OESTERREICHISCHE NATIONALBANK
EUROSYSTEM

May 2022

CESEE Research Update

www.oenb.at/cesee-research-update

Content

http://www.oenb.at
http://cesee.oenb.at

Imprint/inquiries/copyright 2022:
Oesterreichische Nationalbank,
Central, Eastern and Southeastern Europe Section
Postal address: P.O. Box 61, A 1011 Vienna, Austria
To subscribe or unsubscribe to our newsletter, please visit our website http://cesee.oenb.at

The CESEE Research Update is released quarterly by the Central, Eastern and Southeastern Europe Section of the Oesterreichische Nationalbank (OeNB). The aim of this newsletter is to inform readers about OeNB analysis and research output on the CESEE region as well as related events.

Highlight of this Issue

OeNB BOFIT Outlook for selected CESEE economies and Russia

CESEE-6: inflation curbs private consumption and external demand weakens in the near term; investments strengthen in the medium term

At 5.5%, the economies of Bulgaria, Croatia, Czechia, Hungary, Poland and Romania (CESEE-6) saw a solid rebound of annual GDP growth in 2021. The revival was driven by dynamic exports and, as the year progressed, by business investments and later by private consumption as well. The economic momentum also fed through to labor market conditions in CESEE, causing unemployment rates to revert to the historically low levels of 2019. Yet, new COVID-19 infection waves and persistent bottlenecks in global value and supply chains eventually increased the risks to growth again toward the end of 2021. At the same time, inflation rates went higher and higher, culminating in the highest average rate measured in CESEE-6 in 20 years at 8.2% in February 2022.

Price developments were driven by both international factors, including rising energy and commodity prices, and domestic factors. The latter included pent-up consumer demand, the normalization of prices in sectors hit hard by the lockdowns, adjustments of regulated prices and post-lockdown frictional losses, e.g. on account of staff or supply shortages and fuelled core inflation especially since the turn of the year. The increase in the contribution of energy to the HICP in January and February, however, was somewhat contained due to government support measures aimed at limiting price increases for household energy (and to some extent also for fuel).

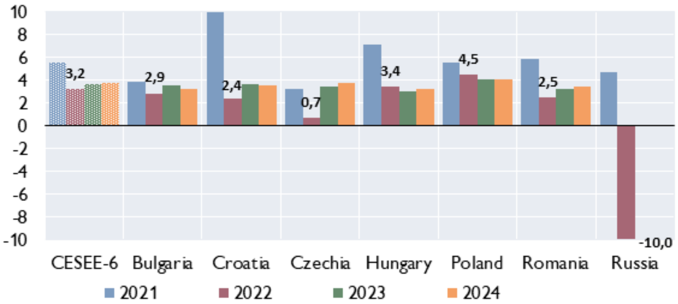
The inflation-targeting central banks in the CESEE-6 responded to rising prices with major interest rate hikes, thus abandoning the monetary policy easing that was called for during the pandemic in 2020. The prospects for a considerably longer period of high price pressures have increased substantially since the start of the war in Ukraine and central banks further upped their policy rates. Since the start of 2022, policy rates had been raised to the following levels: 3% in Romania (+125 basis points), 4.4% in Hungary (+200 basis points in total), 4.5% in Poland (a cumulative +275 basis points) and 5% in Czechia (ultimately +125 basis points).

Looking ahead, the ongoing war in Ukraine and surging inflation rates in early 2022 lead us to lower our growth forecast for the current year by 1.3 percentage points to 3.2% year on year. For the years 2023 and 2024, we expect GDP to expand by 3.7% and 3.8% year on year. Regarding the composition of growth, all GDP components will weaken in 2022 except for gross fixed capital formation. In particular, export growth will halve. With import growth declining more strongly, the negative contribution of net exports will diminish. Over the entire forecast horizon, the contribution of private consumption growth will remain robust, whereas the contribution of gross fixed capital formation will strengthen notably in 2023 along with the increased disbursement of EU funds.

