TOWARDS COHESION POLICY 4.0

STRUCTURAL TRANSFORMATION AND INCLUSIVE GROWTH

Regional Studies Association
EUROPE

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TABLE OF CONTENTS

1. INTRODUCTION 7

1.1 Political polarisation and inequality 7

1.2 New opportunities and challenges 8

1.3 Future EU policies for structural transformation and cohesion 9

2. THE CHALLENGE OF ECONOMIC CHANGE FOR EUROPE 11

2.1 Global transformations – the fourth production revolution 11

2.2 An opportunity for renewal 13

2.3 Structural transformation and the importance of ecosystems 14

3. STRUCTURAL TRANSFORMATION AND PRODUCTIVITY CHALLENGES FOR THE EU 17

3.1 Why productivity is not resuming and how this affects inequality 17

3.2 How regional disparities may affect EU productivity 21

3.3 Differentiated regional productivity catching-up within EU countries 23

4. TERRITORIAL POLICY RESPONSES 25

4.1 Strategies for global frontier regions 25

4.2 Strategies for intermediate regions 26

4.3 Strategies for lagging regions 27

4.4 The case for an integrated systems approach 28

5. DEVELOPING A EUROPEAN POLICY RESPONSE 31

5.1 Lessons from Lisbon and Europe 2020: principles for a new EU strategy 31

5.2 Focus and coherence: improving the effectiveness of direct EU spending 33

5.3 More effective economic governance and structural reforms 37

6. ENSURING TERRITORIAL AND SOCIALLY INCLUSIVE GROWTH: A MORE EFFECTIVE COHESION POLICY 41

6.1 Strengthening the effectiveness of Cohesion Policy 41

6.2 The efficiency of Cohesion Policy implementation 44

6.3 Economic governance and Cohesion Policy 45

7. CONCLUSIONS AND RECOMMENDATIONS 49

7.1 A new agenda for structural transformation and cohesion 49

7.2 Recommendations 50

8. BIBLIOGRAPHY 53

ANNEX 1: REGIONAL CATCHING-UP IN SELECTED EU MEMBER STATES 69

Preface

In the context of the current debate on the future of the EU and its Multiannual Financial Framework after 2020, and specifically the role of EU Cohesion Policy, this paper reflects on the opportunities and challenges of structural transformation in Europe and sets out proposals for change. It draws on the latest research from international bodies and academia and new statistical analysis by OECD on the performance of EU regions with respect to productivity. The paper is also based on informal discussions and feedback from senior officials in several Member States, particularly concerning the reform of European economic governance, the relationship between EU policies under direct management and shared management, and the reform of Cohesion Policy.

The authors are very grateful for the informal feedback from academic experts and senior officials received on earlier versions of the paper. They also acknowledge the assistance of: Eric Gonnard and Alexander Lembcke of the OECD Regional Development Policy Division; research support from Dr Carlos Mendez, Dr Laura Polverari and Dr Neculai-Cristian Surubaru of the European Policies Research Centre (University of Strathclyde); critical comment on the structural transformation agenda from Professor David Bailey (Department of Economics, Finance & Entrepreneurship, Aston University); and administrative support from Alyson Ross and Dr Keith Clement. Lastly, the authors would like to thank the Regional Studies Association (RSA Europe) for publishing the paper.

June 2017

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It should be noted that the authors are writing in a personal capacity, and the views expressed do not necessarily reflect the views of the OECD (or its Member States) or the governments of Poland and Slovenia.

EXECUTIVE SUMMARY

The White Paper on the Future of Europe makes a powerful statement about the current precarious state of European integration and its uncertain future. The continuing effects of the financial, economic and migration crises are associated with reduced confidence and trust in democratic institutions and politicians, and a rise in populism, threatening the unity of the EU. A major cause is the unequal impact of globalisation and technological change on different parts of the EU. Thus, **the EU not only needs to accelerate sustainable growth but also to resume convergence so that all parts of the EU are able to exploit the opportunities from the globalisation of trade and technological change**.

In the context of the debate on the future of the EU, and specifically the EU policy and budgetary priorities after 2020, this paper makes the case for a new approach to structural transformation, growth and cohesion in the EU. Drawing on the latest research by international bodies and academic experts, the paper explores both the opportunities and challenges from globalisation and technological change, the widening differences in productivity between leading and lagging regions, and the need for a new EU policy framework capable of delivering inclusive growth.

The challenge of economic change for Europe

The past three decades have been characterised by trade liberalisation, the rise of global value chains and global production networks. The integration of emerging countries has challenged the EU's attractiveness as a production location, because of import competition and off-shoring. Further, technological change and digital transformation (the fourth production revolution) is associated with jobless growth and concerns that the EU is falling behind technologically. Europe generally has a strong position with respect to advances in technology, value added, productivity, profitability and profits, but there are important questions about its technological leadership.

There are major opportunities from structural change that the EU is well-placed to exploit. The cost advantages of some emerging economies are eroding, labour costs are becoming a less critical factor in location decisions, and some supply chains are being shortened to ensure greater control. These trends do not guarantee the renewed competitiveness of developed economies but depend on the ability of developed economies to effect the necessary structural transformation.

Structural change across the EU requires a different policy and institutional focus on 'ecosystems' of open, interconnected networks of stakeholders, cooperating through strategic partnerships able to respond rapidly and flexibly to technological, market and social changes. Disruptive innovation and creativity require multidisciplinarity and open models of collaboration. The support of environment for such ecosystems will unavoidably need to be tailored to specific national, regional or even local contexts. Policy packages need to be integrated and coordinated, delivered at a national, regional and local levels, while being adapted to the needs of different territories.

Structural transformation and productivity challenges for the EU

The current economic situation in the EU is characterised by a persistent low labour productivity growth, at below one percent per year. Research suggests that the main source of the productivity slowdown is not a lower rate of innovation by the most advanced firms, sectors or regions, but rather a slowing of the pace at which innovations spread throughout the economy.

At regional level, there is an increasing productivity gap between leading 'frontier' regions and lagging regions, the gap that has grown by 56 percent between 1995 and 2014. Consequently**, most of the inequalities across EU countries are now accounted by differences *within* rather than *between* countries.** Thus, while EU market and economic integration has been a successful convergence machine for countries, these gains have not been distributed equally inside each country. These differences cannot be addressed by compensatory policies relying on income transfers. The adaptation to the specific shocks on regional economies generated by globalisation and market integration require differentiated (or place-based) strategies. With many frontier regions being capital cities or other major urban areas, there is a risk of increasing economic and social disconnection between the 'motors' of EU growth and other regions.

Developing a new policy framework for structural transformation

Renewing the successful European economic growth model depends on its ability to reduce the increasing productivity gap between 'frontier regions' and other parts of the EU, in particular the rate at which the diffusion of innovation and structural change takes place. Research shows that there is untapped potential to increase country-wide productivity by improving the performance of regions.

The challenge for EU and Member State policymakers is to develop or adapt policy frameworks and strategies that will stimulate sustainable growth, in a manner that ensures greater inclusiveness, especially in access to employment and capacity for entrepreneurship. This demands a more granular approach to structural policy, tailored better to the specific conditions of the different types of regions and communities across the EU. Different strategies are needed for frontier regions, intermediate regions (some catching up but others only keeping pace) and lagging regions.

Existing EU strategies – from Lisbon/Gothenburg to Europe 2020 – have been only partially successful, with limited results in relation to the scale of the challenge. Notwithstanding certain achievements, strategies have been over-ambitious in relation to the resources available, the deficits in governance (especially on coherence and the coordination of policies) and the performance of interventions. Importantly, **policy responses have given inadequate recognition of the spatial unevenness of current and development needs and challenges** for economic growth and development in the EU.

Looking forward, any new EU strategic approach needs to recognise the lessons from the past and be realistic about what can be achieved. With relatively limited budgetary resources at EU level, the EU will need to establish the following principles for a new EU strategy.

- *Focus on a limited number of key priorities* that collectively promote accelerated innovation, structural transformation and inclusive and environmentally sustainable growth.

- *Encourage more effective and efficient governance* to ensure institutional coordination, and integration horizontally across the policy domains at EU, Member State and regional levels, and vertically between EU, national and regional levels.

- *Promote structural reforms and investment in institutional capacity* to optimise the conditions for reform and investment, particularly in the regulation of labour markets and other areas;

- *Ensure territorial and social inclusion,* by taking account of territorial differences in the formulation and implementation of policies.

The critical requirement is a coherent, consistent and mutually enforcing policy framework. Sectoral policies cannot deliver on a new EU agenda without integrated territorial policy packages. Equally, integrated territorial policy approaches cannot deliver prosperity and inclusive growth in the regions without well-designed sectoral and structural policies and reforms.

Focus and coherence: improving the effectiveness of direct EU spending

The first component of the EU policy response is through directly managed interventions (Heading 1a). **The EU budget has a crucial role in delivering well-targeted interventions** in the following areas:

- *investment in EU-wide infrastructure***,** where intervention is justified on the basis of economies of scale, support for coordinating or mobilising national action or completion of 'missing links';
- *pan-European cooperation, networking and EU-wide mobility* schemes facilitating collaboration and engagement through, for example, joint research and knowledge exchange; and
- *common policy challenges* requiring coordinated EU-level action and pooling of financing, including policies reacting to migration, defence, climate change and other threats.

Intervention in these areas has grown over the past two decades, with increasing direct spending on infrastructure, research and innovation, SME competitiveness and investment projects. These programmes have seen strong take-up, in particular under Horizon 2020 and CEF, and are regarded as generating important added value and contributions to EU targets.

However, from the perspective of the structural transformation agenda, research and evaluation evidence indicates that several improvements are required. First, these programmes need a coherent performance framework to enable a systematic and comparable assessment of progress and strategic achievements across policy areas. Second, the additionality of programme spending is sometimes unclear. Justifications for future spending need to be based more clearly on evidence. Third, there are important inter-relationships between spending on infrastructure, SME competitiveness, research and other objectives, but the coherence of policies and instruments needs to be given a higher political priority. Lastly, all EU spending needs to take account of the territorial dimension.

Given the important role of directly managed EU policies in delivering targeted interventions, a priority for post-2020 is that they are integrated into a strategic framework for structural change, ensuring more coherence with each other, with other EU budget headings and with Member State policies.

More effective economic governance and structural reforms

The second component of a post-2020 EU policy framework is economic governance. For the EU to respond actively to external and internal challenges requires new goals for all European policies (and their delivery). It also requires the **further development of the European economic governance system** to enable:

- effective *cooperation at international scale* to deal with globalisation challenges including their territorial effects (through global agreements on trade and multilateral contracts);
- effective *improvement of macroeconomic conditions* in which EU firms and citizens operate in all territories (through strengthening further Economic and Monetary Union);

- *improved quality in the design and delivery of EU and national policies* for growth and structural transformation (including through structural reforms); and

- greater *empowerment of regional and local actors* to facilitate the comprehensive realisation of a structural transformation strategy on the ground.

These functions cannot be performed within a single hierarchical system of institutions. It requires a multilevel governance system, comprising:

- an *improved economic governance system* at EU level, with an integrated framework for coordinating economic policies, including their territorial impact;

- a *system for coordinating the delivery of a structural transformation strategy* – in the form of a framework for EU, national and other polices relevant for structural transformation; and

- *ecosystems for structural transformations and cohesion* across all levels of government involved in developing and implementing structural transformation.

This will require **redefinition and re-focusing of the European Semester process**, headed by a *new EU Strategy* including a common European agenda for structural transformation setting out a joint vision, objectives and activities. This would be translated into medium-term *Strategic Country Reports* prepared by the Commission assessing development needs and challenges, as a basis for National Reform Programmes (NRPs) prepared by Member States showing the structural reforms and measures required to achieve EU strategic goals. Crucially, the NRPs would provide a framework for all EU policies, rationalising the requirement for programming by Member States. Lastly, *Country-Specific Recommendations* would also become more multiannual and strategic, focusing on the strategic reforms needed to achieve EU Strategy goals, including those related to territorial matters and the structural transformation agenda, and involving a mix of incentives and conditionalities.

Ensuring territorial and socially inclusive growth: a more effective Cohesion Policy

In concert with more focused and coherent spending by the EU in areas such as research, SME competitiveness and infrastructure, and stronger economic governance and structural reforms, the EU needs powerful instruments to ensure that growth is territorially and socially inclusive.

Cohesion Policy has played a role in supporting regions in structural adaptation paths, latterly fostering a shift from a productive model based on price to one based on innovation. It has done so by supporting investments in human capital, regional specialisation, diversification of regional economies, innovation, competitiveness of local productive systems, and internationalisation. Progress was initially slow; many regions implemented strategies to support structural adjustment, but yielded limited results or focused more on safeguarding jobs. Increasingly, strategies have focused on innovation and internationalisation, but success has depended on the quality of the local institutions.

In this context, the 2006 and 2013 reforms to Cohesion Policy are significant, in transforming key aspects of the policy, relating to:

- objectives, through thematic priorities aligned first with the Lisbon Strategy, latterly with Europe 2020;

- strategic coherence, through a common strategic and regulatory framework for all ESI Funds;
- a greater performance focus through results-orientated specification of objectives and outcomes, ex ante conditionalities and a performance reserve;
- greater potential leverage of spending through more use of financial instruments; and
- encouragement for integrated, localised, bottom-up development.

Importantly, a strategic approach to structural change has been encouraged through an obligation for each country/region to develop 'smart specialisation strategies' based on a twin-track strategy of consolidating existing traditional sectoral strengths through investment in key 'enabling technologies', while supporting related diversification into new innovative industries or activities.

In assessing the post-2020 EU response to structural change, Cohesion Policy needs to heed several important lessons. First**, strategies for structural change should reflect the comparative advantage of regions**, which may well lie in traditional, low-tech rather than high-tech, innovative sectors. Policies and strategies need to be designed with realism about the long-term timescale required for structural change; shifts in specialisation may take decades to achieve and critical mass is important.

Second, bold policies for structural transformation shifts need to be accompanied by equally **bold social measures, capable of facilitating accelerated changes to education and skills**, and counteracting the transitional social effects of the job losses in traditional industries. Synergies between different ESI Funds (ESF and ERDF, but also EAFRD and EMFF), and social and welfare policies are paramount.

Third, **the effectiveness of territorial policies for structural transformation depends on the quality of government and national and local institutions**. They are important for setting the institutional context, for effective policy design and to facilitate the emergence of strategic vision, social entrepreneurship and collective risk-taking. Initial experience with ex ante conditionalities in 2014-20 has been positive in many countries, and there is a case for strengthening conditionalities related to the quality of government and administrative capacity as well as to strengthen support for capacity building.

Fourth, the complexity of implementation of Cohesion Policy is a major constraint. The administrative time and cost of implementing ESIF programmes have increased significantly, primarily due to the resources required for intensified financial management and control procedures. There is increasing recognition of **the need for a fundamental change to the management system for Cohesion Policy** that recognises differences in institutional structures and capacities across Member States.

Lastly, recent research underscores that the results of Cohesion Policy depend on factors external to Cohesion Policy. **The policy needs to be part of a comprehensive governance system with a clear territorial dimension that promotes pro-growth and productivity-increasing policies,** with attention to the territorial differentiation of development implemented by national and sub-national authorities, and more coordination at European level of macroeconomic factors that are out of reach of individual Member States.

Conclusions

The EU model of integration has delivered unmatched long-term growth and economic and social convergence. However, the model is threatened by the effects of the financial and economic crises on employment opportunities and living standards. The EU needs both **to accelerate sustainable growth and ensure that all parts of the EU are able to exploit the growing globalisation of trade and technological change**. Structural transformation should be central to renewed policy priorities, requiring a new balance between policies for 'competitiveness' and 'cohesion'.

Recommendations

The EU requires **a new strategy for sustainable growth and structural transformation**, setting out a common policy vision and a coherent framework for all EU policies - through regulatory reform, directly managed and territorial policies – with a collective focus on improving the ecosystems for structural change at different levels.

Effective structural transformation therefore requires **a commitment by governments at different levels to work together** to facilitate concerted and integrated action, combining a mix of policy inputs, to meet different territorial development needs and challenges.

A **reformed economic governance system** should provide an integrated framework for economic policy coordination, aiming at improving the conditions for structural transformation across all levels of government and take account of territorial differences within and between Member States.

Structural reforms require a mix of incentives and conditionalities to ensure that they are carried out.

A new EU strategy should be underpinned by a **performance and accountability framework** covering all areas of EU spending.

Structural transformation requires all levels of government to contribute to common EU objectives, and should involve the **greater empowerment of regional and local authorities**

Further reform of Cohesion Policy should maintain the key principles of the 2013 regulatory changes but involve **specific changes to maximise opportunities to influence structural transformation**, including: better coordination of funding instruments; recognition of the different territorial opportunities and challenges for frontier, intermediate and lagging regions; more emphasis on human capital; strengthened conditionalities; investment in capacity-building; and a significantly rationalised and differentiated implementation system.

Finally, **the pursuit of economic and social cohesion is a collective task of both national and EU policies**. Member States have the primary responsibility for the conduct and coordination of their economic policies to meet cohesion objectives. The same obligation applies to all EU policies and actions, including the implementation of the internal market. The agenda for 'Cohesion 4.0' is thus a much wider task than for Cohesion Policy alone. It requires Member States to demonstrate that they have implemented structural reforms to support growth and cohesion before uploading domestic interests to the European level. It also underscores the necessity of an integrated approach to structural transformation and cohesion under all EU regulatory and investment policies.

1. INTRODUCTION

The White Paper on the Future of Europe makes a powerful statement about the current precarious state of European integration and its uncertain future. The continuing effects of the financial, economic and migration crises are associated with reduced confidence and trust in democratic institutions and politicians, and a rise in populism, threatening the unity of the EU. A fundamental cause is the highly unequal impact of globalisation and technological change on different parts of the EU. Many regions have been able to exploit the opportunities of structural change, but equally there are regions and social groups that have been left behind. The challenge for the EU is not only to accelerate growth but also to resume convergence to ensure that all parts of the EU are able to exploit the growing globalisation of trade and technological change. **Growth needs to be sustainable, cohesive and inclusive**: in other words, deliver prosperity for the whole of Europe.

In the context of the debate on the future of the EU, and specifically the EU policy and budgetary priorities after 2020, this paper makes the case for a new approach to structural transformation, growth and cohesion in the EU. Drawing on the latest research by international bodies (World Bank, OECD, EU) and academic experts, the paper explores both the opportunities and challenges from globalisation and technological change, the widening differences in productivity between leading and lagging regions, and the need for a new EU policy framework capable of delivering inclusive growth.

1.1 Political polarisation and inequality

According to the latest Eurobarometer data, **only about a third of EU citizens have trust in the EU**, a figure that has changed little over the past six years (European Commission 2016a), but which has dropped significantly since 2008 when more than 50 percent of citizens expressed trust in EU institutions There has also been an unprecedented upsurge in support for Eurosceptic parties across the EU, most clearly in the 2014 European Parliament elections (Treib 2014).

While the factors at play are complex and contested, it is clear that **the eurozone and migration crises have politicised the EU in public debates, diminished confidence in EU institutions** and boosted support for Eurosceptic political parties (Hobolt and de Vries 2016, Hobolt and Tilley 2016, Hooghe and Marks 2017). Key factors explaining defection from mainstream pro-European to Eurosceptic parties are the degree to which individuals were negatively affected by the crisis and their discontent with the EU's response to the crisis (Hobolt and de Vries 2016). Identity politics associated with community, cohesion and solidarity have been at the core of Eurosceptic party narratives and electoral gains (Börzel and Risse 2017). The principle of EU solidarity across Member States has been challenged by the euro crisis and the politics surrounding bailouts, while the migration/refugee crisis has led to reactions against the core principle of freedom of movement and the liberal foundations of the European project in favour of exclusionary and nationalist agendas.

An important factor is perceptions of an unequal Europe. Eurobarometer survey research indicates that just over half of citizens surveyed do not agree that everyone in their country has a chance to succeed in life. In the view of citizens, social equality, solidarity and comparable living standards across the EU are regarded as most important for the future of the EU (European Commission 2016a, 2016d). Various studies have shown that economic factors impact on political support for the EU. Poor economic performance at the national level (in terms of GDP/GNI and unemployment change) or negative

subjective perceptions among citizens about their economic future reduce political support for the EU (Hooghe and Marks 2004, Henjak et al. 2012, Chalmers and Dellmuth 2015).

Initial research on the patterns of voting behaviour in the United Kingdom's EU referendum in June 2016 found that inequality, associated with the negative effects of integration and globalisation, was one explanatory factor; those areas with lower median wages, low levels of skills, lack of opportunities and higher levels of poverty were significantly more likely to vote Leave (Bell and Machin 2016, Darvas and Wolff 2016, Goodwin and Heath 2016). Evidence from other EU countries shows that fears about globalisation influences are greatest among less educated, less affluent and older people, who have a greater propensity to support populist and anti-EU parties (De Vries and Hoffman 2016). Income inequality in the EU has also been found to undermine support for democracy and trust in politicians and parliaments (Schäfer 2012). A recent study, using European Election Study data from 2009, shows that citizens who have greater levels of concern about inequality and favour more redistribution tend to have lower political support for the EU as it is now, but are relatively more favourable to further European integration (Simpson and Loveless 2016).

