Total real investment, which measures the volume of gross fixed capital formation across the economy, contracted sharply during the GFC as economic growth weakened and financing conditions tightened. The subsequent recovery was relatively modest. Investment declined again during the pandemic, rebounding only partially thereafter, with other events such as Russia's war of aggression in Ukraine and rising energy prices also weighing on capital formation. As a result, aggregate real investment volumes across advanced countries remained approximately 20% below their pre-GFC trend and 7% below the pre-COVID trend at end-2024 (Figure 2, Panel A). An investment shortfall is also evident in emerging markets, though it developed more gradually, as investment was less affected by the GFC than in advanced economies. Investment in emerging-market economies on average is estimated to be approximately 19% below the pre-GFC trend, although it is slightly above the pre-COVID trend due to recent robust growth in India and Indonesia (Figure 2, Panel B). This investment slowdown has been widespread across countries. Most have continued to see weak capital formation in recent years, with a few exceptions, such as the United States, India and Indonesia, where investment growth has been relatively strong.

Figure 2. Real investment remains below the pre-GFC and pre-pandemic trends in many economies

Real total investment

A. Advanced economies

Index 2015 = 100

- Weighted average
- Pre-GFC trend (2002-07)
- Pre-COVID trend (2014-19)

B. Emerging-market economies

Index 2015 = 100

- Weighted average
- Pre-GFC trend (2002-07)
- Pre-COVID trend (2014-19)
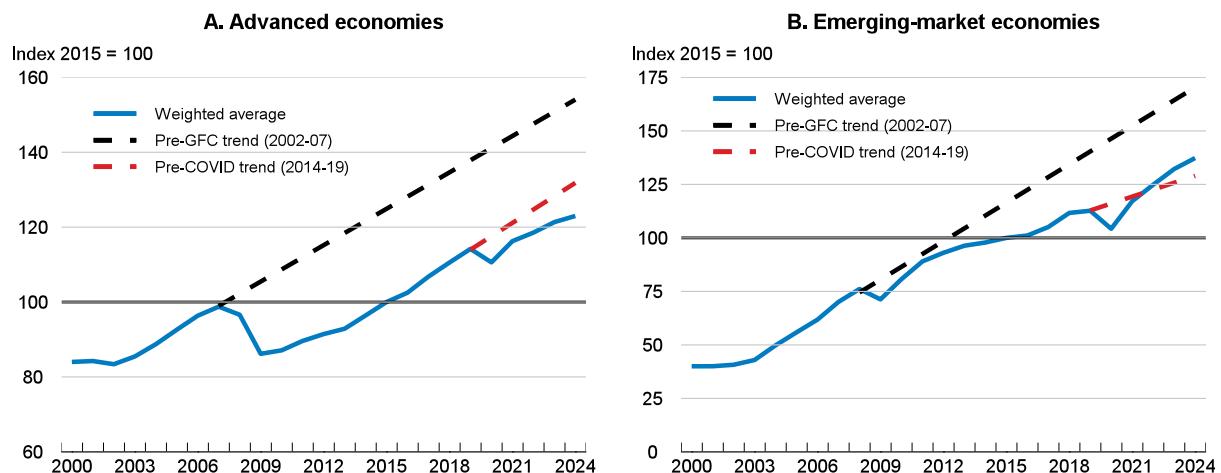
Note: Real investment across 33 advanced economies and 13 emerging-market economies (Argentina, Brazil, Bulgaria, Chile, Colombia, Costa Rica, India, Indonesia, Mexico, Romania, South Africa, Thailand, and Türkiye). Weighted average using GDP PPP weights in 2015. GFC denotes the global financial crisis.
Source: OECD Economic Outlook 117 database; and OECD calculations.

While the ratio of gross investment to GDP has risen in recent years in some countries, net investment - the addition to the capital stock after accounting for depreciation - remains weak across OECD countries. Since the pre-GFC period, average net investment rates across the OECD have declined by over 0.9 percentage points of GDP, from 2.5 to 1.6 per cent of GDP for the median country, with the fall in net investment strongest in the euro area. The overall decline in net investment has been primarily driven by the drop in business net investment - the largest share of total investment – though reductions in residential and public net investment have also contributed (Figure 3). The declines primarily reflect weakness in underlying investment volumes. The fall in prices of investment goods relative to overall prices played a significant role in the lower net investment-to-GDP ratios of the 1990s and early 2000s, but relative prices have since broadly stabilised in the post-GFC period.

Figure 3. Net investment-to-GDP ratios have declined since the GFC

Net investment in OECD countries
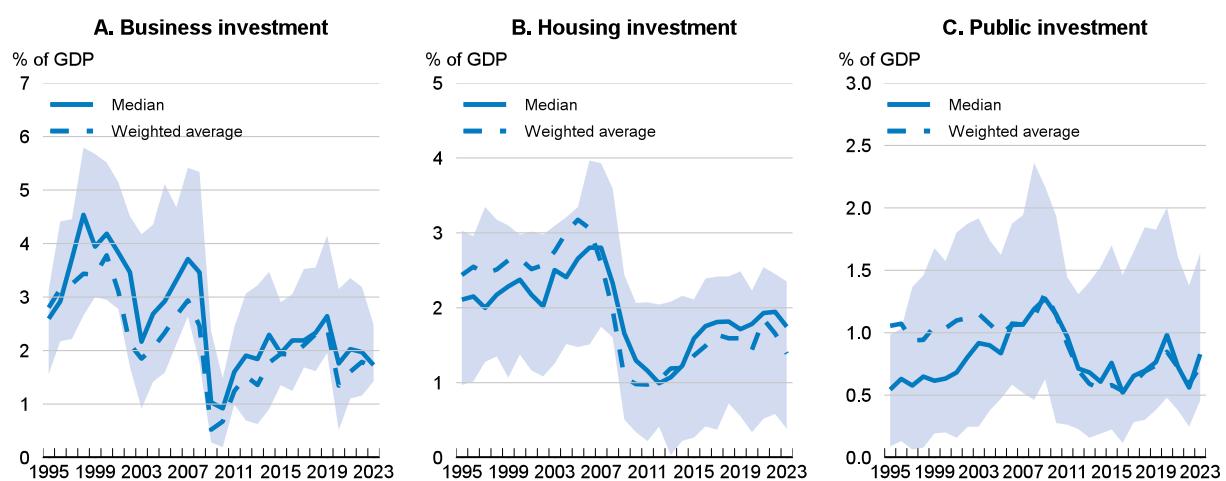
Note: Net investment-to-GDP is defined as the ratio of gross fixed capital formation minus the consumption of fixed capital in current prices, to nominal GDP. Business investment includes the combined investment of the non-financial and financial sectors, while public investment refers to the investment undertaken by the general government. Based on 32 OECD countries for which sectoral investment data are available. The shaded area shows the interquartile range.
Source: OECD National Accounts database; and OECD calculations.

2.2. Trends in business investment

Business investment represents the largest share of total investment in OECD economies, accounting for over 60% on average. As a share of GDP, business investment is around 13% for the median OECD country (Figure 4, Panel A). However, there is substantial cross-country variation, with gross business investment ratios ranging from around 20% of GDP in Korea and Switzerland, to around 9% of GDP in the UK. Investment performance has remained relatively weak in most countries, with business investment-to-GDP ratios remaining below their pre-crisis levels on both a weighted-average and median basis. Average growth rates in real business investment have also been notably lower in all OECD economies compared to the period before 2007 (Figure 4, Panel B), and in no OECD country has real business investment fully returned to its pre-2008 trend. On a weighted average basis, real business investment in OECD countries was around 23% below its pre-GFC trend at end 2023 (Figure 5).

This weakness has been broad-based, spanning countries at different income levels and affecting firms of all sizes, including both large corporations and small and medium-sized enterprises (Hanappi, Millot and Turban, 2023). However, these aggregate trends mask considerable cross-country heterogeneity in recent performance. A few economies stand out for comparatively stronger business investment growth, particularly in recent years, such as the United States and Sweden, while in others, such as Germany and Finland, business investment has experienced negative real growth in recent years.

Figure 4. Business investment has been particularly sluggish since the GFC

A. OECD business investment to GDP ratio

B. Annual growth in real business investment
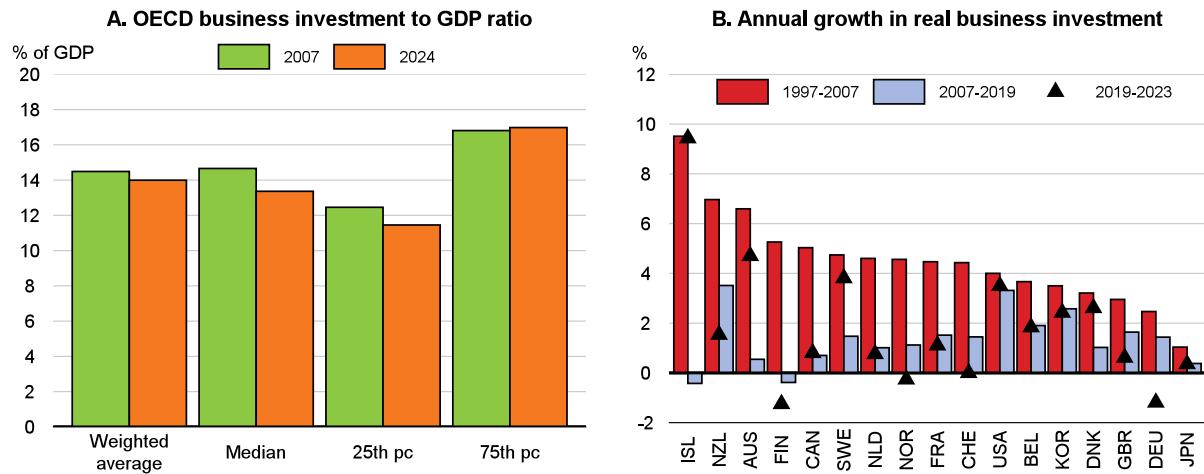
Note: In Panel A, the gross business-to-GDP ratio is shown. The country sample is the same as the countries shown in Panel B.
Source: OECD Economic Outlook 117 database; and OECD calculations.

3. Do neoclassical factors explain weak business investment?

3.1. Aggregate demand

An important factor behind the weakness in business investment relative to earlier trends may be more subdued aggregate demand growth. Corporate investment is closely linked to output growth, as stronger demand incentivises firms to expand capacity. To assess the extent to which cyclical fluctuations have contributed to the observed dynamics in business investment since the GFC and the COVID-19 pandemic, the following reduced-form investment model is estimated. The specification relates real business investment growth to its own lag as well as to current real output growth, controlling for country-fixed effects:[3]

$$\Delta I_{c,t} = \beta_1 \Delta Y_{c,t} + \beta_2 \Delta I_{c,t-1} + \alpha_c + \epsilon_{c,t} \tag{1}$$

where $\Delta I_{c,t}$ denotes the annual growth rate of real business investment in country c and year t, and $\Delta Y_{c,t}$ is the annual growth rate of GDP.

