Die Auswirkung von Covid-19 auf die finanzielle Vulnerabilität verschuldeter Haushalte in CESEE [22]

Im Jahr 2020 waren Haushalte aufgrund der COVID-19-Pandemie in den CESEE-10[23] stark von Einkommenseinbußen betroffen. So zeigen Daten der OeNB Euro Survey vom Herbst 2020, dass sich der Anteil der Haushalte, die von einem negativen Einkommensschock in den letzten 12 Monaten berichten, im Vergleich zum Vorjahr nahezu verdoppelte. Dies ist vornehmlich auf reduzierte Arbeitszeiten und damit verbundene Gehaltskürzungen zurückzuführen, Kündigungen spielen eine untergeordnete Rolle. Verschuldete Haushalte sind dabei besonders unter Druck geraten. Sie waren deutlich stärker von notwendigen Ausgabenreduktionen und Gehaltskürzungen betroffen. Einer von drei in dieser Analyse betrachteten Vulnerabilitätsindikatoren für verschuldete Haushalte weist auf einen signifikanten Anstieg der finanziellen Verwundbarkeit im Jahr 2020 hin. Zeitgleich wurden Unterstützungsmaßnahmen gesetzt, die den unmittelbaren negativen Einfluss auf die Schuldentragfähigkeit der Haushalte deutlich abgeschwächt haben dürften. Ein zu rasches Auslaufen dieser Maßnahmen könnte besonders die vulnerablen Haushalte vor weitere finanzielle Schwierigkeiten stellen. Allerdings sollten auch die fiskalischen Risiken und mögliche Anreizverzerrungen, die andauernde Unterstützungsmaßnahmen mit sich bringen können, dagegen abgewogen werden.

Did the Covid-19 pandemic affect the financial situation of CESEE households?

As a consequence of the COVID-19 pandemic, firms had to reduce labor demand and self-employed workers experienced interruptions in their activity. The resulting income losses were, on aggregate, largely cushioned by governmental support measures (European Commission, 2021). Still, the impact of the crisis might have hit households very unevenly as recently indicated by the IMF (WEO, April 2021). Drawing on micro data from the OeNB Euro Survey from fall 2020 allows to shed some light on how the pandemic has affected the financial situation of households in the CESEE-10 region.

Chart 1

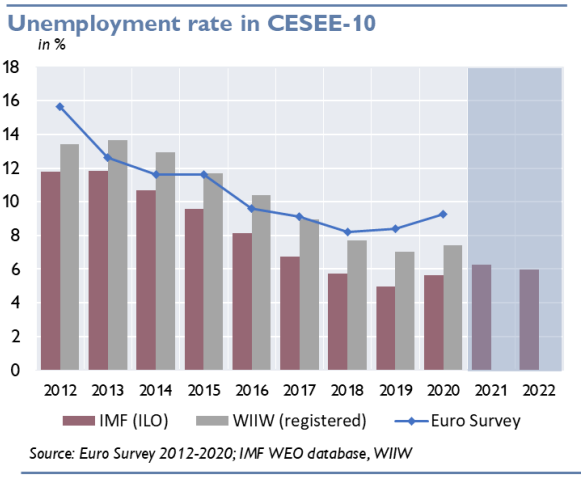
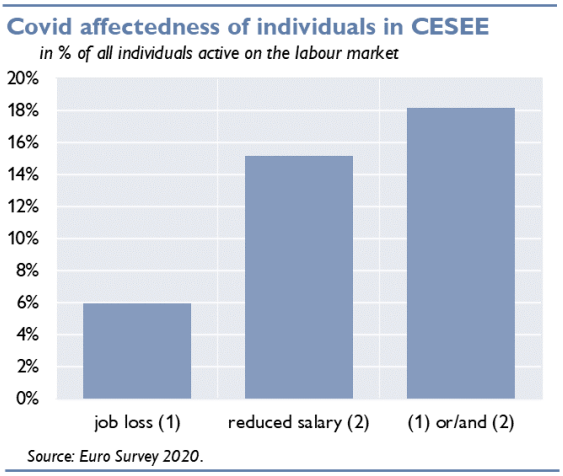


