EU policies – Delivering for citizens



Industrial policy

SUMMARY

Through its industrial policy, the European Union (EU) has been striving to create conditions conducive to increasing industry growth and competitiveness since 1992. European industry remains a cornerstone of the economy, providing one job out of five, and is responsible for the bulk of EU exports and investment in research and innovation. Today, the aim of EU policy is to enable a successful transition towards digital, knowledge-based, decarbonised and more circular industry in Europe. To achieve this goal, the EU supports, coordinates and supplements Member State-level policies and actions, mainly in the areas of research and innovation, SMEs and digital technologies.

In a Eurobarometer poll conducted for the European Parliament, more than half of EU citizens expressed support for increased EU action on industrial policy. Despite this, it is still the least understood policy area covered by the poll.

Since 2014, efforts have been made in a number of areas, including investment (mainly through the European Fund for Strategic Investment, which supports industrial modernisation); digitalisation (for example setting up a number of research partnerships, or a growing network of digital innovation hubs); financing (making it easier for industry and SMEs to access public markets and attract venture funds); greener industry (for example through the revised 2030 emission targets, or measures on clean mobility); standardisation (bringing together relevant stakeholders to collectively develop and update European standards); and skills (mobilising key stakeholders to close the skills gap and providing an adequate workforce for modern industry). The European Parliament has called for ambitious policies in many of these areas.

In the future, EU spending on key areas relevant to industrial policy is expected to rise moderately. The European Commission is proposing to boost the share of EU spending on research, SMEs and key infrastructure, although not as much as Parliament has requested. In the coming years, policies are likely to focus on seeking fairer global competition, stimulating innovation, building digital capacities and increasing the sustainability of European industry.

This is an update of an earlier briefing issued in advance of the 2019 European elections.



In this Briefing

- State of play
- > Public expectations for EU involvement
- > EU framework
- Deliveries of the 2014-2019 parliamentary term
- Potential for the future

State of play

Europe, like most advanced economies, is not immune to <u>de-industrialisation</u>. For example, the contribution of manufacturing to European gross domestic product (GDP) diminished from 18.5 % in 2000 to 15 % in 2012 and the industry share of total EU <u>gross value added</u> decreased from 22 % in 2000 to 19 % in 2016. The economic and financial crisis had a particularly negative effect on the sector, as 3.8 million <u>jobs</u> were lost between 2008 and 2012. However, since then industry has been on a steady recovery path, even if the pre-crisis <u>peak</u> has still not been regained. For instance, industry's share in EU gross value added grew by 6.4 % between 2009 and 2016, and over 1.5 million net new jobs were created between 2013 and 2016. In manufacturing, jobs grew at an even higher pace, mainly in better paid engineering, professional and management posts. Furthermore, labour productivity has grown annually by 2.7 % since 2009, which is higher than for example in the US and Korea (0.7 % and 2.3 % respectively).

Industry therefore remains crucial for the European economy, providing one in five jobs and providing more than 80 % of <u>EU exports</u>. In particular, the manufacturing sector has a crucial role in driving productivity and innovation in the whole economy. It is responsible for 64 % of private sector R&D expenditure and for 49 % of innovation expenditure. Furthermore, every additional <u>job</u> in manufacturing creates between 0.5 and 2 jobs in other sectors. Interestingly, EU countries with strong industrial sectors recorded quicker recovery from the crisis.

Europe is the <u>global leader</u> in many industrial sectors and technologies, particularly those with high value added, greener production, and a low ecological footprint. It does well on markets encompassing more advanced, innovative and increasingly customised products and services. While European industry strives to be at the forefront of new technologies,² it must also respond to a need for greater resource efficiency and the imperative of promoting a sustainable, circular and low-carbon economy. This generates both new opportunities and new challenges.

