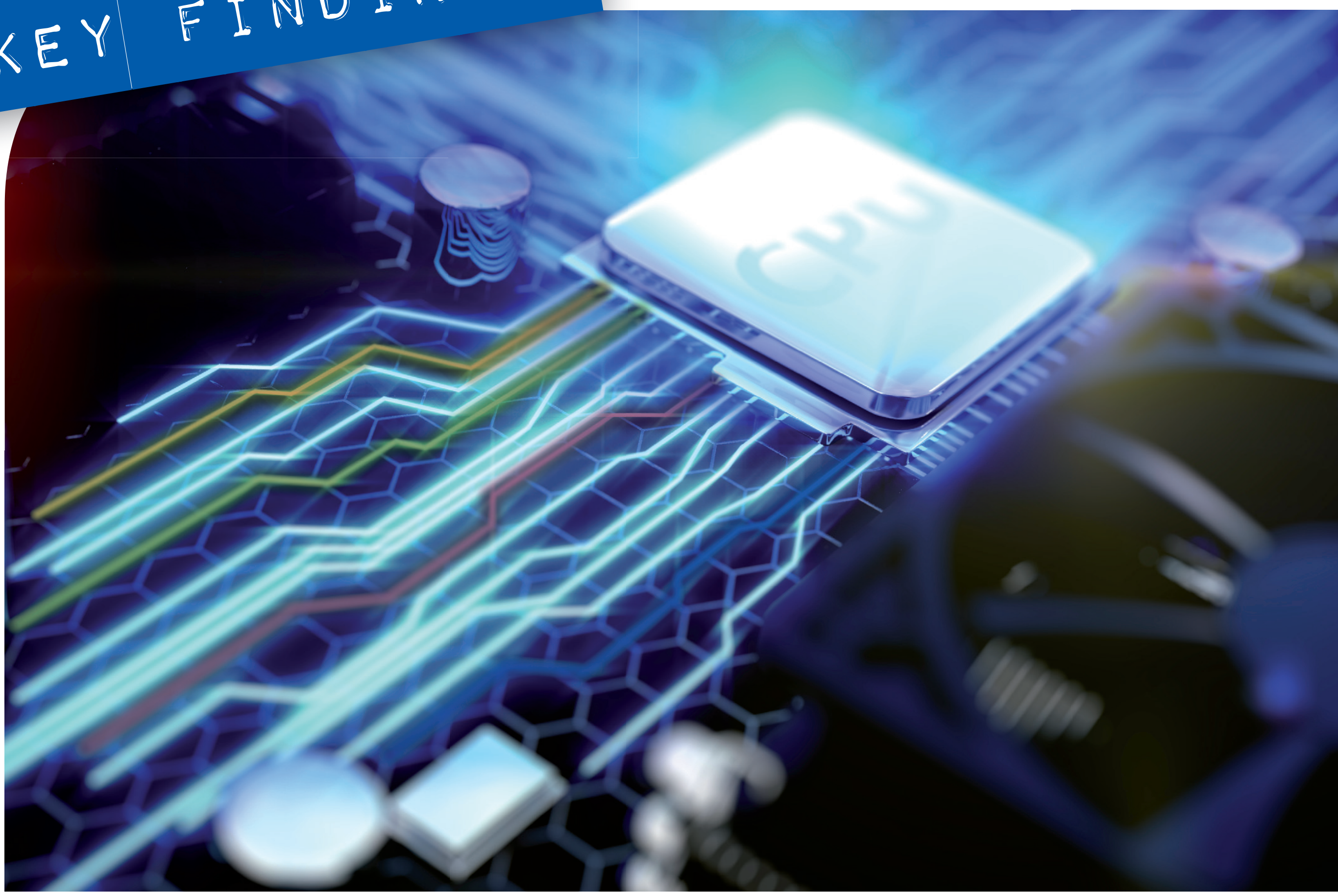
European Investment Bank
The EU bank

Investment and Investment Finance in Europe

Financing productivity growth

KEY FINDINGS



2016

From investment crisis to sub-optimal investment recovery?

Europe's recovery is slow. Following the recession triggered by the sovereign debt crisis in Europe, a slow recovery began in most EU Member States in early 2013. It started as an export-driven upswing but has been increasingly supported by domestic demand, particularly consumption. Growth of domestic demand has been sustained by falling oil prices and overall inflation, as well as by very accommodating monetary policy and the phasing-out of fiscal retrenchment.