Chart 2



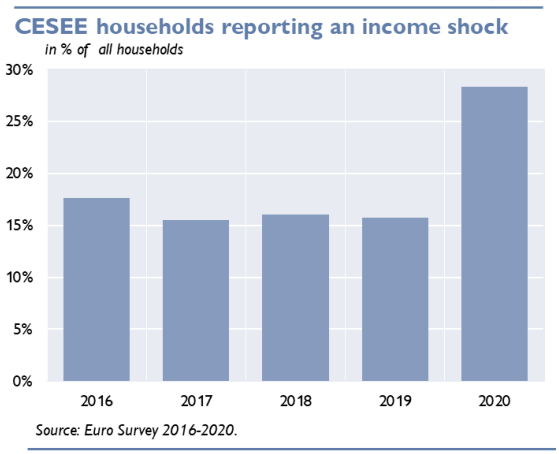
[22] Autoren: Matthias Enzinger, Melanie Koch und Aleksandra Riedl (Abteilung für die Analyse wirtschaftlicher Entwicklung im Ausland).

[23] CESEE-10 umfasst Bulgarien (BG), Tschechien (CZ), Kroatien (HR), Ungarn (HU), Polen (PL), Rumänien (RO), Albanien (AL), Bosnien und Herzegowina (BA), Nordmazedonien (MK) und Serbien (RS).

Chart 1 displays the development of the unemployment rate in the CESEE-10 region[24]. Both definitions of unemployment (ILO versus registered unemployed) point to an increase in the unemployment rate in 2020. While displaying a somewhat higher level of unemployment, data from the Euro Survey point to a very similar increase in the unemployment rate in 2020 by +0.8 percentage point (pp). Thus, OeNB Euro Survey data capture the dynamics of the CESEE-10 labor market quite well[25].

While a 0.8pp increase in the unemployment rate does not seem particularly high[26], job losses are only one source of potential income reduction for employees. In the 2020 fall wave of the Euro Survey, individuals were asked whether they were negatively affected by job loss and/or by a reduction in salary due to a decrease in working hours as a result of the Corona crisis. Chart 2 reveals that although 6% of all individuals active on the labor market lost their jobs, more than twice as many (15%) were confronted with a reduced salary.

Chart 3



Focusing on households rather than on individuals shows that almost 30% of all households in the CESEE-10 region experienced an unexpected significant income reduction over the last 12 months (see Chart 3). Hence, this share almost doubled compared to the years before 2020. Unfortunately, the Euro Survey does not collect data on the amount by which a household's income has been reduced. However, as the respective survey question focusses on a "significant

Chart 4

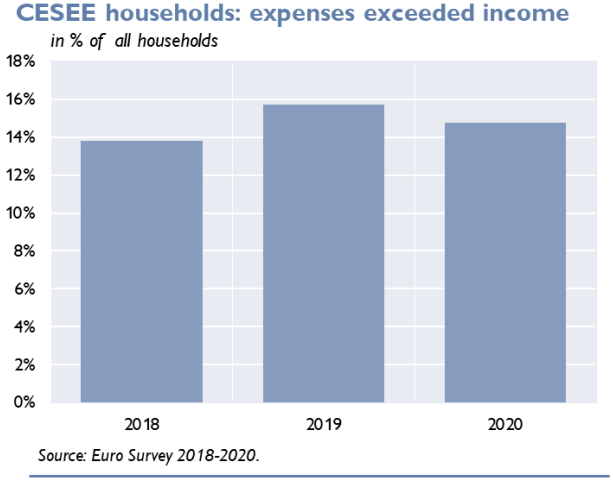
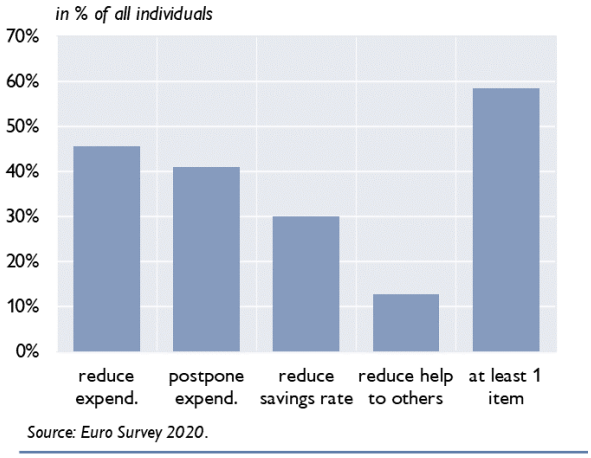