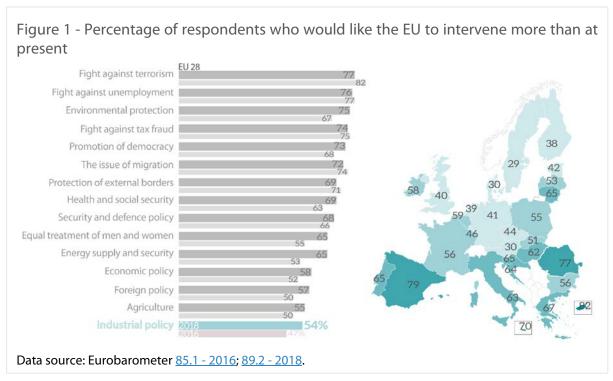
Currently, EU industry is undergoing a <u>transformation</u> based on the ever increasing role of new technologies such as robotics, the internet of things and artificial intelligence. The combination of these technologies and the reorganisation of labour means that the manufacturing process is gradually shifting towards the creation of smart factories based on innovative interactions between machines and humans, with the aim of producing more customised products of a higher quality. This industrial transformation offers unprecedented possibilities to understand and shape manufacturing performance, customer behaviour, and product development. It also has the potential to improve Europe's productivity, competitiveness and growth and create well paid jobs in medium and high-tech manufacturing.

However, breakthroughs are necessary in a number of areas if this transformation is to come to fruition; these include wide implementation of digitalisation, including by SMEs, supported by substantial investment, continuous innovation efforts and the availability of a workforce with relevant skills and knowledge. It is also a very lengthy process. Even though the main building blocks for this integrated vision already exist, the fusion of all the necessary technologies into coherent systems is still far away, and there are significant differences in levels of progress in individual Member States. Furthermore, EU industry is exposed to growing global competition. Global players, such as China, are focusing increasingly on advanced technologies and strategic value chains. Data from industry points to a gradual loss of global market and export share for European manufacturing, due to the robust growth of Chinese and other Asian manufacturers. While the technological complexity of manufacturing in Europe is still very high, the technological gap seems to be closing.

So far, EU policy has mainly focused on supporting the modernisation and development of industry; ensuring fair competition; improving the business environment; increasing resource efficiency; enhancing standardisation; strengthening the single market; implementing regional development instruments that support innovation, skills and entrepreneurship; and enhancing access to

resources such as raw materials, skilled labour and finance.³ EU support is needed in areas such as building a legal framework to facilitate market entry and growth for businesses, encouraging the development of globally competitive strategic value chains, pooling resources for innovation and investment in industry, increasing the dissemination of technologies and making them accessible to European enterprises, and helping the workforce to acquire high-level skills.

Public expectations for EU involvement⁴



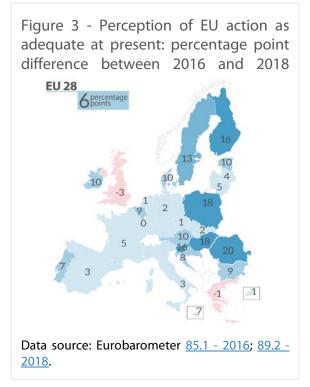
Comparative Eurobarometer surveys on citizens' 'perceptions and expectations', conducted for the European Parliament in 2016 and 2018, show that the share of EU citizens who would like the EU to intervene more in industrial policy rose from 47 % to 54 % over the period concerned. Although this

increase means that a majority of citizens expect intensified EU action, industrial policy is still at the bottom of all the areas examined. Industrial policy is the area with the highest share of citizens who cannot say whether current EU involvement is excessive, adequate or insufficient (20% in 2018 and 21% in 2016), and who do not have an opinion on whether the EU should intervene more, less or keep its involvement as it is (14% in 2018 and 17% in 2016).

There are some significant differences across Member States, with northern and western Member States tending to express weaker support for EU intervention than countries in the south and east. The lowest levels of support were registered in Sweden (29%) and Denmark (30%), although in both countries the share of people supporting EU action grew. The strongest levels of support for more EU intervention in this area were registered in Cyprus (82%), Spain (79%) and Romania (77%).