But the recovery of investment is even slower. EU investment growth in the last three years has been 3.1% per year, slightly below the pre-crisis average rate of 3.4% and well below historical rates of investment growth during recoveries from financial crises.

And large differences in regional and sectoral investment performance remain. By mid-2016, investment in the less crisis-hit "old" Member States (hereafter "core countries") had reached the pre-crisis level but investment in mostly "new" Member State "cohesion countries" was still 9% down. In the most crisis-hit "periphery countries", investment is still 27% below the pre-crisis level. Notably, even within country group, substantial differences remain. In terms of asset composition, investment in intangibles is well above average historical levels in core and periphery countries, while expenditure on machinery and equipment stands out in cohesion countries. Construction, both residential and non-residential, remains depressed overall: investment in new construction exceeds pre-crisis levels in only five Member States, while in 15 it is more than 15% below pre-crisis levels.

The gradual recovery of investment overall is good news, but there are downside risks. Falling productivity growth, comparatively low levels of investment in intangible capital and falling investment in infrastructure pose a threat to future growth. Financing conditions for firms have improved, but systemic market failures and frictions remain.

Figure 1 EU investment by country group, % change relative to Q1 2008

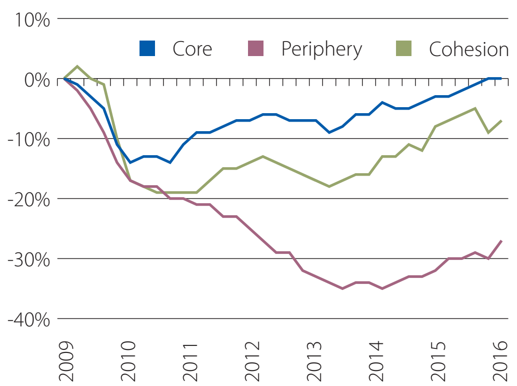
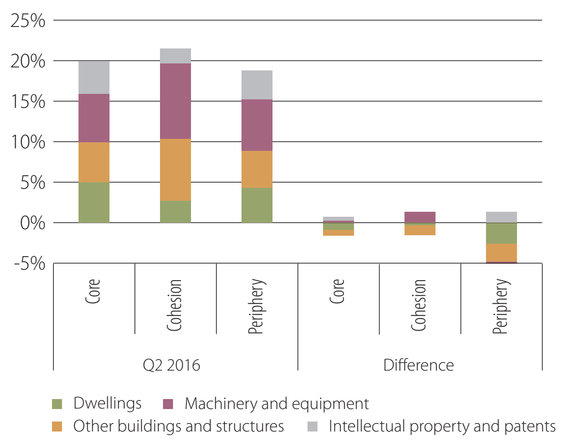


Figure 2 Investment by asset class, Q2 2016 (% GDP), and difference relative to 1995-2005 average



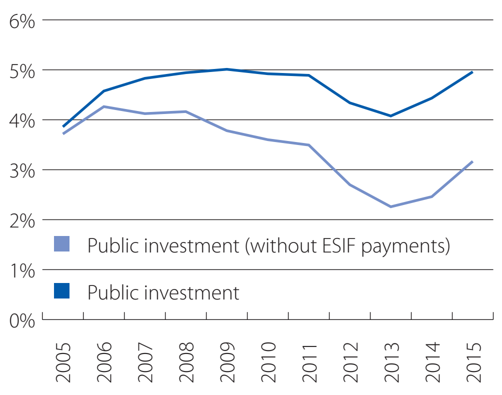
Source: *National Accounts, Eurostat.*
Note: *Real Gross Fixed Capital Formation. Index average 2008 = 100. Source: Eurostat, OECD. "Core" includes Austria, Belgium, Germany, Denmark, Finland, France, Luxembourg, the Netherlands, Sweden and the UK; "Periphery" includes Cyprus, Greece, Spain, Ireland, Italy, Slovenia and Portugal; "Cohesion" includes Bulgaria, the Czech Republic, Estonia, Croatia, Hungary, Lithuania, Latvia, Malta, Poland, Romania and Slovakia.*

Public investment trends are shaped by fiscal space and EU funds

Levels of real government investment in core and cohesion countries have recently been comparable to pre-crisis levels, but public investment in periphery countries was still 42% down in 2015. It is clear that fiscal consolidation has played a restraining role, particularly in periphery countries, and most EU governments do not plan increases in government investment in 2016 and 2017.