The model is estimated for 17 OECD countries for which data on real business investment are available. The results (Table A1) confirm a strong and statistically significant relationship between output and investment growth. A one percentage point increase in GDP growth is associated with a 1.26 percentage point rise in investment growth. Lagged investment growth also has a positive and significant effect, indicating that both demand conditions and inertia shape short-term investment dynamics. Using these coefficients, we then construct counterfactual investment paths indexed to 2007, comparing actual investment outcomes with model predictions for the period 2007–2023. The resulting gap in 2023 reflects the shortfall in investment not explained by output developments.

This empirical analysis indicates that weak aggregate demand developments explain around one-third of the total shortfall in investment relative to its pre-GFC trend (Figure 5, Panel A). The remaining shortfall can be interpreted as an investment 'gap' that is not accounted for by output developments. These gaps

---

[3] A similar empirical approach was used in Lewis et al (2014).

are sizeable in some countries, reaching over 30% in Australia, Korea and the Netherlands (Figure 5, Panel B). A decomposition of these investment gaps indicates that structural factors following the COVID-19 shock has also contributed to the unexplained slowdown: on average roughly one-quarter of the gap stems from investment developments since 2020. However, the impact of the COVID-19 shock on business investment has been much larger in some countries, such as Belgium, Denmark and Sweden.

Figure 5. Business investment 'gaps' are large across OECD economies

Decomposition of shortfalls in real business investment compared to pre-GFC trend
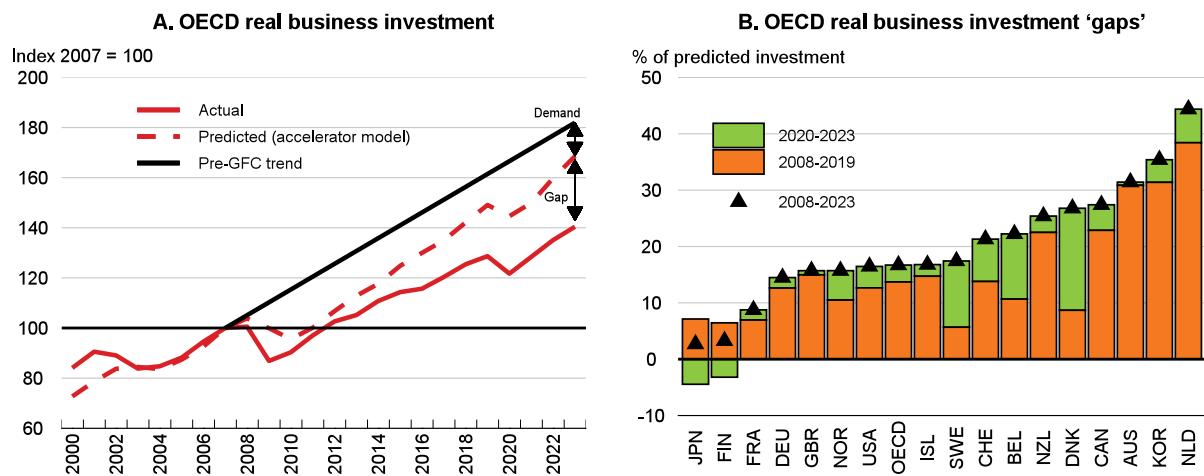
Note: The investment gap is calculated as the shortfall relative to predicted investment from a simple accelerator model that relates real business investment growth to its own lag and to current real output growth (Annex A). Predicted real business investment is calculated from 2008 to 2023 as the fitted values from the model using actual growth rates of GDP and lagged investment. The overall shortfall in real business investment relative to the pre-GFC trend in 2023 is then decomposed into a part that is explained by the model, interpreted as demand (calculated as trend investment minus predicted investment) and an unexplained part, or 'gap' (calculated as predicted investment minus actual investment, as a per cent of predicted investment). The country sample includes 17 OECD countries for which data on real business investment are available. Panel A shows the results for the OECD aggregate, calculated as a weighted average of the countries in Panel B using GDP PPP weights. Panel B shows investment gaps in per cent of predicted investment, for countries with available data.
Source: OECD Economic Outlook 117 database; and OECD calculations.

3.2. User cost of capital

Business investment gaps have opened up despite a marked decline in the user cost of capital (UCC) across most economies. The UCC captures the cost of financing and maintaining capital factoring in borrowing costs, relative prices, taxes, and depreciation. As described in Lewis et al (2014), a representative measure of the real user cost of capital can derived from the following expression:

$$UCC = \frac{P^K}{P^Y} \times (\theta(1-\tau)i - (1-\theta)i - \pi + \delta)$$

(2)

where $\frac{P^K}{P^Y}$ denotes the relative price of business investment to GDP, θ is the fraction of debt in corporate liabilities，τ is the effective marginal corporate tax rate,[4] i is the long-term government bond yield, π represents the change in the GDP deflator, δ is the depreciation rate.

The measure of UCC has trended downward steadily over the past few decades until the recent moves to tighten monetary policy (Figure 6, Panel A). Borrowing costs dropped to historically low levels following the monetary policy easing in response to the GFC, and while they have risen more recently, they remain well below long-term averages (Figure 6, Panel B). Effective corporate tax rates have also declined, with several OECD countries having reduced the main statutory rate (Figure 6, Panel C), and changes to tax provisions have further lowered the effective cost of capital in some countries. Simultaneously, the price of investment goods relative to overall output prices fell throughout the 1990s and early 2000s, largely due to sustained improvements in the quality and efficiency of ICT-related capital (Figure 6, Panel C).

Figure 6. The cost of capital has fallen and company valuations have recovered
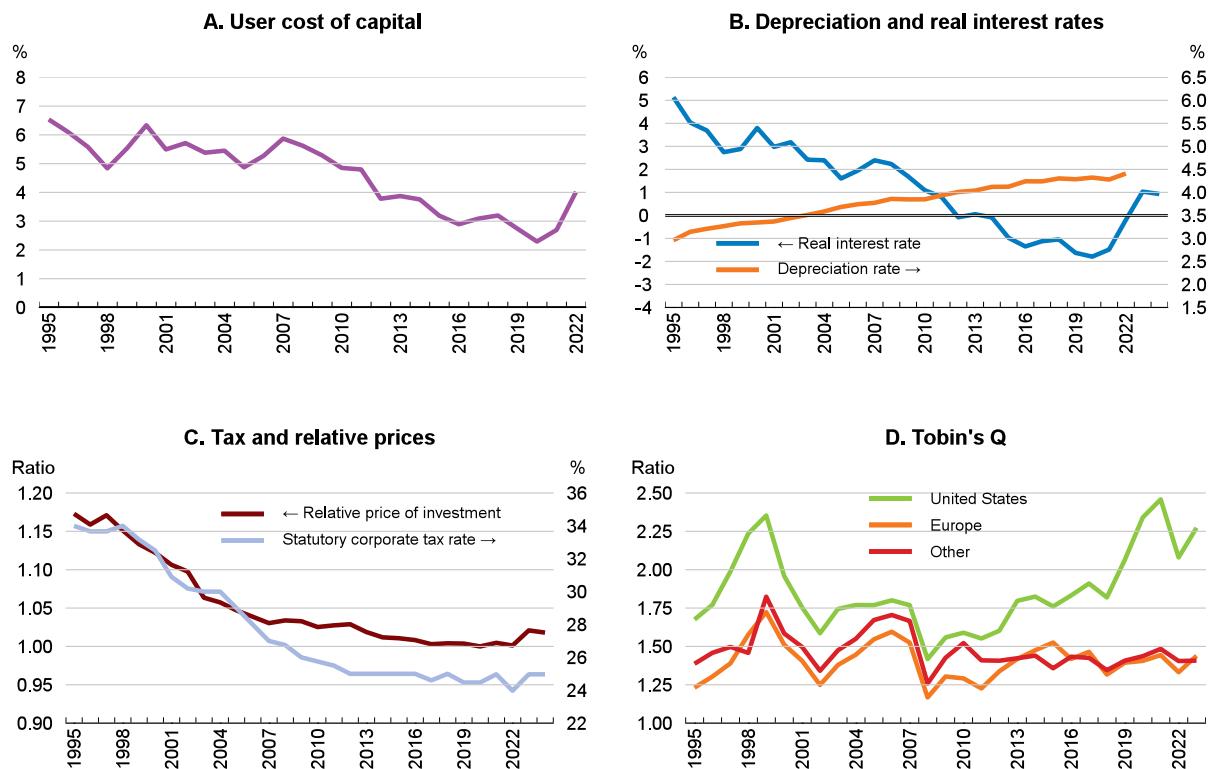
Note: Panel A: The UCC is calculated using the relative price of investment, the real interest rate based on the 10-year government bond yield and 10-year ahead inflation expectations from professional forecasts, the depreciation rate, the statutory corporate tax rate and the share of debt in corporate liabilities (debt plus equity). Panel C: The relative price of investment is measured as the ratio of the investment and GDP deflators. Panel D: Tobin's Q is calculated as the sum of market capitalisation and liabilities, minus common equity, divided by total assets using Worldscope data. In Panels A, B and C, the country sample includes 15 OECD countries for which data are available (Australia, Belgium, Canada, Denmark, Finland, France, Germany, Japan, Korea, the Netherlands, New Zealand, Sweden, Switzerland, the United Kingdom, and the United States). Median values are shown. In Panel D, for Europe, the median is calculated using data from a subset of countries with larger stock markets, covering Austria, Belgium, Switzerland, Germany, Denmark, Spain, France, Italy, the Netherlands, and Sweden. The 'Other' category represents the median of Australia, Canada, the United Kingdom, and Japan.
Source: OECD Economic Outlook 117 database; OECD National accounts database; Oxford University Centre for Business Taxation Database; LSEG Worldscope Fundamentals; Consensus Economics; and OECD calculations.

---

[4] Due to data limitations, the statutory corporate tax rate is used in the calculation of the proxy UCC measure.

3.3. Tobin's Q and profitability

Expectations of future profitability have also remained favourable to higher investment. When the ratio of a firm's market valuation to the replacement cost of its assets (Tobin's Q) is above one, markets expect firms can earn returns on new investment that exceed investment costs, providing an incentive to invest in fixed capital. A proxy measure of Tobin's Q can be constructed from firm-level data from listed companies calculated as the sum of market capitalisation and liabilities, minus common equity, divided by total assets using data from Worldscope. This measure indicates that Tobin's Q has remained above 1 since the GFC across a subset of OECD countries with the largest stock markets (Figure 6, Panel D).[5] In the United States and some Scandinavian countries, valuations have risen strongly in recent years, whereas valuations have been flat or increased only gradually in most European and other advanced economies.

Current measures of profitability and cash resources also do not appear to have acted as constraints on investment. National accounts data for the non-financial corporate sector indicate that subdued corporate investment in advanced economies since the GFC has coincided with the non-financial corporate sector shifting from being a net borrower to net lender on aggregate (Figure 7, Panel A). Gross corporate savings as a share of GDP have increased in more than half of the OECD countries with available data, driven by stronger profits, proportionally lower tax payments, and lower interest expenditures, although this has been partially offset by higher dividends in some countries including the United States, Canada and the Netherlands (Figure 7, Panel B). Overall, the ratio of net investment to net sales has also declined, implying that higher sales have not been proportionally matched with higher investment.

