



WHO ARE WE?

BusinessEurope is the leading advocate for growth and competitiveness at the European level, standing up for companies across the continent and campaigning on the issues that most influence their performance.

A recognised social partner, we speak for around 20 million enterprises of all sizes in 35 European countries whose national business federations are our direct members.

ABOUT THE REFORM BAROMETER

BusinessEurope's Reform Barometer looks at the global competitiveness performance of Europe on the basis of key indicators covering taxation and public finances, business environment, innovation and skills, access to finance and financial stability, and labour market.

Moreover, complementing the European Commission's yearly European Semester consultation that suggests reform policies that can boost sustainable growth in Member States, we carry out a similar business semester process to lay out clear policy recommendations about how we can help our European companies succeed, as a thriving business sector is a necessary foundation to reach higher living, wage and income and provide funding to achieve many of the political goals and objectives, such as the green transformation to a climate-neutral economy, that we need to pursue in the 21st century.

A NOTE ON THE COMPOSITION OF THE EUROPEAN UNION

The Reform Barometer seeks to provide information and policy recommendations for decision-makers and analysts. Most statistical sources are not available for the current country composition i.e. the EU27 yet. Where data allows for it we have calculated the decomposed EU27 value. In a few instances we show data for the EU28 or EU22 (for some OECD statistics data is available only for EU countries that are OECD members). For each figure we note the country composition explicitly.

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FOREWORD

As this document goes to publication, the European society is facing an extraordinary challenge from the outbreak of COVID-19. Whilst the size of the short-term fall in economic activity will clearly depend both on the spread of the virus and on the extent of measures taken to prevent the spread of the virus, it is already clear from developments in recent days that the impact will be substantial, with the likelihood of a large number of EU member states experiencing a significant, and in some cases massive, short-term downturn.

The immediate economic priority for the EU and its member states is to provide a coordinated response in order to both maintain the essential functioning of our economy in the immediate future, and ensure that once the spread of the virus is addressed, we have maintained the business eco-system vital to fully restoring our treasured European way of life.

We are certain that through solidarity, responsibility and ambitious action, both Europe and the world can defeat the challenge posed by the virus, both to our economy and our health, and we can once again return to focusing on putting in place the long-term reforms needed to ensure our economy is able to deliver our societal needs.

Last November, BusinessEurope set out its priorities for the new political cycle in a strategy document entitled, 'Prosperity, People, Planet', and it is under these 3 inter-related themes that this year's Barometer seeks to benchmark EU competitiveness.

- **Prosperity** is key to delivering the EU's broader social and environmental goals, with a strong economy in turn dependent upon a supportive business environment able to attract investment and support innovation. Whilst the EU has many innovative companies, we need to do more to support entrepreneurship, and in particular raise our digital capabilities.
- **People**, and in particularly their skills are increasingly essential to success in an increasingly knowledge-based global economy. The EU has high number of graduates, but more needs to be done to ensure such qualifications translate into work-related skills across peoples' entire careers.
- The **planet** is the finite resources upon which our prosperity is based. As we explore in detail, European companies in areas ranging from renewable energy to electric batteries are increasingly leading the way in delivering solutions which can help the bring the global economy onto a more sustainable footing. But the EU cannot act alone, with the ability of all companies to deliver innovation solutions to global challenges dependent upon an EU policy framework that supports competitiveness.

In part 2, as in previous years, we draw on the expertise of our Member Federations to assess implementation of the EU's country specific reform recommendations. The results are startling, with reform efforts weakening as memories of the economic crisis of 2009 perhaps started to disappear from politicians' rear view mirror. Only 13% of the reform recommendations have been adequately implemented – even lower than previous years.

While the immediate challenge facing policy-makers is to ensure a forceful and timely response to the unfolding situation to support our economy, crisis management measures should be accompanied with a range of growth-enhancing initiatives and reforms with a view to ensuring our economy returns to a growth trajectory as the crisis abates. We should not forget the lesson of the financial crisis that a crisis response that relies mostly on monetary policy and demand stimulus, but fails to ensure structural reforms, leaves our economy weak and susceptible to the next downturn. This report provides a guide to the sort of reforms the EU and its member states can put in place to strengthen our prosperity, improve the livelihood of our people, and ensure the sustainable use of our planet.

Pierre Gattaz President



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EXECUTIVE SUMMARY

BusinessEurope's Reform Barometer is our annual review of EU competitiveness. Part 1 benchmarks the global competitiveness performance of Europe on the basis of key indicators under the three inter-related pillars of our recently published strategy, 'Prosperity, People, Planet'. Part 2 draws on a survey of our members to evaluate progress on implementation of the EU country-specific reforms which form part of the European Semester process.

Part 1: EU Competitiveness in the global economy

PROSPERITY

Whilst Europe has experienced an economic recovery in recent years, the upturn began later and has been weaker than in the United States. Consequently, over the past decade Europe has failed to close its growth and productivity gap to main global competitors.

KEY FACTS

- EU growth slowed in 2019 to an estimated 1.5% compared to 2.1% in 2018. By comparison US growth was 2.3% in 2019 down from 2.9% in 2018. The United States has increased its GDP by 22% since 2010 compared with 14% in the EU.
- EU unemployment is down to 6.7% from 11.7% at the peak of the crisis, but remains high in comparison to the USA at 3.5%.
- EU productivity per hour worked is only 75% of that in the USA.
- Starting a business in the EU takes around three times as long as in the US.
- Whilst the EU has slightly increased R&D spending from 1.8% of GDP in 2007 to 2.1% in 2018, it remains well below that in the USA (2.8%) and Japan (3.2%).
- The average tax wedge is in the EU around 1/3 higher than in the US.
- Financial markets in the EU are still less integrated today compared to what they were in the pre-crisis period in 2005-2007, and cross-border bank claims in the Euro-area are down to 55% of what they were pre-crisis in 2008.

KEY POLICY RECOMMENDATIONS

- Member states should increase research and development (R&D) spending, and support stronger privatesector R&D investment, in order to reach the EU's 3% target.
- Trans-European (and national) infrastructure must be significantly improved and expanded. Regulatory, administrative and technical barriers need to be removed to ensure access to infrastructure facilities, inter-connections and inter-operability.
- Member states should reduce taxation on labour and capital, including corporate tax, which are particularly damaging to growth and employment. They should also continue efforts to ensure the administration of their tax systems becomes simpler, more transparent and user-friendly.
- In all member states, there is scope to make public finances growth-friendlier and more efficient, in particular by targeted reductions in non-productive public spending and by reductions in distortionary taxes that hamper growth.
- The Commission's Economic Governance Review provides the opportunity to improve the clarity of the Stability and Growth Pact, in particular to simplify the fiscal rules and reduce their pro-cyclicality, thus helping to ensure they play their full role in helping member states put their finances on a sustainable footing. The review should consider how the framework can best support growth-enhancing public investment.
- Decision and policy-makers must set out to reinforce and implement the Capital Markets Union and put in place a full Banking Union to ensure a genuine single market in financial services.

PEOPLE

People with the right skills and capacities are crucial in order for businesses to reach their economic potential and ensure a strong economy. Similarly, entrepreneurial drive is important for Europe to be at the forefront of rapidly developing industries including in high-tech and digital sectors.

KEY FACTS

- US graduates are more likely than Europeans to choose so-called STEM (science, technology, engineering, Mathematics) degrees, with the proportion of students taking such degrees rising more quickly in the USA in recent years.
- Out of the world's top 50 universities 31 are in the USA and only 6 in the EU.
- According to the OECD's PISA results, 15-year-old pupils in the EU underperform in comparison to their peers in Japan, Canada, South Korea and China.

KEY POLICY RECOMMENDATIONS

- Education and training systems need to be better tailored to labour market needs to address skill gaps. This requires improving digital and STEM (science, technology, engineering, and mathematics) education at all levels. More e-apprenticeships (in digital and technical-based occupations) are also required.
- Further develop and promote actions aiming to encourage entrepreneurship, including by removing stigmatising insolvency legislation.
- Continue to explore the possibilities for a European company law form designed for SMEs, building on the work done on the European Private Company proposal.

PLANET

The challenge for both Europe and our global partners is how to transform our economies to operate in a state of net-zero greenhouse gas emissions (climate neutrality) as part of a broader shift to greater environmental sustainability. This will also present new opportunities for European business if we can ensure the right framework conditions are in place for our companies.

KEY FACTS

- The EU emits less CO_2 than other major economies in per capita terms, with the EU responsible for less than a tenth of global emissions.
- European companies are performing well in many environmental markets with, for example, a 30% share of global trade in cleantech.
- EU consumers appear to change their behaviour in response to climate concerns than counterparts in other regions, with, for example, a lower take-up of electric cars in the EU than in China and the USA.

KEY POLICY RECOMMENDATIONS

- The EU should develop and deploy innovative technologies to support decarbonisation of value chains in Europe in a cost-effective and tech-neutral way, unleashing investment through a comprehensive industrial strategy.
- Financially support the business case for breakthrough technologies to help companies make them competitive whilst reducing their GHG emissions.
- Awareness-raising campaigns can accelerate the understanding amongst citizens that their own actions significantly influence their carbon footprint, increasing demand for low-carbon products.
- Major trading partners must also commit themselves to ambitions comparable with Europe's as soon as possible. Additional safeguards to keep industrial production in Europe should be considered in close dialogue with business and other stakeholders prior to the global stocktaking exercise under the Paris agreement in 2023.

In addition to more free allocation and indirect cost compensation under the EU Emissions Trading Scheme, this may include sensitive measures such as carbon border adjustments for some sectors, subject to some important considerations (e.g. WTO compliance), while other trade-related measures can be considered for the European economy in general, such as climate considerations in free-trade agreements.

