Catalytic capital investment as an enabler of affordable rental and cooperative housing

in Central and South-Eastern Europe

\- Full Research Report -

Catalytic capital investment as an enabler of affordable rental and cooperative housing

in Central and South-Eastern Europe

-Full Research Report-

Authors: Zsuzsanna Pósfai, Csaba Jelinek, Sara Dević, Aleksandar Tomašević, Ivon Pavlović

Contributing authors: Marc Neelen, Ana Džokić, Rok Ramšak, Anja Lazar, Maša Hawlina, Antonija Komazlić, Mauro Sirotnjak, Iva Marčetić

Layout: Zsombor Katona

Data visualizations: Eszter Katona and Mihály Minkó

Publisher: Periféria Policy and Research Center (Periféria Közpolitikai és Kutatóközpont), Barát u. 8., 1074 Budapest, Hungary

ISBN: 978-615-6576-00-2 (pdf)

Supported by the Catalytic Capital Consortium Grantmaking.

This Report is the outcome of the research project entitled “Analyzing the potential for catalytic capital investment in the affordable housing sector of Eastern and South-Eastern Europe”.

More information under: *www.moba.coop/catalytic-capital-investment*

December 2022

Table of contents

Executive summary

This Research Report looks at the potential of catalytic capital investments in the housing sector of Central and South-Eastern Europe (CSEE), and more specifically in eight countries of this region - Bosnia and Herzegovina, Bulgaria, Czechia, Croatia, Hungary, Northern Macedonia, Serbia, Slovenia - as explored by a research consortium from five countries during 2022. The countries were selected to reflect diversity in terms of EU membership, size and economic development. The empirical part of the research was concluded in October 2022.

The research was supported by a grant from the Catalytic Capital Consortium Grantmaking, a project of the New Venture Fund.

We define **catalytic capital investments** as “investments that are more patient, risk-tolerant, concessionary, and flexible than conventional capital”. See: *Catalytic Capital Consortium FAQ.*[1]

Countries of the CSEE region have experienced quickly increasing housing inequalities in the past decades. The public housing stock is marginal and severely residualized, and private rental housing markets are small and severely under-regulated. Thus, they do not provide adequate stability and are too expensive for the majority of the population. Over 90% of the housing stock in most of these countries is occupied by its owner, which makes it difficult for first-time entrants or separating households to find their place in the housing market. States have been systematically withdrawing from affordable housing provisions, especially any rental housing form. Meanwhile, they have supported the middle class’s access to homeownership through various state subsidies and subsidized mortgages. These measures have contributed to fueling house price bubbles. Since 2015, the CSEE region’s housing markets have been exceptionally expansive. In 2021, record levels of new housing loans were disbursed,[2] and house prices increased at unforeseen speed, and at higher rates in the CSEE region than in other areas of Europe.[3] These changes have made housing markets in several countries of the region vulnerable and more prone to crisis. All this is happening in the context of an energy crisis and high levels of inflation, which unfolded in the course of 2022, affecting countries of the CSEE region particularly strongly. The coming period will surely bring important shifts in the region’s housing markets. For average or below-average-income families, possibilities for housing themselves will most likely narrow.

Compared to other regions, the quality and energy efficiency of the housing stock is very poor in CSEE, which also means that households - especially low-income households - face relatively high maintenance costs. 20-30% of the population, including middle-class households, struggles with housing affordability issues, and housing deprivation rates are high.

According to our surveys conducted in 2022, more than half of the population in four regional capital cities (Budapest, Belgrade, Ljubljana, Zagreb) would

1. See *www.macfound.org*, Catalytic Capital Consortium, Frequently Asked Questions.
2. European Mortgage Federation (2022) *Hypostat 2022 – A review of Europe’s mortgage and housing markets*
3. European Systemic Risk Board (2022) *Vulnerabilities in the residential real estate sectors of the EEA countries*

welcome some change in their housing situation. Moreover, between 13 and 26% of the population fulfills both subjective (being open to such an idea) and objective (being above the financially most vulnerable segments of society) criteria to become users of new, affordable and secure rental and cooperative housing models, were they to be offered.

Housing finance products currently available in the region cannot fulfill these needs: housing loans for individuals are not accessible to large segments of society. This is even the case for many social groups whose monthly income is above average. The research findings point to the need for a new non-profit sector for developing rental and cooperative housing to improve this housing situation.

There are, however, two main obstacles to the emergence of such a non-profit housing sector in the region: (1) currently available loans for organizations have a very short maturity, and (2) in the absence of minimally adequate financial tools, housing providers are not able to expand their capacities and upscale their activities.

The report offers a theory of change to overcome this catch-22 situation: bringing in new catalytic capital investments to bridge the gap of missing long-term finance. This could take the form of complementary financing next to a (mid-term) bank loan and can cover a significant part of the total investment needed at the start of a housing development. This catalytic capital investment mechanism can be of limited duration since it can offer to kickstart a necessary shift within the more mainstream housing finance landscape, and over time, conventional lenders can step into this developing market and introduce new, more adequate loan frameworks.

In this mechanism, it is necessary to have intermediary organizations since catalytic capital providers have limited capacity to engage directly with the end beneficiaries (startup housing providers). Intermediary organizations collect and structure capital and issue it towards end beneficiaries while supporting them with capacity development to absorb the investments. Capacity development both on the local scale (for housing providers) and on the intermediate scale (for intermediary organizations) is crucial for the success of this impactful shift in housing finance.

Source: Olaf Spinner

List of abbreviations

AIFM: alternative investment fund manager

CCFHL: Certified Consumer-Friendly Housing Loans

CEB: Council of Europe Development Bank

CSEE: Central and South-Eastern Europe (8 countries within this research)

DSTI: debt-service-to-income ratio

EaSI: EU Programme for Employment and Social Innovation

EBRD: European Bank for Reconstruction and Development

ECB: European Central Bank

EEA: European Economic Area

EFSE: European Fund for Southeast Europe

EIB: European Investment Bank

EIF: European Investment Fund

ESG: Environmental, Social and Governance

ESRB: European Systemic Risk Board

EU: European Union

FiM: Finance in Motion

FX: foreign exchange

GGF: Green Growth Fund

IT: Information technology

KfW: Kreditanstalt für Wiederaufbau

LTV: loan-to-value ratio

OECD: Organisation for Economic Co-operation and Development

MNB: Magyar Nemzeti Bank (the Central Bank of Hungary)

NDG: Narrow Demand Group

NGO: non-governmental organization

NPL: non-performing loan

PTI: payment-to-income ratio

RRF: Recovery and Resilience Facility

SCE: European Cooperative Society

SIZ: Self-Managing Communities of Interest (Samoupravne interesne zajednice)

SME: small and medium-sized enterprises

UN: United Nations

WDG: Wide Demand Group

y-o-y: year-on-year

Introduction

Since the 2008 global financial crisis, a global housing crisis has been taking shape, creating severe economic and social problems.[4] **Housing could be a pivotal domain to tackle deepening social and environmental problems worldwide.** However, instead of the upscaling of novel, innovative housing models around the world, we see deepening inequalities in access to adequate housing, serious and worsening affordability problems of increasing segments of the population, and energetically unsustainable and degrading housing stocks in most of the European countries.[5]

Deepening housing inequalities are especially prominent in Central and South-Eastern European countries. Here, as part of the shock-therapy milieu of the 1990s, social housing sectors were extremely rapidly privatized and radically downscaled. Ever since, investments in affordable housing solutions have become practically non-existent.[6] **A common, structural characteristic of these countries is a 'super-homeownership' regime** (i.e., a high, often over 90% share of owner-occupied housing). It results in an extremely commodified and non-resilient housing market.[7] Even though these countries have a long history of creating and managing affordable housing projects (during the 1945-1990 state socialist period or even earlier), local decision-makers and investors typically maintain the culturalist narrative of people's preference towards homeownership. According to this narrative, people are not open to alternative forms of tenure, such as rental models and novel housing solutions. This report aims to deconstruct this myth based on robust empirical material.

Currently, no affordable, long-term financial solutions in the region are available to nonprofit housing providers, and the regulatory environment for such housing provision is also lacking. **However, we believe that by matching unserved target groups, nonprofit housing providers and adequate financial instruments, a shift could occur in CSEE housing markets in favor of more accessible housing.**

When advocating for the development of new institutions of rental housing provision, it is important to keep in mind that the presence of corporate actors in the housing market has led to the increasing financialization of housing in other contexts. **Thus, it is essential to set up robust regulatory frameworks and also to ensure, through their institutional setup, ownership and stakeholder relations, as well as their internal structure, that new rental and cooperative housing providers are nonprofit in the long term.** In this report, when we mention new rental and cooperative housing providers, we always mean nonprofit, socially controlled entities attached to their locality. We discuss new affordable models in general, which could respond to the housing needs of social groups currently unserved

4. Aalbers, M. B. (2016) The great moderation, the great excess and the global housing crisis. In The Financialization of Housing (pp. 64-80). Routledge; Potts, D. (2020). Broken cities: Inside the global housing crisis. Bloomsbury Publishing.
5. OECD (2020) *Housing and Inclusive Growth* OECD Publishing; OECD (2021) *Brick by Brick: Building Better Housing Policies* OECD Publishing; UN (2021) *#Housing2030: Effective Policies for Affordable Housing in the UNECE Region* United Nations Publications.
6. Hegedüs, J., Horváth, V. and Somogyi, E. (2017) *Affordable Housing in Central and Eastern Europe: Identifying and Overcoming Constraints in New Member States*. Metropolitan Research Institute; Ireland, D. (2020) *What is wrong with housing in Eastern Europe today?* Journal of Urban Regeneration and Renewal 14(2): 128 – 134.
7. Stephens, M. (2005) A Critical Analysis of Housing Finance Reform in a "Super" Home-ownership State: The Case of Armenia. Urban Studies 42(10), 1795-1815.

by market-based solutions. **Within this, we focus specifically on rental and cooperative models** (within the latter meaning use-based, limited-equity and rental-based cooperatives, and not ones based on individual ownership) **managed by nonprofit housing providers**. These nonprofit housing providers can be third-sector organizations or owned by public entities. However, we do not discuss housing models where the state directly owns and manages the housing stock because we aim to focus on the until now less explored possibility of creating and upscaling a new sector of nonprofit housing providers in the region. This is also the sector where catalytic capital could have the most critical role.

The countries in this research have experienced a lack of affordable housing and significant socio-economic hardship. **Therefore, intending to build up a robust evidence base for future progressive steps – including potential catalytic capital investments – we have set out with three research questions:**

- What are the characteristics and the size of specific social groups needing new forms of permanently affordable housing solutions, whose needs are not met under the current market conditions?

- What are the characteristics of the actors and the products present in the housing finance market of this region? What are – historical or contemporary – examples of catalytic capital boosting affordable housing in the CSEE region?

- What are the bottlenecks preventing catalytic capital or impact finance from entering the affordable and/or cooperative housing sector in CSEE? What steps should be taken to overcome these bottlenecks?

Source: Mihály Köles

Our research had a two-fold approach: **we investigated both the demand and supply sides of the housing market**. On the demand side, we focused on housing conditions and households' housing situation, exploring what housing needs the current market mechanisms are not able to serve. We aimed to identify how large a potential target group for new housing solutions, other than individual homeownership, could be in our countries of research. On the supply side, we did a thorough overview of currently existing housing finance instruments, looking specifically at which social groups would not have access to them. In our interviews, we mapped financial actors engaged in housing finance and tested their openness to develop new housing finance instruments potentially. Finally, we identified the main bottlenecks of the current situation and proposed a way catalytic capital could contribute to overcoming these.

The report is structured in the following way: **first, we give an overview of the current situation in the housing markets of all eight countries selected for the research**. We provide a regional, comparative overview of different issues of housing poverty and housing finance across the eight countries. At the end of the chapter, in the "country digest" sections, we also highlight the specificities of the individual countries. **Second, we offer a deep dive into the currently existing housing finance landscape of four selected core research countries**, demonstrating the existing instruments' limitations. This chapter is based on in-depth desk research and on interviews we conducted with experts and bank representatives in the four countries. **Chapter three presents the results of the representative surveys conducted in the capital cities of the four core research countries**. These surveys, conducted with households, serve as the basis for identifying the potential target groups for new housing models. **Fourth, we conclude the report with our proposal on how to develop new housing finance instruments** that can serve these target groups through nonprofit housing providers and cooperatives. Catalytic capital is to play a crucial role in catalyzing this shift towards a more accessible housing market.

In the **Annex** we list all financial actors we did desk research on, and also the institutions we interviewed. In the **Supplement**, based on conducted interviews, we give examples of different entities engaged in financing affordable housing projects (mainly from countries outside our area of study). These case studies demonstrate how housing finance can reduce housing inequalities, and are a valuable part of the research.

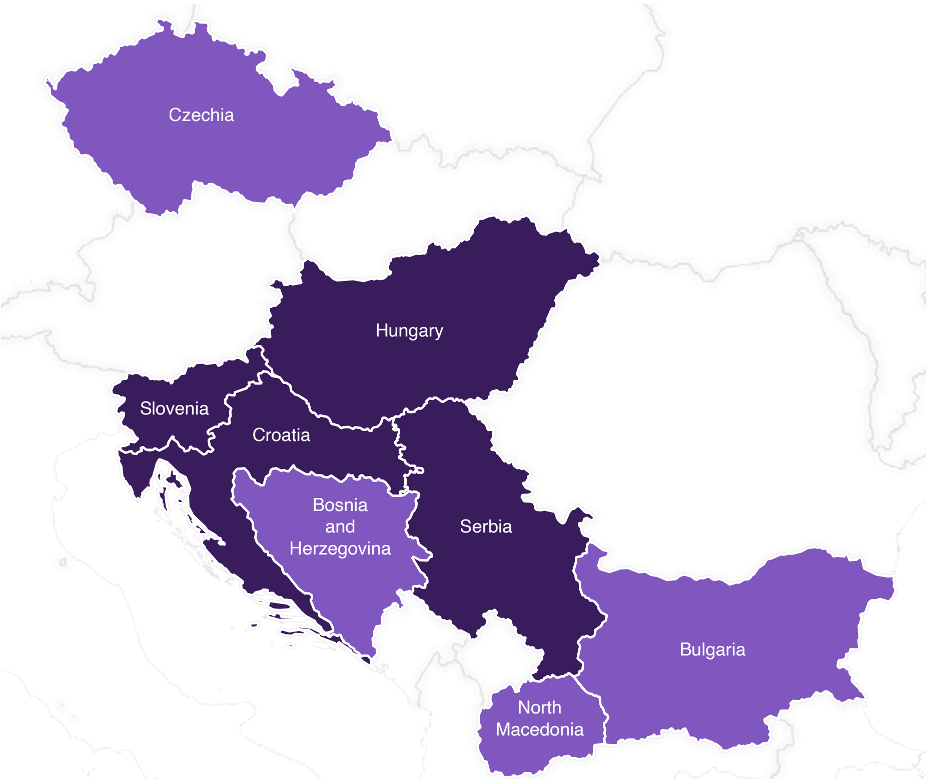
Methodology

This report focuses on the housing sector of eight countries in Central and South-Eastern Europe: **Bosnia and Herzegovina, Bulgaria, Czechia, Croatia, Hungary, Northern Macedonia, Serbia, and Slovenia** (Figure 1). We selected both EU and non-EU members and kept diversity within the sample in the dimensions of size and economic development.

In the first phase of the research, extensive **desk research** was carried out in these countries, focusing on the housing sector's current state and evolution and the existing housing finance instruments. Desk research was supported by interviews with local housing experts from all eight countries.

In the next phase, four so-called "core countries" (Croatia, Hungary, Serbia, Slovenia) have been selected for **representative surveys, more in-depth research on financial instruments, and expert interviews**.

FIGURE 1: EIGHT COUNTRIES OF THE RESEARCH, AND THE FOUR CORE RESEARCH COUNTRIES
Source: Own edits



The **surveys with households** were conducted in four cities in May and June 2022 by the follow-ing market research companies: Smart+ (Belgrade), Ninamedia (Ljubljana), Promocija Plus (Zagreb) and Tárki (Budapest). The survey had 33 questions divided into two parts. Every respondent completed the first part of the survey, which had 13 questions. The respondents were then filtered based on three simple criteria, and only a so-called "Wide Demand Group" completed the second part with 20 additional questions. This two-step logic ensured a proper estimation of the ratio of this Wide Demand Group in these cities and a deeper insight into the characteristics of this group. In each case, the first part of the survey was representative of gender and age groups for the adult population. The sample size varied according to the population of the respective cities (n=1341 in Belgrade, n=1762 in Budapest, n=1004 in Ljubljana, n=1052 in Zagreb). The primary mode of data collection was via phone, while web interviews were used in up to 15% of the cases to reach subpopulations not reachable by phone (typically younger respondents).

To analyze **available financial instruments** for individuals, organizations, and companies in the four core research countries, we have selected 39 relevant financial institutions. The types of financial institutions subject to desk research were commercial banks, development banks, savings banks, housing funds, and development funds. In addition, we gathered publicly available information about available financial instruments on the market (websites, publications, reports and promotional materials) through desk research. The concluding list of the financial institutions subject to desk research can be found in the Annex.

We also conducted **17 local expert interviews** in the four core countries, identifying key financial actors and experts in the field of housing finance through previous knowledge of the field and desk research. In addition, we also conducted **10 interviews with international experts**, typically representatives of financial institutions with experience in the field of financing affordable housing (EU financial institutions, public and private financial institutions from outside the region), from foundations developing innovative financial tools for this purpose, or actors with significant experience in developing innovative financial instruments in Central and South-Eastern Europe. The interview list can also be found in the Annex.

The information was gathered from April to October 2022. Thus, in our research, we faced the challenge of doing research during a highly volatile period amid emerging crises. Moreover, due to the specifics and dynamics of the financial and housing markets in 2022 (with the Russian invasion of Ukraine, escalating inflation across Europe, and the start of interest rate hikes), some information gathered in that period will be somewhat dated by the time of reading. Therefore, in the analysis, the emphasis was also put on long-term trends and processes in the market. Furthermore, to be able to follow the changes in the markets, where this was possible, we added the month (and not only the year) for the data presented.

1. Demand and supply mismatch of affordable housing in the region

1.1 Unmet housing needs

Since the 2008 global financial crisis, access to affordable housing "has become increasingly challenging" in most of the OECD countries.[8] According to the United Nations estimates, in Europe, there are at least 100 million low and mid-income people who spend over 40% of their disposable income on securing their housing needs.[9] Even though there is a strong case for an unfolding European housing crisis - especially following the start of the Covid-19 pandemic - it seems that Central and South-Eastern European countries witness some structurally different forms of housing problems than the rest of Europe.[10] According to recent comparative research, "housing deprivation [...] is heavily concentrated in some of the poorer nations of Central and Eastern Europe and some nations in Southern Europe".[11] Moreover, non-poor households in this region are more exposed to housing deprivation, than poor households in countries like the United Kingdom or Ireland.

In this section, we highlight the most crucial common housing trends in this region and show the most important faces of the housing crisis in these countries.

After the Second World War, Central and South-Eastern European countries had severe housing shortages and struggled with high overcrowding rates. During the Cold War period - and mainly until the global economic crisis of the late 1970s - different state socialist regimes channeled significant public investments into housing construction and the modernization of public utilities. In short, housing was a fundamental domain of most of the state socialist regimes. As a result, in the countries we analyzed, 50-74% of the present-day housing stock was built between 1946 and 1990 (see Figure 2).

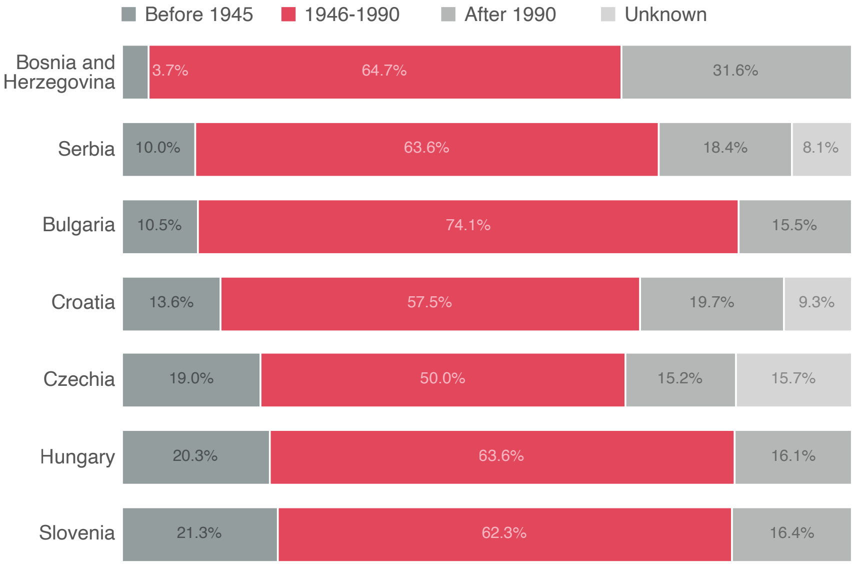
Consequently, by the 1980s, the main housing-related problems partly shifted from quantity- towards quality-related issues, mainly caused by the systematic disinvestment in maintaining the public housing stock and the poor quality of some newly constructed housing units.

In the 1990s, rapid privatization and liberalization of housing exposed **large segments of these societies to housing affordability and accessibility problems**. As utility costs got liberalized and public subsidies cut, energy poverty became another newly emerging problem in the 1990s, which has once again come to the center of public attention since the beginning of the European energy crisis in 2022. In many countries of the region, legal issues and informal dwellings have also been prominent: given the lax regulations and the intensifying hardships of households to secure their housing in the post-1989 era, informal housing solutions and the emergence of slums have become widespread in some countries.[12]

8. OECD (2021) *Brick by Brick: Building Better Housing Policies* OECD Publishing
9. UN (2021) *#Housing2030: Effective Policies for Affordable Housing in the UNECE Region* United Nations Publications
10. Kováts, B. (2020) Is There a Core-Semiperiphery Division in Housing? Applying World-systems Theory in European Comparative Housing Research. Housing, Theory and Society 38(4), 419-438; Ireland, D. (2020) What is wrong with housing in Eastern Europe today? Journal of Urban Regeneration and Renewal 14(2) 128-134.
11. Hick, R, Pomati, M. and Stephens, M. (2022) *Housing and poverty in Europe : Examining the house prices*, Cardiff University, p. 3.
12. Tsenkova, S. (2012) Urban planning and informal cities in Southeast Europe. Journal of Architecture and Planning Research 49(4) 292-305.

