



INVESTMENT REPORT
2018/2019



KEY FINDINGS

retooling
europe's economy



EIB Investment Report 2018/2019: retooling Europe's economy - Key findings

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Key Findings

Tim Bending

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The full version of the *Investment Report 2018/2019: Retooling Europe's economy* can be downloaded at:

www.eib.org/investment-report



EUROPEAN INVESTMENT BANK INVESTMENT REPORT
2018/2019

KEY FINDINGS

RETOOLING EUROPE'S ECONOMY

Introduction

The *Investment Report*, issued annually by the European Investment Bank, provides a comprehensive overview and analysis of investment and the financing of investment in the European Union. It combines the exploration of investment trends with in-depth analysis, focusing especially on the drivers and barriers to investment activity. The report leverages on a unique set of databases and survey data, including EIBIS, an annual survey of 12 500 firms in Europe, which focuses on their assessment of investment and investment finance conditions, and which allows analysis with firm balance sheet information. The report provides critical inputs into policy debates on the need for public action on investment, and on the types of intervention that can have the greatest impact.

This year's report addresses a moment of economic recovery in which investment growth, overall, is strong, but downside risks to the economic outlook are rising. It identifies many ways in which current investment is still structurally inadequate, given the legacy effects of the recent crisis and the great challenges that lie ahead. There is an urgent need to retool Europe, from its infrastructure and innovation ecosystem, through to its businesses and workers, to enhance prosperity and social cohesion.

As the Key Findings of the *Investment Report 2018/2019*, the following provides a summary of:

- the **state of investment** in the EU overall;
- the breadth of the **investment gaps** that still exist;
- the stagnation of **infrastructure** investment;
- the need to accelerate investment in **climate change mitigation**, especially energy efficiency;
- the need to foster more **innovation** and investment in intangible assets;
- the challenge of adopting **digital technologies**;
- the challenge of **re-skilling** the European workforce;
- current **financing conditions** and financing constraints; and
- the need for more **equity finance** for a more responsive EU economy.

Finally, an overview of the main policy recommendations is provided. Building on the data and the analysis it presents, this report also provides a wake-up call for Europe.

Investment is back, the recovery has broadened...

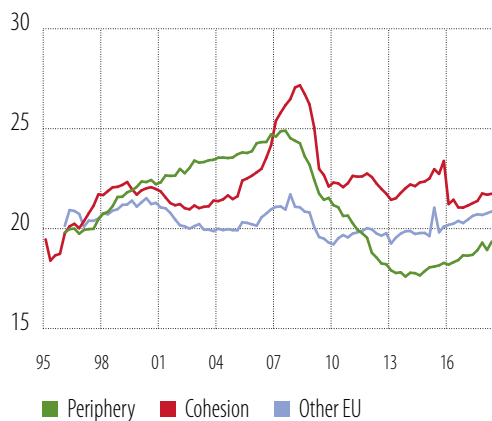
Investment growth is consolidating across the EU. Measured as gross fixed capital formation, investment grew by 4% on average in 2017 and the first half of 2018.

Investment rates have reached historical averages, apart from in the “periphery” group of countries¹, where investment growth is healthy but investment by households and government remains low. While investment intensity in the “cohesion” group might be expected to be high, reflecting the process of catching-up, it is paradoxically almost as high in the more advanced “other EU” group where greater saturation of opportunities might be expected.

Investment is becoming more balanced across asset classes and institutional sectors. While investment in machinery and equipment continues its robust growth, investment in dwellings and other buildings and structures has picked up in most EU countries. Investment by corporations remains strong, being slightly above historical averages in the periphery countries and below them in cohesion countries. Investment by households is supported by real income growth and the recovery of house prices.

Public investment is gradually picking up but remains low, especially in the periphery. It is above its long-term average in only six countries. The composition of public spending is still skewed away from investment (relative to historical averages), particularly with regard to infrastructure, but the situation is slowly improving.

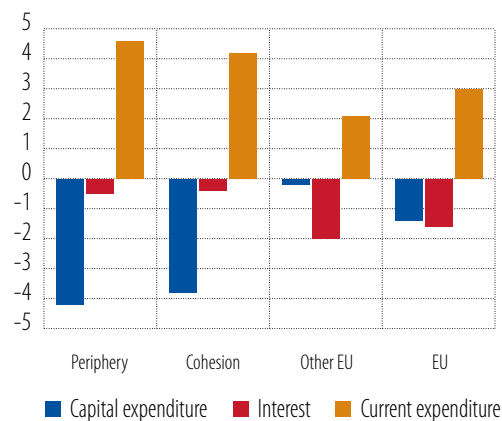
Real investment in the EU (gross fixed capital formation, % of real GDP)



Source: Eurostat.

Note: Ireland is excluded due to strong one-off effects.

Change in composition of public expenditure, 2017 compared to 1995-2016 average (% points of GDP)



Source: Eurostat.

¹ EU countries are grouped as “cohesion” (those that joined the EU since 2004), “periphery” (Cyprus, Greece, Ireland, Italy, Portugal and Spain) and “other EU”.

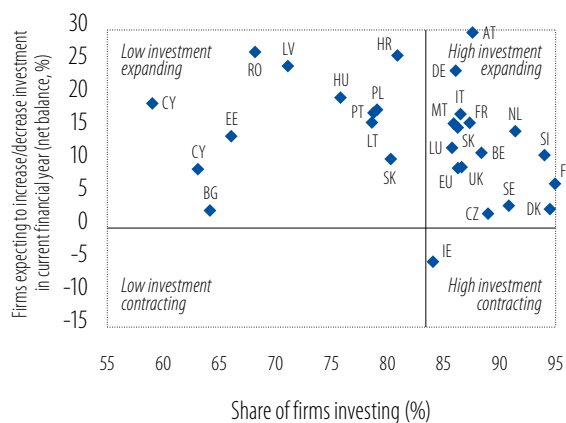
...and firms remain optimistic

EIBIS data show firms expecting to increase investment, on average, in nearly all countries. In general, the share of firms investing was higher in the other EU group, and lower among cohesion and periphery countries, but with exceptions. Firms expected to reduce investment only in Ireland, reflecting uncertainty linked to Brexit.

Firms remain optimistic about short-run financing and sectoral conditions, but pessimism about the political and regulatory climate has grown. On balance, looking a year ahead, firms are significantly less optimistic than before about the overall economic climate, and marginally less optimistic overall.

Replacing and upgrading capital stock is still the main purpose of corporate investment, but investment in capacity expansion has increased. Investment in capacity expansion has risen 5 percentage points (p.p.) to 30%, with replacement accounting for 47% and innovation activities for 15%. Unsurprisingly, firms are more likely to expand capacity when they are relatively profitable and regard more of their machinery and equipment as already state-of-the-art.

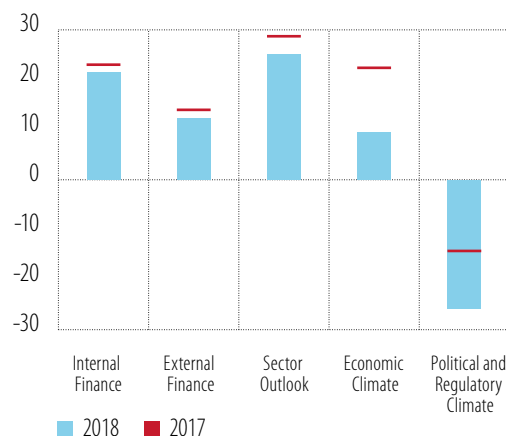
Investment cycle (share of firms investing in 2017 vs firms expecting investment increase in 2018, %)



Source: EIBIS 2018.

Note: Share of firms investing excludes firms investing less than EUR 500 per employee. The vertical line shows the EU average share of firms investing.

Firms' perception of conditions
(% of firms expecting improvement minus % expecting deterioration)



Source: EIBIS 2017 and 2018.