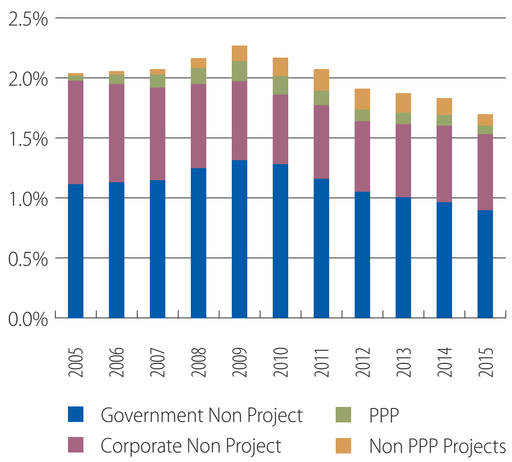
In cohesion countries, public investment has been the main driver of investment growth since the recession, but this was dependent on EU Structural and Investment Funds, which accounted for around two fifths of public investment, or nearly 2% of GDP, in recent years. However, latest data for 2016 show that previously strong investment growth in cohesion countries has now suffered from a "cliff effect," suddenly turning negative after the 2015 deadline for payments under the last EU programming period.

Figure 3 **Public investment rate in cohesion countries**



Source: *ECON calculation, DG Regio and AMECO data.*
Notes: *National co-financing not included.*

Figure 4 **Infrastructure investment rate, EU**



Source: *Eurostat, EIB/EPEC, Projectware.*
Notes: *Belgium, Croatia, France, Greece, Lithuania, Poland and Romania are excluded from the analysis due to missing data.*

Revised data show that infrastructure investment is falling

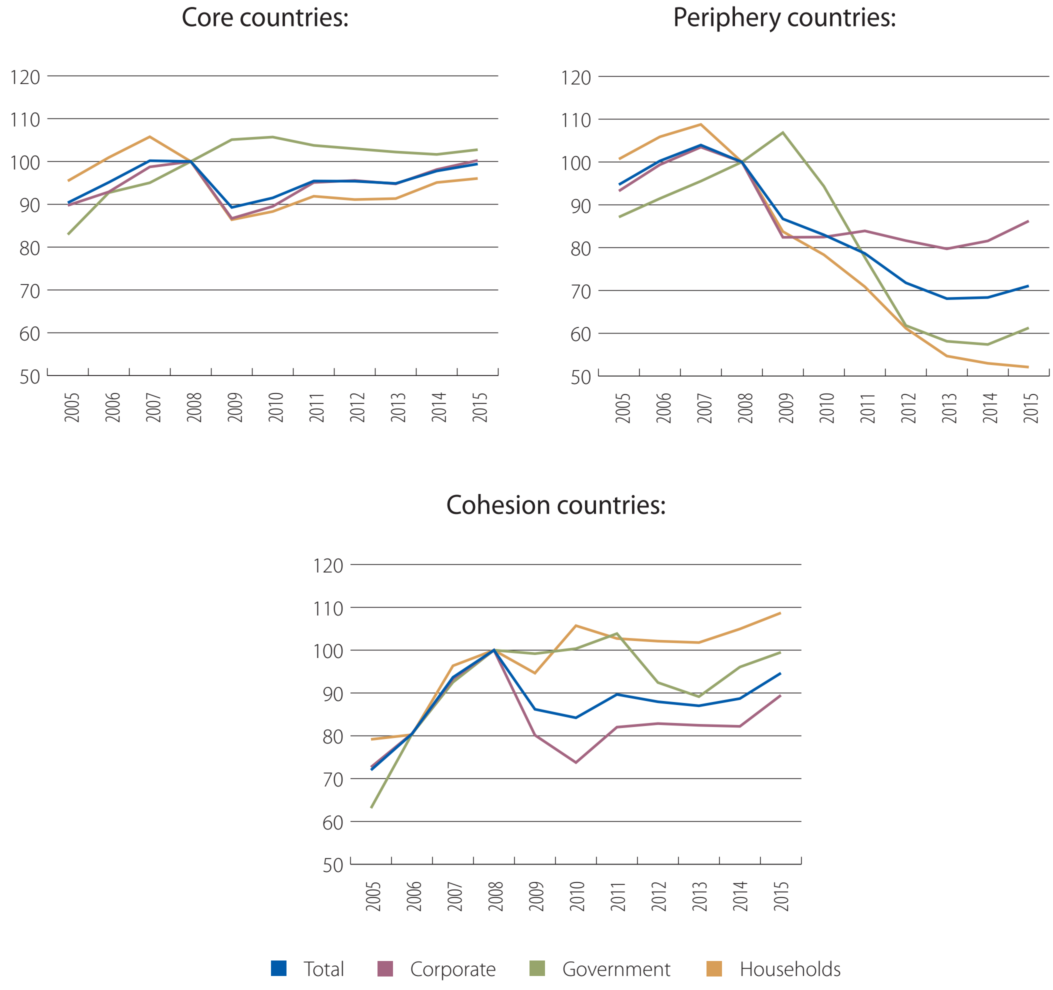
The introduction of the ESA 2010 national accounting categories has enabled a much more accurate estimation of infrastructure investment in Europe. While previously thought to have been quite resilient, we now see that infrastructure investment has fallen by about one quarter, from 2.3% to 1.7% of GDP, since 2009. By 2015 it was well under 2005 levels, with no sign of a turnaround.

