

STUDY

Requested by the ITRE committee



Brexit and Industry and Space Policy

Workshop proceedings



Policy Department for Economic, Scientific and Quality of Life Policies
Directorate-General for Internal Policies
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EN

Brexit and Industry and Space Policy

Workshop proceedings

Abstract

This document summarises the presentations and discussions of the workshop of “Brexit and Industry and Space Policy”, which was held on 24 September 2018. The effects of Brexit on EU27 business, trade, value chains, innovation and space policy were assessed. This document was provided by the Policy Department for Economic, Scientific and Quality of Life Policies at the request of the Committee on Industry, Research and Energy (ITRE).

This document was requested by the European Parliament's Committee on Industry, Research and Energy

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LIST OF ABBREVIATIONS

ITRE	Committee on Industry, Research and Energy
ESA	European Space Agency
EUMETSAT	European Organisation for the Exploitation of Meteorological Satellites
SST	Space Surveillance and Tracking
SSA	Space Situation Awareness
SME	Small-to-Medium Enterprise
GDPR	General Data Protection Regulation
ESPI	European Space Policy Institute
ECMWF	European Centre for Medium-Range Weather Forecasts
PRS	Public Regulated Service

EXECUTIVE SUMMARY

On Monday 24 September 2018, the Policy Department for Economic, Scientific and Quality of Life Policies organised a workshop on 'Brexit and industry and space policy' at the request of the Committee on Industry, Research and Energy (ITRE).

The workshop, chaired by Morten Helveg Petersen, Vice-Chair of ITRE, explored the potential legal and economic impacts of Brexit on EU27 industry and space policy. Participants discussed the trade and industrial policy the EU would need to continue to capture value from global and European value chains, the possible effect that Brexit will have on European business, and Brexit's potential impact on various European space programmes, particularly Copernicus and Galileo. The workshop consisted of four presentations by high-level speakers, followed by a question and answer session.

The first speaker, **Reinhilde Veugelers, Research Fellow at Bruegel**, assessed what kind of industrial policy the EU needs and then analysed Brexit's impact on that needed industrial policy. The current trend towards global value chains increases innovation capacity and is an important driver of change in the EU27. It is crucial that the EU recognises this interconnectedness of activities across firms, sectors and countries in designing policy. Simply having these value chains is not enough; we must capture the value within them. Trade policy plays a key role in capturing the value from value chains, and the EU needs a trade policy with open markets and an elimination of tariff and non-tariff barriers along the whole value chain. However, concerning the policy target, it is not sufficient to have well-functioning value chains and trade policies alone; the EU must tie them to industrial policy. The target of future policy should be to provide the framework conditions for innovation. It needs to make Europe attractive to productive firms with unique, innovative capabilities in efficient European value chains. Furthermore, the EU must monitor pivotal sectors for innovation-based growth where Europe has the capacity to develop sustainable innovative positions in order to capture value.

The second speaker, **Luisa Santos, Director for International Relations at Business Europe and Chair of Business Europe's Brexit Task Force**, outlined Business Europe's position and current priorities on Brexit, and examined the cross-sectorial issues that might have an impact on business, industry, and services. The key for business is a smooth transition throughout Brexit. This transition will not happen without a withdrawal agreement. In addition, a close relation with the UK without jeopardising the integrity of the single market is important for European business. Because European business is committed to maintaining the single market, the UK cannot have the same market access that it currently has if it leaves the single market. Brexit furthermore will have an impact on trade and customs. Companies may have to use different product labels and test products twice, causing additional administrative burden for companies, especially SMEs. Europe will need to conduct additional border checks to verify that products from the UK meet European sanitary standards. Moreover, it is unclear what duties the parties will implement between their markets. Potential problems with rules of origin may arise. Disrupted data flows between the parties would affect a number of sectors. Business Europe is committed to helping companies prepare for Brexit by raising awareness of Brexit's potential impact.

The last speaker, **Jean-Jacques Tortora, Director of the European Space Policy Institute**, analysed the impact of Brexit on space policy. The UK will remain a member of several intergovernmental organisations like the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) and others post-Brexit. In terms of space security, UK participation in the Space Surveillance and Tracking (SST) and Space Situational Awareness (SSA) Programmes is uncertain. Losing the UK's perspective on security and defence will likely have negative implications for the EU. Of all the member states, the UK has the most liberal approach to space. One-

third of investments in the "new space" sector throughout Europe were initiated in the UK. UK participation in the Copernicus project is at risk, but as it is a collaborative programme, it will likely be in the interest of all parties to continue to have as much participation as possible. Similarly, Brexit puts the UK's involvement in the Galileo project into question. The UK has a strong position at the core of the PRS, which poses complicated problems moving forward. The Galileo and Copernicus projects are likely the programmes that will allow the UK to maintain its critical mass in the space industry.

Once the individual presentations had concluded, Mr. Petersen opened the **questions and answer session** to the floor. Workshop participants asked questions and made comments on Brexit's negative impact on citizens, UK awareness of problems caused by Brexit, and UK participation in the Galileo project.