EU policymakers increasingly recognise that **growth and integration have failed to give sufficient attention to solidarity and cohesion** (Buti and Pichelman 2017):

> *"While the deepening globalisation and integration process has generated overall income gain… [it has created] …winners (take it all) and losers in an age of massive transformation…In this context, EU Institutional settings and policies have been increasingly perceived as pro-market biased, paying little attention if any to its social impact, and undermining cohesion, solidarity, autonomy and governability at the national, regional and local level."*

1.2 New opportunities and challenges

The question facing the EU is how to respond. The long-term convergence of structurally weaker countries and regions with the rest of the EU was exacerbated by the financial and economic crises, with rising disparities within and between countries (European Commission 2014a). All Member States were affected by the crisis, but with strong national and regional variation in the scale and timing of impact, and the pace and degree of recovery (Crescenzi et al. 2016). In 11 EU Member States, GDP in 2015 remained lower than in 2007 (at constant prices). Although most EU countries have seen positive economic growth since at least 2014, rates of growth and job creation remain muted (European Commission 2016c). Among the less-developed regions, different patterns can be discerned between low-growth and low-income regions, linked to different trajectories of regional economic restructuring and the quality of governance (European Commission 2017a). Low-income regions improved their productivity and growth even during the crisis, while low-growth regions did not become more productive and lost pre-2008 employment gains. Macroeconomic imbalances played a role in this latter group in exacerbating the effects of the crisis.

Further, there is the prospect of massive structural transformation over the coming decades that will create major new opportunities for the EU but also huge challenges in providing EU citizens with secure and well-paid employment. Different parts of the EU are better placed than others to respond: the productivity gap between the frontier regions and lagging regions is widening.

Policy responses need to recognise that current and future opportunities and challenges for economic growth and development in the EU are spatially highly uneven. **The ability of the EU to exploit opportunities and overcome challenges is place-specific**, contingent on factors such as historical legacies, resources and institutions. Regional and other spatial policies are sometimes judged to be less optimal than spatially blind policy responses. Yet, no policy is spatially blind; any form of government intervention has spatial consequences, and many sectoral policies implicitly or explicitly favour growth areas.

The EU's main instrument for responding to uneven development is Cohesion Policy, which has an increasingly strong track record of performance. During the 1990s, critics rightly highlighted ineffective EU spending, typified by examples of investment in underused infrastructure. Such criticisms were valid in the 1990s, but successive reforms during the 2000s (most notably in 2013) have mobilised a major shift in Cohesion Policy spending towards Europe 2020 priorities and a focus on performance, with increasingly convincing research evidence on the effectiveness of the policy (Bachtler et al. 2017, Davies 2017). During the economic crisis, the policy also demonstrated its value as a stabilising and spatially targeted response to economic shocks; it sustained public investment in the face of enforced national austerity policies and fiscal retrenchment (McGregor et al. 2014).

Looking forward, in line with the scenarios outlined in the White Paper on the Future of Europe, there are different options for the future of Cohesion Policy (MT PRES 2017): sustain and enhance (increased budget and new momentum); maintain and support (less funding but little change); prioritise and improve (focused support and spatial coverage); refresh and restart (radical change in direction and architecture); and reduction of priorities (sectoral refocus).

In the context of these scenarios, this paper makes the case for a substantial 'refresh' and 'enhancement' of the EU's approach to Cohesion Policy but set within a broader EU strategy towards growth and cohesion that responds to the opportunities and challenges of structural transformation – in effect a 'Cohesion Policy 4.0'.[1] If EU integration is to deliver opportunity and prosperity to all EU citizens, including to those left behind in the so-called developed regions of the EU, it needs to re-assess how it meets its Treaty objectives of economic, social and territorial cohesion. This needs to be considered in the wider context of structural transformation. Due to the next production revolution, the EU will need to restructure its policy approach. Member States and EU institutions need to work together to integrate both growth and cohesion objectives into EU, national, regional and local policies in a consistent, efficient and targeted fashion.

1.3 Future EU policies for structural transformation and cohesion

The following paper begins by outlining the challenge of economic change for Europe, in terms of both the implications of continuing globalisation and technological change and the opportunities for the EU from the renewal of economic competitiveness (Section 2) - requiring important changes to the current policy and institutional approach.

The paper argues that renewing the successful European economic growth model depends on its ability to reduce the increasing productivity gap between 'frontier regions' and other parts of the EU, in particular the rate at which the diffusion of innovation and structural change takes place (Section 3).

[1] The proposals in this paper foresee a 'fourth generation Cohesion Policy' that follows on from the first generation (1975-1988), second generation (1988-2006) and third generation (2007-2020).

Importantly, **inequalities in economic growth and development across the EU are now accounted for by differences *within* rather than *between* countries**. With many frontier regions being capital cities or other major urban areas, there is a real danger of increasing economic and social disconnection between the flourishing 'motors' of EU growth and the remainder of the EU. That said, frontier regions are also faced with number of challenges, some of which should also be addressed within the EU policy framework.

The challenge for EU and Member State policymakers is to **develop or adapt policy frameworks and strategies that will stimulate growth, but in a manner that also ensures greater inclusiveness,** especially in access to employment opportunities and capacity for entrepreneurship. This demands a more granular approach to structural policy, which is tailored better to the specific conditions of the different types of cities and regions across the EU and with greater consideration of governance requirements.

The starting point for a European policy response is that existing strategies – from Lisbon/Gothenburg to Europe 2020 – have been only partially successful, with limited results in relation to the scale of the challenge (Section 5). Notwithstanding certain achievements, strategies have been over-ambitious in relation to the resources available, the deficits in governance (especially on coherence and the coordination of policies) and the performance of interventions. On the one hand, those policy levers that are directly managed by the EU are insufficiently discriminating towards the different development situations and institutional contexts in different parts of the EU; and there remain important questions about their additionality and effectiveness. On the other hand, the main EU policy that is regionally discriminatory – Cohesion Policy – is demonstrating evidence of increasing effectiveness, but its performance is constrained by the quality of government, especially the need for structural reforms and deficits in institutional and administrative capacity (Charron et al. 2014, Surubaru 2017). Both sets of EU policies need better coordination with Member State policies with a more effective system of economic governance (Section 6).

Looking forward, if the EU is to exploit the potential of the new production revolution in ways that benefit all EU citizens, it needs **a structural transformation agenda that recognises more consistently - across all relevant policies - the different potentials of regions in Europe and includes a commitment to sustainable, inclusive and cohesive growth** (Section 7).

2. THE CHALLENGE OF ECONOMIC CHANGE FOR EUROPE

2.1 Global transformations – the fourth production revolution

The past three decades have been characterised by **trade liberalisation, the rise of global value chains** (Gereffi and Fernandes-Stark 2011) and **global production networks** (Coe and Yeung 2015, Dicken 2014). Emerging countries from across the globe have been integrated into the world economy (OECD 2013a) shifting the centre of global economic gravity towards Southeast Asia (Kharas 2010, Quah 2011, Toth and Nagy 2016). Labour cost advantages, in particular, attracted investment and process-oriented production to emerging countries, stimulating unprecedented growth especially in China and India. The cumulative causation of rapidly growing market demand coupled with large populations generated a strong pull effect, in turn attracting additional production activities (OECD 2013a).

This process has allowed some emerging economies gradually to increase the sophistication of their export base (Schott 2008, IMF 2011) and to move from parts-assemblers to parts-providers (OECD, 2013a). It is increasingly evident that the more advanced emerging economies are also becoming serious players in the knowledge-intensive segments of production processes, triggering concerns in the developed world for the consequences of their economies, especially with respect to future employment.

China has been the major focus. Its share of high-quality and high-price exports has increased significantly; between 2005 and 2011, full-package manufacturing as a share of total export trade rose from 42 to 70 percent. China is already a runner-up after the US in terms of investment in R&D, and its share of world exports in commercial knowledge-intensive services has reached ten percent (OECD 2013c). More broadly, it has been estimated that Asia's share (excluding Japan) of the world middle class could rise from ten percent in 2000 to 40 percent by 2040 (Kharas 2010), with a billion new middle-class consumers forecast to emerge in 12 Asian countries over the next decade (Ogilvy and Mather 2016).

These trends are frequently represented as a serious threat for the developed world and the EU's attractiveness as a production location, because of fears of **import competition** and **off-shoring of the production of goods and services.** In the empirical literature China's import penetration, especially after its entry into the WTO in 2001, has been shown to be associated with employment losses in manufacturing and routine jobs in the developed economies, both in the US (Autor et al, 2013) and in Europe (Balsvik et al, 2013, Donoso et al, 2014, Dauth et al, 2014, Keller and Utar 2016, Breemersch et al. 2016).

A further dimension of perceived risks is **technological change** and **digital transformation due to automation** processes in particular. Indeed, **the latter has been termed the fourth production revolution** (De Propris /WEF 2016)**.**

Research has highlighted two important implications. First, technological change is said potentially to involve **jobless growth,** making unemployment and underemployment the most important business risk globally (De Propris/WEF 2017). It has been estimated that "as many as 45 percent of the activities individuals are paid to perform" are open to automation according to McKinsey (Chui et al. 2015). This conclusion is supported by other studies (Frey and Osborne 2013, PwC 2017), though not all have such

dramatic conclusions (e.g. Arntz et al. 2016).[2] Future automation will not only affect routine and codifiable activities, but also those that require tacit knowledge and experience, i.e. those parts of activities where developed countries have a comparative advantage (Rifkin 2014). According to the OECD (2015a), "about 60 per cent of occupations could have 30 per cent or more of their constituent activities automated". This would dramatically transform the vast majority of occupations, possibly leading either to jobless growth and-/-or a further strengthening of job polarisation in the labour markets of developed economies (OECD 2015a) and potentially further aggravating political polarisation.

The likely impact of these scenarios is still speculative. Analysis by OECD (2015b) found no evidence that the application of ICT has increased technological unemployment overall, while Breemersch et al. (2016) found that changes in employment (both in manufacturing and non-manufacturing industries) are only weakly correlated with technological change in the case of 18 European countries between 1996 and 2007. Importantly, however, the employment gains and losses from technological change vary considerably across the labour market. The adoption of ICT and R&D, related process innovation are associated with polarisation of high-paid jobs within individual manufacturing industries (Breemersch et al.2016). There is also evidence of technology affecting the polarisation of low-paid employment in Western and Northern European countries.

The second, complementary, perceived threat is EU-specific: **concerns that the EU is falling behind technologically**, with potentially devastating welfare effects on the European Social Model, especially with 'winner takes all' types of markets becoming more important, i.e. markets where market leaders capture significant and increasing market shares (Andrews et al. 2016). Although Europe generally has a strong position with respect to advances in technology, value added, productivity, profitability and profits, there are important questions about its technological leadership.

The EU continues to lag behind the US in terms of innovation performance. On the input side, R&D spending has stagnated at two percent of GDP since 2000, far below the target rate of three percent called for under the Lisbon and then Europe 2020 strategies (see Section 0), and below the 2.8 percent recorded in the US (Aiginger 2016). Meanwhile, China is steadily advancing towards the European R&D intensity level (ibid). Further, frequently discussed EU-US gaps relate to university rankings and venture capital financing of start-ups. At the level of outcomes or industrial performance, a key EU deficit versus the US consists of the lack of so-called 'yollies', or young leading innovators in knowledge-intensive sectors that grow to become large, R&D intensive firms (Veugelers and Cincera 2010, Cincera and Veugelers 2014). There are few firms in the EU that can be compared with the likes of Apple, Google, Facebook and Tesla. Indeed, in ICT there is no European company among the global top 20 companies (Roland Berger 2015). The OECD (2017a) has found that the EU is lagging behind countries like the US, Japan and even Korea and China with regard to the share of value-added in ICT goods and services in total manufacturing exports, the share of ICT-related patents in total patents or in ICT investment as a share of GDP[3]. The rising role of the (technology) platform economy further underlines the importance of achieving substantial European participation in this new 'mega trend' (OECD 2016a).

[2] Frey and Osborne's (2013) work was re-examined by Arntz, Gregory and Zierahn (OECD, 2016). Using a new OECD dataset, they suggested that ten percent of jobs were under a 'high risk' (i.e. 70 percent probability) of computerisation.

[3] France represents a positive exception as far as ICT investment is concerned as it is almost on a par with Japan and the US, with around three percent of ICT related investments in its GDP, and even exhibiting an increasing investment trend between 2004 and 2014. Germany, on the other hand, is still lagging behind significantly at below two percent and with a downward trend (OECD 2017a).

ICT is not the only example of insufficient European leadership in the technology field. While Europe is clearly maintaining a competitive global position in a number of high value-added products - especially in higher-technology sectors - there is a widening **gap of industrial dynamics within Europe**, with a lack of investment in industrial modernisation, and the age of installed process technology in Europe is increasing rather than decreasing (Kroll et al. 2016). Further, the obsolescence of production facilities seems to be concentrated in certain EU Member States, such as France and the United Kingdom, compared to Germany or Sweden (SYMOP et al. 2014, Kroll et al. 2016). **The decline in innovative performance has also been recognised as an important issue at the regional level** (European Commission 2016b), explored further in the subsequent sections of this paper.

2.2 An opportunity for renewal

While the challenges of globalisation and technological change are often presented as daunting, it is important to stress that there are major opportunities that the EU is well-placed to exploit - if the EU is able to respond adequately to the challenges. In fact, the OECD considers that **the next production revolution has the potential "to restore the competitiveness" of developed economies** (OECD 2017b). They argue that this is where the future policy focus should be directed: an embrace of global transformations as an opportunity to empower people, regions and communities to engage with and influence change.

The first factor creating a more favourable global context is the **erosion of the cost advantages of at least some of the major emerging economies**. According to the Boston Consulting Group (2014), the manufacturing costs of countries like China and Thailand are already almost on a par with Poland and the Czech Republic and only some 20 percent behind Germany or Sweden. In countries such as China, average hourly wage increases of 15-20 percent in recent years (while being a benefit of globalisation for Chinese workers) have eroded the country's cost advantage in labour-intensive activities (OECD 2013).

While there are many other emerging economies in Asia and Africa that still have low-cost advantages and are trying to replicate the Chinese model, it is still the case that **the pressure on the developed economies will not be as acute as in the last 15 years.** The reduced off-shoring pressure is likely to be further reduced due to the discovery of hidden costs (Porter and Rivkin, 2012), rising uncertainties and the need to ensure supply chain resilience (e.g. in relation to conflicts or natural disasters). This is combined with the realisation by multinationals that interrupted / disrupted production chains are costly, especially with the growing need for operational flexibility, efficient cooperation and coordination across different production stages, and the desire to ensure quality and reduce lead times so as to respond more flexibly to demand (OECD 2013, De Backer et al. 2016, Bailey and De Propris, 2014). Also, the declining share of labour in overall costs means that labour costs are a less critical factor in location decisions as a consequence of the automation processes of the fourth industrial revolution (OECD 2013).

These projected trends do not guarantee renewed competitiveness of developed economies, for which the evidence is limited and mixed. There is, for example, no consensus on the importance of reshoring (De Backer et al. 2016, Bailey and De Propris 2014). However, evidence does suggest that companies are faced with a changing cost calculus with regard to the optimal location of production. Companies will need to engage in different processes, collectively termed 'reshoring' (McKinsey 2014, Bailey and

De Propris 2014)[4]. Ellram et al. (2013) argue that firms are no longer looking at location 'costs in isolation' but are instead looking at 'total costs'. Gray et al (2013) also support the idea that reshoring is fundamentally about location. They note that firms' outsourcing probably took place faster than expected as firms followed a herd instinct (a 'bandwagon effect') and internationalised their production, which, in some cases, led them to miscalculate the actual cost advantage of offshoring.

OECD work on future scenarios of production and trade within global value chains by 2030 concluded that "rising wage costs in (some) emerging economies and the growing digitalisation of production … are expected to restore the competitiveness of developed economies and discourage further offshoring to emerging economies" (OECD 2017b: 2). They characterise the **digitalisation of production to be "the biggest game-changer,** reversing the importance and length of GVCs [global value chains] and reorienting global production and trade back towards OECD economies" (ibid).

A critical factor determining whether and to what extent a rebalancing takes place in the fourth production revolution is the ability of the developed economies to effect the necessary structural transformation (OECD, 2017e). The key characteristics of future 'Industry 4.0' production are complex, rapidly responsive, creative, customised, digital, smart and intelligent, sustainable systems of production, with goods and services bundled together (OECD 2015c, De Propris/WEF 2016). Critically, production is also expected to become more distributed and localised, i.e. to get closer to the end markets (ibid.), which clearly represents a major opportunity not just for the core areas of the EU, but for regions and communities across the EU.

Making Europe attractive as a production and investment site for these forms of production, and thereby reigniting growth, will require profound and broad engagement by policymakers, business and wider society. Roland Berger (2014:44) estimate that European economies "are poised to embark on a radical structural transition" which over the next 15 years will require a total investment of €1,350 billion, on the basis of which Europe could see its manufacturing industry add gross value worth €1.25 trillion. Equally, without sufficient structural transformation, it could suffer a loss of €605 billion in foregone value added.

This growth will not necessarily be inclusive with regard to employment. Research suggests that the employment impact may be limited due to automation (De Backer et al. 2016, OECD 2017b, Bailey and De Propris 2014). Productivity growth and new technologies will create new and complementary jobs (Autor 2015, Moretti 2010, Goos et al. 2015) but require significant and wide-ranging upskilling (OECD, 2017a) and other investment in knowledge-based capital (OECD 2015d, Aiginger 2016). Consequently, **the extent to which future growth is also inclusive depends on Europe's ability to facilitate a faster, more comprehensive, integrated and consistent approach to structural transformation** than it has yet achieved. The next section explores in more detail why a comprehensive, multi-sectoral, multi-policy and even multi-disciplinary and cross-territorial (integrated) approach is essential for structural transformation.

2.3 Structural transformation and the importance of ecosystems

The scale, scope and speed of the challenge of structural transformation indicate the requirement for a fundamentally different policy and institutional approach. Instead of the delivery of policies through (for

[4] The current literature presents a number of concepts, ranging from 'back-shoring' (suggesting the reverse of a previously offshored activity) to 'near-shoring' (suggesting an increased spatial proximity of value chain activities, but not necessarily moved back to the home economy), or more generally 'best-shoring' (suggesting changes in the location of foreign activities) (Colliers International and Corenet Global 2013).

example) aid schemes and projects, an increased focus will need to be placed on developing 'ecosystems' of open, interconnected networks of stakeholders, cooperating to a much greater extent through strategic partnerships. These will be much more dependent on their business environments to source ideas and solutions both locally (e.g. importance of knowledge-based factors such as links to universities or cooperation with technology parks) as well as globally (Roland Berger 2015, OECD 2015d, OECD 2017, Wostner 2017, European Commission 2017a, 2017b).

Three sets of factors support the need for an 'ecosystem approach' to structural transformation. First, **the unprecedented speed of technological, market and social changes translates into a highly uncertain environment for business and government**. Combined with increasing complexities, this means greater risks, especially given research-to-market time delays. Managing this uncertainty and risk requires the pooling of resources and risk-sharing but also the need to work with joint infrastructures and support services, such as involvement in living labs where multinational as well as start-up companies can meet and benefit from each other's advantages (capital and networks for the former and innovative approaches and speed by the latter). Such **support environments, which translate into globally connected (innovative) ecosystems, will unavoidably need to be tailored to specific national, regional or even local contexts**.[5] Indeed, as shown by the European Commission (2017a, 2017b), it is not just that they need to be tailored, but they can only be provided at the regional and local levels, though integrated vertically in the broader policy mix at national and European levels.

A second major factor is that innovation and especially disruptive innovation and creativity require **multidisciplinarity and open models of collaboration** (Chesbrough 2003). As argued by OECD (2016c: 68), the:

> *"pieces of knowledge required come from various actors and activities are rarely available inside a single organisation ... so it is important therefore to support the generation, diffusion and use of many sorts of knowledge and types of collaboration"*.

This not only requires convergence or 'mixing' of different technologies (OECD, 2015c) or industries, and the mixing of different skills where "interdisciplinary thinking is key" (Roland Berger, 2014:12), but also mixing of the four modalities of human behaviour - science, engineering, design and arts (Oxman, 2016). Furthermore, for convergence or mixing to occur, an open and collaborative atmosphere is needed, which, requires established relationships and trust, with the latter being needed even to explore the possibilities of collaboration (Wostner 2017). In turn, this requires well-developed institutions capable of nurturing collaboration and networks both regionally (territorially) and internationally (Amison and Bailey 2014) and in industrial policy terms to bring actors together in a process of knowledge discovery (Rodrik 2009).

Linked to the latter, a third factor is the importance of **proximity with comprehensive and integrated support environments.** It has been shown empirically that proximity, especially to the urban centres, matters for economic growth (Brakman and van Marrewijk 2007, OECD 2014). Proximity to large urban agglomerations seems to enable rural regions to borrow agglomeration effects from the urban areas,

[5] On innovation policy for example, see Veugelers (2015) on 'innovation capacity' and catching up. She argues that this needs a systemic, long-term and dynamic policy mix that takes into account countries' initial strengths and weaknesses and supports the potential of the country for innovation- based development by: providing framework conditions; promoting access to (foreign) technologies; supporting the building of absorptive as well as creative capacities; and by supporting links across innovation agents. Overall, this calls for high-quality institutions involved in the design and implementation of innovation policy (Badinger et al. 2016).

provided that a certain threshold of connectivity and linkages is ensured (Veneri and Ruiz 2013, Ahrend et al. 2014). Such urban-rural linkages can have important catching-up effects given that 80 percent of the rural population within OECD countries live close to cities.