While corporate infrastructure investment fell at the start of the crisis, public infrastructure investment accounts for most of the decline since. As mentioned, fiscal consolidation has been the main driver. While the ratio of government investment to GDP is close to its long-term average, this is not true for government investment in infrastructure: in this case the gap remains.

At the EU level, corporate investment has been the main driver of the (slow) investment recovery…

Corporate investment is the main contributor to investment growth at the EU level. However, it has reached the pre-crisis peak in core countries, but not in the periphery or cohesion groups. In cohesion countries, corporate investment has largely stagnated and is still well below the pre-crisis level, with low investment in buildings and structures providing the main drag. The ratio of corporate investment to GDP in 2015 is below its 1999-2005 average and accounts for a quarter of the decline in total investment to GDP since that period. Thus, while corporate investment is driving the mild investment recovery, it remains weak by historical comparison.

Figure 5 **Investment by institutional sector and country group, 2008 = 100**

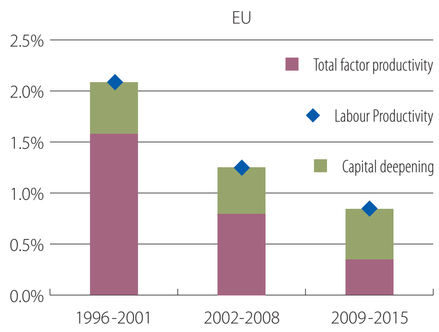


Source: *National Sector Accounts, Eurostat*

…but it is threatened by falling productivity growth

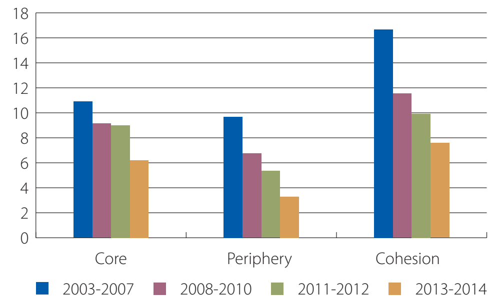
Our estimations show that the average realised internal rate of return of firms has been in decline since the beginning of the financial crisis, across countries, sectors and firm sizes. Such a decline is to be expected after a crisis, but after eight years this explanation becomes less plausible, and it becomes increasingly likely that the decline is driven by falling rates of productivity growth. While easing monetary policy may have cushioned this trend, its continuation would obviously have serious implications for investment and potential growth. EIB Investment Survey results show that firm's perception of the sufficiency of past investment is not typically linked to their capacity utilisation, with firms prioritising replacement over expansion even where capacity utilisation is high, suggesting that capital stock quality issues are preeminent.

Figure 6 **Components of labour productivity growth**



Source: AMECO and EIB staff calculations.

Figure 7 **Nominal internal rates of return on assets**

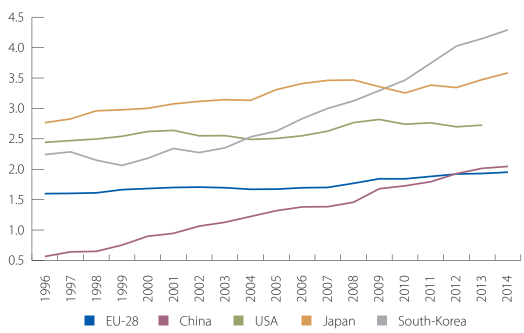


Source: ORBIS, Bureau van Dijk and EIB staff calculations.

