



OESTERREICHISCHE NATIONALBANK

EUROSYSTEM

Households in CESEE and the COVID-19 pandemic: a focus on savings

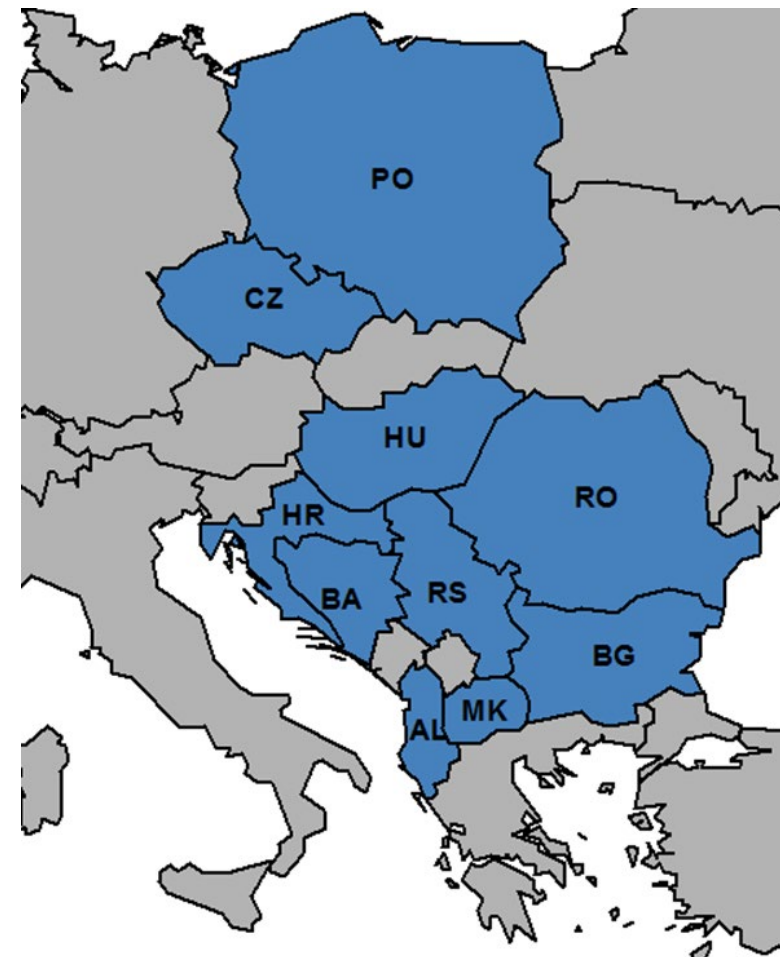
88th East Jour Fixe of the OeNB
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Data – the OeNB Euro Survey

- Survey of individuals in 10 countries:
 - 6 EU member states: Bulgaria, Czechia, Croatia, Hungary, Poland, Romania
 - 4 (potential) EU candidates: Albania, Bosnia and Herzegovina, North Macedonia, Serbia
- (Semi)annually since 2007: in the field right now
- 1,000 randomly selected respondents per country/wave
- Representative with respect to age, sex, and regional distribution
- Unique information about individual (euro) cash holdings, savings behavior, (household) debt, economic sentiments, and sociodemographics



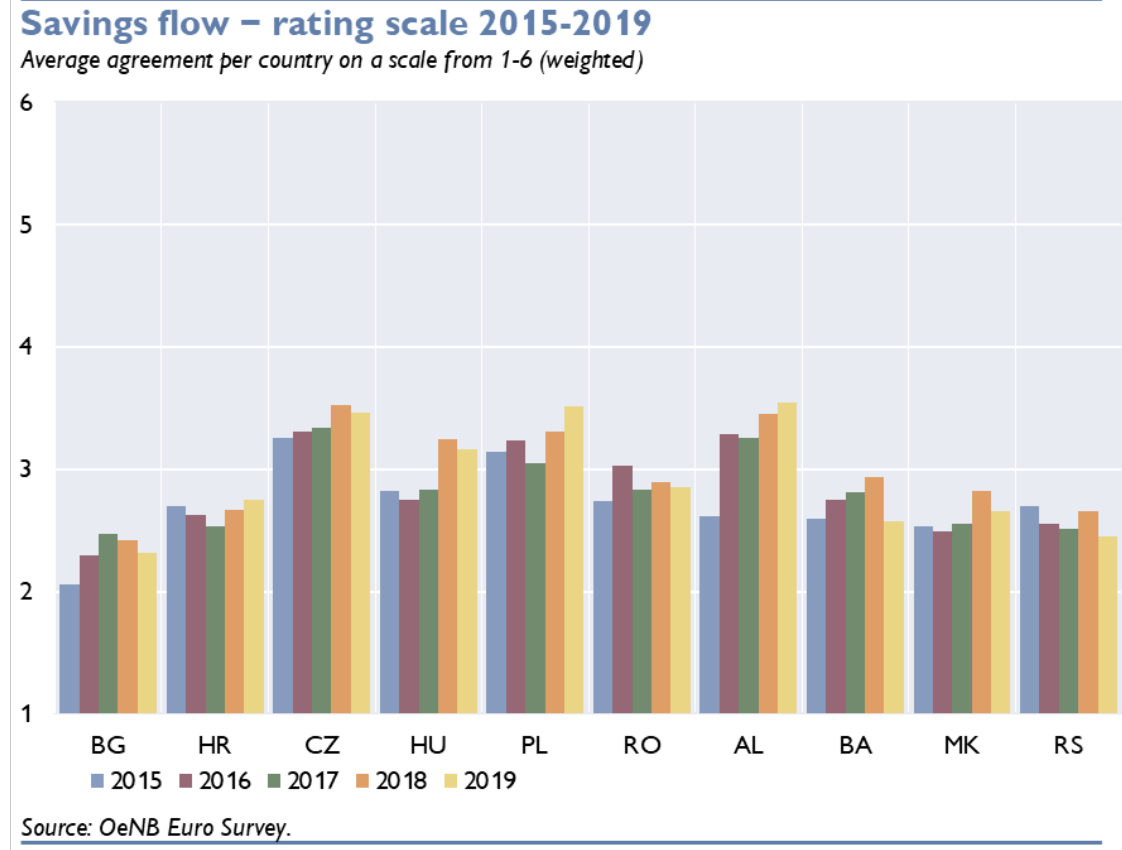
HOUSEHOLD SAVINGS IN CESEE: TWO STYLIZED FACTS