The overall increase in support for more EU involvement in industrial policy was 7 percentage points (see Figure 2). The trend of increased support was almost universal across the EU, with only two Member States demonstrating a reverse trend of a marginal magnitude – Italy with a decrease of two percentage points and Estonia with a decrease of one percentage point. The most prominent increases were registered in Belgium, Germany (increase of 15 percentage points in both) and Poland (increase of 14 percentage points).

42 % of EU citizens evaluated EU involvement in industrial policy as adequate. This was a six percentage point increase compared to 2016. Back then, the share of citizens evaluating EU involvement in this area as insufficient was one percentage point higher than those considering it to be adequate (37 % to 36 %). In 2018, the share of citizens evaluating EU involvement as adequate was already considerably higher than that of those evaluating it as insufficient (42 % against 31 %).



This trend towards an improved evaluation of EU involvement was almost universal across the EU. Just as with the expectations, there were only two Member States with a marginal decrease in their evaluations, namely the UK (three percentage point drop) and Greece (one percentage point drop). The survey results did not show a significant gap between citizens' expectations and actual EU involvement in this policy area and there was no significant change in this over the period concerned.

EU framework

Legal framework

Even though the very first attempts to support industry through policy actions already started with the creation of the European Coal and Steel Community, it was not until the Treaty of Maastricht that a legal base for industrial policy was established. As set out in Article 173 TFEU, the policy's goals are to: (1) speed up the adjustment of industry to structural changes; (2) encourage an environment favourable to initiative and to the development of undertakings throughout the Union, particularly small and medium-sized undertakings; (3) encourage an environment favourable to cooperation between undertakings; and (4) foster better exploitation of the industrial potential of innovation, research and technological development policies. In other words, the policy is aimed at securing framework conditions favourable to industrial competitiveness.

This policy is cross-cutting, as it is embedded in a number of other EU policies, such as trade, the internal market, research and innovation, competition, the business environment, intellectual property rights, energy, employment, environmental protection and public health. It also has a sectoral dimension, as it can be implemented differently depending on the needs and characteristics of particular economic activities and products. While the EU establishes the framework conditions to boost industry competitiveness, primary responsibility remains at national level. The Union's mandate is to support, coordinate or supplement the Member State-level policies and actions, but Article 173 excludes the harmonisation of national regulations or laws in this field.

Financial framework

In the 2014-2020 multiannual financial framework (MFF), industrial policy is supported mainly under heading 1 'Smart and inclusive growth', which targets SMEs and innovation across its various programmes and objectives.

- Horizon 2020: the EU's framework <u>programme</u> for research and innovation (€79.4 billion) provides a number of strands and instruments that serve industrial policy objectives. For instance, its 'Leadership in enabling and industrial technologies' section focuses on developing four key enabling technologies (nanotechnologies, advanced materials, advanced manufacturing and processing, and biotechnology) likely to boost EU industry competitiveness. Highly innovative SMEs with clear commercial ambition and potential for high growth and internationalisation are supported through the SME instrument. Horizon 2020 also facilitates industry access to venture capital, helps with advice and networking opportunities and enables partnerships between the Commission and industry, which work on addressing major current challenges and improving industrial competitiveness. It also supports the digital innovation hubs that help industries access technology testing and the latest knowledge and expertise (€100 million per year until 2020).
- **COSME:** the EU's programme for SMEs (€2.3 billion) supports industry through actions facilitating SME access to finance and markets inside and outside the EU and improving the framework conditions for the competitiveness and sustainability of EU enterprises.
- **Connecting Europe Facility:** with an envelope of €19.1 billion, the CEF supports the general industrial framework by advancing work on the European transport network, further integrating European energy markets (which may lower prices) and investing in telecommunications and digital connectivity infrastructure.
- **European Fund for Strategic Investments:** the (€21 billion) EFSI provides guarantees that mobilise additional private investment. Its involvement in areas such as infrastructure, research and innovation, renewable energy and energy efficiency, risk finance for SMEs and education, makes it an important instrument for modernising European industry.
- **EGNOS and Galileo:** EU satellite navigation systems (€7.1 billion) and **Copernicus**, the European Earth Observation and Monitoring Programme (€4.3 billion), directly foster competitiveness, innovation and job creation in the European space industry, but are also designed to promote commercial applications and opportunities in other industrial sectors.

