GLOBSEC
IDEAS SHAPING THE WORLD

VIG
VIENNA INSURANCE GROUP

GLOBSEC Policy Institute & Vienna Insurance Group (VIG) Joint Research Report:

Economic Recovery in Central and Eastern Europe (CEE): Towards a New Normal

www.globsec.org

GLOBSEC
IDEAS SHAPING THE WORLD

VIG
VIENNA INSURANCE GROUP

The research report is authored by GLOBSEC Policy Institute Team in close consultation with the Vienna Insurance Group.

It was compiled with contributions from **Mag. Wilhelm Molterer**, GLOBSEC Chairman of the Board and former Austrian Vice-Chancellor, and Dr. Klaus Mühleder, Director of Management, Strategy and Development at Vienna Insurance Group. Research assistance was provided by **Ms. Simona Talačová**, Research Intern to the GLOBSEC chief economist.

September 2022**

Contents

1 Introduction and Context

I. The New World Unleashed by the Pandemic

Two tectonic shocks at the beginning of this decade – the COVID19 pandemic (focus period: 2020-2021) and Russia's invasion of Ukraine (ongoing since February 2022) – **have upended the European economy** with economic reverberations felt worldwide.

The pandemic induced a severe economic contraction that was met by unprecedented policy assistance in the form of monetary and fiscal stimulus measures. These steps indeed helped establish a floor to the crisis across the European Union (EU) during the initial year of the pandemic until vaccines became broadly available in 2021 and provided immunity against the deadly virus. Vaccinations and policy interventions forged an economic reopening and a dynamic recovery by the second half of 2021.

There had been considerable speculation concerning the shape and form the pandemic recovery would take. Thought leaders in Davos predicted in 2020 that it would be 'K-shaped', setting off significant wealth and value redistribution and creating winners and losers across different regions, economic sectors, and areas of employment. Some actors were expected to tap greater market share and public support and others expected to decline. **There is limited evidence that the driving force of the recovery in the region of Central and Eastern Europe (CEE) was subject to such lasting unevenness**. Only time and more recent data, that said, will provide more conclusive evidence.

The pandemic, nonetheless, has shaped a new macro-economic environment in Europe. Implications include, for example, pronounced deficit spending and elevated sovereign and private debt levels. The historical fiscal stimulus measures alone, rolled out to prop up households, firms, and healthcare systems, have pushed the debt-to-GDP ratio to double or even triple the 60% ceiling afforded by the Stability and Growth Pact in several EU countries. The ceiling was suspended when the pandemic hit two years ago and remains suspended to-date, driving an ongoing policy debate about the reform of EU fiscal rules.

The post-omicron terrain in the second half of 2021 (and the first weeks of 2022 before Russia invaded Ukraine) was **marked by a robust rebound in economic activity** on the one hand even as **transitory inflationary pressures** took shape on the other. The latter was steered by temporary imbalances between demand (emboldened) and supply (lagging) – the culprits include supply chain bottlenecks in some sectors, such as automotive and semi-conductors, and steep energy prices caused by past OPEC decisions that stifled supply

in the global market. But these processes were expected to dissipate with time and inflation forecasted to decline closer to the medium-term central bank target.

Russia's aggression against Ukraine, launched February 24, 2022, derailed both market expectations and the trajectory of the robust recovery ostensibly underway. It not only sent shockwaves throughout Europe and the world but has additionally introduced a new layer of complexity to a conjectured uneven post-pandemic rebound, eclipsing the rebound previously underway.

II. Navigating a More Complex Economic Environment Amid the War and Beyond

The added layer of complexity to the European economic environment post-invasion emanates from several sources and brings to the fore significant themes that are here to stay with us over this decade.

- **European energy security is at stake.** Europe has generally imported about 40% of its energy from Russia. This degree of dependence on a political foe means Europe risks being abruptly cut off from a significant supplier. The dependence, alternatively, may spur the EU to come together behind a decision to impose a full-on energy ban on Russia. In either case, Europe is unprepared to wean itself off Russian energy swiftly and wholly - any such action would generate painful economic aftershocks across Europe.
- **The war is adversely affecting global food supply.** Since both Ukraine and Russia are breadbaskets, the gap in global supply resulting from the war pushed up food prices. In fact, global food prices soared at the fastest rate in over a decade to record highs.
- **The war is detrimentally impacting the sourcing of critical raw materials.** Both Ukraine and Russia are mineral-rich and supply critically important raw materials. Russia, for example, controls as much as 44% of global palladium supplies, key for car and aircraft catalytic converters. Ukraine, meanwhile, produces around 50% of the global supply of neon used in semiconductor manufacturing.
- **Supply chain bottlenecks are set to become broader and more acute.** The post-pandemic supply chain bottlenecks will be a much broader and intense problem, going beyond just automotive and semi-conductors.
- **Lavish public spending is not going anywhere or anytime soon.** Expenditures have been directed to numerous target areas, from defense spending to social support for thousands of refugees fleeing the war to fiscal support to compensate the hardest-hit households for the price shocks they are facing. The resulting debt dynamics and diminished appetite for austerity anytime soon stand out as long-term trends that will prove inflationary.
- **The Russian aggression marks a new era of hostile geopolitics, with far-reaching repercussions for industry, trade, and supply chains.** Western allies will be inclined to conduct business and trade with like-minded countries. A core lesson from Russia's aggression: fostering dependencies on autocracies is not worth it over the long run. The EU and its allies will maintain an upper hand in strategic industries and the necessary

inputs therein, ranging from the sourcing of raw materials to the manufacturing of semi-conductors to near-shored battery production facilities.

- **Inflation is here to stay and has become entrenched.** Pressure to transition away from Russian energy, global food price hikes, and the high input costs passed on to consumers by energy-intensive and raw-materials intensive sectors are all inflationary developments. There is, moreover, emerging evidence concerning second-round effects that have witnessed workers demand higher wages and the threat of a wage-price spiral.
- **Central banks are faced with a tough dilemma.** Central banks all over the world are faced with choosing between containing inflation through interest rate hikes or supporting growth that has been stifled by the war. In Europe, the quandary is accentuated by financial fragmentation and the concern that monetary policy normalization could affect the ability of some countries to borrow.

III. Uneven Effects

The effects of the two-fold shock have already reverberated throughout the global economy and the international community. The consequences will be uneven across the geopolitical landscape, with the energy sanctions repercussions, for example, disproportionally borne by the EU compared to the U.S. Variance will also emerge within continents, with some regions facing greater hardship and enduring more considerable economic costs than others. The CEE-region, as this paper argues, will witness these shocks disrupt and shape its political and economic terrain due to a unique combination of its macro-economic pre-conditions, engines of growth, and trade links. The repercussions will long outlive these shocks in the region.

The region exhibits extraordinary dependency on Russian coal, oil, gas, and nuclear fuel. For countries like Slovakia, Czechia, and Hungary, energy imports from Russia range between 70-100% depending on the specific energy component and respective country. Secondly, the region's economic structure is orientated disproportionately towards manufacturing, underlining the above-average energy-intensity of CEE industry and its disproportionate use of raw materials for manufacturing. The geographical proximity to the conflict accentuates a broad range of effects from the war, be that a greater influx of refugees and associated fiscal support to exchange rate volatility.

Not only cost-of-living crises tend to hit poorer Member States harder through the nominal channel but also the CEE-specific economic structures and geographical proximity to the conflict serve to magnify these processes. The region, to this point, is at greater risk of unchecked inflation than its Western European peers. Headline annual inflation in all CEE-countries under review, in fact, has already reached double-digits as of May 2022, with Czechia reaching 15.2% followed by Bulgaria at 13.4%, Poland at 12.8%, Romania at 12.4%, Slovakia at 11.8%, Hungary at 10.8%, and Croatia at 10.7%. The region is also threatened by more suppressed growth through the confidence channel (the proximity effect), the decaying purchasing power of consumers amid soaring price growth, and supply shortages in critical raw materials and parts in automotive manufacturing and other strategic sectors.

IV. The CEE-Region's Opportunity

Both the COVID19 pandemic and the war in Ukraine are first and foremost grave human tragedies and humanitarian catastrophes, taking lives and ravaging livelihoods. Because of this toll, they should serve as a reminder and an opportunity for the international community to resurface stronger. The CEE-region must be no exception to this principle.

These tectonic changes present opportunities for the CEE-region, both economic and political, that should be seized. First and foremost, the war in Ukraine places the CEE-region in the spotlight globally. Countries like Poland, Slovakia, Hungary, and Romania have gained strategic importance by fortifying the NATO eastern flank border in their territories, assumed a pivotal role in accepting humanitarian refugees, and provided passage for military equipment and humanitarian aid. Moreover, the world has been scrutinizing how the former communist countries – once under the sphere of Russian influence – are reacting to Putin's unlawful war and the atrocities taking places only hundreds of kilometers away from its territory. Their empirical experience serves as a reminder that any show of weakness could prove fatal for their own nations - the risk that Russia could continue its crusade further to the EU neighbourhood is no longer off-limits.

A renewed spotlight on the region will be further down the line be **linked to potential renewed capital inflows**. The valiant Ukrainian resistance to Russia's aggression has inspired the West and mobilized it to adopt unified and bold action. Western leaders have vowed permanent support and solidarity to help rebuild Ukraine through a new international Marshall Plan to restore the war-torn nation. On top of that, CEE-nations hardest-affected by the humanitarian crisis on their borders will require financial assistance from the EU. Apart from public funds, as the situation stabilizes, foreign private investors could be attracted by the potential to finance not merely a return to pre-war status quo but rather a leap-frogging towards a modern and innovative Ukrainian economy and regional economy more broadly. A unique investment opportunity lies in the green space, with the push to expeditiously wean countries off their Russian energy dependencies. Another opportunity rests in the cyber-security space, where a war in its own right has been taking place. The region, both motivated by recent developments and bolstered by an army of engineers and highly skilled technical staff, boasts the potential to lead in this arena.

Capital inflows will necessitate political stability in the region, as well as firm and declared allegiance of CEE-governments to the values of Western liberal democracy **to foster investor confidence**. The localisation of the (previously) international value chain might also be an opportunity to consider. The Russian war in Ukraine marks the beginning of a new geopolitical era – in this climate sitting on the fence between the West and the East is no longer viable. Putin's war has rather prompted a new chapter in European solidarity, an opening to dispel any remaining reminders and nostalgia towards the communist past within CEE societies, and an opportunity to pre-emptively address the disinformation problem in CEE and fortify the region's democracies. It is, to underline this point, a once-in-a-generation opportunity for CEE societies and a unique opportunity for CEE policymakers to create conditions that help minimize risks and reap the benefits from these tectonic shifts in a manner that maximizes economic well-being in the region.

And finally the moment presents a **CEE-opportunity to fast-track its transition towards renewable energy sources benefitting from** the European Green Deal tailwinds and goals including the enlarged financial envelope that will be allocated to complete the transition on a tight schedule. The transition has only been provided enhanced public impetus following Russia's belligerent actions in Ukraine.

2 Country Coverage and Regional Economy

I. Country Coverage

The current report studies the following eight countries located in the CEE-region: *Austria, Bulgaria, Croatia, Czechia, Hungary, Poland, Romania, Slovakia.*

Within the CEE-region, the report distinguishes between three sub-regions:

a. **Central:** Austria, Slovakia, Czech Republic, Hungary

b. **North:** Poland

c. **South:** Croatia, Bulgaria, Romania

Figure 1. The CEE-region in Focus

Source: GLOBSEC.

II. The Regional Economy

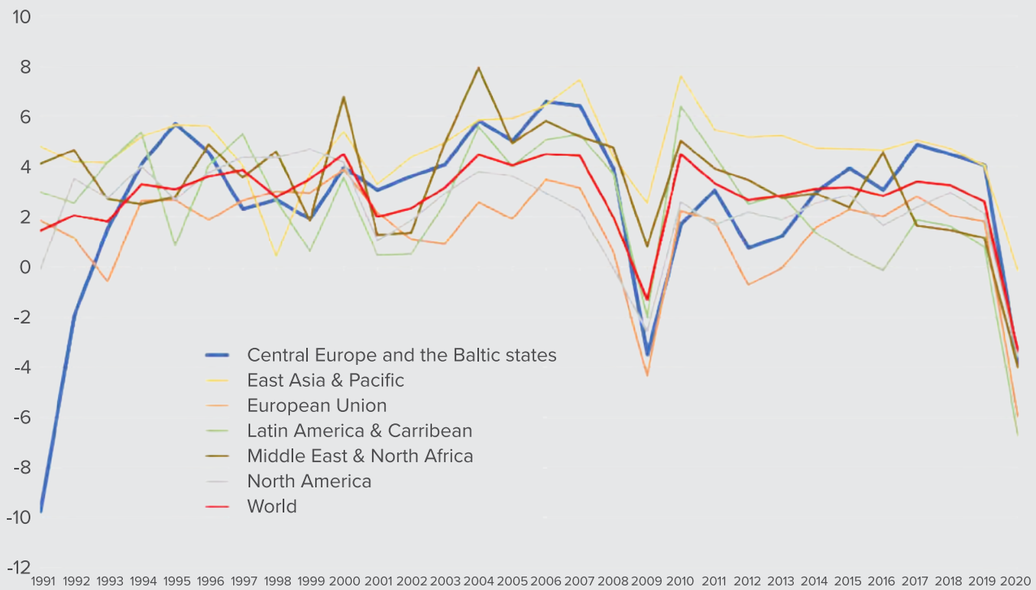
The CEE-region is an economic success story, exhibiting some of the fastest growth rates globally prior to the Great Financial Crisis (GFC) (Figure 2). Most CEE countries embarked on their transitional path from command to market economy in the early 1990s. Despite extensive transitional costs and overall varied economic performance in the early stages of the transition, CEE economies have posted impressive economic gains since 2000, driven by their underlying strengths. These assets have included skilled yet low-cost labour, foreign capital inflows, dynamic export activity buttressed by manufacturing, and more recently also funding from the EU.

The post-transitional, pre-crisis economic performance has, in turn, powered CEE's real economic convergence, narrowing the prosperity gap vis-à-vis western peers and enabling CEE residents to enjoy a substantial rise in living standards (Figure 3).

The shared post-communist legacy of the region has shaped the region's economies, including its institutions, organization of production, economic structures, and attitudes[1]. In general, CEE countries embarked on their transitional paths with low and obsolete capital stocks (except Austria)[2], which have increased over time but remain considerably lower compared to western EU counterparts. The post-transitional capital gap has been financed primarily from abroad, in the form of foreign direct investment (FDI). FDI inflows gradually intensified over time, as the macroeconomic and institutional environments stabilized, i.e., post-transition inflation was tamed, and basic predictable governance structures were set up. They peaked pre-crisis and then levelled off.