Figure 7. Strong corporate profitability has not translated into higher gross fixed capital investment

A. OECD corporate saving and investment

B. Sources of corporate gross saving
Change between 2002-07 average and 2022
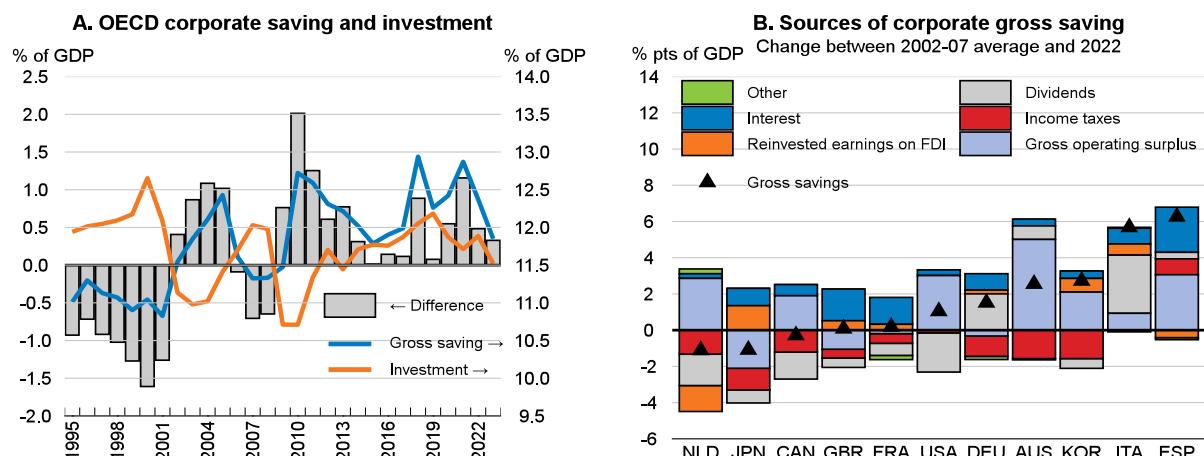
Note: Panel A contains 33 OECD countries. It shows gross fixed capital formation and gross savings for the non-financial corporate sector as a per cent of nominal GDP, aggregated up to the OECD level. The difference between gross fixed capital investment and gross savings is approximately equal to net lending, but can vary depending on changes in inventories, other non-financial produced assets, and net capital transfers. In Panel B, the decomposition is based on the distribution of income account for the non-financial corporate sector within the System of National Accounts: Gross operating surplus = Gross saving + Net property income paid + Current taxes on income + Social transfers + Other transfers, where Net property income paid = Dividends - reinvested earnings on foreign direct investment + net interest paid + rents on land (for more information see (Chen, Loukas and Brent, 2017)).
Source: OECD National Accounts database; and OECD calculations.

---

[5] Differences in the valuation of firms in advanced economies and their US counterparts may be driven by several factors. These include the traditionally stronger institutional framework in the United States —including corporate governance standards and financial market infrastructure—greater market capacity to absorb global risks, and higher expectations for future investment returns (La Porta et al., 1998). The relative undervaluation of "brown" firms (those with higher carbon emissions) in other developed countries, compared to the United States, may also contribute to this premium (Doidge, Karolyi and Stulz, 2020).

3.4. Uncertainty

Elevated uncertainty – both macroeconomic and policy related – is likely to have weighed on investment incentives and encouraged precautionary cash accumulation. Although not a traditional neoclassical determinant, uncertainty is increasingly incorporated into standard neoclassical-type models of business investment (Bloom, 2007; Bloom et al., 2018). Firms may hesitate to commit to long-term capital spending projects when the outlook for global demand, trade policy, or regulatory frameworks is unclear. Economic policy uncertainty indicators started to increase steadily around 2016, and trade policy uncertainty became elevated in the 2017-2020 period (Figure 8, Panel A). Furthermore, recent survey evidence suggests that uncertainty is increasingly a major obstacle to investment for firms (Figure 8, Panel B).

Figure 8. Uncertainty has increased, becoming a greater obstacle to investment

A. Uncertainty indices	B. Survey measure of uncertainty
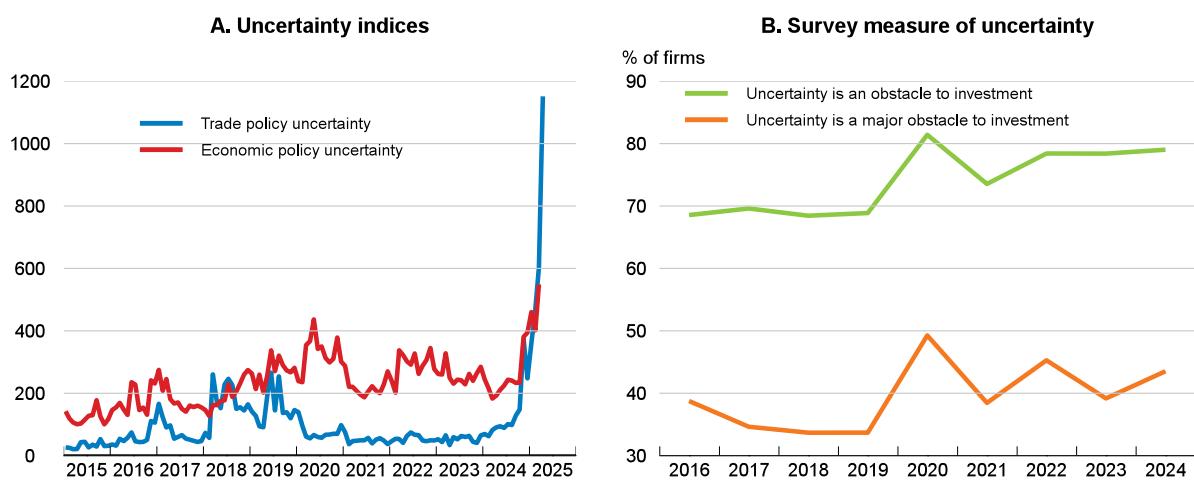
Note: For Panel A, the Economic Policy Uncertainty (EPU) is based on Baker, Bloom & Davis (2016) and the Trade Policy Uncertainty (TPU) index is from Caldara et al (2019). The EPU index is a nominal GDP-weighted average of national EPU for 21 countries: Australia, Brazil, Canada, Chile, China, Colombia, France, Germany, Greece, India, Ireland, Italy, Japan, Korea, Mexico, Netherlands, Russia, Spain, Sweden, the United Kingdom and the United States. The TPU index is based on automated text searches of the electronic archives of seven newspapers: Boston Globe, Chicago Tribune, Guardian, Los Angeles Times, New York Times, Wall Street Journal, and Washington Post Panel B shows the share of firms responding positively to the survey question Q.38 in the European Investment Bank EIB) Investment Survey: 'Thinking about your investment activities, to what extent is each of the following an obstacle? Is it a major obstacle, a minor obstacle or not an obstacle at all?', the average score is shown for EU countries and the United States.
Source: www.policyuncertainty.com; European Investment Bank (EIB) Investment Survey; and OECD calculations.

To attempt to quantify impact of policy uncertainty on investment in OECD economies a panel Vector Autoregression (VAR) model is estimated with quarterly data. The model includes real business investment, GDP, the GDP deflator, short-term interest rates and a measure of economic uncertainty, the Economic Policy Uncertainty (EPU) index, developed by Baker, Bloom and Davis (2016), capturing both country-specific and global shocks.

The results suggest that a one standard deviation increase in economic policy uncertainty reduces business investment growth by around 1 percentage point and GDP growth by over ¼ percentage point after one year, the point at which the impact on both measures reach their peak(Figure 9). These findings suggest that the increase in uncertainty during recent years may have reduced annual investment growth by 0.4 percentage points on average across OECD countries. This would account for approximately one-sixth of the overall shortfall in business investment, and one-quarter of the investment 'gap' shown in Figure 5.

More recently, measures of policy uncertainty have spiked due to heightened concerns about economic risks from tariffs on international trade. To illustrate the potential future implications and the potential growth benefits from reduced uncertainty, two scenarios are considered:

- Persistently high uncertainty. If current levels of high uncertainty persist and only decline towards their 2024 average, the resulting decline in investment growth could lead to real investment being 1.4 percentage points lower by end-2026.

- Lower uncertainty. In a "confidence rebound scenario" where uncertainty declines from its value at the end of 2024 to the average levels over the 2015-2019 period by end-2025, the associated cumulative gain in business investment growth would be around 1.8 percentage points by end-2026 as compared to a baseline where economic policy uncertainty remains at current levels.

Figure 9. An uncertainty shock decreases business investment and GDP

A. Impact on business investment

B. Impact on GDP
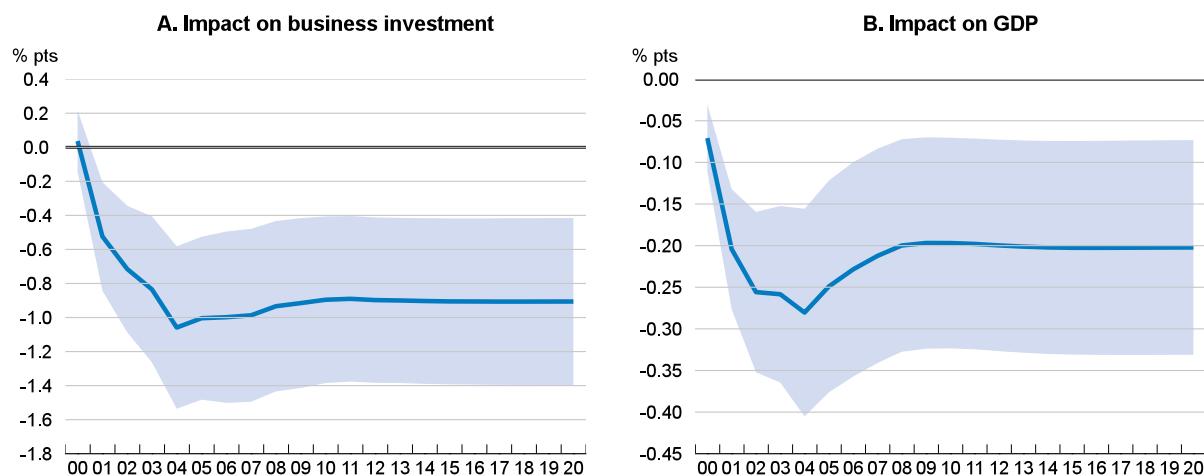
Note: Panels show the impact of a one standard deviation increase in economic policy uncertainty on business investment (Panel A) and GDP (Panel B). Grey shaded areas depict 90% confidence bands. The results are based on a panel VAR model for nine OECD countries with available data on business investment and economic policy uncertainty (Australia, Canada, Germany, France, Japan, Korea, Sweden, the United Kingdom and the United States). The panel VAR specification features four lags of growth rates of GDP, GDP deflator, business investment, economic policy uncertainty (Baker, Bloom and Davis, 2016), the first difference of short-term interest rates and a linear trend. The model is estimated at quarterly frequency over 1997Q1 to 2024Q4. The identification of the structural shock to economic policy uncertainty rests on a Cholesky triangularisation of the variance-covariance matrix of the reduced-form residuals. The uncertainty shock is ordered first, implying that it affects all other variables at time t.
Source: OECD Economic Outlook 117 database; and OECD calculations.