That said, **linkages function *not only* on the regional level, they also operate at the local level** (Duranton and Overman 2005). This applies particularly where there is a co-location of firms, researchers and workers, especially when combined with trust-based institutional structures and also supported by policy, facilitating the generation and transfer of knowledge. In areas such as entrepreneurship, localisation economies decline rapidly over relatively short distances, and multidisciplinarity, new ideas and mixing of technology and skills, by and large, come from actual face-to-face interaction and developed social relations and institutions, further underlining **the need for a territorial policy approach** (Rosenthal and Strange 2003, Storper and Venables 2004, Feldman and Kogler 2010, Rekers and Hansen 2015).

On the policy side, the promotion of environments conducive to innovation in line with the fourth production revolution thus requires the **engagement of multiple policies, in a consistent and coordinated manner**. It is essential that policy-mixes are not just adapted, but also integrated. As shown by Wostner (2017), for regions and countries to advance, a series of conditions need to be simultaneously in place ranging from RTDI and human resource development, to entrepreneurship and infrastructure provision and they need to be provided in line with the longer-term development priorities (as set out, for example, in the smart specialisation strategies) reflecting the comparative advantages and needs of particular territories (Crescenzi et al. 2016). The same messages flow from the literature on advanced manufacturing (Kroll et al. 2016), digitalisation and the next production revolution (Roland Berger 2015, OECD 2017)) as well as on employment and inclusion from regional and local perspectives (OECD 2010, 2011, 2016a, 2016c, 2016e).

Furthermore, given linkages between urban and rural areas, **'policy-mixing' should not just embrace, but systematically encourage partnering among different territories in multi-sectoral, multi-policy and cross-territorial frameworks,** highlighting the importance of an ecosystems approach. Given the significance of comprehensive and integrated support from different policies, the OECD has argued that **policy packages to develop such ecosystems must be delivered through a combination of national, regional and local levels, while being adapted to the needs of different territories** (OECD 2017c).

3. STRUCTURAL TRANSFORMATION AND PRODUCTIVITY CHALLENGES FOR THE EU

The current economic situation in the EU is characterised by **persistently low labour productivity growth**, at below one percent per year.[6] Other major OECD regions, such as Japan or the US, share the same pattern. This is a major concern for governments. Over the long run, productivity is the main driver of income growth, especially in economies affected by ageing and demographic decline.[7] In the past, economic crises usually reignited productivity through a cleansing effect, which deleveraged the economy towards high-productivity sectors. The effects of the 2008 crisis seem subdued in this respect.

Productivity growth is at the centre of the analysis because it is the key economic indicator of innovation, and **it is only through increasing total factor productivity growth that a real increase in wellbeing, as well as the capacity to address other challenges, can be sustained** (Jorgenson et al. 2014). That said, while productivity growth is the key factor deserving attention, GDP per capita growth rates have to be as high as the increase in labour productivity to stabilise employment (Aiginger 2016), which is also an EU policy priority (European Commission 2017).

In consequence, governments are looking for new options to stimulate the growth of EU economies, but in a manner that ensures a certain equity in access to opportunities, i.e. inclusion (Aiginger 2016, Badinger et al. 2016). This has generated the need to construct a broader development model. The latter requires **a more granular approach to structural policy, tailored to the specific conditions of different types of cities and regions**.

3.1 Why productivity is not resuming and how this affects inequality

OECD Research (2015e, 2016c) suggests that the **main source of the productivity slowdown** is not a lower rate of innovation by the most advanced firms, sectors or regions, but rather a slowing of the pace at which innovations spread throughout the economy. In other words, the '**diffusion machine' has broken down** thus merging the question of territorial opportunities and cohesion with the aggregate *growth* agenda, hence the reference to inclusive growth.

At the regional level, the OECD (2016c) has shown that the gap between the regions representing the 'frontier' of GDP per worker (a proxy for productivity levels) in each country and the bottom ten percent of lagging regions increased by 60 percent between 1995 and 2013. For the EU only, the same pattern emerges. On average, the frontier regions have grown by 1.7 percent per year, while both the bottom ten percent and the bottom 75 percent of lagging regions grew by around 1.4 percent a year. The growth gap may be small – on average 0.3 percentage points per year – but has accumulated over a period of 20 years. **As a result, the gap in productivity levels between the frontier and the bottom ten percent increased by 56 percent between 1995 and 2014** (see Figure 1).[8] By 2014, this gap in terms of annual GDP per worker reached around €30,000 in constant prices and PPP. In fact, the gap between

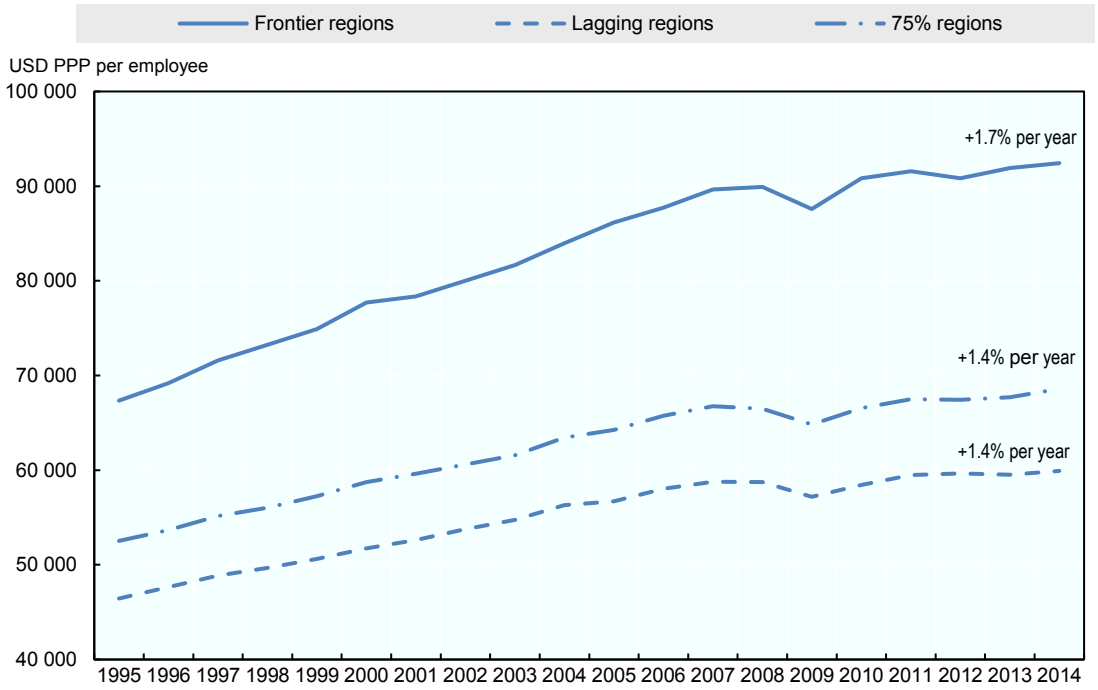
[6] Indeed, a key indicator of the transatlantic gap is productivity performance. For a summary, see Ortega-Argilés et al. (2015). They find that, across manufacturing, high-tech manufacturing and services, US firms are more able to translate their R&D investments into productivity increases (see also Badinger et al. 2016).

[7] As Krugman (1994) notes: "Productivity isn't everything, but in the long run it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker."

[8] Note that without Bulgaria and Romania, which entered the EU only in 2007, the increase would be 45 percent for the 1995-2014 period.

the bottom 75 percent and the top ten percent increased even further (by 61 percent), indicating that "**leaders are breaking away from the pack**" (OECD 2016e). Such a trend was empirically predicted at the turn of the millennium (see Cheshire and Magrini 2000), but unfortunately not addressed comprehensively enough. Put differently, without a change, the bottom 75 percent of regions would have fallen to only about 48 percent of the productivity of the top ten percent by 2050, from the current 35 percent.

Figure 1: The increasing productivity gap between frontier and lagging regions in the EU, 1995-2014



Source: OECD Regional database. Data at the TL2 regional level.

A consequence of this continued regional divergence is that most of the **inequalities across EU countries are now accounted by differences *within* rather than *between* countries**.[9][10] The dispersion of both GDP per worker and GDP per capita across EU countries significantly decreased between 1995 and 2014, but not the differences within the countries (Figure 2). Using the Theil index, the total of inequality in the EU can be decomposed completely into these within and between variations. In 1995, more than two-thirds of the inequality in GDP per capita within the EU28 was due to inequality between countries. By 2015, the within-country inequality contributed as much to total inequality as the between-country inequality. Put differently, the entire decline in inequality in Europe derives from a reduction of inequality across countries, while inequality within countries has actually grown.

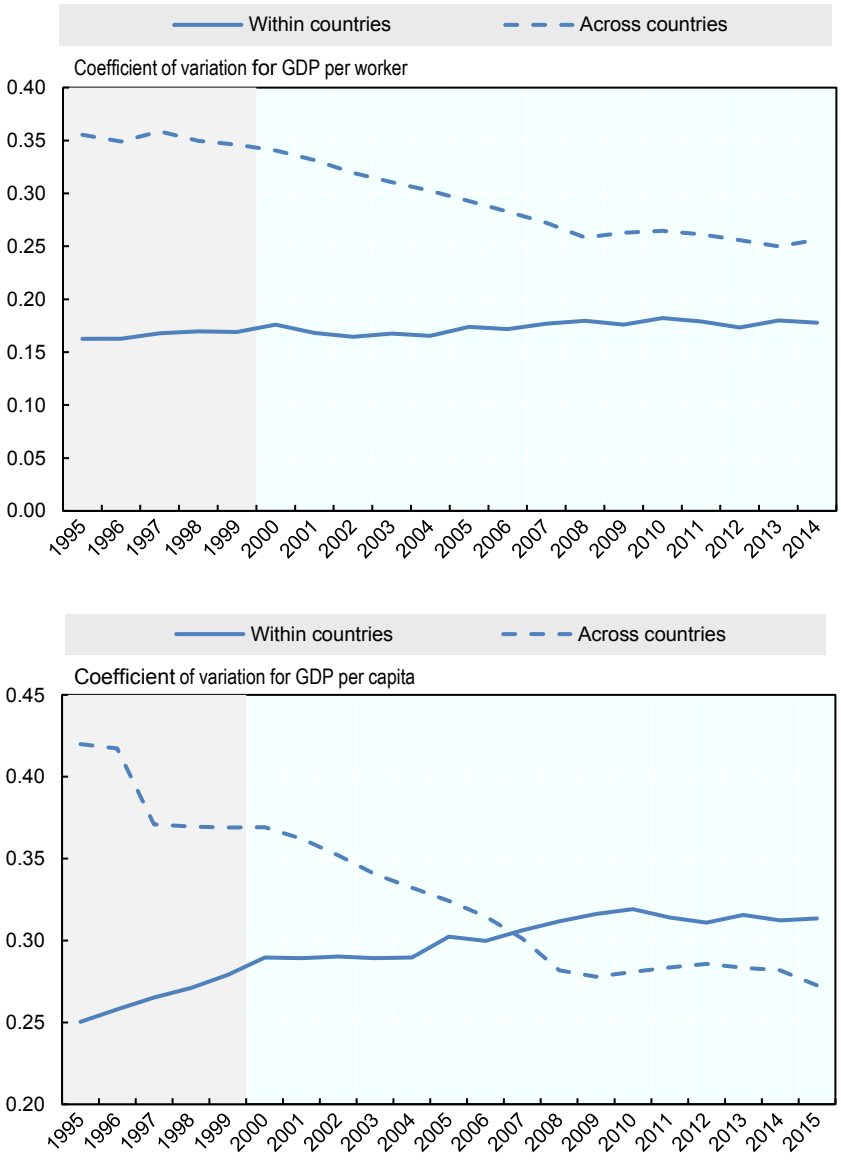
Thus, while EU market and economic integration has been a successful convergence machine for countries, **these gains have not been distributed equally inside each country**. Some regions have

[9] See for example McCann (2016) on how the UK's poor recent productivity performance is largely an urban and regional problem, with London having 'decoupled' itself from the rest of the UK economy. London's economic performance contributes to national averages that disguise weaknesses in other regions. See also Martin et al. (2017) on productivity growth paths of British cities.

[10] However, this is not universal: there are outlier countries where there is internal convergence but not external convergence.

benefited more than others. By focusing on regional GDP per capita gaps, the design of EU Cohesion Policy partly aimed to address these potential sources of divergence within countries, but perhaps the scope of the problem was somewhat underestimated and the mechanisms driving these trends were not fully appreciated. Governments thought they could adapt to globalisation by focusing on sectoral policies - such as labour, education, skills, innovation, etc. - and by compensating the regions losing from the shocks for medium-term adjustment costs. However, **this policy approach cannot fully address the sources of the problem.**

Figure 2: Dispersion of productivity and GDP per capita across EU countries has reduced, but not across regions within countries, 1995-2014

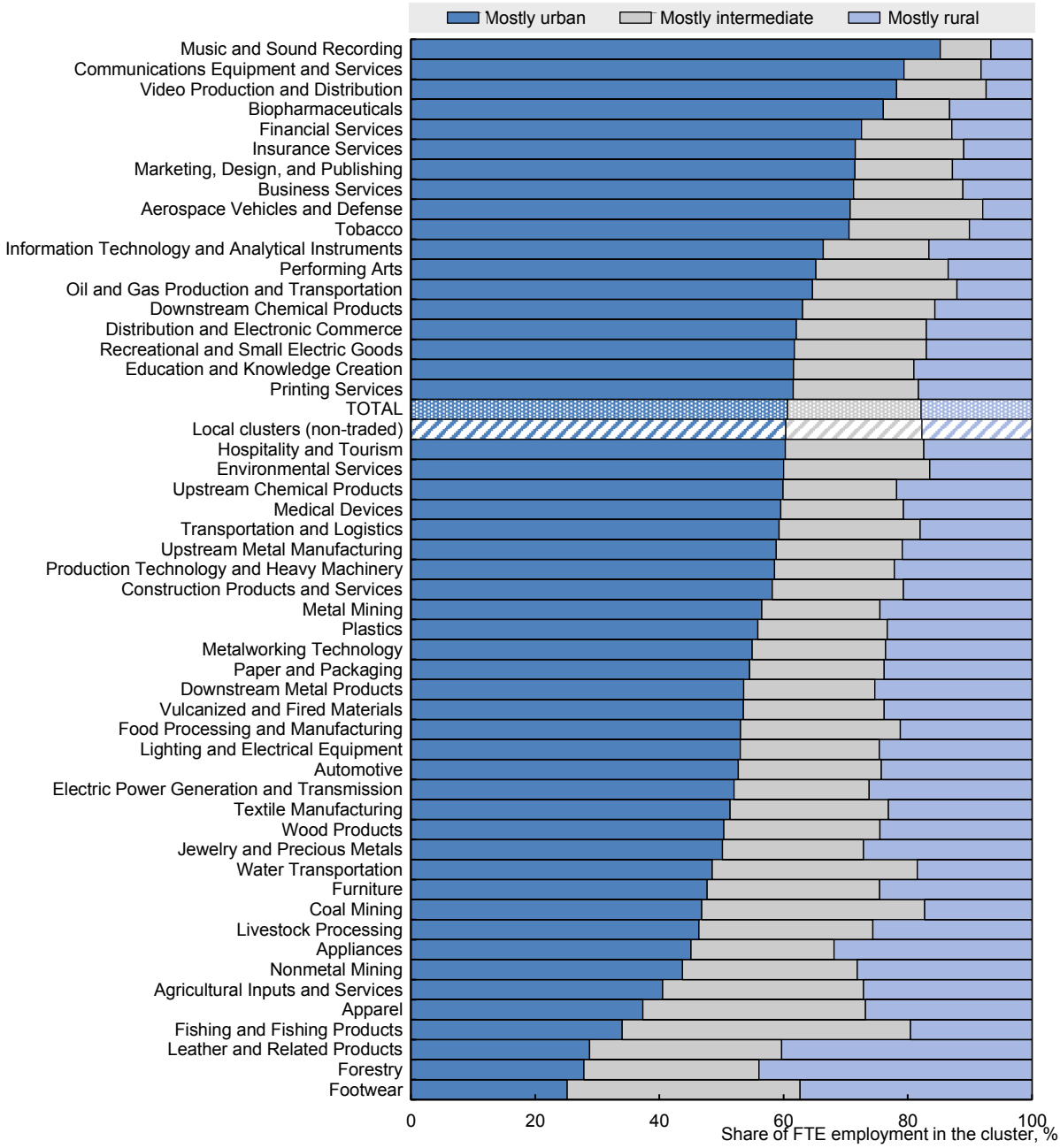


Source: OECD Regional database. Data at TL2 regional level

While the full picture requires further analysis, a likely explanation is as follows. Currently, approximately two-thirds of our economies are in non-tradable sectors, many of which are located in large cities. Figure 3 displays the location of EU clusters by type of region. **Mostly urban areas are characterised by non-traded activities or tradable sectors with high-value added** (e.g. music, video, financial services, biopharma, aerospace, etc.). **By contrast, agriculture and traditional manufacturing** (e.g.

footwear, leather, apparel, textiles, wood products, etc.) **are mainly located in intermediate and rural areas.**

Figure 3: Share of total employment in EU clusters by type of region, 2016



NB: Urban regions are those with at least 70 percent of the population living in Functional Urban Areas or part of the population living in a large metropolitan area of at least 1.5 million people.

Source: Calculations based on OECD Regional Statistics (2017) and data used and provided by Ketels and Protsiv (2016). Data at TL2 regional level.

Those people living in **large cities are therefore benefitting from lower tradable prices and more imported product diversity, while, to some extent, being relatively sheltered from international competition**. By contrast, rural areas and smaller-sized cities can only produce tradeable (or traded) goods because they do not have the density of population to be highly specialised in service sectors. Those territories in which these tradable sectors were concentrated were much more directly hit by

globalisation shocks. Furthermore, the shocks in low-density areas were much more idiosyncratic than in cities. In large cities, there is constant creation and destruction of enterprises and employment. **In low-density areas, the shocks are felt much more directly, and the scope for adjustment is much more limited**. This problem cannot be addressed only by the mobility of people, which is much lower than standard economic models typically assume.[11] The sentiment of being left behind is perhaps one of the sources of the so-called 'geography of discontent'.

The important point is that such tensions at the regional level cannot be addressed by compensatory policies relying on income transfers. **The adaptation to the specific shocks on regional economies generated by globalisation and market integration require differentiated (or place-based) strategies** (Barca 2009).

3.2 How regional disparities may affect EU productivity

Regional disparities have an impact on the aggregate productivity of countries. To explain this point, it is useful to categorise EU regions, for analytical purposes, according to their productivity performance into **frontier** regions, **catching-up** regions, **keeping-pace** regions, and **diverging** regions[12], which usefully represent productivity performance within countries.

It is striking that **the majority of GDP and employment in the EU (around 60-62 percent) were generated in regions which are either keeping pace or diverging** (see Table 1 and Figure 4). Despite their large share in the economy, they only contributed 45 percent of the EU growth during the 2000-14 period. By contrast, the frontier regions, representing only 19 percent of employment, contributed 32 percent of the EU growth rate and accounted for 24 percent of GDP by 2014. The regional productivity of catching-up regions contributed 24 percent of EU economic growth. These regions increased their share of EU GDP to 19 percent, although their share of employment decreased slightly.

Table 1: Contribution of the different regional productivity patterns to aggregate EU GDP and employment growth, 2000-2014

	Contribution to EU GDP growth	Share of EU GDP 2000	Share of EU GDP 2014	Share of EU Employment 2000	Share of EU Employment 2014
Frontier regions	32%	22%	24%	18%	19%
Catching-up regions	24%	18%	19%	23%	22%
Keeping pace regions	30%	40%	38%	38%	39%
Diverging regions	15%	21%	20%	21%	21%

Source: OECD Regional database. Data at TL2 regional level.

[11] Labour mobility has probably even decreased in the aftermath of the crisis, due to negative equity due to the fall of real estate prices or sunk costs associated with the housing crisis.

