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EU COHESION AFTER COVID-19: WHAT ARE THE NEW TRENDS FOR THE RESILIENT FUTURE?

Soudržnost EU po COVIDu-19: Jaké jsou nové trendy pro odolnou budoucnost?

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Annotation

COVID-19 pandemic presents a significant challenge for the entire European Union. National, regional and local communities are on the front line in countering the disease and its socio-economic impact. Solidarity and responsibility across our societies and between Member States are key to overcoming this challenge. COVID-19 intensified and accelerated the debate on the resilience of regional economies not only to respond to exogenous shocks but how to shape viable environments. These are systems that meet today's demands and future challenges. In the first line, especially, the green and digital transitions' potential is highlighted as new drivers of EU growth. New economic, social and territorial disparities may appear without appropriate policy action. The aim is that the cohesion policy should respond to these challenges and, in particular, ensure that place-based, multilevel, and partnership-led approaches continue to improve cohesion while building on synergies and mainstreaming cohesion objectives into other policies and instruments. Via literature review method, the paper aims to summarise the fundamental aspects of the EU Cohesion Policy not only for the programming period 2021-2027 but in the long-term perspectives, i.e., cohesion towards 2050. How will the EU Cohesion Policy help in the future? The transition to carbon-neutrality will transform the EU's economy. The digital transition is moving forward at different speeds across the EU. The EU Cohesion Policy will become more flexible, drawing on the lessons from the pandemic, to adapt more easily to unexpected shocks, e.g., by a higher flexibility in transferring resources.

Key words

cohesion, COVID-19, European Union, regional disparities, resilience

Anotace

Pandemie COVID-19 představuje velkou výzvu pro celou Evropskou unii. Národní, regionální a místní komunity jsou v první linii v boji proti této nemoci a jejím socioekonomickým dopadům. Solidarita a odpovědnost napříč našimi společnostmi a mezi členskými státy jsou klíčem k překonání této výzvy. COVID-19 zintenzivnil a urychlil debatu o odolnosti regionálních ekonomik nejen jak reagovat na exogenní otřesy, ale jak utvářet životaschopná prostředí. Jsou to systémy, které splňují dnešní požadavky a budoucí výzvy. V první řadě to znamená, že potenciál zelené a digitální transformace se ukazuje jako nová hnací síla růstu EU. Bez vhodných politických opatření, se mohou objevit nové ekonomické, sociální a územní rozdíly. Cílem je, aby politika soudržnosti na tyto výzvy reagovala, a zejména aby byla schopna zajistit, aby místní, víceúrovňové a partnerské přístupy nadále zlepšovaly soudržnost a zároveň stavěly na synergiích a začleňovaly cíle soudržnosti do jiných politik a nástrojů. Na základě metody literární rešerše, příspěvek si klade za cíl sumarizovat základní aspekty politiky soudržnosti EU nejen pro programové období 2021-2027, ale i v dlouhodobých perspektívách, tedy soudržnost do roku 2050. A jak pomůže politika soudržnosti EU v budoucnu? Přejít na uhlíkovou neutralitu promění ekonomiku EU. Digitální přechod postupuje v EU různou rychlostí. Politika soudržnosti EU bude pružnější a bude čerpat z ponaučení z pandemie, aby se snadněji přizpůsobila neočekávaným otřesům, např. vyšší flexibilita převodu zdrojů.

Klíčová slova

soudržnost, COVID-19, Evropská unie, regionální disparity, odolnost

JEL Classification: O52, P41, R11

1. Introduction

The EU Cohesion Policy remains the EU's most important investment tool; it has effectively addressed the fallout of ongoing extraordinary crises such as the COVID-19 pandemic. Likewise, it will be critical in response to the consequences of the war in Ukraine. However, regional disparities remain high, and the Cohesion Policy should be strengthened and recognised as a fundamental value of the EU to ensure a fair recovery and a just digital and green transition in Europe. Investments in infrastructure, skills, innovation and governance have continued to drive convergence in recent years. Nonetheless, gaps remain, and many growth drivers remain concentrated in more developed regions and urban areas. Recent research shows that the effectiveness of these investments depends on an appropriate region-specific investment mix and an excellent institutional and macroeconomic framework (Annoni, Dominicis, Khabirpour, 2019). Cohesion Policy has helped to reduce disparities, cohesion in the EU has improved, but gaps remain (European Commission, 2022):