Note: Based on the question: "Do you think that each of the following will improve, stay the same or get worse over the next 12 months?"

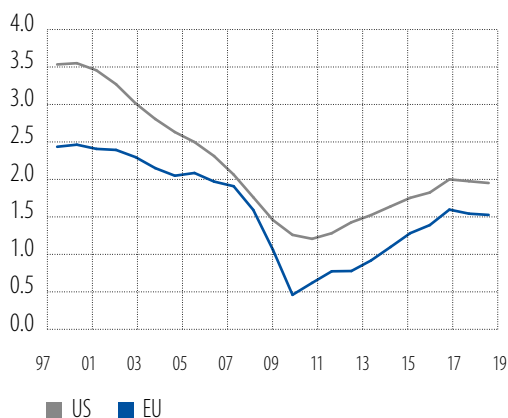
...but looking forward, there is cause for concern

After years of underinvestment, “potential growth” remains depressed: the cyclical upswing belies the existence of structural weaknesses and investment needs, while downside risks mount. In other words, the economy is already growing faster than the potential suggested by current levels of capital stock, labour supply and rates of innovation. Favourable monetary policy and global demand conditions have helped push output growth above this potential, but the need for a retooling of Europe’s economy to sustain growth and meet future challenges remains. The growing perception of downside risks to the global outlook for growth and investment makes this task even more urgent.

Compared to the post-crisis experience in the US, Europe’s recovery suffers from weak investment. Comparing the first five and a half years of recovery in Europe (since 2013) and the US (since 2009) shows that the recoveries were similar, and that the EU has even seen faster growth of employment, real GDP and incomes. However, investment growth in the EU, at 3.4%, has been a whole percentage point lower than in the US.

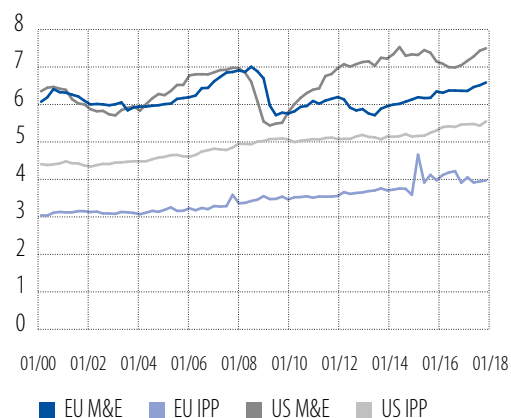
A large gap in machinery and equipment investment has opened, relative to the US, threatening European competitiveness. Meanwhile the gap in investment in intellectual property, including R&D, shows no signs of closing. As adoption of new technologies requires a combination of tangible and intangible investment, the cumulative gap is a challenge for the EU. Indeed, the EU risks repeating the experience of the 1990s when the US took a lead in productivity through heavy investment in information technologies, except that China has now also entered the picture. The current wave of investment in the US, some of it in automation and digitalisation (but also, partially, related to the shale gas boom), may further widen the gap and undermine the ability of EU firms to compete.

Estimated potential output in the EU and US (%)



Source: EIB estimates based on Eurostat and AMECO.

Real GFCF in machinery and equipment and intellectual property products (% of real GDP)



Source: Eurostat and OECD statistics.

We need to retool Europe's economy

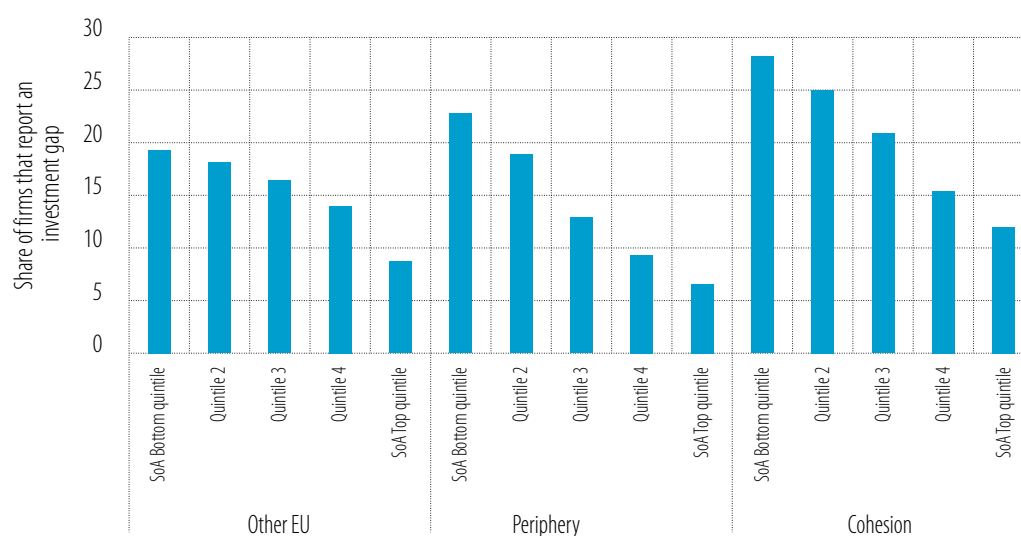
Despite expanding investment, the need for further investment perceived by EU firms remains unchanged. More firms think their past investment was too little, rather than too much, by a margin of 16 p.p., up 1 p.p. from last year. Increasing investment by firms has only served to keep pace with perceived investment needs that are growing, not to close the gap.

Perceived shortfalls in investment are driven by firms' fears that they could fall behind in terms of technology and competitiveness. Despite the recent pick-up in capacity expansion, perceived investment gaps still appear unrelated to capacity constraints. Instead, they are clearly related to capital quality, such as the degree to which firms see their machinery and equipment as state-of-the-art.

For EU firms, being "state-of-the-art" increasingly means investing in digital technologies, which make up nearly 30% of the value of investment in machinery and equipment in manufacturing firms, and 20% in services. For infrastructure (including transport and logistics) and service sector firms, having more state-of-the-art equipment is associated with increasing investment in stand-alone digital intangibles like software, data, ICT networks and website activities.

The obstacle to investment most frequently named by firms is availability of skills. 77% of firms regarded this as an obstacle. Meanwhile, firms' concerns about energy costs and access to digital infrastructure are increasing. While these were mentioned as obstacles by only 59% and 46% of firms, respectively, both measures increased by 3 p.p. This was driven by experiences in specific countries, such as Latvia, Portugal and the Czech Republic for energy costs and Austria, Belgium, France and Germany for digital infrastructure.

Investment gaps perceived by firms and quality of firms' capital stock, in terms of machinery and equipment reported to be state-of-the-art (%)



Source: EIBIS 2018.

Note: Investment gap is the % of firms reporting too little investment over the last three years, minus those reporting too much. Firms are sorted (within country) into quintiles according to the proportion of their machinery and equipment they consider state-of-the-art (SoA).

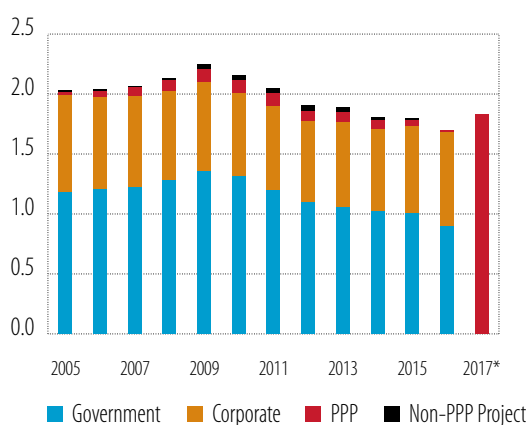
Investment in infrastructure remains depressed

Infrastructure investment continued its downward trend in 2016, and preliminary data suggest no marked reversal in 2017. At 1.7% of GDP, overall infrastructure investment now stands at about 75% of its pre-crisis level. While this investment has been more or less stable in the other EU countries (as a share of GDP), it has been volatile and declining in the periphery and cohesion countries. The latter saw a large spike in infrastructure investment in 2014-15 linked to the EU Structural Funds cycle.