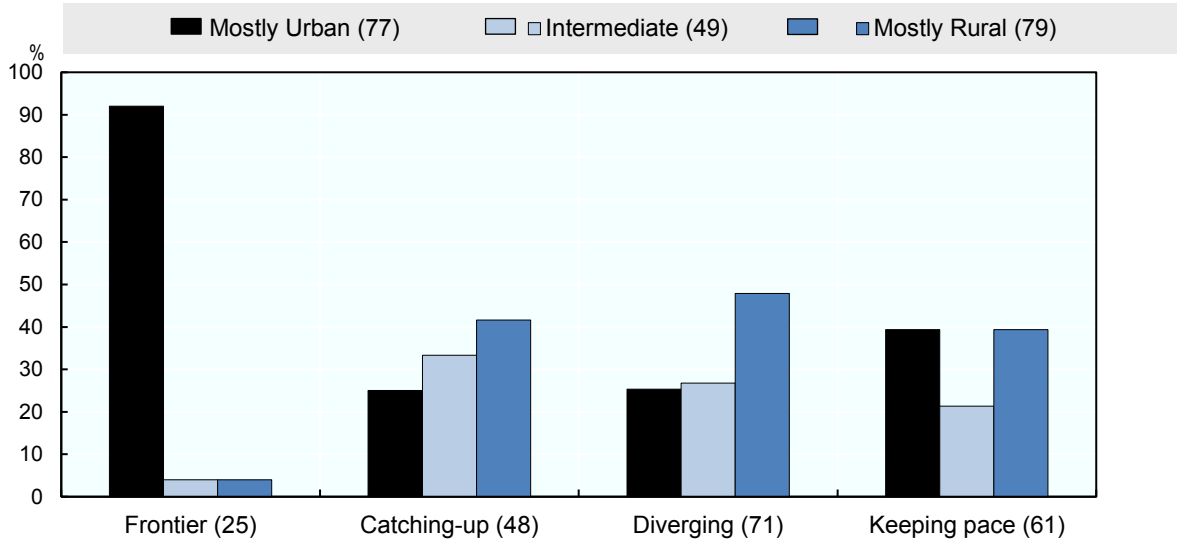
[12] For a description of the method to establish this analytical classification, see OECD (2016c). The regional breakdown is based on the OECD Territorial Level 2 classification, corresponding broadly with the EU NUTS 2 level, as follows: **(i) Frontier regions** have the highest productivity levels *in each country*. In order to avoid the definition depending on special cases, the frontier regions in each country need to cover at least ten percent of the population; **(ii) Catching-up regions** have reduced the productivity-level gap vis-à-vis the frontier regions during the period under consideration; **(iii) Keeping-pace regions** have maintained (±5%) the productivity level gap vis-à-vis frontier regions during the period under consideration; **(iv) Diverging regions** have increased the productivity level gap vis-à-vis frontier regions during the period under consideration

How can these different types of regional productivity dynamics be characterised in terms of their urban vs. rural nature? Figure 4 displays the percentage of regions in each category which can be considered *Mostly urban*, *Intermediate* and *Mostly rural*.[13] Not surprisingly, most of the frontier regions (above 90 percent) are mostly urban. These are the regions with a high density of people and firms, where many high-value products and services are located.

Also predictable is that the majority of the diverging regions (48 percent) are mostly rural. But perhaps less expected is that the highest share of catching-up regions (42 percent) is also mostly rural, in particular among those close to the cities. Conversely, around 25 percent of the diverging regions and 40 percent of the keeping-pace regions are mostly urban.

These figures show that **productivity catching-up and underperformance are not necessarily associated with urban or rural characteristics.** Examples of successes and problems can be found in all types of regions. It also follows from this that an urban or rural policy approach is not necessarily the most appropriate, given that, empirically, the performance of regions is more complex. Policy should focus on the linkages. Hence, as discussed below, a different policy approach and classification should be used if the EU is to deliver on the inclusive growth agenda.

Figure 4: Productivity performance and regional characteristics of EU regions, 2000-2014



Note: In parenthesis, the number of regions in each category.
Source: OECD Regional database. Data at TL2 regional level.

[13] TL2 (NUTS2) regions have been classified as mostly urban (MU), intermediate (IN) or mostly rural (MR), according to the percentage of residents living in Functional Urban Areas (cf. OECD, 2016c). Regions with more than 70 percent of their population living in a FUA, or some percentage of their population living in a large metropolitan area with more than 1.5 million inhabitants, are classified as mostly urban, and those with less than 50 percent are classified as mostly rural.

3.3 Differentiated regional productivity catching-up within EU countries

The impact of regional productivity catching-up on the aggregate productivity of countries can be illustrated by the contribution of each region to the aggregate GDP growth rate, as well as the regional contribution to the growth rate of national productivity.[14]

From this perspective, two types of countries emerge (see Annex 1 for individual country data).

- The first category comprises countries such as Austria, Germany, Czech Republic, Spain, Italy, Poland, Portugal and Romania. In all these cases, frontier regions are typically major contributors to GDP growth because they are large, but they have much smaller or negative contributions to aggregate productivity growth. Most of the productivity performance of these countries is therefore the result of the catching-up of the lagging regions. The frontier regions sustain high productivity levels, but productivity growth dynamics occur elsewhere in the country. **Regional policy favouring the productivity performance of lagging regions acts as an important driver of a country-wide growth strategy**.[15]

- The second category includes countries such as Bulgaria, Denmark, France, United Kingdom, Greece, Hungary, Netherlands, Slovak Republic and Sweden. In these countries, both GDP growth and aggregate productivity growth are dominated by the frontier regions. Expressed differently, most of the growth dynamics are concentrated at the frontier with limited effects from the catching-up process. This strong territorial asymmetry **signals that a growth potential may exist at the regional level that has not yet materialised or could be further mobilised**. This should be the main task for EU and national territorial development strategies, recognising interdependencies among the performance of different territories.

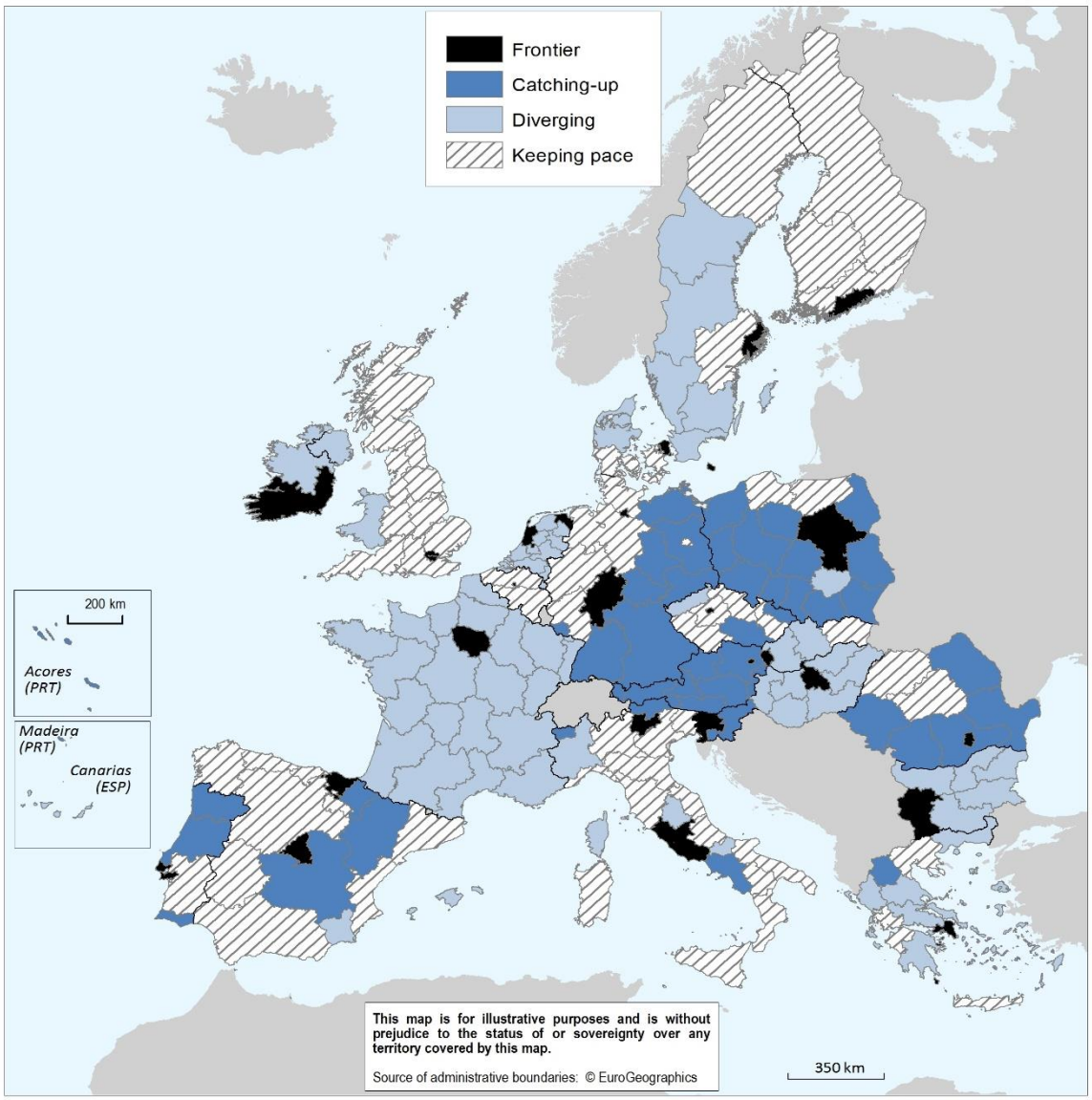
All of the above suggests that there may be untapped potential to increase country-wide productivity by improving the performance of regions. This is the main argument underpinning the case for territorial / regional policy intervention. Indeed, governments should not address regional disparities on the basis of territorial equity objectives alone, but as a **way of addressing the faltering productivity growth of countries as a whole**. Figure 5 illustrates the extensive areas of the EU that are either diverging or only 'keeping pace'.

It is not possible to establish a clear-cut relationship between economic conditions and increased political polarisation in the EU, but it is likely that **national societal consensus is negatively affected by these regional/territorial productivity gaps**. The next questions are: what are the main drivers of regional productivity catching-up and what can policy do to promote them?

[14] The regional contribution to GDP growth is straightforward; it is just the growth rate of each region between *t* and *t+1* multiplied by the share of that region in the national GDP. The contribution to aggregate productivity is more complicated because labour productivity is a ratio. Here, a counterfactual is used corresponding to what would have been the aggregate productivity without each given region. If in this counterfactual the aggregate productivity is higher than average that means that a given region contributes negatively to the aggregate growth rate (for more details see OECD 2016c).

[15] Regional policy also has a role in unlocking the productivity growth of frontier regions in countries that are not converging; as the OECD team notes, the convergence of lagging regions in a country depends on the growth of the frontier regions in that country.

Figure 5: Differences in productivity performance across the EU relative to national frontiers, 2000-14



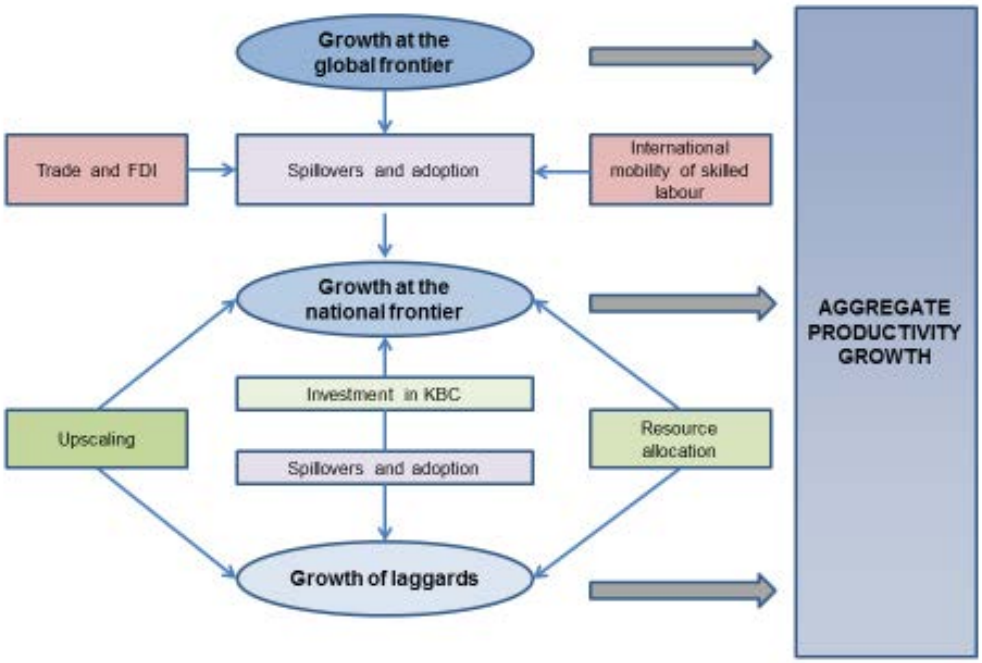
Note: data for Croatia, Estonia, Latvia and Lithuania not available. For the methodology underpinning the classification of regions for analytical purposes refer to footnote 13.

Source: OECD data

4. TERRITORIAL POLICY RESPONSES

The territorial dimension of policy responses is evident by considering the key factors driving aggregate productivity growth (OECD 2015d) as shown in Figure 6.

Figure 6: Factors shaping productivity growth



Source: OECD 2015d.

The key message from OECD research is that there is a **cascade of relationships** between different types of firms, from global frontier countries/regions to national/regional frontiers before reaching laggard countries/regions. It highlights the need to differentiate policy responses (and specifically diffusion mechanisms) according to specific territorial contexts (OECD 2016e). This logic could also be considered as a more suitable basis for a new typology of regions for EU policy design purposes and/or for developing appropriate strategies.

4.1 Strategies for global frontier regions

As noted above, at the apex are the so-called **global frontier regions,** regarded as the drivers of innovation and growth which, to varying degrees, should also pull other regions forward. These global frontier regions are generally urban regions containing very large cities or industrial 'powerhouses' such as Ile de France, Stockholm, Groningen and Copenhagen (OECD 2016e). They are already the most advanced as far as structural transformation is concerned as they have efficient and effective ecosystems in place. They have state-of-the-art infrastructures, especially the ones related to knowledge such as research facilities and ICT, and they have world-class knowledge institutions as well as a critical mass of competitive and dynamic firms and access to talent with well-established linkages both locally and internationally, including well-developed institutions e.g. intermediaries to

further enhance collaboration, joint investment, risk-taking, as well as experimentation, efficient educational and training systems, etc.

While they have many self-sustaining mechanisms - and are often the main beneficiaries of (supposedly aspatial) national sectoral policies for infrastructure, education, R&D and employment – sustaining their performance in a European context is of key importance for the competitiveness of the EU as a whole, and for their transformation from European to global 'champions' (Roland Berger 2014).

The competitive advantage of global frontier regions is not just, or even primarily, in their investments in knowledge-based capital, but in "how they tacitly combine different types of intangibles in the production process" (OECD 2015d: 26). Specifically, it depends on how efficiently their ecosystems function, and how well they are able to compete and cooperate at the same time. However, it is in the common European interest, including of all the other regions, that the global frontier regions are also empowered to position themselves at the top of global competitiveness charts. Key policy requirements include:

- implementing outstanding structural and regulatory reforms, which may be horizontal (EU or national), but which are especially crucial for these regions - issues such as standardisation, data protection, laws enabling provision of the sharing economy and new business models, digital security;

- reinvigorated and more focused implementation of excellence-based instruments and investments (e.g. Horizon 2020), such as research and ICT infrastructures, skills development and mobility, and knowledge flows;

- strengthening links to other regions to develop (geographically based or virtual) value networks or by creating synergies among ongoing and new initiatives such as the Vanguard Initiative, the Smart Specialisation Platform for Industrial Modernisation, or the Knowledge and Innovation Communities of the European Institute of Technology (European Commission 2016a); and

- increasing the capacity to manage inclusion, given that many frontier cities, are characterised by polarised labour markets, are magnets for migrants and face serious challenges of social exclusion.

4.2 Strategies for intermediate regions

The second group comprises **intermediate regions,** regions that are directly related and linked to the global frontier and have the capacity to follow, to varying degrees, but are capable of performing much better, if the European 'regional catching-up machine' could be fixed (OECD 2016e). Examples of such regions include Piedmont or Umbria in Italy, as well as a number of regions outside the capital areas in developed countries from France and Sweden to Ireland and Belgium, including regions such as Burgenland and Kärnten in Austria. In the case of lagging countries, these intermediate regions also tend to perform the role of the **national frontiers** such as the cases of Madrid, Attiki, Mazovia, Ljubljana or Lisbon; the category also includes regions lagging behind the national frontiers such as Castilla y León in Spain.

For the intermediate regions, the process of catching-up or narrowing the gap with the frontier regions requires them to transform themselves from 'global frontier suppliers' into leading creators of (distinct) value within the global networks, thus strengthening and expanding value added in their tradable sectors. It is within such networks that learning and diffusion processes from the global frontier to the intermediate regions can take place, and similarly from the intermediate regions to the lagging regions. The OECD (2015d: 27) underlines the importance of understanding the barriers to the diffusion of unexploited existing technologies, which are the "key in understanding cross-country differences in aggregate performance", especially due to differences in penetration rates, which are increasing over time (Comin and Mesteri 2013).

In order to promote diffusion, the OECD (2016e: 30) has argued that:

> *"The shift in the global frontier can be transmitted to national frontiers through the mobility of production factors (capital, labour) and trade flows. Within countries, the investment in knowledge-based capital and all actions favouring spillovers and adoption may facilitate the diffusion of the frontier innovations to lagging firms, sectors or regions. This process is facilitated by a macro-structural environment that supports, rather than hinders, the shift of resources across sectors and the upscaling of best productivity practices."*

The European Commission (2017a, 2017b) has also provided extensive evidence why such challenges and barriers need to be addressed in a comprehensive and integrated, but regionally differentiated manner, i.e. enforcing structural reforms in conjunction with RTDI, ICT, human capital, business, institutional and other policy measures in a territorially adapted and mutually consistent development strategy framework. It should be borne in mind that it is only at the regional (and in some cases at the local as well, depending on the scale) level that ecosystems referred to in Section 2.3. can be set up.

Strengthening and broadening the *catching-up process* among firms, industries and regions though setting up ecosystems conductive for the requirements of the fourth production revolution can contribute most to aggregate growth as the frontier contributes less than a third of the EU's GDP growth. The same message comes from the OECD (2016b). Consequently, **it is the non-frontier regions, both intermediate and lagging, that should be at the heart of policies for the structural transformation and inclusive growth agenda of the EU**.

4.3 Strategies for lagging regions

Further away from both global and intermediate regions are the **lagging regions.** Their catching-up performance depends mainly on the intermediate (and national frontier) regions, i.e. regions of the European periphery in the east and south, plus (some) outermost regions. The further one goes from the frontier, the greater are the challenges of transformation and setting up efficient ecosystems.

This is not just because these regions tend to be institutionally weaker (European Commission 2017), but also because the structure of their economies is much more specialised in agriculture and traditional, more standardised manufacturing, and they are, as a consequence, exposed to stronger idiosyncratic shocks (see Section 3.2 above). That said, it is critical that **the lagging regions participate in the structural transformation agenda and develop regional** (innovation) **ecosystems.** This policy mix is in principle no different to the one for the intermediate regions (European Commission 2017), with a caveat, of course, that their different starting position should be

taken into account and that their catching-up process should thus be geared towards intermediate regions as suggested by the OECD (2015d).

There are however, considerations that tend to require **two specific additional policy interventions**.

First, there are **infrastructure gaps** that need to be addressed in areas such as ICT network infrastructure, environmental infrastructure (especially in rural areas), and national transport network infrastructure (apart from TEN-Ts) where the focus is on connecting the economic growth centres (cities) with each other and hinterlands to generate spillovers. The latter is simply a matter of sensible policy-making as proximity to cities has been shown (see Section 2.3) to be one of the key growth drivers of such regions (OECD 2014, Ahrend et al. 2014, OECD 2016e).

This does, however, need to be nuanced, given the record of significant investment to date (particularly through EU funding) and questions over the cost-benefit and impact of some projects. As the European Commission (2017: 46) has noted, "such investment should be made limited in time, respond to clear criteria of need and development potential". This also means that they should only be approved when implemented in conjunction with complementary activities (e.g. training and investment in productive capacity). As far as the needs are concerned, it has been shown that there are large differences among the lagging countries and regions; in particular, the transport endowments of low-growth regions tend, on average, to be much better, than in low-income regions. Although gaps might exist in the low-growth regions that could justify investment, this should be considered an exception to the rule. However, for the low-income regions, the significant gaps indicate that infrastructure will still need to feature, at least to a certain extent, in their development strategies.

A particular challenge faces **remoter rural lagging regions**. The evidence suggests that rural regions close to a city exhibit sound growth performance and that they should (in many cases) have good future prospects, at least when nearby cities perform well (OECD 2016e). For the more remote rural regions, however, challenges of very low density and low accessibility put them in a different position. This is not to say that there are no opportunities: the evidence suggests that some of these regions perform well, and **it is exactly through structural transformation and digitalisation that additional opportunities will become available** (e.g. by way of e-health).

The focus of these areas however needs to be on finding the absolute (and not just relative) comparative advantage (OECD 2016e), which is in practice harder to achieve as it requires even stronger specialisation, which in turn is associated with greater risks. Furthermore, even though opportunities might increase in absolute, they could still be losing-out in relative terms to the rural areas close to a city and other regions. This suggests a longer and more gradual transition towards structural transformation, with a need to capitalise on softer and more standard business opportunities (e.g. through standard business development support measures, growth of the tourism industry, stronger emphasis on community based and institutional development, etc.

4.4 The case for an integrated systems approach

The key conclusion is the need for a consistent and mutually enforcing policy framework for different levels to function as a system. This is not just due to the cascade of interrelationships among different levels, but also because there are systemic interdependencies.

Regional productivity catching-up is not incompatible with very dynamic frontier regions. On the contrary, as shown by the OECD (2016e) "most of the regions with high productivity growth rates have benefited from the potential pulling effect of the frontier region(s) to which they have converged". Fast-growing frontiers thus mean much greater propensity for the productivity of other regions also to grow faster. Many Portuguese regions, for example, experienced strong productivity growth alongside the strong growth of the country's frontier with Lisbon being an exception to the rule, i.e. with the frontier having a relatively small effect. By contrast, among the worst performing regions, most of their poor productivity performance is the combined result of low performance of the national frontier region(s) and the lack of catching up (with the exception of the Netherlands).