Part 2: Member assessment of reform progress in member states

Moreover, complementing the benchmarking analysis of the EU's competitive performance on key indicators, we have carried out a survey among our member federations asking them to assess the appropriateness and progress of carrying out the national reforms suggested under the European Semester to bolster competitiveness and strengthen the economy.

KEY FACTS

- While our member federations believe that the EU country-specific reform recommendations focus on the right reform objectives, Member States still demonstrate unsatisfactory levels of implementation. Only 13% of the recommendations assessed have been implemented appropriately according to our members, a significant decrease compared to our previous assessment last year.
- The most pressing concern for our members is the current business environment, and in particular the regulatory barriers to entrepreneurship. Administrative hurdles and costs to start up a business continue to vary considerably across the EU, indicating that there is still significant scope to improve, in particular in the area of taxation. Reform momentum is also slowing down in the area of public finances and innovation and skills.

INTRODUCTION: REFORMS NEEDED TO CATCH UP WITH GLOBAL COMPETITORS

In common with our global partners and competitors, Europe saw a slowdown of economic growth in 2019 with output estimated to have increased by 1.5% compared to 2.1% in 2018. By comparison US growth registered 2.3% in 2019 down from 2.9% the previous year. Thus whilst Europe has experienced an economic recovery in recent years, the upturn began later and has been weaker than in the United States. Consequently, over the past decade Europe has failed to close its growth and productivity gap to main global competitors. The United States has experienced considerably stronger economic growth (Figure 1) since 2010, increasing its GDP by a total of 22%, whilst Europe only grew 14% in total 1.

With the EU expected to register growth of around 1.5% in the early years of the decade, slightly less in the Euro-area, it is imperative that European policy-makers display a stronger commitment to economic reforms to bolster our growth and enhance long-term productivity, both to avoid the EU losing competitiveness

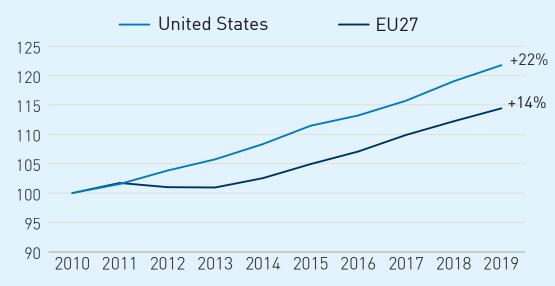


The United States has experienced considerably stronger economic growth since 2010, increasing its GDP by a total of 22%, whilst Europe only grew 14% in total

compared to other global economies and to ensure that we are to meeting the societal and environmental goals of the 21st century, whilst maintaining our standard of living.

Figure 1: The EU economy has grown less than the US since the crisis

Real GDP, constant price, index 2010=100



Source: BusinessEurope calculations based on IMF, Eurostat and US Bureau of Economic Analysis

Whilst a more positive story can be told around the employment pick-up in the EU in recent years there is no room for complacency. Unemployment in the EU27 is now down to 6.7% (autumn of 2019) from 11.7% at the peak of the crisis, with more than 12 million jobs created since 2013 in the EU27².

¹ In per capita terms, i.e. accounting for different demographic trends, the USA grew 13% as opposed to 11% in the EU27 from 2010 to 2018 (2019 data currently unavailable).

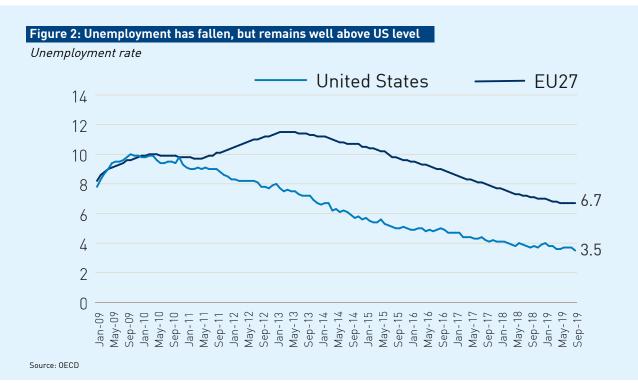
² Data for Q1-Q3 2013 relative to Q1-3 2019 for total employment of 20-64 years old.

However, European unemployment still remains high in comparison to the USA at 3.5% (Figure 2). Unemployment rates of individual member states vary strongly, but the overall pattern shows the EU countries still need to pass labour market reforms if they are to bring unemployment closer to "best practice" levels.

Moreover, the EU's recovery in recent years has been underpinned by a number of temporary factors, notably the ECB expanded asset purchase programme (quantitative easing). In order to secure our long-term



prosperity, it will be necessary to move from crisis management and excessive reliance on monetary policy towards a longer-term approach based on growth-enhancing structural policies to unlock Europe's potential for higher productivity and economic prosperity.



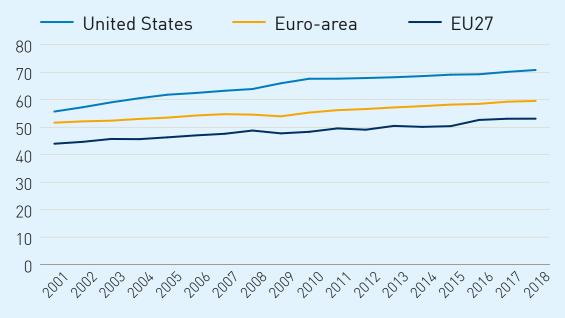
A particular concern for policy-makers must be the persistent gap in productivity levels in the USA and EU. The EU has a productivity level per hour worked corresponding to only 75% of the US.

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Figure 3: EU productivity level is only at 3/4 of the US

Productivity (GDP in USD per hour worked), constant prices



Source: Own calculations based on OECD

Another indication that the EU has fallen behind global competitors and needs to pass economic reforms in order to catch up is that the EU countries can be seen in various international rankings that compare EU competitiveness and ease of doing business with the rest of the world (Figure 4). Competitiveness is key for any economy to stay prosperous and reach its full economic potential, whilst ease of doing business is an important component that affects, in particular, the productivity of companies and the extent to which an economy can foster an entrepreneurial mindset in its populace. While the USA ranks very high on the World Bank, World Economic Forum and IMD rankings of competitiveness and ease of doing business, the EU comes out only as 32th, 19th and 27th (weighted average of EU countries, where individual performance strongly varies).

Figure 4: The EU trails the USA when it comes to ease of doing business and competitiveness

Positions on international rankings of competitiveness/ease of doing business

	World Bank : Ease of Doing Business 2020	World Economic Forum : Global Competitiveness Report (2019)	IMD : World Competitiveness Yearbook (2019)
EU27	32	19	27
United States	6	2	3
Total number of countries included in the ranking	190	140	63

With demographic headwinds ahead, it is inevitable that Europe will see its share of world GDP decline, but with the right reform mix and political will it will be possible to ensure that our productivity and competitiveness can match global competitors, ensuring Europe's prosperity, instead of continuing to lag behind the United States and other large economies. In this report, we study the challenges to European competitiveness in greater detail and put forward BusinessEurope's policy recommendations that will help us overcome the gap in competitiveness and growth to other major economies.



1. PROSPERITY

Prosperity is key to delivering the EU's broader social and environmental goals. Only through ensuring that companies are able to start, grow and thrive can they play their full role in society as a source of employment, innovation and funding for public services. While the economic recovery has continued in Europe over the past years it has been hamstrung by a range of factors including low levels of investment and productivity growth. In order to improve our growth prospects, it is imperative that we ensure we have a supportive business environment in place, boost our research and innovative capabilities, and ensure better access to finance and higher investment levels. This section considers the capacity of the EU to deliver economic prosperity by benchmarking our performance against our main global competitors in four key areas:

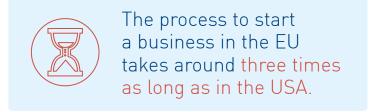
- A supportive business environment
- Capacity to harness the benefits of innovative technological advancement
- Sound public finances and supportive tax environment
- Access to finance to support business investment



1.1. A SUPPORTIVE BUSINESS ENVIRONMENT

A competitive-friendly business environment is essential for company start-ups and expansion. Open markets with clear and properly enforced rules can promote competition, legal certainty and in turn productivity growth.

The time and cost of starting a business, and of getting operating licences, are key indicators of the overall ease of doing business in an economy. While significant progress has been made over the last decade, administrative hurdles and costs to start up a business continue to vary considerably across the EU, indicating

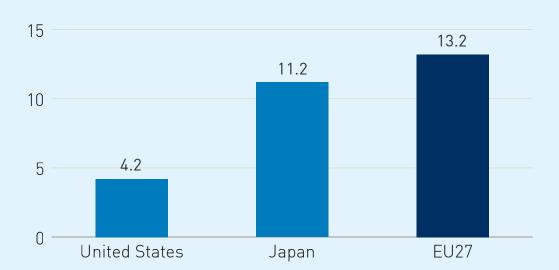


that there is still significant scope to improve. In particular, the process to start a business in the EU takes around three times as long as in the US (Figure 5).

It is also a complicated affair to expand and grow in the Single Market. Administrative complexity, regulatory heterogeneity and different approaches in, for example, consumer protection, services or data economy, lead to persistent fragmentation of the Single Market which does not allow its four freedoms to deliver business efficiencies and productivity gains.

Figure 5: it takes longer to start a business in the EU than in the USA

Time to start a business (days, 2019)



Source: World Bank Doing Business 2019

POLICY RECOMMENDATIONS

- Regulation at EU and national level must follow better regulation principles and rest on proper
 enforcement and a minimum of administrative burdens in order to support business start-ups and
 companiy expansion. Competitiveness proofing, including an SME test, must be an integral part
 of the ex-ante impact assessment for all legislative proposals and independent scrutiny of impact
 assessments must be reinforced.
- Digital transformation, allowing wide-scale roll-out of digital technologies, will require a fully functioning integrated digital single market. As well as network investment, action is needed to ensure a barrier-free level playing for cross-border e-commerce, prevent forced data localisation measures, and to address tried and tested, fit-for-purpose frameworks in the areas of consumer legislation, copyright and data protection rules.
- The EU needs an ambitious bilateral trade agenda that provides more.