Savings flow: the majority of respondents cannot save

“Currently, I am able to save money (i.e. I have sufficient funds to save)”

Scale: 1 – “Strongly disagree” to 6 – “Strongly agree”

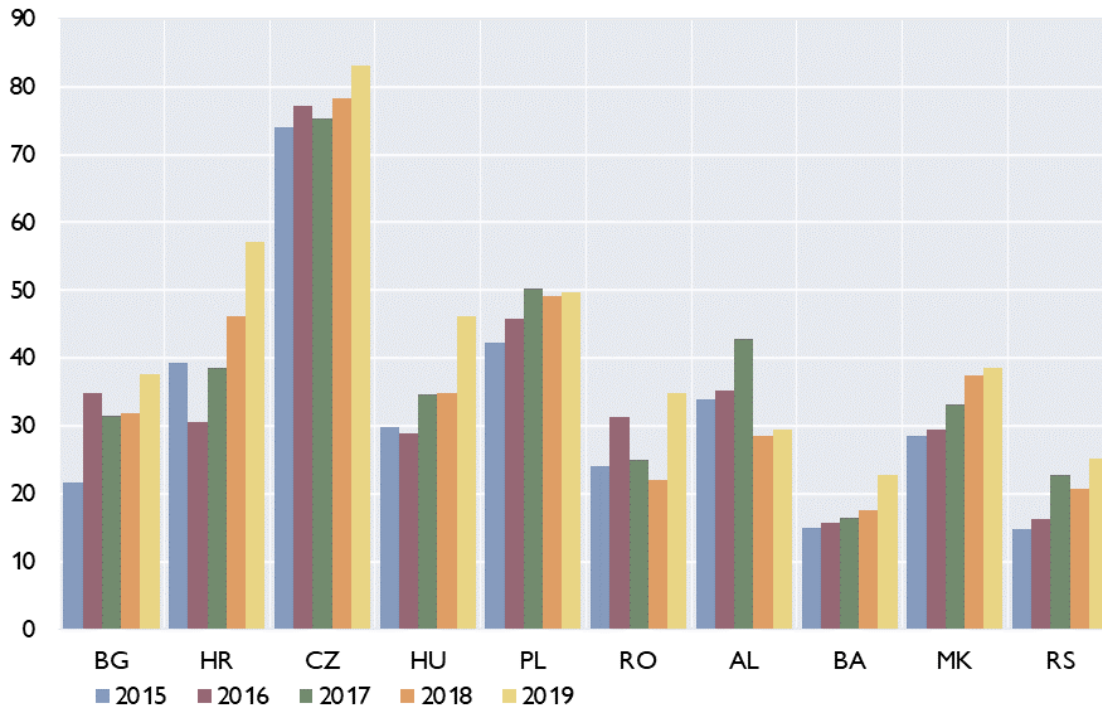
- On average, individuals disagree: they are not able to save money
- Only slight positive change over time in some countries



Savings stock: the majority of respondents do not have any savings

Savings stock 2015-2019

% of respondents in each country (weighted)



Source: OeNB Euro Survey.

“There are several ways in which one can hold savings. For example, one can hold cash, use bank accounts, have life insurances, hold mutual funds, pension funds, etc. Do you currently have any savings? Please refer to savings you hold personally or together with your partner.”

- In most countries, the share of savers increased between 2015 and 2019
- But it is still well below 50%
- Lower prevalence in Western Balkans

THE STATE OF HOUSEHOLD SAVINGS IN CESEE RIGHT BEFORE THE PANDEMIC: DATA FROM FALL 2019

**BASED ON: KOCH, M. AND T. SCHEIBER (2021): HOUSEHOLD SAVINGS IN CESEE – EXPECTATIONS,
EXPERIENCES, AND COMMON PREDICTORS. OENB: FOCUS ON EUROPEAN ECONOMIC INTEGRATION.
FORTHCOMING.**

Savings stock in 2019

Share of population who had savings in fall 2019

Share of respondents in %



Source: OeNB Euro Survey, 2019.

Note: The orange line represents the weighted average value over all observations. Weighted averages excluding respondents reporting “don’t know” or who refused to answer. Weights are calibrated on census populations statistics for age, gender and region, and where available, on education and ethnicity (separately for each country). In BG and PL many persons (ca. 10% and 8%) did not answer this question. In the case of Bulgaria, it seems that especially more educated and male respondents are unwilling to answer questions on savings and income, which makes an underestimation of the share likely.