1. WORKSHOP PROCEEDINGS

1.1. Opening Remarks

The workshop was chaired by Mr. Morten Helveg Petersen, Vice-Chair of ITRE. He began by welcoming the participants to the workshop. He then introduced the topic, stating that the workshop would explore the potential legal and economic impacts of Brexit and industry and space policy on the EU 27. The EU's industrial policy aims to make European industry more competitive so it can maintain its role as a driver of sustainable growth and employment in Europe. He emphasised that a strong EU space policy can benefit not only scientific research but also the EU economy at large, particularly in sectors such as transport, climate, communication and security.

He notified the participants that there would be an hour for the workshop. Speakers would have a maximum of 10 minutes per presentation and after the presentation of the three speakers, there would be a question and answer session.

1.2. The Potential Implications of Brexit for EU27 Industry and Space Policy

Reinhilde Veugelers, Senior Fellow at Bruegel

Professor Veugelers started her presentation by emphasising the challenge that the uncertainty surrounding Brexit negotiations poses. In particular, she explained that the future EU27-UK trade relationships as well as the future UK industrial policy will be key determinants in what the EU27 future industrial policy should look like. Within the current context of uncertainty, she explained she will give a broad overview and flag the principles of the future EU27 industry and space policy.

The challenging industrial environment is due largely to rising globalisation, particularly the rise of China and rapid technological change. Digital technology is especially evolving very quickly and, consequently, many sector boundaries are blurring. It is now much more difficult to draw clear lines between sectors. Related to this blurring of sector boundaries is the blurring of firm boundaries, particularly firms connected to global value chains. Another important aspect of the business environment is the exposure to increased uncertainty. This can be economic uncertainty, but we also see increasing political uncertainty with trade wars, Brexit, the rise of protectionism and uncertainty with respect to government policy in general.

She then introduced the current trend towards global value chains, a trend related to innovation capacity. Economic activities in the EU have become much more integrated within global value chains where firms, countries and regions increasingly specialise, not on the whole value chain but on specific tasks and stages within a value chain. That means that, for Europe in particular, there is more connectedness between firms, sectors, regions and countries. Most of the time these value chains are organised at a European level, and are therefore often European value chains rather than global ones. Based on the data, firms that participate in these global value chains can more effectively build sustainable competitive positions, create more value and will be more productive. To the extent that they base their contributions on unique skills and competences, they can also capture much more of that value when they are aligned in these European value chains. That immediately ties global value chains to innovative capacity because firms and sectors will contribute to the EU economy with production based on quality rather than quantity. They will therefore contribute with productivity growth and high value-added types of activities, which are often associated with innovative capacity.

According to Professor Veugelers, we see this across all sectors, so the contribution is coming from high value-added activities that typically rely on the innovative capacities of the firms that design these activities and capacities within global value chains. For European firms in particular, this takes place within European value chains. She stressed the importance of recognising this interconnectedness of activities across firms, sectors and countries in designing policy. Countries in particular not only need to have these global value chains, they must also be able to benefit from global value chains. Cross-border flows of capital labour, human capital, and knowledge are important in order for these value chains to operate and for countries to capture their value.

Furthermore, companies, regions, and firms with unique and sustainable capabilities will capture value from value chains by specialising and embedding productive capabilities of certain tasks within the value chain. Thus, the target of trade and industrial policy should be to make Europe attractive to such companies in order to promote innovation.

For this to take place, the EU will have to closely tie border policy, trade policy, and industrial policy. Efficient value chains and innovative capabilities can arise in any type of activity or sector, so it is important to have a sufficiently horizontal policy. In addition, trade barriers that arise along the value chain would have an effect on all firms that are closely connected, so a multilateral, open policy is necessary. Beyond trade barriers, the single market is important because uniform or aligned product standards streamline component supplier participation in these value chains. As the connection needs to be economic, we need global production networks and efficient logistic chains. Consequently, sufficiently integrated infrastructure and complementary services are needed to allow for low-cost integration.

Because the EU should focus the policy agenda on the framework conditions for innovation, it is important to monitor very pivotal sectors for innovation-based growth where Europe has the capacity to develop sustainable innovative positions in order to capture value. Examples include the digital, biopharma, transportation, aerospace and space sectors. Observing the effectiveness of the framework conditions on these sectors will allow the EU to assess needed policy interventions for potential barriers.

1.3. The Potential Implications of Brexit for EU Business

Luisa Santos, Director for International Relations at Business Europe and Chair of Business Europe's Brexit Task Force

Mrs. Santos began by stating that she would first give an overview of Business Europe's position and current priorities on Brexit, and then examine the cross-sectorial issues that might have an impact on business, industry, and services.

First, she started by discussing Business Europe's current priorities. The key for business, Mrs. Santos said, is facilitating a smooth phasing out from the United Kingdom's membership in the EU until there is an agreement that sets a framework for future EU-UK relations. Without the withdrawal agreement, the transition will not happen.

Furthermore, maintaining a close relation with the UK without jeopardising the integrity of the single market is crucial for European business. The UK will have to improve market access with less control (in trade policy, for instance) post-Brexit. European business is dedicated to maintaining the European single market, and after the UK leaves the EU single market and the customs union, it cannot have the same market access that it currently has.