1.2. CAPACITY TO HARNESS THE BENEFITS OF INNOVATIVE TECHNOLOGICAL ADVANCEMENTS

Despite having increased as a percentage of GDP since 2013, investment levels in the EU remain below precrisis levels (20.6% in 2018, up from 19.3% in 2013, but still lower than 22.6% in 2007). This corresponds to an investment gap of around 300 bn euros (i.e. additional investment if we were back at the pre-crisis level).

One indicator of the pace of change in recent years in the global economy is the significant change in the list of the world's largest and most profitable companies. A useful way to gauge how well Europe is managing the global competition, especially in new high-potential areas such as digital services, is to consider its share of the world's largest and most profitable companies. This shows that the global share of 'superstar' firms in Europe declined over the last two decades³.

On R&D spending, whilst the EU has slightly increased spending from 1.8% of GDP in 2007 to 2.1% in 2018, its share remains well below that of the USA (2.8%) and Japan (3.2%).

The EU's innovation and technological capability is fundamental to our ability to attract and retain high-quality, high-productivity jobs, and take forward the digital transformation that is needed across all sectors to ensure that we are able to compete successfully in the global economy. Measuring innovation capacity and technological readiness is a complex exercise, but we consider the following as useful pointers of our current and future capacity to compete internationally:

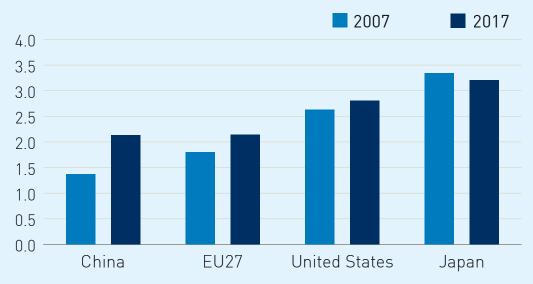
- Research and development investments
- · Access to fast broadband
- Patent registrations
- Robot density as an estimate of to which extent production is automatised in order to exploit
 ways to improve productivity in manufacturing

As our economy gradually becomes more knowledge- and skills-intensive research and development becomes increasingly important to our global competitiveness. On R&D spending, whilst the EU has slightly increased spending from 1.8% of GDP in 2007 to 2.1% in 2018, its share remains well below that of the US [2.8%] and Japan (3.2%). Moreover, China has increased its research share rapidly over the past decade to the same level as the EU in 2018. This also means the EU is around a percentage point behind its own 3% target in the EU growth strategy (Europe 2020), and can by no means be seen as a global leader in research and development.

³ McKinsey, Superstars: The dynamics of firms, sectors, and cities leading the world economy, October 2018. While Western Europe hosted 36% of the top 10% of global firms by economic profits in the mid-1990s, its share has dropped to around 25% in recent years

Figure 6: EU countries spend less on research than global competitors

R&D spending % of GDP 2018



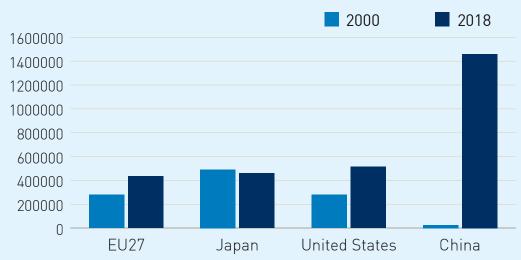
Source: Own calculations based on World Bank

Patent applications provide an alternative measure of innovation performance. While companies will use many different methods to protect intellectual property (IP) and different strategies concerning patent applications, meaning such data should be treated with some caution, it does allow us to gauge the state of company research and development activities globally.

As Figure 7 illustrates, patent applications have grown in the EU over the past decades, but growth from 2000 to 2018 was 55% as opposed to 84% in the US, while applications rose very steeply in China (albeit from very low levels). As a result, the patent gap between the EU and USA has grown over time, with USA application numbers now almost a fifth above those in the EU.

Figure 7: the EU has not managed to close the patents gap

Patents applications 2018

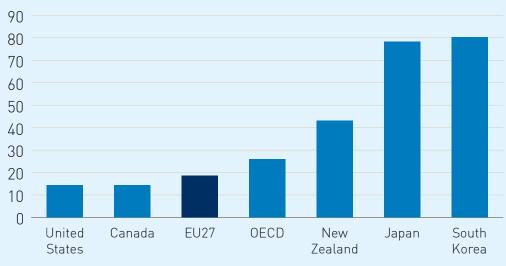


Source: Own calculations based on WIPO

Good Internet access is a crucial enabler for companies as they are operating in an increasingly digital economy. However, the EU continues to lag behind its competitors in some key metrics for digital communication. As illustrated in Figure 8, (fast) fibre connections are much less prevalent in the EU, USA and Canada, compared to the leading countries Japan and South Korea.

Figure 8: The EU, the USA and Canada strongly lag behind the global leaders in fast broadband

Fibre connections in total broadband, in 2018, %

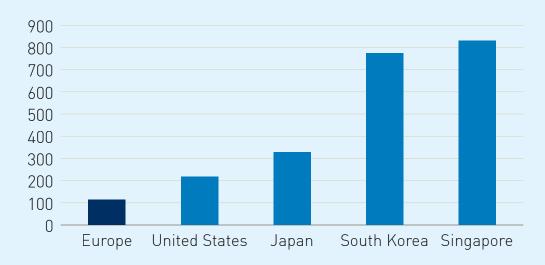


Source: OECD

Industrial robot density gives a useful benchmark for the capacity of a country to automate production processes in order to ensure higher productivity in manufacturing. However, while Europe has a strong record in producing robots, particularly for industrial applications, the number of installed robots in Europe, as illustrated in Figure 9, is with only 114 robots per 10,000 employees significantly below that in South Korea (774), Japan (327) and the USA (217).

Figure 9: Europe's robot density is well below that of other industrialised countries

Number of installed industrial robots per 10,000 employees in the manufacturing industry in 2018



Source: IFR World Robotics 2019⁴

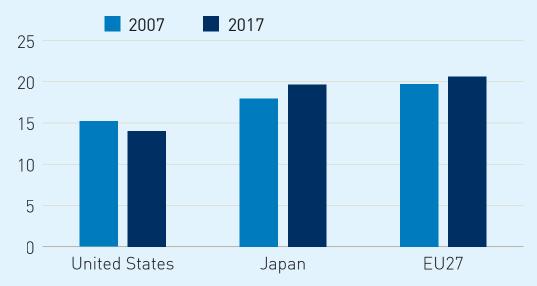
POLICY RECOMMENDATIONS

- Member states should increase research and development (R&D) spending, and support stronger private sector R&D investment, in order to reach the EU's 3% target. The post-2020 EU long-term budget (MFF) must scale up R&D and innovation support.
- Member states should also put in place more business-oriented innovation policies to ensure a greater
 economic impact from research and innovation investments. Targeted initiatives must stimulate
 private R&D investment and incentives for cooperation between companies and research institutes in
 networks and clusters should be improved in order to facilitate the commercialisation of innovation.
 Regulation excessively focused on precaution and risk avoidance will stifle investment in innovation.
- Trans-European (and national) infrastructure must be significantly improved and expanded. Remaining regulatory, administrative and technical barriers need to be removed to ensure necessary access to infrastructure facilities, inter-connections, inter-operability and to create investment-conducive regulatory and financial framework.
- A strengthened digital infrastructure is essential to allow the EU to adopt the latest technologies enabling businesses to compete globally. This is especially the case when it comes to providing very high capacity networks in order to launch 5G on a large scale.

1.3. SOUND PUBLIC FINANCES AND SUPPORTIVE TAX ENVIRONMENT

Sustainable public finances are of key importance for long-term growth. The financial crisis illustrated that falling confidence in a government's ability to repay debt can lead to a vicious circle whereby increased borrowing levels lead to higher borrowing costs, and in turn require higher taxation. Public consumption remains with 20.6% of GDP in the EU well above the 19.7% in Japan and 14.0% in the USA, and has declined in the USA in recent years while growing in the EU (Figure 10).





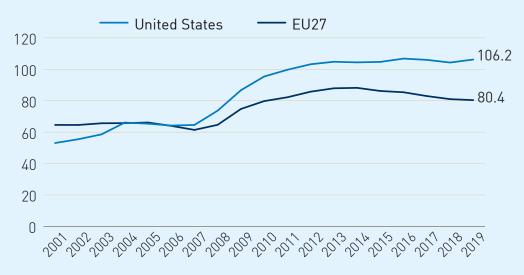
Source: World Bank

While it is positive to observe that EU member states have made significant progress in reducing public deficits since the financial crisis (from -6.0% of GDP in the EU27 in 2009 to -0.4% in 2019), there remains more to be done to reduce still high public debt ratios which remain above the 60% Maastricht limit in many member states.

In this context, the proper enforcement of the Stability and Growth Pact (SGP) remains essential to help member states put their public finances on a stronger footing, and in particular bring down debt levels below the Maastricht threshold. However, it is also essential that the SGP offers the fullest possible support to member states who wish to orientate their budgets towards investment and growth-supporting expenditure. It must be borne in mind that the fiscal improvements in recent years owed much to the reductions in long-term interest rates on sovereign debt, a process unlikely to repeat itself in the near term. In the future, therefore, improving public finances will have to rely more on structural reforms.