Figure 2. CEE-outpaced most of the world's regions in the period before the Great Financial Crisis

(Annual percentage growth rate of GDP at market prices based on constant local currency)



Source: World Bank.

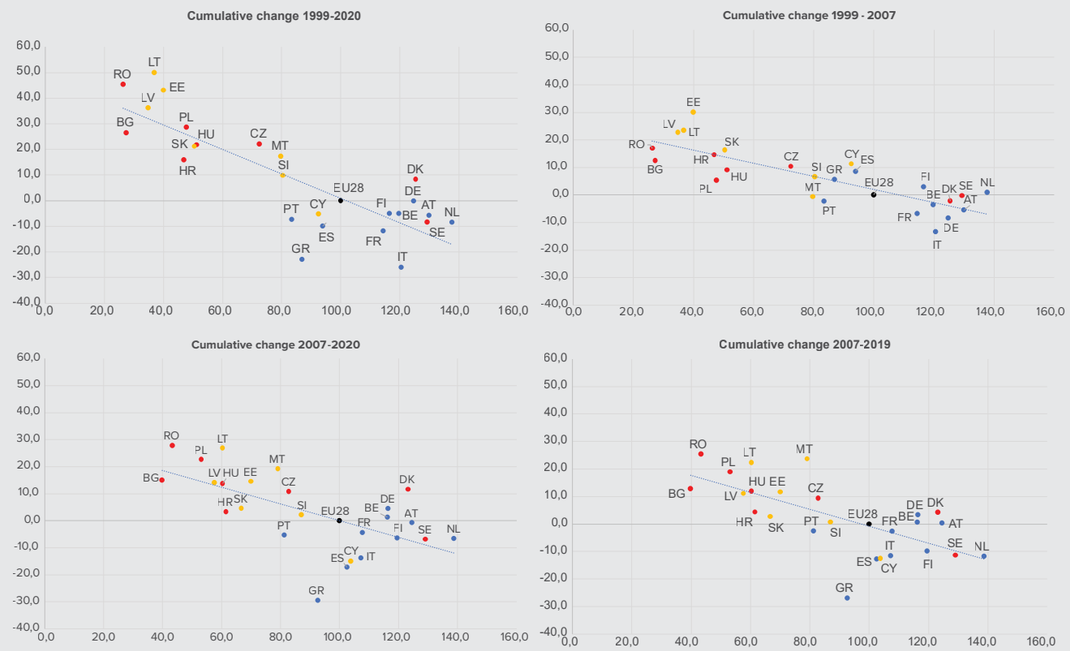
However, it is not just the volume of registered FDI inflows that matters but also sectoral composition, its quality, and the motives of investors. At a sectoral level, the bulk of FDI in CEE has been channelled to traditional industry, notably manufacturing (ranging between 9-39% of the total inflows in 2018), finance, insurance and business services (ranging between 11-27% in 2018), and other services, with these three sectors accounting for the majority of total FDI stocks in CEE[3]. A few countries received substantial FDI inflows in additional country-specific sectors, such as Romania in energy and agriculture, Poland in construction, and Slovakia in energy. Factors like geography, country size, market proximity, resource endowments, cost and quality of labour and capital, government FDI policies and governance more broadly, and investment conditions influence the decisions of multinational companies regarding where to invest across countries and sectors based on country-specific cost-benefit tradeoffs[4].

In CEE, FDI entry and subsequent inflows were broadly motivated by relatively low unit labour costs (ULCs). Research findings indicate that low ULCs have played a significant role in vertical FDI by multinational firms[5], especially in sectors with labour-intensive production.

However, traditionally low labour costs have been on the rise in many CEE countries, particularly in the latter half of the past decade, leading to losses in relative competitiveness vis-à-vis competitors. To the extent that price and wage increases should mirror productivity gains from investment activity and enhancements in knowledge and skills, these developments are a normal part of the convergence process and not a cause for concern per se. But countries where costs are

Figure 3. GDP per capita relative to the EU28: initial level in 1999 versus cumulative change (1999-2020, 1999-2007, 2007-2019, 2007-2020)

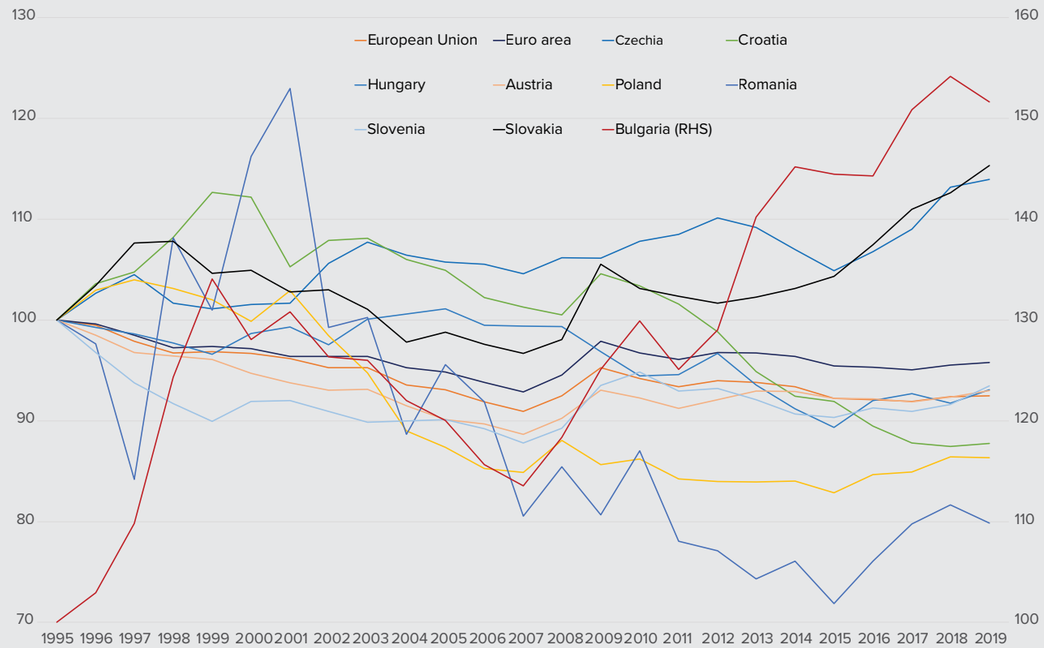
(GDP at current prices per capita in PPS; EU28 = 100; x-axis: level beginning period 1999; y-axis: cumulative change in the level between years indicated)



Source: EC Ameco.

Figure 4. CEE outpaced most of the world's regions in the period before the Great Financial Crisis

(Annual percentage growth rate of GDP at market prices based on constant local currency)



Source: EC Ameco.

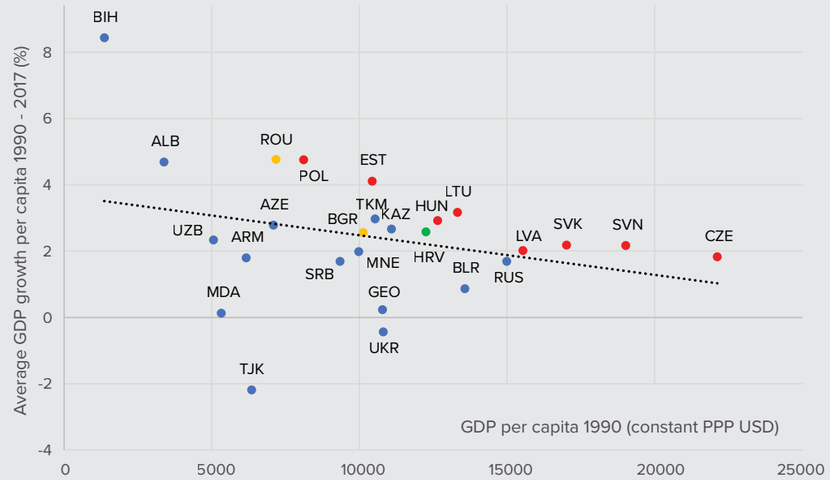
rising consistently faster than productivity risk losing competitiveness. Underlying labour productivity in the CEE – measured as GDP per hour worked as compared to the EU15 average – has been subdued post-crisis and is still lagging pronouncedly behind the EU15 average, with Austria standing out as an exception. The wage-labour productivity decoupling – fuelled by perpetual wage moderation and declining labour shares – has been rampant across advanced economies in recent years and subjected to much scrutiny. For example, a 2020 report by WIIW[6] offers several important insights about the perceived decoupling in CEE. Firstly, it is weaker in CEE than across many major markets such as the US, corroborating other empirical studies[7, 8].

Secondly, **the perceived decoupling has been softer for manufacturing-heavyweights, where underlying productivity gains were considerable compared to a non-manufacturing control group** that saw more pronounced decoupling driven by fast wage growth over the period 2002-2017. Thirdly, the decoupling intensified post-crisis steered by a declining labour share and by worsening terms of trade but shrank again in recent years driven by strong compensation/wage growth. Among CEE countries, Poland and Slovakia experienced the most marked decoupling[6].

Proximity to EU markets has been another strong FDI catalyst - together with other central Europe countries about 80% of investment was received from western European partners[9]. In fact, CEE's integration in international and European regional clubs has played a vital role in its transitional experience and is inextricably linked to domestic policies shaping the transition from communism to capitalism[10]. Apart from benefits connected to the EU internal market - the free movement of goods, services, capital, and people - admission to these clubs guarantees some basic level of macroeconomic and institutional development. EU accession, for example, requires the proper functioning of markets (goods, services,

Figure 5. Post-communist economies which joined the EU grew faster

(Gross domestic product per capita, in constant PPP USD)



Source: Penn World Tables 9.1.

labour), macroeconomic stability (prices, sustainable finance, external balances), and economic governance[11]. Euro accession also necessitates that countries formally achieve nominal convergence criteria, including price stability, exchange rate and long-term interest rate stability, and fiscal criteria[12]. All CEE economies included in the present analysis are current EU members and several are also euro area members (Austria, Slovakia, Slovenia) or now find themselves at an advanced stage of the euro accession process (Bulgaria, Croatia). Characterized as mostly small and open, CEE regional economies have benefitted from close proximity, access, and strong economic ties to the larger European markets.

Overall, CEE experience suggests that FDI inflows have contributed significantly to the transformation and reform of these economies, especially pre-crisis. CEE may have reaped large benefits from technology, know-how, and managerial spillovers from foreign investors early post-transition though the record is mixed (especially later evidence). According to firm-level data in Slovakia and across other CEE countries, for example, domestic firms lag foreign-owned firms in productivity[13]. Foreign-owned enterprises are often larger and benefit from greater returns to scale – this distinction could explain the gap. Nevertheless, aggregate productivity developments have been found to be driven by a handful of foreign-owned superstar firms. Domestic firms, meanwhile, remain laggards, with productivity gains low and flat over time. Notwithstanding such mixed spillover effects, FDI-assisted development has been a key ingredient and driver in the CEE towards catalysing internationally competitive export-oriented industries, with the German-CEE automotive industry cluster serving as a case in point[14].

Evidence suggests, furthermore, that post-communist economies which joined the EU grew faster than their non-EU peers (Figure 5). In more recent years, CEE growth has benefitted from EU cohesion funds, with the latter becoming one of the region's leading motors of growth in the post-crisis decade. The programming period was just about to expire in 2020 and as part of the post-pandemic response it has been extended in both scale and scope. Surging household consumption – and domestic demand more broadly – has also become one of the region's important growth pillars as CEE economies converged and climbed the income-bracket ladder from low- to more seasoned middle-income rank.

All in all, the state of the regional economy pre-pandemic took shape based on a mixture of factors,

including historical heritage, the transitional trajectory, the reform agenda, the establishment of institutions, and regional integration as part of the broader transition strategy of the region. These factors have jointly shaped the terrain of the CEE economy and defined its growth paradigm as we know it today.

But the tailwinds to CEE growth had been waning and its engine losing traction in the years prior to 2020. According to numerous observers[15,16], the Great Recession put a critical dent in the active growth model of CEE and marked an inflection point. Despite post-crisis policy efforts, CEE growth rates failed to redeem their pre-crisis dynamism. Its competitive advantages, such as cost competitiveness, have been waning, productivity has been stalling, and the export-oriented manufacturing over-reliant paradigm that once sufficed to place the CEE region among the best performers is becoming a liability in the ever-turbulent geo-economic terrain. **CEE remains not only undercapitalized but lags on the twin green and digital transitions, a necessary metamorphosis to stay on par with a rapidly changing world.**

Recent crises have the unique potential to serve as a catalyst for the region to unleash a new, more dynamic, globally competitive, and resilient growth paradigm. To do so, changes that the two recent shocks – the COVID19 pandemic and Russia's war in Ukraine – have introduced to the global and regional economies must be analysed, with the aim of putting forth an effective, integrated, balanced, and regionally coordinated growth agenda directed at improving productivity outcomes in strategically selected domestic sectors, expanding higher-value-added exports, and tactically investing in innovation of production processes and in services to meet the demands of the challenges of the new, post-pandemic, and post-war era.

The goal of the forthcoming research brief is to formulate and detail the macro-economic knock-on effects from the pandemic and Russia's war in Ukraine on the CEE-region, as well as their implications for the region's economic recovery, policy calibration, and ultimately the transition towards the new normal.

3 The Pandemic: Impacts and Recovery

a. Sectoral Shifts and Business Dynamism in the OECD-region

Economic shocks, such as the COVID19 pandemic, often lead to the reallocation of capital and workers to adjust to changing economic circumstances. Economic shocks have forged winners and losers in our economies in the past. The Great Financial Crisis (2007-2008), for one, saw new regulations introduced to curb the unhinged power of the financial sector - these measures provided a more favourable climate for the rise of technology and social media. In the early 1990s, meanwhile, a recession propelled the spread of personal computers, cell phones, and the internet at the expense of traditional industry. And the stagflation of the 1970s in the United States induced financial and real estate booms. The Great Depression, finally, catalysed growth in car-making, aerospace, and consumer goods at the expense of legacy manufacturing and coal mining.