Productivity-enhancing investment in intangible capital has been resilient, but lags global peers

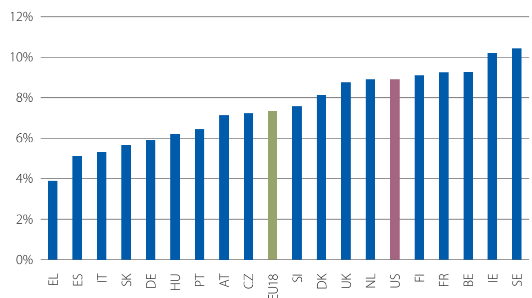
In the EU, investment in intellectual property rights, a large part of which is accounted for by R&D expenditures, has fared better than investment in tangible capital, with levels now higher than those in 2008 (Greece, Latvia and Romania are notable exceptions). Yet global comparisons are not so flattering. The ratio of R&D expenditures to GDP in the EU remains nearly 1 p.p. below the US level and is falling behind relative to rapid growth in China, Japan and South Korea. EU investment in the broader category of intangible assets has proved resilient, but is significantly lower than in the US, with growth too slow to close the gap. The ratio of investments in intangibles and tangible capital is positively correlated with government investment in R&D and greater labour market flexibility (or the rate of improvement in the latter).

Figure 8 **R&D as % of GDP, EU and major economies**



Source: OECD (2016), Science, Technology and R&D Statistics (database).

Figure 9 **Investment in intangibles as % of GDP, 2010-2013**



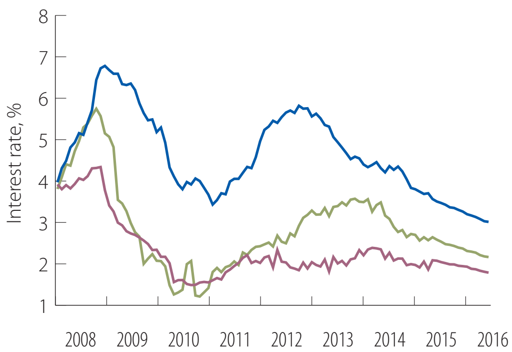
Source: INTAN-Invest and authors' elaborations on national accounts. No data for other EU member States.

Financial conditions for firms have improved…

The ECB and other European central banks have reacted to the crisis with an extraordinary package of monetary easing, including lowering interest rates to their effective lower bound and introducing unconventional measures such as the asset purchase programme. At the same time, the banking union aims to improve the resilience of the banking sector. These measures have gone a long way towards normalising financial conditions for investment by firms. Notably:

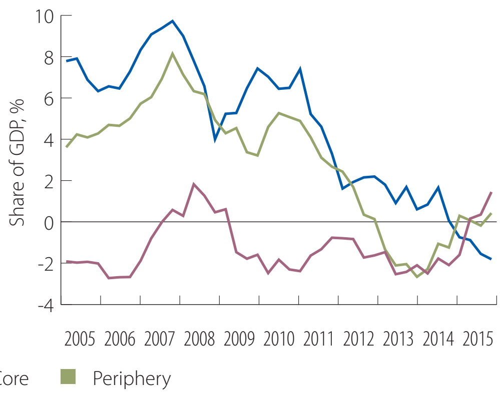
- The process of financial market fragmentation is gradually being reversed, particularly in the sense that spreads in bond yields and corporate lending rates between core and periphery countries have been compressed.
- Bank lending is gradually increasing and access to external finance in general is improving, supported by extremely accommodative monetary policy. This has so far compensated considerably for the falling returns on investment in the post-crisis period.

Figure 10 **Real cost of bank borrowing for firms**



Sources: Eurostat, EIB estimations.

Figure 11 **Net capital inflows by country group**



Source: IMF balance of payments statistics, EIB calculations.