- Convergence has been driven by high growth in less developed regions, but low cost-advantages and infrastructure investment returns may shrink over time.
 - Since 2001, less developed eastern EU regions have been catching up with the rest of the EU, leading to a substantial reduction of the GDP per capita gap. Their high growth rates have been fuelled by structural transformation, notably a shift of employment out of agriculture and into higher value-added sectors. In addition, some of these regions have relied on infrastructure investment and low costs to promote growth.
 - Several middle-income and less developed regions, especially in the southern EU, have suffered from economic stagnation or decline, suggesting they are in a development trap. In addition, many were hit by the economic and financial crisis in 2008 and have struggled to recover since.
 - Capital metropolitan regions perform better than other regions. Between 2001 and 2019, real GDP per head in metropolitan (metro) regions grew faster than in other EU regions. In the southern and the eastern EU, both capital and other metro regions had higher GDP and employment growth per capita, leading to a growing concentration of economic activity and employment in these regions. However, metro regions and other regions grew at similar speeds in the north-western EU, while only the capital regions grew slightly faster.
- Significant progress has been made in improving employment and social inclusion, but important structural challenges remain.
 - Employment has been growing, but regional disparities remain larger than before 2008. The economic crisis in 2008 led to a significant spike in regional disparities in both employment and unemployment rates. The employment rate has fully recovered from the crisis at the EU level and reached its highest value in 2019 at 73% of those aged 20–64. Regional disparities have fallen since 2008, but remain wider than before the economic crisis. Employment rates in less developed regions remain far below those in more developed regions.
 - Reducing regional employment disparities requires more employment growth and a reduction of the gender gap. In less developed regions, the gender employment gap is almost twice that in more developed regions (17 vs 9 percentage points). Overall, women in less developed regions are more likely to be disadvantaged than men in the same region and less likely to have a high achievement level than women in other regions.
 - The number of people at risk of poverty and social exclusion has fallen by 17 million between 2012 and 2019, mostly due to the decline of the number of people in severe material deprivation in eastern Member States. Reaching the EU 2030 target of reducing the number of people at risk of poverty or social exclusion by at least 15 million requires maintaining the current rate of poverty reduction over the next decade. The pandemic, however, increased the number of people at risk of poverty and social exclusion by 5 million in 2020.
 - Health disparities have been shrinking. Life expectancy has increased faster in less developed regions over the past decade than in other regions. The pandemic reduced life expectancy (temporary issue) and highlighted the regional differences in a healthcare capacity.

However, this is the past, and the consequences of previous decisions and past activities, which have a real form in the present, i.e., in the results. But what awaits us next? In the next 30 years, the EU's growth will be driven by the green and digital transitions. These will bring new opportunities but will require significant structural changes that are likely to create new regional disparities. If ignored, the demographic transition may undermine both cohesion and growth. Moreover, the way these transitions are managed will determine whether all regions and citizens, wherever they live, will be able to benefit from these transitions. How can Cohesion Policy, together with other EU policies, address these new challenges? Given the COVID-19 pandemic and current economic developments, it seems crucial the effects of government expenditure on growth during recessions (Beetsma,

Giuliodori, 2011; Beetsma, Giuliodori, Klaassen, 2008; Blanchard, Perotti, 2002), as well as on quality of institutions (Charron, Lapuente, 2013; Charron, Lapuente, Annoni, 2019).

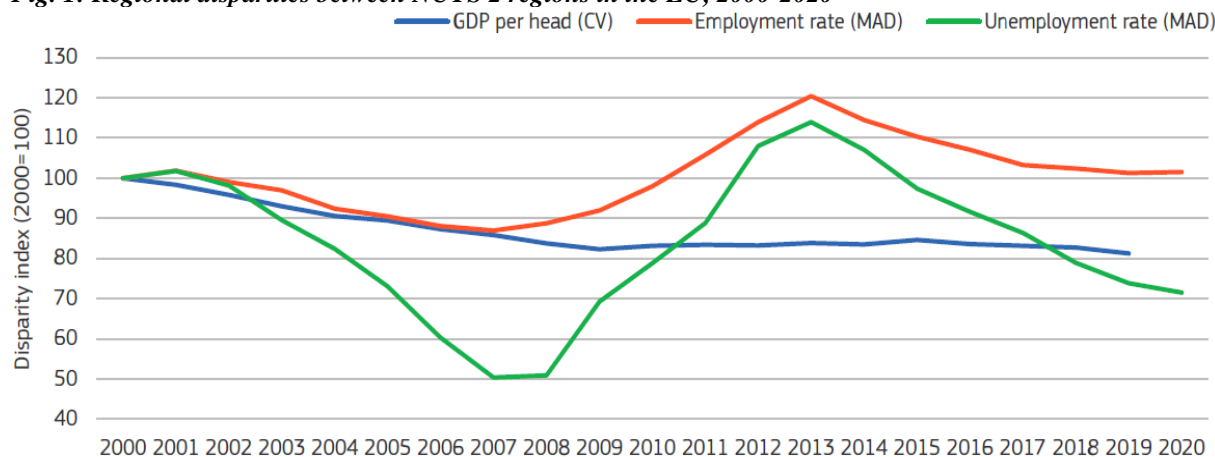
Cohesion Policy can reassure Europeans in three ways: first, by offering them a positive economic perspective for their region; second, by addressing their concerns about their quality of life, employment opportunities and social inclusion; and third, by ensuring that the costs and benefits of meeting new challenges are shared fairly. This can be done by identifying the best responses to these new drivers of disparities, strengthening the role of regions and factoring in the territorial impact of horizontal EU policies.