3.5. Quantifying the role of different factors

Taken together, the evidence presented in this section suggests that aggregate demand and uncertainty play a significant role in explaining the weakness in business investment, together accounting for around half of the overall shortfall relative to the pre-GFC trend shown in Figure 5. As noted above, weak aggregate demand explains the largest share—approximately one-third—while heightened uncertainty accounts for about one-sixth.

In contrast, capital costs, valuation signals and firms' current profitability do not appear to explain the persistent weakness in business investment. Moreover, proxy measures of the user cost of capital (UCC), Tobin's Q and profitability are not statistically significant when added to the accelerator model (see Annex A), suggesting that other determinants have become increasingly important—particularly since 2012, when the investment 'gap' began to widen. Structural changes in the investment landscape are likely to shed some light on possible explanations for persistent investment weakness.

4. Structural shifts in the investment landscape: implications for explaining weak investment

This section reviews some key recent structural changes in the investment landscape and examines the extent to which they may help identify additional factors restraining investment. The key changes discussed include the shifting sectoral composition of economic activity, the rising importance of digital and intangible assets, increasingly cautious corporate financial behaviour, and declining business dynamism. The analysis highlights that reduced competition and financing frictions may play significant roles as underlying drivers of persistently weak business investment.

4.1. Sectoral shifts and composition effects

Changes in aggregate investment rates may partly reflect composition effects, particularly the reallocation of output across sectors with differing capital intensities. Over the past three decades, the share of low-investment-intensity sectors—such as many service industries—has steadily increased in OECD economies, while the weight of more capital-intensive sectors like manufacturing has declined.

To assess the importance of sectoral composition effects, we first examine whether the decline in investment is broad-based across sectors or concentrated in a subset of industries. To do so, we estimate the following regression:

$$i_{c,t}^s = \alpha_c^s + \beta^s \times t + \epsilon_{c,t}^s$$

(3)

where $i_{c,t}^s$ denotes the investment rate in sector s, country c, and year t. The investment rate is defined as gross fixed capital formation minus consumption of fixed capital, divided by value added. α_c^s captures country fixed effects, while the time trend t is interacted with industry dummies to allow for sector-specific dynamics.

The results suggest that weakness in investment has been widespread, with investment rates appear to have fallen in all industries (Figure 10). This suggests that the reallocation of activity towards sectors with low investment rates is unlikely to be a main driver of the investment slowdown.

Figure 10. Business investment has been weak across sectors

Change in net investment to value added ratio by sector

OECD annual average, 1997-2021, in % points
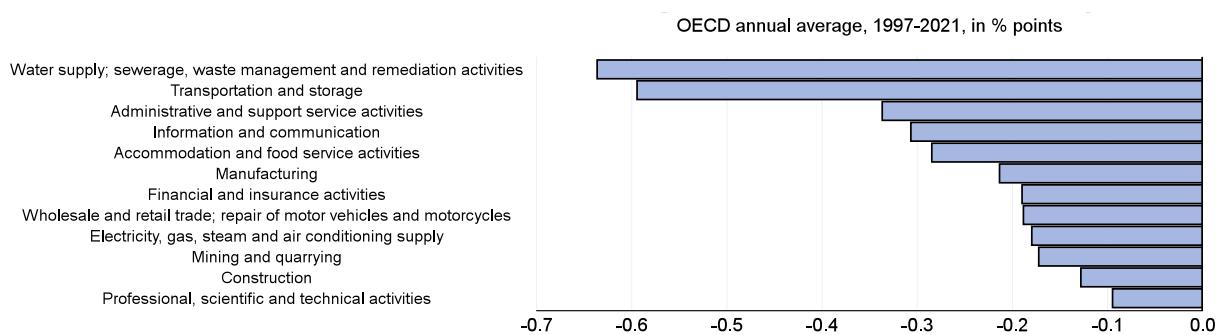
Note: The graph plots the coefficient β^s from the regression $i_{c,t}^s = \alpha_c^s + \beta^s \times t + \epsilon_{c,t}^s$ for each sector s, showing the average annual change in the net investment rate over the period 1997-2021, expressed in percentage points. This approach controls for country-specific time invariant factors. The sample covers the period from 1997 to 2021, and 25 OECD countries, with the net investment ratio defined as gross fixed capital formation minus consumption of fixed capital, divided by value added, all in current prices.
Source: OECD National Accounts database; and OECD calculations.

We next investigate the role of composition effects more formally, by applying a shift-share decomposition. Aggregate investment intensity can be expressed as a weighted average of sectoral investment intensities, where each sector's weight corresponds to its share in total value added:

$$\frac{I}{Y} = \frac{\sum_s I^s}{Y} = \sum_s \frac{Y^s}{Y} \times \frac{I^s}{Y^s} \qquad (4)$$

We then decompose the change in the aggregate net investment-to-GDP ratio between two time periods into two components:

$$\frac{I_{t_1}}{Y_{t_1}} - \frac{I_{t_0}}{Y_{t_0}} = \sum_s \left(\frac{Y^s_{t_1}}{Y_{t_1}} + \frac{Y^s_{t_0}}{Y_{t_0}}\right) \times \frac{1}{2} \times \left(\frac{I^s_{t_1}}{Y^s_{t_1}} - \frac{I^s_{t_0}}{Y^s_{t_0}}\right) + \sum_s \left(\frac{I^s_{t_1}}{Y^s_{t_1}} + \frac{I^s_{t_0}}{Y^s_{t_0}}\right) \times \frac{1}{2} \times \left(\frac{Y^s_{t_1}}{Y_{t_1}} - \frac{Y^s_{t_0}}{Y_{t_0}}\right) \qquad (5)$$

The first term is the within component, capturing the changes in investment rates within individual sectors, holding their relative economic importance constant. The second term is the between component, capturing the changes in value added shares across sectors, holding the sectoral investment rate constant.

The decomposition results (Figure 11) show that shifts in the sectoral composition of the economy have made only a modest contribution to the overall decline in net business investment in recent decades. In contrast, changes in investment rates within sectors account for most of the observed decline in net business investment.

Figure 11. Declines in business investment are primarily driven by within-sector trends, not sectoral reallocation

Change in net investment to value added ratio
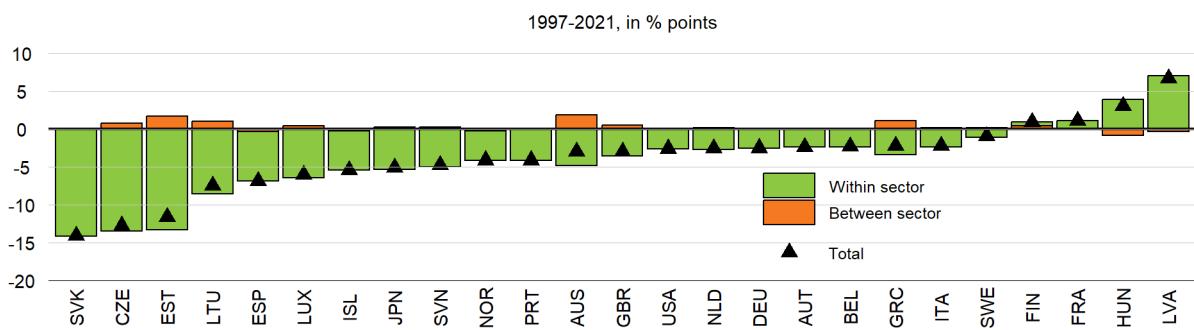
Note: The graph presents a shift-share analysis for all countries with available data. This analysis decomposes changes in the investment rate into two components: a within-industry effect (reflecting investment changes within sector) and a between-industry effect (reflecting investment shifts in sectoral composition), following the methodology of Autor and Salomons (2018).
Source: OECD National Accounts database; and OECD calculations.

4.2. The digital transition and shifting patterns of investment across asset types

The transition towards a more digital and knowledge-intensive economy in recent years has had a significant impact on the composition of business investment. Investment has been channelled into knowledge-based intangible assets, such as software, data, and research and development (R&D), and complementary tangible investments, such as ICT hardware, including servers, networking equipment,

and cloud infrastructure (André and Gal, 2024). Together, these assets are an important driver of firm productivity and innovation (Corrado et al., 2021).

Real investment in digital and knowledge assets has outpaced other asset classes across most advanced economies (Figure 12). Real investment in software has increased three-fold since 2008 on average in OECD economies, while investment in ICT hardware and R&D has grown by around 100% and 45%, respectively, over the same period, compared to aggregate growth of 12% for machinery and a 7% decline in investment in structures. Digital investment has expanded particularly rapidly in countries such as the United States and France, which have also seen strong growth in overall investment. In contrast, several countries, including Germany, have witnessed more modest increases. Investment has expanded particularly rapidly in tech-related firms (Figure 13). Firm-level data also show that AI-related companies invest in physical capital at nearly twice the rate of other firms, with their R&D investment rates more than three times higher (Figure 14).

Figure 12. Investment patterns have shifted towards the digital and knowledge-based economy

Average annual growth in real gross investment by asset class, 2008-2022
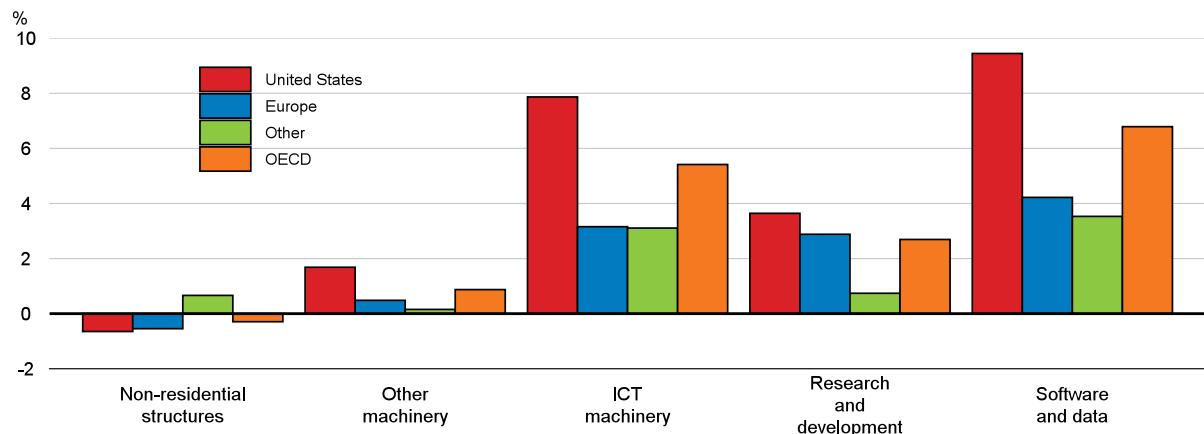
Note: ICT machinery includes both computer hardware and telecommunications equipment. The sample includes 32 OECD countries. 'Other' includes Australia, Canada, Israel, Japan and the United Kingdom. OECD refers to the weighted average of OECD countries for which data are available, with weights based on GDP PPP.
Source: OECD National Accounts database; and OECD calculations.