Major support for industry also comes from the **European structural and investment funds** (€454 billion). These funds⁶ focus on areas that are key to industrial competitiveness, such as research and innovation, digital technologies, low-carbon economy, supporting SMEs, and education and training. According to a 2015 <u>study</u>, more than half of the financial envelope will be allocated to initiatives directly or indirectly, helping to achieve EU industrial policy objectives.

Deliveries of the 2014-2019 parliamentary term

Since mid-2014, a number of objectives have been achieved, including in the areas set out below.

industry. The European <u>platform of national initiatives</u> improves the sharing of best practices and ensures that measures taken by Member States complement and reinforce each other. <u>Public-private partnerships in research</u> have been set up to build key digital technologies and integrate them in future digital industrial platforms, and promote their application in specific industrial sectors. The number of digital innovation hubs (DIHs) has been expanding, notably in eastern and central European countries, and the EU is linking them together in a <u>pan-European network of DIHs</u>. Furthermore, the <u>European high-performance computing (HPC) joint undertaking</u> has been launched to pool European and national resources to create HPC infrastructure and <u>exascale</u> super-computers, to enable SMEs and industry to find innovative solutions, reduce costs and decrease time to market. The EU is promoting the development

- of technology and industrial capabilities in <u>cybersecurity</u> and industry should also benefit from the forthcoming removal of restrictions on the <u>free flow of non-personal data</u>.
- Investment: the <u>European Fund for Strategic Investment</u> contributes to industry modernisation by triggering investment in SMEs, research, development and innovation, energy efficiency, energy, and digital transformation. As of April 2019, total investment is expected to reach €392 billion. The <u>Omnibus Regulation</u> was adopted to simplify the process of combining EFSI resources with the European structural and investment funds for an even greater impact.
- Financing: the <u>capital markets union</u> seeks to improve the availability of alternative sources of financing for European companies, including industrial firms. Notably, the EU has agreed on new <u>prospectus</u> rules to facilitate access to public markets, especially for SMEs, and on better financial support for small, growing and social enterprises with the adoption of <u>legislation</u> on European venture capital funds and European social entrepreneurship funds.
- Single market for goods: the EU adopted a regulation on the <u>mutual recognition of goods</u> to boost product trade in the single market by improving communication between authorities and companies, facilitating the process for recognising that a product is already lawfully sold in another EU country and can therefore be allowed on EU markets, and reinforcing problem-solving mechanisms. Parliament and Council also reached an agreement on rules to make it harder to market <u>unsafe products</u>.
- **Energy:** EU policies aim to assist industry with the transition to a low carbon economy and with decoupling economic growth from greenhouse gas emissions. In this respect, the Union has revised the 2030 emission targets for the energy and industry sectors under the EU emissions trading system. Furthermore, the co-legislators reached an agreement on common rules for the internal market for electricity, which may lower electricity prices for industrial use. Another major initiative was the revision of the Energy Efficiency Directive which aims to improve industrial competitiveness by keeping costs lower through better energy efficiency.
- **Standardisation and patents:** the <u>Joint Initiative on Standardisation</u> brings together key European and national organisations, bodies and stakeholders, such as industry and SMEs, working on modernising and accelerating the delivery of standards by the end of 2019. The EU is trying to create a genuine <u>unitary patent</u> regime, protected by a unified patent court.
- > **Skills:** to address skills gaps that could hamper industrial growth, the <u>blueprint for sectoral cooperation on skills</u> was launched as part of the <u>new skills agenda</u>. It mobilises key stakeholders to deliver sector-specific skills solutions. Furthermore, <u>the digital skills and jobs coalition</u> is working on providing industry with a labour force with digital expertise.
- Circular economy: Parliament and Council have adopted new rules on how to manage waste (including extended producer responsibility). These will incentivise industry to design products that can be more easily recycled or reused, and stimulate industrial symbiosis turning one industry's by-product into another's raw material. A EU plastics strategy seeks to transform the way plastics and plastics products are designed, produced, used and recycled. The EU has also examined the potential to increase the circular use of 27 critical raw materials.
- ➤ Clean mobility and the automotive industry: the EU is introducing stringent CO2 emissions standards for cars and vans, while supporting the deployment of an alternative charging infrastructure and action to stimulate the development of autonomous driving, shared transport, and the development of sustainable batteries.
- **Trade:** to protect industry from unfair competition, the EU has adopted new and stringent rules on <u>trade defence</u>, including anti-dumping and anti-subsidy measures.
- **Defence industry:** the EU has agreed on a new <u>European Defence Industrial Development Programme</u> (EDIDP), to boost innovation in the defence industry.