The paper aims to summarise the fundamental aspects of the EU Cohesion Policy from the current and long-term perspectives, i.e., cohesion towards 2050. Given the topicality of the topic, the key method is a literature review mapping contemporary sources issued by relevant institutions, primarily by the European Commission. A literature review is a survey of scholarly sources on a specific topic. It provides an overview of current knowledge, allowing identifying relevant level of knowledge, approaches, trends and gaps in the current setting of economic policies and the directions in which they are implemented. Literature review doesn't just summarize sources – it analyses, and synthesizes to give a clear picture of the state of knowledge on the researched subject. A literature review in its most comprehensive form includes a synthesis of quantitative findings stemming from quantitative research studies and qualitative findings stemming from qualitative research studies. Synthesizing quantitative and qualitative findings in the same literature review renders the literature review process as a mixed research study.

2. Recent trends in convergence and divergence between the EU Member States and regions

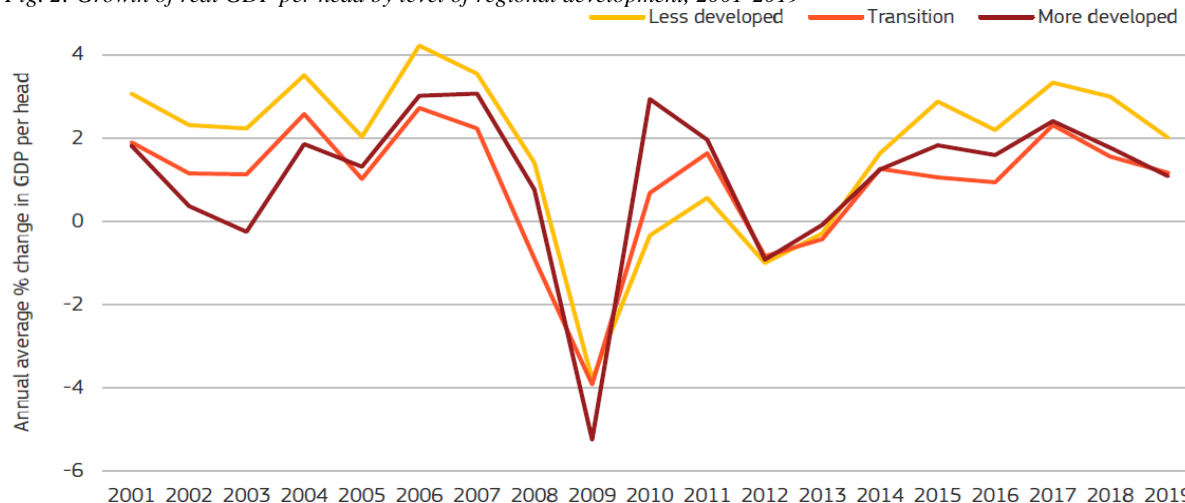
Regional economic convergence has stopped in the EU, and divergence could become a threat to economic progress when globalisation poses new challenges to economic cohesion (Iammarino et al., 2017). Economic convergence' primarily refers to a decrease in regional disparities in GDP per capita. However, it is beneficial to discuss disparities in related concepts such as productivity and employment trends. Although the evidence suggests that the EU economy has benefited, and continues to benefit, from globalisation, these benefits are not automatically and evenly transmitted to all regions. Here is necessary to examine recent trends in economic cohesion in regions across the EU, as reflected in GDP per head and in the underlying developments in productivity and employment. It is linked with the risk of regions falling into a 'development trap' and discusses regional competitiveness factors, including entrepreneurship, digitalisation, and innovation.

Prior to the 2007–2008 crisis, disparities in GDP per head in the EU were shrinking, mainly because regions with the lowest levels grew faster than average (Fig. 1). However, following the crisis, regional disparities widened slightly in the years immediately following the crisis. There are signs that the long-term process of regional convergence, which was interrupted by the crisis, has resumed, although at a very slow pace. Regional disparities in employment and unemployment rates also narrowed from 2000 up to the financial crisis, after which they widened to reach a new peak in 2013. They then began narrowing again; but in 2020 the disparities in both were wider than in 2008. Disparities in the employment rate remain at much the same level as in 2000. The economic convergence of regions over the period 2001–2019 was mainly driven by the catching-up of many of the less developed ones, their GDP per head growing faster than elsewhere, except in 2010 and 2011 immediately following the global financial crisis (Fig. 2). However, the average picture hides differing trends among less developed regions. While there has been strong growth and significant catching-up in those in eastern Europe, many less developed regions in southern Europe have experienced sluggish or negative growth and their GDP per head is diverging away from the EU average.

Fig. 1: Regional disparities between NUTS 2 regions in the EU, 2000-2020

Note: Disparities are measured by the coefficient of variation (CV) and the mean absolute deviation (MAD). Both are weighted by the population in each region. Analysis is based on NUTS 2 but regions which are part of the same metro area are combined.