The government sector accounts for about 80% of the fall in total infrastructure investment over the past decade. The fall in government infrastructure investment was most pronounced in countries subject to adverse macroeconomic conditions and more severe fiscal constraints. This trend has been aggravated by a tendency to protect current expenditure at the expense of capital expenditure. Fiscal constraints were particularly binding for disadvantaged regions with already poor infrastructure quality and weak socio-economic outcomes.

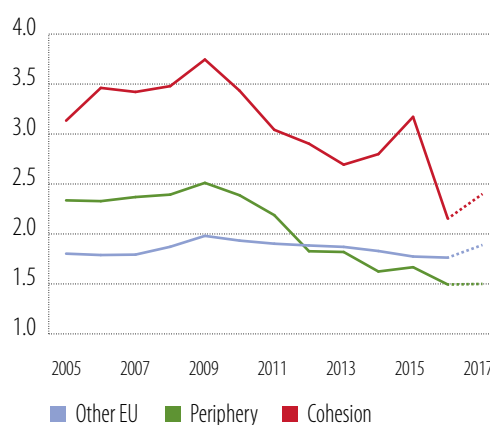
Corporate infrastructure investment has held up better, but suffers from falling returns, in part due to lower allowed returns in regulated sectors. In 2016, corporate infrastructure investment as a share of GDP finally returned to its 2009 level. It has been supported by healthy corporate balance sheets in the sector, but undermined by a trend of declining returns on investment in many sectors. Returns have suffered most in periphery countries and in the power and ICT sectors. Falling returns reflect the general macroeconomic environment, but also the fall in allowed returns – for firms in regulated sectors – which are set with reference to interest rates that are currently historically low.

EU infrastructure investment by institutional sector (% of GDP)



Source: EIB Infrastructure Database.
 Note: Based on Eurostat, Projectware, EPEC data.
 Data for 2017 are provisional. Data are missing for Belgium, Croatia, Lithuania, Poland, Romania and the UK.

Infrastructure investment by region (% of GDP)



Source: EIB Infrastructure Database.
 Note: Based on Eurostat, Projectware, EPEC data.
 Data for 2017 are provisional. Data are missing for Belgium, Croatia, Lithuania, Poland, Romania and the UK.

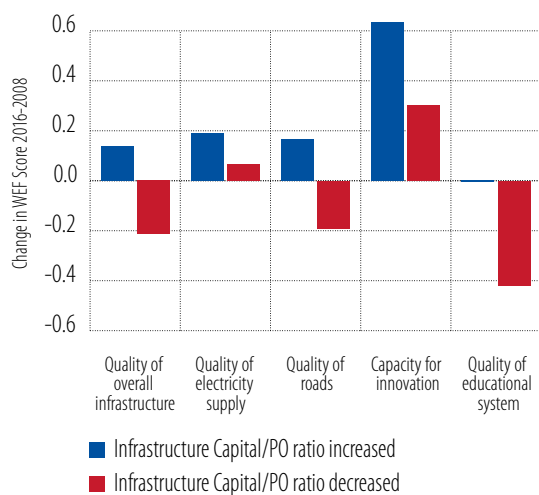
...with consequences that are visible

The fall in infrastructure investment activities has not been due to need saturation. One in three large municipalities in Europe said that infrastructure investment was below needs, while infrastructure investment fell most in regions where infrastructure quality was already relatively low. Analysis reveals that additional infrastructure investment has continued to generate substantial spill-overs in terms of firm growth.

Investment through public private partnerships (PPPs) fell to EUR 9 billion in 2017, from EUR 30 billion in 2005. The replacement of enthusiasm with a very cautious attitude to PPPs largely explains this trend, rather than changes in regulation or the cost of funding. Reassessing the pros and cons of PPPs will ensure their effective use.

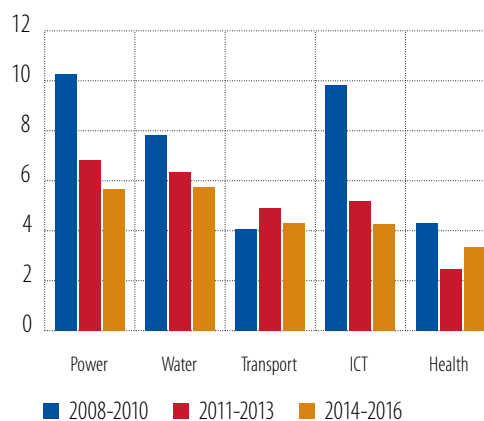
Good governance matters. At the municipal level, poor infrastructure quality is associated with a lack of technical capacity to select and implement complex projects. At the regional level, it is similarly associated with limited technical capacity and weak regional governance. Infrastructure gaps should be addressed in a comprehensive way, encompassing finance, technical capacity and governance issues.

Change in infrastructure stock and perceived infrastructure quality



Source: Eurostat Capital Stock data and World Economic Forum Competitiveness data. Comparison 2016 vs 2008.

Estimated Internal Rate of Return by infrastructure sector (%)



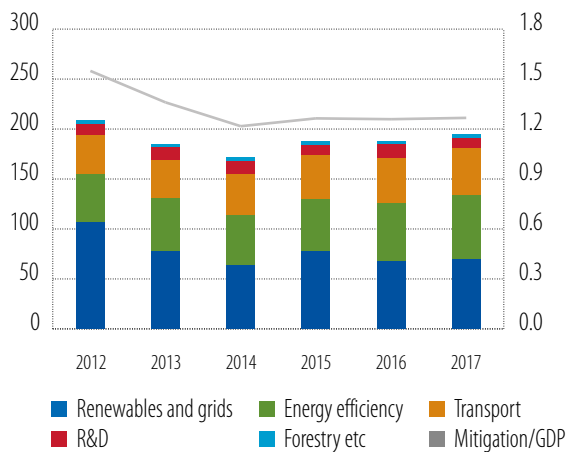
Source: EIB calculations based on Bureau van Dijk ORBIS data for selected infrastructure firms, using the methodology of Fama and French (1999) and Wagenvoort and Torfs (2013).

Investment in climate change mitigation must accelerate...

EU investment in climate change mitigation (CCM) continues to stagnate at just under 1.3% of GDP, having fallen from 1.5% between 2012 and 2014. In nominal terms, the amount invested rose marginally to EUR 194 billion. While CCM investment in transport and energy efficiency shows a gradual rising trend, it is investment in renewable energy and related grid infrastructure that has fallen.

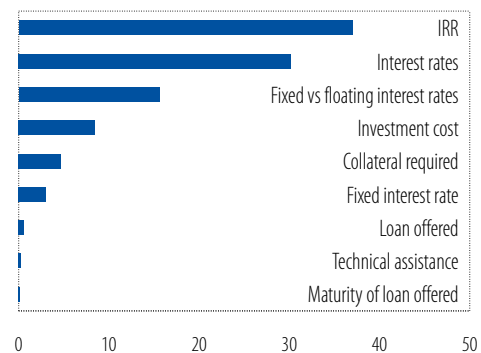
CCM investment trends have been influenced by a mix of regulatory changes, ineffective market mechanisms, technological developments, fossil fuel price changes and subsidies. While the scaling back of renewable energy support schemes has increased uncertainty and reduced expected returns, the EU Emissions Trading System has initially failed to deliver a carbon price sufficient to promote CCM investments. At the same time, low fossil fuel prices, over-capacity in some countries and ongoing global fossil fuel subsidies have made the investment environment for CCM more difficult.

Climate change mitigation investment in the EU (EUR bn (lhs), % of GDP (rhs))



Source: EIB Climate Change Mitigation Database.
Note: Based on International Energy Agency Data and EIB calculations.

Relative influence of factors on firms' decision-making on energy-efficiency investments (% of total)



Source: EIB calculations.
Note: Based on a natural experiment on 1 500 firms, which were asked to choose repeatedly among different loan options to derive their implicit preferences.