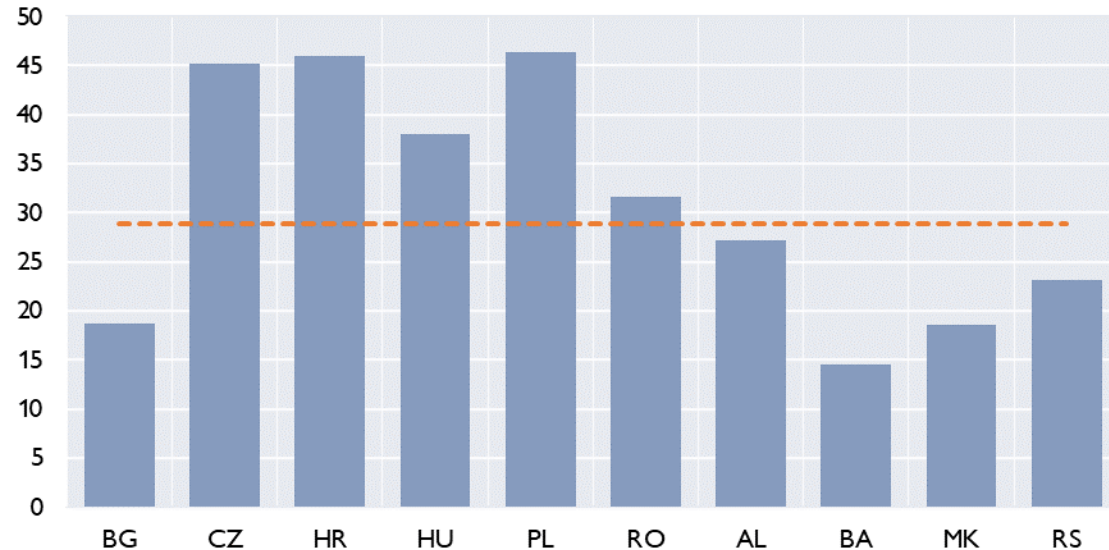
- Share in the Western Balkans is well below the mean
- Czechia clearly outstanding

Measuring the flow of savings in more detail

“At the end of the month, do you usually have some money left that you can save, for example, to finance major future purchases, provide for emergencies or accumulate wealth?”

Share of population who regularly saved in fall 2019

Share of respondents in %



Source: OeNB Euro Survey, 2019.

Note: The orange line represents the weighted average value over all observations. Weighted averages excluding respondents reporting “don’t know” or who refused to answer. Weights are calibrated on census populations statistics for age, gender and region, and where available, on education and ethnicity (separately for each country). In all countries many persons did not answer this question (more than 15% mostly). Especially respondents in the EU countries were unwilling to answer, which makes an underestimation of the gap between EU and non-EU countries likely.

- Emphasis on ability, not willingness
- Overall, less than one-third of respondents can save regularly
- Positive correlation between having savings and being able to save

Amount of regular savings in 2019

“If so, how big an amount can you save?”

- Those who can save, can save quite considerable amounts
- Mostly more than 5% of their income
- Still, overall, most people neither can save nor do they have any savings
 - Mostly, the more affluent can save

[More](#)

Amount saved by those who regularly saved in fall 2019

EUR per month (ppp-adjusted)



Source: OeNB Euro Survey, 2019.

Note: The orange line represents the weighted average value over all observations. Weighted averages excluding respondents reporting “don’t know” or who refused to answer. Weights are calibrated on census populations statistics for age, gender and region, and where available, on education and ethnicity (separately for each country). In all countries many persons did not answer this question (more than 15% mostly). In Albania, several outliers increase the amount tremendously. If these outliers are excluded, the amount is comparable to the average across all countries.

Research project: household savings in CESEE – expectations, experiences, and common predictors

Analyzing the relationship between household savings and **future economic prospects** as well as **negative financial experiences** of individuals in CESEE...

- Expectations and experiences
 - about rather exogenous events, e.g. a country's economic situation, economic crises, and inflation events

While controlling for important covariates or confounds...

- Sociodemographics: sex, age, education, income, employed, self-employed, hh-size, no. of children, income shock (dummy), and financial literacy
- 'Behavioral' factors: Risk/uncertainty aversion, self-control

Expectations

1. *Over the next five years, the economic situation of [MY COUNTRY] will improve.*
2. *Over the next year, prices will strongly increase in [MY COUNTRY].*
3. *Over the next 12 months, I expect the financial situation of my household to get better.*

- The first two questions are variables of interest
- The third question as an additional control variable
- All measured on rating scales (from 1 – strongly disagree to 6 – strongly agree)

Experiences

1. *I remember periods of high inflation during which the value of the [LOCAL CURRENCY] dropped sharply.*

2. *I remember periods during which access to savings deposits was restricted in [MY COUNTRY].*

3. *If you think back in time to periods of economic turbulences that happened prior to 2008, e.g. very high inflation, banking crisis or restricted access to savings deposits. At that time, did you personally incur a financial loss due to such events?*
 - a) *No, I had no savings then*
 - b) *No, I did not incur a financial loss*
 - c) *Yes*

Multivariate regression analysis I

Stock and flow significantly related to:

- Expectations about country's economic situation (+)
- Expectations about situation of hh (+)
- Income, education, (self)employment (+)
- Financial literacy, self-control (+)
- No savings in the past (–)

Stock significantly related to:

- Experience with account restrictions (–)
- No. of small children (+)

Flow significantly related to:

- HH experienced an income shock (–)
- Age (+)
 - No hump-shaped relationship

[Estimation](#)

Multivariate regression analysis II

Amount significantly related to:

- Inflation expectations (–)
- Expectations about situation of hh (+)
- Income, education, (self)employment (+)
- Financial literacy, self-control (+)
- Income shock (–)

Further insights:

- Experiences matter much more if we only look at older people (“crisis cohort”)
- Expectations are rather negatively related to savings for younger people
- Country expectations are mediated by hh expectations and trust in institutions, especially NCBs
 - There is no large/robust effect beyond that

[Full Results](#)

SPOT ON THE PANDEMIC

Developments in 2020

Share of population who had savings

Share of respondents in %



Source: OeNB Euro Survey.