Source: European Commission (2022, p. 25).

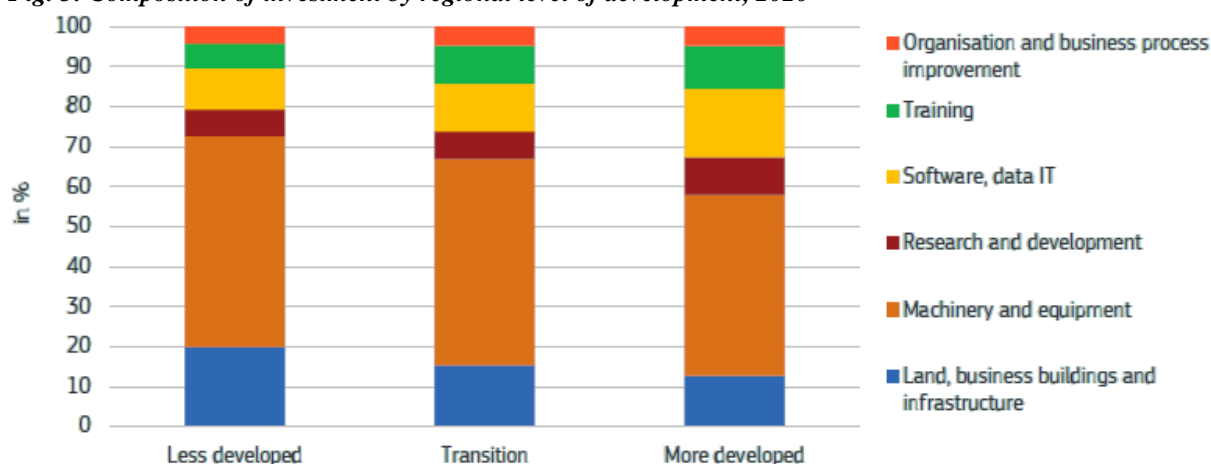
Fig. 2: Growth of real GDP per head by level of regional development, 2001-2019

Source: European Commission (2022, p. 25).

After the financial and economic crisis years and their aftermath, the EU economy is growing again, with growth being particularly high in low-income Member States. After a long period of convergence, since the crisis in 2008 regional disparities in GDP per head have stopped shrinking. Regional disparities in employment and unemployment rates increased dramatically after the economic crisis. Since 2013, they have started shrinking again, but remain significantly greater than in 2007. GDP per head in the less developed regions converges towards the EU average through faster productivity growth and increased employment. This trend is primarily driven by developments in regions in the eastern Member States. In contrast, many less developed regions in the southern Member States fail to catch up and are experiencing decline and divergence. The last two decades have witnessed a modernisation of the agricultural sector, evidenced by a long-term and ongoing increase in productivity and decrease in employment. These developments have been particularly pronounced in the less developed regions, which have experienced a sectoral economy restructuring. With a GDP per head between 75 % and 100 % of the EU average, transition regions seem stuck in a 'development trap'. Between 2001 and 2019, their growth in GDP per head was far below the EU average, and their productivity growth and employment creation were lower than in other regions. Their manufacturing sectors are smaller than regions with a lower or higher GDP per head. Their innovation and education systems and institutional quality are not strong enough to be competitive globally. Innovation in the EU remains highly concentrated in the capital and other metropolitan regions. In north-western EU countries, good regional connections, high digital readiness, a skilled labour force and an attractive business environment have enabled surrounding regions to benefit from proximity to highly innovative ones. In southern and eastern EU countries, the most innovative regions are less strong and, accordingly, neighbouring regions reap the little benefit. These patterns could lead to a widening research and innovation divide between EU regions.

Regional cohesion still addresses the same issue – how to address gaps. COVID-19 pandemic has highlighted gaps among regions and societal groups. The European Investment Bank's Investment Survey (EIBIS), an annual corporate survey that gathers insights on the investment landscape in the EU, helps shed light on the effects of the COVID-19 crisis on investment and how these link to regional cohesion. Firms' responses are grouped depending on their location in less developed, transition, and more developed regions. EIBIS results show that cuts to investment activity triggered by COVID-19 came from lower initial investment activity, particularly in less developed regions. 79 % of firms undertake investment, compared with 85 % in transition and 87 % in more developed regions. Firms in less developed and transition regions tend to be smaller, and fewer tend to export than those in more developed regions. Firms' investment activities in less developed and transition regions tend to be tilted towards tangibles; a smaller share of firms target investment towards research and development compared with peers in more developed regions, where more active innovators (firms that heavily invest in research and development) are located (Fig. 3). Firms in less developed and transition regions operate in a more challenging environment and report obstacles to investment more often. They often find that their investment is hindered by uncertainty, energy costs and lack of access to transport infrastructure and finance. A more challenging investment environment and structural differences pre-dating the pandemic can hamper adjustment to the emerging recovery phase. Fewer firms in less developed and transition regions have reacted to the pandemic by becoming more digital, while many in more developed regions are pulling ahead. Policy measures have helped limit the pandemic's immediate adverse impact on jobs. However, a higher share of firms expects the COVID-19 outbreak to decrease employment in the longer term (19 % in less developed and 14 % in transition regions compared with 12 % in more developed ones).