Figure 13. Tech firms lead the way in digital and knowledge investment growth

Digital and knowledge-related real investment in tech vs non-tech sectors, median of OECD countries

A. Software and data

B. ICT

C. Research and development
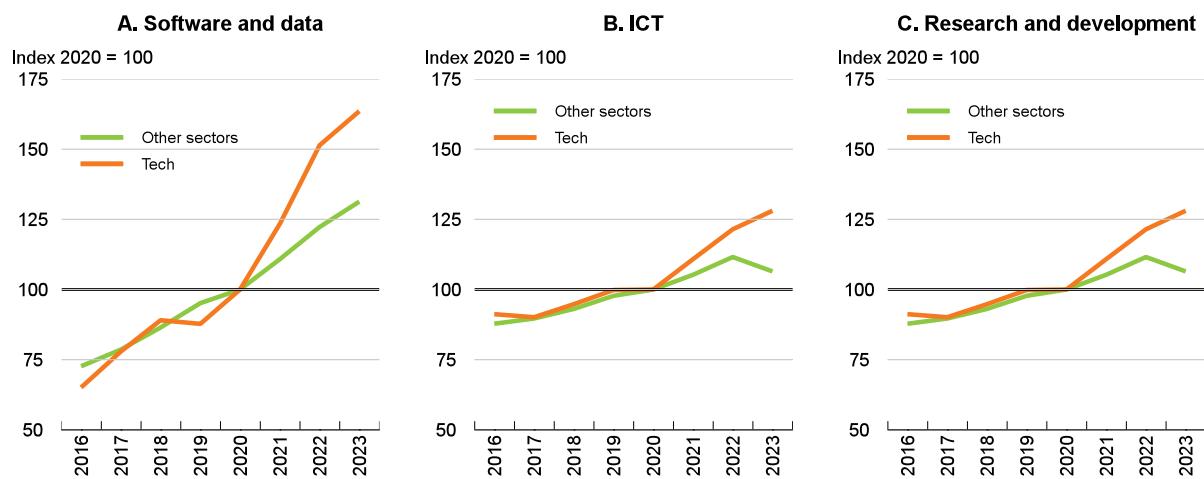
Note: Tech sector corresponds to Sector J (services related to information and communication) in the national accounts NACE Rev. 2 classification. The sample includes countries for which sector-asset data are available through 2023, covering Australia, Austria, Canada, France, Japan, the Netherlands, the United Kingdom and the United States.
Source: OECD National Accounts database; and OECD calculations.

Figure 14. AI-related firms increasingly invest more than other firms

Gross investment-to-sales ratio

A. Capital expenditure

B. Research and development
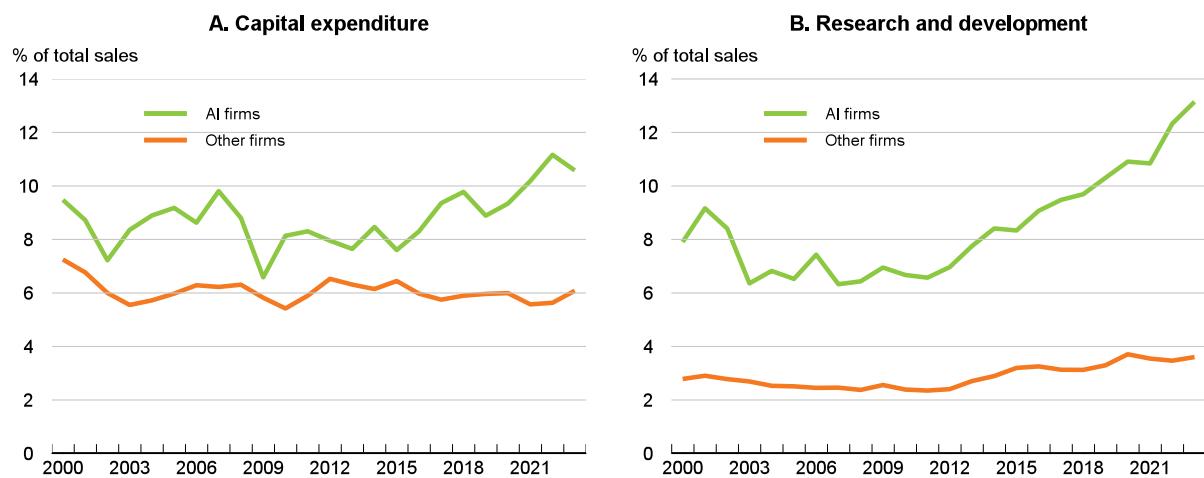
Note: Gross investment-to-sales ratio is in current prices. AI firms are identified based on the companies covered by the Xtrackers Global AI and Big Data ETF (ISIN: IE00BGV5VN51) – a financial product that seeks to track the Nasdaq Global AI and Big Data stock market index. The index is designed to track the performance of companies that are most active in filing patents relating to Deep Learning, Natural Language Processing, Image Recognition, Speech Recognition & Chatbots, Cloud computing, Cyber Security, and Big Data. The constituents were derived as of end of March 2025. Stock markets covered include Canada, China, Finland, France, Germany, Hong Kong (China), Israel, Japan, Korea, Chinese Taipei, the United Kingdom, and the United States. Note that there are some known issues around the measurement of R&D in company accounts which are examined in forthcoming OECD work (OECD, 2025a).
Source: LSEG Worldscope Fundamentals; and OECD calculations.

The relatively stronger growth of digital and knowledge-based investment has not been sufficient to offset the impact of rising depreciation and weak tangible investment. Thus, net business investment as a share of GDP has declined across most OECD countries, despite a notable rise in digital and R&D investment (Figure 15, Panel A). This decline reflects sluggish growth in traditional tangible investment categories — such as infrastructure and machinery — which still account for the largest share of business investment, alongside the higher depreciation rates for digital and knowledge-based capital (Figure 15, Panel B). On average, digital and knowledge-based assets now make up just over 35% of total capital formation, in current prices, up from around 28% at the turn of the century (Figure 15, Panel C).[6] As investment has shifted toward these faster-depreciating assets, the overall depreciation or 'scrapping' rate has risen.

Figure 15. Declines in net business investment are driven by rising depreciation and weak non-digital tangibles

A. Change in net business investment
2008-2023

% of GDP

Legend: Depreciation | Other assets (non-ICT tangibles) | Digital and knowledge assets | ▲ Net investment

Countries (x-axis): SVN, LVA, SVK, CZE, LTU, LUX, AUS, EST, NOR, ISL, SWE, AUT, ITA, USA, GBR, FRA, JPN, NLD, FIN

B. OECD implied depreciation rates by asset class
2023

%

Categories: Other, Research and development, ICT, Software and data

C. Share of digital and knowledge assets in OECD non-residential investment

%

Legend: Research and development | ICT | Software and data

Periods: 1995-2000, 2000-2010, 2010-2020, 2020-2023

Note: Panel A: Net business investment-to-GDP ratio is shown in current prices. The sample includes 19 OECD countries where a full asset breakdown of investment is available. 2023 data or latest available. Panels B and C are private and public non-residential investment. Panel B: Other refers to non-ICT machinery and non-residential structures and buildings. ICT includes ICT equipment, which is the sum of computer hardware and telecommunications equipment. For each asset type, the implied depreciation rates are calculated using the Perpetual Inventory Method (PIM), based on data for the net capital stock and gross fixed capital formation, both in real terms. Panel C: Chart shows investment by asset as a share of non-residential investment, expressed in nominal terms.
Source: OECD national accounts; and OECD calculations.

---

[6] Despite ongoing enhancements to the National Accounts, some types of intangible assets are still not captured in business investment statistics, such as organisational and marketing capital. Some attempts have been made to measure these newer types of intangibles, suggesting that around half of intangible investments are not captured in official national accounts (Corrado et al., 2021).

4.3. Corporate financial behaviour: cash accumulation, shareholder payouts and rising required returns

As documented in Section 3, the corporate sector as a whole has been generally profitable but has accumulated savings instead of investing in fixed assets (Figure 7 above). National accounts and firm level data can help to shed some light on the uses of these savings. The increase in corporate net financial asset positions has been predominantly associated with the accumulation of financial assets rather than reductions in debt (Figure 16, Panel A). Firm-level data suggest that rising corporate gross operating surpluses have been associated with increased cash holdings and higher shareholder payouts, mainly through dividends (Figure 16, Panels C and D). In the United States, Canada, Switzerland, and the United Kingdom, share buybacks have also contributed significantly to this trend.[7] Concurrently, the number and value of corporate mergers and acquisitions remained elevated during much of the post-GFC period, particularly in the United States and Europe, indicating that financial resources were utilised to acquire existing capital assets from other companies, rather than to expand the overall capital stock through internal investments (Figure 16, Panels E and F). Another possible use of corporate savings would be to invest in other countries, but there is little sign of this in outward foreign direct investment flows from the major economies, other than in Japan (Figure 16, Panel B).

At the same time, firms appear to not be undertaking all the available profitable marginal investments that lower costs of finance should encourage. The average pre-tax rate of return on corporate capital assets has remained high in many economies in recent years, after dropping during the GFC and pandemic (Figure 17, Panel A). There is also evidence that required returns on investment have increased, since the gap between hurdle rates – the minimum expected return a firm requires to proceed with an investment – and capital costs has widened (Figure 18, Panels A and B) (OECD, 2015; Shah, Bunn and Melolinna, 2024). While rising policy uncertainty may have contributed to higher risk premia and thus higher hurdle rates, the scale of the increase points to additional underlying structural factors.

---

[7] The low cost of borrowing may also have incentivised firms to undertake non-investment financial activities such as leveraged buybacks and debt refinancing. See Chapter 2 of the Global Debt Report 2025, (OECD, 2025b).

Figure 16. Firms have used savings to accumulate financial assets and return funds to shareholders

A. Total non-financial corporate debt and financial assets

% of GDP

Legend:
- 2002-2007 assets
- 2023 assets
- 2002-2007 liabilities
- 2023 liabilties

Countries: ITA, AUS, ESP, GBR, DEU, FRA, NLD

B. Foreign direct investment
G7 economies

% of gross fixed capital formation

Legend: Net inflow, Net outflow, 1990-2023 average, Difference

Years: 1990–2023

C. Cash holdings

% of total assets

Legend: Average 2002-2007, 2024

Countries: AUS, CAN, GBR, DEU, IND, THA, ITA, ZAF, FRA, IDN, USA, KOR, JPN, SWE, BRA, CHN, CHE

D. Total payout to shareholders

% of net income

Legend: Average 2002-2007, 2024

Countries: JPN, KOR, CHN, DEU, IND, FRA, THA, IDN, CAN, ITA, SWE, ZAF, USA, BRA, CHE, GBR, AUS

E. Merger and acquisition deals
United States

USD billion / Number

Legend: ← Value of deals, Number of deals →

Years: 1985–2024

F. Merger and acquisition deals
Europe

USD billion / Number

Legend: ← Value of deals, Number of deals →

Years: 1985–2024

Note: In Panel A, debt is proxied by total financial liabilities less equity, from consolidated financial balance sheets. Panel B displays the weighted average of net FDI inflows and net FDI outflows as a share of gross fixed capital formation for G7 countries, with weights based on GDP at PPPs. Data in Panels C and D are based on the listed firms covered in the Worldscope database. The sample includes countries with at least 150 firms in each year since 2000 and with at least three consecutive years of non-missing observations for sales, common equity, and total assets. Indicators shown in Panel C and D are calculated at the country-year level, based on cumulated values across all firms in each country and year. The 2002-2007 average is calculated based on the country-level indicators. Cash holdings is the sum of cash and short-term investments. Total payout is the sum of dividend and share repurchase payments. Firm-level data for each country are cleaned by dropping the extreme 0.5% of values. For Switzerland and India, 2024 data are from 2023.
Source: OECD National Accounts database; World Bank data for FDI; LSEG Worldscope Fundamentals; Institute for mergers and acquisitions and alliances; and OECD calculations.