FIGURE 2

AGE OF THE HOUSING STOCK



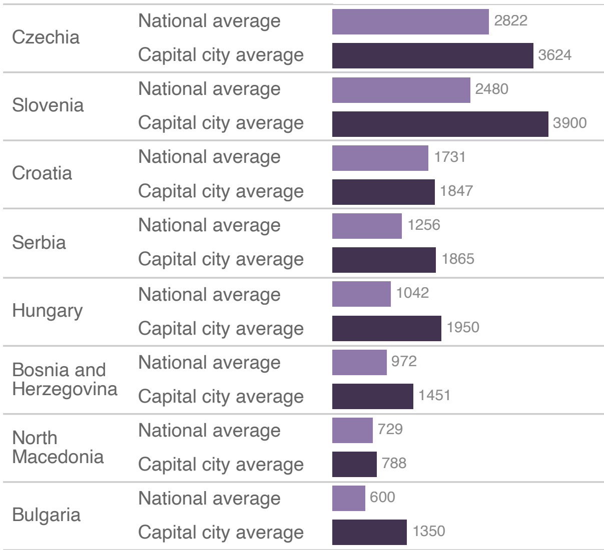
Source:
BA: Census 2013 (https://www.popis.gov.ba/popis2013/doc/Knjiga5/K5_B_E.pdf),
BG, HR, CZ, HU, SI: Census 2011 (Eurostat CensusHub)
RS: Census 2011 (https://www.stat.gov.rs/en-US/oblasti/popis/popis-2011/popisni-podaci-eksel-tabele)

Beyond quality issues, the region has also experienced significant price hikes in the housing market during the past decade. Due to the extreme dominance of owner-occupied housing in the region ("super-homeownership"), hikes in sales prices significantly influence the general accessibility of housing. Figure 3 gives a snapshot of **the sales prices of housing** in the region.

Long-term housing price trends show pressures on the housing market (Figure 4). **House price indices have been above the European average in most Central and South-Eastern European countries** in the past years.

FIGURE 3

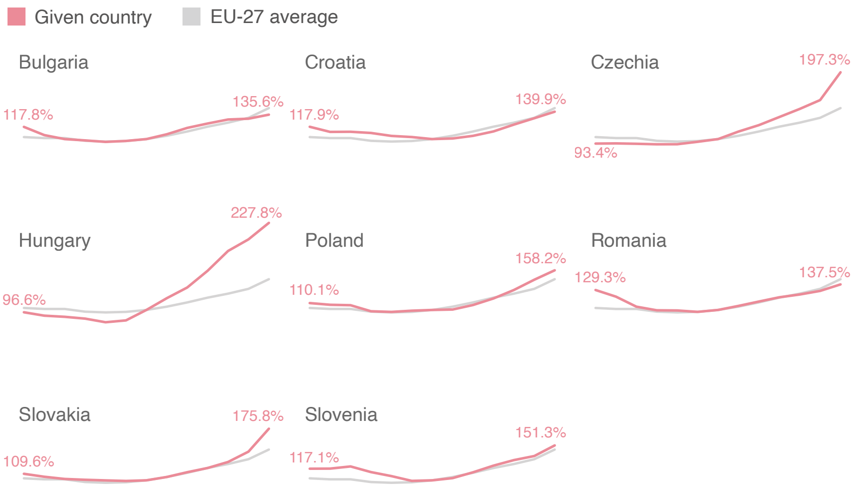
AVERAGE SALES PRICES OF HOUSING UNITS, IN EUR/SQM (NATIONAL AVERAGE AND CAPITAL CITY AVERAGE)



Source:
BH: Agency for Statistics of Bosnia and Herzegovina, 2022
BG: Imot.bg, 2022
CZ: Deloitte Property Index, 2020
HR: Real Estate Exchange, 2022
HU: KSH, 2021, Mean price per square meter of housing units (new build weighted at 12% of all transactions; HUF converted at 2021.12.31. rate)
MK: Macedonia Statistical Institute, 2019
SR: RGZ, 2021
SI: Numbeo.com 2021, Zadrugator 2021

FIGURE 4

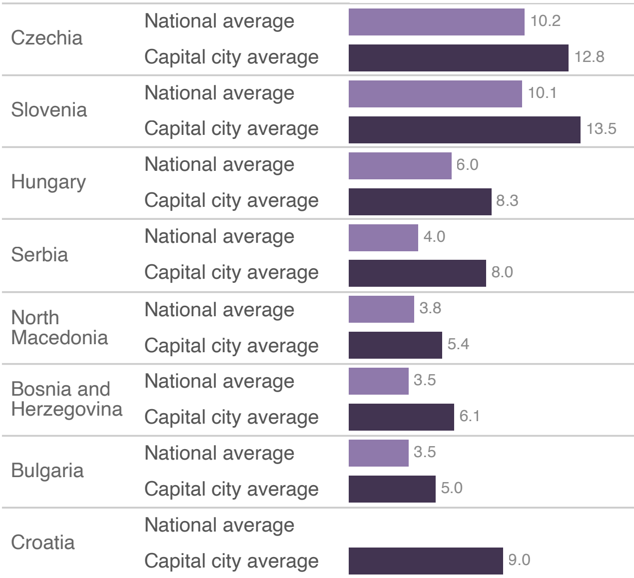
NOMINAL HOUSE PRICE INDEX FOR CENTRAL AND EASTERN EUROPEAN COUNTRIES, 2009-2021 (2015=100%)



Source: European Mortgage Federation, Hypostat 2022

FIGURE 5

AVERAGE RENTAL PRICES, IN EUR/SQM (NATIONAL AVERAGE AND CAPITAL CITY AVERAGE)



Source:
BH: Expatistan 2022, Olx.ba 2022
BG: Imot.bg, 2022
CZ: Deloitte Rent Index, 2022
HR: City of Zagreb, Real Estate Market Report, 2021
HU: KSH-ingatlan.com, Rent index 2021 (HUF converted at 2021.12.31. rate)
MK: Numbeo.com, 2021, Cost of living
SR: Danas.rs, 2022, "Koliko košta biti podstanar: Cene kirija po gradovima u Srbiji"
SI: Expatistan 2022, Realestate-Slovenia.info, 2022

The rental market is generally much smaller (around 5-15%) in these countries than in Western European countries (except Czechia, where this rate is 21%),[13] **but is becoming more and more** important due to social groups falling out of access to homeownership. Rental markets are significant in larger cities, which is also reflected by much higher rental prices (in the case of Serbia double) in capital cities (Figure 5). Difficulties in housing affordability also stem from the scarcity and high cost of rental housing units.

To summarize all these interrelated issues, we use the notion of housing poverty. **Housing poverty can be defined as households living under worse housing conditions than those minimally acceptable in a given society.** We distinguish four dimensions of housing poverty: affordability, housing quality (including energy efficiency), spatial accessibility and legal security of tenure. All these dimensions are intertwined, and downward mobility in one dimension can easily lead to a downward spiral in the housing market of a given country. In the case of Hungary, the estimation is that **20-30% of the population is affected by some form of housing poverty.**[14] **Based on our desk research, we assume this estimate to be accurate for the entire region. This large percentage shows that housing poverty is not only a problem of the lowest social strata and the most marginalized social groups, but it is increasingly present in some**

13. Eurostat (2021) *Distribution of population by tenure status, type of household and income group*
14. Pósfai, Z. (2018) *Annual report on housing poverty in Hungary - English summary*. Habitat for Humanity Hungary 13. Pósfai, Z. (2018) Annual report on housing poverty in Hungary - English summary. Habitat for Humanity Hungary

segments of the lower-middle class and the middle class.

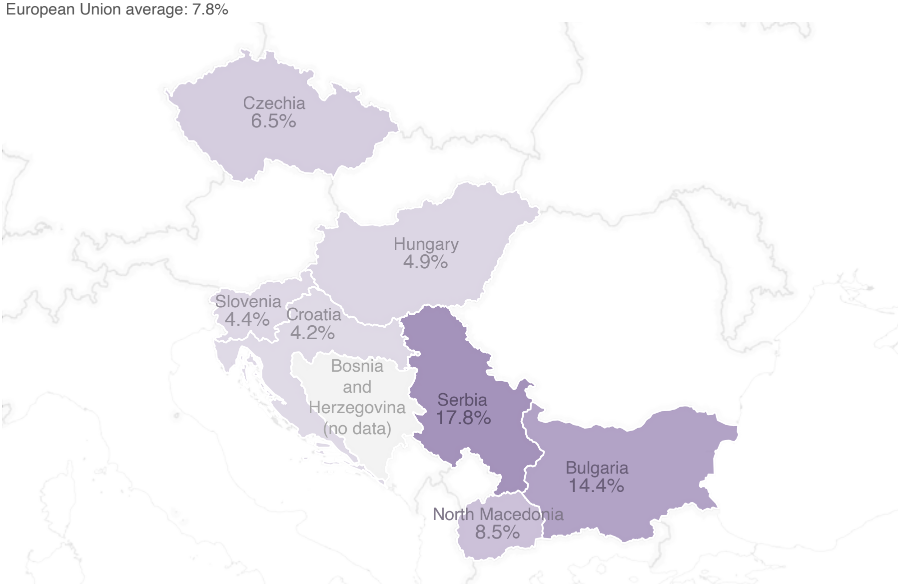
Regarding **housing affordability**, there are different definitions in the literature, ranging from price-to-income and expenditure-to-income ratios to housing quality measures. At its core, **housing affordability is linked to the ability of households to pay for a dwelling**. Housing affordability is, therefore, often seen as a function of housing costs and household income. Housing costs are, in turn, driven by several factors, including house prices, rents, mortgages, but also insurance, mandatory services and charges (e.g. sewage and refuse removal charges), regular maintenance and repairs, taxes and the cost of utilities (water, electricity, gas and heating).

UN-Habitat states that “[T]he underlying principle [of housing affordability] is that household financial costs associated with housing should not threaten or compromise the attainment and satisfaction of other basic needs such as food, education, access to health care, transport, etc”.[15] According to the UN-Habitat’s Urban Indicators Program a dwelling is not affordable if the net monthly expenditure on housing cost exceeds 30% of the total monthly income of a household. In the case of Eurostat, housing affordability is usually analyzed through the housing cost overburden rate, which is defined as the share of the population in a country living in households that spend 40% or more of their disposable income on housing[16] (Figure 6).

FIGURE 6

RATIO OF POPULATION WITH HOUSING COST OVERBURDEN

European Union average: 7.8%



Source: EU-SILC database 2020

15. UN-Habitat (2020) *Affordability: A Global Issue*.
16. *Eurostat Glossary: Housing cost overburden rate*

Based on the 40% threshold, the CSEE countries can be divided into two groups. While Serbia, North Macedonia and Bulgaria have higher housing cost over-burden ratios than the EU27 average, the remaining countries are currently below that rate. However, when we look into local research, the number of households struggling with affordability problems is significantly higher.

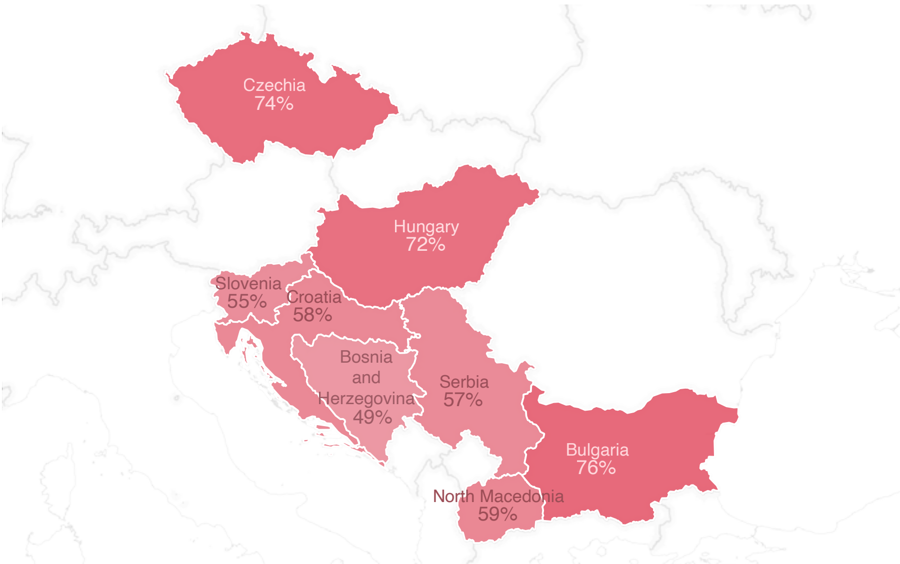
A comparative study on the housing regimes of the new EU member states, proposed to broaden the definition of affordability and include two additional groups: people living in inadequate housing and people living in adequate housing but not having sufficient income to cover both their housing costs and maintain adequate living standards.[17] Based on this more complex definition the study concludes that affordability problems on the Eastern periphery of Europe are systematically bigger than in other parts of the EU. The authors also highlighted that it is not only the "structural poor", i.e. the most vulnerable part of society affected but also the "risky" middle class. **Therefore, in the remaining part of this report, we will focus on the middle class experiencing housing affordability issues, assuming that the housing problems of the structural poor can be more efficiently handled through public interventions than with catalytic capital deployment**.

Regarding **spatial accessibility**, a crucial question is the urban- rural dynamics in different countries. While Central European countries tend to have a higher rate of urbanization, South-Eastern European countries have a larger share of the rural population (Figure 7).

FIGURE 7

RATIO OF URBAN POPULATION

European Union average: 75%



Source: World Bank, 2021

17. Hegedüs, J., Horváth, V. and Somogyi, E. (2017) *Affordable Housing in Central and Eastern Europe: Identifying and Overcoming Constraints in New Member States*. Metropolitan Research Institute

In rural areas, housing quality is typically worse compared to urban ones. This situation has become more prominent in recent decades due to demographic decline. Low fertility rates and a negative migration balance cause demographic decline. According to the forecasts of the UN, Central and South-Eastern European countries will have a relatively high rate of demographic decline in a global comparison, and it is predicted that the demographic decline by 2050 will be one of the highest globally in this region.[18] These tendencies are already observable: 81% of the rural regions in the Eastern member states of the EU experienced shrinking between 2010-2017.[19]

Besides declining population numbers, these rural areas typically suffer from infrastructural disinvestment and bad access to services of general interest. This means that the population of these shrinking rural regions is not only more exposed to housing poverty in the present, but it is very likely that the gap between more developed urban and less developed rural areas will further increase.

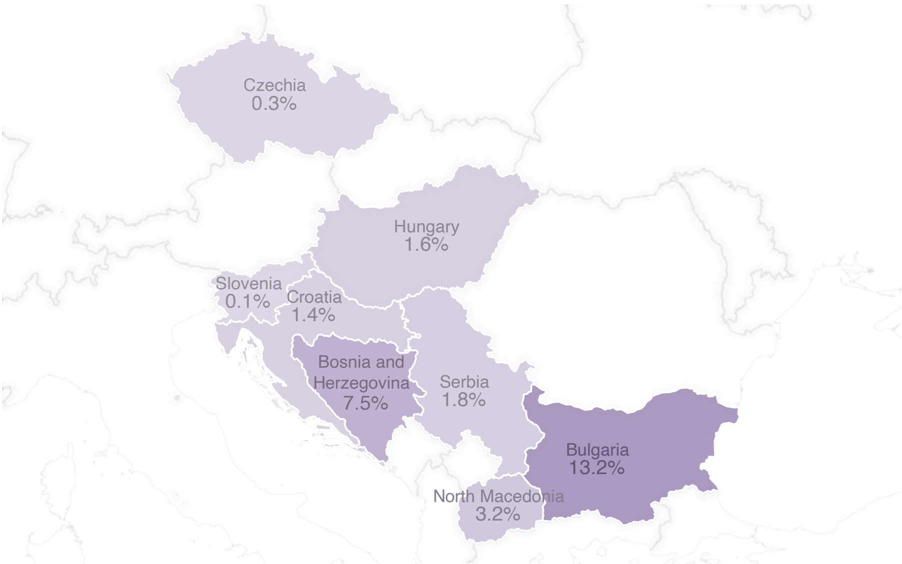
In terms of **housing quality and energy efficiency**, there are multiple dimensions to measure housing inadequacy.

First, the **availability of basic amenities, such as a toilet**, is still a good indicator of housing quality in the region. From this perspective, Bosnia and Herzegovina and Bulgaria stand out from the eight analyzed countries (see Figure 8). In these two countries, a significant part of the population is deprived of this very basic infrastructure.

FIGURE 8

RATIO OF DWELLINGS WITHOUT INDOOR FLUSHING TOILET

European Union average: 1.8%



Source: EU-SILC database 2020, for Bosnia and Herzegovina: "Anketa o potrošnji domaćinstava 2015"

18. United Nations, Department of Economic and Social Affairs, Population Division (2019) *World Population Prospects 2019: Highlights* (ST/ESA/SER.A/423)
19. Jelinek, Cs., Virág, T. (2020) *Zsugorodó városok és társadalmi egyenlőtlenségek Magyarországon*. Szociológiai Szemle 30(2): 4 – 26.

Second, Eurostat collects data about people living in dwellings with serious quality problems, such as **leaking roofs, damp walls, floors or foundations, or rot in windows**. Except for Czechia and Croatia, in all the analyzed countries, 10-20% of the population suffers from at least one of these housing problems (see Figure 9), with Hungary and Slovenia being above the EU average.

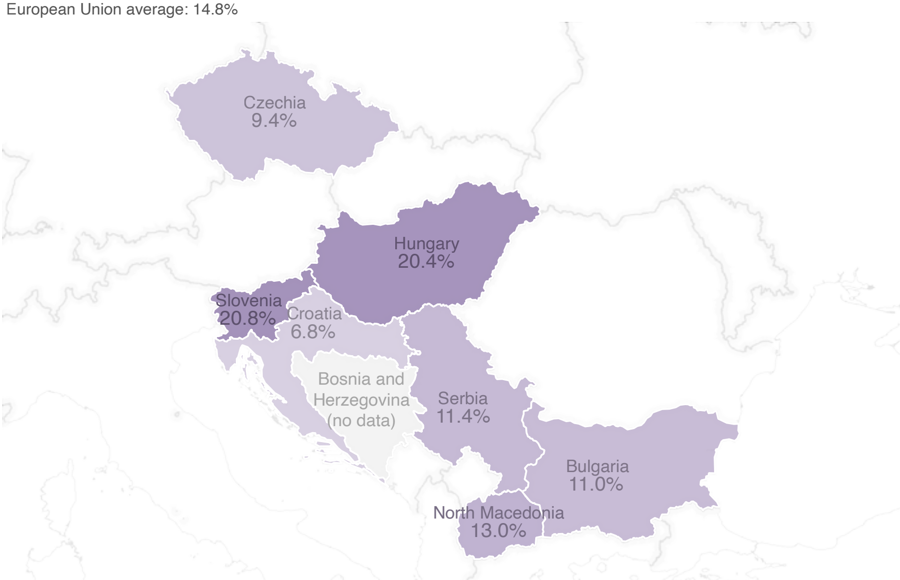
Third, **energy efficiency** is a crucial element of housing quality both from a structural and a household-level perspective. 30% of global energy-related CO_2 emissions come from buildings; thus, residential buildings play a pivotal role in the fight for a just energy transition. At the same time, energy costs take up a significant part of household expenditures, especially since the emerging European energy crisis in 2022. In the case of Central and South-Eastern European countries, this financial pressure on households is generally more prominent than in other parts of Europe, especially in the lower income categories.[20]

Regarding the legal security of tenure, the region has two typical problems. First, mainly in the South-Eastern European countries, a significant portion of dwellings is informally constructed, which may result in different types of insecurities.[21] For example, since 2012, when the Croatian government introduced the Law on Illegally Constructed Buildings that permitted the legalization of buildings constructed between 1968 and 2011, the Office of Legalization received 800,000 applications.

FIGURE 9

RATIO OF DWELLINGS WITH SERIOUS QUALITY PROBLEMS

European Union average: 14.8%



Source: EU-SILC database 2020

20. European Commission (2022) *Energy Poverty National Indicators: Insights for a more effective measuring*. Energy Poverty Advisory Hub.
21. Tsenkova, S. (2012) Urban planning and informal cities in Southeast Europe. Journal of Architecture and Planning Research 49(4) 292-305; Zahariev, B., Yordanov, I. (2022) Informal Settlements. In: Münch, S., Suede, A. (eds.) *Precarious Housing in Europe: A Critical Guide*. Donau-Universitat Krems. 227-300

Second, in the case of rental arrangements, tenants are typically less secured by rental market regulations than in other parts of Europe. It is hard to collect and compare data in this dimension of housing poverty, but we will turn back to this issue in the country digests in the next section of the report.

In the context of a deepening housing crisis, market segmentation and increasing affordability problems, a logical solution would be strengthening the public housing sector to mitigate these social problems. However, **since the privatization in the 1990s, public funds channeled into the public rental sector have remained minimal in the region. The share of the public rental sector is below 5% in each of the analyzed countries (compared to the EU average of 7.5%).**[22] **The public housing stock is often residualized, or in other words, poorly maintained and occupied by low-income households. At the same time, waiting lists for public housing units are often extremely long, and there is significant pressure on these remaining and dysfunctionally working systems**.

Although systematic disinvestment and the shrinking public housing sector are not only regional phenomena, there is a peculiar regional specificity of the political narratives around the issue. **A common rhetorical trope is a supposed cultural characteristic of the local population: "naturally" valuing homeownership over tenancy**. On the one hand, this narrative can be challenged on historical grounds. Before the privatization in the 1990s, wide segments of CSEE societies benefited from generous public subsidies as tenants in the public housing sector. Various forms of these living arrangements - such as cheap rental units provided for young teachers or nurses - are often remembered with nostalgia nowadays. On the other hand, the continuous expansion of the private rental sector, as well as various informal ways of living in the properties of relatives, friends and acquaintances below market price rates, is a sign that a housing regime based exclusively on homeownership is not a realistic - let alone desirable - option for numerous households.

Thus, **the starting point of this research was a hypothesis that there is a significant demand for alternative rental solutions in the housing market which can provide an adequate, safe and affordable dwelling for people not served by the market and by existing housing policies**.[23]

22. See *OECD Affordable Housing Database*.
23. For a long analysis about the potential positive effects of an expanding affordable rental sector see Elfayoumi, K., Karpowicz, I., Lee, J., et al. (2021) *Affordable Rental Housing: Making It Part of Europe's Recovery. Departmental Paper. IMF Departmental Paper* No 2021/013.