Fig. 3: Composition of investment by regional level of development, 2020

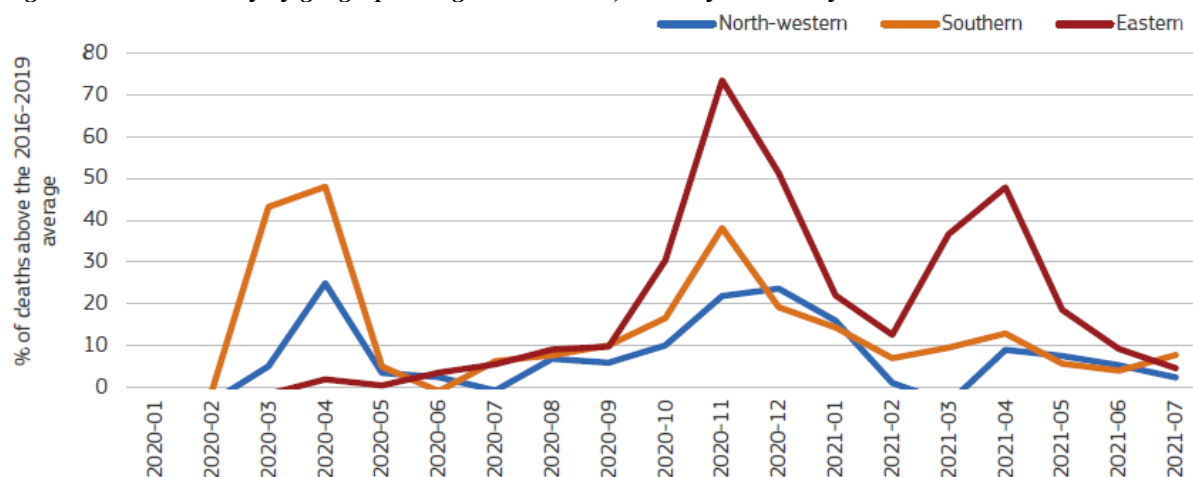


Source: European Commission (2022, p. 55); EIBIS (2021).

Structural shifts toward a greener and more digital economy and innovation will also be important to maintain competitiveness and support economic catch-up in less prosperous regions, and to maintain and nurture good-quality employment opportunities in the longer term. EIBIS analysis shows that the pandemic has negatively impacted human capital formation, with fewer adults participating in training and schools being closed across the EU. Moreover, school closures are likely to have accentuated regional disparities, as less wealthy Member States closed schools for longer. It underscores the need to invest in human capital as part of recovery strategies to mitigate risks of rising divergences in the future.

3. COVID-19 pandemic and its territorial dimension in the EU

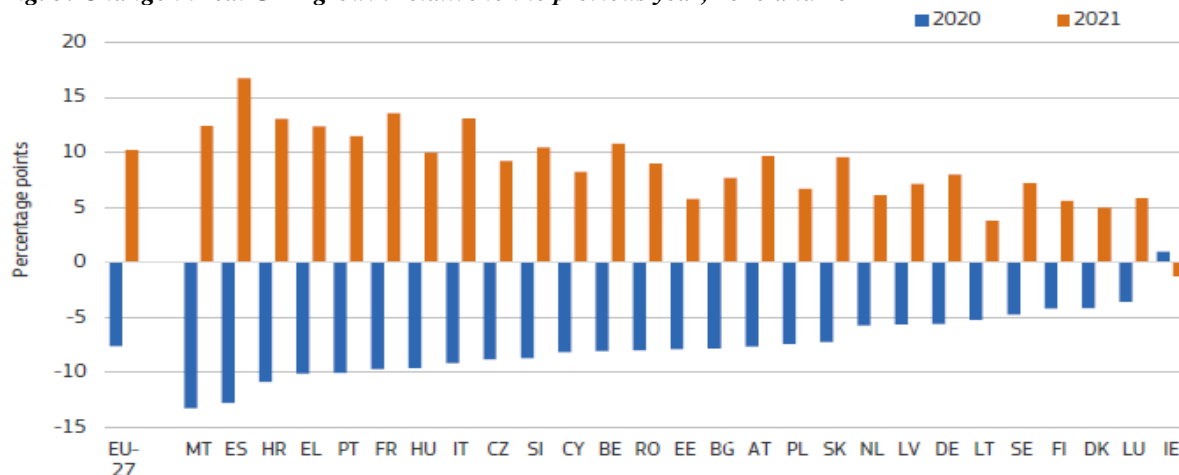
The EU Cohesion Policy assesses the long-term evolution of regional disparities and addresses the dramatic short-term effects of the COVID-19 pandemic. This has had an asymmetric impact on EU regions, reflecting different regional healthcare capacities, restrictions and economic structures. COVID-19 has already increased EU mortality by 13 %, but the impact so far is higher in less developed regions where mortality increased by 17 %. The outbreak of the COVID-19 pandemic has led to at least 872 000 more deaths in the EU compared with previous years. Moreover, excess mortality was higher in less developed regions than in transition and more developed ones. Although the first wave primarily affected north-western regions and southern regions, the following waves led to the highest mortality in eastern regions, see Fig. 4.