Secondly, Mrs. Santos examined several Brexit-related issues that are affecting various industrial sectors, starting with customs. The customs union is the basis of the European Union, allowing Europe to have the same border, external tariff, duties, trade rules, regulatory framework, social standards, environmental standards and state head policies. This means that manufacturers within the European Union only need to test a product once. Now that the UK is leaving, this is all at risk. We do not know what will happen in regards to duties afterwards. The EU and the UK would maintain duty-free access to each other's markets under a free trade agreement, but such an agreement is not guaranteed. In sectors like agriculture, the EU's duties are sometimes as high as 40% or more. Industrial sector goods also have high duties in the EU. For instance, textile duties are 12% for third countries, and automotive duties are 10%. Without a free trade agreement post-Brexit, EU companies exporting to the UK will be charged additional duties and vice versa.

Ideally, the regulatory framework in the EU and UK is the same. If companies are following the same rules, they only need to test their products once and they only need to label their products with one label. However, if the UK does not come to an agreement with the EU and decides to diverge in its regulatory framework, companies may have to test their products twice, use different product labels, and comply with different rules. This would be an additional administrative burden for companies, especially SMEs, who would probably need to hire more people to take care of customs paperwork.

Furthermore, border checks will have to take place. For example, because the EU has very high food standards, it would have to check products imported from a third country to verify that it complies with EU sanitary and phytosanitary rules. These exchanges require additional paperwork. Europe and the UK have deeply integrated supply chains, and without an agreement, we can expect significant increases in cost and border operations because of additional testing, checks, and customs paperwork.

Additionally, the UK and the EU will need to comply with rules of origin, the law by which products qualify to be duty-free when produced in the preferential area. For example, if a car must have 55% value added in the preferential area (in the EU or the UK) to be duty-free, this might create problems because imports come from so many different places and the final product might not fulfil this condition. There is no guarantee, even with a free-trade agreement, that we will keep the same supply chains post-Brexit. There might be companies that do not sufficiently comply with the rules to benefit from this preferential treatment. Additionally, the EU has a number of free-trade agreements with third countries (Canada and Korea, for instance). If the UK does not have the same rules as the EU and does not roll back the agreements that the EU has with these countries, the EU may no longer be able to use intermediary products from the UK, further impacting supply chains. The regulatory divergence is not just an issue for sectors; it is also a horizontal issue because competition is a question of level playing fields (not just social or environmental standards). If the UK does not maintain the same level playing field, there could be problems concerning competition between companies in the EU and the UK.

Next, Mrs. Santos talked about data flows. This area affects a number of sectors. The EU has the General Data Protection Regulation (GDPR), but once the UK becomes a third country, it will become non-compliant under EU rules. As a result, it will need an adequacy decision if the EU is to continue to exchange data with the UK safely. An adequacy decision could take some time, creating uncertainty for operators in the meantime.

The European business world needs to prepare for the worst-case scenario, and companies (especially SMEs) must be aware of Brexit's potential impact along their respective supply chains. Mrs. Santos concluded by stating that this is part of Business Europe's objective; to help companies prepare for Brexit by raising awareness of Brexit's potential impact.

1.4. The Potential Implications of Brexit for EU Space Policy

Jean-Jacques Tortora, Director of the European Space Policy Institute (ESPI)

Mr. Tortora began by giving an overview of the specificities of the UK in the space sector. The UK is a member of several intergovernmental organisations like the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) and others, and will remain so after Brexit. The UK is traditionally focused on business and applications (probably more so than any other European member state at the moment) and, as a result, its participation is limited in Orion and in human space flights, which are not in line with their strategic vision of the UK space industry. Mr. Tortora further noted that the UK is very sensitive to issues related to security and defence and has contributed greatly to reflection in this domain. Losing the UK perspective in this area may have negative implications. Lastly, he remarked that the UK is the European member state with the most liberal approach to space. According to a study done at the ESPI, the UK is by far the country in which most “new space” investments are taking place. One-third of the investments throughout Europe were initiated in the UK.

Next, Mr. Tortora reviewed Brexit’s potential consequences on the EU’s various space flagship programmes. The UK will likely continue its membership in the ESA, EUMETSAT, the European Centre for Medium-Range Weather Forecasts (ECMWF) and Mercator Ocean for maritime observation, allowing them access to a large set of data.

Furthermore, the UK’s participation in the Copernicus program might be at risk. However, because Copernicus is a collaborative programme, it will likely be in the interest of all parties for the UK to continue active participation. Copernicus is based on a free data policy, ensuring the availability of most data to the UK, although some data might be restricted to contributing parties and there might be some potential issues for high bandwidth access to the data.

Next, Mr. Tortora examined space security. Post-Brexit UK participation in the Space Surveillance and Tracking (SST) and Space Situational Awareness (SSA) Programmes is uncertain. Some arrangements are still possible to ensure continued access to data because the programme is being developed and there is still room for negotiation. Furthermore, the potential loss is limited because the UK has no major national assets in the programme, unlike France and Germany.

In addition, major commercial operators (like Inmarsat, Eutelsat, SES, Intelsat, ...) have elaborated a cooperative framework for data exchange among themselves for collision avoidance purposes on stationary orbits, and this will not be impacted by Brexit.

Additionally, SSA services for in-orbit collision avoidance are currently available through US providers, which might even further develop commercial offers in these matters along the lines of the recent development of the US space policy.

He then spoke about governmental satcoms, or govsatcoms, which are governmental satellites for secured communications. This is the sole area in which the UK has implemented a strong national space policy. They have deployed a number of military satcoms through the Skynet. Skynet 5 is currently in use and Skynet 6 is under discussion. The UK industry is also involved in the open geostationary satcoms business. There is no reason that this will change in the future because it is completely private and commercial.