According to the Commission, the main programmes supporting European industry, such as Horizon 2020, CEF and COSME, received a high number of eligible submissions, exhausting the resources available (the first two also contributed to the <u>creation of EFSI</u>). In view of this, and as strongly advocated by the <u>European Parliament</u>, the envelope for the 'Competitiveness for growth

and jobs' budget heading was increased during the mid-term <u>revision</u> of the 2014-2020 MFF by €875 million.⁸

Potential for the future

Looking to the longer term, EU investment in industry – particularly in digitalisation, research and innovation, crucial infrastructure and SMEs – is likely to increase slightly in the future. In its May 2018 communication on the multiannual financial framework for 2021 to 2027, the **Commission** proposed to <u>increase</u> the Horizon 2020 budget by 29 %, the CEF by 19 %, and COSME by 17 %. It also proposed to increase funding for the <u>single market programme</u> by 9 % and support digital transformation through the Digital Europe programme with a budget of €9.2 billion. In addition, the Commission proposed to reform its <u>cohesion policy</u> in order to concentrate funding on areas crucial for industry, such as innovation, support for small businesses, digital technologies, industrial modernisation, and the shift towards a low-carbon, circular economy. This falls short of the **European Parliament's** demands: in its <u>resolution</u> of 14 November 2018, Parliament called for a 40 % increase in the current budget for research and innovation, doubling the budget for COSME, and an increase of 30 % for the CEF.⁹

The Commission's May 2019 Future of Europe paper stresses that industry will be increasingly affected by the growing use of technology and digitalisation, and that a modern industrial policy should be built on the single market and focus on strategic value chains. The document also underlines the urgent need to take action should internal or external competitors distort the level playing field, and to develop new tools to address the distortive effects of foreign state ownership. In a 2017 reflection paper on globalisation, the Commission argued that industry's future depended on investment in new manufacturing technologies and related industrial data services. Importantly, the European Council Leaders' Agenda Strategic Agenda 2019-2024, released in May 2019, mentions the development of a new industrial strategy as a priority. Renewed interest in industrial policy is also expressed in the Franco-German manifesto of February 2019, which sets out a vision of how to help industry face the challenges of globalisation. The document argues for increased support for innovation, the revision of the regulatory framework, and for new measures to defend and protect European companies, markets and technologies. As far as the policy outlook is concerned, under the current Treaties the EU is to a certain extent able to address the need for industrial modernisation and increasing competitiveness. Even though the Member States have primary responsibility for their industrial policies, the Union will play an important role in the inevitable shift to digital, decarbonised and more circular industry in Europe. It will target its investments, research and innovation policies and the legal framework, such as environmental and product standards, towards achieving this transformation.