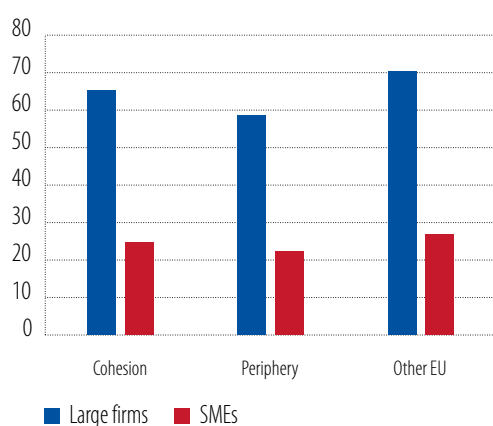
...with an enhanced focus on energy efficiency

Investment in energy efficiency needs to be increased dramatically to meet EU targets for 2030 and beyond. In June 2018, a political agreement was reached on new, more ambitious EU climate targets for 2030. While investment in many areas may be broadly on track, meeting these targets will require a step-change in the EU's and Member States' efforts to realise potential energy-efficiency gains.

Firms treat energy-efficiency measures – which make up some 8% of firm investment – similarly to other types of investment, with the expected internal rate of return and interest rates the dominant factors in decision-making. An experimental exercise with 1 500 firms suggests that a 1 p.p. increase in the internal rate of return raises the probability of going ahead with an energy-efficiency measure by 2.5 p.p. The size of the investment needed may also be relatively influential, but there is little evidence that firms consider energy-efficiency investments to be less risky than other types of investment.

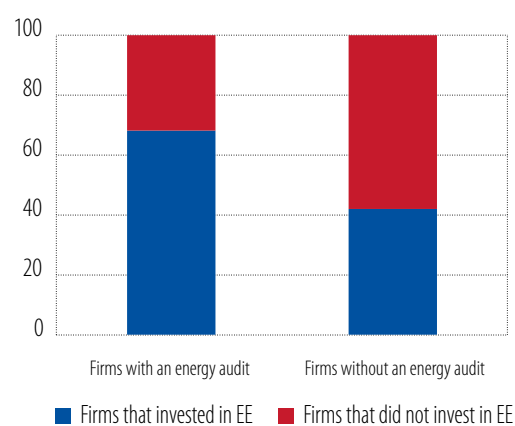
Carrying out an energy audit makes firms more likely to invest in energy-efficiency measures. The effect is notably even larger for innovative firms, microenterprises and firms in the service sector. Energy audits can therefore play an important role in helping firms to diagnose and analyse energy use and opportunities for efficiency gains, thereby overcoming the information gap on internal rates of return that is one of the main barriers to energy-efficiency investments.

Proportion of EU firms that have conducted an energy audit in the last three years, by region and firm size (%)



Source: EIBIS 2018.

Energy audits and firms' investment in energy efficiency (%)



Source: EIBIS 2018.

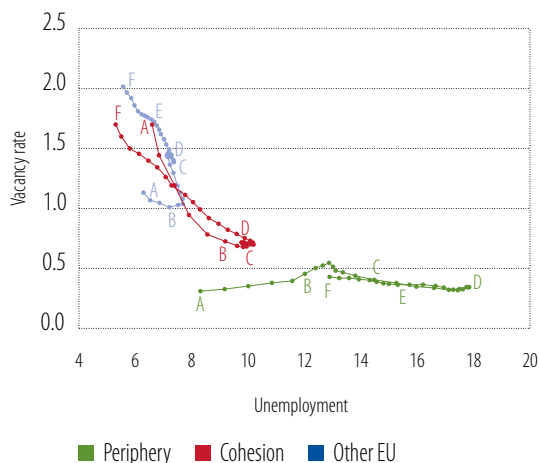
The recovery is revealing a structural gap in skills...

Almost eight out of ten European firms (77%) consider the limited availability of staff with appropriate skills to be an impediment to investment. This finding comes against a backdrop of structural transformation and cyclical recovery in EU labour markets, with EU average unemployment approaching pre-crisis levels and a record 239 million people in employment. Nonetheless, the effects of the crisis are still visible. Structural trends, including demographic change and the advance of digital technologies, are also transforming EU labour markets. Such factors result in strong disparities in labour market conditions between different countries and regions.

A lack of staff with the right skills is the most frequently reported impediment to investment in both the cohesion and other EU groups of countries. This reflects a structural gap in adjustment to changing technology and skill requirements, exacerbated by a tight labour market (particularly in the other EU countries) and outward migration (in cohesion countries). A lower degree of concern about skills in the periphery countries reflects the slower economic recovery there. At the firm level, it is the more competitive, innovative and fast-growing firms that more often report limited skills availability as a constraint.

Investing in skills matters for structural reasons, including demographic and technological change. Persistent skill shortages and mismatches can negatively affect productivity and technology adoption. Demographic trends will make skills a more pressing structural issue over time, raising pressure to generate higher productivity gains. Moreover, workforce shrinkage is expected to materialise at a time when global competition will require a more skilled workforce in many industries.

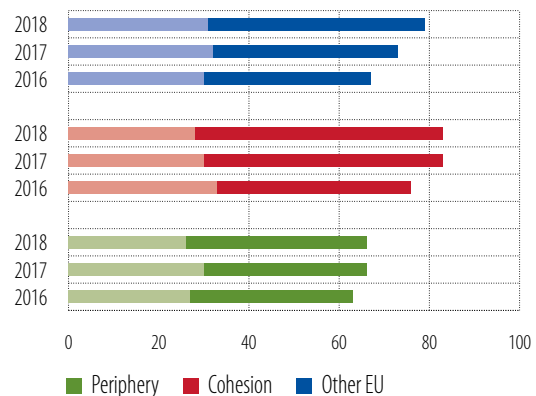
Job vacancy rates vs unemployment, 2009-18, by country group (%)



Source: Eurostat.

Note: While rising vacancy rates signal increasing labour supply constraints in cohesion and other EU countries, there is still cyclical unemployment in periphery countries. A = 2009, B = 2010, C = 2012, D = 2014, E = 2016, F = 2018.

Share of firms reporting missing skills as an investment impediment, by country group (%)



Source: EIBIS 2016-18.

Note: Light colour = minor impediment; dark colour = major impediment.

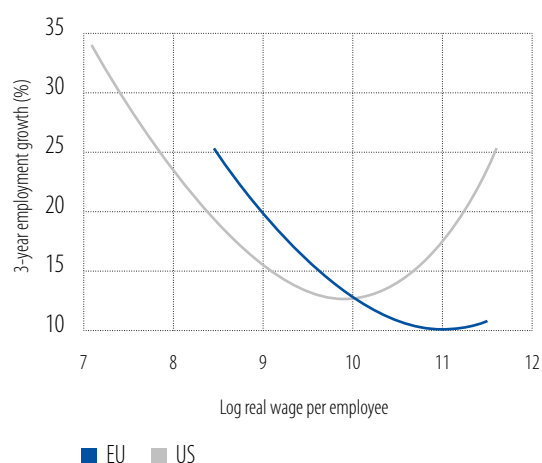
...that demands a European response

60% of firms expect digitalisation to increase demand for higher-skilled staff, while the polarisation of the labour market is already underway. Firms adopting advanced digital technologies report unfilled vacancies more often than other firms. Meanwhile, difficulty finding digital skills is more likely to be reported by firms in all parts of the EU than in the US. Looking at employment growth, a hollowing-out of the labour market is clear, with much stronger job creation among the highest and lowest paid jobs compared to middle income ones that are the main target of digitalisation and automation.

Firms that provide training for employees are more productive on average, yet 21% of firms consider their recent investment in training to have been insufficient. Some 73% of firms in the EU invest in training of employees. Small firm size as well as financial constraints can limit companies' investment in training, as can a firm's ability to internalise and benefit from training investment. Firms are responding to digital-related skills gaps by dedicating 21% of their training budgets to improving the digital skills of their staff.