Lastly, he spoke about Galileo, the most problematic space programme in regards to Brexit. The UK has a very strong position at the core of the Galileo Public Regulated Service (PRS), Galileo’s security service. Mr. Tortora assured that all the civil signals, including diagnose, will remain accessible. However, both

UK access and industrial participation in the PRS are still in question. Access to the signal is a simple question to address; involvement of the UK industry at the very core of the management of the security of the system, however, is much more complicated.

Mr. Tortora began his conclusion by first pointing out that the implications of Brexit on European space policy are not commensurate to the size of the sector. The sector is small in economic terms, but more is at stake than pure economy. He continued by stating that, even though Brexit will not affect UK's participation in the ESA, it is unclear if this will be sufficient to maintain the UK industry's critical mass. Without their critical mass, the UK will no longer be competitive in the space sector. The closest thing to mass-market production is taking place in the framework of EU programmes through Galileo and Copernicus, and this is likely what will provide the overall European space manufacturing industry the critical mass. The UK may face issues regarding access to supply chains, critical technologies and talent. He finished his conclusion by reiterating that the UK has helped a great deal in shaping EU security and defence policy, and that space may be a precursor for future UK and EU collaboration in this sector.

2. QUESTIONS AND ANSWERS SESSION

The three presentations summarised above were followed by a Questions and Answers session, in which the speakers were asked by the Members of the Committee to elaborate further on certain questions.

Question 1 by Kathleen Van Brempt: Brexit has not even happened yet but we are already feeling the impact. How can we explain these negative impacts to our regions where people are in danger of losing their jobs and industry is falling back?

Question 2 by Mr. Dan Nica: Is the British government aware of the consequences of Brexit?

Question 3 by Mr. Evžen Tošenovský: Galileo is going to be a very successful programme and I see it as a serious obstacle if the UK can no longer participate. Do you see a reasonable way to allow the UK to remain involved?

Response by Reinhilde Veugelers: Professor Veugelers answered that, as mentioned by Mr. Dan Nica and Mrs. Kathleen Van Brempt, there have been many studies that try to identify what loss the UK might incur from exiting. Unfortunately, there have not been as many studies about the negative impact of Brexit on the EU-27, who will also lose out. The same uncertainty that hurts the UK will also hurt the EU. Thus, the EU should stay committed to an open, multilateral trade policy and aggressively invest in an industrial policy aimed at innovation-based growth. That will allow the EU to both capture the value from value chains and better respond to any kind of uncertainty that happens along the value chain.

Response by Luisa Santos: Mrs. Santos responded by stating that Business Europe's focus has been, in part, to ensure that businesses are aware of Brexit's implications. Some SMEs do not realise that their products end up in the UK market, and Business Europe wants to make sure that businesses track and understand their supply chains. Furthermore, trade agreements do not usually deal with innovation projects, so if the UK wants to continue to have access to Horizon Europe, Copernicus, and other projects, the deal must go beyond a free trade agreement. The deal must ensure that both the UK and the EU are respecting the same set of rules in several different areas. This level playing field between countries and companies is essential for close cooperation between the EU and the UK in the future.

Response by Jean-Jacques Tortora: Mr. Tortora replied that the mechanical consequence of Brexit is that the UK becomes a third party, which does not mean that the EU and the UK should not remain good friends. The ideal agreement ensures a good continuity of UK participation in a number of EU space-related programmes. The only critical issue is, as Mr. Evžen Tošenovský rightly pointed out, the PRS, because the PRS has been designed as a sovereignty development. When you have good friends, you can invite them to your home, but the question is whether or not you should give them the keys to your house; and, this is the political decision that the EU needs to make.

ANNEX 1 AGENDA

Workshop on Brexit and industry and space policy

Organised by Policy Department for Economic, Scientific and Quality of Life Policies
at the request of the Committee on Industry, Research and Energy (ITRE)

European Parliament, Brussels
24 September 2018, 15.00 - 16.00
Room József Antall (JAN) 2Q2

Final programme

Introduction by **Morten Helveg PETERSEN**, ITRE Vice-Chair

Presentation #1 | Overview of the potential implications of Brexit for EU27 Industry and Space Policy

By **Reinhilde Veugelers**, Senior Fellow at Bruegel

Presentation #2 | Implications of Brexit for EU business

By **Luisa Santos**, International relations and Brexit Task Force, Business Europe

Presentation #3 | Implications of Brexit for EU space policy

By **Jean-Jacques Tortora**, European Space Policy Institute, Director

Questions and Answers with Members

Closing remarks by **Morten Helveg PETERSEN**, ITRE Vice-Chair

ANNEX 2 SPEAKER BIOGRAPHIES

Reinhilde Veugelers, Senior Fellow at Bruegel



Professor Dr. Reinhilde Veugelers is a full professor at KULeuven (BE) in the Department of Management, Strategy and Innovation. She has been a Senior Fellow at Bruegel since 2009. She is also a CEPR Research Fellow and a member of the Royal Flemish Academy of Belgium for Sciences. She currently serves on the ERC Scientific Council. She is a member of the "Research, Innovation, and Science Policy Experts" (RISE) high level group advising Commissioner Carlos Moedas.