The pandemic has triggered some early new sectoral trends across the OECD region (Figure 6) with the nature of the shock and the physical lockdowns the main culprit and ensuing policy responses a secondary one. Early data points to a sectoral divergence in the revenues of companies and profits across the OECD region between 2019 and 2020 (Figure 6). Businesses, such as consumer services, transportation, commercial, and professional services (but also manufacturing, automobiles, and components that typically rely on physical presence of their workers or necessitate physical interactions to take place) were penalized. On the flipside, the new needs that emerged during the pandemic, including healthcare and medical equipment, as well as the new demand for pharmaceuticals have translated into increased profits and revenues for OECD businesses in these areas. Confined to their homes, workers and consumers had to rely on digital solutions in an unprecedented fashion, boosting the software industry and related services. The combination of shortages and elevated demand in goods dependent on semi-conductors also forged clear winners in the semi-conductor industry.

On the EU policy-response front, the pandemic prompted a major paradigm shift, as demonstrated by the EU Next Generation facility and its centrepiece Recovery and Resilience Facility (RRF) featuring a common-European debt instrument. The €1.07 trillion largest-ever budget, alongside the additional €750 billion stimulus through the Next Generation EU facility, represent historical financial outlays and a bold European policy response. Over

Figure 6. Sectoral Changes in Economic Fortunes in the OECD region: Evidence from the Pandemic

(Changes in revenues and profits between financial year 2019 and financial year 2020 by sector)

Source: S&P Capital IQ; and OECD calculations via the OECD Economic Outlook, Volume 2021 Issue 1.
Note: Profits are measured using earnings before interest, taxes, depreciation, and amortization (EBITDA). Results are reported for the median firm for each indicator and weighted by the firm's asset size in 2019.

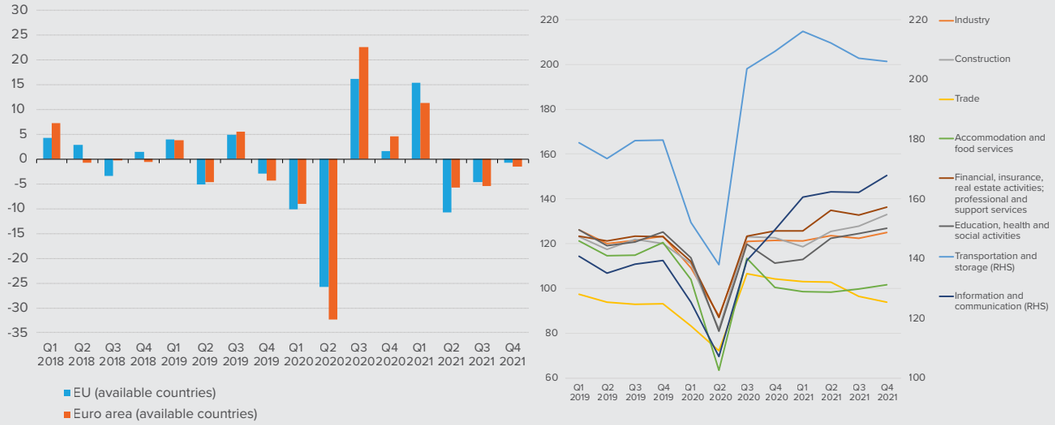
50% of budgetary expenditures are earmarked for modernization programs such as research and development investments, decarbonization programs, and innovation initiatives. Fiscal rules under the RRF mandate that 37% of funds be directed towards climate investments and reforms and that at least 20% of funds be directed to digitalization in recognition of the urgency to address this double-threat as part of the pandemic recovery. This policy response entails that large volumes of EU funds will be flowing into the green transition and related industries (renewable energy, green mobility, clean infrastructure, industries related to sustainable building renovations, etc...) and digitalization (information technologies, cybersecurity, fintech, e-commerce, digital services) in the coming years to support the sustainability pledge that lies at the heart of the post-pandemic EU strategy.

In terms of national responses, the pandemic saw blanket fiscal support rolled out in the initial months of the pandemic and a floor put beneath EU business bankruptcies (Figure 7). In both the EU and the euro area, fiscal packages contributed to a sharp decline in firm destruction in Q2-2020, which was in part corrected in the following quarters (Q3-2020 to Q1-2021). The remainder of the year witnessed net business creation rather than destruction amid prospects that the virus would recede due to vaccinations and an anticipated ensuing rebound in economic activity (Figure 7, LHS).

Interestingly, and counter-intuitively, considering the gravity of the shock and the uncertainty associated with the future trajectory of the virus, the data suggests that new business creation in Europe occurred in some sectors. The initial dip of all new business creation in Q2-2020, notably, was followed

Figure 7. Firm Bankruptcies in Europe (LHS); Registration of New Business by Sector: Evidence from the Pandemic (RHS)

(Available EU countries, index 2015=100, % change compared with the previous quarter, seasonally adjusted)



Source: Eurostat.

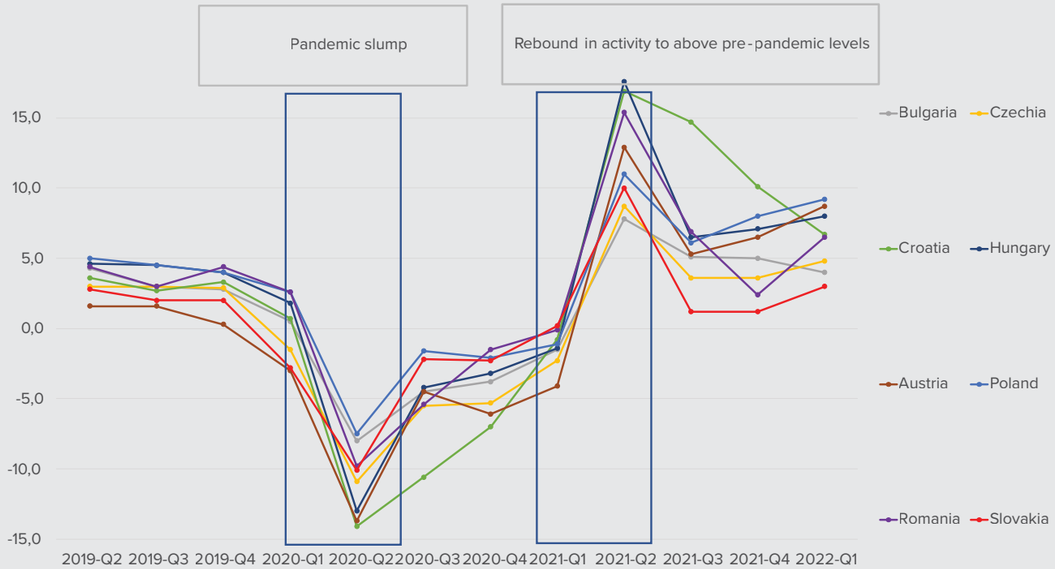
by an upward trend in several sectors (Figure 7, RHS), signaling improved confidence in the economic recovery and indicating the potential rise of a new gig economy in a post-COVID-19 world.[17] Some workers on lockdown, for example, tapped the gig economy to supplement their incomes and/or to respond to new demand for services provided in the digital space (i.e., professional and support services). In any case, the positive trends and business dynamism in some sectors (even as others suffered) underscores the resource reallocation in the economy taking place.

b. Recovery at CEE Country Level

CEE economies were hit hard during the first pandemic wave, especially in the second quarter of 2020, with Croatia recording the sharpest decline on record at an annual basis (Figure 8). On the other side of the spectrum, Poland weathered the pandemic shock best with the mildest GDP losses in the second quarter of 2020. These outcomes are not surprising in light of the unique characteristics of these CEE economies and the overall pandemic-fuelled dynamics in the economy. Croatia stands out as CEE's lone economy dominated by services, such as those related to tourism and hospitality, that were hardest hit by lockdowns and travel restrictions. In contrast, Croatia's CEE peers – Czechia, Poland, Slovakia – feature minor service- intensity with their economies rather dominated by industrial activities. Industry and construction-related activities held significant weights in the economies of Czechia (34%) and Poland and Slovakia (both with 31%) according to Eurostat. Poland's top rank reflects its consistent position as one of CEE's best-diversified economy pertaining to its export portfolio and domestic production that make it more resilient in times of turbulence. The Polish economy held up well also in previous crises: it was famously the sole CEE economy that avoided contraction during the Great Financial Crisis of 2008-2009.

Figure 8. CEE region's annual GDP growth

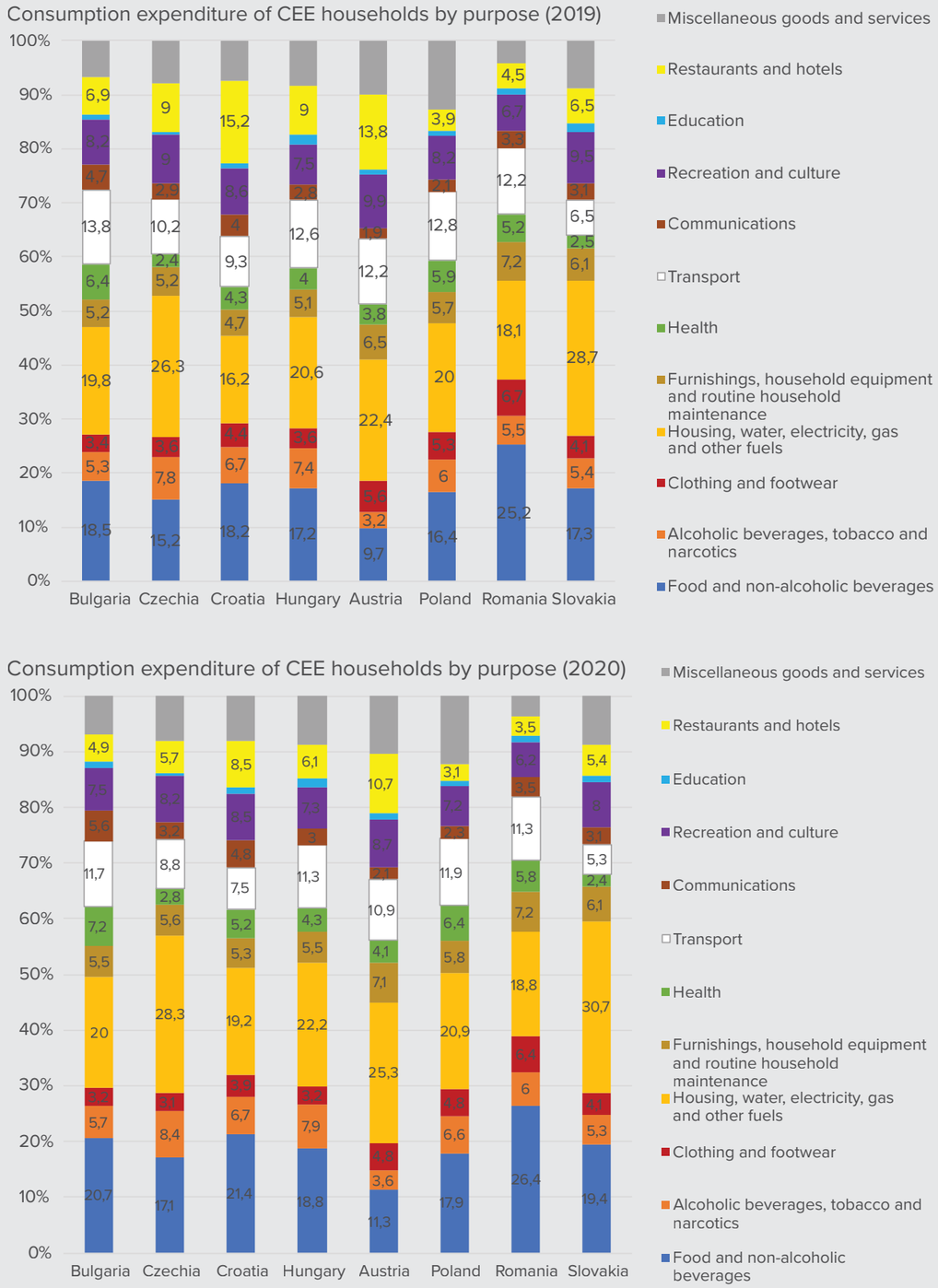
(Seasonally, calendar adjusted)



Source: Eurostat.

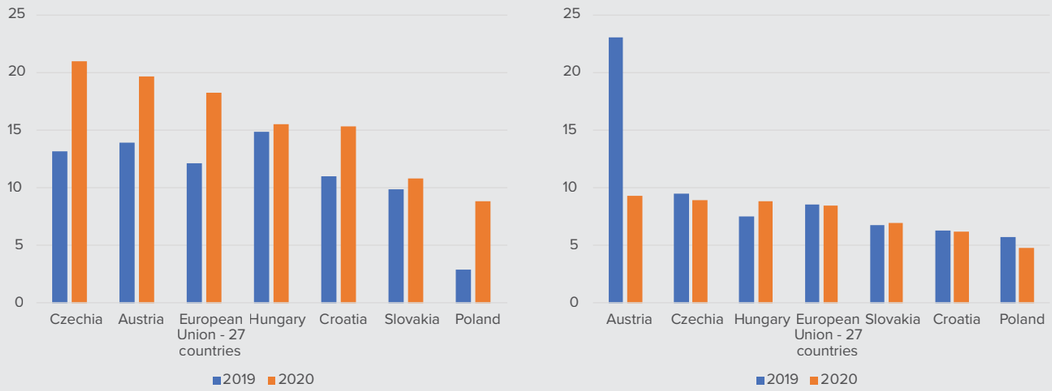
In shifting gears to developments following the initial shock and GDP drops in the second quarter of 2020, most CEE countries experienced brisk rebounds, reaching or exceeding their pre-pandemic levels merely a year later (Q2-2021). Generally, the economies that contracted the most recorded the strongest subsequent gains (Croatia, Hungary). Since the trajectory of the virus was largely seasonal, with spring and summer seasons contained and restrictions relaxed and falls and winters marked by surges in infections as well as new variants, CEE economic activity broadly mirrors these developments. The rollouts of the vaccines, the resulting improvements in the epidemiological situation, and the related reopening of the economies fuelled the rebound peak in Q2-2021, with Q3-2021 tainted by the Delta-wave and local outbreaks and Q4-2021 dominated by the Omicron wave.

Figure 9. Consumption Expenditures of CEE-households by Segment: Evidence from the Pandemic



Source: Eurostat.