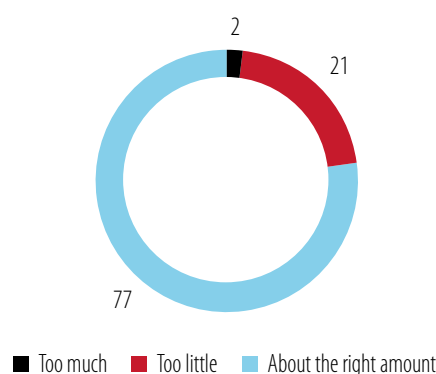
Investing in skills is an essential part of the European retooling effort, with positive implications for competitiveness and social cohesion. Education and training systems need to focus on the quality of outcomes, inclusiveness, and equipping people with skills that are complementary to technology. In an integrated market, where mobility of workers means sharing the benefits of investment in skill formation, greater joint efforts and coordination at the European level is valuable. Currently, just about 1% of spending on education in the EU is at the European level. The existence of a single market for labour, and the growing importance of skill-related issues, calls for closer European coordination in this area.

Change in employment over wage spectrum



Source: EIBIS Digital and Skills Survey 2018.

Sufficiency of EU firms' investment in training in 2017 (%)



Source: EIBIS Digital and Skills Survey 2018.

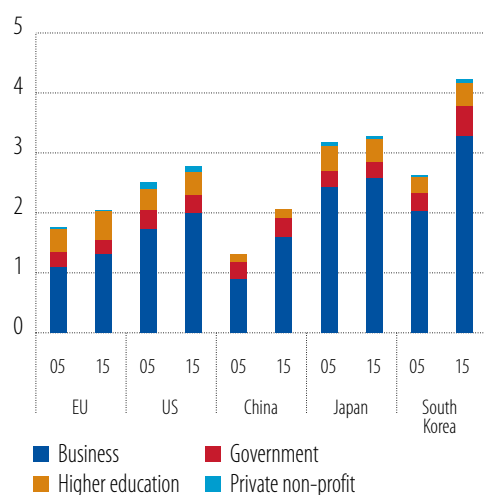
The EU is losing ground on innovation...

Investment in innovation is critical for the growth of productivity and future prosperity, while helping to address challenges like an ageing population and climate change. Innovation is about moving the technology frontier, but it is also about the adoption of new technologies. Remaining at the forefront of innovation and at the same time keeping up with adoption is what will define Europe's long-term ability to compete in global markets.

EU spending on R&D lags global competitors because of weaker business R&D. Business investment in intangibles is also lower in the EU than in the US. EU R&D investment remains stable at 2% of GDP, a level recently matched by China and below spending in the US at 2.8%. Business R&D largely accounts for the difference, being 1.3% of GDP in the EU and 2% in the US. Achieving the EU target for R&D of 3% of GDP by 2020 would imply additional annual investment of EUR 140 billion. Meanwhile, EIBIS data shows that US firms devoted 48% of total investment to intangibles as a whole, compared to 36% in the EU.

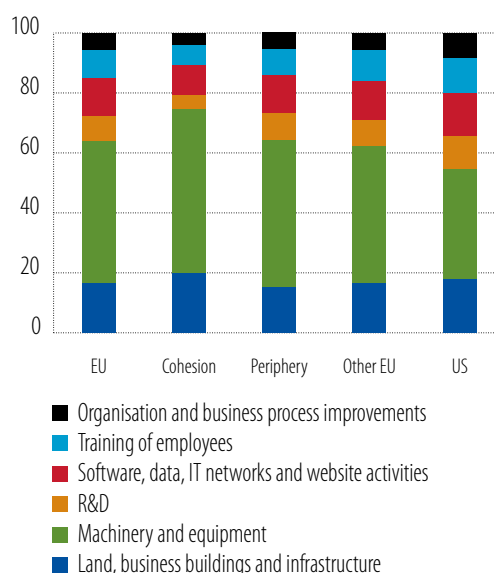
The EU is losing ground among the world's top firms for R&D spending, with fewer new entrants in this group, reflecting the challenges EU firms face in scaling-up. Business R&D is highly concentrated, with just 2 500 firms accounting for around 90% of global business R&D, and 250 investing 70% of that. Among the top 2 500, China's presence is growing. Moreover, the US and China represent 37% and 25%, respectively, of new entrants to the top 2 500 after 2011. With only 13% of new entrants, the EU is more reliant on long-established companies for its position in the global innovation landscape.

R&D expenditures (% of GDP)



Source: EIB calculations, based on Eurostat

Composition of investment in tangible and intangible assets, EU and US (%)



Source: EIB calculations based on EIBIS 2018 and EIBIS Digital and Skills Survey 2018.

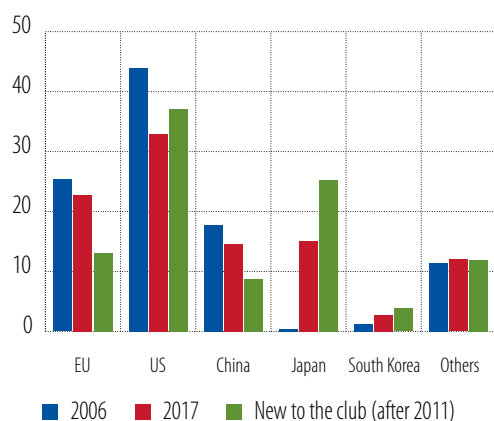
...particularly in terms of global leadership by firms

European weakness in “tech” is a concern, given the shifts towards digitalisation and “winner-takes-all” dynamics. Among the top 2 500 companies for R&D, the EU is a global leader in the automotive industry, but has a comparatively much weaker presence in the electronics and technology sector, covering areas such as microelectronics, consumer electronics, digital infrastructure and services, and cybersecurity. The overall investment intensity of leading firms in the tech sector is also notably weaker in the EU than in the US.

Compared to the US, the EU has more firms that do not innovate at all, fewer leading innovators and more that are focused on adopting innovation. Only 8% of EU firms can be categorised as “leading innovators” that invest significantly in R&D and introduce products new to their market, compared to 16% in the US. By contrast, EU firms are twice as likely to focus on adopting existing innovations (24% vs 12%), with this figure rising to 31% in cohesion countries, signalling a process of catching-up. Survey evidence shows that innovators grow faster than other firms, and are more likely to regard external finance constraints and the limited availability of skilled workers to be obstacles for investment.

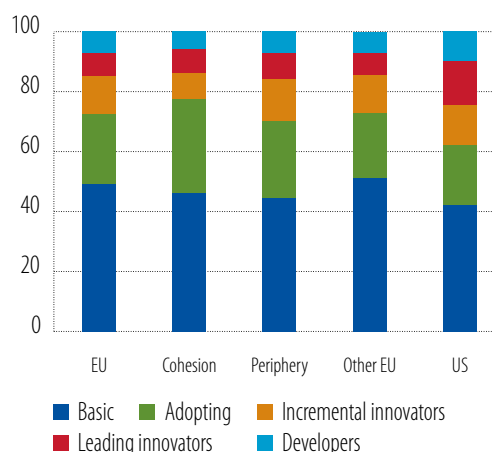
Investment in intangible assets, and not just R&D, is critical for innovation. It is necessary to consider investment in the full range of intangible assets – software, data, organisational capital, employee skills, all kinds of intellectual property rights, and so on – that are closely associated with innovation in advanced economies.

Share of top 2 500 R&D companies in 2006, 2017, and among new entrants (%)



Source: EIB calculations based on the EU Industrial R&D Investment Scoreboard.

Distribution of firms by innovation profile (%)



Source: EIB calculations based on EIBIS 2018 and EIBIS Digital and Skills Survey 2018.

Key findings

EU firms are waking up to the urgency of embracing digitalisation...