Luisa Santos, Director of International Relations and Chair of Brexit Task Force, BusinessEurope



Ms Santos is Director for International Relations at BusinessEurope and Chair of BusinessEurope's Brexit Task Force. She was a member of the TTIP Advisory Group and is now a member of the Expert Group on EU trade agreements. Her principal experience is in the textiles sector, having acted first as the chief representative for the Portuguese textile industry in Brussels, later as Trade and Industry Manager for Euratex-European Apparel and Textile Confederation. She was also the manager responsible for international partnerships – including a joint venture in India – for a leading Portuguese textiles company. Her academic background is in law and management.

Jean-Jacques Tortora, Director of the European Space Policy Institute



Since June 1, 2016 Jean-Jacques Tortora serves as the Director of the European Space Policy Institute.

From 2007 to mid 2016 he was the Secretary General of ASD-Eurospace, which is the trade association of the European Space Industry.

From 2004 to mid 2007, he was head of the French Space Agency (CNES) office in North America and the Attaché for Space and Aeronautics at the Embassy of France in Washington, D.C.

ANNEX 3 PRESENTATIONS

Presentation by R. VEUGELERS

Presentation #1 | Overview of the potential implications of Brexit for EU27 Industry and Space Policy

The slide features a dark red header with the text 'IMPROVING ECONOMIC POLICY' and the Bruegel logo. The main title is in large white font. The speaker's name and affiliations are listed below. The event details and date are at the bottom.

IMPROVING ECONOMIC POLICY 

Overview of the potential implications of Brexit for EU27 Industry and Space Policy

Reinhilde Veugelers
Senior Fellow at Bruegel
Professor at KU Leuven

Workshop at the European Parliament on
“Brexit and Industry & Space Policy”

24 September 2018



EU Industrial Policy: setting the scene

Uncertainty around Brexit on the shape of the UK-EU27 (trade) relationships post-Brexit and the UK's future industrial or space strategy, which, depending on the direction it takes, will impact the EU27 industrial and space policy response

At this stage, we can only flag general principles for the EU27 industrial and space policy response

An assessment of what kind of EU industrial policy POST BREXIT is needed requires an understanding of the changing role of sectors and firms for Europe's growth

- Changing environment
- Needed policies for manufacturing/servicing Europe's growth
- Impact of Brexit for industrial policy making

2



Challenges & Changing environment

- **Globalisation** emerging countries as markets and sources of production (esp. China)
- **Rapid technology change** (esp. digital technologies)
- **Blurring of sector boundaries** servitisation of manufacturing
- **Blurring of firm boundaries** Global value chains
- **Shortage of supply** (national resources, specific skills)
- **Exposure to a more uncertain environment**
 - Global exposure
 - Costs/volatility of input prices;
 - Which depends on type of sector: low skilled, high skilled, energy costs
 - Government/political intervention:
 - Protectionism/trade wars/Brexit
 - Regulation

3



Challenges & Changing environment: GVCs and Innovative capacity

Economic activities in the EU have become more integrated within Global Value Chains

- Firms and countries increasingly specialise in specific stages and tasks within the GVC
- Value creation is increasingly joint across firms, sectors and countries
- For EU firms this participation in GVCs has a strong EU orientation: European Value Chains (EVCs)

Participation in Global Value Chains (GVCs) allows firms and countries to build sustainable competitive positions, even more so if accompanied with innovative capacity

Firms and Sectors contribution to EU economies is through productivity growth

- A shift towards high value added activities
- A greater importance of innovative capacity,
- Requiring a high quality human capital base with a well educated/trained workforce.

This shift towards more skill-, value- and innovation-intensive activities holds across all sectors



Impact of GVC/EVCs for Policy

Understanding the interconnectedness and reshaping thinking on policy

- **For countries to benefit from GVCs**, it is key that cross border flows of capital, labour, human capital and knowledge within GVCs become effectively linked to local productive capabilities in certain tasks.
- **The policy agenda is thus not only about ‘border’(trade) policies;** instead a holistic policy framework is required where effective ‘behind-the-border’ policies leverage the participation in GVCs into competitiveness and growth

Openness is a necessary condition for countries to integrate in international production networks, but “behind-the-border” (economic) policies largely determine which position countries occupy in GVCs: which value they are able to create and capture.

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GVC/EVC and Trade Policy

- In view of the **magnification effect of tariffs and non-tariff barriers** along the value chain: Open markets and elimination of T & NTB.
- As barriers between third countries upward or downward in the value chain matter as much as the barriers put in place by direct trade partners, **trade liberalisation should be even more than before pursued multilaterally.**
- **More uniform product standards** will ease the participation in GVCs for components suppliers.
- **Global production networks rely on the logistics chain**, which requires efficient network infrastructures and competitive complementary services.
 - Special attention to removal of barriers in sectors such as transport, (telecommunications, finance and business services.

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GVC/EVC and Industrial Policy

- GVCs allow for more efficient value creation, also EVCs

But

- Which firms/countries within the value chain **CAPTURE** the value created in GVCs/EVCs?