Note: Weighted averages excluding respondents reporting “don’t know” or who refused to answer. Weights are calibrated on census populations statistics for age, gender and region, and where available, on education and ethnicity (separately for each country).

- Positive deposit growth in 2020 in all countries
 - In some countries, even acceleration

- However, no significant change in the share of savers (savings stock) in the whole sample

- Only small significant changes in Bulgaria and Czechia

Comparing regression results of 2019 and 2020

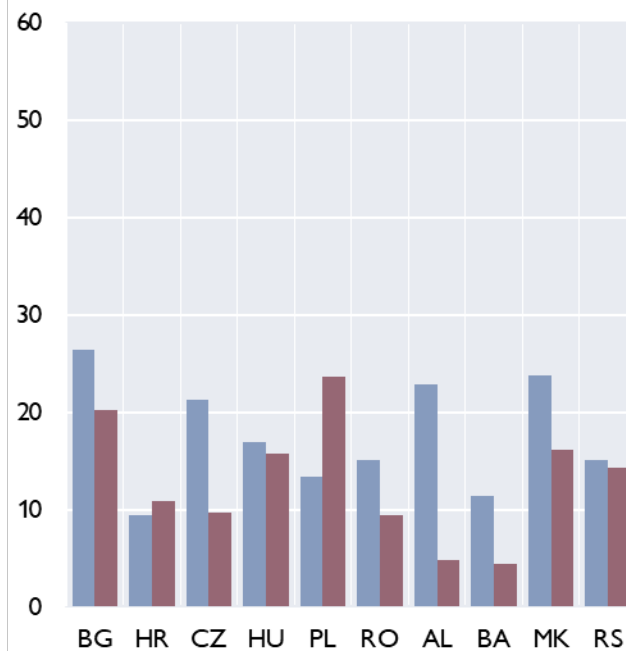
- Relationships more pronounced in 2020:
 - Experienced restricted access
 - Being employed
 - Risk aversion
- Relationships only in 2020:
 - Experienced inflation
 - Experienced income shock
- Relationships less pronounced in 2020:
 - Expectations about the country
 - Expectations about the household
- **In times of crisis, the past becomes more important and the future less...**
 - Analysis to be continued in Scheiber and Koch:
“COVID-19 affectedness and its impact on economic sentiments”

General: savings and COVID-19 pandemic affectedness

Covid-19 affectedness: use of savings

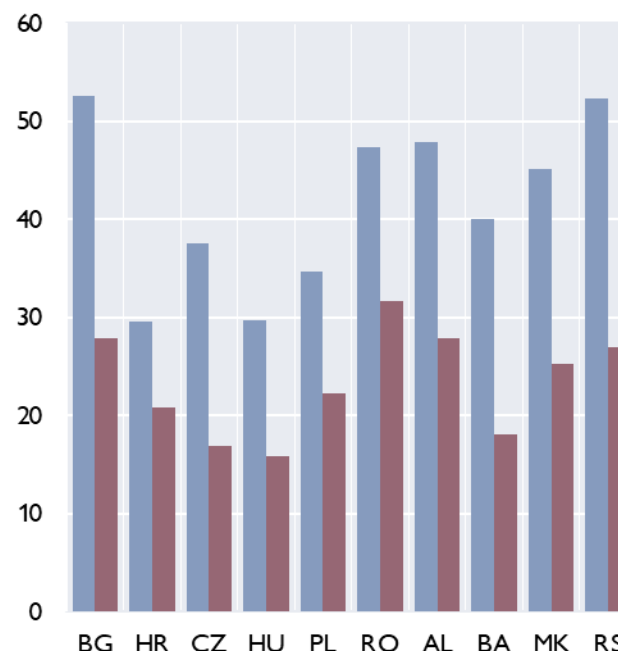
Reduced stock/sold possessions

Distribution between savers and nonsavers in %



Reduced flow

Distribution between savers and nonsavers in %



Source: OeNB Euro Survey 2020.

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

Bottom line

- Individuals in CESEE entered the pandemic in a vulnerable condition:
 - And so far, we have only talked about savings
- Some of the respondents who had savings already used up their savings in the fall of 2020
- Crisis experience seems to pop up again
- It is still unclear if savings behavior will change permanently

How to access OeNB Euro Survey data

<https://www.oenb.at/en/Monetary-Policy/Surveys/OeNB-Euro-Survey/data-sharing.html>