Figure 11: The EU's public debt ratio is below that of the USA, but still well above the 60% limit set out in the Stability and Growth Pact

Public debt as % of GDP

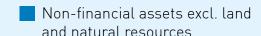


Source: IMF

When assessing the soundness of public finances, it is helpful to consider both the asset and liability side. If debt is used to finance investments that translate into assets it will be less precarious for a country's financial situation than if liabilities are not matched by assets. For example, it is often noted that Japan has a very high level of public debt well above 200% of GDP, as opposed to the US and EU levels of around 100%. However, if we also consider the asset side of public finances, Japan similarly has a much larger asset position in excess of 200% of GDP. The EU and the United States again look relatively similar with asset positions of about 100%. This emphasises the importance of considering the composition and quality of public finances, and not look solely at the liability side in isolation.

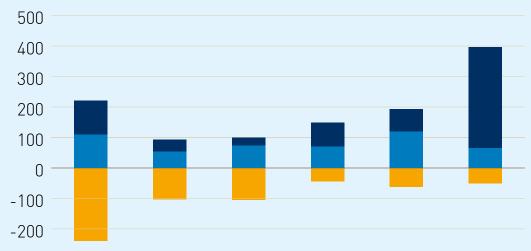


Assets and liabilities, % of GDP 2016









Source: Own calculations based on IMF Fiscal Monitor *EU24 - data unavailable for a small number of EU member states

Sound public finances and a focus on growth-enhancing types of spending are key to a prosperous society, but must be complemented and underpinned by a fair and not overly complicated tax system that does not disincentivise work, including in particular reaching high levels of productivity and income. This is particularly important in the context of the ongoing transition towards more knowledge-intensive and digital service-based economies that rely more on highly skilled high-productive labour inputs.

The average tax wedge is in the EU about 30% higher than in the US (Figure 13). Both the OECD and the European Commission stress that high levels of labour taxation may have detrimental effects on employment by reducing incentives both for workers to enter the labour market (if net gains after taxes and benefits are small) and employers to hire more staff (if labour costs are very high).

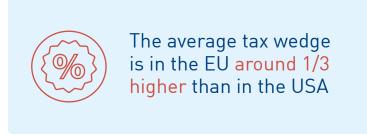
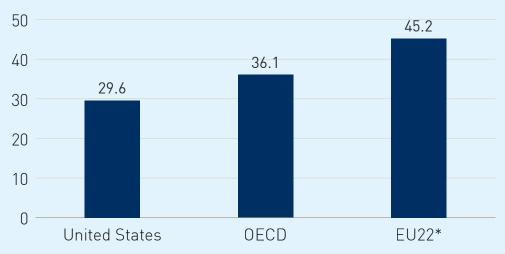


Figure 13: tax on labour in the EU high compared to global competitors

Tax wedge for average income earner, 2018



Source: Calculations based on OECD

*data unavailable for a small number of EU member states that are not OECD members

During the past years the United States modernised its tax systems with a significant reduction of the tax burden (Figure 14). As a result, according to the global Tax Competitiveness Index published annually by the Tax Foundation, the USA has now eclipsed the EU in terms of tax competitiveness. This further highlights the need for the EU countries to be serious about reforming their tax systems to ensure the competitiveness of their businesses in the global economy. It also illustrates that since the EU countries continue to hamper their competitiveness with an overall tax burden well above the levels seen in other economies, it is imperative to ensure that public finances are sound and public spending focused on fostering a business-friendly environment.

Figure 14: recent reforms mean that the USA now has a more competitive tax system than the EU

Score on Tax Competitiveness Index (higher values = stronger competitiveness)



Source: Own calculations based on the Tax Foundation

POLICY RECOMMENDATIONS

- Member states should reduce taxation on labour and capital, including corporate tax, which are
 particularly damaging to growth and employment.
- They should also continue efforts to ensure the administration of their tax systems becomes simpler, more transparent and user-friendly.
- In all member states, there is scope to make public finances growth-friendlier and more efficient, in particular by targeted reductions in non-productive public spending and by reductions in distortionary taxes that hamper growth.
- The European Commission's Economic Governance Review provides the opportunity to improve the clarity of the Stability and Growth Pact, in particular to simplify the fiscal rules and reduce their procyclicality, thus helping to ensure they play their full role in helping member states put their finances on a sustainable footing. The review should consider how the framework can best support growthenhancing public investment. Whilst it is essential the governance framework encourages public investment that can support the green transition, we should avoid any discrimination in favour of such investment which risks crowding out other growth-enhancing public investment, notably digital infrastructure. The review should also seek to clarify the present interpretation of the flexibility mechanisms relating to investment and structural reforms.

1.4. ACCESS TO FINANCE TO SUPPORT BUSINESS INVESTMENT

Access to finance on reasonable terms is a pre-condition for companies to thrive and make the investment necessary to drive growth and maintain competitiveness. Financial instability, as illustrated during the crisis, impacts negatively on access to finance, confidence and growth, precluding companies from taking on new investment. In the following, we consider the state of non-performing loans in Europe, as prevailing risk in the system remains a concern that puts a damper on bank lending and investments. We also look at the various sources of finance, beginning with bank lending before turning to equity financing, foreign direct investments and venture capital.

In order to both provide stability and meet the different financing needs of companies, and in particular of SMEs, finance needs to be available through a variety of different channels. At the same time the regulatory environment is of considerable macroeconomic importance. In particular, the negative feedback loop between sovereign and bank financial positions we saw building up from 2010, which led to political uncertainty and financial market instability, has become less acute since 2012, following strong European Central Bank (ECB) action, but still requires more regulatory work to put in place a fully-fledged Banking Union. Moreover with the financial system about to implement the requirements of the so-called Basel III rules there is a risk that access to finance will be constrained, putting a further damper on economic growth and access to funding at a time when Europe needs to mobilise considerable resources to invest in moving towards a climate-neutral economy.

In the following, we look at the state of financing in the European Union by considering, in turn,

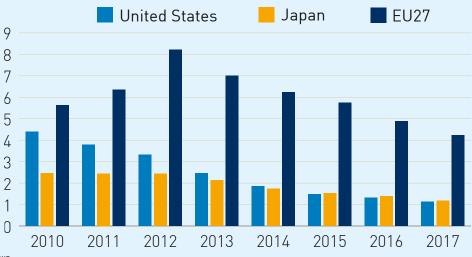
- The state of non-performing loans in the EU
- Developments in bank lending and bank market fragmentation/integration
- The use of equity financing
- The inflow of foreign direct investments
- The state of venture capital in Europe relative to global competitors

One particular supply constraint on bank lending in the Euro-area may be the continuing high volumes of non-performing loans (NPLs) that banks continue to hold on their balance sheets in a number of member states. While the Euro-area as a whole has made progress in reducing NPLs since the heights in 2012, when the ratio of NPLs to gross loans amounted to over 8%, NPLs were with 4.2% in 2017 still well above the 1.1-1.2% seen in the USA and Japan (Figure 15).

The ECB has estimated that if the capital tied up to support NPLs could be deployed to support new lending then 'total credit volume' in the Euro-area could increase by at least 2.5% overall, and at least 6% in the six member states with the highest concentration of NPLs⁵.

Figure 15: While NPLs have gradually been reduced across Europe, ratios still remain above those in the **USA** and Japan



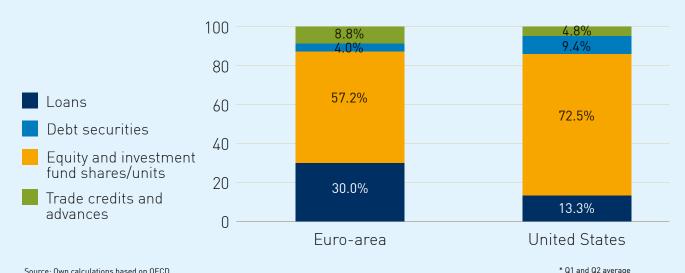


Source: World Bank Group

Euro-area businesses fund themselves to a much larger extent via bank lending as shown in Figure 16, with loans making up 30% liabilities of non-financial firms, in contrast to only 13% in the United States where firms fund themselves to a greater extent via capital markets. First, equity and investment fund shares/units make up 73% of firm liabilities in the USA, but only 57% in the EU. Second, debt securities such as bonds amount to 9% in the USA, but only 4% in the Euro-area. Moreover, the structure of liabilities of non-financial firms since the financial crisis is largely unchanged despite several EU policy initiatives to diversify firm funding sources following the crisis.

Figure 16: Euro-area businesses fund themselves to a larger extent via bank lending compared to the USA, where companies rely more on capital markets

Liabilities held by non -inancial corporations, 2019*



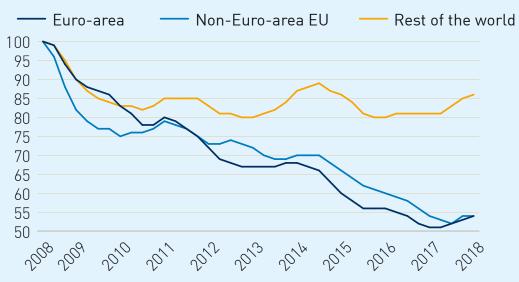
Source: Own calculations based on OECD

⁵ Keynote speech by Vitor Constâncio. (Feb. 2017) "Resolving Europe's NPL burden: challenges and benefits"

Similarly, Figure 17 illustrates this fragmentation by showing the claims held by Euro-area banks in different countries. As is well known, following the financial crisis, banks across the globe reduced their international lending, and Euro-area banks were no exception to this. But whilst Euro-area banks soon felt more confident in lending again outside of the EU, their lending to other banks, institutions and firms within the Euro-area, but outside of their own member state has fallen strongly in recent years, despite the first steps being put in place to complete the Banking Union. Only since 2017 has there been a slight increase in lending to counterparts in the EU/Euro-area, but it remains to be seen if this is a permanent trend or just a temporary incidence. As the ECB has pointed out, greater cross-border banking can increase financial stability and competition in the banking sector, ultimately improving the availability of finance for firms to invest.