Figure 10. Gross Household Saving Rate (LHS) and Gross Household Investment Rate (RHS): Evidence from the Pandemic (%)



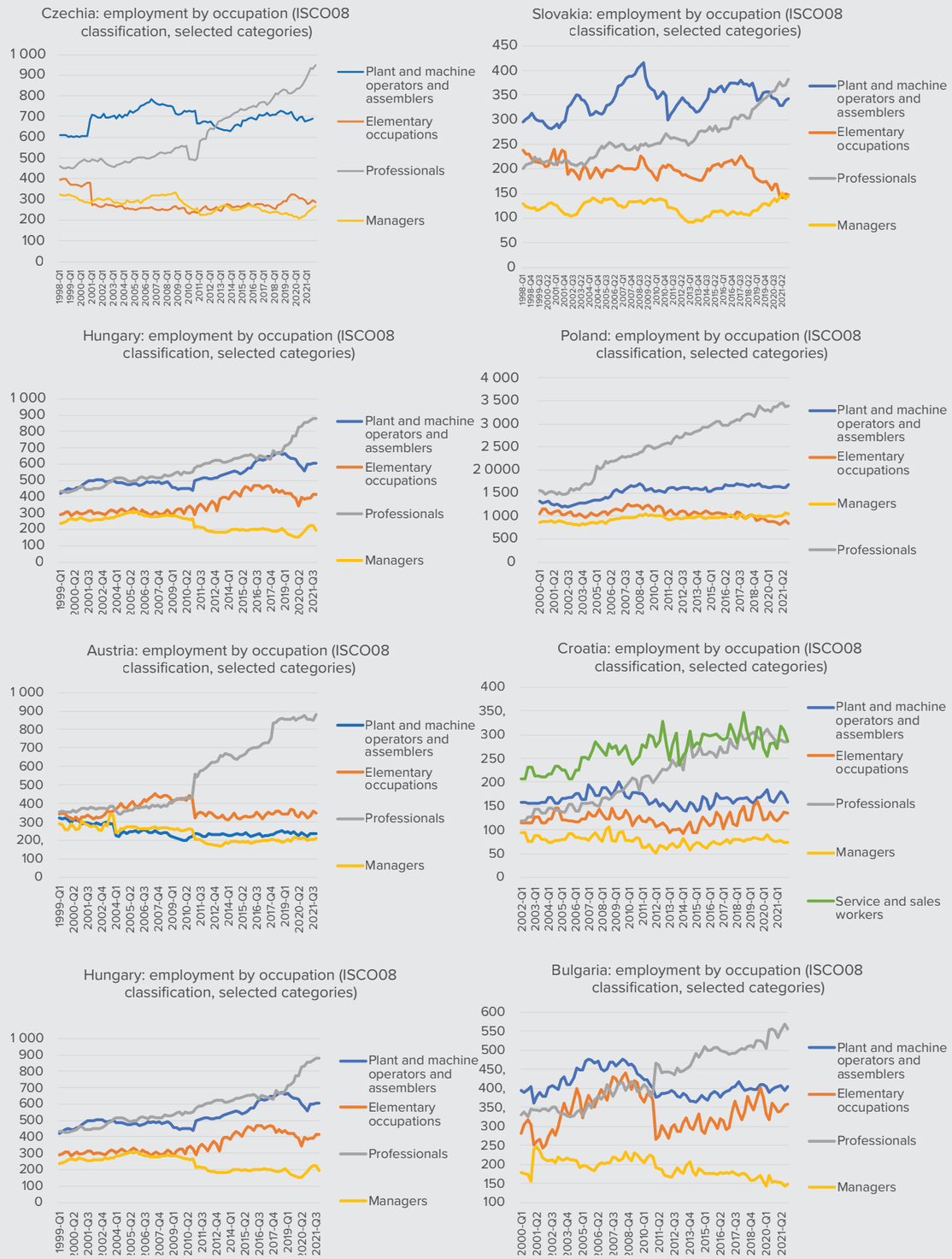
Source: Eurostat.

c. CEE Consumer Behaviour

Concerning the pandemic's influence on consumer behaviour in the region, data points to moderate changes in the spending patterns of households (Figure 9). Consumption expenditures of CEE-households between 2019 and 2020 suggest that food and beverages, housing and energy, and health were the biggest spending items in CEE. Restaurants and hotels, recreation and culture, and transport, meanwhile, experienced the largest spending reductions between 2019 and 2020. These consumer patterns seem consistent with larger global trends but the reallocation between segments is only part of the story, with household and savings decisions forming the other part (Figure 10).

Turning to the investment and savings decisions of CEE households pre- and post-pandemic, it is notable that the pandemic coincided with dramatically increased savings rates. The pandemic, notably, witnessed families and consumers tend to stow away extra income that they were unable to spend during lockdowns. On the other hand, investment rates across CEE revealed mixed signals, with activity declining in Poland, Croatia, and Czechia in line with EU trends and increasing in Austria, Hungary, and Slovakia.

Figure 11. Employment by CEE-country by Occupation: Evidence from the Pandemic



Source: Eurostat.
Note: Thousands of employed persons aged 15 to 64 years.

d. Occupational Dynamics

In terms of the occupational dimension, employment data captures a continued upward trend among high-skilled jobs, such as professionals, and a flat or downward trend among low-skilled elementary occupations in CEE (Figure 11). The pandemic has coincided with an acceleration of some of these pre-existing trends, with a wedge driven between professionals and those in elementary occupations in several countries. This dynamic aligns with the narrative that professionals were able to retain their jobs through, for example, telework even during the most intense periods of the pandemic. Low-skilled workers, meanwhile, were susceptible to losing their jobs due to business shutdowns.

Occupational data further reveals volatility for assembly workers in the most manufacturing intensive countries (Slovakia, Czechia, Hungary) – these employees were subjected to repeated factory shutdowns and subsequent reopenings contingent on the trajectory of the virus and the availability of chips and other components in the automotive sector. As already discussed, revenues and profits in the automotive and components sector have been among the most adversely affected, with repercussions for assembly jobs. Consistent with these patterns, the employment of assembly workers has followed a declining trajectory in the most manufacturing intensive countries (Slovakia, Czechia, Hungary) between Q1-2020 and Q4-2021.

e. Supply Chain Bottlenecks and Inflationary Environment

The pandemic additionally marks two key changes that pertain to not just the **CEE macroeconomic environment** but also Europe and the global economy, with important economic implications. One, after a decade of disinflationary pressures, inflationary pressures returned prior to or in the fall of 2021. Two, the pandemic has introduced lingering bottlenecks to international supply, which has impacted the sourcing of components and impeded industry in CEE and beyond.

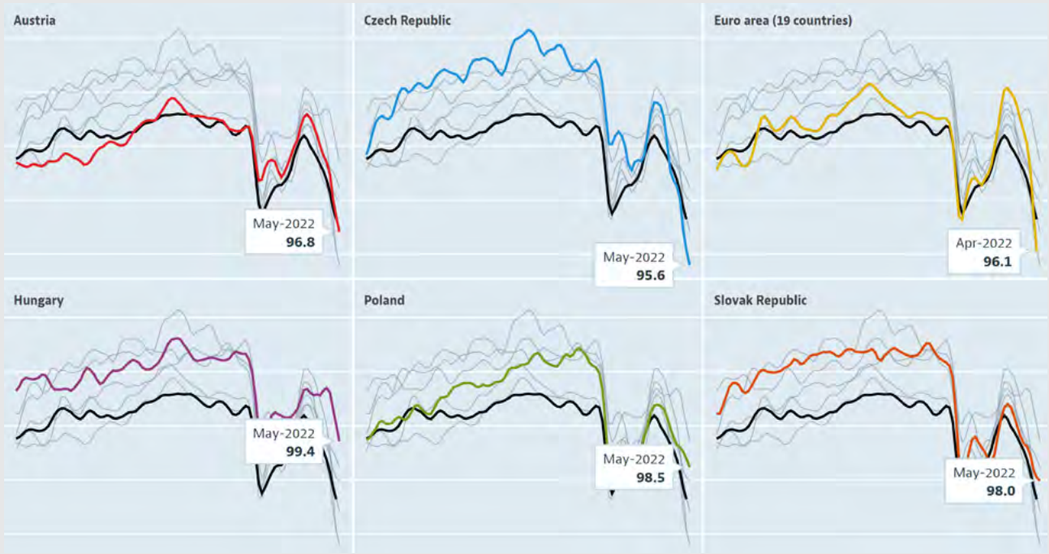
The underlying factors and conditions behind inflationary pressures were initially expected to be temporary and dissolve themselves with time. First, heightened energy prices were seen as the consequence of earlier OPEC decisions and stifled supply associated with those actions that would both wear off. Second, inflation was fuelled by supply bottlenecks in certain sectors, such as chips and semi-conductors, largely due to 'reopening effects', i.e., demand rebounding faster than supply amid a robust recovery.

But with inflation venturing into double-digits in CEE, the post-pandemic transitory inflation narrative has lost credibility - inflation rather has become more entrenched with evidence of second-round effects. The energy embargo on Russian energy imports, including coal and crude oil, in the later tranches (and potentially also gas) tilt the risks to inflation outlook steeply to the upside. The next section more extensively discusses the ways in which Russia's aggression is a seismic game-changer to nominal developments in CEE and beyond and the inflationary mega-trends that are here to stay.

4 Economic Repercussions of Russia's War in Ukraine

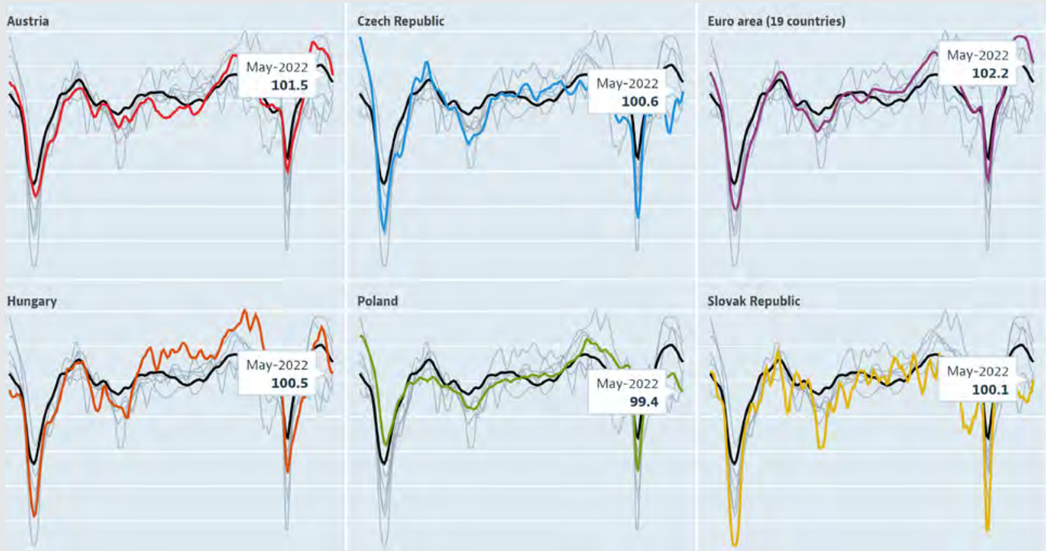
The COVID19 pandemic has both accelerated some pre-existing trends and propelled new developments that have forged a new post-pandemic landscape in Europe. This new macroeconomic environment is marked by several characteristics. As discussed in the previous section, it has shaped sectoral and occupational dynamics, influenced consumer behaviour, and exposed countries that fared better than others. The robust recovery that ensued in the second half of 2021 was

Figure 12a. Consumer Confidence Index (CCI) in Selected CEE Economies Has Plunged



Sources: OECD, https://data.oecd.org/leadind/consumer-confidence-index-cci.htm

Figure 12b. Down-tick in Business Confidence Index (BCI) in Selected CEE Economies



Sources: OECD, https://data.oecd.org/leadind/business-confidence-index-bci.htm

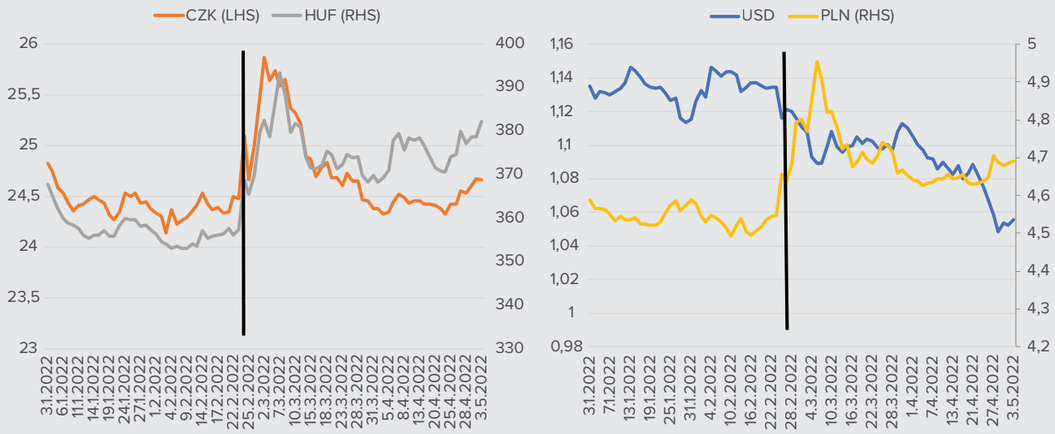
accompanied by inflationary pressures and supply chain bottlenecks.

Russia's unprovoked aggression in Ukraine has added to the already vastly complex post-pandemic economic environment. The full-scale invasion began on February 24th, 2022, and the global economy (Europe in particular) is already witnessing ripple effects through numerous channels. The section that follows classifies these economic channels and especially discusses those that will be most pronounced particularly in light of the implications for the CEE-recovery.

f. The Confidence Channel

The war on the European continent has translated to rising consumer pessimism in recent months (Figure 12a) and CEE-businesses have correspondingly grown more wary - business surveys have been subject to swings since the war broke out (Figure 12b). **The war has also affected investor confidence and capital flows.** The exchange rates of CEE countries near Ukraine have depreciated steeply against the euro post-invasion (Figure 13) as investors sought to divest from CEE foreign exchange, bonds, and other assets in an aggressive sell-off in favour instead towards those perceived as safe havens (USD and USD-denominated selected assets).