The forecast is subject to an exceptionally high degree of uncertainty with political and economic risks tilted to the downside. Risks include the future path of inflation (and related second-round effects of a prolonged high-inflation scenario), the developments in Ukraine, the evolution of sanctions against Russia, supply disruptions and renewed surges in COVID-19 infection rates. Apart from geopolitics, political uncertainty in the region itself prevails. The dispute with the EU about the conformity of Hungarian and Polish national regulations with EU law implies uncertainty about the disbursement of EU funds. Climate risks are no longer relevant in the long term only as recent extreme events, such as floodings and droughts, have exposed the vulnerability to natural disasters of economies in moderate climate zones.

Real GDP growth in selected CESEE economies

year-on-year growth in %



Note: realized values for 2021, OeNB-BOFIT projections for 2022 to 2024.

Attack on Ukraine severely hits Russia's economy

Russia's war on Ukraine markedly hurts the Russian economy. In light of uncertainty in Russia, increased Western economic and trade sanctions as well as the country's own countersanctions, we expect Russian GDP to contract by about 10% this year and thereafter remain at levels seen a decade ago, i.e. prior to the annexation of Crimea and initial sanctions on Russia. High inflation will depress household consumption, and fixed investment will suffer. Russian inflation could reach as much as 20% or more this year. Distress in corporations will, like in earlier recessions, probably lead to larger cuts in real wages than in employment. Nevertheless,

[1] *Cutoff date for data underlying the CESEE-6 outlook: March 21, 2022. The projections for the CESEE-6 countries were prepared by the OeNB, those for Russia by the Bank of Finland in cooperation with the OeNB. All projections are based on the assumptions of the March 2022 ECB staff macroeconomic projection exercise (MPE) for the euro area, using the figures from the severe scenario, according to which real annual GDP growth in the euro area is projected to amount to 2.3% in 2022 and 2023, and to 1.9% in 2024. Forecast oil prices are based on the average for oil futures contracts for the ten days preceding March 25, 2022, and yield the following Brent oil prices per barrel: USD 100 in 2022 and USD 89 in 2023.*

unemployment is expected to rise. Fixed investment should contract to levels last seen a decade and a half ago. The business environment for private (foreign as well as domestic) firms has become exceptionally unstable and lacks perspective.

Russia's imports are expected to halve to levels reminiscent of the mid-2000s. The volume of Russian exports will decline, particularly as the EU reduces its energy imports from Russia. While Russia may be able to shift a tangible part of its oil exports to other markets, a particularly large part of its gas exports is tied to pipeline transmission.

The ruble's exchange rate is expected to remain at its current level during the forecast period. The central bank is unable to support the exchange rate through purchasing rubles on the market, as the EU and the US have prohibited transactions with the central bank. On the other hand, the fresh requirement for Russian firms to convert 80% of their forex export earnings to rubles will provide coverage for payments going abroad, especially as imports have fallen sharply. High export prices and falling imports will push up Russia's current account surplus, which already reached nearly 7% of GDP last year.

The risks to this forecast are exceptionally large and tilted to the downside. The growth of the global economy and changes in oil prices could diverge from their expected paths. The war Russia started may take unexpected turns. International economic and trade sanctions on Russia, as well as Russia's own countersanctions, could escalate and further hurt Russian exports and imports. The impacts of interruptions in supply and logistics on Russian production and imports could be surprisingly large. Russian inflation could accelerate more than expected and continue longer than anticipated, which would further erode private consumption in particular. Fixed investment by private firms could contract sharply if, for example, large firms are unable to meet their orders.

For more information see [Economic review and outlook - Oesterreichische Nationalbank (OeNB)]

Household saving behavior and the COVID-19 pandemic: evidence from the OeNB Euro Survey

According to monetary statistics for nine Central, Eastern and Southeastern countries (CESEE-9[1]), the growth rate of household deposits remained positive in the aggregate over the course of the COVID-19 pandemic. In Czechia and Romania, household deposit growth accelerated substantially in 2020 and 2021, whereas in Bulgaria, Croatia, Hungary, Albania and Serbia, it started to accelerate in 2021. In Poland, the growth rate of deposits had accelerated already in 2019 and decelerated somewhat during the pandemic but still remained above pre-crisis levels. Only in Bosnia and Herzegovina did deposit growth decelerate in 2020, but it eventually returned to pre-crisis levels in 2021. The increase of aggregate household deposits during the pandemic mainly reflects both forced saving due to restricted consumption opportunities during lockdowns and higher precautionary saving. Yet, aggregate figures cannot inform us about the relative contribution of those two drivers to deposit growth. Moreover, the distributional consequences are unclear; while some households may have increased their savings, others may have been forced to dissave.