Chart 5



[24] Note that the CESEE-10 aggregate is a population weighted average.

[25] Respondents are asked to classify themselves into one of the following categories: (i) employee; (ii) employer; (iii) own account worker; (iv) contributing family worker; (v) retired; (vi) student; (vii) maternity/parental leave; (viii) not working, but seeking a job; (ix) not working for salary, not seeking a job. The derived unemployment rate is defined as (viii)/((i) + (ii) +(iii) +(iv) +(viii))*100. More details on the OeNB Euro Survey can be obtained from the OeNB homepage: OeNB Euro Survey - Oesterreichische Nationalbank (OeNB)

[26] Compared to the global financial crisis, the unemployment rate in the CESEE-10 region increased by 3.4 percentage points from 2008 (trough) to 2012 (peak).

reduction", it is likely that the income shock might have had severe consequences for the financial vulnerability of households.

An important indicator of financial distress is the share of households whose expenses exceeded income in the past 12 months. Surprisingly, according to this indicator (see Chart 4), the respective share remained rather stable over the last three years[27]. Therefore, the income shock households faced due to the pandemic was either compensated by a decrease in expenditures and/or in the savings rate. Indeed, more than 40% of all respondents reported that they had to reduce or postpone expenditures since the outbreak of the Corona crisis (see Chart 5). Moreover, 30% had to reduce their savings rates and more than 10% of the respondents had to cut down their help to family and friends. Overall, as indicated by the right bar in Chart 5, almost 60% of all respondents had to take at least one of the four actions displayed by the other bars in Chart 5.

Has the loan repayment capacity of households changed in the course of the pandemic?

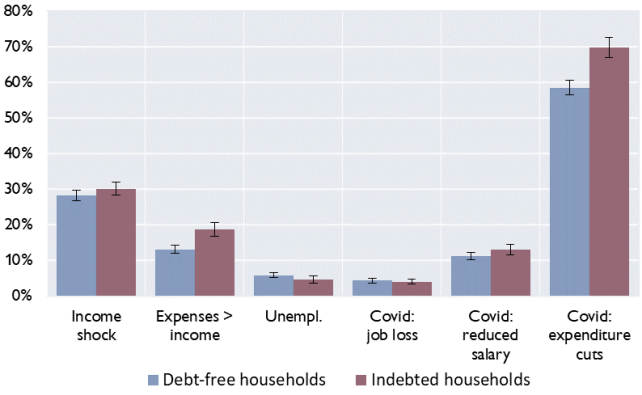
In general, the loan repayment capacity of an indebted household can be affected either by a change in loan instalment payments (caused by an exchange rate or interest rate shock) or via a change in income. So far, we have seen that the COVID-19 pandemic has altered the disposable income of a significant share of households in the CESEE-10 region. Micro data can provide valuable information on the extent to which indebted households were affected by income shocks and whether this has depressed their repayment capacity – an issue highly relevant from a financial stability perspective.

Chart 6 shows the share of indebted and debt-free households among six groups of "affected" households/respondents: (1) households that experienced an income shock (significant reduction of income in the last 12 months), (2) households whose expenses exceeded income in the past 12 months, (3) unemployed respondents, as well as respondents who reported to have been affected in the following ways since the outbreak of the Corona crisis: (4) job loss, (5) reduced salary, and (6) expenditure cuts.