Source: Norbert Levajsics

1.2 Overheating and volatile housing markets

This section looks at the **broader economic processes** in the countries of our research, aiming to understand how the housing market is embedded in the general economic context. We will see **what market-based solutions have been developed in the field of housing, and also some limitations of these market-based solutions in responding to housing needs**.

General economic situation

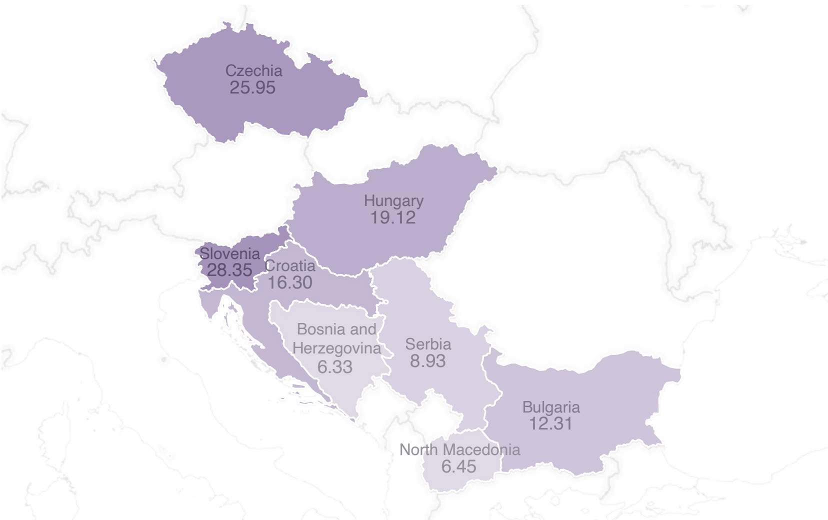
Among the eight analyzed countries, five are EU member states (Czechia, Hungary, Slovenia, Croatia, Bulgaria), and three are not (Serbia, Bosnia and Herzegovina, North Macedonia). This, among other factors, significantly influences their general economic situation and economic institutions.

Among our observed countries, only Slovenia officially uses the euro currency, and Croatia is introducing it as of January 2023. The Bulgarian lev, the North Macedonian denar, the Bosnia and Herzegovina convertible mark and the Serbian dinar are all unilaterally pegged to the euro (some at fixed conversion rates and some within a band). Thus, among our observed countries, the Hungarian forint and the Czech koruna are the only currencies with floating exchange rates compared to the euro. In recent economic cycles, the Hungarian forint was the most volatile currency in the region, with a devaluation trend.

FIGURE 10

GDP PER CAPITA IN CURRENT PRICES (in thousand EUR)

Note: data converted at 1 USD = 0.94 EUR, 25.05.2022.



Source: IMF Datamapper, 2022

Considering GDP per capita, differences among the eight countries are significant, with Slovenia leading the group (Figure 10).

The "hierarchy" reflected by GDP / capita is similar to that of the median monthly equivalised income (see Figure 11) in the countries of our research. For example, there is a more than 6-fold difference between the highest and lowest median equivalised net income in North Macedonia and Slovenia.

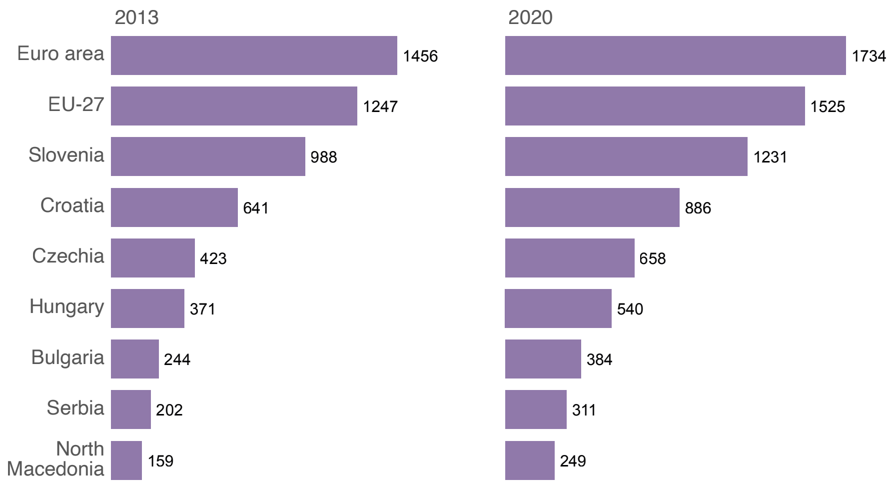
One of the key characteristics of the current turbulent economic period is the increasing inflation rate. Figure 12 compares the inflation rate from April 2022 to September 2022. Inflation rates started to increase in 2021 due to disturbances in the supply chains of various goods due to Covid19-related emergency interventions. Furthermore, since the winter of 2020-2021, energy prices have constantly been increasing, linked to the general economic imbalances in the aftermath of the pandemic. The difficulties of energy supply chains have been further intensified by the ongoing war of Russia against Ukraine. Over the summer of 2022, due to the steps Russia took on gas and oil markets amid escalating pressures on an international scale, energy prices have drastically increased in Europe. Since energy is an essential part of both household and industrial consumption, the effect on inflation rates has been quite direct.

Long-term interest rates (Figure 13) are also telling macroeconomic figures. Since most countries in the region are not part of the eurozone, their central banks have more liberty in adjusting their reference interest rates.

FIGURE 11

MEDIAN EQUIVALISED NET MONTHLY INCOME (€)

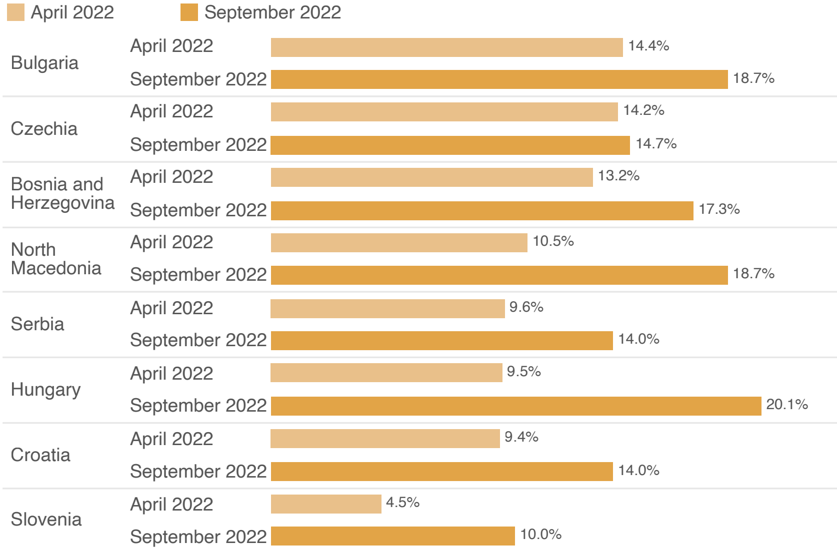
There is no data for Bosnia and Herzegovina



Source: Eurostat, 2022, Median equivalised net income (database: Mean and median income by age and sex).

FIGURE 12

INFLATION RATES IN APRIL AND SEPTEMBER 2022

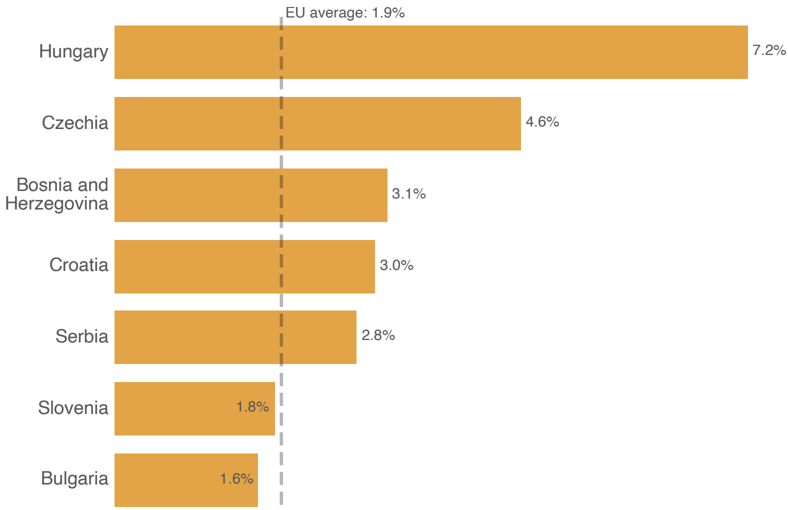


Source: https://tradingeconomics.com/

FIGURE 13

LONG TERM INTEREST RATES IN MAY 2022

There is no data for North Macedonia



Source: HU, CZ, HR, SI, BG: CEIC Data, May 2022; BA: Central Bank of Bosnia and Herzegovina, May 2022; SR: National Bank of Serbia, May 2022

In May 2022, Hungary had the highest long-term interest rates, which have significantly increased since then. The base interest rate of the Hungarian National Bank was under 1% between 2016 and 2021 and started to be raised little by little in July 2021. Over the spring and summer of 2022, these hikes were accelerated, and the Hungarian base interest rate is at 13% as of October 2022.[24] This was partly due to Hungary's vulnerable position in the current energy crisis (mainly because of high dependence on Russian gas import and the composition of its energy mix), and partly due to the country's lack of agreement on the planned spendings of the Recovery and Resilience Facility (RRF) and Cohesion Policy Funds for the 2021-2027 period with the European Commission.

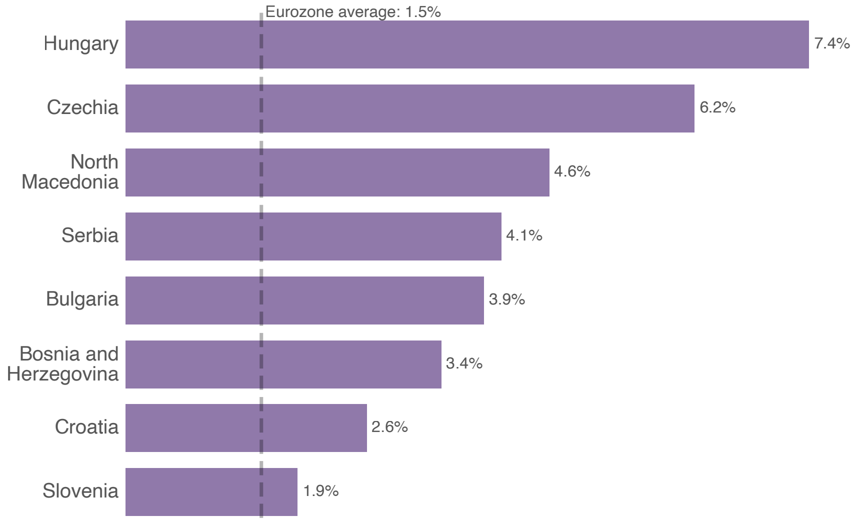
Eurozone base rates were only raised to 2% at the beginning of November 2022 by the European Central Bank,[25] while all non-eurozone countries have already had to increase their reference interest rates more significantly. As of November 2022, the reference central bank interest rate in Serbia was 4%,[26] in Croatia 3%,[27] in Czechia 7%,[28] in North Macedonia 3.5%.[29] The only exception to this trend is Bulgaria, where the central bank reference rate is still at 0.6%.[30] This reflects the financial and economic dependency of the region on the European core and also has significant implications for the housing market and housing finance instruments available in the region.

Average bank lending rates to households and non-financial companies (Figure 14) reflect the base interest rate in the given country. In simplified terms, banks can receive financing at rates close to central bank reference rates and then can determine how much margin they put on this in their lending to households and companies. For instance, in Croatia, the average interest rate for housing loans was 3.6% in 2020 and 3.9% in 2021 – still relatively low since many of the loans issued in 2020 were subsidized.[31] Interest rate hikes in Croatia have not started by Q3 2022, but stricter lending conditions are being enforced due to the deteriorating economic environment.[32] In Hungary, interest rate risks were mitigated by the Certified Consumer-Friendly Housing Loans (CCFHL - described in section 2.2) in recent years. At the end of 2021, these products accounted for around 61% of total new housing loans.[33]

24. Hungarian National Bank – *Base rate history*
25. European Central Bank – *Key ECB interest rates*
26. National Bank of Serbia – *Interest rates*
27. Croatian National Bank – *Interest rates*
28. Czech National Bank – *Interest rates*
29. SeeNews – *North Macedonia's central bank raises policy rate to 3,50%*, 2022.10.13.
30. CEICData – *Bulgaria Policy Rate*
31. Croatian National Bank, Annual report 2021.
32. Tportal.hr – *Interest rates are still not rising significantly, but lending conditions are getting stricter*, 2022.10.25.
33. Hungarian National Bank, Annual report 2021.

FIGURE 14

BANK LENDING RATES TO HOUSEHOLDS AND COMPANIES IN MARCH 2022



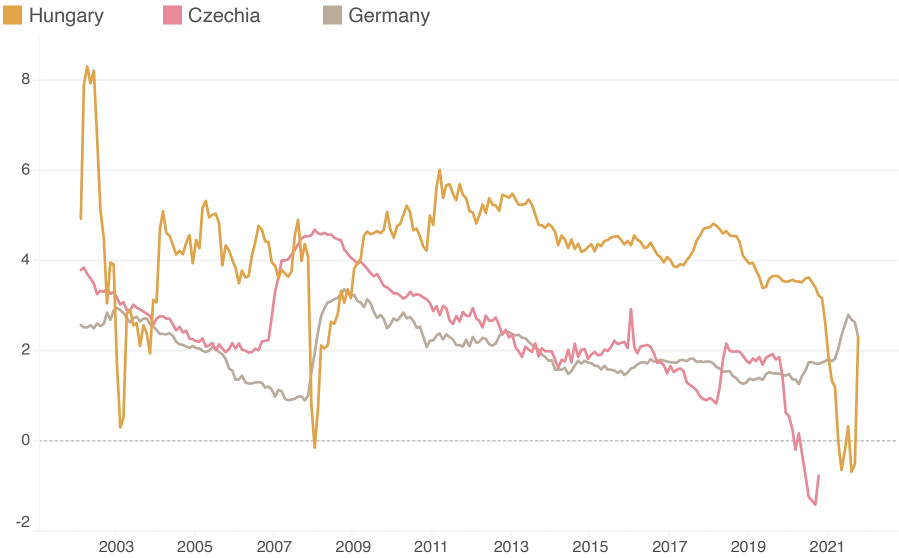
Source: BG, BH, CZ, HU, MK, SR: CEIC Data, 2022
HR, SI: TradingEconomics, 2022
Euro area: ECB Statistical Data Warehouse, 2022

Banks' returns on assets were usually higher in past years in Central and South-Eastern European countries than on the scale of their overall group operations, which also meant that banks could be more profitable here.[34] As Figure 15 shows, some countries of the region have had much more **volatile trajectories in terms of margins on lending to households** than the European economic core.[35] Economic turning points, and the diverging bank strategies in different markets significantly influence these patterns. During 2021 and 2022, banks of countries that had to increase their base interest rates (on Figure 15: Czechia and Hungary) started lending at negative margins, as they did not want to or could not immediately reflect increasing base interest and inflation rates in the cost of their loans. This had several reasons, mainly their interest in not losing market shares. However, this lag is only temporary, and already by autumn 2022, non-subsidized bank lending is starting to become very expensive. In the case of our researched countries specifically, this means that in Serbia, average bank lending rates were at 4.5% in July 2022, in Czechia at 8.4% in September (8.2% in August), and in Hungary, they were at 25% in October (14.2% in August).[36]

34. European Investment Bank (2021) *CESEE Bank Lending Survey*, p.17.
35. European Central Bank, Statistical Data Warehouse, *Banks lending margins*
36. CEICData – Bank lending rate: for *Serbia*; for *Czechia*; for *Hungary*

FIGURE 15

BANKS' LENDING MARGINS ON LOANS TO HOUSEHOLDS FOR HOUSE PURCHASE - SELECTED COUNTRIES



Source: European Central Bank, 2022, Banks lending margins

Household lending

The above-discussed figures of bank lending conditions are important from the perspective of this research because **individual mortgages are nearly the only form of existing housing finance in the region**. Due to a severe lack of rental housing, and an institutional vacuum of institutions that would provide rental housing on a larger scale, there are high stakes attached to access to individual homeownership.

Government policies and housing market tendencies have led to a swift increase in new household lending in all countries of our research. Still, Hungary stands out among them with a 42% increase in housing loans alone from 2020 to 2021, reaching a historic high in the country in terms of new lending. This was due to the stimulus provided by different government subsidy programs (which will be discussed in section 2.2). In Slovenia, the increase in new housing loans from 2020 to 2021 was 9%, while in Serbia, all types of new loans to households (58% of which were cash loans) increased by 29% during 2022. Household lending in Croatia was more or less stable, increasing only by 2.3% from 2020 to 2021. This data will be discussed in the "country digest" section for each country.

In early 2022, the European Systemic Risk Board (ESRB), which is part of the European Union's system for financial supervision, issued warnings against five countries relating to the **medium-term vulnerabilities of their residential real estate markets**.[37]

Four out of these five countries are from the Central and South-Eastern European region (Bulgaria, Croatia, Hungary, Slovakia). The key vulnerabilities the ESRB now identified in the above five countries were mainly related to **rapid house price growth, possible overvaluation of residential real estate, and the level and dynamics of household indebtedness - that is, high levels of mortgage credit growth**. In their analysis, conducted in 2021, financial stability risks are increasing because household income levels have become more uncertain due to the pandemic, while interest rates on new loans were constantly decreasing. **The abundance and rapid growth of housing credit** - among other factors - **has strongly increased house prices and loan volumes**. Uncertain supply chains and growing construction costs have also contributed to rising house prices, especially in the new dwellings segment. Paired with income uncertainties, this situation presented itself as risky and vulnerable.[38] In 2022, the economic situation has severely deteriorated, with record inflation and quickly increasing interest rates. Thus, the **warnings about the debt servicing capacity of households have become even more relevant**.

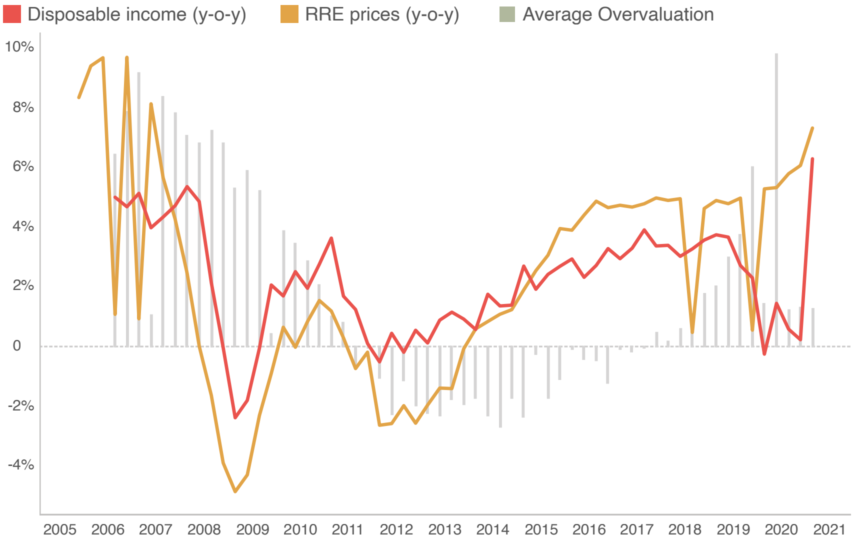
In recent years, the **decoupling of the housing market from the real economy** was a Europe-wide phenomenon. While the housing market was characterized by increasing house prices and new mortgage credit, real economy data showed GDP decline and retracting disposable income in the aftermath of the pandemic.[39] This indicates a risk of residential real estate bubbles, especially in overheated urban markets. In 2020 "house prices in the EU as a whole have surpassed the peak reached before the global financial crisis",[40] and the European Central Bank estimates that since 2019 **residential real estate prices have become rapidly overvalued, and their overvaluation currently stands at 13% on a European average** (Figure 16).

This notion of overvaluation is more relevant to understand from the perspective of local residents, through the issue of **housing affordability**, that is, a **comparison of house prices with locally available income levels**. This comparison shows that countries in the region are in a difficult position on a European scale. **The affordability of purchasing housing**[41] **is worst in capital cities of Central and South-Eastern Europe within the EU** - except for Paris (Figure 17).