In order to shed some light on the importance of forced saving and precautionary saving, we included specific questions on individuals' saving behavior around the pandemic in the 2021 wave of OeNB Euro Survey. The OeNB Euro Survey interviews randomly selected individuals in ten different CESEE countries[2] – 1,000 per country – and is representative of the population in these countries in terms of region, age and gender if

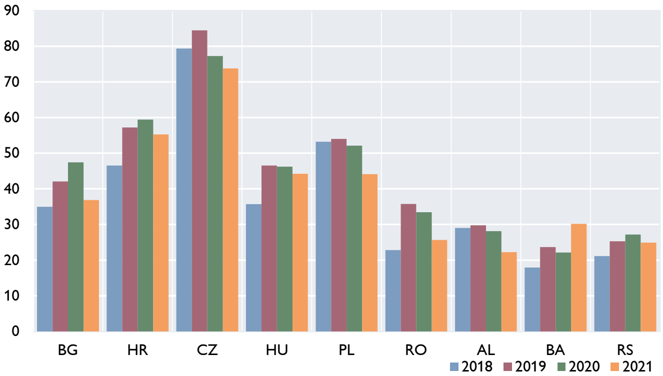
[1] *The nine countries are: Albania (AL), Bosnia and Herzegovina (BA), Bulgaria (BG), Croatia (HR), Czechia (CZ), Hungary (HU), Poland (PL), Romania (RO) and Serbia (RS).*

[2] *For this analysis, data from one country, North Macedonia, are not used due to a translation error in the savings module. The other nine countries are the aforementioned ones.*

appropriate weights are applied. The interviews referred to here were conducted in fall 2021, after the first, mostly energy-related, price hikes but well before the war in Ukraine and its consequences put further financial pressure on households. In this note, we present some first insights we gleaned from the 2021 Euro Survey wave.

Share of individuals who have savings

% of individuals



Source: OeNB Euro Survey.
Note: Weighted averages excluding respondents who answered "don't know" or refused to answer. Weights are calibrated on census populations statistics for age, gender, region, and where available, on education and ethnicity (separatly for each country).

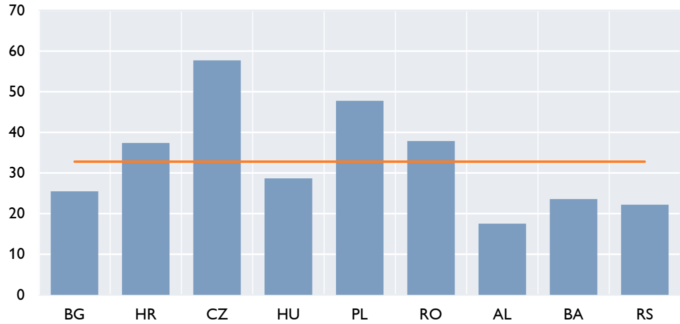
First, we look at a question that is regularly asked in the OeNB Euro Survey – whether respondents have any savings at the time of the interview – and how the share of savers changed over the last four years. While between 2019 and 2020, the share stayed very stable, in 2021, the second year of the pandemic, there seemed to be a larger drop compared to 2019; this drop was significant in most countries. In Bosnia and Herzegovina, by contrast, there was a significant increase in the proportion of savers.

In the 2021 wave, respondents were also asked about their saving behavior before the outbreak of the COVID-19 pandemic. Specifically, they were asked whether they had been able to save regularly before the pandemic. As already highlighted in one of our earlier studies (Koch and Scheiber, 2022), we saw again that the majority had not been able to save regularly. On average, only a third of respondents had been able to save, with the share of savers being above 50% only in Czechia.