Therefore, **it is critical for any strategy that promotes catching up among the lagging regions to "consider the system of regions** when analysing and designing policies … **ensuring that the frontier regions play fully their role and continue to perform**" (OECD 2016e: 37). The same kind of interdependence can be seen from **linked regional and national performances** as identified in the EU Regional Innovation Scoreboard (European Commission 2016b).

Furthermore, **the integrated territorial approach needs to be consistently embedded in the European policy mix and more focused on delivering key priorities.** Sectoral policies cannot deliver on the promised EU agenda without the integrated territorial policy packages. The converse also applies; integrated territorial policy approaches without well-designed sectoral and structural policies and reforms cannot deliver prosperity and inclusive growth in the regions.

5. DEVELOPING A EUROPEAN POLICY RESPONSE

The starting point for a European policy response is that existing strategies – from Lisbon/Gothenburg to Europe 2020 – have been only partially successful with limited results in relation to the scale of the challenge. Recognition of the different starting points and potentials of regions in Europe is critical to a new structural transformation strategy. Only through a multi-layered approach is it feasible that all parts of the EU can successfully transform and thus achieve the inclusive growth objective based on improved productivity, EU-wide, and to the benefit of all EU citizens.

5.1 Lessons from Lisbon and Europe 2020: principles for a new EU strategy

The **Lisbon Strategy** was launched in 2000 with the strategic goal of the EU becoming 'the most competitive and dynamic knowledge-based economy in the world' (European Council 2000*).* Reviewed in 2005 on the basis of the Kok report (2004), the strategy was superseded in the late 2000s by Europe 2020. Although it has been characterised as a failure, the Lisbon Strategy provided important lessons for EU-level strategic policymaking (European Commission 2010a).

While Lisbon reflected a public consensus on the need for reforms to promote growth, the goals were overambitious. Despite some progress, most objectives were not achieved, particularly the closure of the productivity gap (European Commission 2010a). The strategy focused on some key areas of reform - RDTI, labour markets, business environment and consolidation of public finances – but neglected other elements such as stronger supervision of financial markets and macroeconomic imbalances (see also Mabett and Schelkle 2007). Funding was limited largely to Structural and Cohesion Funds, with an overemphasis on expenditure and compliance at the expense of outcomes (Mendez et al. 2011, Begg 2016). Insufficient attention was given to the contributions of other parts of the EU budget and coherence with national policies (European Commission 2010a, Haase 2015). Lastly, progress was held back by weak governance, lack of influence of the 'Integrated Guidelines' approach and weak political ownership within the European Council and the Member States (Tilford and Whyte 2010, Zgajewski and Hajjar 2005).

The **Europe 2020** strategy was initially proposed by the Commission in March 2010, as a ten-year strategy for smart, sustainable and inclusive growth with five EU headline targets relating to the employment rate, research and development, climate change and renewable energy, education and poverty and social exclusion, and monitoring of progress through the European Semester.

Progress has been made in some areas, but the achievement of targets has been significantly affected by the crisis. Attainment of targets relating to greenhouse gas emissions and energy efficiency, were 'aided' by the crisis in reducing overall energy consumption (Dijkstra and Athanasoglou 2015), while indicators relating to poverty and employment worsened (European Commission 2014b). There are also major differences across countries: Southern European countries are lagging behind, particularly in relation to the indicators related to employment, poverty and R&D, in comparison with many Central and Eastern European countries which have made better progress than EU15 countries such as France and Germany (Balcerzak 2015).

However, the Europe 2020 strategy is hampered by the same weaknesses that affected the achievement of the Lisbon Strategy noted above. Overall **coordination and enforcement are weak**.

National indicators, where available, were set by the Member States independently of EU-wide targets[16] and are not comparable in their levels of ambition (Daly 2012; Dijkstra and Athanasoglou 2015, European Commission 2015c). The enforcement method based on Country-Specific Recommendations and the European Semester, which largely relies on 'peer pressure', has been ineffectual (Van Rompuy et al. 2017, Council of the European Union 2014, Delmas 2015). The collective EU and Member State effort is clearly not adequate: for example, R&D expenditure continues to be largely concentrated in a handful of NUTS 2 regions in Northern and Central Europe[17] with strong regions maintaining their leadership position, and laggards not seeming able to catch-up (Eurostat 2017). Importantly, the visibility of the strategy on the ground and stakeholder commitment are weak (European Commission 2015c).

Looking forward, any new EU strategic approach needs to recognise the lessons from the past and be realistic about what can be achieved. With relatively limited budgetary resources at EU level, it is widely acknowledged that the EU will need to establish the following **principles for a new EU strategy.**

a) **Focus on a limited number of key priorities** that collectively promote accelerated innovation, structural transformation and inclusive growth. This needs to be articulated in a vision that begins with a strong, compelling narrative of the opportunities and challenges, and what the desired outcomes should be (OECD 2016).

b) **Encourage more effective and efficient governance** to ensure institutional coordination, and integration horizontally across the policy domains at EU, Member State and regional levels, and vertically between EU, national and regional levels (OECD 2011, OECD 2016c, Pilat and Noland 2016). The policy silos that generate trade-offs "have become luxuries that our economies can no longer afford" (Francesca and Sylvain 2010, OECD 2011). Key EU policies that require intensified policy coordination are: RTDI and ICT; human resource development; entrepreneurship; internationalisation and participation in global value chains; infrastructure development; and urban, rural and other territorial policies.

c) **Promote structural reforms and investment in institutional capacity** to optimise the conditions for reform and investment (OECD 2013b), particularly in the key areas of labour market regulations, wholesale and trade market regulations (see D'Costa et al. 2016). These factors of structural flexibility also promote the catching-up of the lagging regions. Other issues that need to be addressed are barriers to up-scaling and up-grading, regulations regarding openness and global factor mobility, especially of knowledge flows, standardisation and an investment-friendly fiscal framework.

d) **Ensure territorial and social inclusion**, by taking account of territorial differences in the formulation and implementation of policies - bundles of policy measures across different government levels need to be not just coordinated but also differentiated across different

[16] Member States did not have to set national targets and were not required to coordinate with other countries'. The exception was GHG emissions and renewable energy, "for which all Member States have set binding targets in a coordinated manner so that the sum of the national targets is equal to or higher than the EU targets" (Dijkstra and Athanasoglou 2015: 5).

[17] In Germany (10), the UK (4), Sweden (4), Austria (4) Finland (3), Denmark (2), Belgium (2) and Slovenia (1), (Eurostat 2017).

territories given their differing characteristics (although pursuing the same kind of goals) (Barca 2009).

Given the mixed results of past strategies, it is arguable that the EU needs greater mobilising power. This is underscored by the broad literature on structural transformation and the fourth production revolution discussed in Sections 2 and 3 that advocate concerted action within Europe with coordinated European and national initiatives. For example, Kroll et al. (2016) make a convincing case for strengthened policy coordination with improved advanced manufacturing technologies ecosystems through better alignment of EU, national and regional policies, where the European level should focus on connecting, providing platforms and leverage synergies, while arguing for place-based (industrial) development at the national and regional levels.

It is only through a consistent, multi-layered approach that the EU will be able to capitalise on the opportunities of the fourth production revolution. In short, regulations, standards and structural reforms are critically needed, but can represent only part of the policy response. The missing links are the ecosystems, which can only be delivered at national and regional levels.

For the most important areas of EU policy intervention, notably under Headings 1a and 1b of the EU budget, there is clearly a need for a **common European agenda for structural transformation setting out a joint vision, objectives and activities**. This needs to ensure that the different policies are working in concert to combine both top-down (EU, national) and bottom-up (regional, national) policy interventions. In particular, it is essential that the policy framework is capable of mobilising integrated policy support at the most appropriate territorial level (which will vary between Member States) to ensure that the structural transformation agenda is adapted to different development contexts. Further, intensified structural changes will continue to have negative side-effects (dislocation, inclusion, etc.) that need to be addressed through targeted and integrated territorial approaches in the specific regions affected.

The following sections discuss the contribution of the two main sets of policy levers at the disposal of the EU: the directly managed policies for infrastructure, research, SMEs and investment under Heading 1a of the EU budget; and the role of Cohesion Policy under Heading 1b. The role of economic governance – a key element of a new structural transformation agenda - is also considered.

5.2 Focus and coherence: improving the effectiveness of direct EU spending

The EU budget has a crucial role in delivering well-targeted interventions, where the following framework conditions are met.

a) **Investment in EU-wide infrastructure,** where there is a clear case for intervention on the basis of economies of scale, support for coordinating or mobilising national action or completion of 'missing links'. This includes research infrastructure (European Strategy Forum on Research Infrastructures), the development of the EU's ICT backbone network, and the TEN-T core network corridors.

b) Pan-European **cooperation, networking and EU-wide mobility** schemes facilitating collaboration and engagement through, for example, joint research (Horizon 2020) and knowledge exchange (Erasmus+, Marie-Curie Fellowships).

c) **Common policy challenges** that require strongly coordinated EU level action combined with pooling of finance from multiple countries, including policies that are reactions to sudden changes such as migration, defence, security and environmental threats.

Intervention in these areas has grown over the past two decades, with increasing direct spending on infrastructure, research and innovation, SME competitiveness and investment projects. Budgetary allocations to Heading 1a (competitiveness/internal market) have increased from an estimated 6.8 percent of the Multiannual Financial Framework (MFF) 2000-06 to 13.1 percent in the MFF 2014-20. The major programmes in the current period under Heading 1a are shown in Table 2, highlighting the key programmes contributing to structural change – CEF, COSME, EaSI, Erasmus, EFSI and Horizon 2020 – which collectively account for allocations of almost €153 billion in the 2014-20 period. (An increase of €1.4 billion has been proposed by the European Commission in the Mid-Term Review and is currently being negotiated).

Table 2: Major directly managed EU programmes, 2014-20

Major programmes	Key objective	Total allocation (€mill)
Connecting Europe Facility	**Trans-European networks**	**21,937**
Copernicus	Earth Observation Platform	4,291
Competitiveness of Enterprises	**SME development**	**2,298**
Customs, Fiscalis, Pericles, Hercule III	Effective customs union, anti-fraud, counterfeiting	908
Employment & social innovation (EasI)	**Employment and social reforms**	**919**
Erasmus+	**Skills, education, employability**	**14,775**
European Fund for Strategic Investments	**Mobilising new investment**	**33,500**
Galileo	EU satellite navigation system	7,072
Horizon 2020	**EU global competitiveness**	**79,402**
International Thermonuclear Exp. Reactor	Nuclear fusion as energy source	2,986
Nuclear decommissioning	Decommissioning nuclear plants	225
Wif4EY	Public wireless connectivity	120

Source: Based on European Commission (2016e, 2016f).

These programmes have seen strong take-up, with applications exceeding the available budget, in particular under Horizon 2020 and CEF, and are regarded as generating important added value and contributions to EU targets. (European Commission 2016e, 2016f, 2016g). However, from the perspective of the structural transformation agenda, several important improvements are required.

First, these programmes require **a coherent performance framework to enable a systematic and comparable assessment of progress and strategic achievements across policy areas**. For new programmes, the first independent assessments will only become available towards the end of 2017. Where evaluations are already available, a common concern is the lack of reliable data for assessing programme indicators and their achievements, including for their predecessor programmes (Steer Davies Gleave 2011, Ramboll 2015, EY 2016). Studies also show considerable differences in the effectiveness of programmes; evaluations of past programmes show mixed results, with some programmes such as FP7 or Erasmus clearly outperforming others, such as the Trans-European Transport Network (TEN-T).

Second, **the additionality of programme spending is unclear**. This applies particularly to EFSI, where the only evaluation conducted to date shows a wide range of interpretations of additionality (EY 2016). Some of these are questionable, including the suggestion that receipt of EIB funding for the first

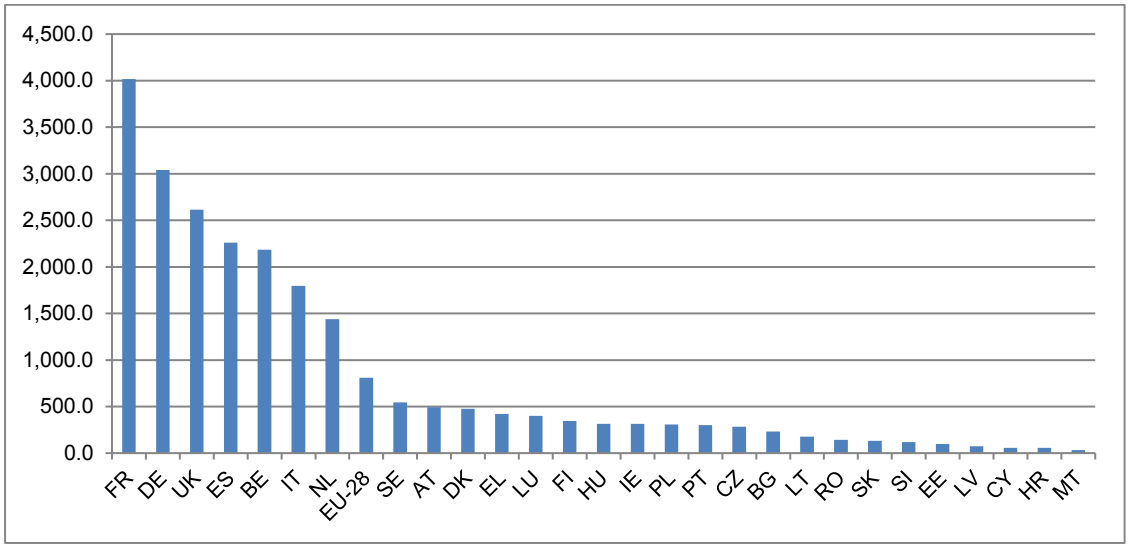
time indicates that EFSI support is additional (Furik 2016). Evaluation research echoes the views from stakeholders (especially national promotional banks) that "some of the financed projects could have been financed without EFSI support" (EY 2016:4). Recent research and other assessments have noted important concerns about the rigour of assessments of additionality, the share of public vs private investment that goes into projects, the possible overestimation of the impact of EFSI, and issues relating to the Fund's governance and transparency of project selection (EIB 2016, ECA 2016). More broadly, claims of additionality and added value of other spending under Heading 1a appear anecdotal, even axiomatic in some cases (European Commission 2015b). Justifications for future spending need to be based more clearly on evidence.

Third, there are important inter-relationships between spending on infrastructure, SME competitiveness, research and other objectives, but **the coherence of policies and instruments needs to be given a higher political priority**. Evaluation and academic research has highlighted the relatively low coherence between CEF (including its TEN-T predecessor), Horizon 2020 (including FP7) and investments made with Structural Funds (Steer Davies Gleave 2011, High-Level Expert Group 2015).

For example, at a strategic level, investments under the TEN-T programme can have 'a two way effect' on the growth of lagging, more peripheral regions. While they bring markets closer and increase these regions' opportunities to compete with core areas, they can also drive human resources and economic activities out of these regions. What is required is thus a coherent policy mix supplementing improved accessibility and connectivity with measures aimed at enhancing the local contexts and supporting internationalisation (Faiña et al. 2016). Some of the specific problems are attributed to the institutional inability of different Commission DGs to cooperate (Steer Davies Gleave 2011), and the need for more synergies between spending on research and innovation via Horizon 2020 and other EU-wide programmes, as well as interventions supported by national science and innovation programmes (High-Level Expert Group 2015, Ferry et al. 2016). It has been argued that without an "effective policy mix" a high impact of publicly funded programmes cannot materialise (High-Level Expert Group 2015:4). A long-standing problem of transport projects funded by TEN-T is that they are assessed and selected according to national rather than European priorities (Gutiérrez et al. 2011).

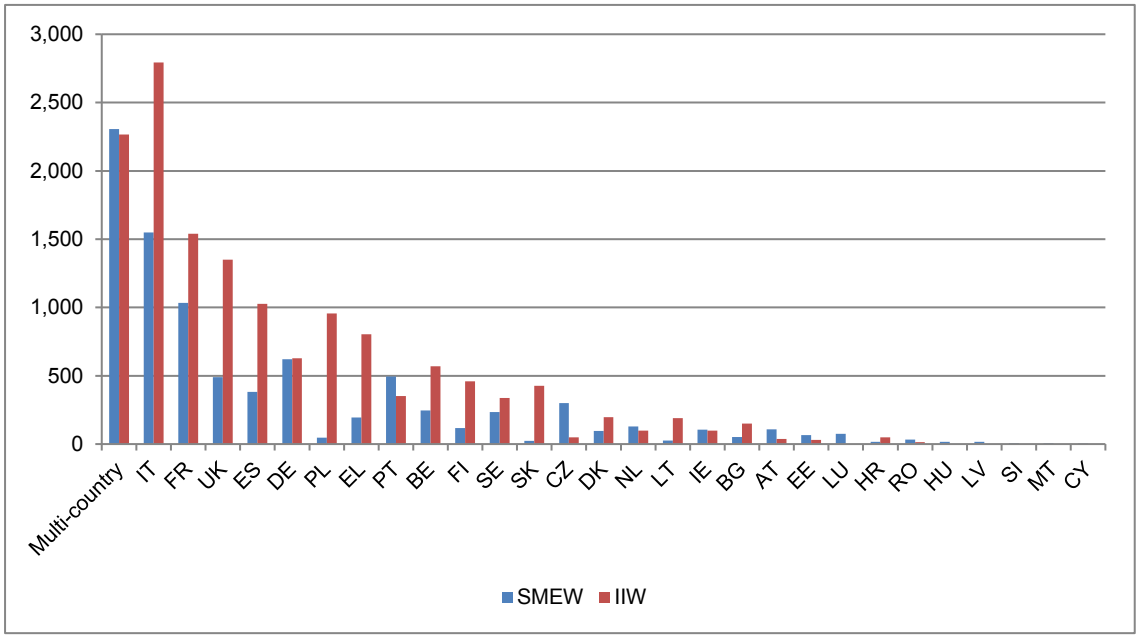
Lastly, the key message of this paper is the need for **all EU spending to take account of the territorial dimension**, and specifically how the intervention contributes to closing the gap between frontier, intermediate and lagging regions. Currently, the major beneficiaries of Heading 1a are large EU15 Member States. Drawing on data for 2014-15 (see Figure 7), spending on Competitiveness for Growth and Jobs was mainly in France, Germany and the United Kingdom, followed by Belgium, Spain, Italy and the Netherlands. By contrast, Central and Eastern European countries do not seem to have benefited from allocations of expenditure under this sub-heading. Under EFSI (see Figure 8), over 90 percent of funding (by mid-2016) had been allocated to projects in the EU-15 Member States, especially Italy, France, the United Kingdom, Spain and Germany (EY 2016).

Figure 7: Heading 1a allocations to Member States, excluding EFSI (€ million), 2014-15



Source: DG Budget data. Note: Excluding EFSI projects expenditure.[18]

Figure 8: Allocation of EFSI financing by Member State



Note: Data are for total amounts of signed projects for SME Guarantee Window (SMEW) and Infrastructure and Innovation Window[19] (IIW) (€ million). Data are for April 2017.

Source: European Investment Fund (EIF) for SMEW and European Investment Bank (EIB) for IIW. EIF data available at: http://www.eif.org/what_we_do/efsi/ipe-efsi-geographies.pdf ; EIB data available at: http://www.eib.org/efsi/efsi-projects/index.htm

[18] Contracts amounting to €10.4 billion were signed, but not spent, as of June 2016 (EIB 2016, 5).

[19] For six IIW projects (3 from France, 2 from Germany and 1 from Spain) the financing sum for the projects was not publicly disclosed.

In summary, directly managed policies have an important role to play as they are well equipped to deliver targeted interventions, especially project based ones. However, a priority for the post-2020 policy approach to structural change should be a more coherent strategic framework for the implementation of directly managed policies that takes into account their coherence with each other, with other headings and with the policies implemented in the Member State with their own resources.

5.3 More effective economic governance and structural reforms

For the EU to respond actively to external and internal challenges requires not only new goals for all European policies and the way in which they are delivered but also the further development of the European economic governance system to make structural transformation and inclusive growth, possible and effective.

Improving the functioning of the EU to maintain its global role and, assure sustainable productivity, employment growth and better prospects for all citizens and territories requires **changes to the EU governance model**. This must allow for:

- effective ***cooperation at international scale*** to deal with globalisation challenges including their territorial effects (through global agreements on trade and multilateral contracts);
- effective ***improvement of macroeconomic conditions*** in which EU firms and citizens operate in all territories (through strengthening further Economic and Monetary Union);
- ***improved quality in the design and delivery of EU and national policies*** for growth and structural transformation (including through structural reforms); and
- greater ***empowerment of regional and local actors*** (and where relevant at the functional area level) to facilitate the comprehensive realisation of a structural transformation strategy on the ground.

These functions cannot be performed within a single hierarchical system of institutions. It **requires a multilevel governance system**, focused on realising mutually shared goals and embracing European institutions, national government, regional and local authorities and business and civil society. Three main elements of the system are:

- an ***improved economic governance system*** at EU level, with an integrated framework for coordinating economic policies, including their territorial impact;
- a ***system for coordinating the delivery of a structural transformation strategy*** – in the form of a framework for EU, national and other polices relevant for structural transformation; and
- ***ecosystems for structural transformations and cohesion*** across all levels of government involved in developing and implementing structural transformation.

The territorial dimension (exploiting territorial potential and tackling place-specific development) is an important element of a new EU strategy aiming to exploit the opportunities of a new phase of globalisation and seeking to deliver more sustainable and inclusive growth prospects for all EU citizens.