Danke für Ihre Aufmerksamkeit

Thank you for your attention

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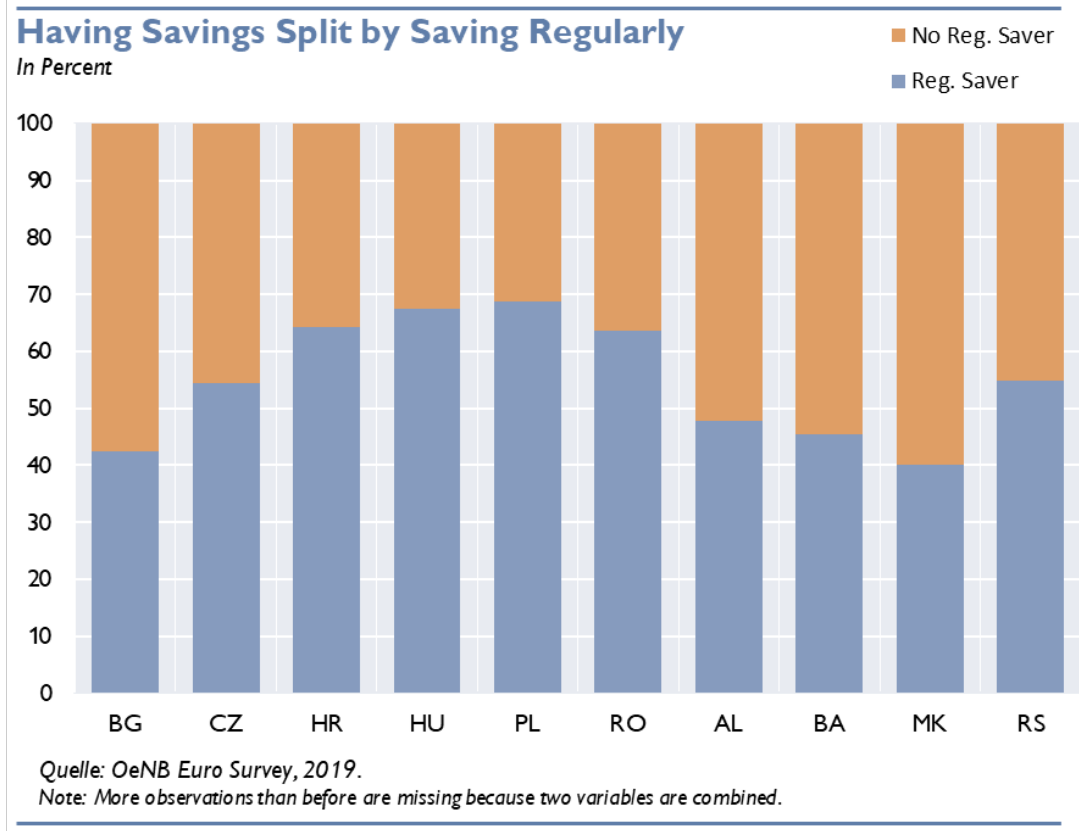
 [OeNB](https://www.youtube.com/OeNB)

 [Oesterreichische Nationalbank](https://www.linkedin.com/Oesterreichische Nationalbank)

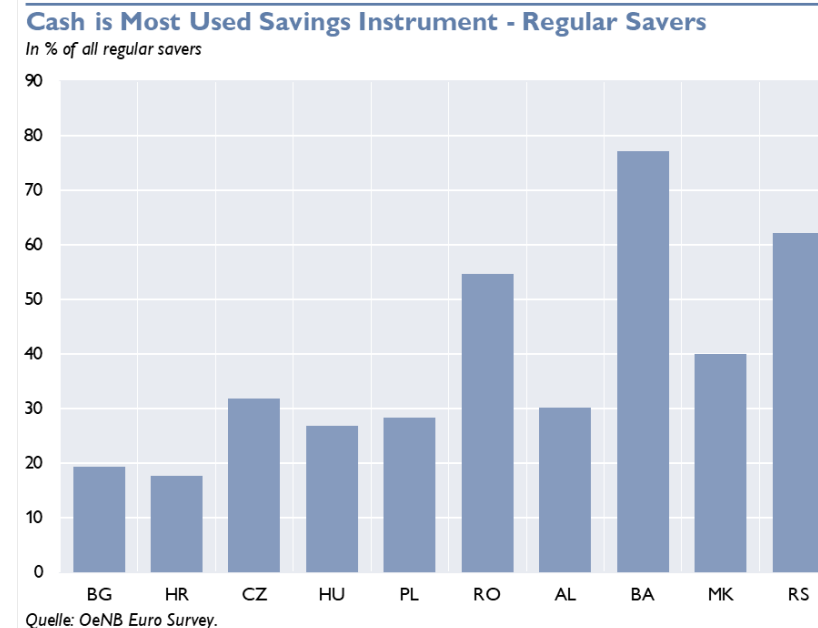


ANNEX

Interactions of regular savers (2019 data)



- On average, 56% of those who have savings are regular savers
- Many regular savers still prefer so save in cash:



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Estimation strategy

Regression analysis:

$$Y_i = \alpha_0 + \beta_1 X_i + \beta_2 C_i + \varepsilon_i$$

where Y_i is either:

1. $\ln \frac{P(\text{Savings Stock}=1|X)}{P(\text{Savings Stock}=0|X)}$ (logit)
2. $\ln \frac{P(\text{Savings Flow}=1|X)}{P(\text{Savings Flow}=0|X)}$ (logit)
3. Amount of Regular Savings (OLS)

X_i : Expectations and experiences

C_i : Covariates

ε_i : Clustered at primary sampling unit

- All regressions are weighted
- Some include country fixed effects

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Main regressions results: Savings stock, savings flow (Logit), and flow amount (OLS)