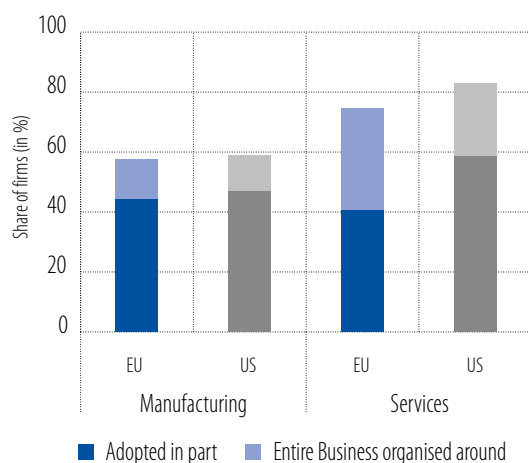
The adoption of digital technologies by EU firms lags behind that of US firms in the service sector, but not in manufacturing. While 83% of US service sector firms report adopting digital technology, only 74% have done so in the EU. In the manufacturing sector, 60% of firms have adopted such technologies, on both sides of the Atlantic. These are some of the findings of a special add-on to the EIB Investment Survey, focused on digitalisation, covering 1 700 firms in the EU and the US. Digital technologies considered include 3D printing, advanced robotics, big data, automation of routines and digital content provision.

Digitalisation is associated with improved firm performance. Firms that adopt digital technologies tend to be more productive, to invest more and to engage more in innovation activities. In both the EU and US, and by a wide margin, firms credit digitalisation with enhanced sales, with the effect estimated at around plus 10% on average.

On balance, 50% of manufacturing firms and just over a third of services sector firms consider their past investments in digital technologies to have been too low. The goal of enhancing the productivity, quality and flexibility of production processes provides the main motivation for the adoption of digital technologies, particularly in manufacturing. While EU firms seem particularly motivated by efficiency gains, US firms tend to focus more on using new technologies like “big data” to open up new market opportunities.

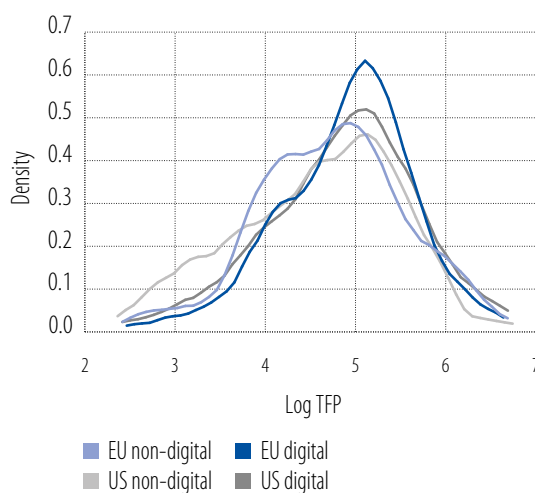
Delaying digitalisation will come at a cost. The most technologically advanced digital firms do not expect further competitive pressures to emerge from further digitalisation in their own sector. They already enjoy higher mark-ups and expect to benefit from path dependency in innovation, confirming the “winner-takes-all” idea. This underlines the urgent need for European action to support the competitiveness of European firms in the global innovation race.

Share of firms that adopted digital technology, EU and US (%)



Source: EIBIS Digital and Skills Survey 2018.

Total factor productivity of digital vs non-digital firms, EU and US



Source: EIBIS Digital and Skills Survey 2018.

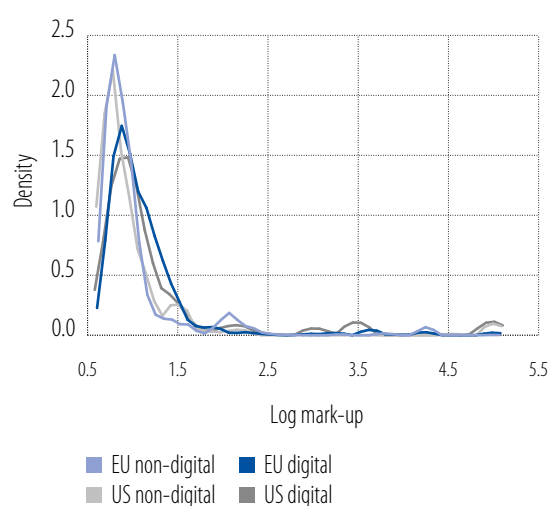
...but barriers remain

Barriers to digitalisation in Europe include the prevalence of small firms, market fragmentation and a financial system that is largely skewed towards debt finance. The larger share of small firms in Europe poses a barrier to digital adoption insofar as digital technologies often come with high fixed costs that small firms find difficult to shoulder. Market fragmentation limits firms' ability to scale-up their digital activities, and thus reduces their incentive to invest. The heavy dependence of European firms on debt finance adversely affects young firms that want to digitalise in particular, as they often do not have pre-existing relationships with banks or much collateral to access debt finance to fund their digitalisation activities.

Policymakers need to pay attention to managing the potential risks of digitalisation. For example, there is evidence that increased automation using digital technologies often leads to a devaluation of mid-level jobs, and thus to labour market polarisation. Increased vulnerability to cybersecurity threats is also something that needs to be taken seriously. In addition, in the context of path dependency in innovation, digitalisation may have potentially negative impacts on consumer welfare, allocative efficiency and innovation activities.

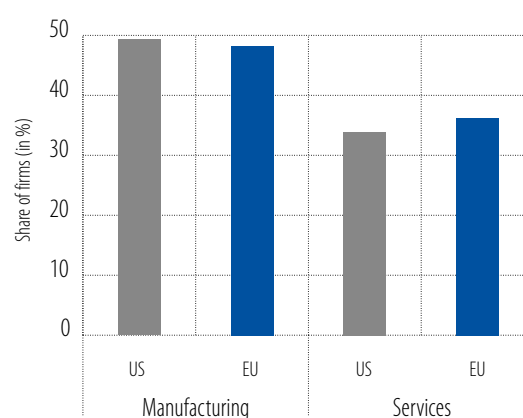
Potential risks from digitalisation only enhance the need for Europe to be at the forefront of this technological wave. The potential gains from the adoption of digital technologies are large and the costs of missing the first-mover advantages of early adoption are high. Europe cannot opt out of digitalisation, so it is better to play a leading and shaping role.

Estimated mark-ups by digitalisation status of firms, EU and US



Source: EIBIS Digital and Skills Survey 2018.
Note: Mark-up calculations are based on the approach of de Loecker and Eeckhout (2017). Distribution plot is weighted.

Share of firms stating that they invested too little in digital technologies in the last three years (%)



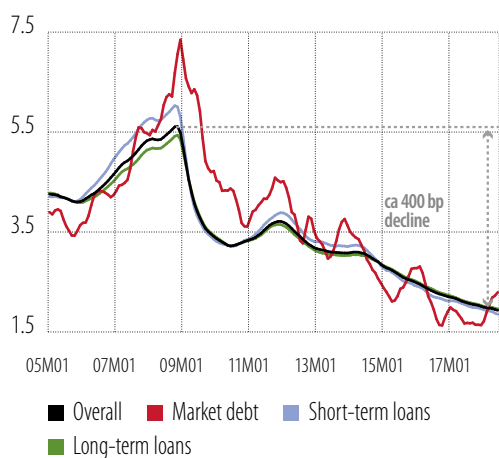
Source: EIBIS Digital and Skills Survey 2018.

Financial conditions remain favourable overall...

Monetary conditions remain supportive of investment, but downside risks to the economic outlook are on the rise. Short-term interest rates remain negative in the euro area, and overall financing conditions continued to soften. However, this means that the expected path of monetary policy normalisation may pose risks for investment, as may developments that undermine market confidence. Global trade tensions have given rise to increasing uncertainty, something that has proven to be a key impediment to investment in recent years. Meanwhile, the process of monetary policy normalisation is leading to the emergence of asymmetric dynamics, accompanied by the repricing of risk.