Figure 17: Bank lending increasingly follows national lines in EU

Cross-border bank claims of Euro-area banks by destination country, 2008 - 2018, index 2008 = 100



Source: BusinessEurope calculations from Bank of International Settlements data

Financial markets in the EU remain fragmented, and as shown by the ECB's composite indicator of financial integration (Figure 18), Euro-area financial markets fragmented further in the aftermath of the financial crisis. While the indicator points to a reintegration trend since 2012, financial markets in the EU are still less integrated today compared to what they were in the pre-crisis period in 2005-7.

Financial markets in the EU are still less integrated today compared to what they were in the pre-crisis period in 2005-2007.

Figure 18: Financial integration in the Euro-area remains below pre-crisis level

Price-based composite indicator of financial integration in the Euro-area

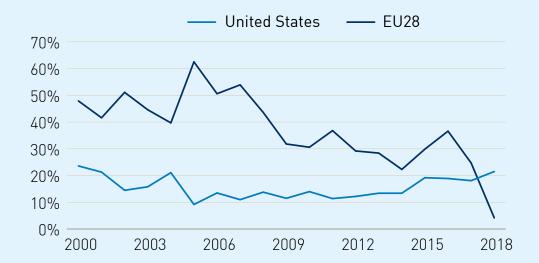


Notes: The composite indicator aggregates ten sub-indicators, and lies between zero (full fragmentation) and one (full integration).
Source: European Central Bank

Another source of financing for companies is foreign direct investments, which also provides a measure for how attractive a destination is seen by global investors. It is therefore a significant concern that the EU28's share of net global foreign direct investments has dropped from 54% in 2007 to 31% in 2017, before appearing to collapse to 4% in 2018. However, the fall in net FDI into the EU is to a large extent the result of a number of US companies with subsidiaries in the EU, in particular the UK and Ireland, repatriating capital in 2018 following US changes in the tax treatment of profits from such entities. Such development illustrates why this measure is particularly volatile. Nevertheless, we will continue to monitor it in detail in the coming years given its importance as a measure of the attractiveness of the EU as an investment location.

Figure 19: EU's share of world FDI continues to fall

Foreign direct investment, net inflows (BoP, current US\$) % of world FDI inflows

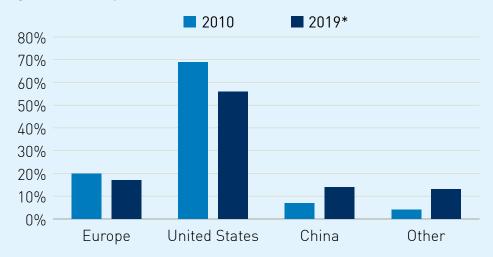


Expanding the financial support channels can help companies to avoid credit shortfalls and obtain better credit conditions, while at the same time contributing to financial stability by diversifying the risk between banks and other financial institutions.

Venture capital (VC) can also be an important source of finance, in particular for growth companies. In terms of global shares, we have seen a strong increase in China since 2010, which implied that the respective shares of the EU and USA have fallen (Figure 20). While we saw VC investment in the EU roughly increase threefold since 2010, investment in the USA also saw about a threefold increase, implying the gap between the EU and USA has not been reduced. In particular the EU lacks the large VC funds found in the USA, with the period of investment also being shorter in the EU.

Figure 20: EU strongly lags behind the United States for venture capital financing

Share of global venture capital



Source: KPMG, Venture Capital Pulse *2019 is a forecast that assumes same growth in 2019Q4 as growth from 2018Q1-Q3 to 2019Q1-Q3 Note the figure covers "Europe", i.e. considerable more countries than the EU27

POLICY RECOMMENDATIONS

- Decision- and policy-makers must set out to reinforce and implement the Capital Markets Union
 and put in place a full Banking Union to ensure a genuine single market in financial services and
 the development of complementary sources of finance to bank lending, specifically long-term debt
 financing and (venture capital) equity investments.
- Policy-makers must ensure that actions to support sustainable finance are proportionate, practicable
 and accommodate the needs of both the financial markets as well as the real economy to help
 companies finance their transition and funnel investments to support greening the economy.
- Policy-makers should also take action to ensure that new prudential rules for financial institutions
 do not significantly increase capital requirements overall to support companies' need for capital for
 investment and trade (bank loans, bonds, equity investment, venture capital and trade finance) and
 ensure access to risk management products at competitive terms.

2. PEOPLE

People with the right skills and capacities are crucial in order for businesses to reach their economic potential and ensure a strong economy.

As our economies become more knowledge-based, having a workforce with the right skill sets and capacities becomes increasingly important to allow businesses to thrive and generate growth and employment opportunities. At the same time entrepreneurial ideas and drive is important for Europeans to remain at the forefront of rapid developments including in particular in high-tech and digital sectors.

This section considers whether we are succeeding in building the labour force with the skills and talents necessary to underpin the European economy by benchmarking our performance against our main global competitors. We do so by considering three key areas:

- Skills and labour market capacities
- Entrepreneurship
- · Labour market functioning



2.1. SKILLS AND LABOUR MARKET CAPACITIES

Having access to a skilled labour force is crucial for businesses. For people having the right skills that are in high demand and allow them to be productive on the labour market increases income and job security. In fact, unemployment-by-skill-level data from Eurostat suggests a large discrepancy in the EU between the unemployment rate for people with tertiary education (4.4%), as opposed to people with secondary education (6.5%) and people without primary or no formal education (14.4%).

Ensuring upskilling and high-quality education that matches labour market demand must therefore be an important political priority to help the EU economy remain competitive in an increasingly skills- and knowledge-based economy.

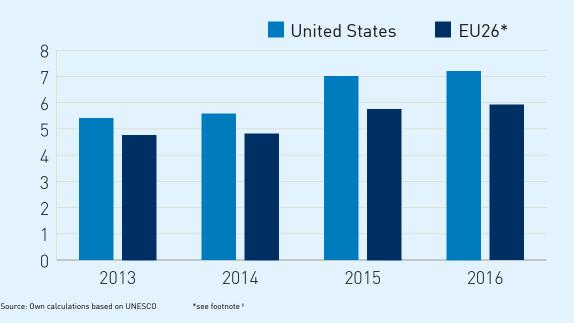
However, US graduates are more prone to choosing to pursue degrees within the so-called STEM (science, technology, engineering, mathematics) fields, that are in particular high demand on the labour market (Figure 21). And while the proportion taking STEM degrees has grown both in the US and EU, the discrepancy has widened as STEM has been gaining ground faster in the United States.

US graduates are more prone to choose to pursue degrees within the so-called STEM (Science, Technology, Engineering, Mathematics) fields, that are in particular high demand on the labour market.



Figure 21: EU continues to lag behind the US in term of emphasis on STEM in higher education

Percent of tertiary graduates that have a STEM (science, technology, engineering, mathematics) degree



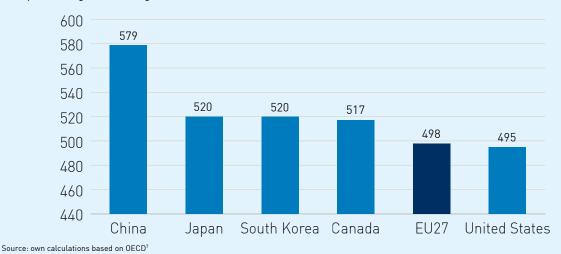
It is important to look beyond quantitative measures and also consider the quality of the education received, however. A high quality of education is key for Europe's competitiveness and ensures that workers have the necessary skills and knowledge throughout their working lives, especially in knowledge-intensive sectors. It is thus of concern that PISA results show that 15-year-old pupils in the EU underperform in comparison to their international peers (Figure 22).

⁶ Data shown excludes Germany due to data unavailability. Data for the EU27 is available for 2016, however. With Germany included the total EU figure stands at 6.5%, still considerably below the USA at 7.2%

In the 2019 data release, the (GDP-weighted) average mean PISA score was 498 in the EU, slightly above that of the USA (495), but well below the scores of pupils in Japan (520), Canada (517) and South Korea (520), as well as China (579).

Figure 22: EU pupils do less well in tests than in many other large global economies

Simple average of reading, math, science PISA scores



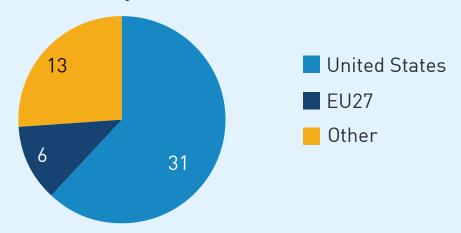
Another indication of the quality of education can be garnered from the various quality of university rankings that are published by recognised research institutions.

According to the Shanghai Academic Ranking of World Universities, out of the world's top 50 universities 31 are in the USA, and only 6 in the EU, with only the EU's best university, the University of Copenhagen, making it into the top 30.



Figure 23: Very few of the world's top universities are in the EU

Number of universities that are ranked as among the 50 best worldwide, 2019



Source: Own calculation based on Shanghai Academic Ranking of World Universities

⁷ Note: China summarizes four provinces (Beijing, Shanghai, Jiangsu, Zhejiang) and, while constituting a very large economy in their own right, are thought not to be representative of the entirety of the country

However, while this could indicate that business and labour unions have been prioritising upskilling, it is likely at least partly a business-cycle effect, since finding the resources to pay for upskilling may have been difficult during the crisis years. It could also be an indication that increasingly the labour market needs skills that have not been adequately provided for during formal education, and thus points to growing skills mismatches and imbalances.