Answer: conditional on well functioning product, financial, labour, technology markets & tax systems: **holders of UNIQUE skills, knowledge and complementary assets**

- Firms with unique innovative capabilities capture value through GVCs/EVCs

The policy target should be making Europe an attractive place for productive firms with unique innovative capabilities in efficient Value Chains

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The EU policy agenda post-Brexit

Policy should be about enabling firms to join GVCs/EVCs

Policy should be to enable firms to capture value in these GVCs/EVCs)

The target should be making Europe an attractive place for productive firms with unique innovative capabilities in efficient EVCs

1. Provide the framework conditions to support firms' EVC innovation-based growth path
2. As these firms can be found in all sectors and activities, policies should be horizontal.

Open Trade Policy with extra-EU (UK et al) and Industrial Policy (Innovation, Entrepreneurship Policy) intra EU

This is a shared policy agenda: EU together with national/regional specific policy agenda

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The EU policy agenda post-Brexit

• Trade policy with extra-EU in a GVC environment should be about removing barriers multilaterally

• Industrial Policy Intra-EU

- **Access to large, open and interconnected product markets**
- **Access to efficient supporting-services**
 - Furthering the single market for supporting services
 - Interconnecting infrastructure for transport, telecommunications
- **Access to specific skills and innovative capacity**
 - Furthering the European Research and Innovation Area, eliminating barriers to the cross-border and cross-sector transfer of skills, knowledge and ideas.
- **Access to finance for small and new firms that want to develop on world markets their ideas for new innovative products.**
 - Addressing the fragility and the fragmentation of the financial sector in Europe, especially the risk-capital segments

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EU Industrial Policy post-Brexit

- **A horizontal policy agenda**

Nevertheless needed:

- **Monitoring of pivotal sectors for innovation-based growth for EU**

- Digital
- Biopharma
- Transport
- AeroSpace

- **Market monitoring to assess**

- Lower returns from investing in innovation capacity
- Barriers to access resources for innovative capacity (skills, finance, science)
- Effectiveness of policy instruments to address barriers

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IMPROVING ECONOMIC POLICY



Background material

Additional information, for publication alongside the proceedings

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European Value Chains

Manufacturing production in the EU became more integrated within “European value chains”

- A few large firms are intensively involved in GVCs, but these large firms matter for Europe’s overall knowledge based growth and competitiveness performance
- Also smaller firms that take **intermediate positions in global value chain** have higher productivity premia, particularly when they can exploit unique innovative capacities
- European firms participation in GVCs is **strongly EU oriented**:
 - These European Value Chains (EVC) have resulted in a deeper integration of EU manufacturing
 - Firms involved in EVC are not disadvantaged relative to firms that develop more global value chains.

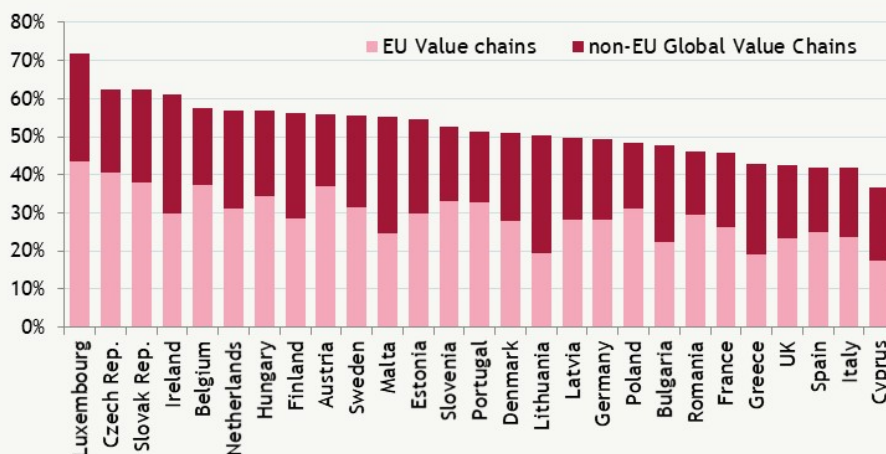
Veugelers, R. (Ed) 2013, Manufacturing Europe’s Future, Bruegel Blueprint, Volume XXI, Bruegel, Brussels;

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Participation in Global and European value chains

In 2009, (on average) **53%** of EU countries’ exports were involved in Global value chains

...of which (on average) **56%** in European value chains.



Source: Bruegel Manufacturing Blueprint (2013)
Participation in GVC is measured as the share of foreign inputs embedded in a country’s exports (backward participation) plus the share of domestic inputs of that country embedded in other countries’ exports (forward participation).

13

CHALLENGES for Europe's innovation capacity

There are many highly innovative European companies,
but on average

- Europe has consistently failed to exploit its potential for innovation-based growth,...
- ...despite a series of innovation policy strategies and targets.