Respondents who reported to have been regular savers before the pandemic were subsequently asked

Share of individuals who saved regularly before the pandemic

% of individuals

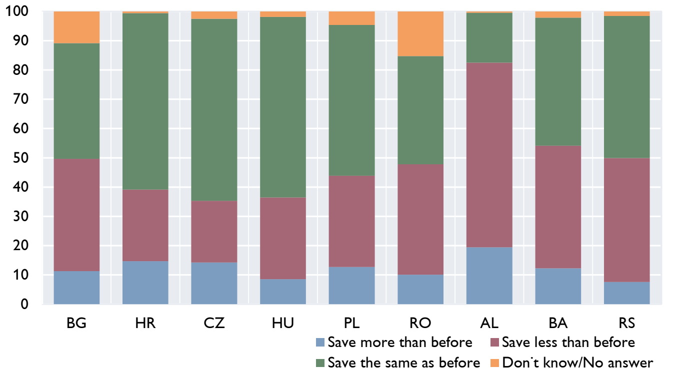


Source: OeNB Euro Survey 2021.
Note: The question reads as follows: "If you think about the time before the Covid-19 pandemic: At the end of the month, do you usually had some money left that you were able to save for large purchases or emergencies, or to accumulate wealth?" The blue bars are weighted averages excluding respondents who answered "don't know" or refused to answer. Weights are calibrated on census populations statistics for age, gender, region, and where available, on education and ethnicity (separatly for each country). The orange line represents the average share over all individuals.

whether and how their regular saving had changed with the start of the pandemic. On average, around 12% reported that regular saving had increased, whereas 33% said their saving had decreased. The latter group is particularly large in the poorer countries: Bulgaria, Romania and all Western Balkan countries except Croatia.

Change in behavior of regular savers during the pandemic

% of individuals who regularly saved before the pandemic



Source: OeNB Euro Survey 2021.
Note: The question reads as follows: "Has the level of your monthly savings changed since the start of the COVID-19 pandemic compared to pre-pandemic times?" Weighted averages, weights are calibrated on census populations statistics for age, gender, region, and where available, on education and ethnicity

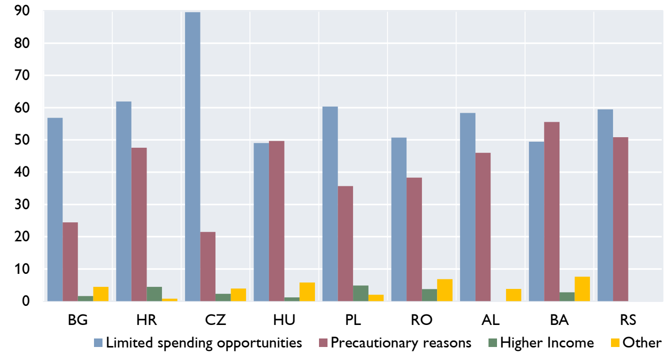
We asked those who said their saving had increased since the pandemic about the reasons for this increase (this question included those who had not been regular savers before the pandemic but reported to be able to save since the pandemic started).[3] In Czechia, almost 90% mentioned limited spending opportunities during lockdowns, i.e., forced saving. In the other countries, forced saving was mentioned by at least 50% of the

[3] *We provided three possible options related to forced saving, precautionary saving or other reasons. Only a few respondents reported other reasons, most frequently reasons related to higher income, which we therefore plotted as additional option.*

respondents. However, increased saving for precautionary reasons was also frequently mentioned, especially in the Western Balkan countries and Hungary.

Reasons for increased savings during the pandemic

% of individuals who said to have increased regular savings since the pandemic



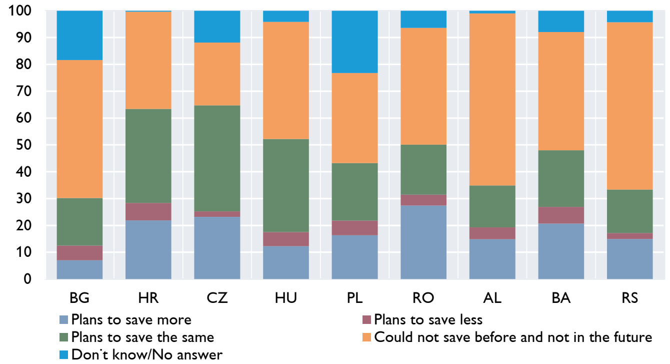
Source: OeNB Euro Survey 2021.