Regressions: full results

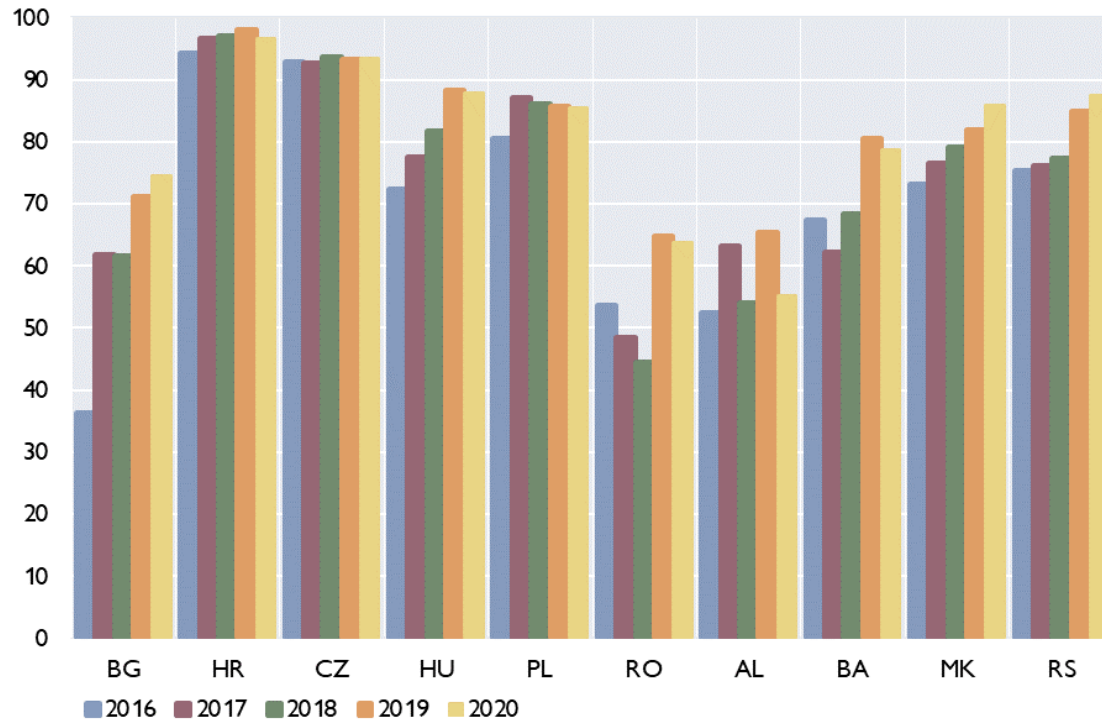
Dependent variable:	Savings stock		Savings flow		Flow amount	
	(1)	(2)	(3)	(4)	(5)	(6)
Expect better economic situation country	0.015*** (0.004)	0.014*** (0.004)	0.011*** (0.003)	0.008** (0.003)	0.776 (1.514)	-0.605 (1.582)
Expect high inflation	0.003 (0.004)	0.002 (0.004)	-0.002 (0.004)	-0.004 (0.004)	-5.302*** (1.797)	-5.551*** (1.946)
Expect better fin. situation of my household	0.033*** (0.004)	0.037*** (0.004)	0.043*** (0.003)	0.044*** (0.003)	10.948*** (1.321)	11.154*** (1.324)
Experienced high inflation	-0.003 (0.004)	0.002 (0.003)	-0.001 (0.003)	-0.002 (0.003)	0.780 (1.754)	1.225 (1.623)
Experienced restricted access to savings account	-0.009** (0.004)	0.002 (0.003)	-0.002 (0.003)	0.003 (0.003)	-2.670* (1.575)	-1.996 (1.452)
Crisis loss prior 2008: No savings	-0.095*** (0.014)	-0.062*** (0.013)	-0.078*** (0.013)	-0.068*** (0.012)	-22.275*** (5.333)	-19.078*** (5.291)
Crisis loss prior 2008: Yes	0.001 (0.021)	0.006 (0.018)	0.007 (0.020)	0.002 (0.019)	3.774 (8.233)	4.786 (8.294)
Crisis loss prior 2008: Don't know	0.025 (0.027)	0.014 (0.024)	-0.012 (0.024)	-0.015 (0.022)	-9.624 (8.523)	-10.277 (8.683)
Second income quartile	0.042** (0.019)	0.064*** (0.017)	0.045** (0.019)	0.056*** (0.018)	4.905 (3.953)	7.464* (3.970)
Third income quartile	0.085*** (0.020)	0.107*** (0.019)	0.102*** (0.019)	0.119*** (0.019)	15.571*** (4.925)	20.551*** (5.069)
Fourth income quartile	0.139*** (0.023)	0.163*** (0.020)	0.216*** (0.023)	0.232*** (0.022)	124.956*** (10.289)	130.842*** (10.209)
Income: Don't know / no answer	-0.027 (0.021)	0.035* (0.019)	-0.062*** (0.020)	-0.026 (0.019)	-6.404 (4.343)	3.723 (4.729)
Male	-0.018* (0.010)	-0.013 (0.010)	0.006 (0.010)	0.011 (0.010)	2.735 (4.357)	3.599 (4.310)
Age in years	0.001 (0.002)	0.002 (0.002)	-0.005** (0.002)	-0.005** (0.002)	-0.544 (0.782)	-0.603 (0.761)
Age Squared	0.000 (0.000)	0.000 (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.013* (0.008)	0.013* (0.008)
Educational attainment (categories)	0.037*** (0.005)	0.043*** (0.005)	0.029*** (0.004)	0.035*** (0.004)	12.337*** (2.403)	12.410*** (2.272)
Employed (dummy)	0.078*** (0.018)	0.027* (0.016)	0.108*** (0.016)	0.076*** (0.016)	16.288*** (4.837)	8.187* (4.906)
Self-Employed (dummy)	0.093*** (0.021)	0.100*** (0.019)	0.071*** (0.019)	0.087*** (0.020)	78.458*** (17.942)	76.202*** (16.962)
Household members	-0.022*** (0.006)	0.001 (0.006)	-0.013** (0.005)	0.004 (0.005)	0.429 (2.857)	2.387 (2.966)
Children below 6 years	0.049*** (0.013)	0.029** (0.012)	0.028** (0.012)	0.014 (0.012)	3.052 (4.711)	-0.648 (4.697)
Children 6-15 years	0.020** (0.010)	0.007 (0.010)	-0.001 (0.010)	-0.013 (0.009)	5.378 (6.389)	4.148 (6.485)
Financial literacy index	0.061*** (0.005)	0.035*** (0.005)	0.041*** (0.005)	0.021*** (0.005)	14.338*** (1.862)	11.060*** (2.127)
Risk/Uncertainty aversion index	0.010 (0.009)	0.014* (0.008)	0.004 (0.008)	0.010 (0.008)	-3.438 (2.300)	-2.116 (2.243)
Self-control index	0.052*** (0.008)	0.043*** (0.008)	0.028*** (0.007)	0.025*** (0.007)	6.667** (3.251)	7.364** (3.079)
Income shock (dummy)	0.000 (0.017)	-0.015 (0.016)	-0.071*** (0.016)	-0.073*** (0.015)	-16.504*** (4.736)	-19.653*** (5.019)
Country fixed-effects	No	Yes	No	Yes	No	Yes
Log-likelihood	-5397.30	-4907.36	-4329.00	-4114.22	-	-
McFaddens Pseudo R-sq. / Adjusted R-sq.	0.11	0.19	0.15	0.19	0.15	0.16
Probability>Chi squared / F-statistic (df_m)	667.7 (25)	965.8 (34)	818.9 (25)	974.9 (34)	22.1 (25)	18.3 (34)
Number of observations	8843	8843	8214	8214	7709	7709
Baseline predicted probability / amount	0.45	0.45	0.32	0.33	65.94	65.94