EU's Innovation Capacity Problems are structural and longstanding

- **Europe's failing capacity for creative destruction:** missing specialization in new innovation based growth sectors and firms
 - Innovation Based Growth Sectors: *aerospace, biotech, computer hardware & services, health care equipment & services, internet, pharmaceuticals, semiconductors, software, telecom equipment*
 - Yollies: companies born since 1975 who have made it into the R&D scoreboard of world leading innovators
- **Europe's fragmented science, research and innovation area:** missing "European Innovation Value Chains".
 - transfer of new science and research insights into commercial ideas that can command world-leading positions
 - link regional and national innovation systems within a more integrated European innovation system

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CHALLENGES for Europe's innovation capacity

Europe's corporate R&D fails to specialize in innovation based growth sectors

Europe's corporate R&D misses "Yollies" in innovation based growth sectors

RTA Indices

Specialisation in "Dynamic" Sectors

	EUR	US
<i>Aerospace & defence</i>	1,5	1,13
<i>Biotechnology</i>	0,32	2,2
<i>Computer hardware & Computer services</i>	0,08	1,39
<i>Health care equipment & services</i>	0,7	1,86
<i>Internet</i>	0	2,54
<i>Pharmaceuticals</i>	1,27	1,16
<i>Semiconductors</i>	0,5	1,72
<i>Software</i>	0,51	2,05
<i>Telecommunications equipment</i>	1,38	1,09
All IBG sectors	0,89	1,43

Specialisation in "Classic" Sectors

<i>Industrial machinery</i>	1,84	0,24
<i>Industrial metals</i>	1	0,3
<i>Electrical components & equipment</i>	1,56	0,18
<i>Fixed & Mobile telecommunications</i>	1,53	0,2
<i>Chemicals</i>	1,31	0,64
<i>Automobiles & parts</i>	1,26	0,58

	EU	US
Share of Yollies in number of region's leading innovators	23%	51%
R&D intensity of Yollies	4%	10%
Ollies	3%	4%
Share of the region's Yollies in Innovation Based Growth Sectors	62%	84%
R&D intensity of Yollies in Innovation Based Growth Sectors	13.9%	12.6%

Source: Veugelers, R. and M. Cincera, 2010, Europe's Missing Yollies, Bruegel Policy Brief 2010/06, Bruegel Brussels

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Why is Europe missing Innovation Based Growth Capacity ?

- Lower returns from investing in innovation capacity
- Higher barriers to access resources for innovation
- A systemic problem
 - Segmented product markets
 - Risk-taking financial markets
 - Higher (Re-)entry & exit costs
 - Inflexible labour markets
 - IPR effectiveness
 - Insufficient linking in “innovation system”
 - Industry science links
 - Large incumbents and small new entrants
 - Public Private partnerships
 - Insufficient or ineffective policy support

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Some Bruegel References

- Veugelers, R., 2018, **Are European firms falling behind in the global corporate research race?** Bruegel Policy Contribution 18-06, Bruegel, Brussels.
- Veugelers, R., 2017 (Ed), **Remaking Europe: the new manufacturing as an engine for growth**, Bruegel Blueprint, Brussels.
- Veugelers, R. (Ed) 2013, **Manufacturing Europe's Future**, Bruegel Blueprint, Volume XXI, Bruegel, Brussels;
- Veugelers, R. and M. Cincera, 2010, **Europe's Missing Yollies**, Bruegel Policy Brief 2010/06, Bruegel Brussels

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Presentation by L. SANTOS

Presentation #2 | Implications of Brexit for EU business



Implications of Brexit for EU Business

Luisa Santos, Director of Industrial Affairs

24 September 2018

Agenda

1. BusinessEurope's Priorities regarding Brexit

2. Cross-sectoral Issues for Business

- Customs Issues
- Rules of Origin
- Regulatory Divergence
- Data Flows
- Research and Innovation

3. BusinessEurope's Publications on Brexit



2

BusinessEurope's Priorities

- A timely conclusion of the withdrawal agreement, including the transition period, is key for business.
- To avoid a cliff-edge scenario, the March political agreement needs to be transformed into a legal text quickly.
- Regarding future relations, the new model that will govern future EU-UK relations should keep our economic relationship as close as possible while preserving the integrity of the Single Market.
- European companies having large investments in the UK and vice-versa need to be able to effectuate intra-corporate transfers.



3

Customs Issues

Within the Single Market, border checks are unnecessary due to:

- The common external tariff
- The common regulatory framework
 - Establishing a level playing field
 - Setting high safety and environmental standards
 - Promoting mutual recognition of related compliance tests



4

Customs Issues

Customs-related issues in EU-UK trade after a no-deal Brexit:

- Border inspections resulting from potential regulatory divergence in areas such as security controls, food safety, consumer protection regulations and environmental regulations
- Customs declarations
- WTO Most-Favoured-Nation tariffs

→ significant disruptions of supply chains, additional delays, additional administrative complexity or increased costs



5

Rules of Origin

- To benefit from a preferential tariff under a EU FTA, a EU company needs to demonstrate that a their good either originates entirely in the EU or that or had substantial work done on it in the EU;
- For cars, around 55% of value added need to be added in the EU under Rules of Origin (ROOs);
- After a no-deal Brexit, the value added to a good in the UK will not qualify as EU value added under ROOs of EU FTAs;
- This will challenge supply strategies and supply chains of companies and force some to change their location.



6

Regulatory Divergence

- EU common minimum regulatory standards and mutual recognition of testing and certification ensures that product tests only need to be conducted in one EU Member State
- Double testing and border inspections resulting from EU-UK regulatory divergence would cause significant costs for industry.



7

Data Flows

- Without a free flow of data, businesses might face serious obstacles in basic operations including salary payments, customer relationship management, or data backups;
- The free flow of personal data between the EU and a Third country is contingent on an adequacy decision from the European Commission;
- There is no set timeframe for an adequacy decision;
- Without an transitional rules, the free flow of data between the EU and the UK would be disrupted in the case of a cliff-edge Brexit.