Chart 6

Affectedness of indebted CESEE households, 2020

in % of all households (i.e., estimated probabilities from a probit model)



Source: Euro Survey 2020. 90% Confidence intervals.
Note: The plotted margins are estimates from individual probit models, where the independent variable is 1 for the affected group (e.g. income shock household) and 0 otherwise. The control variables include the respective other affectedness variables (e.g. Expenses > Income households, ...) as well as a set of common controls: household income terciles, education, religion, marital status, children, household size and country dummies.

The reported results are based on a probit model, where each affected group (e.g. 1 in case of an income shock/0 otherwise) is regressed on a dummy variable for indebted households (and the respective other five affectedness indicators and a common set of control variables). Hence, controlling for a large set of other influencing factors, it turns out that indebted households are more likely to have received a reduced salary (13% versus 11%) and to have cut expenditures since the outbreak of the pandemic (70% versus 58%). Also, the share of indebted households whose expenses exceeded income over the last 12 months is significantly larger (19%) compared to debt-free households (13%). Overall, it seems as indebted households were significantly worse off in financial terms.

[27] This indicator is only available since 2018.

Box: Financial vulnerability Indicators of indebted households

DSTI>40%	$DSTI_i = \frac{DS_i}{I_i} * 100$
Financial margin<0	$FM_{ci} = I_{ci} - DS_{ci} - BLC_c$
Expenses > Income	*Subjective measure*

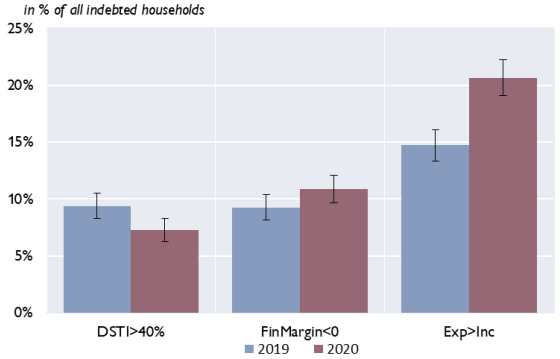
Where DS_i are a household´s monthly debt payments, I_i is the net monthly household income and BLC_c are the basic living costs in country c. The basic living costs are defined as 40% of a country's median income adjusted by the equivalized household size. Furthermore, for tenants this threshold is set to 50% to account for rent payments (Ampudia et al. 2016).

To assess the aggregate impact of an income shock on the repayment capacity of indebted households, we calculate three vulnerability indicators commonly used in the literature and look how they have changed in the CESEE-10 region from 2019 to 2020. The relevant indicators are based on the debt service to income ratio (DSTI), the financial margin (FinMargin), and a subjective measure(expenses>income), which indicates whether the expenses of indebted households were higher than their income in the past 12 months.[28] The indicators with their respective thresholds are defined in more detail in the Box. The share of indebted households whose individual values exceed the respective threshold are defined to be financially vulnerable.

In Chart 7, we display the results for each indicator for the weighted aggregate of all ten countries in the CESEE region. We observe a decrease in the share of vulnerable households whose debt service to income ratio exceed 40%. In contrast, the share of households with a negative financial margin seems to have increased. Hence, looking not only on the relationship between debt payments and income but taking estimated living costs and household size of each indebted household into account, yields a contrasting result. However, the change in both measures is statistically not significant, indicating no major changes in the financial vulnerability of households in the CESEE region. Contrary to these two objective measures of vulnerability, the third indicator points to a significant increase of financial distress among indebted households. While in 2019, 15% of all indebted households reported that their expenses exceeded their income in the past 12 months, the respective share amounted to 21% in 2020.

Share of vulnerable households in CESEE Chart 7

in % of all indebted households



Source: Euro Survey 2019-2020. 90% Confidence intervals.

It is noteworthy that the second and third indicator should, in principle, display the same "sort" of vulnerability. Both the financial margin as well as the expenses/income balance aim to classify an indebted household as vulnerable when its income is not sufficient to cover its expenditures (including debt payments). However, while the financial margin focuses on the current month, the latter considers the last year as the reference period. Having this difference in mind and recalling that both measures move into the same direction, the results might reflect that indebted households had difficulties in meeting their expenses in the course of the crisis, but that their financial situation already improved in fall 2020.