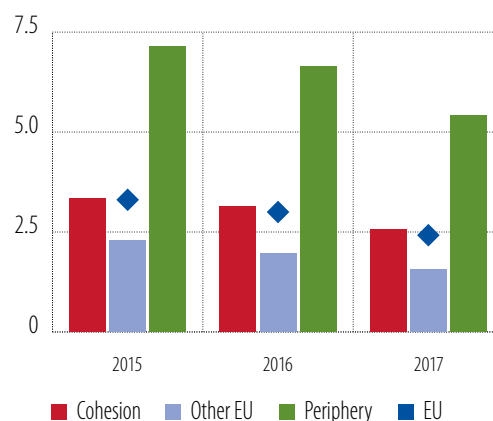
The EU banking sector has strengthened, with only pockets of weakness and vulnerability to monetary policy normalisation. EU banks have increased their capital positions in an unprecedented manner, so there is no capital shortfall overall. Ratios of non-performing loans to assets are gradually improving, although they remain significantly more elevated in the periphery countries. Monetary policy normalisation may affect bank asset valuation via possible depreciation of sovereign debt. It needs to be accompanied by the reactivation of cross-border inter-bank lending to ensure that firms that are dependent on bank lending are not adversely affected.

Cost of debt financing (% per annum)



Source: EIB calculations based on Eurostat.
Note: 3-month moving averages. Data until June 2018.

Uncovered NPL ratios (% of assets)



Source: EIB calculations based on EBA Risk Analysis Report.

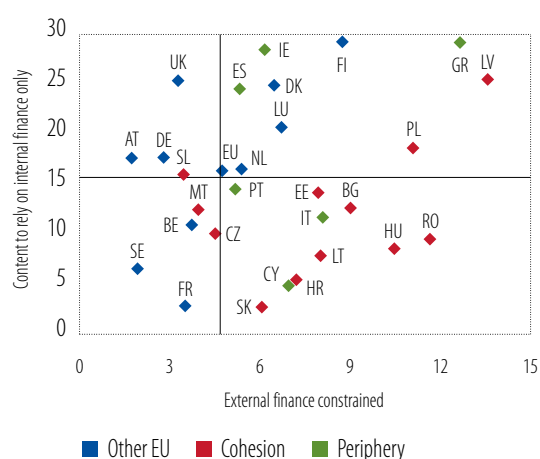
...but the financial sector is ill-suited to supporting innovation and transformation

The number of finance-constrained firms in the EU has fallen to only 5%, but young, small and innovative firms are proportionally more affected. Many EU firms have undergone a process of deleveraging, particularly in the periphery countries, and EU firms overall remain net savers. Nonetheless, constraints remain in some cohesion countries, Greece and, to a lesser extent, Finland and Italy, and among firms that are small, young, engaged in innovation or that invest heavily in intangibles. Collateral requirements and financing costs are the main sources of dissatisfaction.

Large differences in firm performance call for targeted policies. Some finance-constrained firms outperform unconstrained ones in measures such as total factor productivity, employment growth and return on assets, while others notably underperform. This suggests that policies to address access to finance need to discriminate between firms with regard to performance, to alleviate constraints whilst avoiding further misallocation of resources.

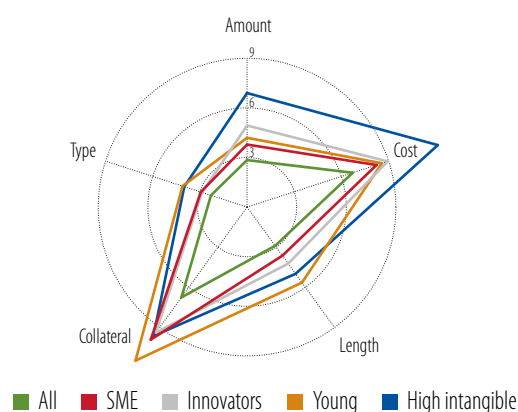
The constraints faced by weaker banks in periphery countries are still being passed on to firms, revealing a degree of ongoing financial fragmentation across Europe. Whereas most firms' satisfaction with external finance opportunities is related to their own financial health, firms that are clients of banks with weaker financial positions are significantly more likely to be dissatisfied with the finance they have been able to obtain. The fact that foreign-owned firms in the periphery are much less likely to face finance constraints than similar, domestically-owned firms reinforces the message on continued financial market fragmentation.

Finance-constrained firms and reliance on internal financing (%)



Source: EIBIS 2018.

Share of firms dissatisfied with different loan conditions, by firm type (%)



Source: EIBIS 2018.

Europe needs more equity finance for innovation and digitalisation...

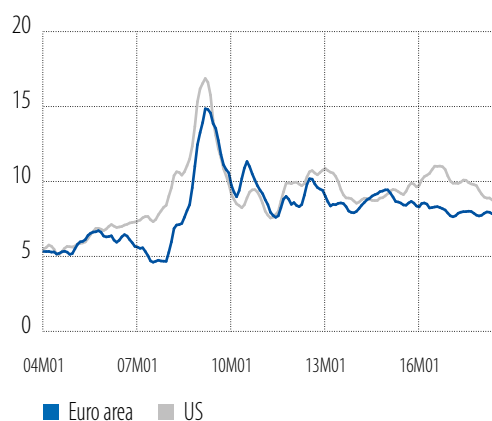
Equity financing in Europe is comparatively underdeveloped, undermining resilience to shocks, innovation and growth in new technology sectors. Private equity, venture capital and listed equity funding all lag the US and advanced Asian countries on several fronts, leaving European firms more dependent on bank lending and weakening resilience to financial shocks. A greater role for equity would promote private-based risk-sharing and improved allocation of capital across the EU. By expanding risk-taking capacity and helping to avoid the “growth-stage trap” in firm development, it would promote innovation and European competitiveness in new emerging technologies.

The cost of equity remains high and issuance activity slow. While the cost of debt now stands at around 400 basis points below its pre-financial crisis level, the cost of equity has not fallen to such an extent. The equity risk premium remains elevated and the spread between equity and debt is still larger than before the crisis.

When it comes to promoting equity financing, the devil is in the detail. Many reasons combine to explain the gap with the EU’s major competitors. On the supply side, reasons for the underdevelopment of equity include institutional and cultural factors such as corporate culture, reluctance to dilute power and tax bias in favour of debt. On the demand side, the structure and regulation of the financial sector, transaction costs and financial literacy all contribute. Ageing is likely to dampen the demand for equity further.

However, as financial integration across the EU gradually recovers, there is a promising compositional shift away from cross-border bank lending towards equity. The share of equity (both portfolio equity and foreign direct investment) in cross-border liabilities has risen in all European regions, with the share for periphery countries rising particularly rapidly. This trend provides an opportunity to foster equity financing at the EU level.

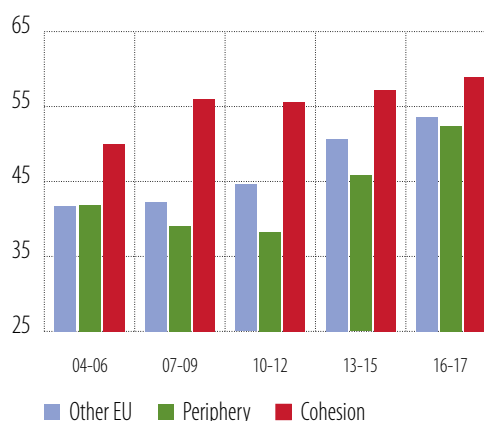
Equity risk premium in the EU and US
(% per annum)



Source: EIB calculations based on Geis et al. 2018, ECB and Worldscope.

Note: 3-month moving average.

Share of equity in cross-border investment liabilities, by region (%)



Source: EIB calculations based on IMF.

Note: Sum of direct and portfolio investment in equity.