There are different options for developing this strategy. An important element is that the European Semester process is focused on assessing a country's institutional ability to reach medium and long-term European goals set out in a new EU Strategy, followed by identification (in dialogue with countries

concerned) of the necessary strategic policy and institutional steps for structural change (reforms) in order to achieve planned goals. In practice, it would mean that the **European Semester process is not only linked to binding legislation** (e.g. levels of public debt or financial deficit) **but also very much linked to EU Strategy goals**. This would also mean that the **Country-Specific Recommendations become more structural, multiannual and more strategic**. Naturally, it means too that they would cover the steps necessary to remove barriers and support the implementation of a structural transformation strategy (priority) at national but also regional and local levels. In this context, some CSRs would relate directly to the territorial dimension – recognising the need to differentiate structural reforms, for example according to the categorisation of regions and overall macroeconomic situation of the country concerned.

In brief, the key elements of the European Semester process would need to be redefined (re-focused) as follows.

- ***A new EU Strategy*** including a **common European agenda for structural transformation** setting out a joint vision, objectives and activities.

- ***Country Report.*** Prepared by the Commission, this would focus primarily on analysing factors influencing the ability of a Member State to achieve the goals and targets defined in the new European Strategy, including an assessment of needs with regard to the effective implementation of the structural transformation strategy. Strategic Country Reports should be prepared every 3-4 years, with annual reports being regarded as monitoring reports with limited possibility to add new proposals for reforms.

- ***National Reform Programme*** **(NRP).** Prepared by a Member State, this would be converted into a medium-term programming document showing steps and structural reforms needed to realise strategic goals defined in the new European Strategy and taking into account the current socioeconomic and territorial situation as assessed in the Country Report. The NRP would also define actions to be undertaken in order to implement the structural transformation strategy at national as well as relevant sub-national levels (particularly relevant in the federally organised Member States). Converting the NRP into a real multiannual strategic programming document would allow identification of the instruments available under various EU and national policies to realise proposed reforms and actions and, as such, would form the coordination framework for various funds.

  The role of various documents used as a programming tool under individual EU policies (e.g. the Partnership Agreement under Cohesion Policy) would therefore reduce, and their focus would shift from strategic analysis (in future, part of a new NRP) to implementation issues, along the lines, for example, of ex-ante conditionality strategies (e.g. smart specialisation). Preparation of the Country Report and NRP at the beginning of the new programming period (Multiannual Financial Framework commencing after 2020) would allow a determination not only of the most-needed reforms but also of investment priorities that should be realised under EU and national policies.

- ***Country-Specific Recommendations*** **(CSRs).** If the focus of the above documents is more multiannual and strategic, then CSRs should evolve in the same direction. CSRs should focus on the strategic reforms needed to achieve new EU Strategy goals, including those related to

territorial matters and the structural transformation agenda. The CSRs related clearly to the achievement of the EU Strategy goals (which would be accepted by the European Council to obtain the highest political commitment) would involve a mix of incentives and conditionalities. One element would comprise a financial incentive scheme for the implementation of the strategic structural reforms. Such incentives should however be geared towards strategically designed investment for structural transformation as opposed to simple ad hoc transfers and compensatory schemes that are likely to end up as current expenditure not leading to strengthened competitiveness. A second element would involve conditionalities to ensure implementation. These would be limited in scope and precisely defined, with concrete steps and timetables for the implementation of necessary reforms. Non-compliance with strategic CSRs by Member States would mean automatic financial and political consequences.

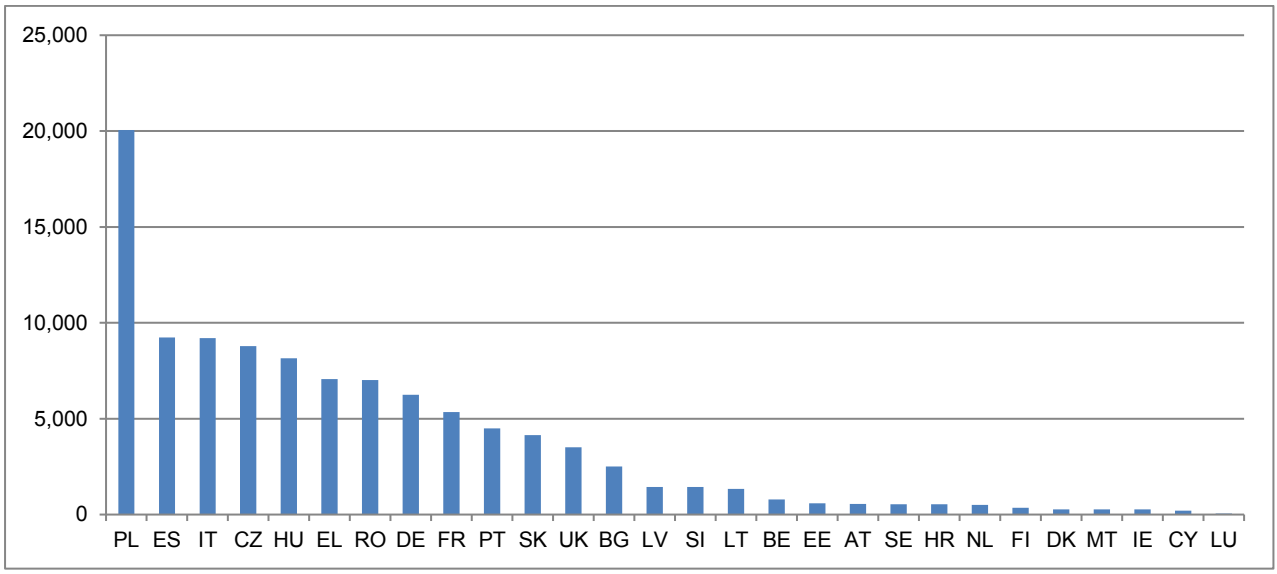
All these strategic documents should also establish the framework for the implementation of the structural transformation agenda with tangible inclusion of the territorial dimension.

6. ENSURING TERRITORIAL AND SOCIALLY INCLUSIVE GROWTH: A MORE EFFECTIVE COHESION POLICY

In concert with more focused and coherent spending by the EU in areas such as research, SME competitiveness and infrastructure, and stronger economic governance and structural reforms, the EU needs powerful instruments to ensure that growth is territorially and socially inclusive. The success of a strategy for structural transformation depends on taking account of territorial differences in the formulation and implementation of policies - bundles of policy measures across different government levels that need to be not just coordinated but also differentiated across different territories given their differing characteristics (but pursuing the same kind of goals).

EU expenditure under Heading 1b - Cohesion Policy - is currently the main EU policy instrument for economic, social and territorial cohesion. With a geographically discriminating allocation formula for funding, most of the funds distributed during 2014-2015 went to less-developed countries and regions. Poland, Spain, Italy, the Czech Republic and Hungary were the greatest beneficiaries of funding (see Figure 9).

Figure 9: Allocations of Heading 1b by Member State (€ million), 2014-15



Source: DG Budget data 2016.

6.1 Strengthening the effectiveness of Cohesion Policy

In assessing the effectiveness of Cohesion Policy, the evidence base has historically been very mixed. During the 1990s and early 2000s, the strategies of Structural and Cohesion Funds programmes were often formulated in vague terms, with objectives only embryonically developed, and often disconnected from the outputs and results expected of programme measures (Bachtler et al 2016. 2017). Several influential studies concluded that the policy had little or no impact in terms of reducing regional disparities (Boldrini and Canova 2001, Ederveen et al. 2003).

However, the past decade has seen improvements in the quality of Cohesion Policy programming and the rigour of evaluation (Polverari et al. 2014, Ward 2016, Davies 2017) and there is now a rich body of evidence on which to judge the effectiveness of Heading 1b. The three main macroeconomic models

applied to ESIF funding – QUEST, HERMIN and RHOMOLO - find clear positive effects in the net recipient Member States (both during programme implementation and in the longer term (Bradley and Untiedt 2009, Varga and in t'Veld 2010, Brandsma et al. 2013, Monfort et al. 2016). Micro-economic analysis and qualitative research on the specific objectives and instruments of programmes (using counterfactual evaluation) have found significant effects of ESIF in terms of the leveraging of private sector investment, business productivity, net job creation, and measures such as patent applications and transport infrastructure (Bondonio and Pellegrini, 2016c; Ward, 2016, Bondonio and Martini 2012, Criscuolo et al 2012, Alecke et al, 2010, Hart and Bonner 2011, Ferrara et al. 2017). The results from econometric regression analyses - which typically test for the effect of ESIF funding on convergence in GDP per capita are more varied. While some studies find evidence that ESIF funding has a positive and statistically significant effect on convergence (e.g. Mohl and Hagen 2010, Becker et al. 2010), others find small effects (Esposti and Bussoletti 2008, Hagen and Mohl 2008) or no statistically significant impact on convergence (Dall'erba and Le Gallo 2008, Breidenbach et al.2016). The variation in results is often critically dependent on the quality of national institutions or macro-economic policies (Beugelsdijk and Eijffinger 2005, Ederveen et al. 2006, Tomova et al. 2013).

Specifically, with respect to structural transformation, Cohesion Policy has played a role in supporting regions in structural adaptation paths from the creation of the Funds, latterly fostering a shift from a productive model based on price to one based on innovation (CSIL et al. 2010). It has done so by supporting investments on human capital, regional specialisation, diversification of regional economies, innovation, competitiveness of local productive systems, and internationalisation. Traditionally, support was provided through subsidies for specific firms or types of firms, such as grants for restructuring or for foreign direct investment, or sectoral strategies (clusters) through a mix of aid to individual firms, dedicated infrastructure, and support and advice (Bachtler et al. 2013, Davies et al. 2015).

Progress has, however, often been slow, especially in the period up to the mid-2000s. Many regions implemented strategies to support structural adjustment, but “these activities were often slow to yield results, reflecting the difficulties in changing from established industries to new activities” (Bachtler et al. 2013: 82). Support to firms, for example, might have allowed firms to remain in the market, thus safeguarding jobs in the short/medium term, but it did not stimulate them to become more competitive for the longer term. In several regions, emphasis was placed on safeguarding jobs in industrial sectors where the long-term sustainability was questionable. **In general, regions found it difficult to strike the right balance of support between: traditional sectors and new activities;** shorter-term and longer-term goals; and the economic and social aspects of structural adjustment. Strategies focused on innovation and internationalisation were most successful in supporting structural change. Support provided to firms at risk of closure impeded wider, longer-term structural change (Ward 2016). Again, institutions matter: “**the degree to which policy can contribute to structural change is not correlated with the historical regional specialisation on capital, equipment or traditional industries, but is highly correlated to the quality of the local institutions”,** (CSIL et al. 2010: 5).

In this context, the 2006 and 2013 reforms to Cohesion Policy were significant in transforming key aspects of the policy, relating to:

- objectives, through thematic priorities aligned first with the Lisbon Strategy, latterly with Europe 2020;
- strategic coherence, through a common strategic and regulatory framework for all ESI Funds;

- a greater performance focus through results-orientated specification of objectives and outcomes, ex ante conditionalities (EACs) and a performance reserve;
- greater potential leverage of spending through more use of financial instruments; and
- encouragement for integrated, localised, bottom-up development.

Initial assessments of the reforms introduced by the 2013 CPR to strengthen effectiveness are indicating that the new rules – e.g. EACs, programming architecture, thematic concentration and results-orientation - are having a positive effect on the focus of programmes. Programmes are now considered to be built on a 'more robust intervention logic' with a clearer connection between the aims of each intervention and how these will be achieved (European Court of Auditors 2017, Altus 2016). More attention is also being paid to ensure that the ESI Funds are coordinated with each other and with other EU policies (Altus 2016, Ferry et al. 2016). Importantly, a strategic approach to structural change is being encouraged through an obligation for each country/region to develop 'smart specialisation strategies' based on a twin-track strategy of consolidating existing traditional sectoral strengths through investment in key 'enabling technologies', while supporting related diversification into new innovative industries or activities.

In assessing the post-2020 EU response to structural change, the experience to date has three sets of important lessons.

First, **strategies for structural change need to reflect the comparative advantage of regions**, which may well lie in traditional, low-tech rather than high-tech, innovative sectors. Identifying and tackling such comparative advantage requires a process that unearths the (often implicit) knowledge of stakeholders and civil society agents, along the lines of the quadruple helix model, and which transcends administrative silos (Kyriakou 2017, Kyriakou et al. 2017, Wostner 2017). **Policies and strategies need to be designed with realism about the long-term timescale required for structural change**; shifts in specialisation may take decades to achieve (CSIL et al. 2010, Bachtler et al. 2013). In this respect, critical mass is important. Thus, especially where the ESIF represent only a relatively limited amount of funding, it is essential that programme strategies are embedded in wider, longer-term policies (CSIL et al. 2010) with broader policy frameworks supporting innovation and entrepreneurship (Pelletier 2017).

Second, **bold policies for structural transformation shifts need to be accompanied by equally bold social measures**, capable of facilitating accelerated changes to education and skills, and counteracting the transitional social effects of the job losses in traditional industries. Again, the pursuit of synergies between different ESI Funds (ESF and ERDF, but also EAFRD and EMFF), and social and welfare policies is paramount.

Third, **the effectiveness of territorial policies for structural transformation depends on the quality of government and national and local institutions**. They are important for setting the institutional context (recognised by the introduction of ex-ante conditionalities) for effective policy design (European Commission 2017d). In particular, they are necessary to facilitate the emergence of "strategic vision, social entrepreneurship and collective risk-taking" (CSIL et al. 2010) and to change "the way policy is done within government" (Wostner 2017). Effective development models also need to recognise that structural adjustment is a societal as well as an economic process. This requires the process of strategy development systematically to take account of the influence on performance of relevant societal or cultural constraints, and to build in institutional and social measures to address cultural, political or

institutional conservatism and culture change' (Bachtler et al 2013:121). The 'entrepreneurial discovery processes' realised under the 2014-20 ESIF programmes are a good example of how such a process of strategy development may be achieved, engaging civil society agents, creating value networks and changing how stakeholders interact with each other (see Kyriakou 2017, Kyriakou et al. 2017, Wostner 2017). All these examples show why Cohesion Policy is vital in delivering ecosystems for the fourth production revolution.

6.2 The efficiency of Cohesion Policy implementation

The complexity of implementation is one of the main weaknesses of Cohesion Policy. The administrative time and cost of implementing ESIF programmes have increased significantly, primarily due to the resources required for intensified financial management and control procedures (Mendez and Bachtler 2011, Davies 2015, Bachtler et al 2017). The declining amount of Cohesion Policy funding in several of the more-developed EU Member States has led to claims that the management cost of Structural Funds programme administration is disproportionate to the scale of funding. Indeed, there is some evidence that the administrative workload in such cases is reducing the willingness of intermediate bodies and beneficiaries to take part in programmes. While there is widespread support for a major simplification of delivery systems and mechanisms, including fewer rules, regulations/acts and more legal certainty and proportionality, there are also structural barriers to such change due to the EU budgetary discharge requirements.

Steps were taken in 2013 to simplify aspects of administration, and some of these have clearly been beneficial, particularly in relation to simplified costs, flat rates, reporting requirements and e-cohesion (Davies 2015). However, many of the measures have mainly benefited the workload of beneficiaries, and most managing authorities and intermediate bodies perceive that the regulations and accompanying acts and guidelines have become more complex and that the administrative workload and cost in managing the funds has increased.

The High-Level Group on ESI Funds Simplification was set up in 2015 to provide the Commission with advice on simplification measures and the reduction of the administrative burden for beneficiaries. Its agenda covers many important issues such as the single audit principle, proportionality and a more risk-based approach to controls, gold-plating of rules by national authorities and harmonisation of rules.

However, simplification can only go so far. There is increasing recognition at EU level of the need for a fundamental change to the management system for Cohesion Policy that goes beyond simplification of rules and recognises differences in institutional and administrative structures and capacities across Member States (Bachtler and Mendez 2016). The challenge will be to engineer a system that makes a real difference to administration. At the programming stage, it would need to ensure coherence with Cohesion Policy objectives and wider EU economic and industrial policies and provide a performance framework and a commitment to the principles of partnership. During implementation, there would need to be mechanisms for assurance on the regularity of spending, and evidence for the results achieved. The fundamental requirement is less onerous administrative requirements based on the key criterion of risk: those Member States (or programme) that represent low risk – on the basis of scale of funding, national co-financing, record of implementation or proven capacity – could be subject to fewer controls.

Equally, continued application of shared management would be important in countries with larger amounts of EU funding and weaker administrative capacity. Cohesion Policy is credited with having

strengthened administrative structures and cultures across Europe over successive periods through its programming requirements, and the focus on institutional capacity building was reinforced in 2014-20 by making it a thematic objective with dedicated funding (Mendez and Bachtler 2015).

As noted above, ex ante conditionalities were introduced for the 2014-20 period in response to research showing that the effectiveness of Cohesion Policy spending was undermined by deficits in national/regional policy frameworks and institutional/administrative capacity. Member States have made considerable effort to comply with ex-ante conditionalities; Commission data indicate that 75 percent of ex ante conditionalities were fulfilled at the time of programme approval, but with 750 conditionalities the subject of action plans The principle of conditionalities has generally been seen as positive, especially in promoting awareness of the policy or institutional pre-conditions that need to be in place for effective implementation, and in influencing government departments/agencies to make necessary legal, regulatory or organisational changes, despite the complexity of the process of compliance (European Commission 2017d).

Notwithstanding this initial experience, the quality of government varies significantly across the EU, and the evidence shows that institutional capacity-building and efficient public administration are particularly important for effective implementation of EU funding and where strong controls and Commission oversight continue to be warranted (Bailey and De Propris 2002, Rodrigues-Pose 2013, Charron et al. 2015). Indeed, there is a case for strengthening conditionalities related to the quality of government and administrative capacity as well as to strengthen the support for capacity building.

That said, more radical approaches could also be conceived. Given the positive impact of ex-ante conditionalities, they could also take on the function of the present operational programmes, thus significantly reducing the administrative burden. Under such a scenario, the structure of ex-ante conditionalities should closely reflect the structure of the objectives of the reformed Cohesion Policy, which in practice means focusing on issues such as smart specialisation, inclusion and fulfilment of preconditions (transport, environment, energy). Delivery could also be based on these conditionalities within the actual implementation process, i.e. payments could be made as bulk transfers of investment-conditioned grants (Wostner 2008) where national implementation systems provide sufficient assurance. In this case, however, the co-financing rates would presumably be lower. For the countries and regions where assurance is not sufficient, they could use simplified Joint Action Plans on the basis of ex-ante conditionality plans, simplified cost options or usual expenditure-based claims. In such cases, special ex-ante conditionality would refer to administrative and institutional strengthening.

6.3 Economic governance and Cohesion Policy

Over the past three decades, **Cohesion Policy has developed its own, unique system of multilevel governance, which has become a tangible and acknowledged landmark for the whole policy**. Through programming and implementation, it allows the perspectives of different development partners to be reconciled, ranging from the European Commission, national governments, and regional and local institutions to private companies and civil society. The system has brought value-added to socioeconomic and territorial management, including the development of partnership practices in all Member States. In some former centrally planned economies, it was even the major vehicle for developing modern policymaking capacities (including coordination, monitoring and evaluation) and the introduction of a multilateral system beneficial for all interactions across all levels of government, the private sector and NGOs.

As a major component of the EU budget, Cohesion Policy has increasingly needed to be responsive to EU policy goals and efforts to address major challenges, especially in the wake of the financial and economic crises. **In institutional terms, this has meant greater linkage to the Europe 2020 strategy and European Semester** to assure proper alignment with EU macroeconomic and microeconomic policies. The changes introduced to Cohesion Policy under the 2014-2020 MFF were driven to a major extent by those expectations. As noted above, the whole programming structure of ESIF is aligned with the Europe 2020 strategy, and new features were added or further developed to support effectiveness and efficiency, including enforced concentration on EU objectives, macroeconomic and ex-ante conditionalities, performance frameworks, and the territorial integrated approach. A clear link was also made between Cohesion Policy and Country-Specific Recommendations issued by the Council under the European Semester process, which should guide structural reforms in Member States, though this link has proved less effective, notably due to the very short-term scope or lack of focus of CSRs.

Those measures strengthened the participation of some actors in the Cohesion Policy decision-making (e.g. urban areas under ITIs or local actors under CLLDs) and extended the need for interactions between various partners in order to prepare and implement ex-ante conditionalities or meet targets set under the performance framework. However, they also shifted the focus of the governance system from using the indigenous capacities and potentials of a given territory to concentrate policy on realising EU goals and tackling challenges, which might be temporary or less relevant for a particular territory. These developments have changed the 'balance of power' within Cohesion Policy, eroding the bottom-up approach and subsidiarity principle and strengthening top-down, centrally and sectorally managed solutions.

In this way, **Cohesion Policy has become an important instrument to realise different thematically defined goals (EU investment policy), but its capacity to respond effectively to new challenges that have territorial and far-reaching complex social and economic comprehensive effects is decreasing.** This might help to achieve clearly defined goals in some areas at the EU level. However, due to agglomeration effects fuelled by EU integration and globalisation, the lack of a proper policy response may increase social inequality, amplify the threat of economic unintended effects (such as delocalisation of economic activities), and further undermine the development prospects of territories that are not well equipped.