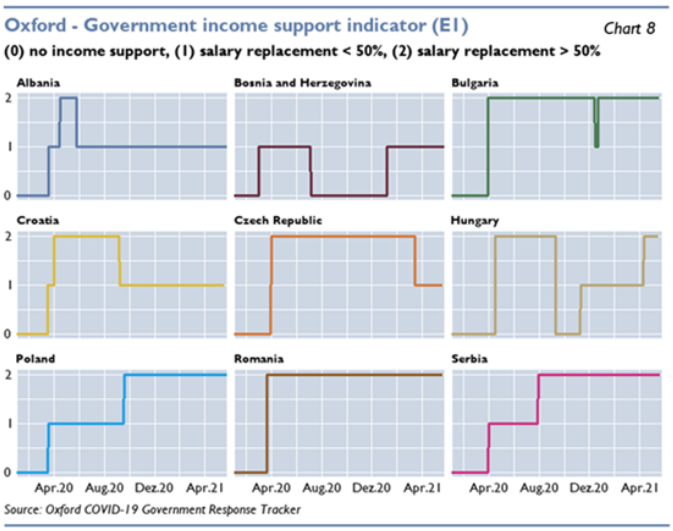
Income support measures and risks ahead

Governments in the CESEE-10 region introduced income support measures to protect employment and the economy in general. These measures have likely dampened the increase in the financial vulnerability of households. While the magnitude of the different income support packages varies considerably between the investigated ten countries, all of them have introduced

[28] Note that the latter indicator (expenses>income) was also presented in Chart 6 but was based on a slightly reduced sample as not all control variables used in the probit model were available for all households.

packages to some extent. As such, wage subsidies for employees facing layoffs (especially to the most vulnerable sectors), short-term labor pay, increased unemployment benefits, and benefits for the self-employed are the most common.

Chart 8 displays the Oxford government income support index[29] available for all CESEE-10 countries expect North Macedonia. It reflects the extent to which income support was granted during the COVID-19 pandemic. Importantly, it shows that support measures were in place in all countries except in one (Bosnia and Herzegovina) during the conduct of the OeNB Euro Survey (in fall 2020). This finding is also confirmed by Euro Survey data, where respondents were asked whether they had received government income support since the outbreak of the Corona crisis. On aggregate, 7% of all individuals in the CESEE region received social benefits or other financial aid from the state.



This leads us to conclude that income assistance programs have cushioned some of the negative effects on the debt bearing capacity of households during the pandemic so far. At the same time, if these measures were phased out too early, the probability of households defaulting could increase. In this context, two aspects are crucial. First, for how long income support measures will be prolonged. Until now, most of the relief packages were already extended several times and their expiration is not yet evident or scheduled around the end of June 2021. Second, if job opportunities and the economic recovery will evolve fast enough to compensate households for their income losses. Ending measures too abruptly could lead to cliff-effects on households' incomes with potential negative consequences for their repayment capacity. On the other hand, extending measures longer and/or larger than necessary could put a strain on fiscal budgets that jeopardizes recovery as well. Moreover, incentives of firms and households could be distorted lastingly by ongoing broadly-based instead of more targeted support measures. These effects need to be considered carefully and balanced against each other with the recovery gaining momentum.

Sources

European Commission 2021: European Economic Forecast. Spring 2021 (europa.eu)
International Monetary Fund. 2021. World Economic Outlook: Managing Divergent Recoveries. Washington, DC. April
Ampudia, M., H. van Vlokhoven and D. Zochowski. 2016. Financial fragility of euro area households. In: Journal of Financial Stability 27. 250–262.

[29] The Oxford government income support index records if a government covers salaries, provides direct cash payments, or a universal basic income to people who lost their jobs or cannot work. The indicator further includes payments to firms if payments are explicitly linked to the payroll or to salaries. The indicator has an ordinal scale, where (0) indicates no income support, (1) means the government is replacing less than 50% of lost salary, and (2) means the replacement of salary is larger than 50%. If the income support is a flat sum, this flat sum is compared to 50% of the median salary to categorize it in (1) or (2).