Figure 24: EU companies are increasing in-work training

Percentage of employed persons, 25-64 years old, in the EU who have undergone training within the last 4 weeks



Source: Own caculations based on Furostat

While primary schooling is crucial to ensuring our youth gets the skills they will need to succeed and obtain high living income, important skills are also acquired through subsequent education or from on-the-job experiences. Moreover, prolonged periods of inactivity and unemployment are often associated with long-lasting negative effects on labour market attainments. It is therefore concerning that 16.4% of European 20-24 year-olds are neither in education or employment ("NEET"), as opposed to 14.8% in the United States, according to OECD data. This highlights that despite the economic recovery in recent years there is still a need for a strong response to ensure better education and stronger labour market attachment for our youth.

POLICY RECOMMENDATIONS

- Decision-makers need to recognize that, in order to increase global competitiveness, labour markets'
 regulatory framework should be clear, simple and flexible. Increases in labour costs must be
 consistent with rises in productivity growth. This means putting in place policies that can raise longterm productivity.
- Policy-makers must improve employment incentives through cuts to tax wedges, particularly for low-income workers, including through lower social security contributions and/or other tax incentives to make work pay, ensuring that taxation does not form a disincentive to work.
- Policy-makers should also take steps to promote digital skills through the use of more e-apprenticeships
 (apprenticeships in digital and technical-based occupations and which use digital learning platforms)
- More generally, we should move towards open, dynamic and mobile labour markets that are needed
 to support new and more diverse career paths and smooth transitions between jobs, sectors and
 employment statuses. These more diversified careers need to be accompanied by adequate social
 security systems promoting professional activity.
- It is imperative that policy-makers take steps to mitigate negative impacts of population ageing. Reforms must encourage people to stay in the workforce longer, make pension systems sustainable, and integrate legal migrants into the workforce. In order to make social protection systems more effective, social investments should be focused in areas where they can enhance growth (e.g. skills development, childcare), with the right balance found between adequacy and sustainability of social safety nets.

We must invest in digital skills in order to bridge the current skills gap. This requires improving basic digital education at early curricular levels as well as basic and advanced science, technology, engineering, and mathematics (STEM) which are fundamental for the ongoing industrial revolution to be a success. In the context of the EU, this can be done through the European Social Fund (ESF) and other relevant funds.

2.2. ENTREPRENEURSHIP

A strong economy needs entrepreneurs that are willing to try out new ideas, concepts and technologies. Often the harbingers of innovation, entrepreneurial activity is especially important as we move more towards service- and knowledge-based economies.

While the "fear of failure" is about the same in the EU and the USA (Figure 25), perception of opportunities is much more positive in the USA. The main difference between Americans and Europeans in terms of how they view entrepreneurial activity is therefore a vastly different perception of the "upside", and not so much different views of the "downside". The implication seems to be that for the EU to move closer to the American entrepreneurial dynamism an important factor will be improving the "upside" of being economically successful in Europe.

Also striking is the fact that Americans perceive both opportunities and their own capabilities to succeed as entrepreneurs much more positively than European and Chinese. This may be due to both an American society that is generally more accommodative of entrepreneurs and businesses, and the American "can do" attitude.

Figure 25: Europeans see much less entrepreneurial opportunity than Americans

Score on selected variables in the Global Entrepreneurship Monitor

	Perceived opportunities	Perceived capabilities	Fear of failure	Entrepreneurial intentions
European Union*	42.5	39.7	38.5	10.1
United States	69.8	55.6	35.2	15.2
China	35.1	24.2	41.7	12.3

Source: Global Entrepreneurship Monitor 2018/2019

POLICY RECOMMENDATIONS

- Promote alternative sources of financing that are accessible, "SME-sized" and sustainable. Enhance access to venture capital and mobilise more equity capital for young entrepreneurs.
- Further develop and promote actions aiming to encourage entrepreneurship as well as to provide a more positive image of entrepreneurs.
- In order to give entrepreneurs a second chance, stigmatising insolvency legislation should be removed
- Develop a set of guidelines on entrepreneurship skills, building on the EU's entrepreneurship competence framework. The EU could provide guidance on how to reform school curricula and help today's students to acquire the skills that they will need to become entrepreneurs or pursue successful careers in enterprises and help share best national practices.
- Promote the business culture in SMEs and life-long learning of entrepreneurs and managerial profiles in order to adapt or raise their professional level, in close connection with the new production processes and business models.

^{*}Data available for 16 member states, which includes all large and mid-sized member states and hence encompasses most of EU GDP

- Ensure that SMEs can acquire the right skills for a better understanding of the opportunities and challenges that new technologies could bring, including in particular associated risks. Special attention should be paid to enhancing digital literacy among employers and employees.
- Support the connection between SMEs and "leading companies" / flagship enterprises. This cooperation can raise their competitiveness and foster SMEs access to international markets. Some examples can be a regional "match portal" to connect SMEs with flagship enterprises, the creation of an online platform for SMEs where they can offer their services, financial support for young enterprises (e.g. venture capital, reduction of bureaucracy).
- Support start-ups especially during scale up and facilitate their access to investors. Moreover, investments are mostly attracted by leading companies which, through collaboration, could generate multiple positive effects for start-ups and SMEs.
- Support SMEs in unlocking the potential of digitalisation. Ensuring the uptake and effective use of
 digital technologies by traditional SMEs and entrepreneurs is central to fully t unlock he potential of the
 digital revolution. The accessibility, reliability and affordability of top-performing digital infrastructure
 is of critical importance to SME digitalisation. Quality infrastructure includes broadband connectivity,
 including in remote areas, cybersecurity, e-government platforms and a vibrant and competitive data
 economy.
- Continue to explore the possibilities for a European company law form designed for SMEs taking inspiration in the work done on the European Private Company proposal.

2.3. LABOUR MARKET FUNCTIONING

The EU27 has seen strong job creation following the peak of the European sovereign debt crisis, with about 12 million jobs created since the beginning of 2013. Alongside strong job creation, the EU saw a gradual fall in unemployment, even though its unemployment rate remains well above that of the United States, with rates in individual member states varying strongly (as shown in Figure 2 above). Whilst estimates of the EU's structural rate of unemployment (the unemployment rate that would be prevailing absent temporary upturns and downturns in the economy) has decreased to 7.3%, this remains well above the 4.7% estimate for the USA, indicating structural challenges remain on EU labour markets.

A particular concern is that businesses across the EU increasingly report difficulties in hiring qualified workers (Figure 26). Whilst increasing skills shortages might be expected when the economy picks up, the share of industrial enterprises which indicate that insufficient labour limits their production is now twice the pre-crisis share and higher than any point in time since 1985.

Figure 26: Manufacturing companies increasingly report that labour shortage hampers their production

Manufacturing – % of manufacturers reporting that shortage of workers is constraint on production in EU27



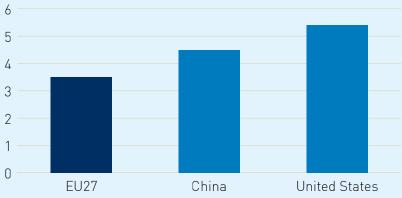
Similarly, enterprise-based surveys from Eurostat find that many companies report that it has become "hard" to specifically recruit ICT personnel, as hard-to-fill ICT vacancies have increased from 38% in 2014 to 56% in 2018.

Well-functioning labour markets facilitate worker transition between jobs, encourage companies to hire and help match skills supply and demand. In contrast, excessive labour market rigidities make it hard for people to move between jobs, hampering employment creation as well as productivity and economic growth.

Labour mobility is particularly important in a monetary union, as it can serve as an adjustment mechanism in response to asymmetric shocks. However, in the EU only around 0.3% of the population is moving from one country to another each year, comparing unfavourably to the US where 3% of the population moves to another state each year.

Flexiblity on labour market is also important to ensure competitiveness for individual businesses, since labour market rigidities will prevent them from adjusting the labour force to temporary ebbs and flows in demand, and make them more wary of scaling up quickly to seize opportunities if they have to shed workers later. Moreover, labour market productivity is higher if companies feel they can reward high performance and punish unsatisfactory performance. However, indicators of labour market flexibility shows that the USA and China have more flexible labour markets than the EU (Figure 27).

Figure 27: EU Labour market regulation damages its competitiveness relative to USA, China Score on the World Economic Forum Hiring and Firing Practices Index (1 = worst, 7 = best)



Source: Own calculations based on the World Economic Forum. 1 = not at all possible to hire and fire, 7 = to a great extent possible

POLICY RECOMMENDATIONS

- Urgent policy action is required to avoid labour market mismatches increasingly acting as a brake on economic growth. Education and training systems need to be better tailored to labour market needs, particularly with more STEM graduates (science, technology, engineering and maths).
- We should set in motion a genuine partnership for labour market reforms: rather than trying to solve labour markets challenges across the board at European level, the European Union's primary role is to provide information, incentives and know-how for member states and social partners to design, implement and evaluate policies addressing the structural labour market challenges they face.
- We need to invest in digital skills in order to bridge the current skills gap. This requires improving
 basic digital education at early curricular levels as well as basic and advanced science, technology,
 engineering, and mathematics (STEM) which are fundamental for the ongoing industrial revolution to
 be a success.
- Policy-makers should work to further integrate markets for goods and services, including logistics and network services, and ensure a barrier-free framework that helps wide-scale roll-out of digital technologies.
- Up-skilling and re-skilling, as part of lifelong learning, needs to be encouraged in order to support the existing workforce and those starting their career, to adapt to new technologies and forms of working. This requires modernising vocational education and training.