Figure 17. The rate of return on corporate capital assets remains high

Rate of return on corporate fixed assets
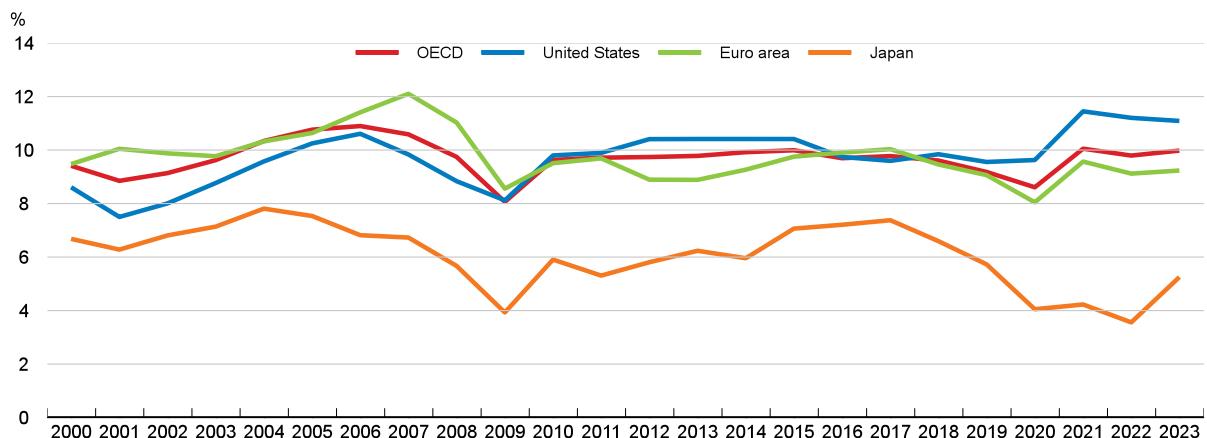
Note: The return on capital is calculated as the corporate gross operating surplus less consumption of fixed capital relative to net fixed assets where available. Euro area refers to the weighted average of 13 euro area countries. OECD refers to the weighted average of 23 countries.
Source: OECD National Accounts database; and OECD calculations.

Figure 18. The gap between financing costs and hurdle rates has increased

A. Cost of capital and hurdle rate

B. Gap between hurdle rate and cost of capital
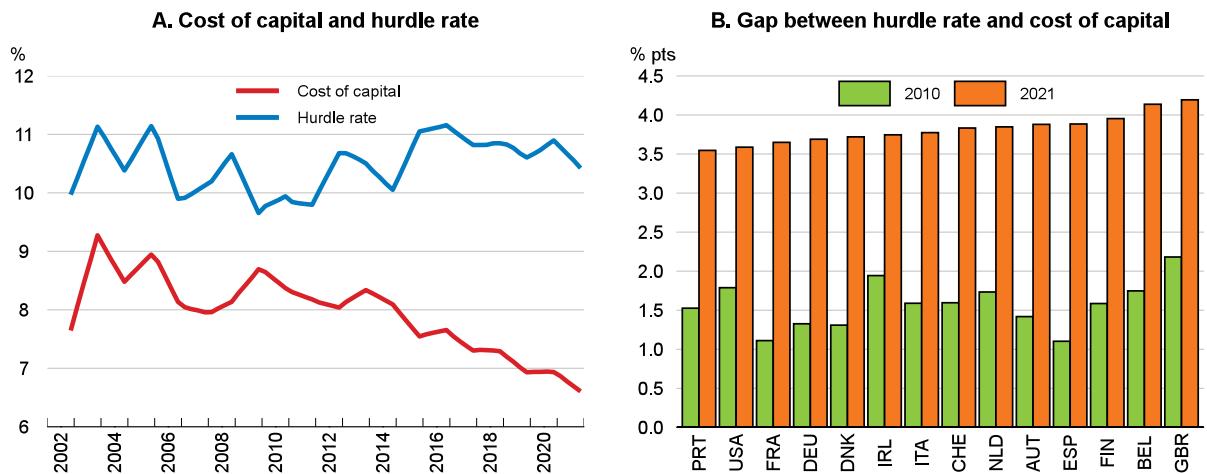
Note: Predicted values for firms' perceived cost of capital and hurdle rates based on information provided during corporate earnings calls, investor conferences, and similar events. The description of data collection and computation can be found in Gormsen and Huber (2023). Panel A is based on an average of the countries listed in Panel B.
Source: Gormsen and Huber (2023).

4.4. Business dynamism: mark-ups and market concentration

Market concentration has risen and business dynamism has declined across advanced economies and are increasingly linked to weak investment (Calligaris et al., 2024). Measures of industry concentration have risen in Europe and the United States, while product market concentration has also increased in European economies (Figure 19). At the same time, data from listed firms show a notable increase in markups – measured as the ratio of total revenue to the cost of goods sold – across most advanced

economies, with Italy being a notable exception (Figure 20).[8] Among emerging-market economies, markups have increased in India and South Africa but eased slightly in Brazil, Chile, Indonesia and Mexico. Net investment rates among listed firms have declined in all countries apart from Korea over the same period.

In parallel with rising market concentration, business investment has also become increasingly concentrated among a small group of highly profitable "superstar" firms (Autor, 2020). This trend is closely linked to shifts in the composition of investment, as the greater scalability of intangible assets tends to boost returns for a limited number of firms, reinforcing "winner-takes-most" dynamics (Haksel and Westlake, 2018). The rise in overall market power appears particularly pronounced in the digital sector (Nicoletti, Vitale and Abate, 2023). These dynamics are further reinforced by growing concentration in institutional ownership. The widespread use of passive investment vehicles and consolidation in the asset management sector mean that many competing firms now share common large shareholders (Schmalz, 2017). Ownership concentration can weaken incentives for competition and has been associated with lower corporate investment (Gutiérrez and Philippon, 2018; Azar, Schmalz and Tecu, 2018).

Figure 19. Industry and product market concentration has increased

Concentration trends in industries and product markets
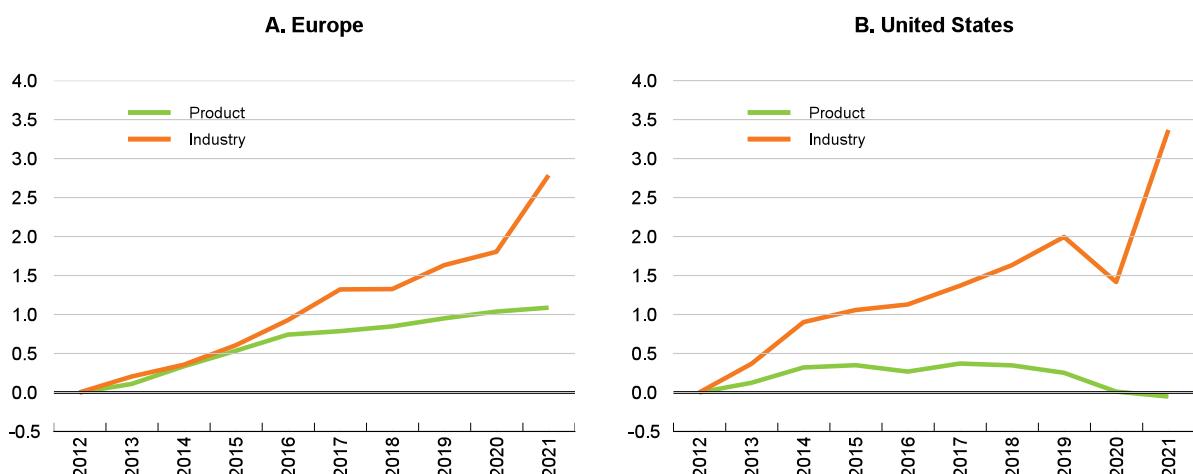
Note: The chart is taken from (Calligaris et al., 2025) and shows the unweighted average across industry- or product- country combinations of cumulative growth of market concentration. The concentration measure used is the top four concentration ratio in product/industry s and country c at time t, $CR^4_{s,g,t}$, which captures the sales of the biggest four firms relative to the market's total sales, in each year. Products included are those available in the Euromonitor data, while the industries are those that correspond to these products. For Panel A, the countries included in the sample are Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, the Netherlands, Poland, Portugal, Romania, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom. The data cover 2012-21.
Source: Calligaris et al.(2025).

---

[8] This measure is a proxy for actual markups (price over marginal cost), since cost of goods sold includes a share of fixed costs so may differ from marginal cost.

Figure 20. Markups have increased across OECD countries

A. Markups

Legend: Average 2002-2007 ▲ 2024

B. OECD average markups
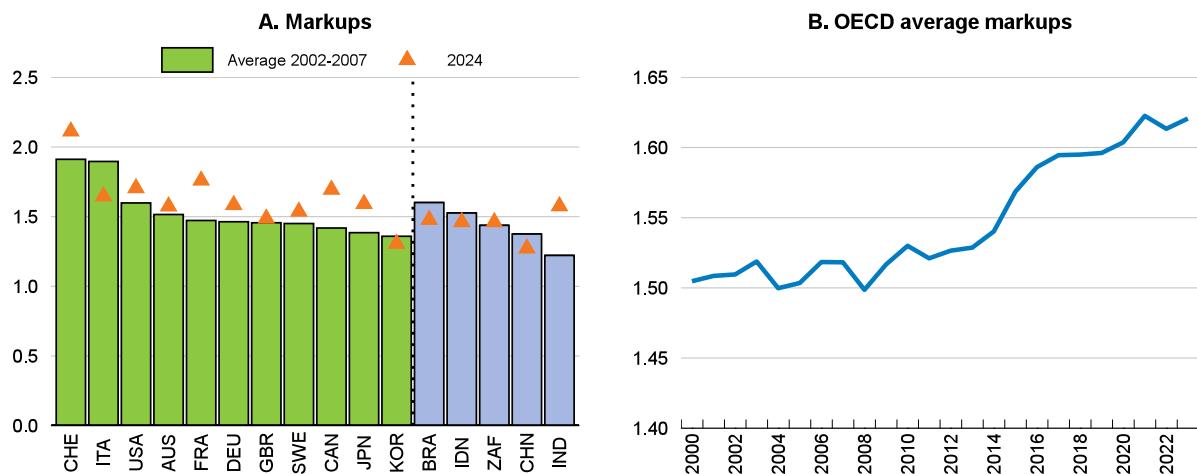
Note: Indicators are calculated at the country-year level, based on cumulated values across all firms in each country and year. The 2002-2007 average is calculated based on the country-level indicators. Markup is revenues over cost of goods sold. The net investment rate is calculated as capital expenditure less depreciation over total sales. Firm-level data for each country is cleaned by dropping the extreme 0.5% of values. Source: LSEG Worldscope Fundamentals; and OECD calculations.