Figure 13. Exchange rates of selected CEE non-euro area economies against the Euro



Sources: National Bank of Slovakia (NBS), https://www.nbs.sk/sk/statisticke-udaje/kurzovy-listok/mesacne-kumulativne-a-rocne-prehlady-kurzov

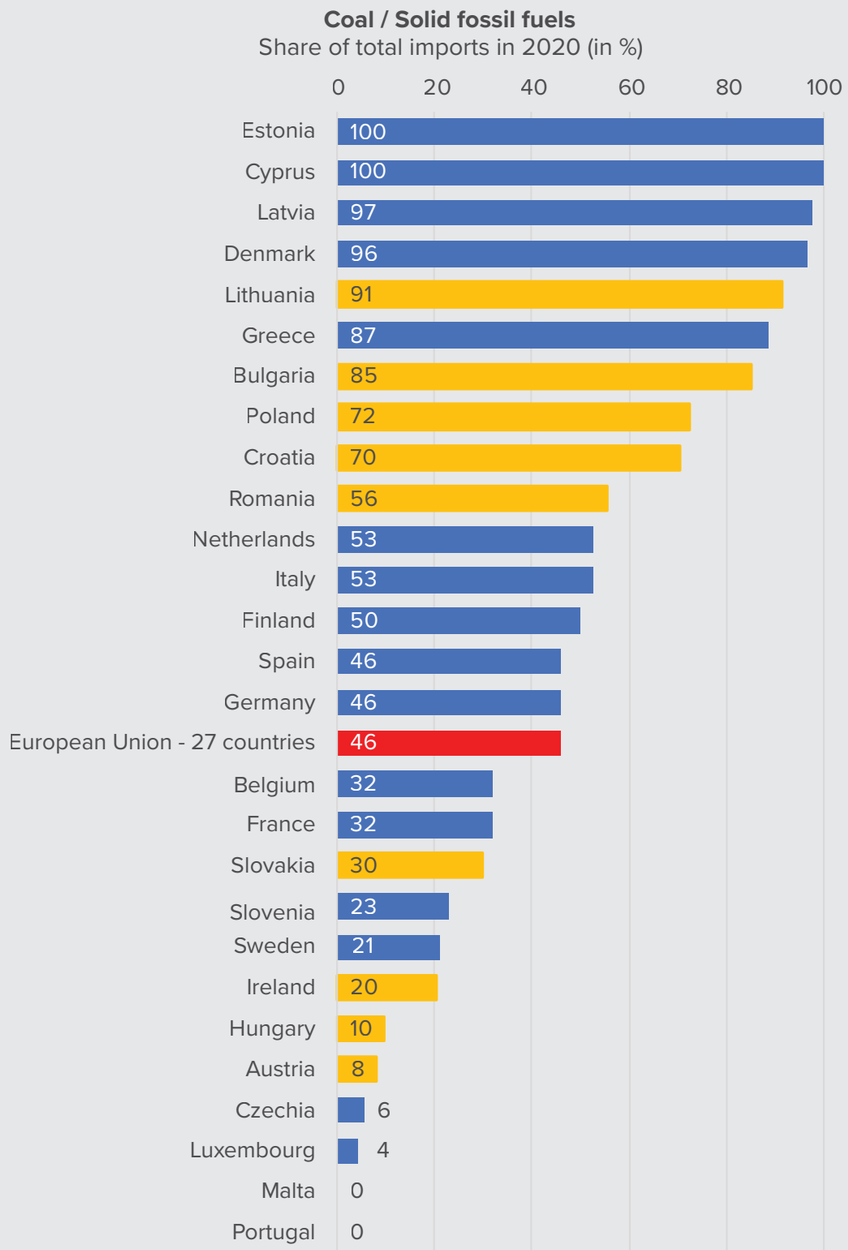
g. The Trade Channel

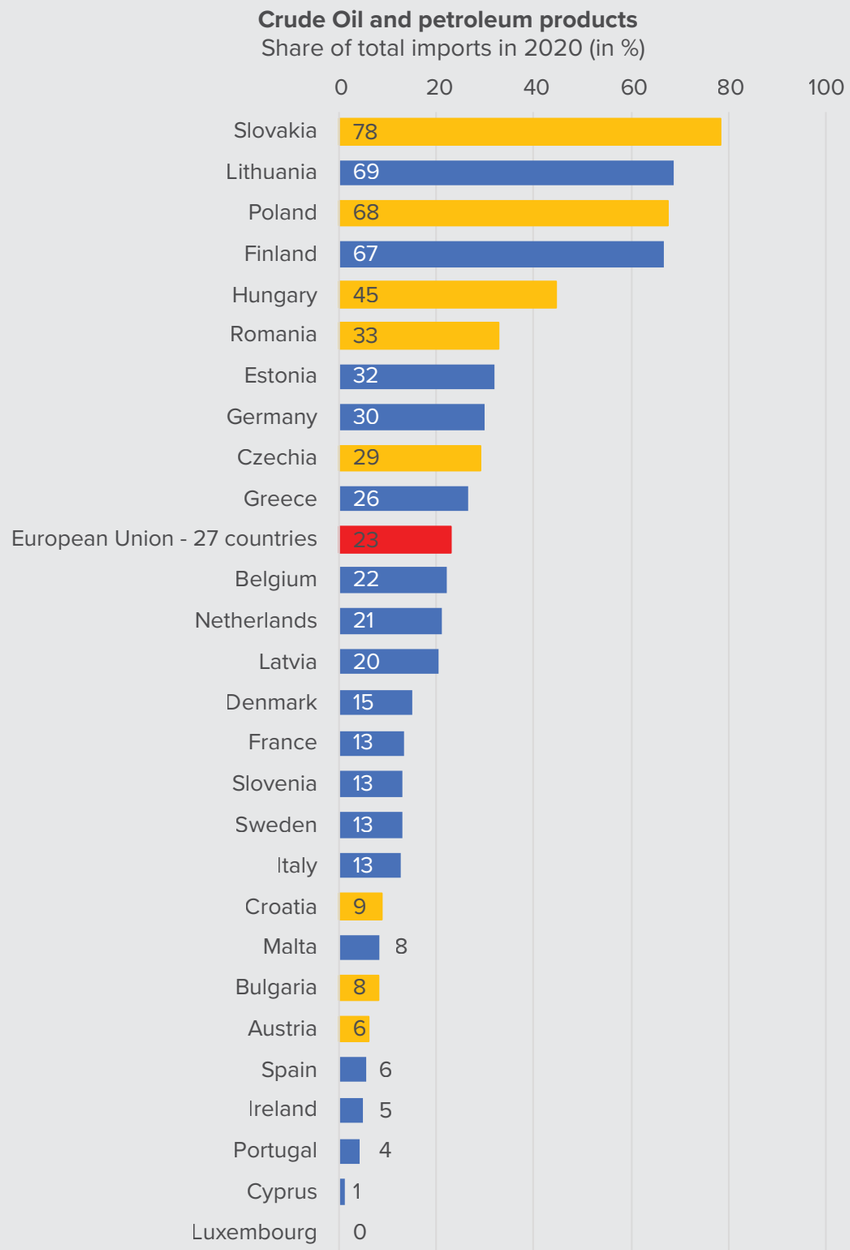
According to Eurostat, the EU primarily imported primary goods (68%) from Russia including, thereof, energy (62%) followed by raw materials (5%). As such, fuel and energy have been weaponized from the beginning of the conflict as the prime target of sanctions both through Western bans on Russian energy imports (the US and UK were the first to announce such a ban followed by an EU ban on coal and an oil phase-out) on one side and natural gas export bans by Russia (against Poland and Bulgaria) on the other. The energy agenda, moreover, has driven a wedge in an otherwise united and ardent stance by Western allies against Russia. This division is due to Europe's extraordinary dependence on Russia's energy imports (Figure 14) and varying levels of political willingness to undergo this economically painful and politically unpopular step.

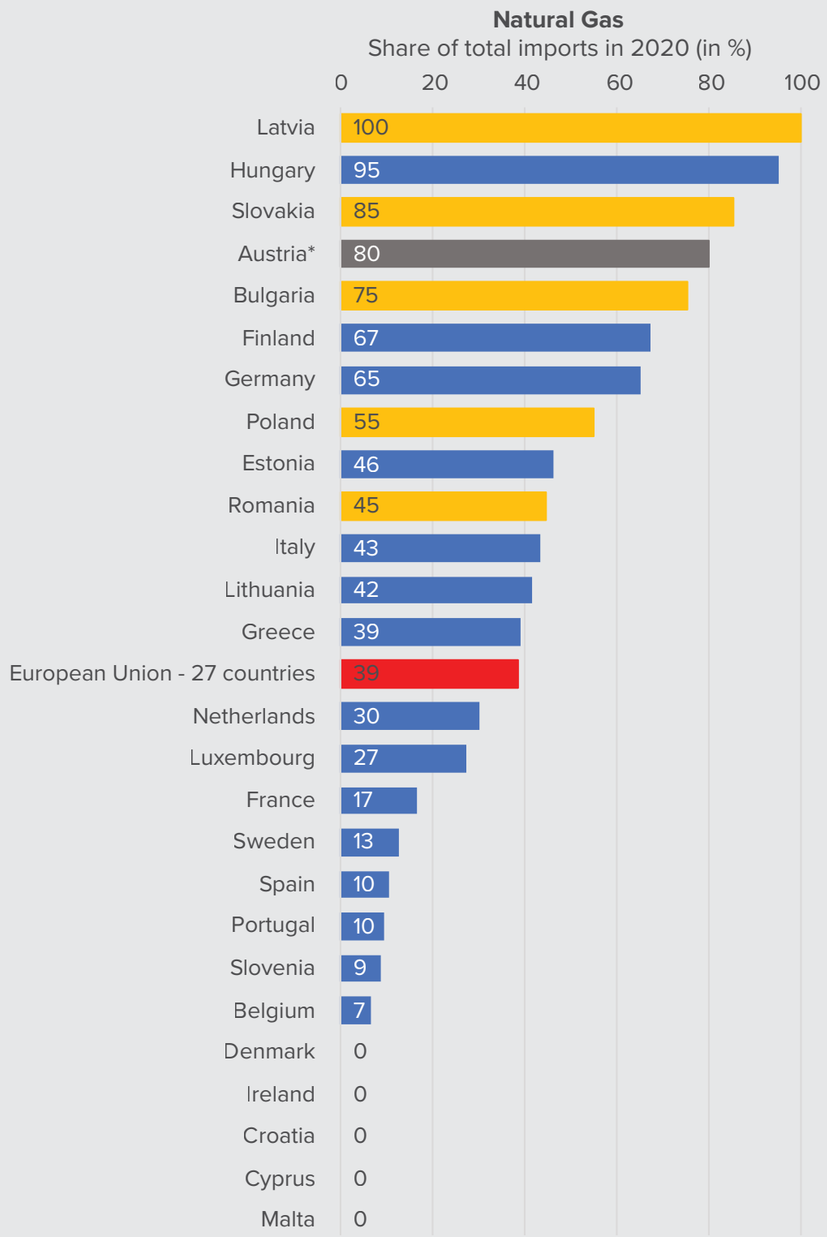
While the US, Canada, and the UK announced embargoes or phase-out measures for Russian energy (oil, gas, coal) months ago, the EU has held back. Faced with pressure from western allies, the EU has launched a new energy strategy, *REPowerEU*, aimed at gradually reducing (by two-thirds) the EU's gas imports from Russia by the end of 2022 and making Europe independent from all Russian fossil fuels well before 2030. But this controlled and gradual weaning process has proved ineffective in starving the Russian war machine from resources and finances to continue the war.

A series of events in March and April 2022, including Putin's decree March 31st to require all 'unfriendly' countries to open a rouble bank account with Gazprombank and de facto undermine their own sanctions, the discovery of mass civilian killings, and evidence of Russian war crimes after their withdrawal from the Kyiv area and the barbarous bombings of Mariupol, **compelled the EU to unite behind banning selected energy imports, starting with the Russian coal imports ban**. Europe imports almost 50% its coal from Russia but demand for the world's dirtiest fossil fuel was already declining even before the conflict. Alternative supplies are more readily available than for natural gas thereby making coal the more palatable and less politically contentious choice for an embargo in the EU energy imports portfolio.

Figure 14. EU27 Dependence on Russian coal, crude oil, and natural gas







Sources: Eurostat

As a part of the sixth tranche of sanctions, EU leaders brokered an agreement on a joint plan to phase out Russian crude oil by the year-end after laborious negotiations. The decision was reached following Germany's turnaround on the issue. Yet several CEE landlocked countries – led by Hungary, Slovakia and Czechia – still strongly objecting to the ban, alleging it would devastate their economies. The deal was hence reached in a two-speed fashion, with the EU banning seaborne deliveries of Russian oil and Germany and Poland also the northern Druzba pipeline deliveries, while the southern Druzba pipeline which caters to Slovakia, Czechia, and Hungary, would be subjected to temporary exempts.

Finally, both, Russia and Ukraine are mineral-rich and supply Europe with critically important raw materials. Russia, for example, controls as much as 44% of global palladium supplies that are key for car and aircraft catalytic converters and Ukraine produces around 50% of the global supply of neon used in semiconductor manufacturing. The shortages of critical raw materials due to the war, used as inputs in European industrial production processes and manufacturing, have been increasing expenses for firms which pass these costs on to consumers. The shortfalls have also disrupted and delayed production processes across a range of sectors such as the production of fertilizers, ICE-vehicles and battery-powered electric vehicles.

h. The Nominal Channel

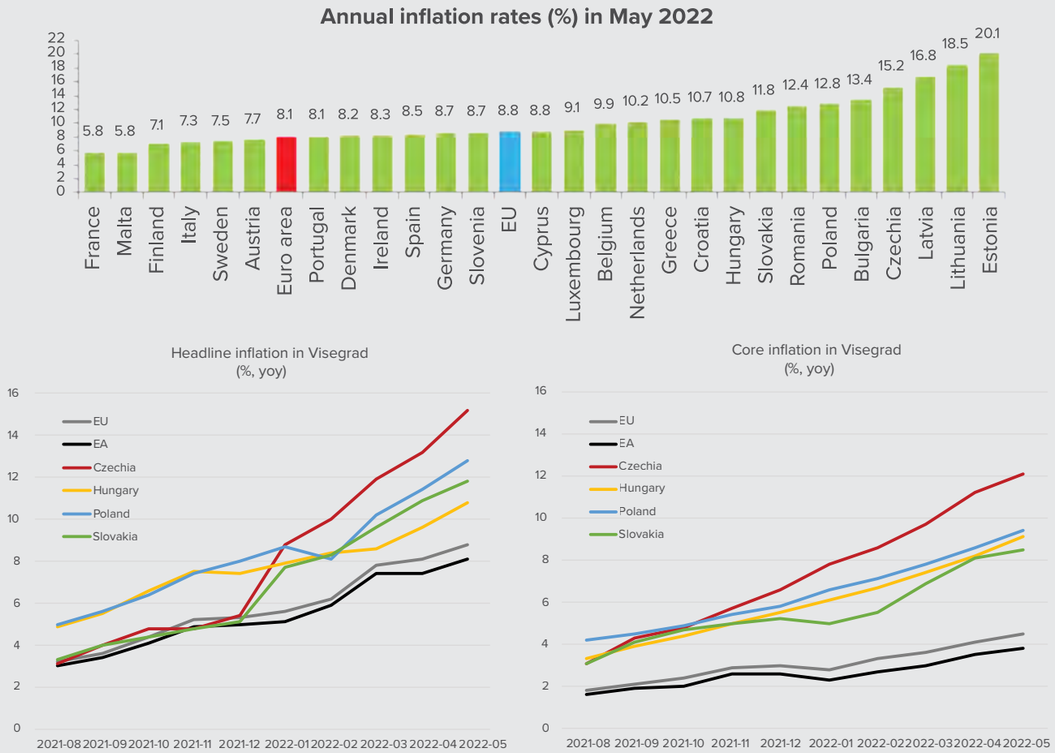
The post-omicron terrain in the second half of 2021 was marked by a robust rebound in economic activity that, nevertheless, also brought forth inflationary pressures. These forces were initially broadly perceived as, and repeatedly labelled as, 'transitory' by official statements of the European Central Bank, the late 2021 OECD Economic Outlook, and other leading publications. The prevailing view was based on price pressure drivers: inflation stemmed from temporary imbalances between emboldened demand and lagging supply, supply chain bottlenecks in some sectors (e.g. the automotive sector and semi-conductors), and high energy prices resulting from previous OPEC decisions and stifled supply on the global market. But all these effects were expected to dissipate with time and inflation expected to decline closer to the medium-term central bank targets.