3. PLANET

The planet is the finite resource upon which our prosperity depends. With our understanding of the growing threat of climate change becoming increasingly clear, the challenge for both Europe and our global partners is how to transform our economies to operate in a state of net-zero greenhouse gas emissions (climate neutrality) as part of a broader shift to greater environmental sustainability, whilst at the same time improving our competitiveness and securing a supply of critical resources. At regulatory levels work is currently ongoing on developing the Sustainable Europe Investment Plan to support the greening of our economies by mobilising investments and economic resources, with similar initiatives regarding sustainable finance and climate finance under consideration.

We are confident that climate-neutral economies are achievable, but the speed with which this becomes reality will be determined by the extent to which society at large can create and sustain the necessary framework conditions and investments to allow entrepreneurs to thrive in a low-carbon future.

We consider the EU economy's progress towards helping to deliver on the global challenge of sustainability according to the following criteria:

- Becoming a climate-neutral economy
- Strengthening our capabilities to lead on clean tech
- Adaption of citizens' behaviour and convergence of global climate ambitions



3.1. BECOMING A CLIMATE-NEUTRAL ECONOMY

Given the EU's goal of reaching climate neutrality, it is important for member states to reduce their ${\rm CO_2}$ emissions. Moreover countries that successfully "green" their economies will derive competitive advantages during the transition towards a climate-neutral global economy. The EU emits less ${\rm CO_2}$ than other major economies in per capita terms (Figure 28). Since 2000 the EU countries have reduced their emissions considerably, whilst emissions in particular in China have increased very considerably. Although this is partly

a reflection of industry having been relocated to China and other emerging economies, the EU has invested heavily in low-carbon solutions (Figure 29) and consequently is now the least polluting major economy relative to population size.



Figure 28: EU emits less than other large economies relative to population size

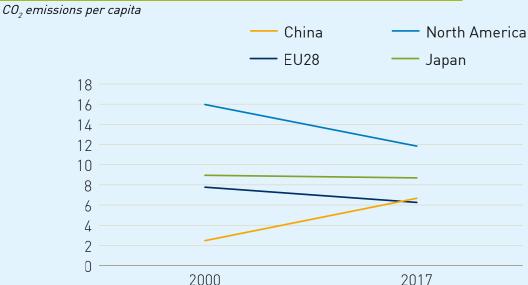


Figure 29: Renewables play a much larger role in the EU's energy mix than in other large economies Renewable share in energy consumption, Percent.

	EU28	United States	Japan
2014	8.5	5.6	4.0
2016	17	9.5	6.4

Source: IEA

Source: IEA

POLICY RECOMMENDATIONS

- When defining further energy and climate policy actions, take into account that the real answer lies in technological innovation: European companies are pioneering and are well positioned in many different segments as they see clear opportunities arise from the energy transition.
- Avoid picking winners at and excessively early stage as the range of technologies and fuels to support the low-carbon transition is broad; policy should let them all compete to deliver the needed solutions.
- Having a sound and stable legislative outlook is key: given the early stages for many zero- and lowcarbon technologies, market penetration and scale-up take time and resources in an environment of constant regulatory changes.
- Global trading partners have not yet caught up with the EU's level of ambition; as long as this continues, it is vital that the European industry continues receiving protection against unfair international competition.

3.2. STRENGTHENING OUR CAPABILITIES TO LEAD ON CLEAN TECH

Succeeding in the green transition requires a strong clean-tech sector to provide the necessary technological solutions. Moreover the transition opens up new business opportunities that will greatly benefit clean-tech companies. Many of the world's leading clean-tech companies are European (Figure 30), giving us a strong advantage. However, we must not forget that this advantage may be transient. In recent years we have for instance seen the Chinese solar panel sector grow very fast to overtake the European competitors that used to be dominant in the nascent market⁹. Only with the right policies in place to support a more sustainable global and European economy, underpinned by strong economic competitiveness, can we ensure that European clean-tech companies reap the gains and opportunities afforded by the greening of the global economy.

Figure 30: Many European companies among the world's largest "cleantech" companies

Largest companies in the New Energy Global Innovation Index (NEX), by market capitalisation in billion euros, February 2019

	1.Tesla Inc	46.5
\circ	2. Orsted A/S	26.2
0	3. Verbund AG	15.1
0	4. Vestas Wind system A/S	13.7
*}	5. BYD Co Ltd	13.7
*• *	6. Samsung SDI Co Ltd	13.0
0	7. Novozymes A/S	11.2
*	8. Sociedad Quimica y Minera de Chile SA	9.9
*]:	9. Daqo New Energy Corp	9.2.
0	10. Siemens Gamesa Renewable Energy SA	8.8

Source: BusinessEurope based on NEX

⁹ World Economic Forum, China's Lead in the Global Solar Race at a Glance, June 2019, https://www.weforum.org/agenda/2019/06/chinas-lead-in-the-global-solar-race-at-a-glance/

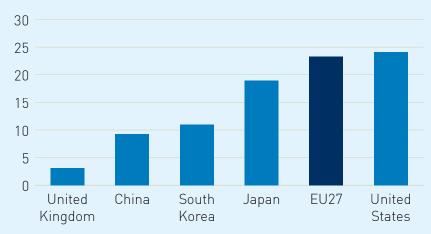
In 2016 the percentage of worldwide innovations in environment-related technologies that were European was 23%, as opposed to 24% in the USA and 19% in Japan, 11% in South Korea and 9% in China (Figure 31), whilst furthermore, European companies held a 30% share of global trade in clean tech (Figure 32).



This suggests that our companies will have an edge in the field as long as we ensure the structural conditions for them to stay competitive as the competition over providing global solutions to the environmental challenges heats up.

Figure 31: EU companies world-leading when it comes to developing environmental technology

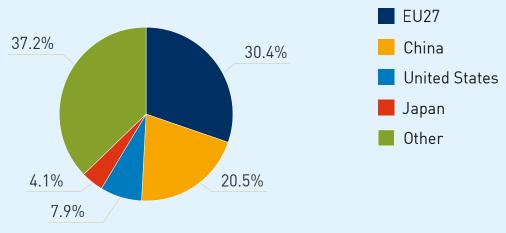
Development of environment-related technologies, % inventions worldwide, 2016



Source: Own calculations based on OECD

Figure 32: EU is world-leading in low-carbon tech exports

Share of total world trade in low-carbon tech goods in 2018

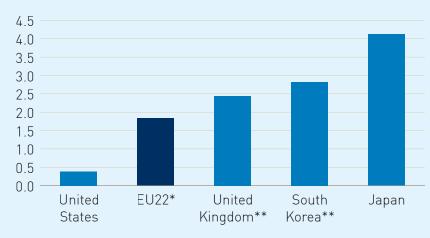


Source: Own calculations based on international trade statistics 10

Of course there is more to do, and in many ways we are only just embarking on the massive endeavour that the political drive to reach climate neutrality by 2050 represents. The EU countries have invested heavily in environmentally related research, which helps unlock potentials and support European businesses in becoming world-leading in sustainable technologies especially in areas where market opportunities do not immediately present themselves. Figures from the OECD show that while Japan (4.1%) followed by South Korea (2.8%) are world-leading in terms of the proportion of government research funding that is directed towards environmental technologies, the EU countries rank much higher (1.8%) than the USA (0.4%). If we ensure the right conditions for EU companies to compete globally, they will be well poised to take advantage of the opportunities that the green transition presents.

Figure 33: EU research is less focused on environment

Environmentally related government R&D budget, % total government R&D, 2018



Source: OECD

* EU27, excluding five countries that are not OECD members ** 2017

POLICY RECOMMENDATIONS

- The EU should develop and deploy innovative technologies to support decarbonisation of value chains
 in Europe in a cost-effective and tech-neutral way, unleashing investment through a comprehensive
 industrial strategy. This includes greater flexibility for public-private partnerships, state aid and other
 political decisions that reduce costs and determine the magnitude of private investments that will flow
 into Europe.
- Financially support the business case for breakthrough technologies to help companies make them competitive whilst reducing their GHG emissions. The EU therefore needs to put in place the right enabling framework that includes the possibility to underwrite risks that are unique to new business models for breakthrough technologies. Extra government support should be focused on those sectors that must make the transition without current commercially available technologies. The EU ETS Innovation Fund and the 35% share for climate-friendly technologies in the proposed Horizon Europe budget for the period 2021-2027 are significant steps in the right direction.

3.3. ADAPTION OF CITIZENS BEHAVIOUR AND CONVERGENCE OF GLOBAL CLIMATE AMBITIONS

The government, acting as a catalyst of investments and by funding research, has an important role to play in the green transition. Business must also carry out a thorough transformation of business practices, business models and ways of operating to reduce, and over time neutralise, their carbon footprints. But households and individual consumers must play a key role, since consumer demands and behaviour are crucial for what companies produce, as well as a major source of CO₂ emissions.

One indication that consumer choices are beginning to change in a greener direction is that the sale of electric vehicles has increased dramatically, albeit from very low levels (Figure 34), and now constitute close to 2%

of the global market¹¹. Once technologies reach a certain level of maturity, and with enablers such as charging infrastructure in place to ensure the pick-up is possible, citizens must play a very prominent role in the green transition. It is important to note that the pick-up of electric vehicles is slower in Europe than in the United States and China.

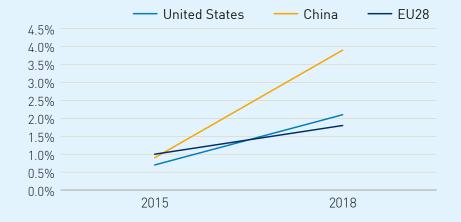
25% of Europeans are not willing to cut down on flights

Recent survey data suggest that, while many households in the EU are indeed ready to change

their behaviour, e.g. eat less red meat to help offset climate change (Figure 35), 25% of Europeans are not willing to cut down on flights. Also, only a slightly larger proportions of Europeans are willing to change behaviour than Americans, despite the vastly differently political stances towards climate change mitigation in the EU and the USA¹². We need a much more profound mentality and behavioural change among consumers in Europe before we can move closer towards reaching the 2050 climate neutrality objective.