37. European Systemic Risk Board (ESRB) (2022) *Vulnerabilities in the residential real estate sectors of the EEA countries*
38. ESRB (2022) *Vulnerabilities in the residential real estate sectors of the EEA countries*, p. 4
39. ESRB (2022) *Vulnerabilities in the residential real estate sectors of the EEA countries*, p.7.
40. ESRB (2022) *Vulnerabilities in the residential real estate sectors of the EEA countries*, p.8.
41. Average price for a 75 sqm apartment outside the city center, national average income, yearly change depicted between 2021 Q1 and 2022 Q1. – Hungarian National Bank (2022) *Housing Market Report*

FIGURE 16

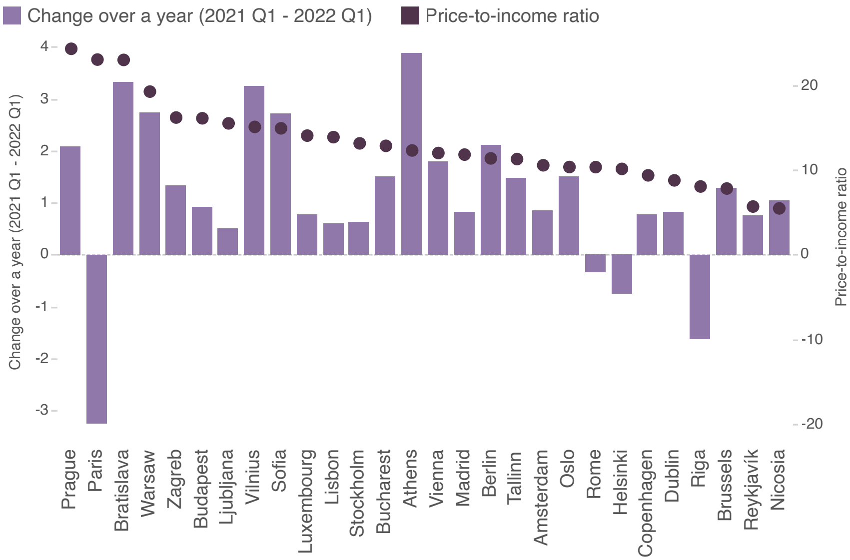
DISPOSABLE INCOME, RESIDENTIAL REAL ESTATE PRICES AND ESTIMATED OVERVALUATION OF HOUSE PRICES



Source: ESRB 2022: Vulnerabilities in the residential real estate sectors of the EEA countries

FIGURE 17

PRICE-TO-INCOME RATIOS IN EUROPEAN CAPITAL CITIES



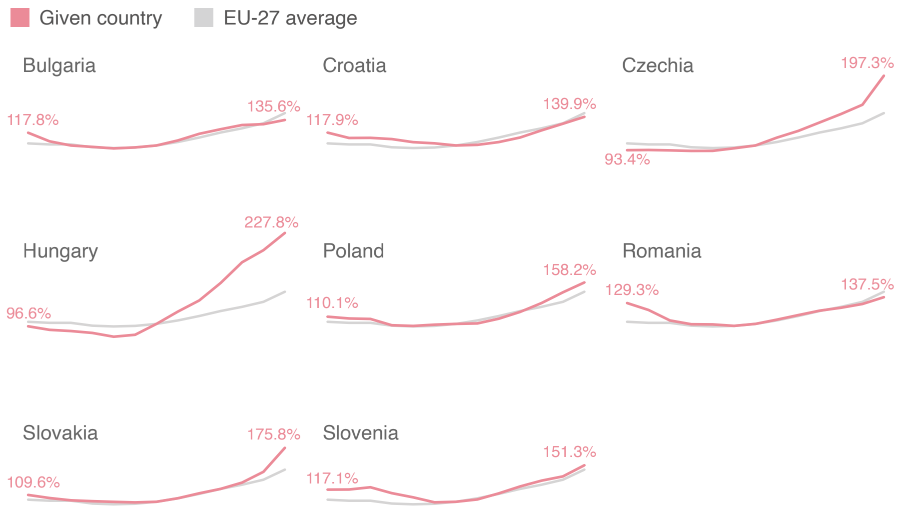
Source: Hungarian National Bank, May 2022, Housing Market Report

House prices can also be examined in a temporal and regional comparison, which we have done based on the data sets of the European Mortgage Federation. In the case of the group of Central and Eastern European countries (Figure 18), the **house price index of several of these countries is above the EU average, and none are significantly below**. Since 2015, the house price index has increased most in Hungary and Czechia. Hungary is also the country with by far the highest house price index growth within the whole European Union during the period between 2012 and 2021.[42]

On the contrary, during this most recent expansionary period of the housing market between 2015 and 2022, **the trajectory of Southern European countries has been different**. House price indexes in the latter countries have grown much slower during this period (Figure 19), remaining well below the EU average. Thus, we can observe a significant difference compared to the expansionary period preceding the 2008 crisis, when Southern European countries experienced more drastic housing market bubbles than Central and Eastern European ones. House price increases have also been fueled in the region by different policies supporting new mortgage lending and generally expanding household market loans. As a result, the year-on-year development of lending to households for house purchases - that is, the **amount of new lending** (Figure 20), **has been above the EU average** in all countries of our research in recent years.

FIGURE 18

NOMINAL HOUSE PRICE INDEX FOR CENTRAL AND EASTERN EUROPEAN COUNTRIES, 2009-2021 (2015=100%)

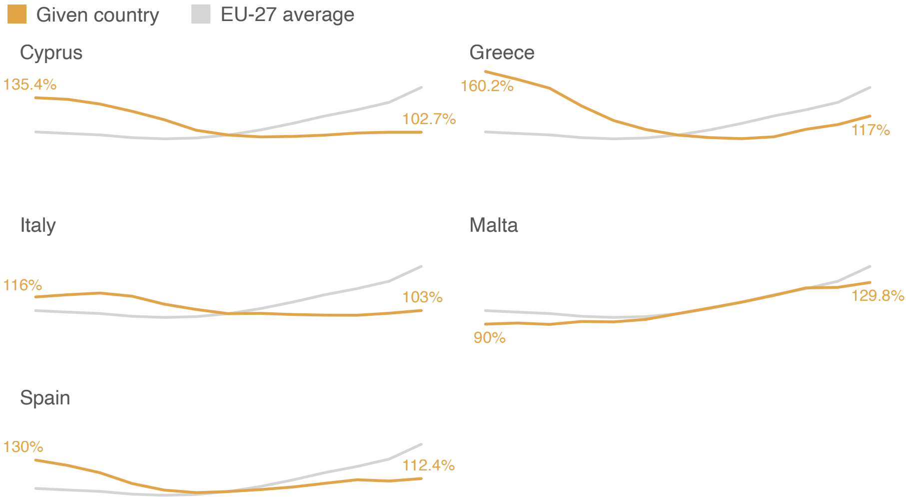


Source: European Mortgage Federation, Hypostat 2022

42. European Mortgage Federation (2022) *Hypostat 2022 – A review of Europe's mortgage and housing markets*, p.47.

FIGURE 19

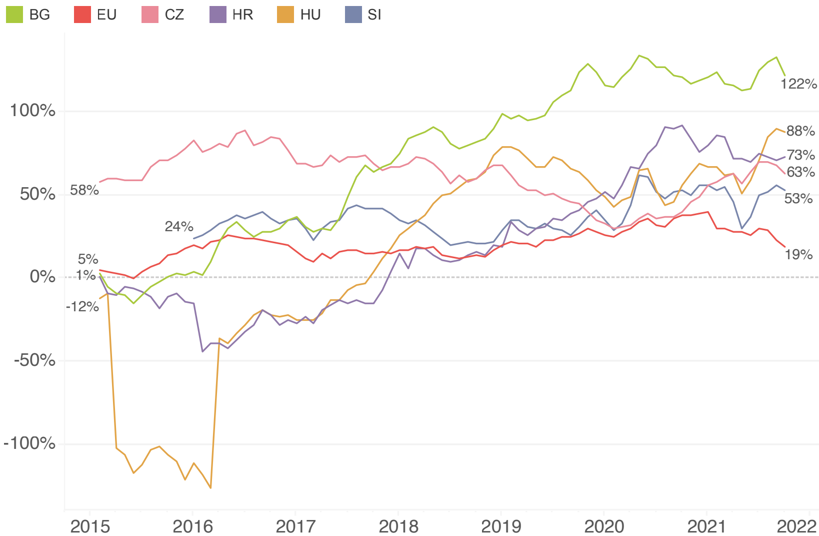
NOMINAL HOUSE PRICE INDEX FOR SOUTHERN EUROPEAN COUNTRIES, 2009-2021 (2015=100%)



Source: European Mortgage Federation, Hypostat 2022

FIGURE 20

YEAR-ON-YEAR CHANGE IN LENDING TO HOUSEHOLDS FOR HOUSE PURCHASES (%)



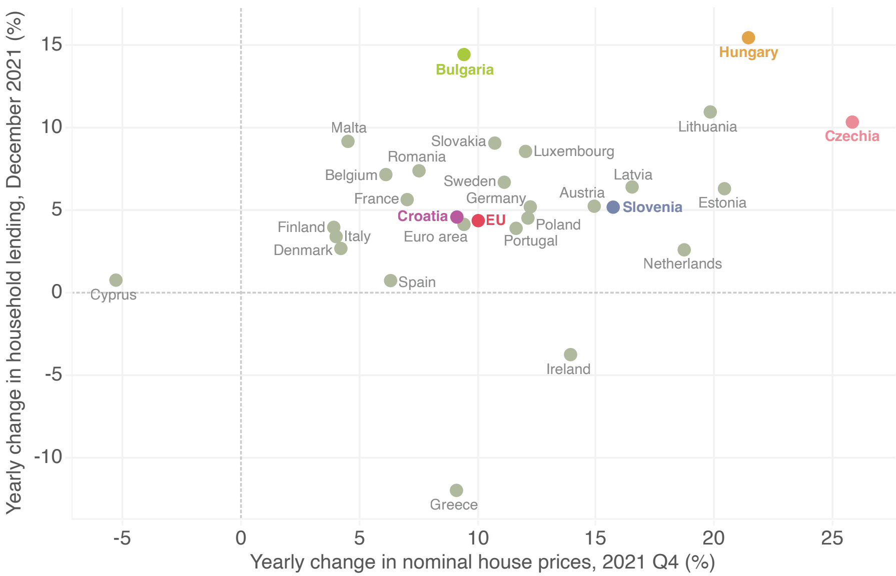
Source: ESRB 2022: Vulnerabilities in the residential real estate sectors of the EEA countries

Despite the expansion of new mortgage lending, the total volume of mortgage loans is still significantly lower in Eastern and South-Eastern European countries than in Northern and Western Europe. However, **it is the dynamic and the structure of lending that gives reason for more attention**. That is, the stock of newly issued loans was rapidly increasing,[43] and lending conditions are also less favorable for households in the CSEE region than in Western Europe (i.e., interest rates are systematically higher).[44] A good reflection of this is the **matrix of the year-on-year change in household lending and nominal house prices** (Figure 21). Czechia, Hungary and Bulgaria are outliers from the other European countries, which might **indicate credit-fueled housing market bubbles**.

The **number of housing unit transactions** is also an important characteristic of the housing market. Usually, higher transaction numbers induce faster house price increases, since potential buyers have less bargaining possibility in a more heated housing market. Countries with the highest growth in house price indices and new mortgage loans (as discussed above) also have higher transaction numbers relative to their population size (Figure 22). The exception is Hungary, where house prices and new loan volumes have drastically increased in recent years, but the number of transactions relative to population size remains relatively low. This reflects the house price bubble that arguably happened in Hungary, not independently from the government subsidies system for homeownership access.

FIGURE 21

CHANGES IN NOMINAL HOUSE PRICES AND HOUSEHOLD LENDING IN EUROPEAN COMPARISON

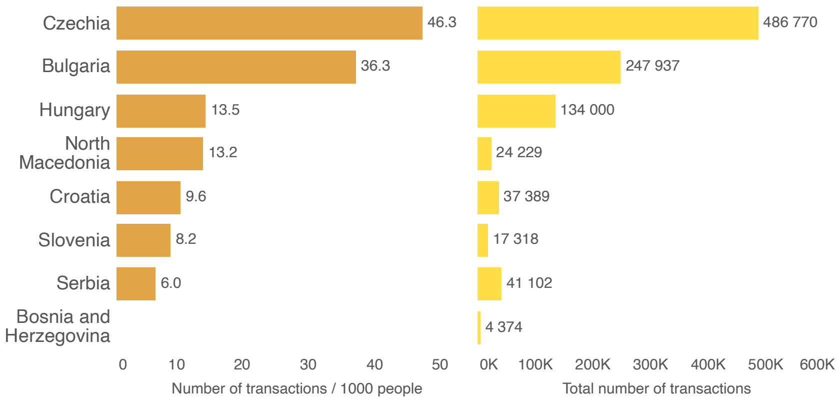


Source: Hungarian National Bank, Housing Market Report, May 2022; source of data: Eurostat, ECB, BIS, MNB.

43. European Mortgage Federation (2022) *Hypostat 2022 – A review of Europe's mortgage and housing markets*, p.52.
44. European Mortgage Federation (2022) *Hypostat 2022 – A review of Europe's mortgage and housing markets*, p.54.

FIGURE 22

NUMBER OF TRANSACTIONS OF HOUSING UNITS (PER THOUSAND PEOPLE AND IN TOTAL)



Source: BA: Bosnia and Herzegovina Cadaster Agency, 2020 BG: Sdelkis Imoti, 2021
CZ: Alexandra Kurbanova, 2021 HR: The Institute of Economics, Zagreb, 2020
HU: Central Statistical Institute, 2020, House prices and house price index
MK: North Macedonia Cadaster Agency, 2021
SR: State Geodetic Authority, 2020 SI: Ministry of the Environment and Space, Market and Real Estate Values, 2021

Construction costs were also fueling house price increases (and thus, larger loan volumes) both in the region and throughout Europe from about 2020. Bulgaria and Hungary stand out with their exceptionally fast increase in construction costs (Figure 23).

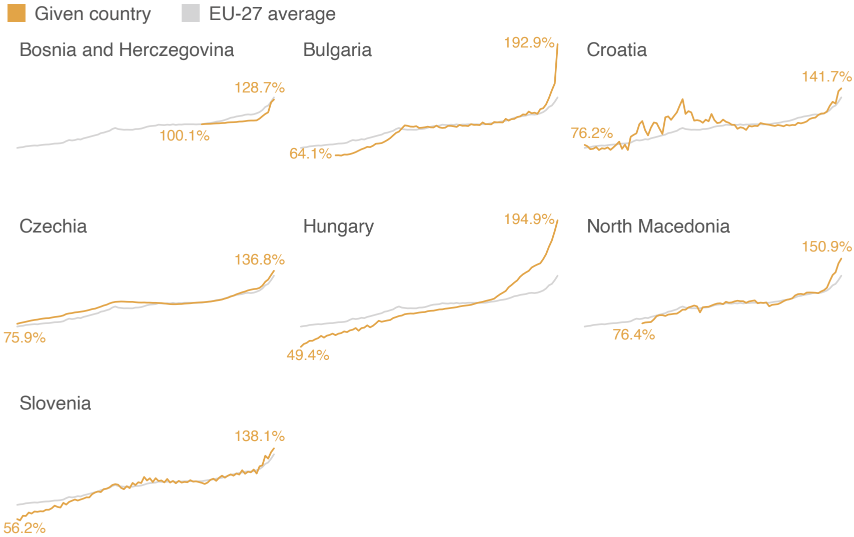
Altogether, we can conclude that **the entire Central and South-Eastern European region was experiencing a new period of housing market expansion between 2015 and 2021**, based on a household credit expansion characterized by rapidly increasing house prices.

Nevertheless, this does not mean there would be sufficient investment in the housing sector. As discussed in the previous sections of the report, housing quality is very low in the region, and the housing stock is in dire need of renewal.

Levels of investment in housing as a percentage of GDP fall far below the EU average in all countries of our research, with Croatia being the only one where this ratio is steadily increasing (Figure 24). Thus, to reduce the risks of housing market bubbles, **the solution should not be to invest less money in the housing market in these countries but to invest in a very different legal and organizational structure**.

FIGURE 23

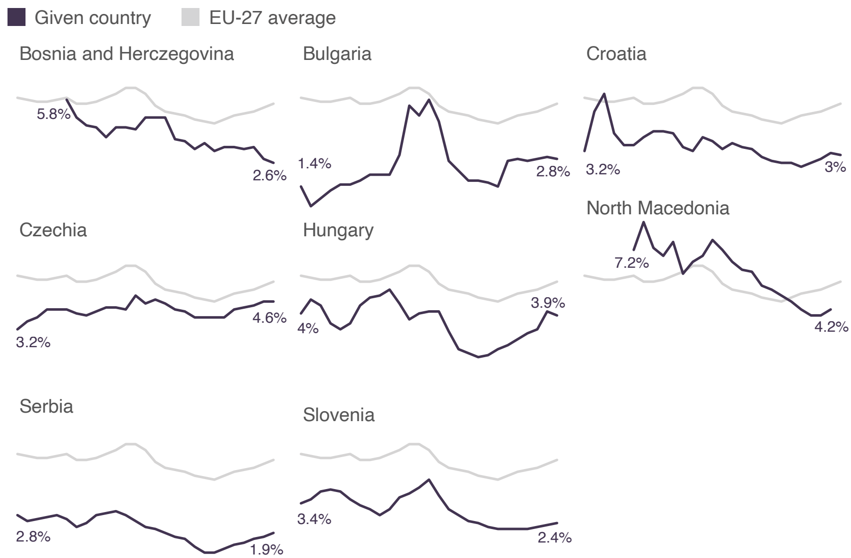
CONSTRUCTION COSTS OF NEW RESIDENTIAL BUILDINGS, 2000-2022, 2015=100%



Source: Eurostat 2022, Construction producer prices or costs, new residential buildings - quarterly data

FIGURE 24

INVESTMENT IN HOUSING 1995-2021 (% OF GDP)



Source: Eurostat, 2022: Gross fixed capital formation by dwellings (percentage of GDP)

Housing market characteristics in the global and long-term perspective

To understand the broader housing market dynamics of the Central and South-Eastern European region, we should zoom out from recent developments and understand the **volatile nature of Central and South-Eastern European housing markets from a longer-term perspective**. On the global scale, these peripheral European markets are characterized by the faster and higher return of investment expectations by financial actors.[45] This is due to the lack of institutional stability, a lack of institutions in long-term housing provision, and a high presence of foreign financial institutions expecting higher profits in these markets than their domestic ones.

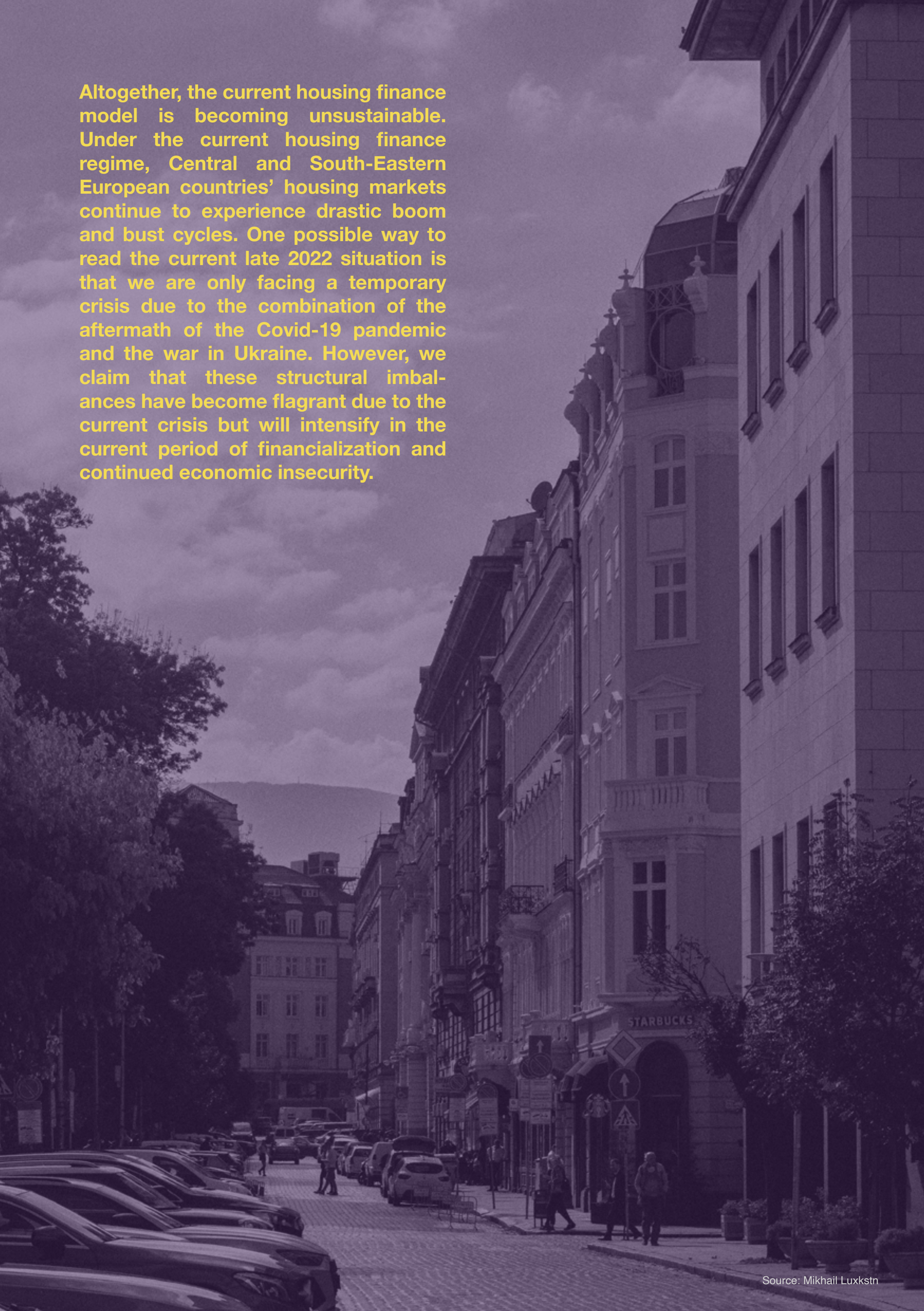
As a result, **Central and South-Eastern European housing markets experience more severe shocks in crisis periods**. For instance, in the aftermath of the 2008 crisis, housing transactions dropped, and mortgage lending practically froze. In several countries (such as Hungary and Croatia), a large-scale social crisis unfolded from household loans denominated in foreign currencies (mainly Swiss francs). With the crisis-induced devaluation of local currencies, the debtors found themselves in a situation where they would have had to repay several times higher amounts than originally expected.[46]

In 2015, when a new mortgage lending cycle started in Europe, these downward trends also reversed in the CSEE region. This was incentivized by the European Central Bank, urging banks to clean their portfolios from non-performing loans (NPL) they had been "carrying" since the 2008 crisis. In its Financial Stability Review from May 2015, the ECB gave a framework for "Resolving the legacy of non-performing exposures",[47] and then continued to step up in favor of the "workout" of non-performing loan portfolios. The ECB's final "Guidance to banks on non-performing loans" was published in March 2017.[48] In an ECB presentation on this Guidance, the strongly formulated phrase "Wait and see approaches often observed in the past cannot continue" can also be read.[49] During these years, many banks sold NPL portfolios to debt collector companies - which increased in size in the region during this period.[50] A new outflow of household lending could thus start, which was in some cases coupled with government programs promoting housing loans for households.

Since 2015, CSEE housing markets and new household credits have been rapidly expanding, leading to drastic house price increases and the ESRB warnings described at the beginning of the chapter.

45. Pósfai, Z. (2018) *Reproducing uneven development on the Hungarian housing market*, PhD dissertation, University of Szeged
46. For an in-depth analysis of the post-2008 debtors' situation in the region, see the texts published in the special issue: Gagyi, Á. and Mikus, M. (ed.s) (2022) *Housing Finance in the Aftermath of the Foreign-Currency Mortgage Crisis in Eastern Europe*, Critical Housing Analysis, vol.9, issue 1.
47. European Central Bank (2015) *Financial Stability Review*, p.146.
48. European Central Bank (2017) *Guidance to banks on non-performing loans*
49. European Central Bank (2018) *ECB Guidance to banks on NPL's*, World Bank Conference, Vienna, p.5.
50. Bródy, L. and Pósfai, Z. (2020) *Household debt on the peripheries of Europe: New constellations since 2008*, Periféria Working Papers nr 3.