...and enhanced efforts to improve the environment for investment

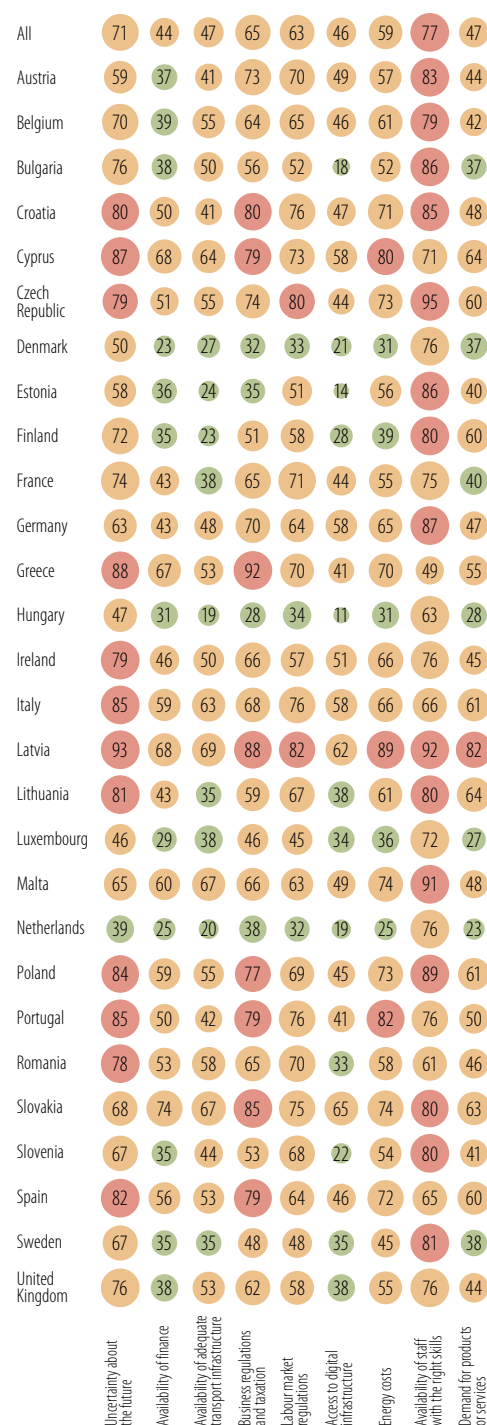
Targeted public investment needs to be complemented by further actions to address barriers to investment and improve investment conditions. More than 60% of firms regard business and labour market regulations as obstacles to investment. The slow recovery and wide dispersion of corporate returns, as well as EIBIS results suggesting that the returns of many smaller, older and less sophisticated firms are pulling down the average, are evidence of the inefficient allocation of resources across the corporate sector. This in turn suggests barriers to firms' exit and entry and a need for greater market flexibility.

Addressing Europe's infrastructure gaps requires a focus on long-term needs, strong institutions and technical capacity. This is needed at all levels of government, including at the EU level to overcome the fragmentation of the single market. Addressing subnational-level gaps requires a balanced policy mix with lending instruments, well-tailored blending of loans and grants and technical assistance where needed.

Support for innovation should seek to create an enabling ecosystem. Innovation and patenting activity is highest in subnational regions that are ranked better for institutional quality, R&D expenditure and skilled workforce.

Improvements in the institutional and regulatory environment are needed to facilitate equity financing, to help EU corporates to raise capital at more competitive rates. The capital markets union can play a pivotal role in creating better incentives and fostering the geographical diversification of financial holdings within the EU. It is very important that these efforts do not only seek to deepen national financial markets within the EU – but also aim to develop cross-border capital markets further.

Obstacles to investment perceived by EU firms (% firms naming an issue as an obstacle)



Source: EIBIS 2018.

Note: Red signifies results in the top quartile; green results in the bottom quartile.

Recommendations

Europe's economy still lacks the "tools" to meet the urgent challenges of the future: remaining globally competitive in the face of rapid innovation and digitalisation, achieving sustainability, and creating an inclusive and cohesive society. Retooling means a process of transformation. It means learning new skills, innovating and adopting new technologies, renewing our infrastructure and cutting dependence on fossil fuels. It requires not just more investment but better investment and great attention to issues of governance, namely the creation of an enabling regulatory and institutional environment.

Encourage a dynamic, innovative business sector:

- **Improve regulatory conditions for firm growth, and market entry and exit.** The small average size of EU firms is associated with less innovation, digitalisation and investment in training, and with more financial constraints. Removing barriers such as size-specific regulation will facilitate firm growth. Reducing barriers to firm entry and exit will improve resource allocation and productivity.
- **Address the conditions that reduce both the supply of and demand for equity financing** for EU corporates, particularly to avoid the "growth-stage trap". These include issues such as tax bias against equity, financial regulation and financial literacy.

Overcome the fragmentation of Europe's markets:

- **Deepen the single market for services** to improve opportunities and incentives for the rapid adoption of digital technologies and the scaling-up of innovative firms.
- **Facilitate the reintegration of Europe's financial markets, particularly through cross-border equity** for improved financial stability, risk-sharing and equity financing for firms. This requires institutional and regulatory changes, as foreseen under the capital markets union.

Work together on skills:

- **Recognise the skills gap as an opportunity for more EU joint action**, in view of the benefit-sharing brought by the free movement of labour. Agenda-setting, funding and creation of conditions that encourage quality public and private investment in skills will make a difference, both in economic and social terms.

Unblock critical investment in infrastructure, innovation and climate change mitigation:

- **Promote better infrastructure governance, with careful project selection, at all levels** to ensure the efficient use of available funds, including at the EU level to remove bottlenecks in the single market.
- **Complement lending instruments and grant support with advisory services to tackle backlogs** and to ensure that gaps are addressed in a comprehensive way.

- **Set the right price signals to promote investment in climate change mitigation**, including the removal of fossil fuel subsidies, a higher carbon price and the alignment of market design with the low carbon transition objective. Financial instruments and information can promote energy audits as an effective way to help unblock energy-efficiency investments. Sustainable finance instruments such as Green Bonds have a vital role to play in mobilising finance for climate action.
- **Support innovation and adoption of new technologies**, considering the complementarities between the upgrading of technology and investments in different classes of intangible assets, and also the complementarities between public and private investment.

There is a need for concerted efforts, using the instruments at Europe's disposal.

- **Member States' policy efforts and budgetary resources should be more targeted at addressing the long-term growth challenges** at the national level, having in mind potential spill-over effects at the European level.
- **The EU budget needs to be effectively leveraged to target enhanced levels of sound investment in intangibles and innovation, skills, climate change and infrastructure**, accelerating European business transformation and enhancing its competitiveness, while addressing the social challenges that such transformation might imply.

About the EIB

The European Investment Bank plays an important catalytic role in promoting sound investment projects in support of EU policy goals in Europe and beyond. In 2017, the EIB provided EUR 70 billion in long-term finance to support public and private productive investment, with the EIF providing EUR 9.3 billion. Together, as a first estimate, this helped realise investment projects worth roughly EUR 250 billion.

The EIB is both a bank and a public institution. Owned by the 28 Member States of the EU, the EIB raises money on the international capital markets and lends these funds for investment projects that address systemic market failures, targeting four priority areas in support of smart and sustainable growth and job creation: innovation and skills, SMEs, climate action and strategic infrastructure.

The EIB delivers sound operations to the highest standards. Projects must not only be bankable, but also comply with strict economic, technical, environmental and social standards in order to yield tangible results, improving lives. Alongside lending, the Bank's blending activities can help leverage available resources, e.g. helping to transform EU funds into financial products such as loans, guarantees and equity. Advisory activities and technical assistance can help projects to get off the ground and maximise value-for-money.

The investments supported by the EIB Group have a lasting impact on the EU economy. Working closely with the European Commission Joint Research Centre, the Bank's economists have used the well-established RHOMOLO model to estimate the future macroeconomic impact of EIB-supported operations in the EU. By 2036, investments supported by the EIB Group in 2017 are expected to raise EU GDP by 0.7% over the baseline scenario, adding 650 000 jobs, through structural impacts on productivity and competitiveness.



**INVESTMENT REPORT
2018/2019**



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