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Financial inclusion

Current Account Ownership

In % of all respondents per country

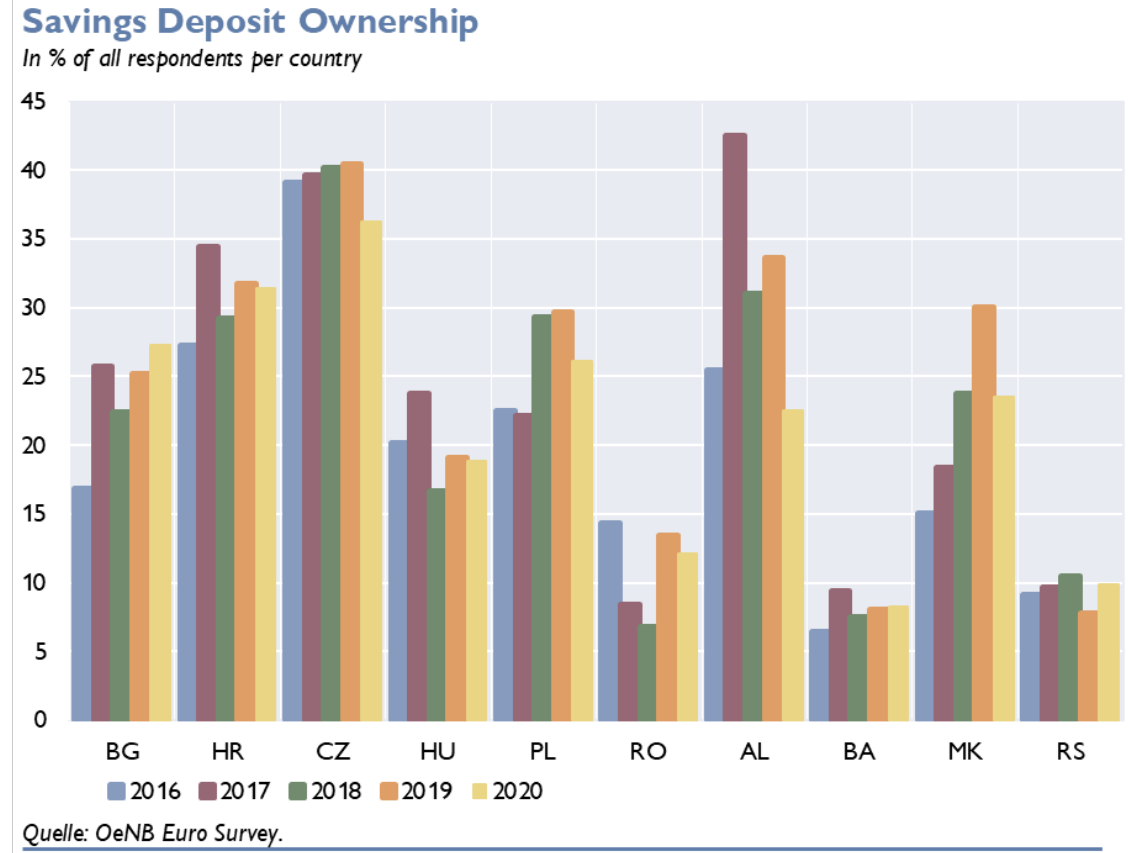


Quelle: OeNB Euro Survey.

- Strong positive developments mostly did not stop in 2020
- Strong catching up process in formerly low-banked countries
- But still less than 70% in AL and RO were banked in 2020

Savings deposits

- Strong decrease in some countries in 2020
- Ownership particularly low in BA, RO, and RS



Other capital market savings instruments

Life Insurance and Pension Funds

In % of all respondents per country



Quelle: OeNB Euro Survey.

Mutual Funds, Stocks, and Bonds

In % of all respondents per country



Quelle: OeNB Euro Survey.