8

Research & Innovation

- UK research entities play an important role in European research and innovation projects and without an agreement on future cooperation in this area, opportunities might be lost for both sides.
- As long as there is no agreement, there will be uncertainty around existing projects that involve UK partners, including ongoing ones



9

BusinessEurope's Publications



Links

- Consequences of a cliff-edge Brexit:
<https://www.busesseurope.eu/publication/s/consequences-cliff-edge-brexIt>
- Brexit: the customs implications and solutions:
<https://www.busesseurope.eu/publication/s/brexIt-customs-implications-and-solutions>

Presentation by J. TORTORA

Presentation #3 | Implications of Brexit for EU space policy



Brexit and Industry and Space Policy
European Parliament - 24 September 2018

Brexit and Industry and Space Policy

European Parliament
Brussels, 24 September 2018

Jean-Jacques Tortora
Director of ESPI

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The European Space Policy Institute (ESPI)

Mission Statement of ESPI

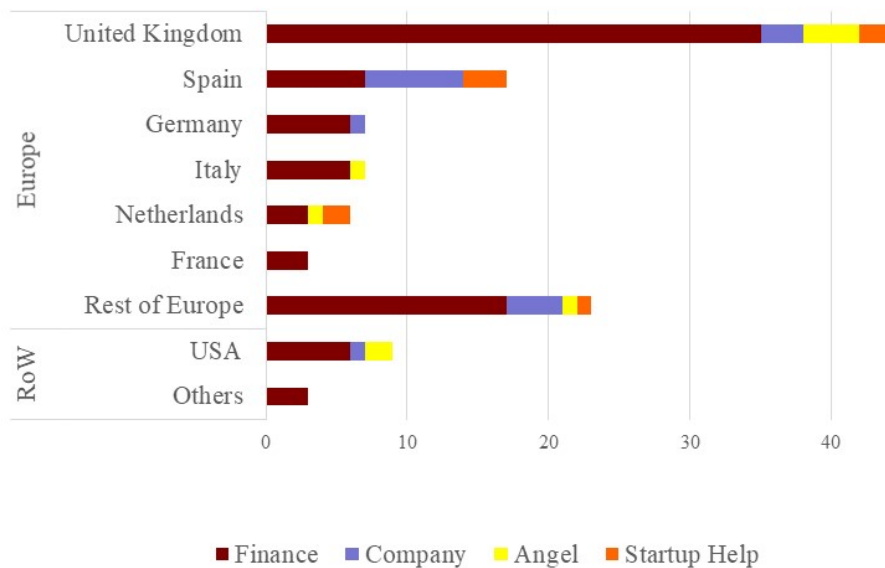
The European Space Policy Institute (ESPI) provides decision-makers with an informed view on mid- to long-term issues relevant to Europe's space activities. In this context, ESPI acts as an independent platform for developing positions and strategies.



UK and Space

- **UK is member of ESA, EUMETSAT, ...**
- **Traditionally focused on business and applications**
 - ✓ Limited participation in Ariane and in Human Space Flights
- **A member very sensitive to S&D-related issues**
- **Very liberal approach to Space**

Distribution of “Newspace” investors in Europe



Copernicus

- **UK continued membership in ESA, EUMETSAT, ECMWF, Mercator**
- **Free data policy ensures availability of most of the data to UK**
 - ✓ Some data restricted to contributing parties
 - ✓ Potential Issue for high-bandwidth access to data
- **UK based industrial participation at stake**
 - ✓ In future contracts issued through EU
 - ✓ In all processes using EU procurement rules

Space Security

- **UK might not be part any more of the SST/SSA EU programme**
 - ✓ Some arrangements to ensure continued access to data
- **Limited concerns**
 - ✓ Programme in the making
 - ✓ No major UK national assets
 - ✓ Major commercial operators secured
 - ✓ US-based services available

GOVSATCOMS

- **Sole area where UK ever implemented a strong national space policy**
 - ✓ Skynet series
- **UK industry involved in the open GEO Satcoms business**
- **Limited concerns regarding EU Govsatcoms programme**

Galileo

- **UK initially fiercely opposed to the programme**
 - ✓ Then insisted to position UK industry at the core of the PRS
- **Demonstrates the high relevance of the programme**
- **All civil signals including EGNOS will remain accessible to UK**
 - ✓ PRS?
- **UK-based Industrial participation in future developments at stake**

Overall

- **“Case for Space” in Brexit:**
 - ✓ Not commensurate to the actual size of the sector
- **No UK industrial Space champion**
 - ✓ UK gets 17% of the industrial activities in Galileo
 - ✓ UK space industry strongly export-oriented
- **ESA and R&T not to be affected**
 - ✓ Sufficient to keep the critical mass in UK?
 - ✓ Potential issues regarding supply chains and access to talent
- **S&D space related issues to be addressed in a consistent manner**
 - ✓ UK contributed to shape EU policy in this matter

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This document summarises the presentations and discussions of the workshop of “Brexit and Industry and Space Policy”, which was held on 24 September 2018. The effects of Brexit on EU27 business, trade, value chains, innovation and space policy were assessed. This document was provided by the Policy Department for Economic, Scientific and Quality of Life Policies at the request of the Committee on Industry, Research and Energy (ITRE).