Fig. 4: Excess mortality by geographic region in the EU, January 2020–July 2021

Source: European Commission (2022, p. 2).

Now, it is useful to note the diversion of geographical groupings of the Member States by geographic area, i.e., Eastern Member States (BG, CZ, EE, HR, LV, LT, HU, PL, RO, SI, SK), Southern Member States (EL, ES, IT, CY, MT, PT), North-western Member States (BE, DK, DE, IE, FR, LU, NL, AT, FI, SE).

The biggest post-war recession and the restrictions to contain the pandemic led to the deepest post-1945 recession. The COVID-19 pandemic triggered the deepest post-war recession in Europe. Real GDP growth in the EU averaged 2.1 % per year between 2014 and 2019. In 2020, real GDP fell by 6.0 %. All economic sectors were affected by the consequences of containment measures, the disruption of global supply chains, the sharp reduction in demand for goods and services, and the fall in tourism, business travel and recreation. Across Europe and the rest of the world, the crisis led to unprecedented policy responses to mitigate the effects of the shock and strengthen the recovery. As a result, the economic impact of the COVID-19 has varied widely across Member States (Fig. 5).

Fig. 5: Change in real GDP growth relative to the previous year, 2020 and 2021

Source: European Commission (2022, p. 9).

Between 2019 and 2020, there was a reversal in real GDP growth of around 13 percentage points (pp) in Malta and Spain (GDP increasing by 5.5 % in 2019 and falling by 7.8 % in 2020 in the first case, and increasing by 2.0 % before falling by 10.8 % in the second case). In contrast, the reduction was less than 5 pp in Finland, Denmark and Luxembourg, and there was even a small increase in Ireland. Economic activity rebounded in 2021, particularly in the Member States where it had fallen the most. The impact was largest on southern regions, especially those dependent on tourism, where the reduction in hours worked and GDP were the most severe. The pandemic affected especially sectors that depend on personal interaction, such as tourism, and drastically altered our jobs, schools and social interactions, while travel restrictions had a disproportionate impact on border areas. The travel restrictions affected the tourism sector and border areas where people could no longer cross a national border to go to work or to access services. Thanks to job-retention schemes, the impact on employment and unemployment was much smaller than the reduction in hours worked and GDP. This allowed the EU to avoid a big

spike in unemployment. The number of people usually working from home doubled. This increase was highest in many of the capital regions. These regions typically have a more developed service economy, host jobs that can more easily be done remotely, have a highly educated labour force, and have a high-quality IT infrastructure. All these factors facilitated the increase in working from home. The stay-at-home requirements and the internal movement restrictions meant that people had to rely more on local facilities and amenities. The requirement to work from home and the closure of schools meant that many people in cities were crowded into small living spaces during the day. This highlighted the benefit of nearby green areas open to the public. In most cities, most residents can reach at least one hectare of green urban area by walking a short distance. However, in several cities (Cyprus, Malta and Romania, and some big cities in Italy, France and Portugal), less than half the people have easy access to green urban spaces within 400 metres of walking distance of their homes. Working from home requirements and remote lessons also posed challenges for households without fast internet connections, which is more often in rural areas.

The economic impact of the pandemic, the depth of the economic recession during the pandemic were affected by three main factors. First, the length and the strictness of lockdown measures implemented by national, regional and local authorities to limit the spread of the virus. The places with stricter lockdown measures tended to experience a deeper recession. Second, some types of economic activities were much more affected than others. Services (notably accommodation and those relating to culture, leisure, tourism) and activities generally requiring proximity suffered from the containment measures. Member States and regions more dependent on these sectors saw a bigger drop in their economic activity. Third, the policy response of Member States, regions, and local authorities varied in scope and intensity, reflecting the pandemic's differential impact. Restrictions imposed in response to the pandemic did not differ greatly between EU Member States. Restrictions peaked in April 2020, were relaxed in summer 2020, and were increased again during autumn and winter 2020-2021.

Restrictions started to recede slowly in May 2021 and continued so until September. Restrictions in eastern Member States were slightly less strict, while southern Member States had the tightest ones and north-western Member States were in between the two. However, the difference between Member States was greater as regards specific kinds of restrictions. For example, some Member States had long periods when people were required not to leave their homes except for a short period of daily exercise, grocery shopping or essential trips. On the other hand, some Member States imposed no stay-at-home requirements for almost the whole period, and others imposed only modest restrictions. The Eastern Member States tended to have the fewest restrictions and the southern ones the most. During the first wave, north-western Member States imposed similar restrictions to the eastern ones, whereas during the second and third waves, they had a stricter approach similar to the southern Member States.