Note: The question reads as follows: "I am now going to read out some reasons why your monthly savings might have increased during the pandemic. Please pick all reasons that apply to you." Weighted averages, weights are calibrated on census populations statistics for age, gender, region, and where available, on education and ethnicity (separatly for each country).

Finally, we asked respondents about their saving plans once the pandemic ends. In most countries, the majority said that they had not been able to save before the pandemic and do not expect to be able to save afterward. Still, a considerable fraction of individuals plans to save more in the future, on average more than 17%. In contrast, only around 5% intend to save less than before the pandemic.

Plans for savings after the pandemic

% of individuals



Source: OeNB Euro Survey 2021.

Note: The question reads as follows: "Looking ahead to post-pandemic times: Do you intend to save more or less compared with what you used to save before the pandemic?" Weighted averages, weights are calibrated on census populations statistics for age, gender, region, and where available, on education and ethnicity (separatly for each country).

Summary: 89th East Jour Fixe

CESEE countries in (e-)motion: trends in the automotive industry and individual mobility

After 120 years of producing and developing petrol and diesel engines, the automotive industry is racing to switch to all-electric cars – at least across Europe. Having ramped up their efforts to go green, car manufacturers in Central, Eastern and Southeastern European (CESEE) countries are keeping the pace of electrification. The OeNB's most recent East Jour Fixe on March 28, 2022, highlighted the opportunities and challenges associated with the electrification of the car industry, including the localization of battery production, the deployment of charging infrastructures, the future of combustion engines in emerging markets as well as innovation and future mobility trends.

In his opening remarks, OeNB Governor Robert Holzmann recalled the importance of the car industry for the CESEE region: It is not only a key manufacturing segment but also a major export driver and an important determinant of economic growth in several CESEE countries. Governor Holzmann also pointed to recent events that have revealed the vulnerability of the car industry and the risks associated with the region's high dependence on this sector: The COVID-19 pandemic has brought about significant disruptions in global supply chains, and the human and political tragedy in Ukraine has created an additional massive exogenous shock and source of risks for the sector. In addition, other long-term challenges loom high. In particular, the global value chain integration of CESEE's car industry has been strongly related to foreign direct investment flows which seem to have lost steam in the last decade. Moreover, many CESEE countries are locked in a functional middle-income trap, generating comparatively little value added.

The future of automotive mobility

In his keynote address, Klaus Schmitz, Partner at the consulting firm Arthur D. Little, provided global survey-based evidence on some of the key questions regarding consumers' attitudes and preferences with respect to future automotive mobility and megatrends in the industry. Polls suggest that the primary reason for using the car is commuting in and out of cities, particularly for work. Consumers share similar motivational patterns for car ownership across all major global markets (comfort, independence, fun and convenience). A large majority of consumers believe that possessing a car in 10 years' time will be at least as important as it is today. According to Schmitz, it is rather traffic congestion than environmental considerations that will prompt people to change their mobility patterns.

With respect to autonomous driving, respondents across all regions are most concerned about safety risks. In view of these results, Schmitz argues that once robo-taxis overcome technical and safety issues, they will replace short-distance means of transport. To date, the transport sector accounts for 20% of CO_2 emissions, most of which come from road traffic, and it is the only sector that has not yet reduced emissions. Still high prices of electric vehicles (EVs), limited charging options and too short a driving range persist as the most discouraging factors for consumers to choose a battery EV.

Schmitz concluded by making a plea for large-scale photovoltaic systems in more favorable regions than in Europe and using the energy thus produced should be used for the green production of hydrogen which, in turn, should be used in fuel cell cars and synthetic fuels. He left the audience with a clear message – namely that there is a large market potential for electrolyzers and that cars can be a sustainable means of mobility even though they are not seen as such today.

The electric car revolution in Europe: Are CESEE countries ready?