Increased market concentration can suppress investment through several channels. One is that dominant firms may restrict output and raise prices rather than invest in expanding capacity, particularly when competitive pressure is limited (Gutiérrez and Philippon, 2017). Another mechanism is that only large 'superstar' firms have the financial resources, managerial capability, and know-how to make large-scale investments with uncertain payback periods, effectively crowding out investment by smaller, less productive, or new firms (Crouzet and Eberly, 2019). Firm-level data suggests that large firms account for a higher share of investment relative to their output, although the gap has not increased over time (Hanappi, Millot and Turban, 2023). In reality, the relationship between market power and investment is likely to be nuanced, and firm specific. For example, firms may first achieve market power through innovation and efficiency, gaining scale through network effects and intangible synergies. Over time, however, some may shift their focus from innovation and fixed capital investment toward rent-seeking strategies, such as regulatory capture and lobbying, to preserve their dominant position (Akcigit and Ates, 2021).

The availability of finance is a second key channel connecting the observed rise in intangible assets and precautionary corporate behaviour such as cash accumulation and high hurdle rates. Investment in software, data, and R&D as well as other intangibles, is harder to finance through bank loans, as these assets are more difficult to value and hence use as collateral. As a result, firms may need to self-finance these assets through retained earnings and higher cash holdings to reduce dependence on external financing (Demmou, Stefanescu, and Arquie, 2019), reducing available resources for investment. These constraints can be particularly binding for smaller firms and those operating in bank-based financial systems with less developed capital markets.

Taken together, increased market concentration and financing challenges for intangibles provide additional plausible explanations for the persistent weakness in business investment. The relative importance of these factors likely varies across countries, sectors, and firms. Other factors may also have played a role. Rising investment costs – including limited land availability, planning delays, regulatory burdens, and implementation capacity constraints – can also deter firms from launching new projects. Moreover, the growing tendency of firms to prioritise shareholder payouts over reinvestment may reflect increasing financialisation (Gutiérrez and Philippon, 2017) and incentives such as shareholder pressure to shift corporate strategy toward maximising short-term financial returns at the expense of long-term productive investment.

4.5. Other structural trends

Finally, other structural trends – such as ageing populations and labour shortages - may also have restrained business investment, particularly in advanced economies. When firms anticipate slower growth in the working-age population, they may revise down expected demand for goods and services, reducing the need to expand productive capacity. This may more than offset any stimulative effects on investment from the downward pressure on real interest rates associated with higher savings in ageing populations — although this effect may also wane as retirees dissave (Eggertsson, Mehrotra and Robbins, 2019). Meanwhile, persistent skill shortages have emerged in some countries and sectors (OECD, 2024), with over 50% of EU and US firms identifying the scarcity of skilled staff as a major obstacle to investment (Figure 21 Panel B: European Investment Bank, 2024). If firms are unable to find the necessary skills to implement, operate or maintain new capital – and fully reap their benefits -, they may postpone investment projects, particularly high-skill, high-tech investments that require complementary human capital, such as ICT and green technology.

5. Concluding remarks: policy priorities to reinvigorate investment

This paper has documented the persistent weakness in business investment across OECD economies and investigated its underlying drivers. Real business investment in OECD economies remained around 23% below its pre- GFC trend as at the end of 2023, despite a substantial decline in the cost of capital and strong corporate profitability in many economies. Subdued aggregate demand and elevated economic uncertainty are estimated to account for around half the shortfall in investment from the pre-GFC trend. The remaining gap is likely to reflect various structural shifts in the investment landscape. These include the rising importance of digital and intangible assets, increasingly cautious corporate financial behaviour and declining business dynamism.

Public policies can play a vital role in supporting a sustained recovery in business investment, although effectiveness will depend on a multidimensional approach tailored to country-specific drivers of investment weakness. The policy recommendations to enhance investment contained in the country notes from the June 2025 *OECD Economic Outlook* aim to address the drivers of weak investment identified above. Among the recommendations related to business investment, enhancing competition and addressing skills shortages emerge as the most frequent areas, while improving access to finance, tax systems, and foreign direct investment (FDI) openness are also prominent (Figure 21, Panel A). Firm-level surveys can also help to identify policy priorities; the recent EIB survey of EU and US firms highlights uncertainty as the most commonly cited obstacle to investment, though skills shortages and regulatory constraints are also identified as being important (Figure 21, Panel B).

Figure 21. The major barriers to private investment can be influenced by government policy

A. Policy recommendations to boost investment
Number of countries

B. Obstacles to investment reported by firms
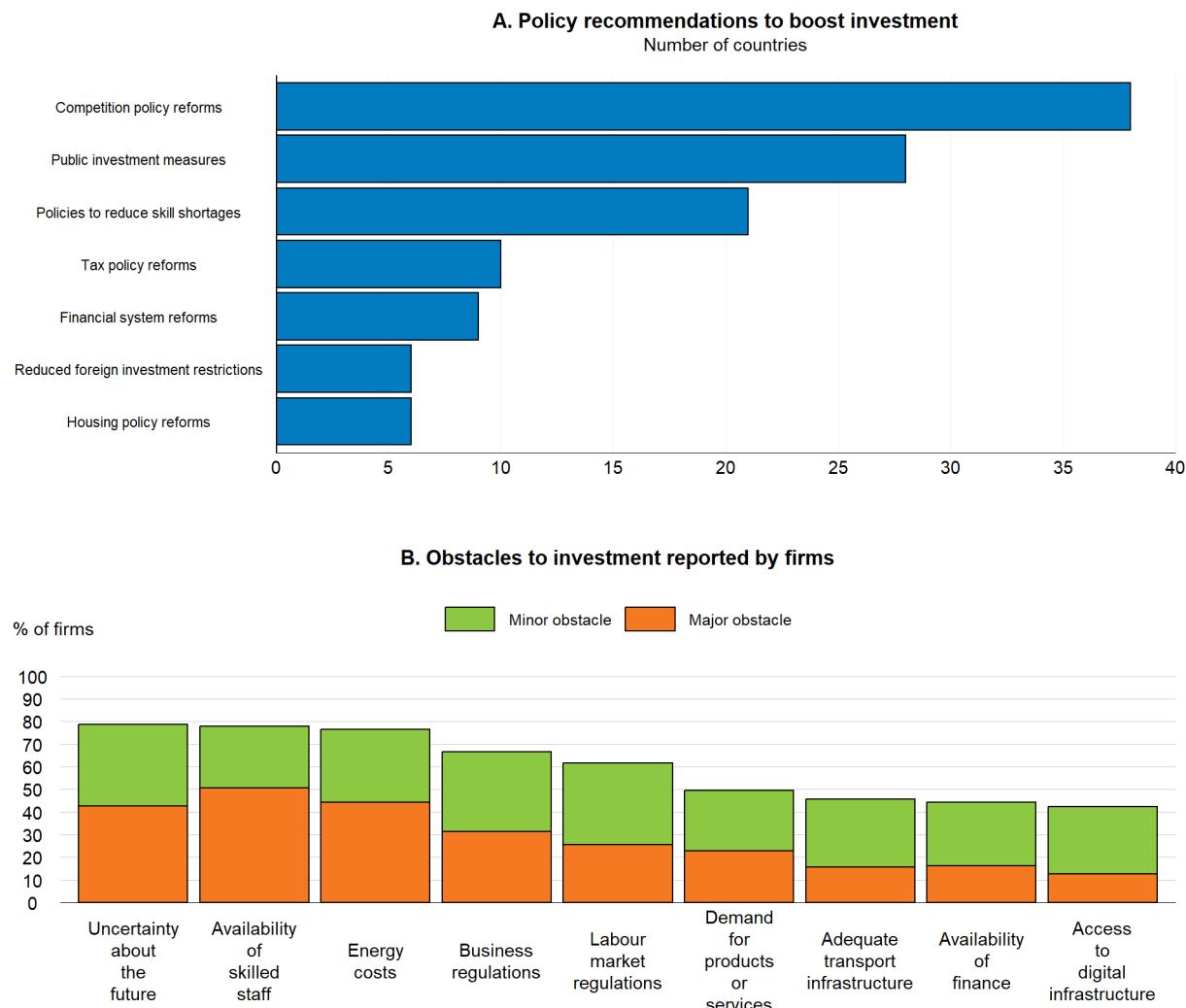
Note: Panel A, policy recommendations are taken from the Economic Outlook 117 country notes (see Chapter 3) for 54 countries. The figure shows the number of countries with policy recommendations to boost investment in each given category. Panel B is based on responses to the question: 'Thinking about your investment activities, to what extent is each of the following an obstacle? Is it a major obstacle, a minor obstacle or not an obstacle at all?' from the European Investment Bank Investment Survey 2024 from responding United States and European firms.
Source: OECD Economic Outlook 117 database; European Investment Bank, EIB Investment Survey 2024: European Union overview; and OECD calculations.

Reducing economic policy uncertainty is one of the key priorities for boosting business investment. Transparent, rules-based trade policies, stable fiscal and tax regimes, and clear regulatory processes can reduce the risk premia that firms incorporate into the hurdle rates that govern investment decisions. Sound monetary, fiscal and macroprudential policies and institutional frameworks can both reduce uncertainty and create the conditions for stronger growth in aggregate demand. At the same time, affirming climate commitments and implementing well-communicated adaptation strategies can further reduce uncertainty about the future operating environment.

Structural reforms are also critical for reinvigorating business dynamism and encouraging firms to invest and innovate to stay ahead of competitors. Reducing the cost of regulation - both through reforming *de jure* regulations and implementing them in a way that does not unnecessarily raise costs - supports firm

entry and expansion, helping to counter rising market concentration. Strengthening insolvency regimes is also important to ensure that resources are reallocated efficiently when firms exit. Ensuring such regimes are not excessively punishing for businesses that do fail can also encourage an entrepreneurial environment. Simplifying and increasing the flexibility of land use and zoning regulations—especially in retail and residential construction—can enable firms to respond more effectively to structural change and expand capacity. In parallel, easing restrictions on foreign direct investment can help boost capital inflows and competitive pressures, while aligning worker skills with business needs will be an important enabler of stronger investment rates.

Policies that reduce financing frictions for investment are critical for alleviating the need for firms to retain cash resources to self-finance future investment projects, particularly for intangible investment. Financial frictions can be especially acute in bank-based financial systems for firms without traditional forms of collateral. Improving the depth of capital markets would support a more diverse range of funding options and promote competition between lenders, thus improving access to finance for intangible investments. It may also help enable young and small firms to undertake investment projects, promoting competitive pressures in more concentrated markets. Developing certain segments of capital markets may require some public financial support and regulatory actions, provided they do not endanger financial stability.