…but there remains room for further action

Many firms still face financing constraints in an extremely low interest rate environment with declining productivity growth and returns on investment. Some areas of weakness are troubling:

- Despite the positive results of the 2016 European Banking Association stress tests and the magnitude of the regulatory adjustment achieved, there has been no confidence rally and European banks continue to suffer from very low valuations. Full recovery may require structural changes in the business model of some banks.
- Despite the monetary policy-driven compression of bond yield spreads within the euro area, cross-border capital flows, particularly to cohesion countries, remain well below their pre-crisis levels. Such capital flows have been one of the key drivers of convergence in the EU.
- SMEs continue to face higher lending rates and are more likely to perceive their financial situation as constrained. Access to equity for SMEs remains difficult, with private equity volumes still well below pre-crisis levels and the venture capital segment still very dependent on government support.

The impact of the crisis on the financial system has had knock-on effects on firm productivity growth

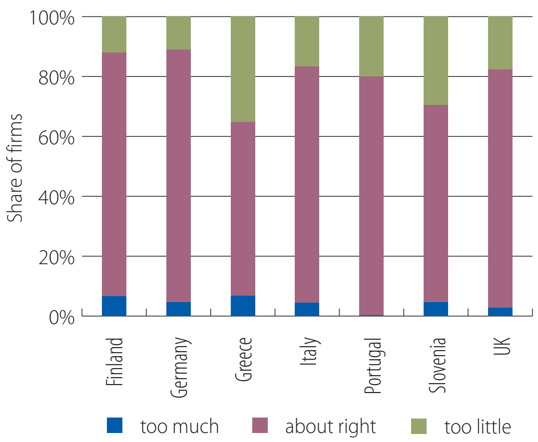
Our analysis shows that the crisis has reduced the ability of the EU financial system to allocate resources efficiently to support the most productive firms, thereby contributing to slowing productivity growth overall. Firms in the EU have been particularly exposed to the effects of the crisis because of their heavy reliance on bank lending and lack of opportunities to turn to capital markets. We find that firms that use more equity, retained earnings and trade credit have tended to achieve improved investment and sales, both before and after the crisis, whereas highly leveraged firms have tended to experience the opposite.

The credit-supply shock generated by the financial crisis has also meant that the allocation of bank credit between firms has been determined to a lesser extent by their productivity and growth potential, and more by the balance sheet health of their bank, or by their size. Credit supply to smaller firms fell more and these firms had more difficulties compensating for reduced external financing with other sources of finance. Our research suggests that firms in sectors with a high growth potential have been particularly adversely affected.

First EIB Investment Survey results support the picture of a modest corporate investment upswing

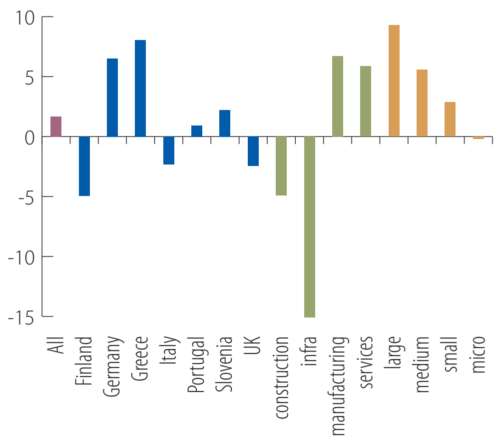
Preliminary results of the EIB Investment Survey (EIBIS) for seven countries confirm this picture of a corporate investment upswing in certain countries. While 80% of firms report that they invested about the right amount in the last three years, 16% report having invested too little. On balance, and by quite small margins, firms in Germany, Greece, Portugal and Slovenia expect to invest more in this financial year than the last, while firms in Finland, Italy and the UK expect to invest less. Firms in the infrastructure sector expect a significant investment slow-down in all seven countries except Portugal. Uncertainty stands out as an issue reported to negatively affect investment decisions, alongside business regulations (particularly in periphery countries) and lack of skilled workers (particularly in Germany and in some cohesion and periphery countries affected by substantial brain-drain).

Figure 12 **Firms' reported investment gap – sufficiency of investment over the last 3 years**



Sources: EIB Investment Survey (EIBIS).

Figure 13 **Firm investment outlook - share of positive views minus share of negative views.**



Source: EIB Investment Survey (EIBIS).
Note: Firms are asked whether they expect investment in the current financial year to be more, less or about the same as in the previous. The percent share of firms responding "more", minus the percent share of firms responding "less" is shown.