In session 1, Matteo Ferrazzi (European Investment Bank – EIB) and Doris Hanzl-Weiss (Vienna Institute for International Economic Studies – wiiw) presented the first part of a study conducted jointly with the OeNB, complemented with country perspectives on Czechia and Slovakia provided by Michal Hrubý (EUROPEUM) and Soňa Muzikárová (GLOBSEC). The session was moderated by Birgit Niessner (OeNB) and Robert Stehrer (wiiw). Ferrazzi noted that many factors have a strong impact on the automotive industry, including long-term trends, such as moving production capacities to emerging markets, and pandemic- and war-related changes to e.g. supply chains. Technology also plays a key role: In Europe, the share of EVs in new vehicle sales has increased strongly over the past years and stood at around 40% in 2021. By 2035, all car sales will be EVs if the goals outlined in the "Fit for 55" initiative of the European Commission are achieved. Two key issues regarding EVs are battery production and charging infrastructures. Regarding the latter, capacities need to be expanded rapidly to make EVs attractive for consumers. Regarding batteries, their price is a key determinant of EV prices and is projected to decrease, but at a much slower pace than in the previous decade. Giga-factories for battery production are being built and planned across Europe to reduce reliance on Asian producers. Referring to Ferrazzi's presentation, Schmitz added that while the 2035 EV goal might be feasible from the perspective of large car producers, it is questionable whether consumer demand and energy supply can adapt fast enough.

In her remarks, Hanzl-Weiss focused on the CESEE region, with many of her points being emphasized and reiterated by Hrubý and Muzikárová. The speakers showed that the CESEE region is heavily specialized in the automotive industry, in particular Czechia, Slovakia, Hungary and, to a somewhat lesser extent, Romania and North Macedonia. The transformation of the sector is thus critical for the region's economic outlook. Muzikárová presented estimation results indicating a strong hit to Slovakia's GDP and employment if production capacities are not adequately adapted to EV production. On a positive note, the share of EVs in exported vehicles has increased rapidly in most CESEE countries, reaching 40% in Slovakia and Slovenia in 2021. The panelists pointed out that EV penetration of CESEE passenger car markets is still low and that EU funds from the Recovery and Resilience Facility for the automotive sector and supporting infrastructures are thus lower than in many Western EU countries.

In the general discussion with the audience, the role of national governments versus that of car producers in shaping the future of CESEE's automotive industry was raised. The panelists noted that while the influence of car producers is clearly large, national governments can still influence developments, for instance, via industrial policy and incentives, subsidies and investments (e.g. by getting involved in the European Battery Alliance).

Risks, challenges and opportunities for a sector in transition: A bumpy road ahead for CESEE countries?

Session 2 was chaired by Debora Revoltella (EIB) and provided a forward-looking view on the sector. Tomáš Slačík (OeNB) started his presentation of the second part of the joint EIB-OeNB-wiiw study by questioning the exclusive focus on electrification as the answer to current problems. He referred to energy and raw material use related to EV production, affordability, distributional aspects and a certain lock-in induced by European regulation which might preclude the development of other technical solutions. Big tech firms will enter the market, curbing the market power of current car producers. Rising demand for inputs will meet limited and inelastic supply and thus boost prices. Slačík also pointed to geopolitical, environmental and social consequences as well as fiscal costs (arising from financing the transition and foregoing tax revenues from fuels in the long-term) and a potential "big market illusion" (related to enormous market expectations on EV producers implying large margins and quantities). He also emphasized the need to shift activities to higher value-added sectors beyond automobiles and secure affordable energy sources beyond fossils. It is equally important to transition into a digital economy, keeping an eye on risks, including financial risks.

Petr Pavlínek (University of Nebraska Omaha and Charles University Prague) highlighted CESEE's high degree of dependence on foreign capital ("integrated periphery" position) that goes hand in hand with low innovation in the region and weak governments. In his view, this will not change any time soon, as he observes a reversal of the investment trends that have prevailed since the start of the transition 30 years ago: New production sites are no longer built in CESEE, while old-type combustion engine production increasingly concentrates in the region. Building on the latter is a risky strategy which undermines future competitiveness.

Nils Poel (European Association of Automotive Suppliers – CLEPA) presented results from a study focusing on powertrains which show that investment in EV production is taking place in the region, in particular in Poland and Hungary. Germany and France are spearheading this development which has significant implications for employment. An EV-only scenario will shed half a million jobs in the EU (around 84% of current jobs in combustion engine production), notwithstanding some replacement in other sectors. A mixed-tech scenario would provide for a better manageable transition without compromising climate goals. Employment effects differ widely, with some regions within countries being more affected than others.