Recent research findings (European Commission 2017) clearly suggest that **the results of Cohesion Policy depend on factors that can only be partially tackled inside Cohesion Policy**. In other words, even the best policy programming and implementation systems are unable to overcome the negative effects of globalisation and integration in some territories if they are not complemented by proper coordination, policymaking and implementation systems, i.e. **a comprehensive governance system with a clear territorial dimension.**

The major (external to the policy) counteracting factors influencing the effective use of Cohesion Policy as a tool for bringing about structural change and more economic and social cohesion across regions and localities of the EU include:

- governance – decentralisation and the quality of institutions across all levels of government;

- the quality of European and national policies for supporting productivity (human resource development, education, export-oriented firms, innovation, key infrastructure, essential public services) paying attention to regional and local potential and development barriers (from natural resources exploitation through connectivity with national frontier regions to smart specialisation – territorially differentiated innovative products and services); and

- macroeconomic conditions being influenced by globalisation, the EU integration process (e.g. in the context of Economic and Monetary Union), national fiscal policies, demographic pressures, etc.

As noted in the previous section, **the current system of EU economic governance is only partially able to assist in creating the proper conditions for effective Cohesion Policy delivery.** The focus is clearly on improving macroeconomic conditions and institutional reforms to help to overcome persistent structural weaknesses in individual countries. CSRs are only partially relevant for improving the policy and institutional environment in which Cohesion Policy operates. Those CSRs relevant for Cohesion Policy relate mostly to general conditions in which investment is made (public procurement, spatial planning), pointing out the inefficiency of implementation solutions in some sectors (e.g. showing the need for structural reforms in labour markets, skills development, and education to improve human and social capital and employment opportunities).

Although the EU economic governance system helps to improve the dialogue between countries and EU institutions as well as the focus of national policies on crucial European reforms, it does not provide a promise of growth and employment to individual countries and regions. In part, this is because of the implementation method (open method of coordination), which requires a strong political commitment from national authorities to implement recommendations (without reward or – in the majority of cases – punishment), and also partly because of the absence of the territorial dimension in this exercise. Simply put, CSRs are formulated very vaguely and from sectoral and short-term perspectives, so they are unable, even if they claim to do so, to promote sustainable development and an integrated approach in the use of differentiated potentials from the perspective of individual territories within the EU.

As mentioned above, Cohesion Policy has developed its own, unique system of instruments to support the achievement of goals ranging from concentration (including earmarking of funds) through ex-ante conditionalities to a performance framework allowing policymakers to focus attention on the tangible results of the policy. The whole system and ex-ante conditionalities in particular has a direct influence on the quality of the national and sub-national programming and delivery of Cohesion Policy (European Commission 2017) through linking the availability of funds with the implementation of EU legislation, the preparation of long-term visions, strategies and programmes and the creation or improvement of existing institutional solutions.

However, similar to CSRs, even full implementation of ex-ante conditions, strict observation of concentration rules and full achievement of targets under performance frameworks do not provide assurance that countries and specific regions will improve their competitiveness. All these instruments – aiming at solving mostly sectorally defined structural and institutional weaknesses – must be used efficiently in combination with:

- good, sustainable pro-growth and productivity-increasing policies, with attention to the territorial differentiation of development factors programmed and implemented by national and sub-national authorities; and

- more coordination at European level of globalisation and macroeconomic factors that are out of reach for individual Member States and development partners.

At present, the ability of Member States and other development actors to implement ambitious pro-development policies is limited not only by the futures of the territories concerned but also by the way in which each globalisation and European integration process impacts on the social and economic lives of citizens.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 A new agenda for structural transformation and cohesion

The EU model of integration has delivered long-term growth and economic and social convergence unmatched anywhere else in the world. However, the model is threatened by the effects of the financial and economic crises on employment opportunities and living standards, combined with the difficulties of European societies to accept and integrate large-scale migration from poorer or war-torn parts of the world.

There is widespread public distrust in the ability of governments at national and EU levels to cope with the economic and social challenges. The EU and the process of EU integration have come under particular pressure, with political challenges to the legitimacy and accountability of the EU and its institutions.

Fundamental to this situation is the highly unequal impact of globalisation and technological change on different parts of the EU. There are significant differences across regions and social groups in terms of the effects of structural changes, partly reflected in political polarisation and the rise of anti-EU parties.

The challenge for the EU is not only to accelerate growth but also to resume convergence to ensure that all parts of the EU are able to exploit the growing globalisation of trade and technological change. In short, growth not only needs to be sustainable but also cohesive and inclusive, i.e. delivering prosperity across the whole of Europe.

Global transformations, especially technological change related to digitalisation and automation in the framework of transition towards the fourth production revolution, have significant implications, particularly with regard to jobs and off-shoring. Nevertheless, they also represent an unprecedented opportunity, and the OECD characterises the **digitalisation of production to be a major 'game changer' in reorienting global production and trade back towards developed countries**.

Structural transformation should thus be at the heart of the renewal of EU policy priorities, as this will also determine the EU's capacity to cope and address other challenges. This means the empowerment of people, businesses and communities with the necessary skills, tools and institutions in order for them to excel in innovation as part of global value chains, but also to enable them to generate territorially distinct and differentiated products and services.

In order to do this, **a new balance between policies for 'competitiveness' and 'cohesion' will need to be struck.** As noted in this paper, the broken 'diffusion machine' means that aggregate productivity growth is faltering: the frontier continues to perform well, but regions that are diverging or keeping pace still represent 60 percent of EU GDP. Cohesion and competitiveness are therefore two aspects of the same objective: inclusive growth.

The effective promotion of inclusive growth requires the EU to reorganise its policy approach. **It will need to facilitate a more coherent structural policy package, that fully integrates the territorial dimensions with the traditional lines of sectoral policies.** Production of the future requires well-functioning 'ecosystems' of open, interconnected networks of stakeholders, cooperating to a much greater extent through strategic partnerships. These will be much more dependent on their business environments to source ideas and solutions both locally (e.g. importance of knowledge-based factors)

and globally. Given that such ecosystems will often be regional/local it is clear that EU sectoral policies alone cannot deliver inclusive growth.

The new structural transformation narrative requires a more territorially differentiated approach, backed by cross-sectoral coordination and alignment of policies across levels of government, which the economy-wide, space-blind approach was unable to achieve. This revised EU policy framework, which has to be more focused (on structural transformation), must put more emphasis on governance (bringing all relevant stakeholders on board) and realise that it can only deliver if it integrates policy instruments at different levels in a coherent policy approach: from the regulatory and structural reforms agenda to EU sectoral and integrated territorial policies. In so doing, the understanding of interrelationships will be critical for the inclusive growth agenda. Rural areas are dependent on cities, as are cities on rural areas. Well-performing metropolitan cities are not 'better' – their function and sectoral composition is simply different, and both types of area can gain from improved connectivity with each other.

7.2 Recommendations

(1) The EU requires a new **strategy for sustainable growth and structural transformation.** This should set out a common policy vision with clear, achievable and manageable objectives. It needs to take account of different national and subnational opportunities and challenges for growth, territorial cohesion and social inclusion. The strategy should provide a coherent framework for all EU policies - through regulatory reform, directly managed and territorial policies – with a collective focus on improving the ecosystems for structural change at EU, national and regional levels.

(2) The ecosystems needed for structural change differ across countries, regions, cities and localities. Effective structural transformation therefore requires **a commitment by governments at different levels to work together to facilitate concerted and integrated action,** combining a mix of policy inputs, to meet different territorial development needs and challenges.

(3) A **reformed economic governance system** should provide an integrated framework for economic policy coordination, aiming at improving the conditions for structural transformation across all levels of government (EU, national, regional, local) and take account of territorial differences within and between Member States and territorial potential; CSRs should be focused on the strategic reforms needed to achieve the new EU strategic goals for growth, structural transformation and cohesion.

(4) Structural reforms require a **mix of incentives and conditionalities** to ensure that they are carried out. Any such mechanisms within the EU economic governance systems should recognise that transformations are demanding processes requiring strategic and systematic efforts to be sustained over longer periods of time. Hence, incentives should be geared towards strategically designed investment for structural transformation as opposed to simple ad hoc transfers and compensatory schemes that are likely to end up as current expenditure that does not strengthen competitiveness.

(5) A new EU growth and structural transformation strategy should be underpinned by a **performance and accountability framework** covering all areas of EU spending, with a consistent and coherent approach to defining the rationale and logic of intervention, the contribution of objectives to the EU strategy, the anticipated outcomes, and the indicators and targets for assessing performance at national and sub-national levels.

(6) Structural transformation requires all levels of government to contribute to common EU objectives, ensuring their adaptation to regional and local development needs and challenges. This requires the **empowerment of regional and local authorities,** facilitating a more flexible and efficient dialogue with EU institutions, the business community and the public (citizens) to respond to globalisation, as well as the opportunities and threats associated with the European integration process.

(7) The 2013 reform of Cohesion Policy went a considerable way towards developing and implementing the essential components of the structural reform agenda. Post-2020 reforms, should therefore **maintain the key principles of the 2013 regulatory changes** (strategic coherence, thematic concentration (but without mandatory thematic objectives), performance focus, integrated territorial development) but involve specific changes to maximise opportunities to influence structural transformation, while addressing the remaining weaknesses of the policy. These changes include the following:

a. ***alignment of objectives and priorities*** with the proposed new EU growth and structural transformation strategy in order to deliver inclusive growth;

b. ***better coordination between Cohesion Policy, other EU policies and national policies*** that have a major role in achieving the objectives of structural transformation defined at EU, national and sub-national levels;

c. ***recognition of the different territorial opportunities and challenges*** for frontier, intermediate and lagging regions to deliver the structural transformation agenda by differentiating support in the designation of regions, financial allocation of resources, and/or the design of strategies;[20]

d. a ***stronger commitment to human capital support*** given the critical role of education and skills for structural transformation, focusing on building effective educational, employment and training systems in the Member States, and ensuring that EU-level human capital policy intervention is differentiated according to the varying development needs and challenges of different countries and regions and delivered in an integrated manner;

e. ***strengthened conditionalities*** to incentivise Member States to create the programming, legal and institutional frameworks for implementing the structural

[20] It should also be recognised that regional and national performances are linked and that especially the frontier regions of less developed Member States play a key role in the structural transformation agendas of their respective countries.

transformation agenda, ensuring that funding is allocated in line with the set objectives and policies, and with the achievement of agreed conditions;

f. ***investment in building institutional capacity***, especially leadership and human resources, capable of developing policies and implementing interventions for structural transformation and cohesion;

g. ***strategic programming of Cohesion Policy at national level*** focused on implementing structural transformation at different territorial levels, linked directly with the economic governance coordination system;

h. a significantly ***rationalised implementation system*** based on the following principles;

- specification of objectives and principles at EU level, but giving Member States maximum flexibility to use national implementation systems;
- rationalisation of the layers of programming and associated documents;
- differentiated models of management and implementation in line with the scale of funding and capacity (for example, making payments through budget transfers of investment-conditioned grants where national implementation systems give sufficient assurance);
- a uniform programming platform and set of rules (to the maximum extent possible) across different EU funding instruments;
- thematic priorities and allocations by funding instruments determined on the basis of territorial needs at national and regional levels;
- greater certainty on financial management and control through the involvement (and approval) of national and EU audit authorities at the programming stage;
- continued reduction of burdens for beneficiaries, complemented by significant reduction of administrative burden also for the entities involved in management of programmes.

i. introduction of an ***EU-wide Technical Assistance programme*** for all levels of government to facilitate the structural transformation agenda and enhance cooperation networks between different tiers of government.

Finally, it needs to be underlined that this paper's advocacy of a comprehensive and integrated approach to inclusive growth rests on the legal provisions of the TFEU, which states that the pursuit of economic, social and territorial cohesion is a collective task of both national and EU policies. Article 175 makes clear that Member States have the primary responsibility for the conduct and coordination of their economic policies to meet cohesion objectives. The same obligation applies to all EU policies and actions, including the implementation of the internal market.

The agenda for 'Cohesion 4.0' is thus a much wider task than for Cohesion Policy alone. It requires Member States to demonstrate that they have implemented structural reforms to support growth and cohesion before uploading domestic interests to the European level. It also underscores the necessity of an integrated approach to structural transformation and cohesion under all EU regulatory and investment policies.

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ANNEX 1: REGIONAL CATCHING-UP IN SELECTED EU MEMBER STATES

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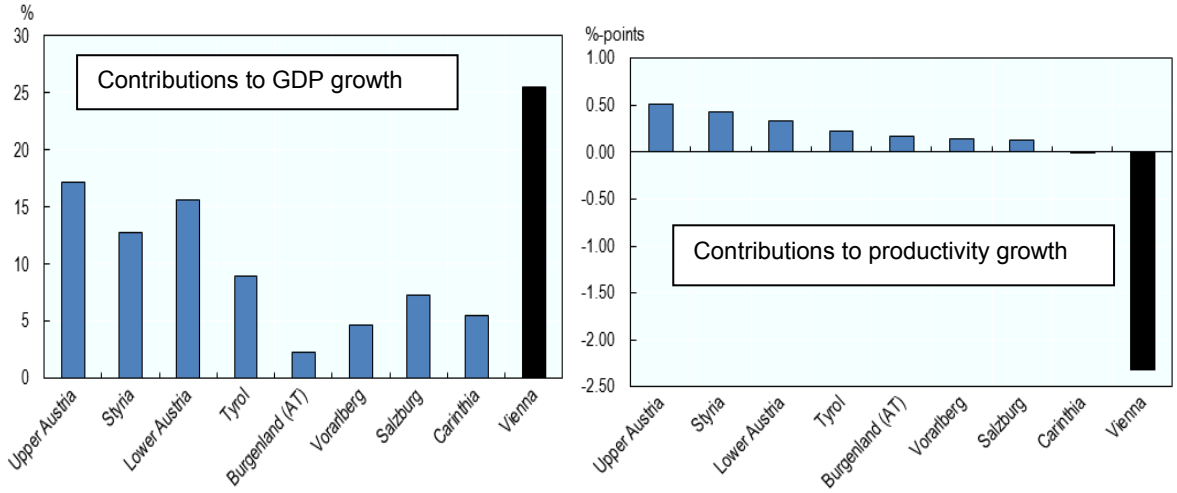

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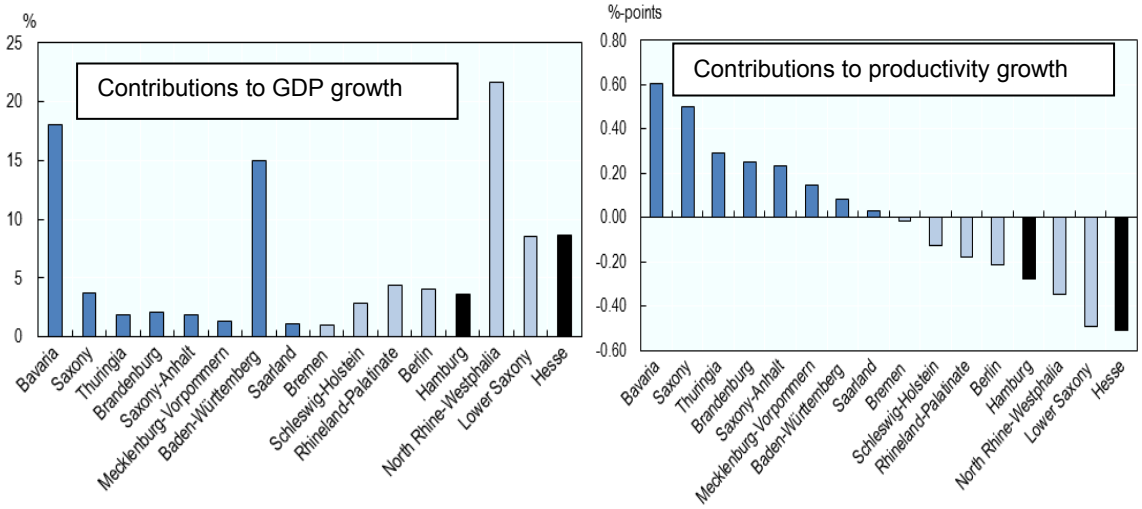

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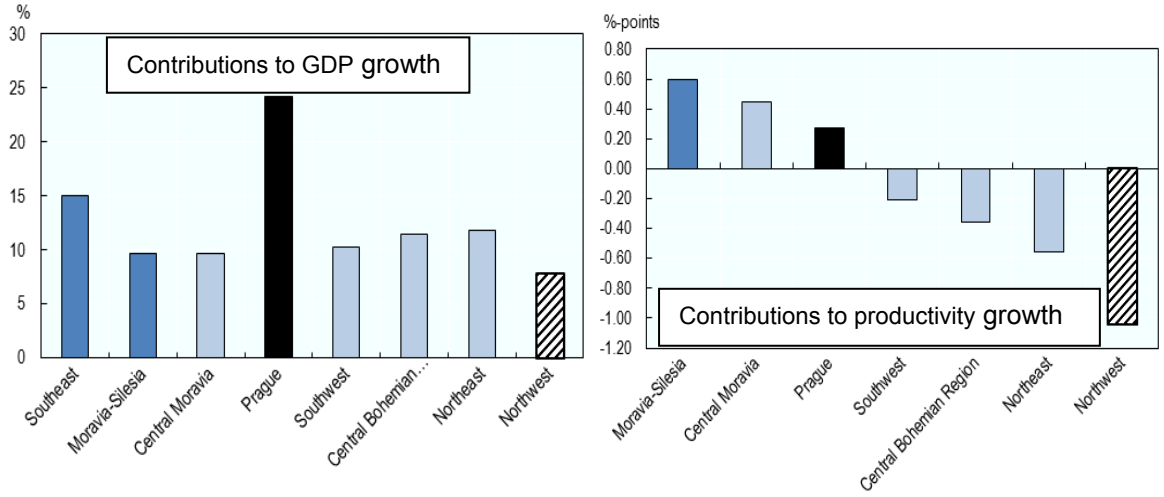

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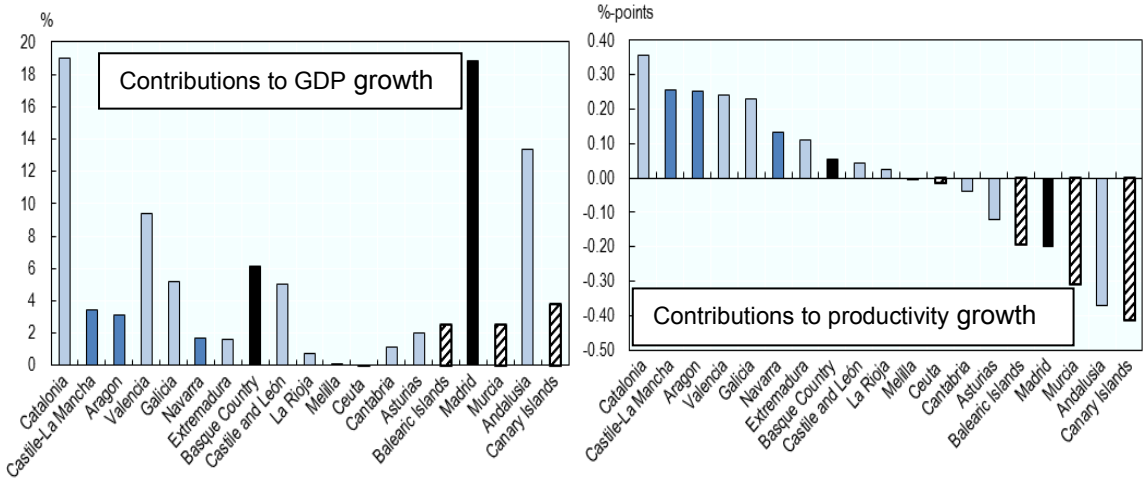

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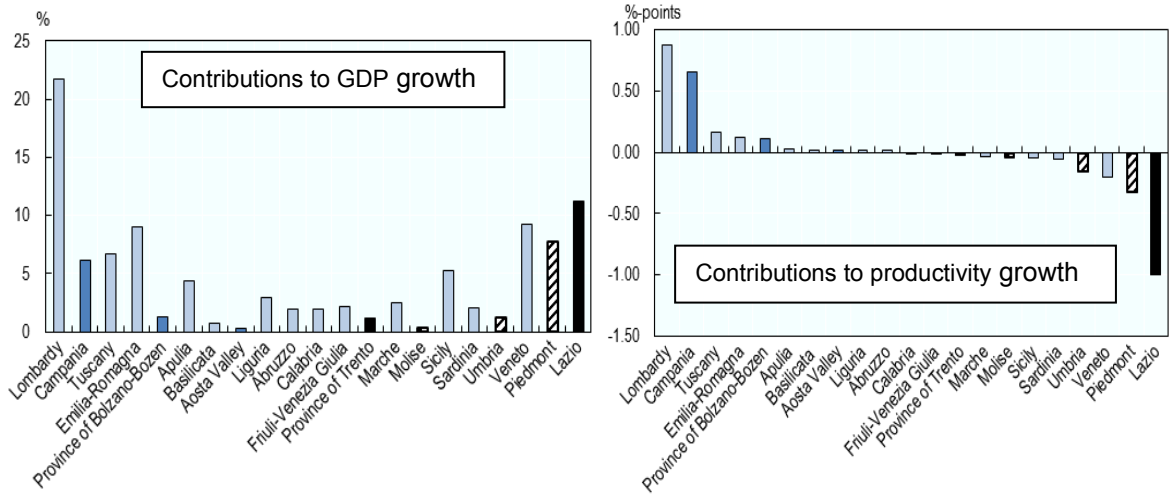