Regional impact is likely to be highly variable, which is a fact and a verifiable fact, for what RHOMOLO model serves. RHOMOLO is the spatial computable general equilibrium model of the European Commission. It is used for policy impact assessment and provides sector-, region- and time-specific results based on scenario analysis. RHOMOLO covers all the EU NUTS 2 regions, disaggregating their economies into ten NACE rev.2 sectors. The model agents make optimising decisions, and spatial interactions between regions are captured through trade flows and factor mobility. This makes RHOMOLO well suited for simulating the effects of policies targeting human capital, transport infrastructure, and R&D and innovation (European Commission, 2018). Regional GDP data for 2020 are not yet available, which limits the extent to which the impact of the COVID-19 pandemic on the economies of the EU regions can be assessed (Di Pietro, Lecca, Salotti, 2020). A modelling exercise using national data and RHOMOLO regional model gives an indication of the potential regional impact. It shows a particularly severe impact on southern European regions and France and less effect on Nordic and eastern regions. The model suggests that in Spain, Italy, France and Greece, some regions are likely to experience a particularly sharp reduction in GDP. This is especially so for those with a large share of value-added in wholesale and retail trade, transport and accommodation, which is line with the actual changes in hours worked in 2020 indicated above.

Cities and regions in the frontline of the fight against the pandemic. The European Committee of the Regions (2021) annual EU Regional and Local Barometer report highlights the current and future challenges for cities and regions in the EU. The latest edition of this report covers a wide range of issues, including the potentially asymmetric financial and health impacts of the pandemic and Member States' recovery and resilience plans. The report highlights the concern that the pandemic may reduce sub-national finance through falling revenues and rising expenditures. A first rough estimate indicates that this could lead to a funding gap of €180 billion for EU local and regional authorities if left unaddressed. Fortunately, significant EU and national support to local and regional authorities are likely to have mitigated this effect. However, it may still leave some regions and cities more exposed than others. The report also discusses the multiple causes of the asymmetric health impact of the pandemic, including differences in age structure, mobility, restrictions, underlying health issues, healthcare capacity and the uptake of the vaccines. The report concludes that only a place-sensitive policy response can factor

in these big spatial differences. The report argues that local and regional authorities should be closely involved in the preparation and implementation of the recovery and resilience plans. A first assessment indicates that local and regional authorities were not consistently consulted during the preparation of these plans. Some of these consultations only had a limited impact on the final plans.

4. Smarter Europe: Greener/low-carbon and more connected/digitalised

The growing interdependence of the world's economies has had a highly differentiated impact on EU regions. Although some have been well-positioned to take advantage of the new opportunities it offers, others have been hit by job losses, stagnating wages and shrinking market shares due to low-cost competitors moving into more technologically advanced sectors. Innovation is an important driver of long-run productivity growth and, as such, is a key factor in supporting the competitiveness of firms. This is especially important for firms in the EU, which increasingly have to compete with firms in developing regions of the world, such as in south-east Asia, which benefit from cheaper labour, less labour market regulation and fast technological catch-up (World Economic Forum, 2019). The capacity to innovate, and to take up innovation produced elsewhere, is of prime importance – especially since, unlike cost-reduction strategies, innovation is in principle without bounds and so is central to sustaining growth over the long term. Moreover, COVID-19 pandemic accelerated structural economic and societal change, creating some risks for cohesion as firms are adjusting at different speeds to the emerging recovery phase, marked by a stronger emphasis on digitalisation. However, concern has risen about the growing research and innovation divide, linked to the geographical concentration of the most innovative firms and research centres, both within Member States and across the EU. Although concentration can result in positive externalities of research and innovation, the core areas are very often located in more developed regions, so widening geographic disparities. See Dijkstra et al. (2020), who show that political discontent with the EU in Member States and regions is linked to an important extent to economic and industrial decline. The ongoing process of digitalisation may further fuel this research and innovation divide.