Figure 34: EU consumers less likely to purchase electric vehicles

Electric vehicles as share of total light vehicle sales



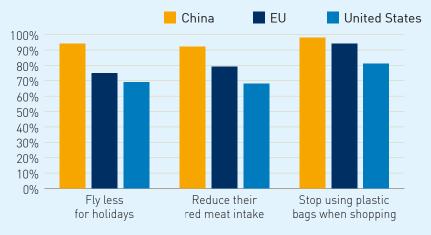
Source: McKinsey¹³

¹¹ https://www.eei.org/issuesandpolicy/electrictransportation/Documents/FINAL_EV_Sales_Update_April2019.pdf
12 European Investment Bank Climate Survey, 2020

¹³ McKinsey, "Expanding electric-vehicle adoption despite early growing pains", August 2019

Figure 35: Europeans only slightly more open to reducing their carbon footprint than Americans

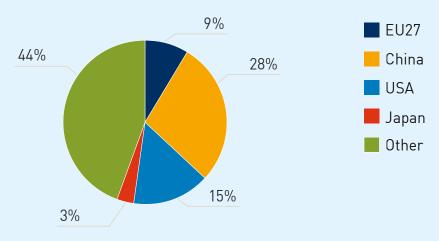
Percentage of people surveyed who indicate that in order to reduce their carbon footprint they are willing to ...



Source: EIB survey¹⁴

Figure 36: The EU responsible for less than a tenth of all CO, emissions; global solution required

Share of total CO, emissions, 2018



Source: Global Carbon Atlas

POLICY RECOMMENDATIONS

- Engage actively with citizens to foster adaptation of consumer behaviour and public acceptance for the low-carbon energy transition. It should also pave the way for technology acceptance and changes in consumption patterns.
- Awareness-raising campaigns can accelerate the understanding amongst citizens that their own actions significantly influence their carbon footprint, increasing demand for low-carbon products.
- Major trading partners must also commit themselves to ambitions comparable with Europe's as soon as possible. Additional safeguards to keep industrial production in Europe should be considered in close dialogue with business and other stakeholder as prior to the global stocktaking exercise under the Paris agreement in 2023.
- In addition to more free allocation and indirect cost compensation under the EU Emissions Trading Scheme, this may include sensitive measures such as carbon border adjustments for some sectors, subject to some important considerations (e.g. WTO compliance), while other trade-related measures can be considered for the European economy in general, such as climate considerations in free-trade agreements.

¹⁴ Note that, of course, self-professed intentions do not necessarily translate into an actual change in behaviour in practice. The question Concerning flights was phrased to pertain to holidays specifically. Includes respondents who says "yes" or that they "indend to"

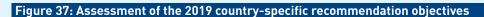
4. STRUCTURAL REFORM PROGRESS - ASSESSMENT BY MEMBER FEDERATIONS

As the previous sections of this report have demonstrated, a failure to take structural reforms forward has had a significant impact on Europe's competitiveness and in turn on its economic performance. The potential benefits from reform are huge. As growth rates are slowing in the EU, it will be even more important to increase the resilience of the EU economy. Recent ECB research suggests e.g. that "sound labour and product markets, framework conditions and political institutions" could **reduce the probability of a severe recession by around 20%**¹⁵.

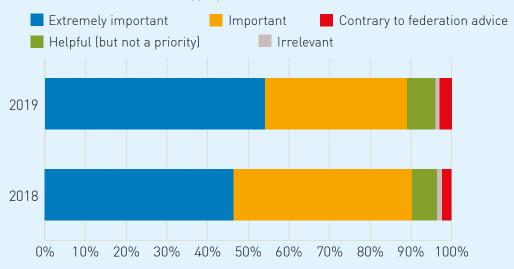
Against that background, this chapter analyses the results of a survey of BusinessEurope member federations regarding reform effort over the year 2019, linked to the European Semester. In particular, federations commented on the appropriateness of each of the Commission's country-specific recommendations (CSRs) and on their government's efforts to implement them. Detailed answers by member federations on individual country recommendations can be found on BusinessEurope's website¹⁶.

4.1. COUNTRY-SPECIFIC RECOMMENDATIONS

Our survey of our member federations shows that, the EU's CSRs continue to be in line with businesses own reform priorities. BusinessEurope member federations believe that **89% of the CSRs** address issues that are either important, or extremely important, with nearly all of the remaining 11% of CSRs seen as helpful.



Member federations' assessment of the appropriateness of individual CSRs



Source: BusinessEurope survey of Member Federations

However, despite the importance of these recommendations, our member federations conclude that **only 13% of the 2019 CSRs assessed are satisfactorily implemented**. This is a significant slowdown compared to last year, when 20% of CSRs received a positive assessment. While the figure increases to 61% when considering

¹⁵ ECB - Working Paper - Sondermann, D., "<u>Towards more resilient economies: the role of well-functioning economic structures</u>", Working Paper Series, No. 1984, November 2016.

¹⁵ The survey considers member federations' whose countries received country-specific recommendations, as part of the European Semester in 2019.

the CSRs where mixed i.e. (some) progress has been identified, this still means that nearly two fifths of CSRs have seen unsatisfactory (34%) or no progress (5%) at all. As in previous years, reforms continue at different paces in different member states. There are examples of countries making positive reform progress, in particular in Bulgaria, Greece and Denmark where the pace of reform implementation has picked up strongly compared to last year. However, in some countries, reform implementation has fallen, notably in Belgium, Finland and Estonia.

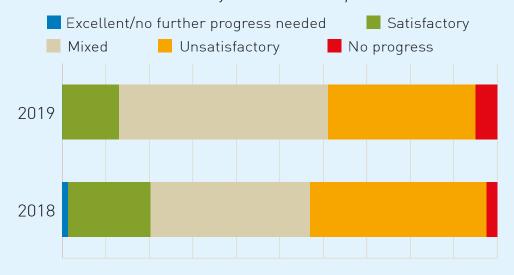
Our member federations conclude that only 13% of the 2019 CSRs assessed are satisfactorily implemented. This is a significant slowdown compared to last year, when 20% of CSRs received a positive assessment.

This is in line with the European Commission's own impact assessment on the country-specific recommendations, which argues that, since the inception of the European Semester, a declining share of CSRs has been implemented in member states. In 2011, during the height of the crisis, 90% of CSRs were assessed by the Commission to have been implemented to the level of at least "some progress". By 2018, this share had fallen to $40\%^{17}$. However, the slowdown in reform momentum is not just a European phenomenon with the OECD arguing that "structural reform efforts (...) remain at a pace below that achieved in the aftermath of the financial crisis" in the global economy in 2018.

With the Commission now planning to incorporate the Sustainable Development Goals into the European Semester, the importance increases of using the economic governance review to reflect upon how the semester process can better support the implementation of country-specific reforms, in particularly the growth-enhancing reforms which are fundamental to delivering the prosperity required to meet our social and environmental goals.

Figure 38: Progress in implementing the 2019 country-specific recommendations

Member federations' assessment of efforts by member states to implement recommendations



Source: BusinessEurope survey of member federations

4.2. PROGRESS BY AREA

In addition to assessing reform effort in implementing the country-specific-recommendations, Business Europe member federations have assessed reform progress in five broad policy areas that are important for long-term growth, and are key to achieve our policy goals discussed in Part 1 of this report.

Figure 39: Reform progress by main policy areas

Member federations' assessment of reform progress by main areas



Source: BusinessEurope survey of member federations

- Past editions of this report have continuously highlighted the slow pace of reform in the labour market
 as the most pressing concern to our member federations. While reform in this area remains generally
 unsatisfactory, some progress has been made. Where half of member federations considered reform
 to be unsatisfactory last year, that share has now decreased to 37%.
- Financial stability continues to be the policy area where member federations consider reform most
 positively, with now more than half of member federations assessing the reforms positively. However,
 across other broad policy areas, reform momentum is slowing down, with worrying reform pace in
 public finances and innovation and skills.

4.3. REFORM PRIORITIES FOR 2020

We have also surveyed our member federations regarding reform priorities for 2020, with the results summarised in the following chart.

Figure 40: Reform priorities for 2020

Member federations' assessment of priorities for reform in 2020

1. Business environment - Regulatory barriers to entrepreneurship	+2
2. Public-sector efficiency	+4
3. Labour market mismatches and labour mobility	-2
4. Tax reforms	-2
5. Pension and healthcare reforms	-1
6. R&D and innovation	-1
7. Public investment	=
8. Active labour market policies	+6
9. Sector-specific regulation	+3
10. Making work pay: interplay of tax and benefit system	=

Source: BusinessEurope survey of member federations

- Members highlight the business environment, and in particular the current regulatory barriers to entrepreneurship, as the top reform priority for 2020. As highlighted in Part 1, administrative hurdles and costs to start up a business continue to vary considerably across the EU, indicating that there is still significant scope for improvement, in particular in the area of tax (4th).
- Members are also increasingly concerned about the efficiency of the public sector, highlighting the
 overall high levels of public expenditure, with concerns about the overall quality provided. It is important
 that EU member states continue efforts to ensure that the administration of their tax systems becomes
 simpler, more transparent and user-friendly, combined with targeted reductions in non-productive
 public spending and in distortionary taxes that hamper growth.

Members highlight the business environment, and in particular the current regulatory barriers to entrepreneurship, as the top reform priority for 2020.



BusinessEurope is the leading advocate for growth and competitiveness at the European level, standing up for companies across the continent and campaigning on the issues that most influence their performance. A recognised social partner, we speak for all-sized enterprises in 35 European countries whose national business federations are our direct members.













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