The war has been a major game-changer on the nominal front. As headline inflation within all CEE countries hit double-digit figures in May 2022 (Figure 15), the 'transitory' narrative shifted to the view that it is entrenched, with solid evidence of second-round effects[18]. This renewed inflation is not a local phenomenon but rather a global one prompted by the strength of the post-pandemic rebound, expansionary fiscal policies pursued during the pandemic, and tight labour markets characterized by full employment in many western economies[19].

Importantly, the war has introduced shortages of strategic commodities – fuel, food, and fertilizer ('3Fs') – that are sending prices soaring and propping up headline inflation globally. The conflict has also contributed to the dearth of critical raw materials used in industrial production processes and manufacturing. This includes, for example, the palladium used for catalytic converters in ICE-vehicles. The transition to green mobility requires even more raw materials (lithium, nickel, cobalt) and EU industry more broadly (beyond the automotive sector) is dependent on raw materials such as steel and aluminium copper.

Both Ukraine and Russia, finally, are breadbaskets, ranking amongst the top three global exporters of wheat, maize, rapeseed, sunflower seeds, and sunflower oil according to the United Nations[20]. Ukraine was the world's sixth-largest exporter of wheat in 2021, with a 10% share of the market, and one of the world's top exporters of barley and sunflower seeds. The global supply shortfall caused by the war, consequently, is pushing up food prices. Food commodities, in fact, surged at the fastest rate in 14 years to record highs in April[21]. Russia also stood prior to the war as the world's top exporter of nitrogen fertilizers, the second leading supplier of potassium fertilizers, and the third for phosphorous fertilizers[20]. This additional layer of complexity to the looming food shortages has prompted fertilizer prices to soar.

Figure 15. Headline Inflation Across the CEE-region has been on an Upward Trajectory (bottom) and Hit Double-Digits (top)

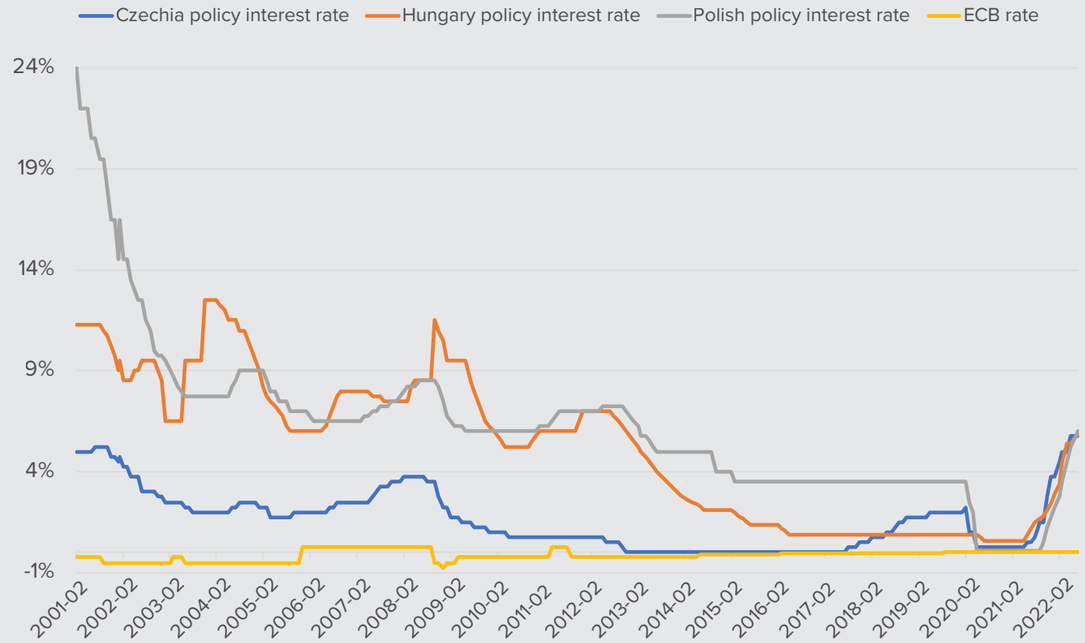


Sources: Eurostat

In the CEE region, there are additional region-specific factors propelling inflation well above the euro area average:

- **Non-euro area central banks had relied on exchange rate assistance in their respective anti-inflationary strategies before the war.** The Czech, Hungarian, and Polish central banks indeed have been aggressively hiking their policy interest rates since the summer of 2021 (Figure 16) to attract capital inflows (investors taking advantage of the interest rate differential) and strengthen their respective local currencies. This strategy was successful until derailed by the war as evidenced by Figure 16. The proximity of these countries to the conflict has since fuelled capital outflows and exchange rate depreciation (Figure 13) that is, in turn, fuelling headline inflation.
- **The CEE region is extraordinarily dependent on Russian energy** (Figure 14), especially natural gas and crude oil (Figure 14). This dependence will attenuate local effects on prices during any embargo or cut-off situation imposed on them as faced by Bulgaria and Poland in late April.
- **It may become increasingly difficult for CEE central banks to steer and anchor inflation expectations** of CEE societies, especially among the middle-aged population of post-communist countries that previously experienced hyper-inflation during the early 1990s in the early transition years. Inflation expectations well-above the policy target tend to have a self-fulfilling effect on prices[22].

Figure 16. Non-euro area CEE central banks have pursued aggressive policy rate hikes as a part of their disinflationary strategy pre-war



Sources: ECB, national central banks of Czechia, Hungary, and Poland (RHS). Note: Last observation refers to May 2022.

- **The gross value added of numerous CEE economies**, particularly Slovakia, Czechia, and Hungary, is **dominated by industry, which requires the disproportionate use of Russian energy and raw materials**. This economic structure renders industry-dominated economies in the CEE-region especially vulnerable and contrasts with those economies that are more oriented towards services.
- **The proximity of the war in CEE will place a greater burden on public finances** of these countries as they assist with incoming refugee inflows, support households amid soaring food and fuel prices, and aid firms facing surging production costs. The deficit-spending and minimal appetite for austerity is here to stay and inflationary.
- **Finally, further long-term inflationary mega-trends are expected to unfold over the coming months and years against the new geo-economic landscape**. They include production regionalization and near-shoring from cheaper but less remote locations, the localization of raw materials sourcing and strategic industries in Europe (or at least closer to the continent), the general inclination towards fostering trade ties with like-minded countries, and the fast-tracking of the energy transition. These developments are all inflationary - Europe, especially CEE, should brace for higher sustained inflation in the coming years.

i. Public Finances

An important legacy of the pandemic concerns elevated sovereign and private debt levels. In many countries of the EU, the massive fiscal stimuli rolled out to prop up countries' strained firms and workers under lockdown have seen their debt-to-GDP ratios balloon to twice- or even triple the 60% ceiling set by the Stability and Growth Pact. The ceiling, that said, was suspended following the onset of the pandemic two years ago and remains so to-date. The decision is now driving an ongoing policy debate about the reform of EU fiscal rules.

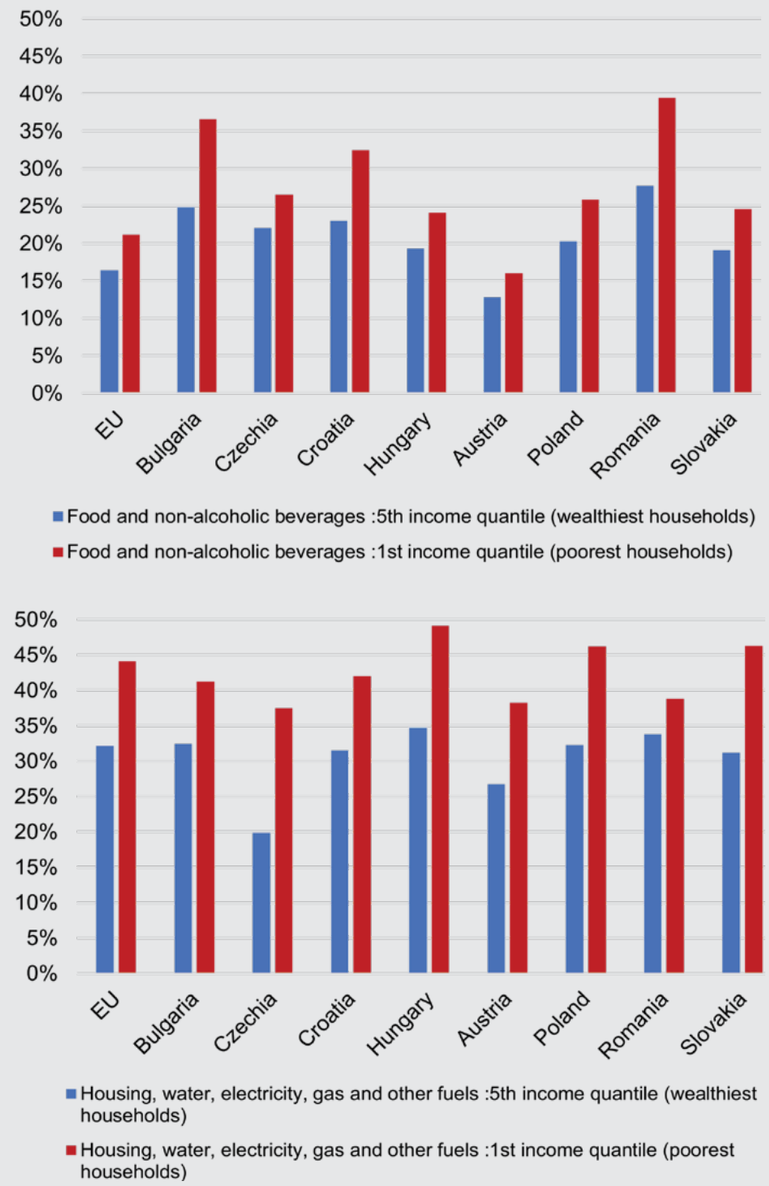
The debt-to-GDP ratio in several CEE countries, such as Hungary and Slovakia, has exceeded the 60% threshold stipulated therein. Taking into account demographic aging costs projections, including pension, healthcare, long-term care, and education expenditures, Slovakia particularly fares among the worst in the EU in terms of long-term fiscal sustainability. **Competing public priorities, including the energy transition and related investments, the automotive transition, anti-inflation fiscal support, refugee fiscal aid, and an aversion to taxes increases or other measures that could help balance the budget, have been aggravated by the war and underscore the leading long-term risk.** In Europe, moreover, the central bank dilemma is accentuated by financial fragmentation - potential monetary policy normalization could affect the ability of countries to borrow once interest rates rise and countries must service large debts that they have amassed even as the revenue-side sees fewer resources as growth slows.

j. Uneven Recovery due to the War

The price shocks that Russia's war in Ukraine has fostered may perpetuate an uneven recovery at both the regional (country-) level and within economies. In both instances, this situation is being catalysed by deteriorating purchasing power excessively hitting poorer countries and/or households. At a country-level, an average household in an emerging market spends larger shares of their income on essentials, such as utilities, fuel, and food, than an average household in a wealthier economy. According to the German Economic Institute (IW), German households pay just over 9% of their average monthly income for energy, on par with consumers in neighbouring France and the Netherlands. Bulgarian households, however, spend more than 25% on electricity, gas and petrol and Hungarian spending stands at 20%[25]. Figure 17 illustrates the greater vulnerability of particular CEE economies to negative fallouts from energy and food price shocks compared to the EU average.

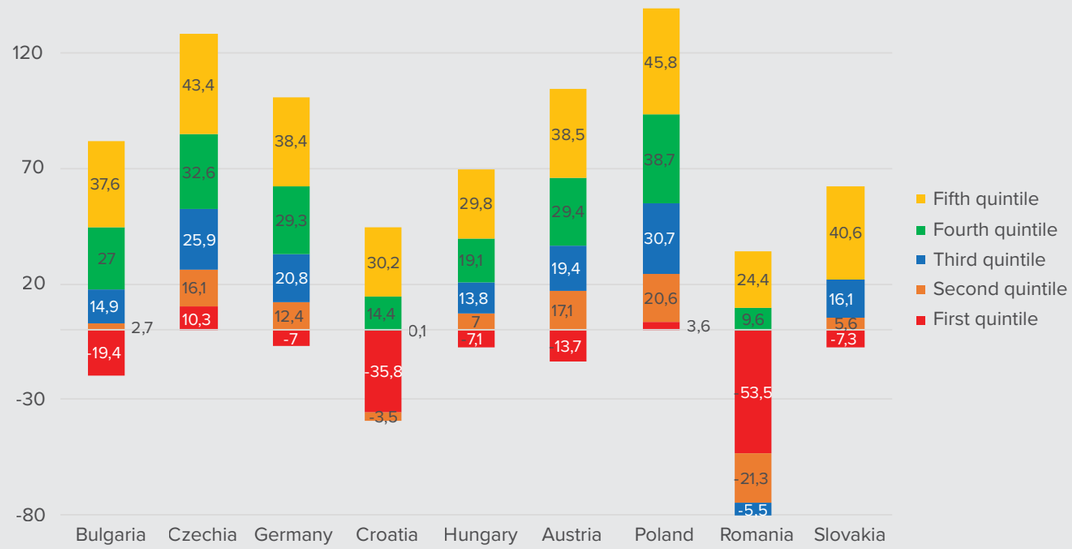
At a household-level, consumption patterns at different income points also shed light on why poorer households are disproportionately affected by the nominal shocks. Low-income earners find themselves in a situation where they spend a relatively larger proportion of their incomes on the essentials - their purchasing power consequently is impacted more considerably than more affluent households when the price of food, housing, and energy soar. On the housing front, wealthier households tend to be home owners and those poorer more likely to be renters[23], once again driving a wedge among income brackets. Home owners rather can benefit from rising home equity even as renters are saddled with steeply higher rents[24].