New or updated **legislation** could be passed on:

- **competition:** the <u>European Parliament</u> has called on the Commission to assess the adequacy of market definitions and EU competition rules¹⁰ to take the evolution of global markets and the emergence of the role of major national players in third countries into account;
- **public procurement:** the <u>European Parliament</u> has called on the Commission to reflect on how public procurement could be deployed to trigger innovation systematically, particularly in the context of digitising industry. The Franco- German <u>manifesto</u> also calls for the strategic use of procurement;
- **robotics and artificial intelligence:** the <u>European Parliament</u> has called on the Commission to consider the creation of a designated agency to provide the necessary expertise to respond in a timely way to new opportunities and challenges arising in this promising field;
- **low-carbon technologies:** the <u>European Parliament</u> has asked the Commission to remove the remaining regulatory barriers to investment in risky 'first of a kind' projects.

In addition, **initiatives** could be taken in the following areas:

- **SMEs:** the <u>European Parliament</u> has asked the Commission to consider launching an SME-specific initiative aimed at funding collaborative research access, digitalisation strategies and export market development;
- **trade:** the <u>European Parliament</u> has called for increased consistency between trade policy and industrial policy in order to avoid relocations and further deindustrialisation in the EU;
- industrial policy: the <u>European Parliament</u> has asked the Commission to develop, together with the Member States, an EU strategy and an action plan for a consistent and comprehensive industrial policy aimed at reindustrialisation, with targets, indicators, measures and time scales;
- **climate policy:** the <u>European Parliament</u> has called for the EU industrial strategy to include effective financing instruments and measures to help decrease carbon risk and tackle the risks of carbon leakage.

MAIN REFERENCES

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European Commission, <u>Industry in Europe – Facts & figures on competitiveness & innovation 2017</u>, September 2017.

Parry M. and Sapała M., <u>2021-2027 multiannual financial framework and new own resources: Analysis of the Commission's proposal</u>, EPRS, European Parliament, July 2018.

ENDNOTES

- ¹ Some <u>academics</u> argue that de-industrialisation, being one of the effects of the wider phenomena of globalisation, can be linked with the recent rise of populist movements in both the US and Europe.
- ² These include, for example, advanced manufacturing and nanotechnology, biotechnology, micro- and macroelectronics, photonics and advanced materials.
- ³ See the Economic and Budgetary Outlook for the European Union 2018, EPRS, European Parliament pp. 57-59.
- ⁴ This section was drafted by Alina Dobreva, with graphics by Nadejda Kresnichka-Nikolchova.
- 5 Examples of sectoral industrial policy include: the <u>chemicals</u>, <u>automotive</u>, <u>tourism</u>, <u>textiles and clothing</u>, <u>defence</u>, <u>fashion and creative</u> industries, the <u>raw materials</u>, <u>metals</u>, <u>minerals and forest-based industries</u>, the <u>mechanical engineering</u> and <u>electrical and electronic engineering industries</u>, and the <u>food and drink</u>, <u>healthcare</u>, <u>biotechnology</u>, <u>aeronautics</u> and <u>maritime</u> industries.
- These consist of the European Regional Development Fund (<u>ERDF</u>), European Social Fund (<u>ESF</u>), Cohesion Fund (<u>CF</u>), European Agricultural Fund for Rural Development (<u>EAFRD</u>), and European Maritime and Fisheries Fund (<u>EMFF</u>).
- ⁷ Important initiatives also contributing to the development of the DIH network include: the European Coordination Hub for Open Robotics Development (<u>ECHORD++</u>), Open Data Incubator Europe (<u>ODINE</u>), the Network for Supercomputing Expertise for SMEs (<u>SESAME NET</u>), and the one-stop shop Accelerating Photonics Innovation Solutions and Technology Support (<u>ACTPHAST</u>).
- ⁸ This also included <u>Erasmus+</u>, <u>Wifi4EU</u> and EFSI.
- ⁹ In current prices.
- ¹⁰ At present the Parliament involvement in competition legislation is generally governed by the consultation procedure.

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