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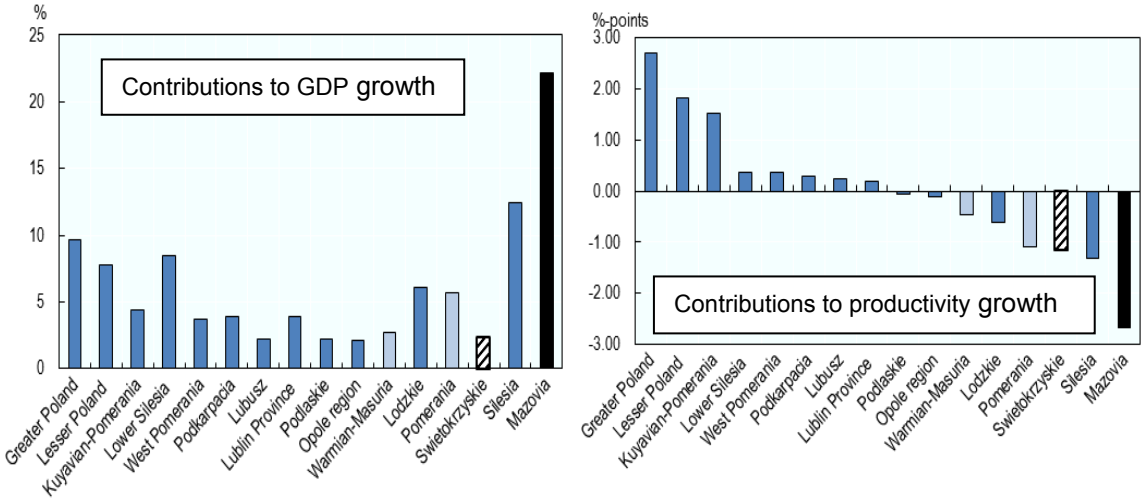

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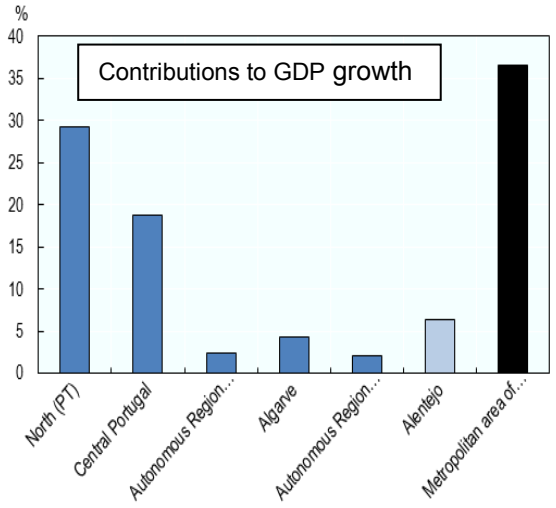

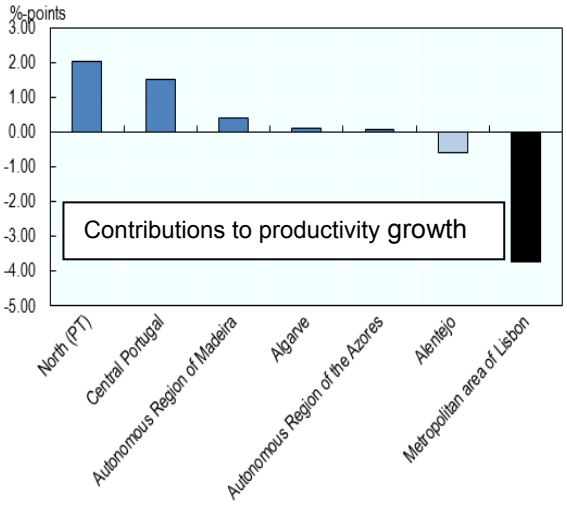

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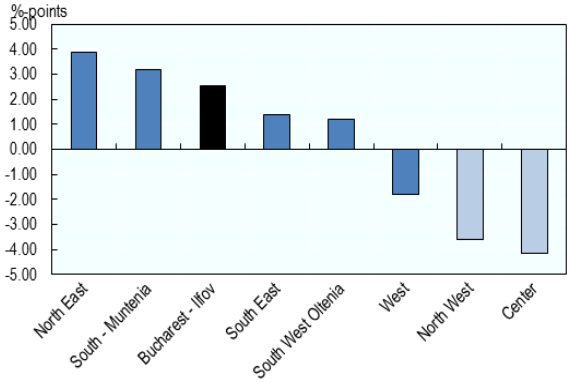

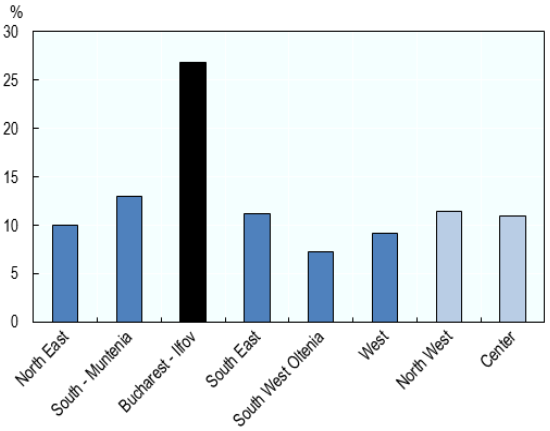

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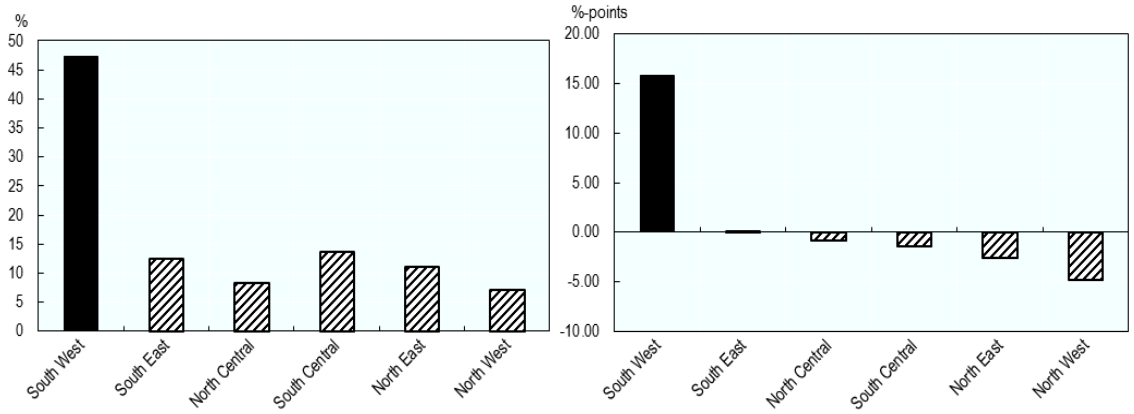

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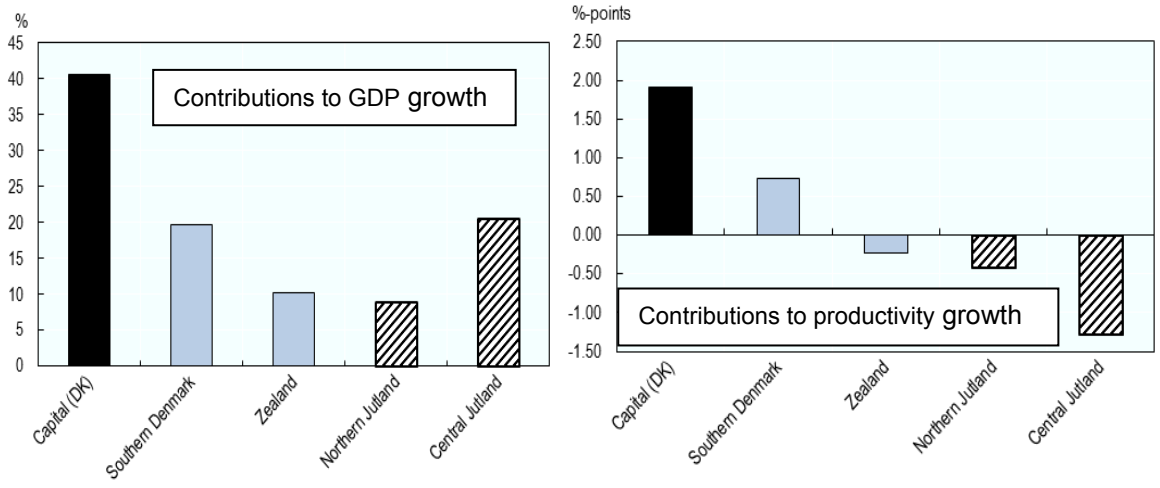

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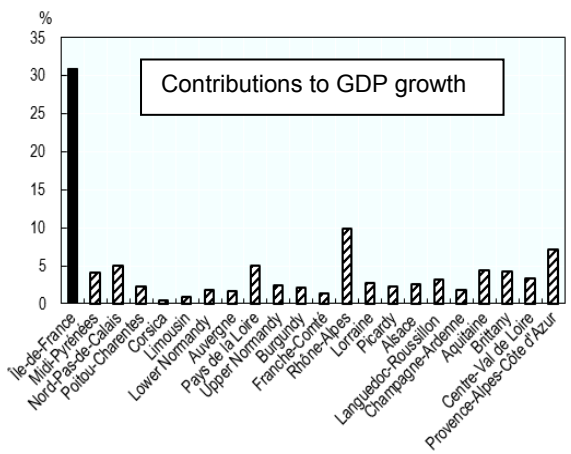

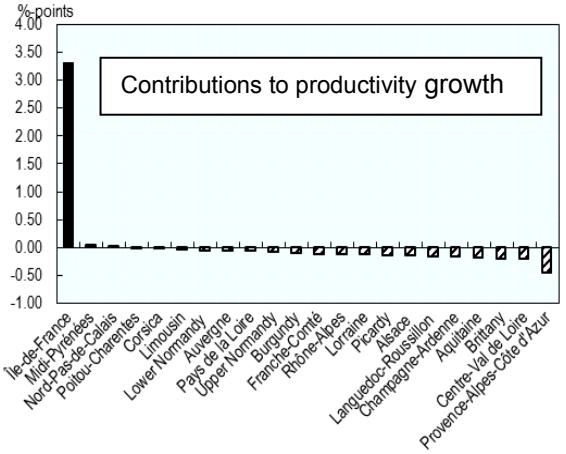

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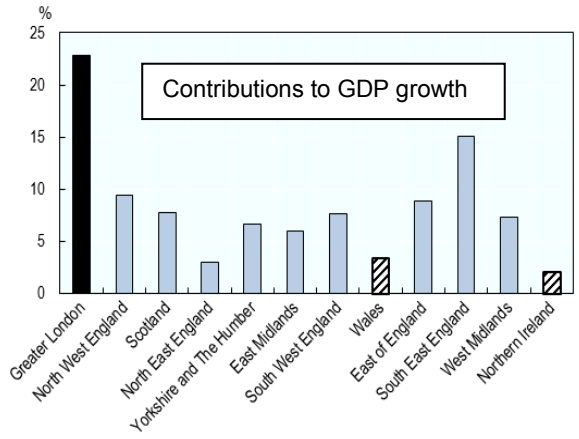

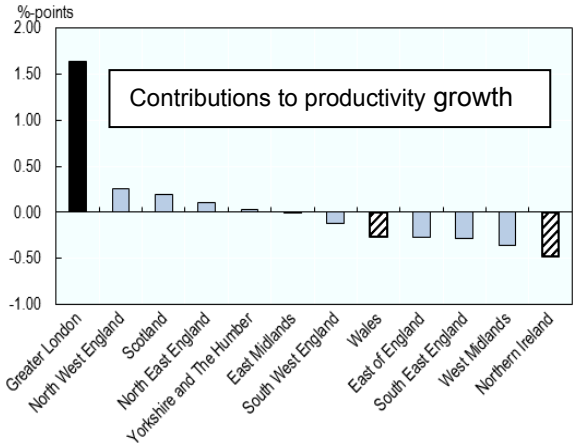

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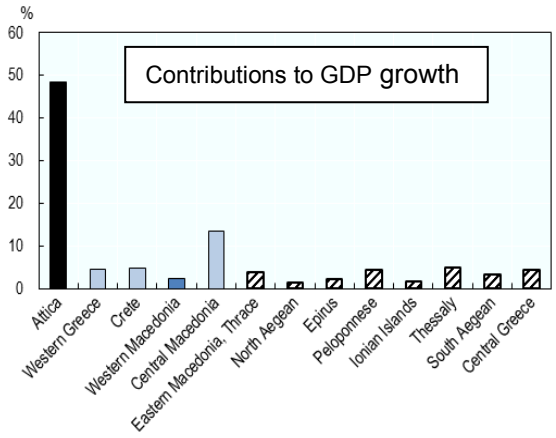

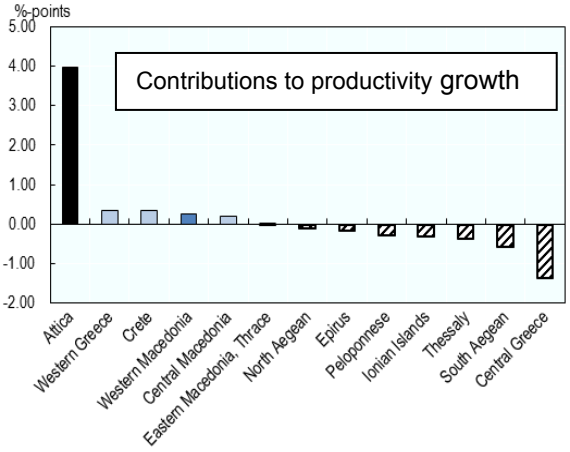

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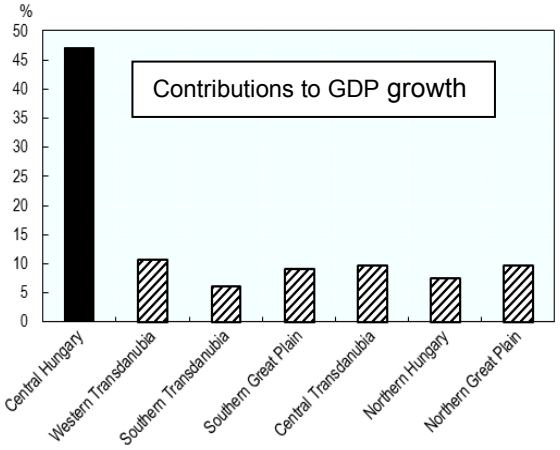

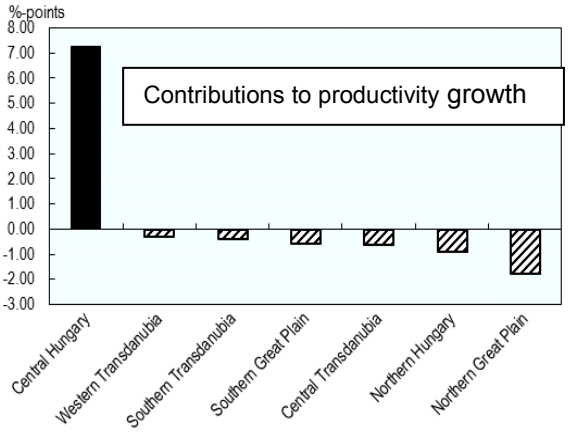

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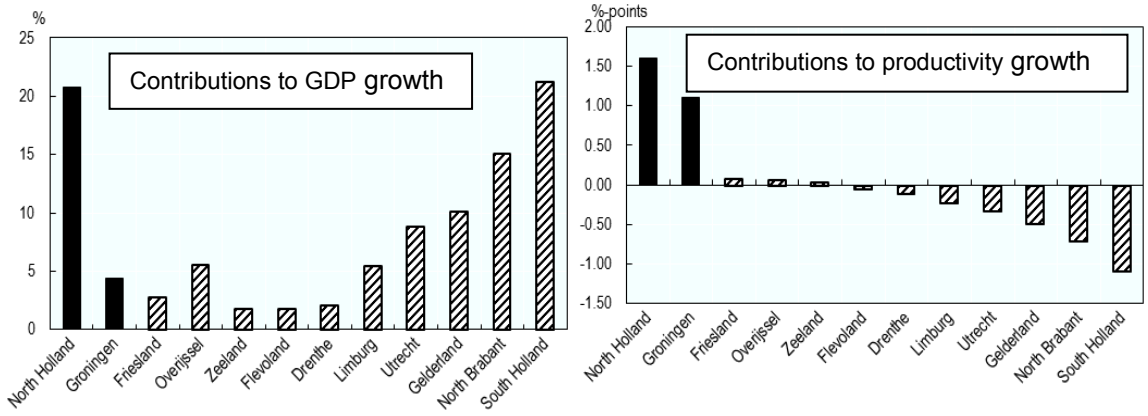

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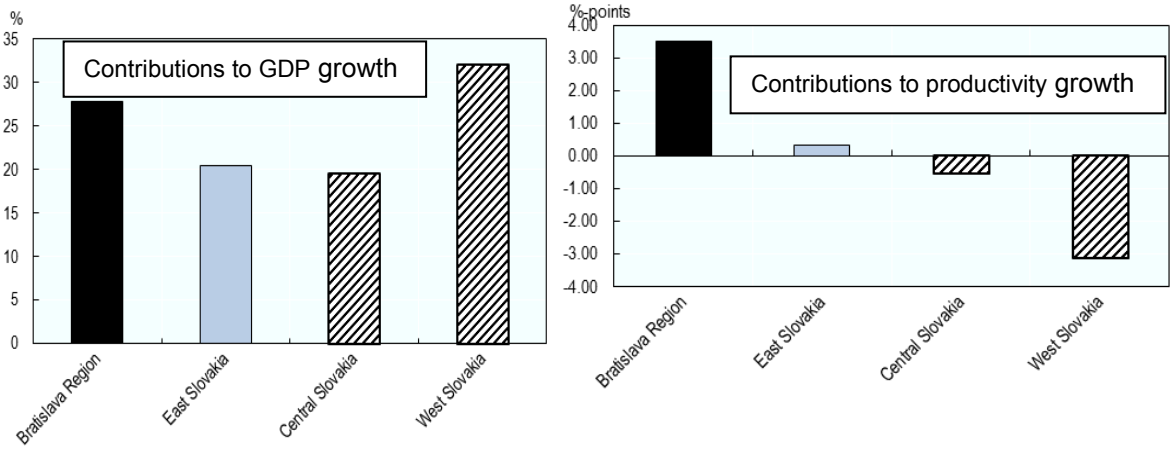

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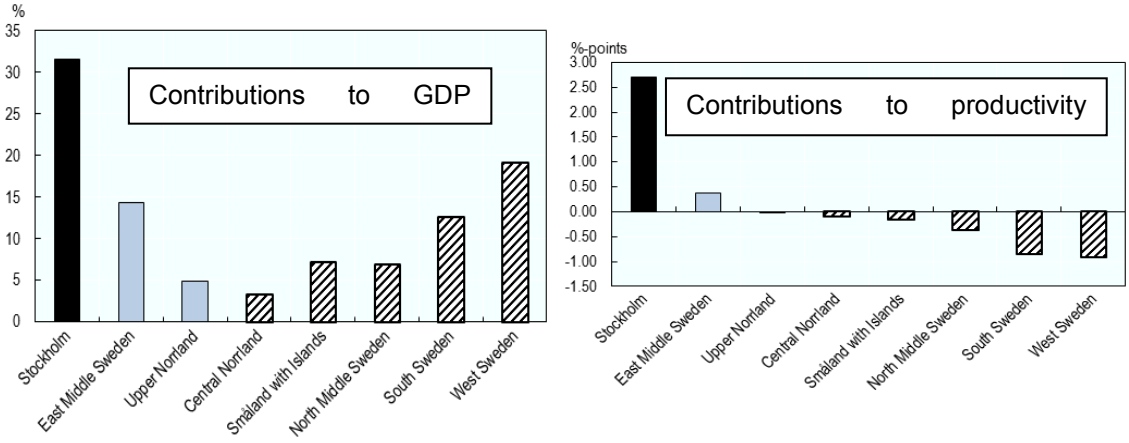

Regional Studies Association

EUROPE

The White Paper on the Future of Europe makes a powerful statement about the current precarious state of European integration and its uncertain future. The continuing effects of the financial, economic and migration crises are associated with reduced confidence and trust in democratic institutions and politicians, and a rise in populism, threatening the unity of the EU. A fundamental cause is the highly unequal impact of globalisation and technological change on different parts of the EU. Many regions have been able to exploit the opportunities of structural change, but equally there are regions and social groups that have been left behind. The challenge for the EU is not only to accelerate growth but also to resume convergence to ensure that all parts of the EU are able to exploit the growing globalisation of trade and technological change. Growth needs to be sustainable, cohesive and inclusive, i.e. deliver prosperity across the whole continent.

In the context of the debate on the future of the EU, and specifically the EU policy and budgetary priorities after 2020, this paper makes the case for a new approach to structural transformation, growth and cohesion in the EU. Drawing on the latest research by international bodies (World Bank, OECD, EU) and academic experts, the paper explores both the opportunities and challenges from globalisation and technological change, the widening differences in productivity between leading and lagging regions, and the need for a new EU policy framework capable of delivering inclusive growth.

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