Finally, fiscal policy can play an essential supporting role for boosting private investment. Public investment, when well-designed and efficiently implemented, can crowd in private capital, foster innovation, and boost long-term potential growth. However, the effectiveness of public capital spending depends on robust public investment management systems, clear project appraisal and selection criteria, and coordination across levels of government, particularly in infrastructure. Anchoring investment plans within credible medium-term fiscal frameworks can reinforce policy predictability while ensuring fiscal sustainability. Moreover, tax policy settings play a role in shaping investment incentives. Low corporate tax rates on a broad corporate tax base can support investment by limiting the complexity of the tax system for businesses and distortions between different kinds of taxpayers. However, targeted measures such as relatively generous capital allowances or reduced non-profit taxes may be a more cost-effective way to support investment spending than general reductions in the statutory corporate tax rate. Carefully designed tax incentives can also help address market failures in areas such as R&D spending and clean technology adoption.

References

Akcigit, U. and S. Ates (2021), "Ten Facts on Declining Business Dynamism and Lessons from Endogenous Growth Theory", American Economic Journal, Vol. 13.

André, C. and P. Gal (2024), "Reviving productivity growth: A review of policies", OECD Economics Department Working Papers, No. 1822, OECD Publishing, Paris, https://doi.org/10.1787/61244acd-en.

Autor, D., D. Dorn, L. F. Katz, C. Patterson and J. Van Reenen. (2020), The fall of the labor share and the rise of superstar firms, Oxford University Press, https://doi.org/10.1093/qje/qjaa004.

Autor, D. and A. Salomons (2018), "Is Automation Labor Share-Displacing? Productivity Growth, Employment, and the Labour Share", Brookings Papers on Economic Activity, Vol. 1, pp. 1-87, https://dx.doi.org/10.1353/eca.2018.0000. 1-87, https://dx.doi.org/10.1353/eca.2018.0000.

Azar, J., M. Schmalz and I. Tecu (2018), "Anticompetitive Effects of Common Ownership", The Journal of Finance, Vol. 73/4, https://doi.org/10.1111/jofi.12698.

Baker, S., N. Bloom and S. Davis (2016), "Measuring Economic Policy Uncertainty", The Quarterly Journal of Economics, Vol. 131/4, https://doi.org/10.1093/qje/qjw024.

Barkai, S. (2020). Declining Labor and Capital Shares. Journal of Finance, 75(5), 2421–2463. https://doi.org/10.1111/jofi.12909.

Bloom, N., Bond, S., & Van Reenen, J. (2007). Uncertainty and investment dynamics. Review of Economic Studies, 74(2), 391–415. https://doi.org/10.1111/j.1467-937X.2007.00426.x

Bloom, N., Floetotto, M., Jaimovich, N., Saporta-Eksten, I., & Terry, S. J. (2018). Really uncertain business cycles. Econometrica, 86(3), 1031–1065. https://doi.org/10.3982/ECTA10927

Caldara, D., M. Iacoviello, P. Molligo, A. Prestipino and A. Raffo (2019), "The Economic Effects of Trade Policy Uncertainty", International Finance Discussion Paper No. 1256, https://dx.doi.org/10.17016/IFDP.2019.1256. 1256, https://dx.doi.org/10.17016/IFDP.2019.1256.

Calligaris, S., C. Criscuolo, J. De Lyon, A. Greppi and O. Pallanch (2025), "Concentration and business dynamics in product markets", OECD Science, Technology and Industry Working Papers, No. 2025/04, https://doi.org/10.1787/d714066e-en. 2025/04, https://doi.org/10.1787/d714066e-en.

Calligaris, S., C. Criscuolo, J. De Lyon, A. Greppi, O. Pallanch and M. Chaves (2024), "Industry concentration in Europe: Trends and methodological insights", OECD Science, Technology and Industry Working Papers, No. 2024/06, OECD Publishing, Paris.

Chen, P., K. Loukas and N. Brent (2017), "The global rise of corporate saving", Journal of Monetary Economics, Vol. 89, pp. 1-19, https://doi.org/10.1016/j.jmoneco.2017.03.004.

Corrado, C., Hulten, C., & Sichel, D. (2009). Intangible capital and U.S. economic growth. Review of Income and Wealth, 55(3), 661–685. https://doi.org/10.1111/j.1475-4991.2009.00343.x

Corrado, C. et al. (2021), "New evidence on intangibles, diffusion and productivity", OECD Science, Technology and Industry Working Papers, No. 2021/10, OECD Publishing, Paris, https://doi.org/10.1787/de0378f3-en.

Crouzet, N. and J. Eberly (2019), "Understanding Weak Capital Investment: The Role of Market Concentration and Intangibles", NBER Working Paper 25869, https://doi.org/10.3386/w25869.

Demmou, L., I. Stefanescu and A. Arquie (2019), "Productivity growth and finance: The role of intangible assets - a sector level analysis", OECD Economics Department Working Papers, No. 1547, OECD Publishing, Paris, https://doi.org/10.1787/e26cae57-en.

Doidge, C., G. Karolyi and R. Stulz (2020), "The U.S. equity valuation premium, globalization, and climate change risks", NBER Working Paper No. 27588, https://doi.org/10.3386/w27588.

Döttling, R., Gutiérrez, G., & Philippon, T. (2017), "Is There an Investment Gap in Advanced Economies?

If So, Why?" National Bureau of Economic Research Working Paper No. 23931. https://doi.org/10.3386/w23931

Eggertsson, G., N. Mehrotra and J. Robbins (2019), "A model of secular stagnation: Theory and quantitative evaluation.", American Economic Review, Vol. 109/6, https://doi.org/10.1257/aer.20170395.

European Investment Bank (2024), "European Investment Bank Survey 2024: European Union Overview".

Gormsen, N. and K. Huber (2023), "Corporate Discount Rates", University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2023-81, https://dx.doi.org/10.2139/ssrn.4477545.

Gutiérrez, G. and T. Philippon (2018), "Ownership, Concentration, and Investment", AEA Papers and Proceedings, Vol. 108.

Gutiérrez, G. and T. Philippon (2017), "Investment-less growth: An empirical investigation", Brookings Papers on Economic Activity.

Haksel, J. and S. Westlake (2018), Capitalism without capital: The rise of the intangible economy, Princeton University Press.

Hanappi, T., V. Millot and S. Turban (2023), "How does corporate taxation affect business investment? Evidence from aggregate and firm-level data", OECD Economics Department Working Papers, No. 1765, https://doi.org/10.1787/04e682d7-en.

Jordà, Ò. (2005), "Estimation and Inference of Impulse Responses by Local Projections", American Economic Review, Vol. 95/1, pp. 161-182, https://doi.org/10.1257/0002828053828518.

La Porta, R. et al. (1998), "Law and Finance", Journal of Political Economy, Vol. 106/6.

Lewis, C., Pain, N., Stráský, J., & Menkyna, F. (2014). Investment Gaps after the Crisis (OECD Economics Department Working Paper No. 1168). OECD Publishing. https://doi.org/10.1787/5jxvgg76vqg1-en

Nicoletti, G., C. Vitale and C. Abate (2023), "Competition, regulation and growth in a digitized world: Dealing with emerging competition issues in digital markets", OECD Economics Department Working Papers, No. 1752, OECD Publishing, Paris, https://doi.org/10.1787/1b143a37-en.

OECD (2025a), "Estimating corporate investment in Artificial Intelligence", OECD Directorate for Financial and Enterprise Affairs Working Papers, forthcoming.

OECD (2025b), Global Debt Report 2025, OECD Publishing, Paris. https://www.oecd.org/en/publications/global-debt-report-2025_8ee42b13-en.html

OECD (2024), OECD Economic Outlook, Volume 2024 Issue 2, OECD Publishing, Paris.

OECD (2015), "Lifting Investment for Higher Sustainable Growth", Economic Outlook, Vol. 97.

Rachel, L., & Summers, L. H. (2019). On Falling Neutral Real Rates, Fiscal Policy, and the Risk of Secular Stagnation. Brookings Papers on Economic Activity, 2019(1), 1–54. https://doi.org/10.2139/ssrn.3322875

Schmalz, M. (2017), "Common Ownership and Competition: Facts, Misconceptions, and What to Do", Directorate for Financial and Enterprise Affairs Competition Committee: Hearing on Common Ownership by institutional investors and its impact on competition, https://one.oecd.org/document/DAF/COMP/WD%282017%2993/en/pdf.

Shah, K., P. Bunn and M. Melolinna (2024), "High hurdles: evidence on corporate investment hurdle rates in the UK", Bank of England Bank Underground Blog.

Annex A: An investment accelerator model

To help assess the extent to which cyclical fluctuations have contributed to the observed dynamics in business investment since the Global Financial Crisis (GFC) and the pandemic, a reduced-form investment model is estimated. This relates real business investment growth to its own lag as well as to current real output growth. The model is estimated for the 17 OECD countries for which data on real business investment are available. This empirical framework aims to capture the short-term response of investment to output fluctuations, shedding light on the role of demand-side factors in shaping investment patterns over recent cycles. The results are presented in Table A.1.

Annex Table 1. Panel regression results for simple accelerator model

Dependent variable: Annual real business investment growth

	(1)
Δ Output	1.2646[***]
	(0.179)
Δ Investment (t-1)	0.6065[***]
	(0.039)
Country FE	Yes
Observations	1824
R-squared	0.616

Note: Variables are real business investment and real GDP. The model is estimated on quarterly data from 1980Q1 to 2008Q2 for 17 OECD countries (Australia, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Japan, Korea, Netherlands, Norway, New Zealand, Sweden, Switzerland, United Kingdom, United States).
Source: OECD Economic Outlook 117 database; and OECD calculations.

An extended model is subsequently estimated that incorporates the standard determinants of investment implied by neo-classical frameworks, while also allowing for the role of time-varying capital depreciation rates, real equity prices (which may reflect corporate balance sheet conditions and elements of Tobin's Q), and capacity utilisation, proxied by the output gap (with a prior that a more negative output gap reduces the need to undertake new investment). The model is estimated using an unbalanced panel comprising 13 OECD economies, with quarterly data from 1993Q1 to 2022Q3, subject to data availability. All variables enter the model in logarithmic form, except for the output gap. In line with Pelgrin et al. (2002), the user cost of capital is introduced as log(1+UCC). Country-specific effects are controlled for using a least-squares dummy variable estimator. The estimation results are presented in Table A.2.

Annex Table 2. Panel regression results for extended accelerator model

Dependent variable: Quarterly real business investment growth

	(1)
Δ Output	1.3966***
	(0.112)
Δ UCC	-0.3014
	(0.218)
Gap (t-1)	0.0038**
	(0.002)
Δ Depreciation	0.3638*
	(0.196)
Share price (t-1)	0.0292
	(0.017)
Investment (t-1)	-0.3973*
	(0.187)
Output (t-1)	0.5055*
	(0.251)
UCC (t-1)	-0.1551
	(0.153)
Country FE	Yes
Observations	1560
R-squared	0.301

Note: Investment is real business fixed investment (log); Output is real GDP (log); Gap is output gap (in per cent); UCC is a proxy for the user cost of capital (product of the relative price of investment goods and the sum of real interest rate and depreciation rate; log(1+UCC)); Share price is equity price index deflated by GDP deflator (log). Robust standard errors are clustered by country.
Source: OECD Economic Outlook 117 database; and Authors' calculations.