Figure 17. Consumption patterns at lower- and upper- income points in CEE on essential categories



Source: Eurostat, 'Income, consumption, and wealth – experimental statistics' database https://ec.europa.eu/eurostat/databrowser/explore/ all/popul?lang=en&subtheme=icw&display=list&sort=category&extractionId=ICW_SR_03.

Figure 18. Median saving rate by income quintile (2015)



Source: Eurostat, 'Income, consumption, and wealth – experimental statistics' database.

Healthy savings patterns also help when the economy comes upon tough times. Personal savings are not just crucial to individual financial well-being but also nationally. Economies that boast high personal savings rates also tend to see swifter economic recoveries[26]. Higher savings reserves indeed serve as cushions that can help absorb overwhelming expenses – especially for the hardest hit earners – without digging the hole deeper. Turning to CEE savings patterns, the most affluent households generally exhibit the highest savings rates while the poorest (1st quintile) tend to spend more than they earn (i.e., negative saving rate) (Figure 18).

The patterns differ between CEE countries, with some on the negative savings-side across several income-brackets (Croatia, Romania) and others in positive territory even at low-income brackets (Poland, Czechia) (Figure 17). The factors behind the median savings patterns of CEE countries may vary[27] based on, for example, overall national prosperity, average earnings, and the role of remittances and shadow economies - this, however, falls beyond the scope of this research. Importantly, **these disparate impacts on households at different income points have economic repercussions for businesses.** Companies that sell discretionary goods and services to lower-income consumers carry more cause for concern. On the flip side, those firms that typically target higher-income earners should be little affected since their higher-earning customers are less likely to curb discretionary spending. Investors should keep this dynamic in mind as companies report how they and their customers are weathering inflation.

5 Impact on the Insurance Industry

The insurance sector plays an important role in the financial services industry, contributing to economic growth, efficient resource allocation, the reduction of transaction costs, the distribution of risk, the creation of liquidity, the facilitation of an investment economy of scale, and the spread of financial losses[28]. The most prevalent macroeconomic drivers of insurance profitability **include GDP growth, inflation, and interest rates[29-32]**, interbank interest rate changes and unemployment[33, 34], disposable income[35], and a balanced Lorenz curve[36]. Social equality impacts insurers too by influencing the stability and resilience of economies and societies - it affects an economy's capacity to develop smoothly across its path of potential growth and minimize income and asset losses resulting from shock events. An unbalanced Lorenz curve transmits through less stable and dynamic economic growth with a higher vulnerability to financial crises and the risk of social unrest and political violence. Hence, it is in the insurance industry's self-interest to consider products and solutions which contribute to mitigating widening income and wealth parities. Protecting society and making it more resilient is intrinsic to the insurance business model[36].

The risk of stagflation has risen substantially against the backdrop of a war coming at the same time as a still-fragile post-pandemic recovery. This climate **poses risks to insurers but also some opportunities.** These tectonic shifts could transform the insurance industry terrain globally, as it seeks to manage the inflation surge and rising interest rates.

A severe stagflationary event – one marked by persistently high inflation coinciding with weak economic growth and high unemployment – **could hurt insurers via weakening premium revenues in a stagnant economy**. Investment returns could also suffer from negative real returns across major asset classes.[37] Lower equity markets and widening credit spreads will likely lead to mark-to-market valuation losses on assets and capital.[38] Persistently high inflation could pass through to insurers as claims inflation, particularly in long-tailed non-life insurance business, and exert pressure on profitability.[37]

Property & Casualty (P&C) insurers are most exposed to the inflation shock, which will increase claims severity. In the near term, property and motor will likely be hit hardest, as price rises in construction, vehicles and vehicle parts surpass those in the wider economy. For Life & Health (L&H) insurers, sustained high inflation will primarily exert indirect effects - rising interest rates rather support profitability. Investments may benefit as bond portfolios roll over into higher yields and the profitability of saving products with guarantees – a large legacy book of the life industry – improves.[38]

If there is to be a silver lining for some insurers, it is that we will see an acceleration to the exit from extremely accommodative monetary policy. A paradigm shift towards higher yields may be a long-term positive for some insurance sectors.[38] Interest rate hikes typically help life insurers on their capital (SII) ratios. Rising interest rates make savings/life insurance more attractive in nominal terms. Profitability could also improve, particularly for in-force life savings products with guarantees[37], assuming continued central bank policy tightening in non-euro area CEE markets and the ECB joining in for euro area CEE economies. P&C insurers, on the other hand, will be harmed by inflationary developments and ensuing interest rate hikes in the short run. But short-term headwinds to P&C profitability in 2022 could turn into tailwinds from further rate hardening in 2023[38].

The picture is mixed also when it comes to long-term trends. Current geopolitics and the shift towards greener economies will likely lead to fundamentally higher prices and could also weigh on household consumption in the long run. The physical and transition risks from climate change, like economic losses from weather events to input shortages in agriculture, or the cost of funding green transitions may also aggravate persistent stagflationary supply shocks. Decarbonization, another long-term structural trend, might mean that global energy prices are bound to remain high for an extended period of time and act as another key supply shock. **Insurers can mitigate the downside risks through strong capital and risk management, underwriting rigor, reinsurance, asset allocation, and hedging**.[38]

The Russia-Ukraine war is more likely to affect the European insurance sector through second-order financial market volatility and through the overall economic climate than through direct effects from sanctions on Russian entities or other measures restricting Russian business. European insurers and reinsurers have little direct Russian exposure in their insurance books and investment portfolios and negligible Belarusian and Ukrainian exposure. However, volatility in global financial markets caused by the conflict could affect their capital ratios. The conflict also may lead to claims from trade credit, surety, and political risk insurance bought by corporate clients that conduct business in Russia, Belarus, and Ukraine. Individual claims could be large and subject to legal disputes but most insurers' aggregate losses should be modest relative to their overall revenue and capital.[39]

6 Key Findings & Call for Action

I. Economic Trends Summary

CEE economies were hit harshly during the first pandemic wave, with Croatia recording the sharpest decline and Poland on the other side of the spectrum, weathering the pandemic shock best. These outcomes are not surprising, considering Croatia is CEE's lone economy dominated by the service sectors (e.g. tourism and hospitality) most impacted by lockdowns and travel restrictions. Poland's economy, meanwhile, ranks consistently as one of CEE's best-diversified economy, making it more resilient in times of turbulence.

Turning to the pandemic's effects on consumer behaviour and the reallocation of household expenditures, **CEE-household spending by purpose between 2019 and 2020 suggest that food and beverages, housing and energy, and health were the largest expenses in the region**. Restaurants and hotels, recreation and culture, and transport, meanwhile, saw the largest reductions in spending between 2019 and 2020. This consumer behaviour is consistent with larger global trends but do not explain the entire picture. **Increased household savings rates across the CEE from 2019 to 2020 support the conclusion that CEE consumers stockpiled extra cash.**

In terms of the occupational dimension, employment data captures the continued incline of professional occupations and the downward (or in some cases a flat) trend of elementary occupations. This dynamic aligns with the narrative that professionals were able to retain their jobs through, for example, telework opportunities even during the most intense periods of the pandemic. Elementary workers, however, were susceptible to losing their jobs due to business shutdowns. Volatility was also measured in occupational data for assembly workers in the most manufacturing intensive countries (Slovakia, Czechia, Hungary) – these employees faced repeated factory shutdowns and subsequent re-openings dependent on the trajectory of the virus and the availability of chips and other components in the automotive sector. Revenues and profits in the automotive and components sector have been among the most adversely affected, with repercussions for assembly jobs.

Russia's unprovoked aggression in Ukraine has added to the already vastly complex post-pandemic economic environment. The war on the European continent has translated to rising consumer pessimism in recent months. Consumer sentiment in CEE countries that share a greater

proximity to the conflict, however, display no more pessimism than the OECD average. CEE-businesses have also grown more wary, with surveys exhibiting a swing since the war broke out.

The energy price shocks that the unprovoked Russian aggression in Ukraine has fostered also perpetuate the deteriorating purchasing power of households amid soaring prices that have become entrenched across essential categories in the spending basket, such as housing, food, and energy. **Spenders in the top income brackets are more insulated from these nominal shocks while low-income earners are more exposed to them.** This is similarly true for food, housing, and energy: low-income earners find themselves in a situation where they spend a relatively larger proportion of their incomes on these essential items, so their purchasing power is harder hit compared to more affluent households when the prices of food, housing, and energy surge. On the housing front, wealthier households tend to be home-owners and poorer more likely to rent, once again driving a wedge among income brackets. Homeowners can indeed benefit from rising home equity while renters are saddled with steeply higher rents. **This dynamic holds across countries: an average household in an emerging market spends a larger share of their income on essentials than an average household in a wealthier economy.** The CEE-region is also more vulnerable to negative fallouts from the food price shocks than the EU average.

Turning to CEE median saving rates at different income points, the wealthiest households exhibit the highest savings rates in CEE. Those in the lowest income brackets, meanwhile, tend to spend more than they earn (i.e., negative saving rate). Higher savings reserves serve as cushions that can help absorb overwhelming expenses – especially for the hardest hit earners – without digging the hole deeper. That said, patterns varied across the region's economies, with Romania and Croatia being more in the negative savings territory than the rest.

II. Charting Policy Course: Policy Recommendations

The present policy brief should serve as grounds for further, focused research, and an input to policy decisions to facilitate a successful recovery in CEE and beyond. In the section which follows, recommendations for charting a future policy course in CEE economies are presented in a 360-degree manner for monetary policy, fiscal policy, and structural policy based on the findings presented earlier.

k. Monetary Policy

Monetary authorities are faced with a dilemma between taming inflation and supporting growth, as the war-effects are rippling through numerous channels of the economy. The monetary policy in CEE is, additionally, two-fold. The euro bloc and the ECB are involved in charting the course for Austria and Slovakia. The non-euro area smaller central banks, for their part, are pursuing their own monetary policy strategies to steer Czechia, Hungary, Poland, and Romania. Meanwhile, Bulgaria and Croatia sit somewhere in between in light of their advanced stage of development towards euro adoption.

The non-euro area central banks have pursued an aggressive monetary policy tightening since the second half of 2021. The Czech national bank's key rate has been raised by 550 basis points since last June to a 23-year high at 5.75%. The Polish reference rate increased to 6.0% and the Hungarian policy rate to 5.9%. These steps have been combined **with foreign exchange interventions to prop up the currencies**. The Czech koruna, Polish zloty and Hungarian forint have, nevertheless, fallen markedly against the dollar since Russia's invasion in Ukraine on February 24 amid the flight to safety. These developments have derailed the local central banks' reliance on exchange rate assistance in their inflation fighting strategies. Further monetary policy tightening in Czechia, Poland, and Hungary in the summer is expected, despite some dovish statements of the new Czech and Polish governors, followed by a neutral stance until the year-end. The exchange rate channel will continue to contribute to inflation and monetary authorities will continue selling foreign currencies to strengthen their local currencies. Many CEE central banks are fortunate to have enough foreign exchange reserves to sell after amassing hefty reserves from more than a decade of EU transfers and strong growth. Czechia is leading the pack with an amassed $175 billion from a Swiss-style exchange rate cap introduced in 2013 that could cover more than a year of imports[40]. Finally, the local central banks will begin to gradually lower interest rates in the first half of 2023 as inflationary pressures abate.

The ECB course-corrected its monetary policy calibration on June 9th, indicating that it would end its bond-buying programme and raise interest rates above zero for the first time in a decade in July, as price pressures became broader-based and more entrenched above the ECB target.[A] The ECB has been prudent with normalizing policy, wary of premature rate hikes but also putting the right framework in place to avert renewed financial fragmentation[41].

l. Fiscal Policy

The role of fiscal policy remains prominent in supporting war refugees who resettle in CEE, households in the region struggling with the soaring prices of essential items (food, energy, fuel), and firms and industries coping with surging prices of inputs, raw materials, and energy. Earlier analysis suggests that fiscal stimuli should be *(1.) highly selective – focusing only on the agents in the economy that are truly hard hit – (2.) provide the right incentives for both consumer and firm behaviour, and (3.) distinguish between short-term and long-term measures.*

Zoning in on to these criteria further, supportive fiscal policy should be selective and targeted to those entities that are most detrimentally impacted by the fallout from the war, as opposed to the non-discriminate fiscal support rolled out in the early months of the COVID19 pandemic. The latter – indiscriminate support with no regard for fiscal sustainability – may appeal to populist politicians vying to win votes. But EU countries should steer clear of extravagant deficit spending at a time where we will soon see an acceleration from extremely easy monetary policy towards higher policy rates.

Secondly, **policymakers should be prudent in creating the correct incentives through their policies.** Pursuing blanket reductions in value-added tax (VAT) and other direct taxes on energy, for example, not only is not targeted enough but also fails to incentivize the desired reductions in demand for gasoline that the price mechanism is communicating. Lump-sum cash transfers to households to make up for their losses in purchasing power are popular but should be both targeted and create incentives aligned with broader long-term policy aims. Policymakers should also incentivize a reduction in gasoline use through, for example, 'carless Sundays' and generally reward other consumer and firm behaviour that contributes to reduced dependency on fossil fuels and the shift towards sustainable transport, mobility, and lifestyle.