Altogether, the current housing finance model is becoming unsustainable. Under the current housing finance regime, Central and South-Eastern European countries' housing markets continue to experience drastic boom and bust cycles. One possible way to read the current late 2022 situation is that we are only facing a temporary crisis due to the combination of the aftermath of the Covid-19 pandemic and the war in Ukraine. However, we claim that these structural imbalances have become flagrant due to the current crisis but will intensify in the current period of financialization and continued economic insecurity.



Source: Mikhail Luxkstn

1.3 Country digest - specificities of the eight observed countries

Following the regional-scale analysis in the previous section, we now highlight the specificities of the eight researched countries. These housing market characteristics are typical of the given country and could not be included in the previous comparative analysis. Beyond this, we also looked into the patterns of household lending in different countries.

Bosnia and Herzegovina

- The country consists of two entities and the Brčko District of Bosnia and Herzegovina. No legal or institutional framework, neither at the state nor entity level, consistently governs housing policy. Individual and uncoordinated interventions characterize the housing landscape.

- Between Q2 2018 and Q1 2022 the prices of new dwellings rose by 37%.[51] In the capital city of Sarajevo, prices are approximately 20% higher than the national average. In 2021 this was 1,452 €/sqm on average (aggregate data for new and second-hand dwellings (Figure 25).

- Energy poverty is a crucial problem in the country: most households (65%) are not connected to the electric grid or a building-level heating system, so they use wood stoves for heating. Only 1.8% of dwellings have insulation.[52] Consequently, an average household pays almost a third of their monthly income on utility bills and maintenance, the highest among the observed countries.

- There is a lack of affordable and quality rental units: according to official statistics, only 2.1% of the population is a tenant,[53] and they consider this a temporary solution until they inherit a dwelling or until they find a way to access a housing loan.

- There are currently two government initiatives to support access to homeownership for young couples, but they are very limited in capacity.

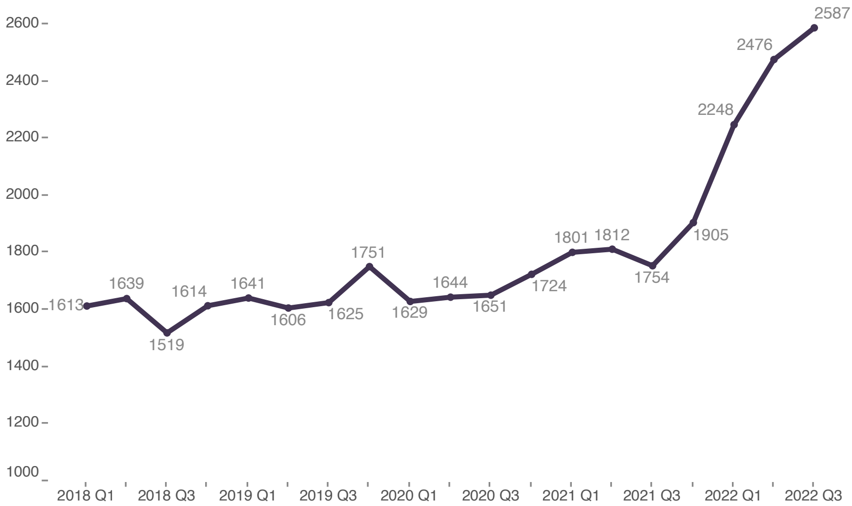
- Currently, the only housing finance instruments offered to households are commercial mortgage loans, provided by 15 banks. In addition, there are notable initiatives towards establishing microcredit organizations as a model of financial provision for those who cannot access these instruments.

- For households not creditworthy for a mortgage loan, the predominant way to access housing finance is a

51. Agency for Statistics of Bosnia and Herzegovina (2022) *Prices of New Dwellings Sold in Bosnia and Herzegovina, quarterly*
52. Marin Petrović, engineer and consultant at *ENOVA*, interviewed on March 24, 2022.
53. Agency for Statistics of Bosnia and Herzegovina (2015) *Household Budget Survey*

FIGURE 25

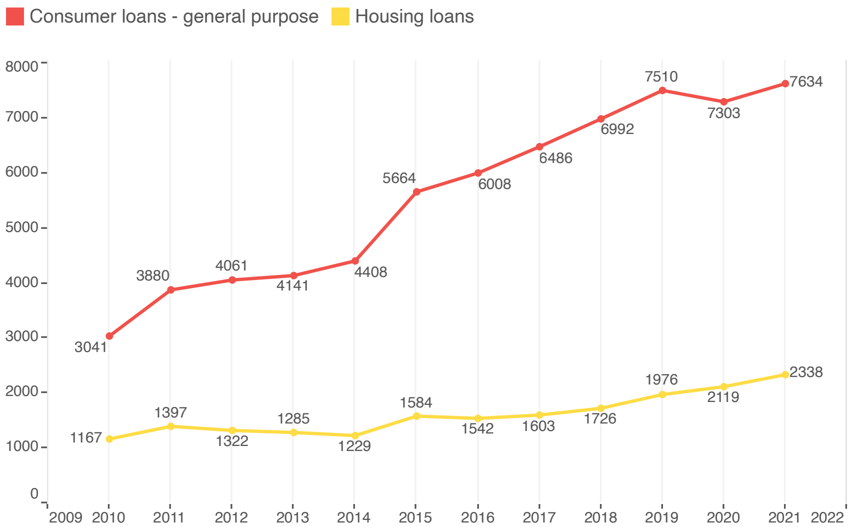
PRICES OF NEWLY CONSTRUCTED DWELLINGS SOLD IN BOSNIA AND HERZEGOVINA 2018-2022 (BAM/SQM)



Source: Agency for Statistics of Bosnia and Herzegovina, 2022

FIGURE 26

TOTAL OUTSTANDING HOUSEHOLDS LOANS IN BOSNIA AND HERZEGOVINA, BY PURPOSE (based on a sample, in millions of BAM)



Source: Central Bank of Bosnia and Herzegovina, 2022 consumer loan. In 2010 the volume of housing loans for households was 1,167 million BAM (ca. 600 million €), and by 2021 it doubled to 2,337 million BAM (ca. 1,200 million €). At the same time, general purpose consumer loans grew from 3,040 million BAM (ca. 1,560 million €) in 2010, to 7,634 million BAM (ca. 3,918 million €) in 2021, which is an increase of 151% (Figure 26).

Bulgaria

■ Bulgaria's predominant type of household is a single-person household (35%), a group more prominent than in any other observed country. Among these households, one-third are overburdened by housing costs.

■ There are significant housing quality and energy efficiency problems: by far, Bulgaria has the highest rate of dwellings without toilets among the observed countries (13.2%).[54] Additionally, 41% of households cannot keep their homes adequately warm, and 29% have arrears on utility bills.

■ While housing construction and housing transaction volumes are sharply increasing, the country is facing an alarming vacancy issue. The reasons are population decline and house purchases as an investment (Figure 27). According to the Bulgarian National Statistical Institute, 1.2 million housing units are vacant or "uninhabited", which is more than 30% of the country's housing stock. In the capital city, Sofia, over 20% of the units are vacant.[55]

■ Alternatives to hardly accessible homeownership are limited: the private rental market is barely existent and unregulated (this partly explains why vacant units do not appear on the rental market), and municipal housing units are very few.

■ The lowest-income households find their way through self-building in peri-urban areas, while the social groups with more means turn to the long-standing model of ownership-based housing cooperatives. This model might hold potential and needs further research.

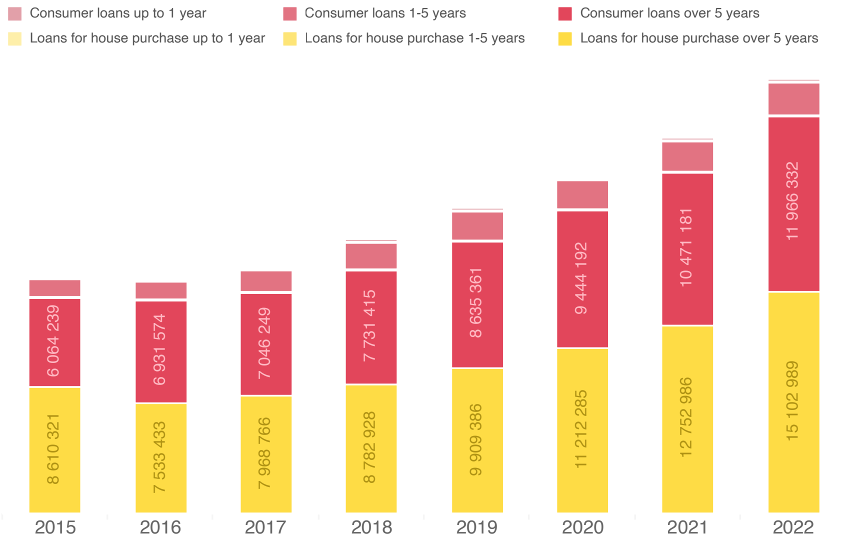
■ The total volume of household loans has been swiftly increasing in the past years. However, consumer loans had dominated household lending until now (specifically, by over-5-year consumer loans), with 2022 being the first year when the total volume of all housing loans exceeded that of all consumer loans.

■ The ESRB warned Bulgaria in early 2022, signaling housing market vulnerabilities due to the rapid increase in house prices and outstanding household loans.

54. EU-SILC (2020) *Share of total population not having indoor flushing toilet for the sole use of their household*
55. Dragomir Tzanev, local expert and Director of Center for Energy Efficiency EnEffect, interviewed on June 17, 2022.

FIGURE 27

TOTAL OUTSTANDING HOUSEHOLDS LOANS IN BULGARIA, BY PURPOSE (in thousand BGN)



Source: Bulgarian National Bank, 2022

Croatia

■ In Croatia, young people are the group with the most urgent need of housing. Almost 65% of 25-34-year-olds still live with their parents, which is, along with Serbia, the highest rate among the observed countries.

■ According to recent data, 41% of the population is at risk of poverty (when social transfers and pensions are not taken into account), and the most vulnerable categories are the unemployed and the elderly.

■ The rental sector in Croatia is very limited, highly competitive and barely regulated. The short-term rental platforms challenge the affordability of the rental sector, and there is a lack of regulation in this respect. While 8.7% of the population is recorded as a tenant, only 1.4% declares that they pay the market price; a large segment of the population lives for free or below market prices in relatives' or acquaintances' dwellings.

■ There are very few alternatives to the hardly accessible homeownership and rental market. Only 2% of the housing stock is public housing, and in Zagreb, there are only 7,265 dwellings owned by the municipality.

■ Croatia was among the few countries in the EU that experienced an increase in construction production in 2020. While the pandemic was expected to influence the housing market negatively, a series of earthquakes in central Croatia rendered a number of properties unusable, creating demand for non-damaged properties and new developments, which helped to offset the negative impact of the pandemic partially.[56]

■ There are two main governmental subsidies in the housing sector for households: a subsidized housing loan scheme and a social housing construction scheme. While the former contributes to the increase of housing prices and is accessible mainly to relatively well-off households, the latter produces low-quality dwellings. Thus neither of these can be seen as a solution to the affordability crisis.

■ In 2022 the European Systemic Risk Board (ESRB) issued a warning to Croatia, highlighting the rapid growth of real estate prices and the possible overvaluation of residential real estate, the level and dynamics of household indebtedness, and signs of loosening lending standards.

Czechia

■ The affordability of new housing in Czechia has been among the lowest in the EU for several years. It takes 11.4 average annual salaries to afford a new apartment, while in neighboring Germany, it takes 5 average annual salaries.

■ In total, half a million Czech households face one of three major housing problems: they are in need of housing, at risk of losing their housing or spend more than 40% of their income on housing-related costs.[57]

■ Regarding energy poverty, the elderly are an especially vulnerable group; up to 250,000 are at risk of it, paying more than 40% of their income for housing costs.[58]

■ Regarding housing costs burden, other vulnerable groups include single people, who spend 34% of their disposable income on housing costs, and single parents, who spend more than a third of their disposable income on rent, mortgages and other housing-related costs (35.4%).

■ Social rental dwellings account for only 0.4% of the total number of homes in the Czech Republic.

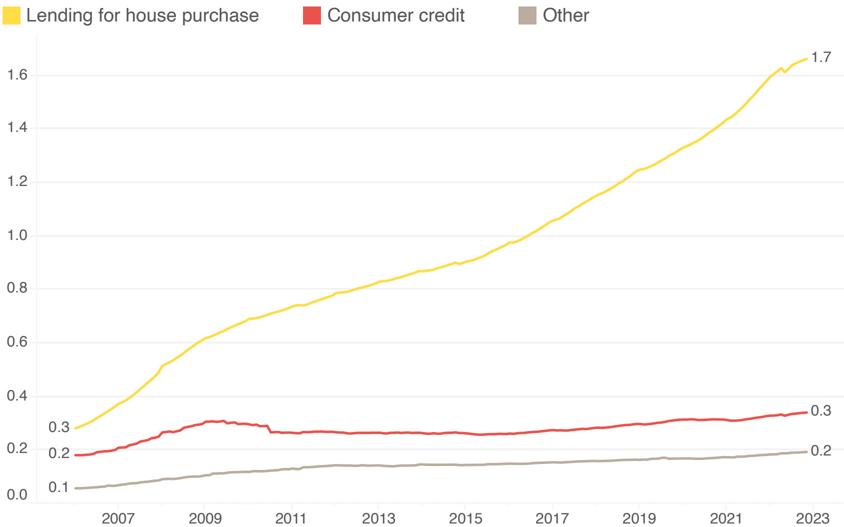
■ About one-fifth of Czech households have a mortgage, which is much higher than in other observed countries. Loans for housing purchase account for 78% of the total volume of household loans (Figure 28).[59]

56. European Mortgage Federation (2021) *Hypostat 2021: A Review of Europe's Mortgage and Housing Markets* 57. Platformu pro sociální bydlení, et al (2021) *Bydlení jako problém: Zpráva o vyloučení z bydlení 2021*
(Housing as a Problem: Housing Exclusion Report 2021)
58. Cesky Radio - *250,000 senior households are at risk of energy poverty*, 2022.03.29.
59. Czech National Bank (2022), *Banking statistics*

■ The municipalities of Prague, Brno, Liberec or Jihlava are attempting to support various collaborative housing models.[60] The national government has proclaimed support for this new collaborative housing model, and the Ministry of Regional Affairs is preparing a law on affordable housing to support it.

FIGURE 28

TOTAL OUTSTANDING HOUSEHOLD LOANS IN CZECHIA, BY PURPOSE 2005-2022 (CZK MILLIONS)



Source: Czech National Bank, July 2022

Hungary

■ According to the Hungarian National Bank analysis, by the end of 2021, house prices were overvalued by 18% nationally and by 15% in Budapest.[61]

■ In recent years, investor-buyers' presence has become very significant in the Hungarian housing market. Investment-purpose transactions jumped outside the capital city in mid-2021 and climbed to around 30% of all transactions by early 2022. Expectations are that as a result of increasing interest rates, investor-buyers will be less present on the market (Figure 29).[62]

■ The European Systemic Risk Board (ESRB) also issued a warning against Hungary in early 2022 due to its housing market vulnerabilities.[63] These vulnerabilities relate to quickly increasing house

60. See for example: *Participativní Bydlení – Zapojená Mesta* (Participatory Housing – Engaged Cities)
61. Hungarian National Bank (2022) *Housing Market Report*
62. Hungarian National Bank (2022) *Housing Market Report*
63. *Warning of the European Systemic Risk Board of 2 December 2021 on medium-term vulnerabilities in the residential real estate sector of Hungary*, 2022.02.11.

prices, the rapid expansion of new household loans, and a still high share of variable interest rate loans (almost 40% of credit issued still has interest rates fixed for less than one year).[64]

- State-subsidized loans are significant in the total lending volume to households. By the end of 2021, they represented a little over 30% of all newly issued loans, but by the first quarter of 2022, they were already 40% of all new loans (Figure 30).

- Between 2015 and 2021, the steepest increase in the housing price index among all EU member states was registered in Hungary. While the housing price index increased by 139%, net earnings only increased by 49% in this period. The trend is similar for rents: Hungary has the worst figure among all EU member states for the same period, with a 32% rise.

- 20-30% of the population experiences some form of housing poverty in Hungary, including middle-income groups. The most affected groups are young people, people living in market rentals and single parents.

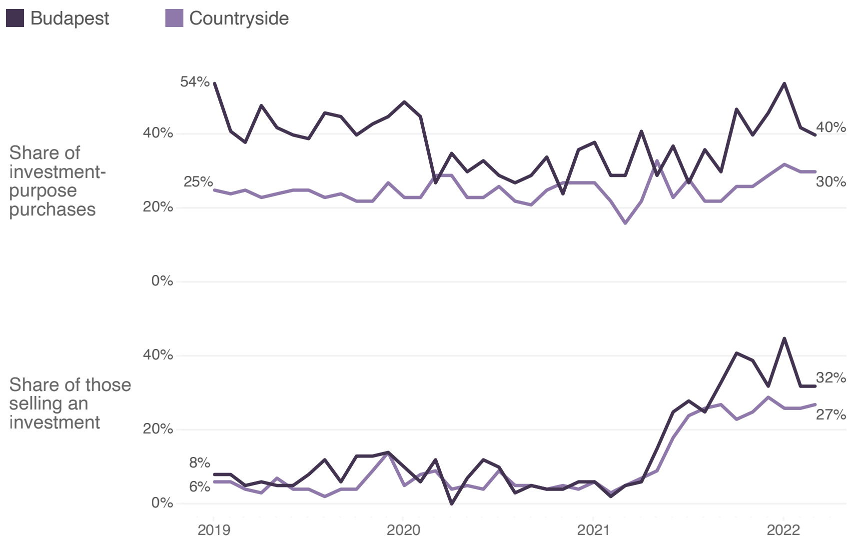
- 80% of the Hungarian housing stock does not reach the minimal technical and energy efficiency standards.[65] 22-25% of the households will face serious financial difficulties due to skyrocketing public utility prices.[66]

- Only 2% of the housing stock is part of the public housing sector in Hungary and only 4% in Budapest.

- There are small-scale initiatives that could form the basis of future governmental interventions or market investments in establishing the nonprofit rental sector in Hungary.

FIGURE 29

SHARE OF INVESTMENT-PURPOSE TRANSACTIONS IN HUNGARY, 2019-2022

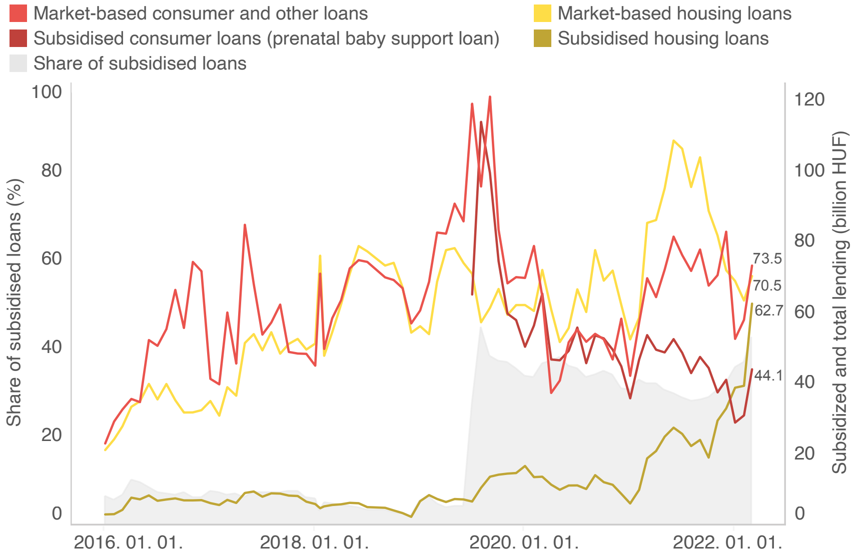


Source: Hungarian National Bank, Financial Stability Report, May 2022

64. *Warning of the European Systemic Risk Board of 2 December 2021 on medium-term vulnerabilities in the residential real estate sector of Hungary*, 2022.02.11.
65. Hungarian National Development Ministry (2015) *Magyarország Nemzeti Energiahatékonysági Cselekvési Terve 2020-ig* (National Action Plan until 2020 for Energy Efficiency)
66. 24.hu - *A háztartások döntő többségét érinti a rezsiemelés, negyedük veszélyeztetett is* (The majority of households is affected by the increase in utility prices, one fourth of them is at risk), 2022. 10. 20.

FIGURE 30

SUBSIDIZED AND TOTAL LENDING IN THE RETAIL SEGMENT IN HUNGARY (NEWLY CONTRACTED LOANS), 2016-2022, IN BILLION HUF



Source: Hungarian National Bank, Financial Stability Report, May 2022

North Macedonia

■ When looking at the number of housing transactions in a year per 1,000 people, the North Macedonian housing market is more dynamic than most observed countries. The most significant portion of these transactions is tied to properties in Skopje (in 2020, this was 63%).

■ The current production of new apartments offers low-quality and over-priced units while targeting investors and excluding those needing affordable and decent homes.

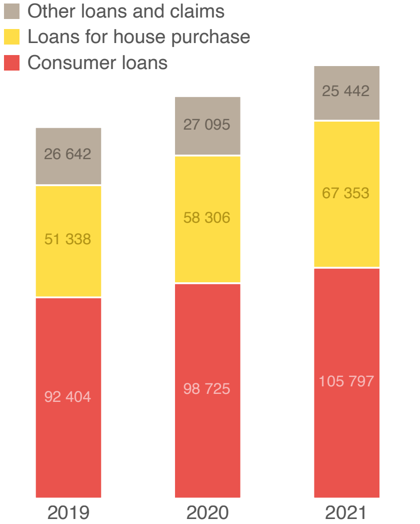
■ Housing market inaccessibility is especially problematic for the youth: in 2019, more than 60% of 25-34-year-olds still lived with their parents, one of the highest in the region.

■ Consumer loans dominate the retail loan market, but the penetration of housing loans has a more dynamic increase (Figure 31).