Georg Zaccharia (Raiffeisen Bank International – RBI) completed the list of speakers and turned the audience's attention to the impact of the war in Ukraine which has led to a shortage of materials and inputs. While Russia is also a market for European cars, the impact on trade in finished cars has been negligible to date given Russia's (and Ukraine's) small market size. Yet, missing inputs have caused production stops at BMW and VW and pose an additional downward risk on the already existing chip shortage. Furthermore, aluminum production will be increasingly affected by the war on a global scale, putting additional pressure on an already tight market. Also, steel prices have surged, given that Russia and Ukraine together account for 20% of total steel supply in Europe. Zaccharia expects large and longer lasting disruptions in supply chains and considerably lower output levels. While demand will be impaired i.a. by inflation and monetary policy tightening (thus causing consumers to postpone buying decisions), it will remain higher than supply capacity in his view.

The presentations and the workshop program are available at 89th East Jour Fixe of the Oesterreichische Nationalbank - Oesterreichische Nationalbank (OeNB)

The joint EIB-OeNB-wiiw study can be downloaded here https://www.eib.org/attachments/publications/econ_recharging_the_batteries_en.pdf

OeNB Euro Survey

The OeNB Euro Survey has been conducted since 2007 in ten Central, Eastern and Southeastern European (CESEE) countries. Its central focus is on exploring different dimensions and drivers of currency holdings and households' saving and borrowing behavior. The main results of the OeNB Euro Survey are published on the OeNB's website at https://www.oenb.at/en/Monetary-Policy/Surveys/OeNB-Euro-Survey/Main-Results.html. The charts are available for download in different file formats and the underlying data can be exported as CSV files.

The quality checks for the data collected in fall 2021 have been finished and the main results on the website will be updated by the end of May 2022. Data from the Euro Survey are regularly used for analyses by researchers and policy makers. For example, OeNB Working Paper 237 investigates third-party guarantee literacy and its effects on acting as a guarantor, drawing on Euro Survey data from 2018 and 2019.

On how to access Euro Survey Data:

Recent studies in Focus on European Economic Integration Q1/22 (full version)

Euro adoption in CESEE: How do financial literacy and trust in institutions affect people's attitudes?
Peter Backé, Elisabeth Beckmann

Household savings in CESEE: expectations, experiences and common predictors
Melanie Koch, Thomas Scheiber

The Belarusian banking sector (2016–2021): from timid recovery to renewed crisis?
Stephan Barisitz

Forthcoming: Studies in Focus on European Economic Integration Q2/22

The FEEI Q2/22 will be published at the end of May 2022

Recent economic developments and outlook:

- War in Ukraine disrupts recovery from the pandemic and further heats up prices
- Accelerating inflation and war in Europe weigh on growth in the CESEE-6 region
- Attack on Ukraine severely hits Russia's economy

Mitigating the impact of the pandemic on personal finances: early descriptive evidence for CESEE
Thomas Scheiber, Melanie Koch

Upcoming Events

The following events are organized by the OeNB and i. a. cover CESEE relevant topics.
Please note that attendance is by invitation only. If you are interested in participating in one or more of the events, please send an e-mail to event-management@oenb.at.

November 21-22, 2022	Conference on European Economic Integration (CEEI)

OeNB Courses at the Joint Vienna Institute (JVI) 2022

The JVI plans to resume classroom training as soon as the COVID-19 health situation allows.

For the most up-to-date information on JVI training courses, please click the following link:
https://www.jvi.org/courses/course-schedule-2022.html

Upcoming OeNB courses

Title	Organization	Date
Euro Area Integration and Accession: Institutional Challenges and Governance Issues for Central Bankers	Oesterreichische Nationalbank	May 9 – 13, 2022
Climate Change and Green Finance	Oesterreichische Nationalbank, in cooperation with the Austrian Federal Ministry of Finance	June 20 – 24, 2022, face-to-face
Financial Translation and Editing: Trends and Tools for Future Challenges	Oesterreichische Nationalbank	October 19 – 21, 2022
Cash Circulation and Payment Systems in Austria	Oesterreichische Nationalbank	November 21 – 23, 2022
Monetary and Financial Statistics Collected and Compiled by the ESCB	Oesterreichische Nationalbank	November 21 – 25, 2022

For more information please follow this link: https://www.jvi.org/home.html