A The most recent ECB decision has turned into increasing policy rates. More information at: https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.mp220721~53e5bdd317.en.html

m. Structural Policy

The war impacts should not derail structural reforms planned as a part of the EU Recovery and Resilience Facility (RRF) in the individual country plans, investment millstones, and reforms linked to the release of EU money. In fact, the RRF agenda's importance has only grown in the face of the Russian aggression. Structural reforms planned under the Recovery and Resilience Facility umbrella should be kept on schedule - they work in tandem with monetary and fiscal policies, increasing the potential growth of regional economies and advancing strategic areas such as the transition towards a more sustainable and smarter growth paradigm.

n. A Make-or-Break Moment

Overall, the war is a make-or-break moment that will shape the CEE and Europe in the decades to come. An unequivocal stance against the aggressor and unity behind the EU values of liberal democracy in an increasingly polarized world matter more than ever and sitting on the fence is not an option. The CEE region's economic and social well-being and prosperity will directly depend on the decisions made today and define the CEE future for generations. CEE politicians and policymakers are thus entrusted with tremendous responsibility and will be held accountable for the consequences of their policy agendas and decisions.

The war is changing the political dynamics within the region, including due to a divergence in views regarding Russia between Hungary and Poland. Both the pandemic and the war have put additional dents into the already diverging Visegrad format – Slovakia, Czechia, Poland, and Hungary – with the first two countries having traditionally looked to fellow liberal democracies and the latter two having headed more in the opposite direction on issues such as the rule of law, China, migration, and EU funds disbursement. Other political formats, including the Slavkov (S3) which includes the like-minded alliance of Slovakia, Czechia, and Austria on issues ranging from the Western Balkans to new economic areas or regional cooperation, are emerging too. These are likely to gain in prominence and give the region more weight in Brussels and shape the region's future beyond Europe's confines.

An ambitious and focused policy agenda heeding long-term strategic aims will need to be accompanied by clear, engaging, and informative communication campaigns to pre-empt CEE's vulnerability to malign foreign (Russian) influence[42], soften growing discontent due to the looming cost-of-living crises across the CEE caused by the soaring food, fuel, and energy prices, and reign in populists.

Once the rubicon toward peace is crossed, **the CEE region could benefit from positive economic knock-on effects on its economies at last, including in its talent pools and financial capital pools.** CEE labour markets could profit from the new impulse created by the resettled and skilled Ukrainian, Russian, and Belarusian refugees. Brain- and skill-shortages have posed a leading hurdle to talent-strapped CEE businesses and economies over the past decade[43]. CEE economies could also benefit from renewed capital inflows in the region in the context of rebuilding. Fresh inflows of human and financial capital could serve as enablers in the region's transition towards higher-value-added innovation-powered economy.

References

1. Goetz, K.H., *Making sense of post-communist central administration: modernization, Europeanization or Latinization?* Journal of European public policy, 2001. **8(6)**: p. 1032-1051. DOI: 10.1080/13501760110098332. Available from: https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.461.6952&rep=rep1&type=pdf.
2. Arratibel, O., et al., *Determinants of growth in the central and eastern European EU member states - a production function approach*. 2007, European Central Bank.
3. OECD, *Inward FDI stocks by industry*. OECD data, 2020. DOI: 10.1787/2bf57022-en. Available from: https://data.oecd.org/fdi/inward-fdi-stocks-by-industry.htm.
4. Mateev, M., *Determinants of foreign direct investment in Central and Southeastern Europe: New empirical tests*. Oxford Journal, 2009. **8(1), 133-149**. Available from: http://mateevfinance.com/re_pdfs/1440238611_pdf_Determinants%20of%20Foreign%20Direct%20Investment%20in%20Central%20and%20Southeastern%20Europe_2009.pdf.
5. Popescu, G., *FDI and Economic Growth in Central and Eastern Europe*. Sustainability, 2014. 11/01. **6**. DOI: 10.3390/su6118149. Available from: https://www.researchgate.net/publication/307737145_FDI_and_Economic_Growth_in_Central_and_Eastern_Europe.
6. Schröder, J., *Decoupling of Labour Productivity Growth from Median Wage Growth in Central and Eastern Europe*. The Vienna Institute for International Economic Studies, 2020. July. Available from: https://wiiw.ac.at/decoupling-of-labour-productivity-growth-from-median-wage-growth-in-central-and-eastern-europe-dlp-5356.pdf.
7. Nolan, B., M. Roser, and S. Thewissen, *GDP Per Capita Versus Median Household Income: What Gives Rise to the Divergence Over Time and how does this Vary Across OECD Countries?* Review of Income and Wealth, 2018. May. **65(3), 465-494**. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/roiw.12362?campaign=wolearlyview.
8. OECD, *Public-Private Partnerships: In Pursuit of Risk Sharing and Value for Money*. OECD Publishing, 2008. 05/21. p. 1-141. DOI: 10.1787/9789264046733-en. Available from: https://www.researchgate.net/publication/287631501_Public-Private_Partnerships_In_Pursuit_of_Risk_Sharing_and_Value_for_Money.
9. Jesmin, R., J. La-Bhus Fah, and R. Jesmin, *Foreign Direct Investment in New Member State of the EU and Western Balkans: Taking Stock and Assessing Prospects*. 2018: INTERNATIONAL MONETARY FUND.
10. Lane, D., *Post-Communist States and the European Union*. Journal of Communist Studies and Transition Politics, 2007. 2007/12/01. **23(4)**: p. 461-477. DOI: 10.1080/13523270701674558. Available from: https://doi.org/10.1080/13523270701674558.
11. Comission, E., *Economic Accession Criteria*. 2016. April. Available from: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/international-economic-relations/enlargement-and-neighbouring-countries/enlargement/economic-accession-criteria_en#:~:text=The%20economic%20criteria%20to%20be,market%20forces%20within%20the%20Union.
12. Commision, E., *Convergence criteria for joining*. 2016. Available from: https://ec.europa.eu/info/business-economy-euro/euro-area/enlargement-euro-area/convergence-criteria-joining_en.
13. Výškrabka, M., *Lesk a bieda firiem na Slovensku: Analýza údajov firiem na individuálnej úrovni*. Inštitút Finančnej Politiky, 2018. Available from: https://www.mfsr.sk/files/archiv/85/Firmy_komentar.pdf.

14. Havlik, P., *FDI in Eurasia: too little and from the wrong places?* The Vienna Institute for International Economic Studies, 2018. April. Available from: https://wiiw.ac.at/fdi-in-eurasia-too-little-and-from-the-wrong-places--n-298.html.

15. Galgóczi, B. and J. Drahokoupil, *Condemned to be left behind? Can Central and Eastern Europe emerge from its low-wage model?* ETUI, The European Trade Union Institute, 2020. November. Available from: https://www.etui.org/publications/books/condemned-to-be-left-behind-can-central-and-eastern-europe-emerge-from-its-low-wage-model.

16. Marciniak, T., J. Novak, and M. Purta, *Central and Eastern Europe needs a new engine for growth*. McKinsey & Company, 2018. Available from: https://www.mckinsey.com/featured-insights/europe/central-and-eastern-europe-needs-a-new-engine-for-growth.

17. Kesari, J.L., *Rethinking the Gig Economy for a Post-COVID World*. Human capital, 2021. June. Available from: https://humancapitalonline.com/Talent/details/2455/rethinking-the-gig-economy-for-a-postcovid-world.

18. Ruch, F.U., *Second-round effects on inflation, and underlying inflation.* Stellenbosch : Stellenbosch University, 2016. December. Available from: https://scholar.sun.ac.za/handle/10019.1/100391?show=full.

19. International Monetary Fund, *World Economic Outlook: War Sets Back the Global Recovery*. 2022. Washington, DC. April. Available from: https://www.imf.org/en/Publications/WEO/Issues/2022/04/19/world-economic-outlook-april-2022.

20. Food and Agriculture Organisation of the United Nations, *The importance of Ukraine and the Russian Federation for global agricultural markets and the risks associated with the current conflict 2022*. March. Available from: https://www.fao.org/3/cb9236en/cb9236en.pdf.

21. Financial Times, *World food prices hit new record on impact from Ukraine war*. 2022. April. Available from: https://www.ft.com/content/5212871a-d2d3-41ef-99fe-400ed33859e8.

22. Carlstrom, C.T. and T.S. Fuerst, *Monetary policy and self-fulfilling expectations: The danger of forecasts*. Economic Review - Federal Reserve Bank of Cleveland, 2001. **37(1)**: p. 9-19. Available from: https://www.proquest.com/docview/235173214?parentSessionId=otH56Eq123ssGSi555Kp0FsD9oS5AYmi%2BBL3etBKNf0%3D&pq-origsite=primo&accountid=14468#.

23. Causa, O., N. Woloszko, and D. Leite, *Housing, wealth accumulation and wealth distribution: evidence and stylized facts*. OECD, 2019. December. Available from: https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP(2019)58&docLanguage=En.

24. Sen, C., *Inflation Is Bringing Back the K-Shaped Economy*. Bloomberg, 2022. March. Available from: https://www.bloomberg.com/opinion/articles/2022-03-14/inflation-is-bringing-back-the-k-shaped-economy.

25. Thalman, E. and B. Wehrmann, *What German households pay for power.* Clean Energy Wire, 2021. December. Available from: https://www.cleanenergywire.org/factsheets/what-german-households-pay-power.

26. Capolongo, A. and M. Kühl, *From savings to spending: Fast track to recovery*. European Stability Mechanism, 2021. July. Available from: https://www.esm.europa.eu/blog/savings-spending-fast-track-recovery.

27. Rocher, S. and M.H. Stierle, *Household saving rates in the EU: Why do they differ so much?* European Comission, 2015. September. Available from: https://ec.europa.eu/info/sites/default/files/dp005_en.pdf.

28. Haiss, P. and K. Sümegi, *The relationship between insurance and economic growth in Europe: a theoretical and empirical analysis*. Empirica, 2008. **35(4): p. 405-431**. DOI: 10.1007/s10663-008-9075-2. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=968243.

29. Staikouras, C. and G. Wood, *The Determinants Of European Bank Profitability*. International Business & Economics Research Journal, 2004. 01/01. **3: p. 57-68**. DOI: 10.19030/iber.v3i6.3699. Available from: https://www.researchgate.net/publication/274009222_The_Determinants_Of_European_Bank_Profitability.

30. Macit, F., *Bank Specific and Macroeconomic Determinants of Profitability: Evidence From Participation Banks in Turkey*. Economics Bulletin, 2012. **32(1): p. 586-595**. Available from: https://EconPapers.repec.org/RePEc:ebl:ecbull:eb-11-00769.

31. Ameur, G.B., S. Mhiri, and Ines, *Explanatory Factors of Bank Performance in Tunisia: A Panel Model Approach.* Global Journal of Management and Business Research, 2013. 13. Available from: https://www.semanticscholar.org/paper/Explanatory-Factors-of-Bank-Performance-in-Tunisia%3A-Ameur-Mhiri/8b729a5afe65edaac6c6ae94edcbeafe3ddf2087.

32. Goddard, J., P. Molyneux, and J. Wilson, *The Profitability of European Banks: A Cross-Sectional and Dynamic Panel Analysis*. Manchester School, 2004. 02/01. **72: p. 363-381**. DOI: 10.1111/j.1467-9957.2004.00397.x. Available from: https://www.researchgate.net/publication/4994266_The_Profitability_of_European_Banks_A_Cross-Sectional_and_Dynamic_Panel_Analysis.

33. Bekeris, R., *THE IMPACT OF MACROECONOMIC INDICATORS UPON SME'S PROFITABILITY*. Ekonomika, 2012. 01/01. 91: p. 117-128. DOI: 10.15388/Ekon.2012.0.883. Available from: https://www.researchgate.net/publication/330515511_THE_IMPACT_OF_MACROECONOMIC_INDICATORS_UPON_SME'S_PROFITABILITY.

34. Christophersen, C. and P. Jakubík, *Insurance and the Macroeconomic Environment*. 2014, EIOPA, Risks and Financial Stability Department.

35. Nissim, D., *Analysis and Valuation of Insurance Companies.* CE|ASA (Center for Excellence in Accounting and Security Analysis), 2010. November. Industry Study No. 2. DOI: http://dx.doi.org/10.2139/ssrn.1739204. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1739204.

36. Schanz, K.-U., *The role of insurance in mitigating social inequality*. The Geneva Association, 2020. August. Available from: https://www.genevaassociation.org/sites/default/files/research-topics-document-type/pdf_public/social_inequality_report_web_final.pdf.

37. Sheehan, M., *Severe stagflation scenario would hurt insurers, warns Swiss Re*. Reinsurnce News, 2021. November. Available from: https://www.reinsurancene.ws/severe-stagflation-scenario-would-hurt-insurers-warns-swiss-re/.

38. Holzheu, T., et al., *Stagflation: the risk is back, but not 1970s style.* Swiss Re Institute, 2022. April. Available from: https://www.swissre.com/institute/research/sigma-research/sigma-2022-02.html.

39. FitchRatings, *Market Volatility Is Ukraine War's Main Risk for European Insurers.* FitchRatings, 2022. March. Available from: https://www.fitchratings.com/research/insurance/market-volatility-is-ukraine-wars-main-risk-for-european-insurers-17-03-2022.

40. Laca, P. and M. Onoszko, *East Europeans Widen Interventions to Shield Currencies From War.* Bloomberg, 2022. March. Available from: https://www.bloomberg.com/news/articles/2022-03-04/czech-central-bank-defends-koruna-in-fallout-from-war-in-ukraine.

41. Panetta, F., *Small steps in a dark room: guiding policy on the path out of the pandemic.* European Central Bank, 2022. February. Available from: https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp220228~2ce9f09429.en.html.

42. GLOBSEC, *GLOBSEC Vulnerability Index*. 2021. Available from: http://www.vulnerabilityindex.org/src/files/Globsec_VulnerabilityIndex_online.pdf.

43. Astrov, V., et al., *How do Economies in EU-CEE Cope with Labour Shortages?* The Vienna Institute for International Economic Studies, 2021. February. Available from: https://wiiw.ac.at/how-do-economies-in-eu-cee-cope-with-labour-shortages-dlp-5641.pdf.

GLOBSEC
IDEAS SHAPING THE WORLD

VIG
VIENNA INSURANCE GROUP

* The author was working at GLOBSEC at the time of writing the report.
** Data collection was concluded up to July 2022.

GLOBSEC
IDEAS SHAPING THE WORLD

Vajnorská 100/B
831 04 Bratislava
Slovak Republic

+421 2 321 378 00
info@globsec.org

www.globsec.org