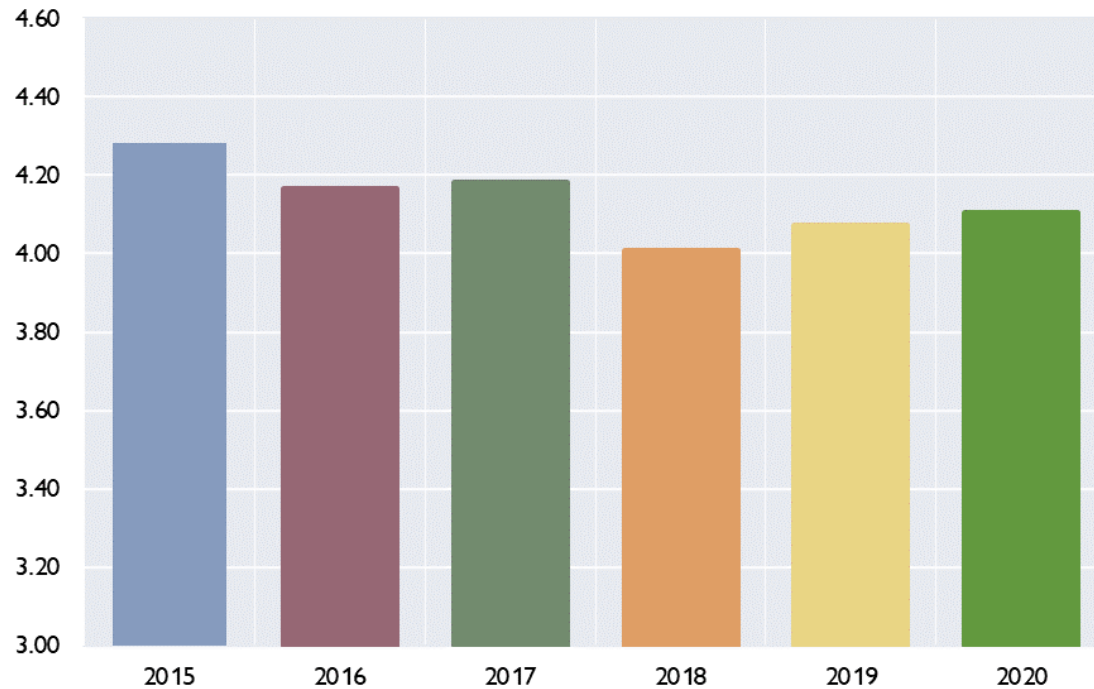
➤ Considerable increase in most countries over time , but still low participation rates

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No change in the ability to save, but maybe portfolios changed?

Savings Flow - Likert-Scale

Average agreement per country over a scale from 1 ('strongly agree') - 6 ('strongly disagree')

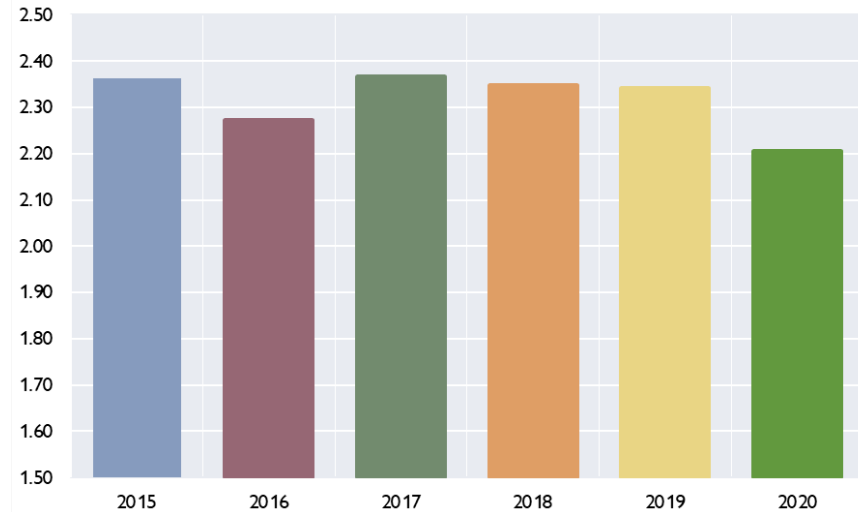


Quelle: OeNB Euro Survey.

- Trust in NCBs and foreign owned banks slightly declined
- Risk aversion slightly increased

Risk Aversion - Likert-Scale

'In financial matters, I prefer safe investments over risky investments' from 1 ('strongly agree') - 6 ('strongly disagree')



Quelle: OeNB Euro Survey.

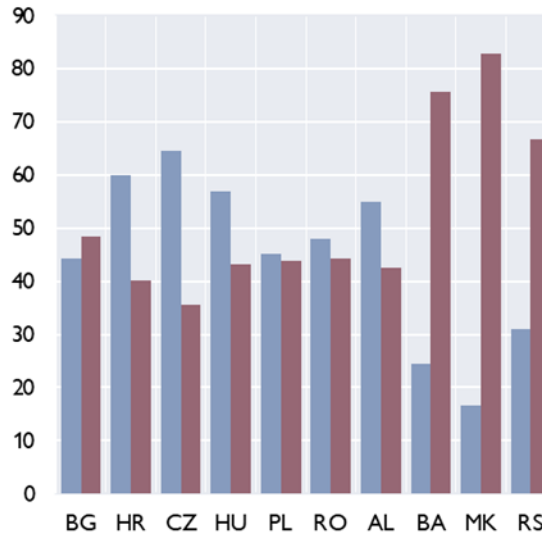
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Outlook: Euro Survey 2021

Covid Affectedness: Support

Received Social Benefits/State Aid

Distribution between Savers and Non-Savers



Help from Family and Friends

Distribution between Savers and Non-Savers



■ Saver ■ No Saver

Source: OeNB Euro Survey 2020.

Note: Weighted averages excluding respondents reporting “don’t know” or who refused to answer. Weights are calibrated on census populations statistics for age, gender and region, and where available, on education and ethnicity (separately for each country).

- Savings flow before the pandemic
- Savings flow during the pandemic: what changed?
- Persistent effects/behavioral change?
 - “Looking ahead to post-pandemic times: Do you intend to save more or less compared with what you used to save before the pandemic?”