Public policies to address market failures and frictions and to enhance productivity growth remain critical

Investment in the EU has started to recover, but this recovery is weak by historical comparison, and uneven. The slowness of the recovery in investment by firms is disturbing, particularly given the extraordinary monetary stimulus. Low productivity growth and falling returns on investment lie behind this, and are a leading concern in core countries. Financial conditions have gradually normalised but constraints still exist, notably for SMEs in certain of the periphery countries. Weak public investment and declining investment in infrastructure is a major concern that has implications for Europe's long-term competitiveness and potential growth. It is particularly linked to fiscal constraints in the periphery countries, while cohesion countries are very reliant on EU structural funds and impacted by reduced FDI and other cross-border capital flows.

- **Structural reforms** focused on market flexibility to support innovation and productivity growth, including action on barriers to investment. The EIB is working with the European Commission to help identify such barriers under Pillar 3 of the Investment plan for Europe.
- **Financial sector reforms** to further improve banking sector resilience and further develop capital markets as an alternative source of finance for European corporations. The banking and capital markets unions are important steps forward in this regard.
- **Public support for investment**, making the best use of available EU and national financing capacities to address investment gaps in infrastructure and innovation and to help alleviate the financial constraints faced by smaller firms. Important are issues of the quality of public spending; institutional capacity; national, regional and municipal-level coordination; and the use of catalytic instruments.

The EIB has a unique role to play in supporting investment in Europe

The EIB plays an important catalytic role in promoting sound investment projects in support of EU policy goals in Europe and beyond. As a bank, it raises money from international capital markets, using its AAA credit rating. As a public institution owned by the 28 Member States of the EU, it lends these funds to finance investment projects that address systemic market failures or financial frictions, targeting four priority areas in support of growth and job creation: innovation and skills, SMEs, climate action and strategic infrastructure.

In 2015, the EIB provided EUR 77.5bn in long-term finance to support private and public productive investment, with the EIF providing EUR 7bn. At a first estimate, this helped realise investment projects worth roughly EUR 230bn and EUR 27bn, respectively. All the projects the EIB finances must not only be bankable, but also comply with strict economic, technical, environmental and social standards in order to yield tangible results in improving people's lives. Alongside lending, the Bank's blending activities can help leverage available funding by, for example, helping transform EU resources under the European Structural and Investment Funds (ESIF) into financial products such as loans, guarantees, equity and other risk-bearing mechanisms. Advisory activities and technical assistance can help projects to get off the ground and maximise the value-for-money of investments.

The Investment Plan for Europe undertaken by the European Commission and the EIB further enhances the EU policy response to relaunch investment and restore EU competitiveness. It consists of three main pillars: finance through the European Fund for Strategic Investments (EFSI) to enhance the EIB Group's capacity to address market failures in risk-taking that hold back investment; the European Investment Advisory Hub (EIAH) to provide comprehensive technical assistance in the sourcing, preparation and development of investment projects; and support for regulatory and structural reform to remove bottlenecks and ensure an investment-friendly environment. As of mid-October 2016, 362 EFSI transactions were approved, potentially leveraging 44% of the full EUR 315bn envisaged.

About the report

Investment and Investment Finance in Europe: Financing productivity growth – 2016 - the EIB annual report on Investment and Investment Finance is designed to serve as a monitoring tool providing a comprehensive overview on the developments and drivers of investment and its finance in the EU. It combines an analysis and understanding of key market trends and developments, with a more in-depth thematic focus, which this year is devoted to the impact of financial constraints on investment dynamics. A new addition to the report this year is the new annual EIB Investment Survey (EIBIS). The report is a flagship product of the EIB Economics Department. It complements internal EIB analysis with contributions of leading experts in the field.

About the Economics Department of the EIB

The mission of the EIB Economics Department is to provide economic analyses and studies to support the Bank in its operations and in the definition of its positioning, strategy and policy. The Department, a team of 30 economists and technical staff, is headed by Debora Revoltella, Director of Economics.

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The European Investment Bank

The EIB is the bank of the European Union. As the world's largest multilateral borrower and lender, we provide finance and expertise for sound and sustainable investment projects, mostly in the EU. We are owned by the 28 Member States and the projects we support contribute to furthering EU policy objectives. Under our external mandates, we also help to implement the financial pillar of the EU's foreign policy.

Disclaimer

The views expressed in this publication are those of the author(s) and do not necessarily reflect the position of the EIB.

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