■ Most of North Macedonia's population faces energy poverty: 86% of households in the country use a stove for heating. The most vulnerable groups

FIGURE 31

LOANS TO INDIVIDUALS FROM BANKS AND SAVINGS HOUSES IN NORTH MACEDONIA (MKD MILLIONS)



Source: National Bank of the Rep. of North Macedonia, 2022

from this perspective are pensioners and single-parent families. They typically live in less energy-efficient buildings and spend most of their household budget on heating.

- Almost 15% of the country's population lives in illegally constructed buildings.
- There are notable efforts to develop financial models for residential energy efficiency and for building extension or construction by the nonprofit housing developer in the country, Habitat for Humanity North Macedonia.

Serbia

- In Serbia, housing construction and housing transactions have spiked, especially since 2015. Since 2015, the number of newly constructed units has risen by 56%; the total financial turnover in the Serbian real estate market increased by 47% between 2020 and 2021.
- Of real estate bought on the market, 87% is paid in cash, while only 13% required a mortgage. This indicates that a substantial part of real estate is bought for investment purposes - for speculation, rental or as a savings scheme.
- In 2021, almost half of bank loans approved to citizens were personal loans, and housing loans followed with 39% (Figure 32). Housing loans are predominantly in foreign currencies (Figure 33).
- More than half of the households in Serbia live in overcrowded dwellings, which is the highest rate in the region.
- Since the Russian invasion of Ukraine, a substantial influx of wealthy Russian and Ukrainian citizens (mainly from the IT sector) to Serbia has put significant

pressure on the housing market, particularly the rental market in Belgrade. As a result, rental prices in some parts of Belgrade doubled,[67] which makes access for Serbian citizens more restricted.

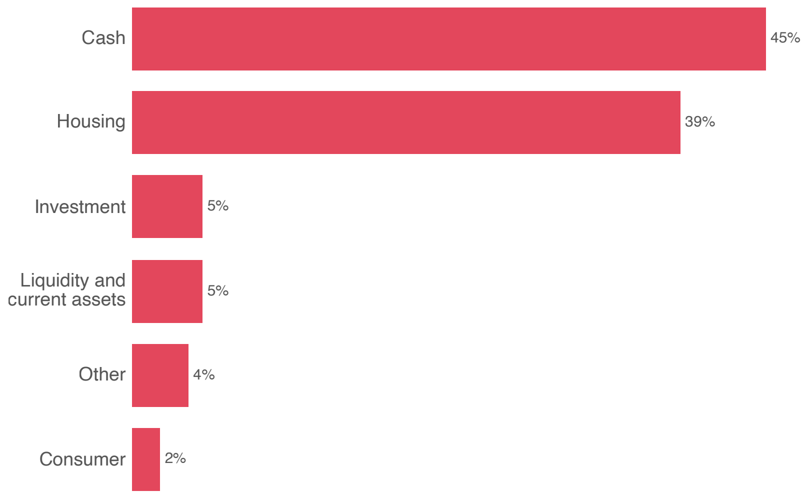
■ The group with the most urgent need for housing are young people: two-thirds of 25-34-year-olds cannot afford to leave their parents' homes - the figure that is, along with Croatia and North Macedonia, the highest among the observed countries.

■ It is estimated that 60-70% of the households in Serbia are affected by energy poverty. Energy-related services represent the most significant share of housing-related costs, 75%.

■ With an unaffordable and unsafe rental market, and almost no public housing options, many households in Serbia build their homes informally on the outskirts of the city. This is usually an option that condemns them to substandard living conditions. In Belgrade, more than 43% of the city's territory is occupied by informal settlements.

FIGURE 32

DISTRIBUTION OF BANK LOANS TO HOUSEHOLDS BY PURPOSE IN SERBIA IN 2021

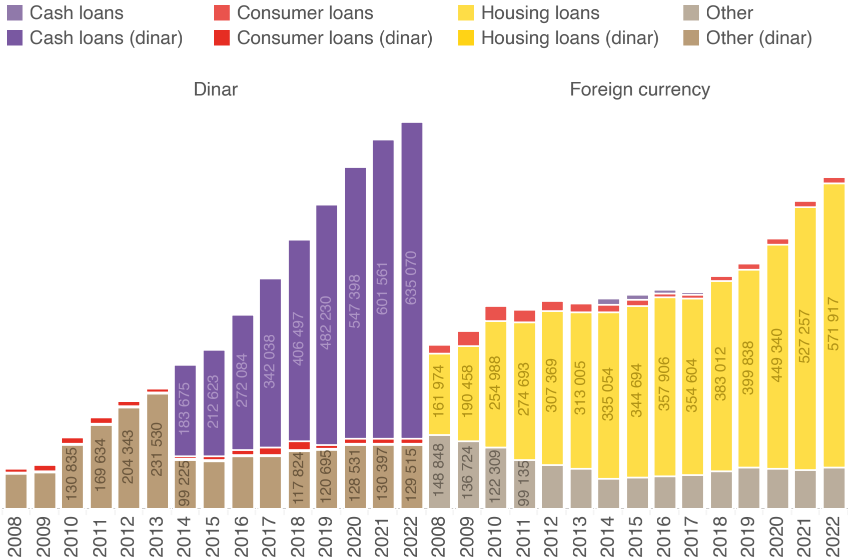


National Bank of Serbia, July 2022

67. Espreso.co.rs - *Cene divljaju, a svakog dana pola miliona nekretnina se rentira! Kako je to moguće?* (Prices are going wild, and every day half a million properties are rented out! How is it possible?), 2022.10.13.

FIGURE 33

VOLUME OF BANK LOANS TO HOUSEHOLDS IN SERBIA, 2008-2022 (IN MILLION RSD)



Source: National Bank of Serbia, 2022

Slovenia

■ House prices are sharply increasing: between 2015 and Q2 2022, house prices in Slovenia rose by 73%, while rent prices were the highest among the observed countries.

■ In December 2021, with favorable terms of financing and a downward trend in fixed interest rates in particular, lending growth reached the highest level in the last ten years, at a 9.1% year-on-year increase in volume (Figure 34).[68]

■ In Slovenia, 41% of young people aged 25-34 still live with their parents, unable to afford independence.

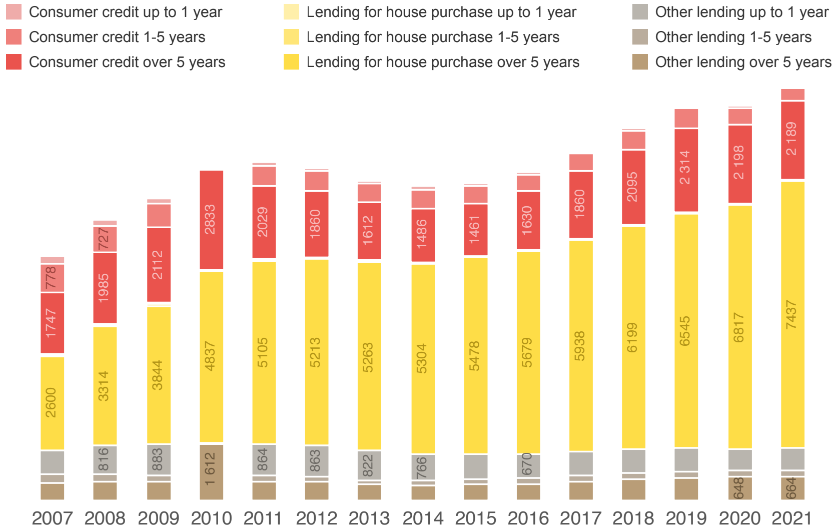
■ Another commonly vulnerable group are seniors that struggle not only with the prices of maintenance and utilities but also with the issues related to care and isolation. More than 43% of homeowners are older than 65, and more than half live alone. The number of senior single-person households has been steadily increasing: in 2011, there were 64,600, and in 2018 there were 74,800 such homes.

68. National Bank of Slovenia, *Annual Report 2021*

■ There is no substantial alternative to the hardly accessible homeownership, nor to limited and expensive rental homes. Public sector entities own only 5.4% of the total housing stock, and some minor public initiatives are far from being systemic solutions.

FIGURE 34

OUTSTANDING LOANS TO HOUSEHOLDS AND NON-PROFIT INSTITUTIONS SERVING HOUSEHOLDS IN SLOVENIA, 2007-2021 (IN EUR MILLION)



Source: Bank of Slovenia, Selected claims of other Monetary Financial Institutions, 2022

“For households not creditworthy for a mortgage loan, the predominant way to access housing finance is a consumer loan.”

Source: Olaf Spinner

2. Financial institutions and existing financial instruments

After analyzing the housing issues and unmet housing needs in the eight researched countries of the CSEE region, we now explore the currently existing housing finance landscape. First, we give an overview of the banking sector in these countries (section 2.1). Then, we provide a more in-depth analysis of housing finance instruments available to individuals (section 2.2) and to organizations / companies (section 2.3). We build on an overview of eight countries for the first part, and for the second and third parts on research done in the four core research countries (Croatia, Hungary, Serbia, Slovenia). This consisted of detailed desk research and interviews conducted with local actors and experts.

2.1 Financial institutions in the region

In the eight selected countries of our research (Bosnia and Herzegovina, Bulgaria, Czechia, Croatia, Hungary, Northern Macedonia, Serbia, Slovenia), we have identified the largest financial market actors present in the field of financial instruments for housing purposes. These actors are all large international banking groups.

We aimed to understand which international financial institutions have a regional presence in more than one country since their activity will highly influence how existing housing finance instruments are formed and deployed across countries. Thus, **we only included financial institutions with a multi-country presence among our researched countries**. Furthermore, we hope that developing relations with these actors would help tackle the issue of affordable housing in the region by establishing new financial instruments that could be deployed regionally. This could be especially important since ethical banks and socially oriented financial institutions barely exist in the region, and none would have instruments specifically for rental or cooperative housing.

We defined the most relevant financial institutions in the region by

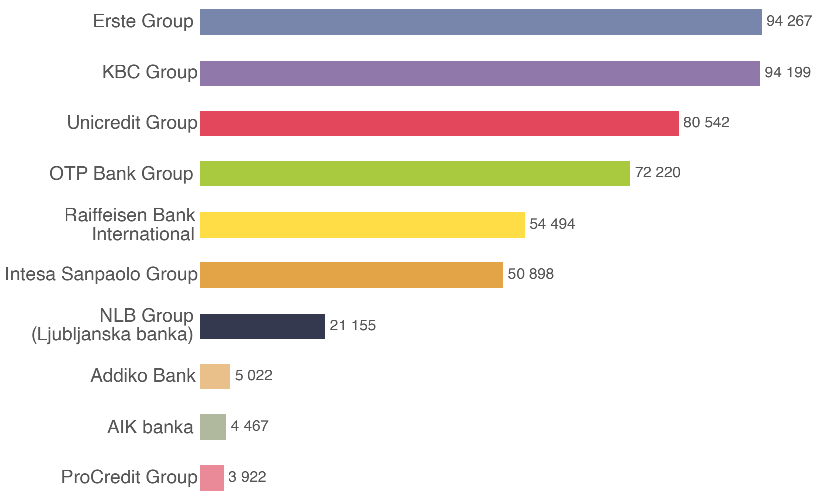
- the number of countries a given institution has presence in (through its subsidiaries),
- by the amount of total assets of the subsidiaries and
- by the amount of total net profit of the financial institution's subsidiaries in the region.

By applying these criteria, we found that **Austrian, Belgian and Italian banking groups dominate the market in the region**. If we look at all three criteria together, the most important financial actor in the region is the Austrian Erste Group (Figures 35-36), with total assets amounting to more than 94.3 billion €. Second is KBC Group with total assets amounting to 94.2 billion €, but with lesser presence in the region, with subsidiaries only in the Czech Republic, Hungary and Bulgaria (Figures 37-38). Erste Group lacks a subsidiary only in Bulgaria among our researched countries. Unicredit Group, similarly to Erste Group, lacks a subsidiary in Bulgaria, coming third in assets but second in profit in 2021 (934 million €), bested only by KBC Group (952 million €). Another Austrian group, Raiffeisen Bank International, holds fifth place by the total amount of assets (54.5 billion €) and by total net profit (565 million €) in the region, with subsidiaries in six countries. If we look at the banking groups that are native to the researched countries, the biggest and most influential one is the Hungarian OTP Group. Fourth by the total amount of assets (72.2 billion €) and also fourth in total net profit (796 million €), with a subsidiary present in Croatia, Slovenia, Serbia, Bulgaria and headquartered in Hungary, OTP Group could bring a lot to the table in creating new financial instruments for affordable rental housing in the region, should they be interested in rental housing solutions. Another bank native to the region is the Slovenian NLB Group which is present in Slovenia, Serbia, Bosnia and Herzegovina and North Macedonia, although holding less than a third of the total assets of OTP Group.

FIGURE 35

TEN LARGEST BANKING GROUPS IN THE OBSERVED COUNTRIES, RANKED BY ASSETS, END 2021 (in million EUR)

Note: the banks represented here are only the ones which have a presence in multiple countries of our research.



Source: Aggregated data compiled from publicly available financial statements

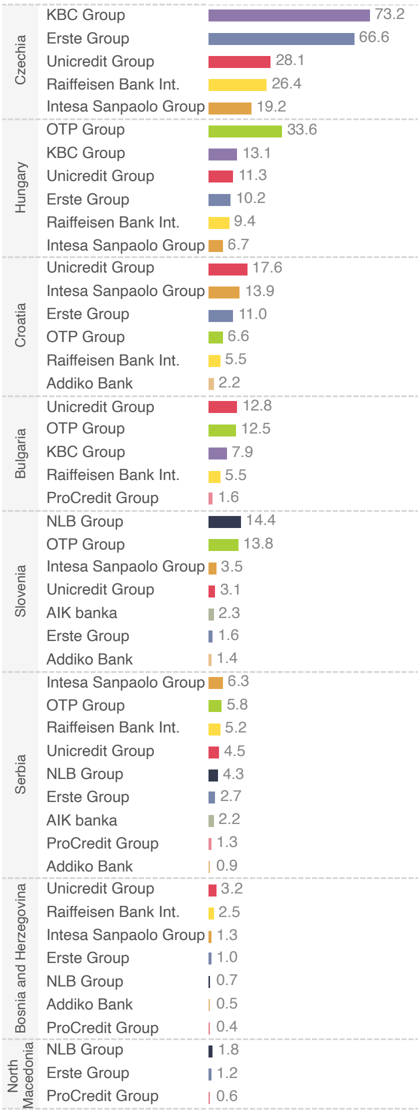
As presented in **Figures 35-38, there is a clear difference between the amounts of assets and net profits of the banking group's subsidiaries in different researched countries. These differences can be attributed to three main factors:**

- **The first factor is the market size in terms of the number of households.** The market size clearly dictates the maximum number of potential banking clients. Taking that into account, the difference between the amounts of assets and net profits of banking groups' subsidiaries in Czechia and Northern Macedonia could

FIGURE 36

TEN LARGEST BANKING GROUPS IN THE OBSERVED COUNTRIES, RANKED BY ASSETS, END 2021 (in billion EUR)

Note: the banks represented here are only the ones which have a presence in multiple countries of our research.



Source: Aggregated data compiled from publicly available financial statements

easily be understood since the population of Czechia is 5.7 times larger than the population of Northern Macedonia.

■ **The second factor is the volume of the economy of each researched country**. If we compare Czechia and Hungary, for example, there is almost no difference in the size of the market (1:1.05). Still, the difference between the amounts of assets and net profits of the banking group's subsidiaries is substantial. For example, Raiffeisen Group holds almost the same market share in Czechia (5.94%[69]) and in Hungary (6.57%), but the difference between the total volume of the assets that the Group is holding in Czechia is almost three times larger (2.81:1). The basis of these differences could then be attributed to the fact that the Gross Domestic Product (GDP) in Czechia is 50% larger than in Hungary.[70] With a bigger economy, the banking sector has a chance to develop a more differentiated portfolio and different financial instruments in cooperation with different types of credit institutions, thus creating a multiplier effect.

■ **The third factor represents international economic integration.** The separation line that is also visually well represented is the EU membership status of the researched countries. The harmonization of monetary, fiscal and customs policies with larger international markets plays a key role in the growth of the local financial markets. This can also be an explanatory factor of the overall smaller banking sectors of non-EU countries in our research.

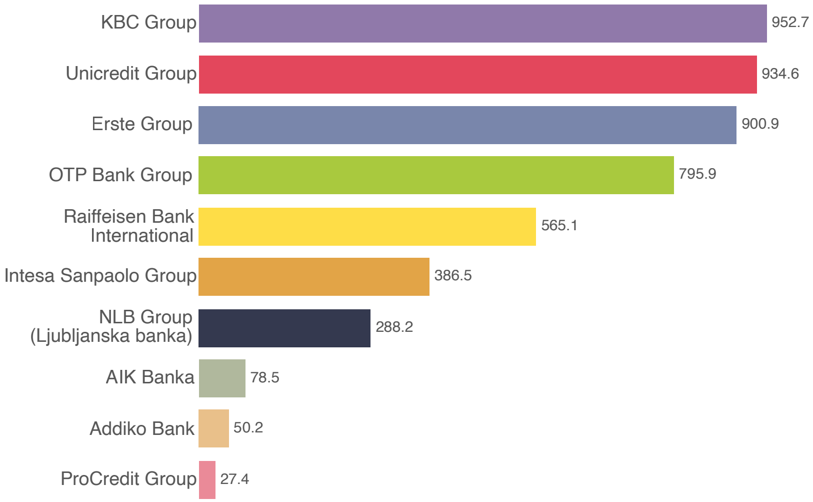
Zooming in on the four core countries of the research (Croatia, Hungary, Serbia, Slovenia), these countries' banking sectors are dominated by retail banks providing services to households and domestic businesses.

69. Raiffeisenbank a.s. – *Consolidated annual report 2021*.
70. IMF Datamapper GDP in current prices – for *Czechia*, for *Hungary*

FIGURE 37

TEN LARGEST BANKING GROUPS IN THE OBSERVED COUNTRIES, RANKED BY NET PROFIT, END 2021 (in million EUR)

Note: the banks represented here are only the ones which have a presence in multiple countries of our research.



Source: Aggregated data compiled from publicly available financial statements

Among them, there is an important share of foreign-owned banks; with foreign ownership being predominant in Serbia and Croatia (in the latter above 90%, with only one more important domestically owned bank), while in Slovenia foreign and domestic ownership are largely balanced. In Hungary, there was an important shift in the share of foreign ownership in the banking sector during the 2010s due to the policies of the successive conservative governments, with foreign ownership decreasing from around 70% in 2008[71] to around 40% by 2020.

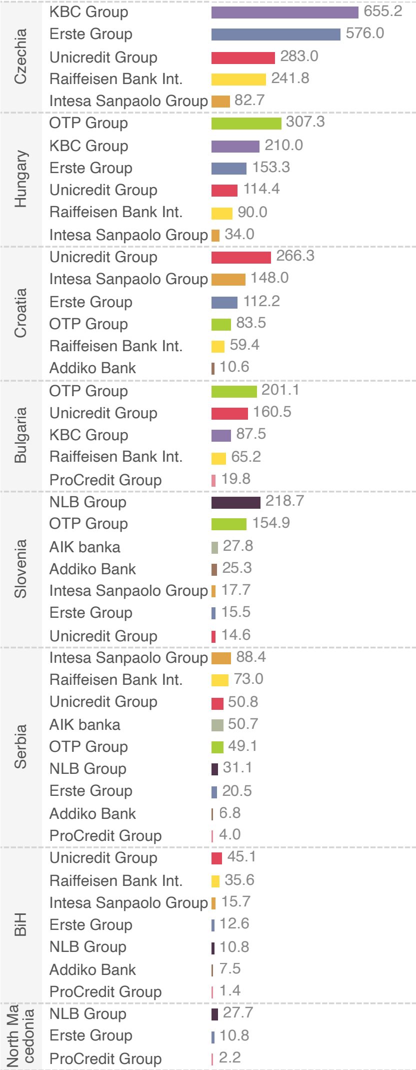
The size of the financial sector varies significantly among the four countries. Hungary has the most diverse and extensive financial sector, with 41 financial institutions as of the end of 2021. Out of these, 21 are commercial banks. The number of commercial banks is similar in Serbia (21)[72] and Croatia (20)[73] - but the number of other financial institutions is smaller in these countries. Slovenia has 16 financial institutions altogether. The profitability and capitalization of the banking sectors in the four countries is high. The after-tax net profit of the banking sector doubled in Croatia and Hungary in 2021 compared to 2020.[74] During the same period it increased by 19% in Slovenia[75] and 17% in Serbia.[76] However, these significant increases in profitability were also due to the economic and financial rebound after the Covid-19 pandemic, and cannot be expected to be sustained, especially in the current context of inflation and escalating interest rates.

71. Banai, Á. – Király, J. – Nagy, M. (2010) *Az aranykor vége Magyarországon* (The end of the golden age in Hungary), Közgazdasági Szemle, vol. LVII.
72. National Bank of Serbia – *List of banks*
73. Croatian National Bank – *List of credit institutions*
74. Croatian National Bank, Annual report 2021., Hungarian National Bank, Annual report 2021.
75. National Bank of Slovenia, Annual report 2021.
76. National Bank of Serbia, Annual report 2021.

FIGURE 38

DISTRIBUTION OF THE SUBSIDIARIES OF THE TEN LARGEST BANKING GROUPS IN THE OBSERVED COUNTRIES, RANKED BY NET PROFIT, END 2021 (in million EUR)

Note: the banks represented here are only the ones which have a presence in multiple countries of our research.



Source: Aggregated data compiled from publicly available financial statements

"The size of the financial sector varies significantly among the four core research countries."

Source: Miklós Gabriel

2.2 Currently available housing finance instruments for households

Mortgage loans for housing purposes are the most common form of housing finance available to households in the four core countries of our research. These products are fairly standardized and often supported by different state subsidies. Understanding this segment is mainly important from the perspective of our research to identify the social groups that would not have access to these products, and would thus represent a potential target group for different types of solutions.

The regulatory framework of household debt

The regulatory framework of household debt varies substantially from country to country. **The main criteria are to have a sufficient (and legal) income level and to be able to offer enough collateral**. Generally, the more significant restriction on an individual's loan amount is represented by the **PTI (payment-to-income) requirements**, which determines the maximum amount of the monthly debt service compared to income. For this reason, it is also called a DSTI ratio: debt-service-to-income. As we will also see in the analysis of survey results later on, most experiences of a loan refusal are because of insufficient income levels.