The competitiveness of EU regions is about innovation, digitalisation and smart specialisation. Smart specialisation is a place-based approach to the governance of innovation policy that focuses investment in research and innovation on selected areas of activity, identified through a wide and inclusive process to mobilise the local knowledge of relevant stakeholders, including businesses, public bodies, research organisations and civil society. Conceived in the 2014–2020 programming period, smart specialisation strategies were firstly defined by Regulation (EU) 1301/2013 as *"the national or regional innovation strategies which set priorities in order to build competitive advantage by developing and matching research and innovation own strengths to business needs in order to address emerging opportunities and market developments in a coherent manner, while avoiding duplication and fragmentation of efforts."* Smart specialisation approach concentrates resources into carefully defined 'priority areas'. Priority areas can be framed in terms of knowledge fields or activities (not only science-based but also social, cultural and creative ones) or subsystems within an economic sector or cutting across sectors. They can also correspond to specific market niches, clusters, technologies or applications of technologies to specific societal and environmental challenges. Priority areas should at the same time be in line with the region's existing assets and be able to take advantage of innovation opportunities. A partial transition towards innovative and smart transformation. Although it is still too early to assess the impact of smart specialisation on innovation, jobs and productivity, there is already some evidence of how the policy has been implemented and its effect on policymaking. In most regions the prioritisation of investment was based on a broad and inclusive 'entrepreneurial discovery process, which in most cases was explicitly set up for formulating the smart specialisation strategy. Although the extent of prioritisation differs between regions, there is evidence that the selected priorities closely reflect regions' scientific and technological profiles and public and private sector strengths. Strategies do not necessarily match the current economic structure as reflected in the sectoral division of employment. Still, they more often prioritise sectors in transformation, as measured by growth rates of employment. Smart specialisation eligibility criteria seem to have been generally well applied in selecting projects, and the resulting investment in research and innovation largely matches the priority areas selected.

Smarter Europe, i.e., greener/low-carbon and more connected/digitalised Europe. The main strategy how to implement is the European Green Deal. With its European Green Deal and Digital Decade, the EU has set ambitious plans to shift towards a climate-neutral, fair and digital economy. At the same time, the ongoing digital transformation, speeded up by the COVID-19 pandemic, is changing the way people work. The green and digital transition will create new opportunities but also new challenges. This twin transition can boost sustainable competitiveness and create new good-quality jobs with adequate accompanying policies in place. However, the impact on employment will vary by occupation, sector, region, and Member State. As a direct and indirect result of the transition, job losses are expected in mining and extractive industries and traditional energy production. In addition, other energy-intensive or hard-to-abate sectors (transport, automotive, steel industries) are facing

significant restructuring challenges, implying job changes in sectors and regions and massive labour reallocation between them. To realise the opportunities and mitigate the risks, both digital skills and skills needed for sustainability will become increasingly indispensable in nearly all jobs and everyday life. Overall, the development of the information or knowledge-based society is critical for creating the necessary conditions for a modern, competitive economy and strengthening economic resilience.

Green, Digital, Inclusive and Fair: How can Cohesion Policy rise to the new territorial challenges? Since the outbreak of the COVID-19 pandemic in Europe, Cohesion Policy has been at the forefront of the European response to the crisis, contributing to the economic recovery of the EU in complementarity with other instruments, e.g., the Recovery and Resilience Facility. The 2021–2027 Multiannual Financial Framework (MFF) is geared towards a swift and resilient recovery, reinforcing convergence among EU regions, given the uneven territorial impact of the crisis. The legislative Cohesion Policy package for the 2021–2027 programming period entered into force on 1 July 2021 (European Commission, 2021). The reformed rules have been designed to increase the focus of Cohesion Policy on a 'smarter' and 'greener' Europe and create favourable conditions for investment with simplified delivery mechanisms and closer links to structural reforms. Cohesion Policy will thus contribute to implementing the EU political agenda and fostering the green transition and digital transformation. Heading 2 – Cohesion, resilience and values – is the biggest of the seven headings in the 2021–2027 MFF in terms of the budget since about 87 % of the heading falls under shared management and will be distributed to national envelopes on cohesion, on an entirely new budgetary instrument supporting economic recovery and resilience, and on other increasingly important goals (youth, creative sectors, values, equality and the rule of law). Beyond Cohesion Policy, administrative reforms and capacity-building can also be funded by the newly established recovery and resilience facility and the technical support instrument, aimed at supporting sustainable economic and social convergence, resilience and recovery in response to the COVID-19 pandemic.

5. Conclusion

The COVID-19 pandemic has an unprecedented shock to economies with adverse consequences for existing societal productive capacities. The EU Cohesion Policy responded quickly to the COVID-19 crisis by mobilising additional funding, making spending on the crisis response eligible and allowing higher co-financing rates. This helped Member States and regions respond to the crisis. However, Cohesion Policy should now return to its core mission of reducing regional disparities and promoting long-term regional development. The EU Cohesion Policy must now be oriented on addressing new drivers of disparities by ensuring a fair transition, strengthening resilience and responsiveness to asymmetric shocks, strengthening urban-rural links and the role of smaller cities and towns in supporting rural areas, and addressing the needs of left behind places. Investments in infrastructure, skills, innovation and governance have continued to drive convergence in recent years. Nonetheless, gaps remain, and many growth drivers remain concentrated in more developed regions and urban areas. Recent research shows that the effectiveness of these investments depends on an appropriate region-specific investment mix and an excellent institutional and macroeconomic framework. The Fourth Industrial Revolution in the form of robotisation, automatization, digitalisation and hand in hand with green transformation, have increasingly been touted as a key pathway for mitigating economic losses from the pandemic. The European Commission has put the 'twin transition' on top of the political agenda as the two trends that will shape Europe and its future.

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