In Hungary, payment-to-income (PTI) and loan-to-value (LTV - the share of the whole property value covered by the loan) levels are strictly regulated since 2015. The limitation on PTI is that the monthly installments for repaying the loan (any loan) can be maximum 50% of legal income (up to 500,000 HUF, that is, about 1200 € net income / month), or maximum 60% (above this income threshold).[77] The general rule of thumb in terms of collateral is that the issued loan can be a maximum of 80% of the value of the property in urban areas (in less active housing markets this loan-to-value ratio is lower).

The other three core countries of this research later also implemented such limitations. In Croatia, the maximum amount of the loan is only restricted by a minimum income level to be left beyond debt service. In the case of consumers with a salary below or equal to eight-ninths of the average net salary in Croatia, the maximum DSTI ratio amounts to 25%.[78] However, LTV values can exceptionally be up to (or even exceeding) 100% in Croatia. Usually, the loan can amount to 80% of the estimated market value of the property, except for Zagrebačka banka and Raiffeisen bank, where the maximum loan can amount even up to 95% or up to 100% of the estimated market value of the property.[79,80] In Slovenia, there are restrictions on household lending in place since 2019[81] (and amended in 2022[82]): a person could only get a loan if after the repayment

77. Hungarian National Bank – *Adósságfék szabályozás* (Debt brakes regulations)
78. Croatian National Bank – *Macroprudential Diagnostics* No.15.
79. Zagrebačka banka – *Opće informacije o stambenom kreditu u eurima* (General information on housing loans in euros), 2022.08.01.
80. Raiffeisen Bank – *Flexi stambeni krediti u EUR* (Flexible housing loans in euros)
81. National Bank of Slovenia - *Bank of Slovenia tightens measures in the area of household lending*, 2019.10.28.
82. National Bank of Slovenia – *Macroprudential restrictions on consumer lending (in force from 1 July 2022)*, 2022.05.24.

of the monthly credit installment they are left with at least 76% of the minimum gross salary, plus a predefined amount in case they are a carer of a dependent family member. Recommended (but not legally binding) maximum LTV is 80% in Slovenia.[83] In Serbia, there is no legal limitation, but the average LTV ratio for the initially secured housing loans with the National Mortgage Insurance Corporation was 65.5% in 2021.[84] Overall, around 20-30% own capital (or downpayment) is required to take a housing loan in countries of the region.

These regulations limit the size of a loan an individual or a family might be able to secure. The maximization of monthly installments (PTI regulation) means that with a lower income, the loan reimbursement period becomes longer, contributing to the increase in the actual cost of the loan. PTI limits can also mean that households can only take smaller loan amounts to be able to cover monthly installments. Thus, they need to be able to provide more downpayment for the property they want to buy, which favors households with more savings or more family support. Since stronger PTI limitations lead to lower loan amounts, LTV regulations often do not practically limit lending in these contexts. However, in other cases, it is rather LTV limitations that can be more important. An example of this is the case of Slovenia, where we discovered during our research that if the borrower has a sufficiently high income, the banks will enable access to other loans complementary to the mortgage loan, thus decreasing the downpayment potentially to 0%.[85]

Market-based housing finance products

Most market-based housing finance products for individuals are **standard mortgaged housing loans**. In the four core countries, it is very rare to have mortgages with fixed interest rates until the end of the repayment period. Usually, the interest rate is only fixed for a part of the loan duration (e.g. in Croatia most often for 5 years[86,87,88]). In Croatia, we found a few mortgage products with fixed interest rates up to 15 years,[89,90,91] and in Hungary fixed interest rate loan products have become more widespread. Among new loans in 2022, almost 60% had a fixed interest rate for the entire loan duration. This is a welcome shift because the 5 or 10-year fixed interest loans later on transform to variable interest rates, which shifts the risks of economic changes onto debtors.[92] Generally, loan durations are maximum 20-30 years, but on average, they are shorter (e.g. in Hungary, average 13 years[93]). In Serbia, at the time of research (September 2022), variable nominal interest rates of approx. 3-4% plus three-month EURIBOR were the most common. Interviewees from the banking sector perceive the competitive difference between actors as mainly expressed in the offered processing time

83. European Systemic Risk Board (2022) *Vulnerabilities in the residential real estate sectors of the EEA countries*; information on different country regulations in the country profiles in the second half of the document.
84. National Bank of Serbia, Annual Financial Stability report 2021
85. Informal interview (commercial bank, bank teller)
86. OTP banka Croatia – *Stambeni krediti* (Housing loans)
87. Hrvatska poštanska banka - *Stambeni kredit s kombinacijom kamatnih stopa* (Housing loans with different interest rates)
88. Erste Bank Croatia – *Stambeni krediti* (Housing loans)
89. Zagrebačka banka – *Opće informacije o stambenom kreditu u eurima* (General information on housing loans in euros)
90. Raiffeisen Bank – *Flexi stambeni krediti u EUR* (Flexible housing loans in euros)
91. Privredna banka Zagreb (PBZ) – *Opće informacije Stambeni krediti* (General information on housing loans)
92. Hitelnet.hu – *Otthonteremtési támogatott hitel* (Subsidized loan for home purchase)
93. Hungarian National Bank (2022) *Housing Market Report*, p.31.

of mortgage requests from clients, and not so much in interest rates. However, as discussed in section 1, in the context of the current unfolding economic crisis, interest rates increased in all countries of our research. Costs of fixed-interest rate loans have especially gone up due to the uncertainties of the upcoming period. In Slovenia, two banks (BKS and Sparkasse) even decided to take fixed interest rates off their offer during the summer of 2022.[94]

In terms of loan purpose, we can distinguish loans for purchasing property and for renovation or reconstruction. In Serbia, the market has shifted from mortgages taken for renovation and reconstruction (dominant in the period 2000-2010) to mortgages taken for buying housing units. As a result, during the past years, the ratio of loans for renovation has significantly fallen.

Another important aspect is the currency indexation of loans. Loans denominated or indexed in foreign currencies (FX loans) are widespread in the region, which means that borrowers are constantly vulnerable to changes in exchange rates. FX housing loans were banned in Hungary in 2012, due to the social crisis they caused in the aftermath of the 2008 crisis. In many other countries, however, they are still predominant. For instance, in Serbia, all mortgage loans are indexed in €.[95] This has not caused significant problems so far because the Serbian dinar has not fluctuated so much compared to the euro in the past decade (since it is fixed within a band), but an economic crisis can create problems of repayment.

Besides regular housing loans secured with a mortgage, some banks offer **eco or green loans**. In Croatia, these are characterized by more favorable interest rates for financing low-energy residential real estate.[96,97] In Hungary, there was a subsidized green loan product available until the summer of 2022, but since the cheap central bank refinancing was stopped, banks have not introduced such a product on a market basis. In Serbia, since recently, the GEFF (Green Economy Financing Facility) in partnership with ERSTE and Procredit banks, has been offering limited credit lines for energy efficiency measures in existing buildings. This is backed up through grant funds from the European Union, the Republic of Austria and the Western Balkans Investment Framework.[98] This includes an investment subsidy of 15 to 20% of the investment, depending on the number of eligible technologies used to improve energy efficiency in an individual house, and up to 35% in the case of groups of individuals or housing associations. In Slovenia, sustainability loans are one of the innovative products with which banks seek to improve their competitive position. They offer favorable housing loan conditions to customers who are constructing their house with sustainable materials, implementing heat pumps, integrating solar cells or implementing similar environmentally sustainable solutions.[99]

94. Slovene Consumers’ Association. (2022) *Stanovanjski krediti: vse višje fiksne obrestne mere in vse bolj okrnjena ponudba* (Home loans: higher and higher fixed interest rates and an increasingly reduced offer)
95. According to the all-time middle exchange rate of the National Bank of Serbia (NBS).
96. Zagrebačka banka – *Green Home Loans*
97. Erste Bank Croatia – *Housing Loans Without a Mortgage*
98. Green Economy Financing Facility – *Grant Support*
99. Interview 8

Until a few years ago, **housing savings banks** were also important institutions of the housing finance landscape in the region. This is a mechanism under which individuals contribute regular savings, and after a predetermined period, are eligible for a state subsidy adding on a certain percentage to the housing-purpose saving. Additionally, savers are eligible for preferential housing loans from the savings bank. The accumulated savings can only be used for housing purposes. These institutions were established in the second half of the 1990s in our core research countries, but by now have mostly been drained of their advantages by state subsidies being cut. In Croatia, state subsidies initially amounted to 25% of the savings. Throughout the years, it was gradually lowered and finally dropped to 0.3% in 2021.[100] In Hungary, the state subsidy added 30% to the savings of the individual until 2018, when this type of subsidy was entirely canceled for new contracts.[101] The mechanism still exists, but has become much less popular without the incentives. The cut of subsidies is problematic because this scheme was very accessible also to lower-income savers or to households who do not fulfill the child-based criteria of other, more widespread state subsidies.

Besides housing loans, **free-use mortgage loans** also exist in the four core countries, although they are not nearly as widespread as in the US. Before the 2008 crisis, they were more common, but since 2008 people have become more aware of the risks of these loans.

The Hungarian Central Bank also has the "Certified Consumer Friendly Housing

100. Ministry of Finance, Croatia – *Housing savings*
101. Bank360.hu - *Lakástakarékpénztárak: mi várható az állami támogatás megszűnése után?* (Housing savings banks – what to expect after the end of state subsidies?), 2022.10.11.

Source: Zsombor Katona

Loan" **certification**. The housing loan product of a bank can receive this certification if it fulfills certain requirements, such as having equal installment payments, a fixed interest rate for at least 5 years, an interest rate premium of maximum 3.5%.[102] A mechanism in Serbia aiming to increase the security of debtors is the National Mortgage Insurance Company (Nacionalna Korporacija Za Osiguranje Stambenih Kredita, or NKOSK), which was created in 2004. This institution provides mortgage guarantees and securities to debtors, but it has not been very popular because it adds 1.5-3.5% of the loan amount to the costs of the mortgage.

Generally, mortgages are important in a commercial bank's portfolio because they are perceived as a sort of gateway service which will tie the client to the bank for a more extended time and thus enable the bank to gather fees by providing other services. This way, a bank is prepared to offer a relatively low interest rate as it will compensate or even profit from it in the long run.

State subsidies linked to mortgage loans and home acquisition

Governments of the four core countries in this research usually promote individual ownership-based forms of housing, which also contribute to housing market volatility when these subsidies are applied procyclically. **In all investigated core countries, public spending on housing is either very minimal or is focused on supporting access to homeownership. These programs usually feature subsidies for specific groups of home-buyers linked to subsidized mortgage schemes**. These measures do not help in "evening out" the region's volatility of market-based housing finance. On the contrary, they can contribute to deepening it by withdrawing costly subsidies precisely during crisis periods. Among the core research countries, subsidized loans represent a very important share of total lending in Croatia (35% in 2020),[103] and in Hungary (31% in 2021).[104]

Target groups of housing subsidies and subsidized loans are usually young couples, with some variations in the precise criteria.

Hungary has the **most widespread and largest scale system of subsidies related to homeownership** among our core research countries, and these are almost all **tied to the number of children** in the family. Subsidized loans are generally very important in the Hungarian market of housing loans; according to several of our interlocutors, general housing-purpose lending has historically always been determined by state subsidies.[105] The current cycle of state subsidies for housing purchase and the linked subsidized mortgages started to be rolled out at the end of 2015. This "new" form of subsidy is essentially similar to the one that existed since the early 1970s and was stopped in 2009.

102. *Hungarian Certified Consumer Friendly Loans*
103. *Warning of the European Systemic Risk Board of 2 December 2021 on medium-term vulnerabilities in the residential real estate sector of Croatia*, 2022.02.12.
104. Hungarian National Bank (2022) *Housing Market Report*
105. Interview 1, interview 2

The general pattern is for the state to give a non-refundable subsidy, allowing access to a subsidized loan. Besides having children, these subsidies usually also require a long-term regular employment status and, in the case of a loan, sufficient downpayment capacity, and thus favor middle-class households. Furthermore, they incentivize buying newly constructed housing - which is more expensive- and channel the subsidies towards real estate developers. The specificities of the different products are summarized in the text box below.

Source: https://pxhere.com/hu/photo/741280

Criteria of housing subsidies and subsidized loans in Hungary

Home Purchase Subsidy for Families

- Available for: couples (if the debtor is married or in a legal partnership) and single parents with children (under 40 years of age: also for promised children)
- Amount of subsidy: depends on the number of children and on the building (new/existing), max 25,000 €

Subsidized loan with the Home Purchase Subsidy

- Available for: recipients of the above subsidy who have (or promise to have) at least two children
- Interest rate: fixed 3% for the whole loan duration
- Loan amount: maximum 25,000 or 37,000 € (depending on the number of children)

Home Renovation Subsidy

- Available for: couples or single parents with at least one child
- Subsidy amount: maximum 7,500 €
- Covering a maximum of 50% of renovation costs
- Post-financed

Subsidized home renovation loan

- Provides pre-financing for the Home Renovation Subsidy
  - Loan criteria adjusted to the subsidy criteria

Green Home Program

- Available for: purchasing newly built housing (or building housing) with a very high (BB or higher) energy performance
- Was available between October 2021 and May 2022
- Interest rate: fixed 2.5% for the entire loan duration
- Loan amount maximum 170,000 €
- Very popular, especially among higher-income individuals. In the second quarter of 2022, this loan product accounted for 33% of all newly issued housing loans, and 85% of loans issued for a newly constructed property.[106]

Baby Expecting Loan

- Free-purpose consumer loan (but many use it for housing purposes)
- Available to: married couples, before the baby is born
- Interest rate: 0%, if the expected baby is born (if not, after 5 years, it transforms into a market-based consumer loan, and a penalty must also be paid)
  - After the second child: one-third of the loan capital is transformed into a subsidy
  - After the third child: the entire remaining loan capital is transformed into a subsidy
- Loan amount: maximum 25,000 €
- In June 2022 accounted for 18% of the total outstanding loan volume among households.[107]

In **Croatia**, there are two subsidized loan programs. In the first, commercial banks offer subsidized loans for real estate built by the government-owned property management company (APN) as **socially encouraged housing construction** (commonly known as the POS program). In the second program, banks offer subsidized loans (subsidized interest rates for the first 5 years of the loan) **for young families under the age of 45**, for their first real estate which can be bought on the free market.[108] In 2022, five banks (Erste & Steiermärkische Bank d.d, Hrvatska poštanska banka d.d., OTP banka d.d., Privredna Banka Zagreb d.d. and Zagrebačka banka d.d.) were partnering with APN in the POS program[109] and fourteen banks in total were participating in the subsidized loan program.[110]

106. Hungarian National Bank (2022) *Lending processes*
107. Hungarian National Bank (2022) *Lending processes*
108. Moj-Bankar.hr - *APN subvencionirani krediti za mlade 2023 - vodič, uvjeti, koraci* (APN subsidized loans for youth 2023 - guide, conditions, steps)
109. APN.hr - *Put do stana* (Way to the home)
110. Croatian Ministry of Spatial Planning, Construction and State Property - *Objavljen popis banaka koje će provoditi subvencionirane stambene kredite* (Published list of banks that will implement subsidized housing loans), 2022.04.03.

In **Serbia**, a widespread **interest rate subsidy** was in place on housing loans between 2005-2010, which was accessible to anyone who did not have other property. The Serbian government soon realized that this measure was counterproductive since it increased the effective demand and, due to insufficient or insufficiently qualitative or affordable supply, pushed up the prices of apartments on the market. Also, this measure meant more subsidies were channeled to banks rather than the population. **As soon as interest rates fell (after 2010), the measure was rendered meaningless and was stopped** (except for members of the army, for which it lasted for another 2-3 years). Interestingly, **subsidies on housing loans had similar effects in other countries as well**, but this had not stopped their implementation in other cases.

Currently, only **direct grants linked to home acquisition** exist in Serbia (which were introduced rather recently), not subsidized loans. The first of these grants is for **acquiring ownership of a house in a rural area**. This program was launched in 2021 **for married couples and common-law partners**, one of whom is **not older than 40**. The amount of requested funds cannot exceed 1,000,000 RSD (8,500 €). The available funds are quite limited: for example, in the region of Vojvodina in 2021, the total available funds were only sufficient for 25 households.[111] The second type of subsidy is **for mothers** for the acquisition of homeownership and is allocated at the **birth of a child**.[112] This program was introduced in February 2022. The maximum amount of funds is 20,000 €, and can cover a maximum of 50% of the total costs in the most underdeveloped regions and 20% in other areas. The third subsidy program is for **young people under 40 years of age**, who buy housing with the loan of NLB Komercijalna banka. This program can be considered to be more of a marketing hook than an objective support measure since the grant amount is only 30,000 RSD (255 €), and it was only offered for a limited amount of time in 2022. Altogether, the current level of subsidies in Serbia is highly insufficient to answer the needs of those who can not independently resolve their housing situation.

In **Slovenia**, the state does not offer direct subsidies for purchasing housing, but some mechanisms are available to different groups of citizens. Firstly, people can acquire a direct subsidy from the national **Eco Fund for energy-efficient construction**. The subsidy amount is connected to the efficiency level that the investment will result in, and the Eco Fund also provides favorable loans for the part of the investment related to energy efficiency. However, the subsidy and the loan apply only to the solutions related to increased energy efficiency and not the entire investment.[113] Secondly, several **municipalities** across Slovenia have established various subsidy mechanisms that help their citizen-inhabitants to gather small subsidies when buying or building housing, for example subsidies of the interest rates for a housing loan.[114]

111. Rtvbap-rs - *Allocation of grants for the purchase of country houses*, 2021.08.11.
112. Implemented on the basis of the Regulation on conditions and methods of exercising the right to funds for construction, participation in the purchase, i.e. the purchase of a family-residential building or apartment based on the birth of a child: adopted on the basis of the *Law on Financial Support for Families with Children*
113. Slovenian Environmental Public Fund (Eco Fund) – *Subvencije in ugodni krediti za okolju prijazne naložbe* (Subsidies and favorable loans for environmentally friendly investments), 2022.10.23.
114. Municipality of Nova Gorica – *Javni razpis za subvencioniranje obrestne mere in stroškov najetih stanovanjskih kreditov občanov Mestne občine Nova Gorica* (Public tender for subsidizing the interest rate and costs of mortgaged housing loans for citizens of the Municipality of Nova Gorica), 2022.10.23.

Furthermore, in 2022 the Slovene government introduced a **guarantee scheme for young people** (under 38 years of age), supporting their access to a housing loan. Applicants need to fulfill one of the following criteria: be a member of a young family, or have a status of an employed person for an indefinite or definite period of time with an average net income below 1.5 times the average net salary in Slovenia.[115] The guaranteed loan can be maximum 200,000 euros, with an amortization period of maximum 30 years, and needs to serve the first property acquisition of the debtor. This scheme is supposed to be in place until 2032 and is operationalized through commercial banks that were selected by SID Bank (the promotional development and export bank, 100% owned by the Republic of Slovenia) through an auction process.[116] This mechanism and the legal adjustments made for its implementation[117] now allow for somewhat expanded lending to what is considered higher risk customers.

The rationale for the above Slovenian program is that clients with low income, no, or little property have no or almost zero chances to get an individual housing loan because banks perceive them as too risky. However, banks recognize that these people are now paying rent, which is often higher than the amount of a loan installment. Banks are also interested in expanding housing-related individual products, because of high cross sale. This means that together with the borrower they also get their families as a customer, while it becomes easier to sell them other products.[118]

It is common to all of the above programs that they usually only **support creditworthy individuals**. The main loan-testing criteria are income levels and downpayment capacity (which are legally regulated in most cases), but banks can also employ stricter criteria than the legally required minimum. Often, specific creditworthiness criteria will include the type of employment, age or family status. Thus, middle-class families with stable and regularized incomes can primarily benefit from them. **As a result, social groups who can have access to market-based loans are also the ones who can enjoy the benefits of state subsidies**, while others are left unserved.

This tendency is further intensified by the fact that different subsidy programs are most often implemented by commercial banks, who have a vested interest in increasing their new loan contracts. Therefore, without a public institution responsible for distributing housing-related funds in a strategic way, **subsidy programs will continue to mainly be translated into an increasing outstanding loan volume and increasing house prices**.

In Croatia, research done in collaboration between the Croatian National Bank and the Economy Research Institute showed that the subsidized housing loan program contributed to the increase in prices on the real estate market, especially in areas that were already under higher pressure.[119] The market became even more inaccessible for those individuals who could not afford a housing loan or do not meet the

115. Official Gazette of the Republic of Slovenia (2022) *Zakon o stanovanjski jamstveni shemi za mlade* (ZSJSM) (Act on Housing Guarantee Scheme for Youth), 2022.10.23.
116. SID Bank – *Stanovanjska jamstvena shema za mlade (ZSJSM)* (Housing guarantee scheme for young people) 2022.10.23.
117. Uradni-list.si - *1381. Sklep o makrobonitetnih omejitvah kreditiranja potrošnikov, stran 4670*. (1381. Decision on macroprudential restrictions on consumer lending, page 4670.)
118. Interview 8
119. Moj-Bankar.hr – *Znanstvenici izračunali: APN krediti pumpaju cijene nekretnina* (Scientists calculated: APN loans pump up real estate prices)

criteria for obtaining a loan. In Hungary, the subsidy schemes introduced since 2015 also significantly contributed to the strongest hikes in house prices within the whole EU. State-subsidized loans contributed around one-third of all new loans in 2021 in Croatia and Hungary. This share will likely increase in 2022, with market-based lending becoming more expensive. The negative impact of the housing subsidies in terms of price increase on the Croatian real estate market was also confirmed by the Croatian association of real estate traders and commercial banks.[120,121]

In Hungary, over the past decades, the government has systematically introduced subsidies for home purchase in a procyclical way.[122] That is, in periods of economic expansion, the subsidies were also expanded, further fueling the housing market. This disproportionately increased prices and increased volatility. Currently, since a lot of money is being poured in on the demand side, but there are serious limitations on the supply side (e.g. in construction materials), the state subsidies are practically being channeled towards the construction and development companies on the housing market.[123] In crisis periods the Hungarian government typically shuts down its subsidy programs, which further intensifies the crisis. **This mechanism highlights the unsustainable nature of these subsidies for the home acquisition of families**. Currently, market-based lending is contracting in Hungary, as it is becoming too expensive for households. It seems that in the second half of 2022, most newly issued loans will be state-subsidized loans, offered on a low, fixed interest rate.[124] Data on this will come out towards the end of the year. Still, the general opinion is that currently household lending can be maintained as long as the government subsidy programs are open, and that housing-purpose lending will most probably crash in the coming period.[125] This also means that currently, the gap between the financial situation of those who can and can not access state subsidies and subsidized loans is further increasing.

120. Interview 6
121. Interview 7
122. Interview 1, and: Czirfusz, M, Jelinek, Cs (2021) *Housing policies and housing affordability in Hungary after 1990*; in: Annual Report on Housing Poverty, Habitat for Humanity Hungary
123. Interview 2
124. Interview 1, interview 3
125. Interview 1, interview 3

Source: Nikola Cirkovic

Exclusion from standard housing loans

In the context of rising house prices, exclusion from mortgage loans results in an increasing gap in the housing market between those who can and cannot access stable, independent housing. For instance, in Serbia, in 2019, about 13 average annual salaries were needed to buy an apartment with cash, or about 19 annual salaries to buy an apartment with credit. As a result, in Serbia, 87% of real estate purchased on the market is paid in cash, while only 13% requires a mortgage. This seems to indicate that taking a mortgage is not an option for many households and that a substantial part of real estate is bought for investment purposes - for speculation, rental or as a savings scheme.

According to our interlocutors in Hungary, some social groups are systematically being missed due to the regulations around mortgage lending, and others are currently slipping out of the bankable category due to the rapidly deteriorating economic environment in the country. Due to the "debt brakes" regulations concerning maximum PTI and LTV in place since the beginning of 2015 (described in the first part of this section), **people with lower income and savings levels cannot access loans anymore**. This reduces the risks of debtors defaulting on their loans, which is an improvement compared to the pre-2008 lending practice. **However, with the complete lack of state support for anything other than homeownership through subsidized loans, low-income social groups find themselves in an increasingly difficult situation to solve their housing situation**.

In Slovenia (and also more generally in the four core research countries), the difficulties of acquiring a mortgage lead to three different unwanted consequences. Firstly, only people with a good financial background who can save enough money for the initial deposit (usually around 10%) and the downpayment (minimum 20% of the estimated property value, including the deposit) can afford to buy housing. Secondly, many people resort to support from their families, which now collectively gather financial resources that enable a particular family member to make a downpayment. This reduces the spending power and leads to lower financial resilience of the entire family. The problem is further exacerbated by the fact that sometimes families, particularly parents, would go even further and offer their real estate as the security or collateral for their children's loans. And thirdly, as people with a stronger financial background and wage tend to get more favorable loan conditions, this leads to further widening wealth inequalities. The interviewed banks confirmed that many of their clients do not take the loan to solve their housing issue but are rather buying their second, third or fourth real estate, exclusively as an investment.[126]

In Serbia, households' main obstacles to acquiring a mortgage are insufficient downpayment capacity or insufficient/insecure income capacity. Today, the primary mortgage takers are young couples from (comparably) higher-earning professional sectors (e.g. IT), or even self-employed. Beyond downpayment and income level, the bank checks the client's credit history in the Central Mortgage Register (CEH),[127] which may be a reason for banks to decline a mortgage request.

126. Interview 8
127. Republik Geodetic Institute of Serbia – *Centralna Evidencija Hipoteka* (Mortgage Registration)

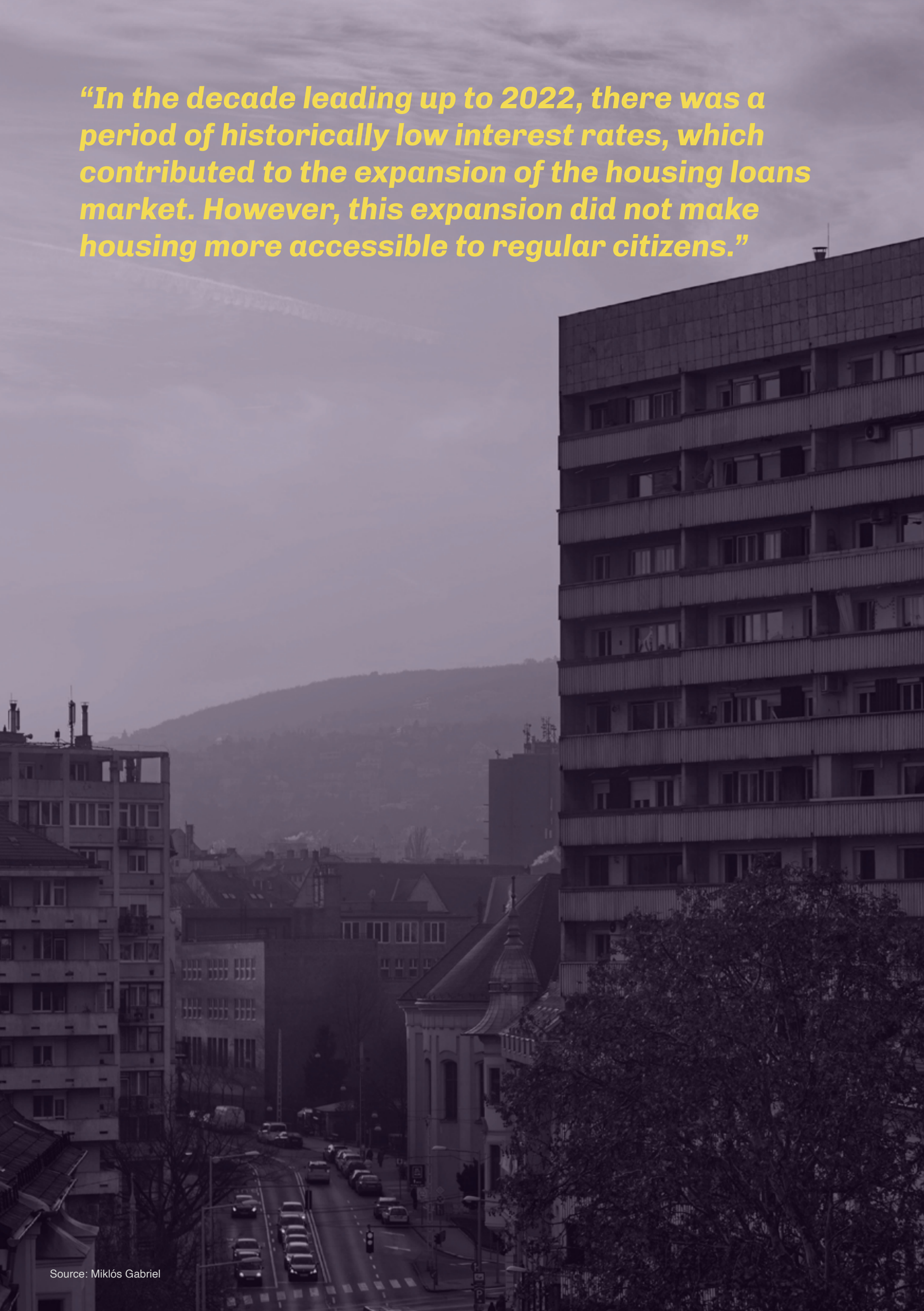
In Hungary, data available for the income status of individuals who take loans confirms that mortgage loans are the privilege of the better off: 60% of newly issued mortgage loans in 2021 were disbursed to the highest income quintile, and a further nearly 20% in the second highest.[128] This income distribution is different in the case of personal / consumer loans. **Even though the "debt-brake" regulations concern not only mortgage but also personal and consumer loans, the latter are still easier to take** due to a faster and simpler application procedure. Research done by the Hungarian National Bank suggests that in recent years it has become more common for lower-income households to use personal loans for housing purposes.[129] The introduction of the Baby Expecting Loan in 2019 (see above) has also contributed to this tendency. The income distribution of debtors taking general personal loans is not that different from mortgages (50% belong to the highest income quintile), while those taking the Baby Expecting Loan are spread out across income quintiles relatively evenly. However, **personal loans from non-bank financial institutions are overwhelmingly taken by lower income groups. Over 30% of these loans are taken by the lowest income quintile**.[130] This tendency would be interesting to further investigate, since **non-bank financial institutions and consumer loans used for housing purposes are rarely discussed, while they are quite important in the CSEE region, mainly among middle and lower income groups**.

Altogether, in the decade leading up to 2022, there was a period of historically low interest rates, which contributed to the expansion of the housing loans market. However, this expansion did not make housing more accessible to regular citizens. On the contrary, as data and experts suggest, the expansion contributed to a further speculative rise in housing prices and increased unaffordability.[131] Currently, with the financial situation of individuals deteriorating and banks' lending requirements getting stricter in the context of the unfolding economic crisis, even more people will be unable to take housing loans. Thus, **the people unable to take housing loans represent a quickly broadening new target group for affordable rental housing solutions**.

The opinion of our different interview partners differed on whether the current financial context meant that lower-income social groups could become new target groups for more innovative housing and housing finance products. Some supported the idea of developing rental housing solutions for social groups who are excluded from conventional mortgage lending;[132] and even claimed it would be interesting from a business perspective to go beyond individual lending, while others[133] were very categorical in saying they have no interest in going beyond their current business model.

128. Hungarian National Bank (2022) *Pénzügyi Stabilitási Jelentés* (Financial Stability Report), p.30.
129. Fellner, Z. – Marosi, A. (2019) *Új szerepben a fogyasztási hitelek – mi magyarázza a személyi kölcsönök felfutását?* (Consumer loans in a new role – what explains the increase in personal loans?)
130. Hungarian National Bank (2022) *Pénzügyi Stabilitási Jelentés* (Financial Stability Report), p.30.
131. Geodetska uprava Republike Slovenije (2022) *Poročilo o slovenskem nepremičninskem trgu za leto 2021*. (Report on the Slovenian real estate market for the summer of 2021.)
132. Interview 2, interview 3
133. Interview 1

“In the decade leading up to 2022, there was a period of historically low interest rates, which contributed to the expansion of the housing loans market. However, this expansion did not make housing more accessible to regular citizens.”



Source: Miklós Gabriel

2.3 Currently available housing finance instruments for organizations and companies

The housing finance instruments available to companies and organizations are much less standardized in the four core countries of this research than those for households. This means that the exact criteria will depend on the characteristics of the borrowing company, the financial plan of the project it wants to implement, and the results of its negotiations with the bank. **Thus, the conditions of loans will vary from project to project. The loan products between different countries are also not harmonized**. Nevertheless, there are some general tendencies and frameworks. We summarize the primary forms of finance available to companies for housing purposes based on the interviews we conducted with local bank representatives and experts. **Information about this housing finance segment is crucial when aiming to develop products for new housing cooperatives or rental housing providers since these are the existing instruments that could be modified or expanded**.

Project financing for housing developers

In Hungary, the most general form of available finance for housing market companies is a **project loan for real estate developers**, which allows them to construct new multi-apartment blocks for sale. These loans generally have a 2-3 year duration, with about 20-30% equity requirement from the company, and often also requesting a certain percentage (e.g. 30%) of pre-sale of apartments. **Combining loan financing with financing the projects from the pre-sale of apartments** is quite general across our core research countries. The loan is usually issued in installments, as the construction on the site goes forward. By the end of the loan duration, the developer sells the housing units and repays the loan. The same bank that issues the project loan will often have a special offer for individual mortgages for the households buying a flat in the project. **This financing structure is not adequate for anything other than construction for sale**. Since these are newly built units, it also means that buyers will typically be relatively higher-income households.

The financial products offered by commercial banks in Croatia are very similar to those in Hungary. These are typically **short-term loans for business investments or general project financing with a maximum repayment period of up to 10 years,**[134, 135, 136, 137] with no particular product or mention of financing affordable housing. The only bank in the Croatian market that currently offers a project financing scheme specifically for the construction of (commercial) residential spaces is OTP Bank.[138]

134. Zagrebačka banka – *Medium and large company financing, Loans*
135. Erste Bank Croatia – *Business clients, Investments and projects*
136. PBZ banka – *Large enterprises, Financing*
137. Raiffeisen Bank Croatia – *Corporate clients, Long-term loans*
138. OTP Bank Croatia – *Project financing*

In Serbia, the key instrument in this field is also **shorter runtime project financing**. As highlighted by interview partners in Serbia, banks usually consider newly constructed real estate projects riskier (since the bank can be left with an unfinished project) and therefore, the initial assessment is more strict and generally requires a larger own participation of the client (30%). In Serbia, banks claim that projects under a certain volume are of less interest due to the too large impact of associated overhead for the bank, while in Slovenia, financing small (few-unit) projects is more common.[139]

In Hungary, due to the stronger crisis signs compared to other countries of the region, developers have already started to expect a drop in sales of apartments. Furthermore, with deteriorating conditions on project loans, by the second half of 2022, some developers have already withdrawn their loan requests and will not start developing new projects until the economic situation is stabilized.[140]

None of the banks interviewed in Hungary, Croatia and Serbia[141] **are doing long-term project financing in the field of housing**, for example for rental housing projects. This would require new products to be developed. **In Slovenia, this is also true for commercial banks**, which would not have specific products for financing housing projects (but public ones do).[142] In other real estate sectors beyond housing - for instance in the office sector - long-term project loans are more general, since these are rental-based developments. The example of these financial instruments could also be expanded to the housing sector. Beyond loan-based financial instruments, bond-based financing can also be important for real estate companies, as well as other financial market instruments. However, these are not discussed here because the most general form of financing remains to be loan-based.

139. Interview 10
140. Hungarian Narional Bank (2022) *Hitelezési folyamatok* (Lending processes), p.14.
141. Interview 1, 2, 3, 4, 5, 6, 7, 13, 14 and 16
142. Interview 9

Source: Patrycja Chociej

Public financial institutions and state subsidies

Theoretically, public financial institutions could play an important role in offering adequate preferential financial instruments for organizations developing affordable housing. The "natural suspects" for this would be the national development banks, such as HBOR in Croatia (Croatian Bank for Reconstruction and Development) or MFB in Hungary (Hungarian Development Bank). However, through our research, we have learned that these banks mainly focus on general business development and do not have any specific focus on the housing sector. They also channel resources from other development banks (mainly the European Bank for Reconstruction and Development and the European Investment Bank), which could be a potential future avenue for introducing specific housing finance instruments. In HBOR, at the end of the 1990s, there were some attempts for establishing credit lines for housing projects, and some criteria were drafted for its implementation, but this project failed and afterwards there was a general distancing from housing programs.[143]

In Croatia, besides cooperating with HBOR, EBRD also cooperated with the Croatian Postal Bank (HPB). Until 2022 HPB was offering credit lines to businesses for financing the energy efficiency of apartment buildings.[144] Currently, HPB is offering a credit for all types of work on the common parts of a residential building, but not for purchase or construction.[145]

Among the core countries of our research, **Slovenia is the only one to have a more widespread institutional and financial system in place for nonprofit housing provision**. Nonprofit housing projects (as defined in the Housing Law, with nonprofit rents calculated based on the formula specified in the Law and offering to house people from public waiting lists) can access financing through SID Bank (promotional development and export bank, 100% owned by the Republic of Slovenia) and SSRS (Housing Fund of Republic of Slovenia). SID Bank gives almost zero interest rate loans with a 25 years amortization period to municipalities to build public housing. The Housing Fund of the Republic of Slovenia provides loans and co-investment to local public housing funds and municipalities and nonprofit housing providers. Conditions are negotiated and determined on a project basis.

The Housing Fund of the Republic of Slovenia serves the state's interest. It covers the territory of the whole state and is one of the main actors responsible for implementing the national housing program, and in accordance with its business policy, finances housing provision (e.g. provides long-term loans with favorable interest rates and co-investment). Furthermore, it promotes construction, renewal and maintenance of flats as well as residential buildings. The Fund also engages in developmental projects. The rents in their apartments are not necessarily nonprofit (as defined in the Law), but can be cost-based (calculated based on the investment cost of the specific project). At the municipal level, local public housing funds or other nonprofit housing organizations which are approved by the municipality to provide the public service of nonprofit housing provision are in charge of implementing the municipality's housing policy and housing program, as well as administrative tasks in the area of housing over which the city has jurisdiction. With respect to the

143. Interview 5
144. Hrvatska poštanska banka, Annual report 2021.
145. Hrvatska poštanska banka – *Loans for co-owners of residential buildings*

supply of housing, the municipal housing funds are in charge of the construction of new nonprofit rental housing and the improvement of the quality of existing housing. They can also provide special housing solutions for specific groups of the population - e.g. young, and elderly, in which the price and conditions can differ from those specified in the Housing Law. The problematic aspect is that they are heavily underfinanced and receive no budget for new housing construction for the state. Therefore they depend heavily on the municipal budgets that can vary a lot from one municipality to the next. In these conditions the Housing Fund of the Republic of Slovenia often steps in and tries to secure new housing where it is most needed (through its own funds, loans and EU funding since the state does not systematically finance nonprofit housing construction).

In 2022, The Ministry of Environment and Spatial Planning in Slovenia had an open call for financing public nonprofit and energy-efficient rental housing provision (both through new construction and renovation) as part of the Recovery and Resilience Facility – RRF, NextGenerationEU initiative. They offered non-refundable financing of up to 50% of eligible costs. More similar calls are expected in the upcoming years.

Going beyond the existing models of project financing for housing

In the interviews, we tried to assess the possibility of local banks opening new products for cooperative and rental housing development. We found a few banks that would potentially be open to exploring such a possibility, although they have generally not or rarely encountered such a need,[146,147] and would usually request strong evidence for an existing market. It is also an issue that local banks are sometimes unaware of the legal possibilities for matching financing with the legal structure of a building owned by a cooperative or rental housing organization.

Currently, **we see different shifts in the housing market that can potentially make it interesting for banks already present in these countries to develop new financial products for rental and cooperative housing**. Some of these shifts are the following:

- There is a growing **interest in products that can respond to ESG (Environmental, Social and Governance) sustainability criteria**, which are gaining ground among the legal and societal expectations towards financial actors. It is seen as a positive aspect of affordable cooperative and rental housing development that such investments inherently have the ESG component. Some banks with experience with EU financial instruments or EBRD financing, which specifically target sustainability aspects, can be more open to this than others. The aspect of environmental sustainability was highlighted over aspects of social sustainability in Serbia and Slovenia, while one of the interviewed Hungarian banks[148] showed interest specifically because of the social aspects of such a project. They saw major possibilities in the energy-efficient retrofit of existing residential buildings since these interventions would have an environmental and social aspect at the same time.

146. Interview 7
147. Interview 13, 14 and 16
148. Interview 3

■ **Individual mortgage lending is running against limits** in the current economic context, and some actors see cooperative and rental housing as a potential new market segment. All the more so because housing is seen as a very safe investment with a high likelihood of housing prices continuing to rise in the mid term.[149] For financial institutions where individual mortgage lending is central to their corporate strategy, moving towards different segments is not so much an option.[150] However, for smaller or niche financial institutions, this could potentially mean an opportunity to work on the development of new instruments.

■ In Serbia,[151] a **new set of lifestyles is appearing** around the international digital nomads that are currently flocking into Serbia, pushed by an enlarging IT industry. This mainly concentrates in Belgrade and Novi Sad. Their income is substantially higher than the Serbian average, serving as a large target group for new financial products. Beyond this specific case of Serbia, **working from distance and working from home** has completely shifted the boundaries between workplace and home in the past few years, and housing projects with spaces adapted for this will be more and more sought after. Developing these kinds of projects also requires housing finance instruments to go beyond the existing ones.

149. This particular interview was conducted well before the increased EURIBOR rates.
150. Interview 1
151. Interview 15

Source: Miklós Gabriel

Expected shifts in the housing finance landscape could start from some of the existing instruments that local banks have for commercial housing providers. In our research, we found a few existing products that could be expanded or modified to **make them adequate for affordable housing projects, run by nonprofit institutional actors**. Some of examples of such instruments are the following:

- In three countries of our research (Croatia, Serbia, Slovenia) Erste Bank, through its Social Banking division, recognizes the challenge for clients to bring in enough of their own equity and facilitates the provision of **'quasi-equity' for social enterprises** to ease that situation. Using this instrument could also make affordable housing projects possible, even though it substantially increases the costs of financing for the client.

- In Serbia, one of the interviewed banks[152] is currently piloting **project financing for housing communities** (multi-apartment buildings with individual ownership of apartments and limited joint ownership of collective spaces) **for energy efficiency upgrades**. Such products already exist in some other countries, for instance in Hungary. This practice could potentially provide an opening for developing other, more voluminous financial products for cooperatives.

- In Hungary, one of the interviewed banks[153] was a **mortgage refinancing bank**, which uses covered bonds[154] as its main instrument. Currently, 96% of their bonds cover individual mortgages, but this could be shifted to 20% of them covering project loans. The advantage of this would be that **mortgage refinancing banks could thus contribute to lengthening loan durations for rental and cooperative housing projects**, by providing long-term financial resources behind the bonds. In these cases, a commercial bank must act as an intermediary, providing the loan in question. Through the covered bonds the mortgage refinancing bank can also somewhat influence the lending policies of the commercial banks. However, this bank could only imagine this type of financial intermediation with some engagement of the state. Another restriction they mention is that they would expect to see established companies with 10-15 year-long track records to provide 10-15 year long loans to them. Without an established functioning, they would see a long-term loan to a company / organization as too risky.

- In Slovenia, public financial institutions have different products for rental and cooperative housing, but these come with strict criteria the projects need to fulfill. For this reason, it could be more interesting for **cooperatives to take a loan from commercial banks, who can be incentivized by the existing public instruments as well.**[155] Most of the interviewed Slovenian banks showed some level of openness to financing housing cooperatives, and could even imagine longer amortization periods. These longer periods could potentially be 25 years[156] or 30 years (which is also the longest amortization period for individual housing loans).[157] However, these would differ from their existing practice of project loans for commercial housing projects, which

152. Interview 14
153. Interview 3
154. European Covered Bond Council – *Covered Bonds*
155. Note: Interviews in Slovenia with representatives of financial institutions were conducted during the time of prolonged steep housing price rises which showed resilience even during the peak of the housing crisis. However, this was before the European Central Bank started to raise the interest rates and when loans started to become more expensive over the summer of 2022.
156. Interview 9
157. Interview 10

are usually only 10 or 20 years long, the typical loan period for housing companies being 10 years, which reflects the fact that rental-based housing development is practically non-existent or rare.

Until now, such shifts have not happened, and some important challenges make it difficult to go beyond existing housing finance models.

■ One of the important and overarching challenges is the **lack of an adequate and supportive regulatory framework** for rental and cooperative housing models to expand, and for such actors of housing provision to be able to scale up. Several of our interlocutors underlined that for this sctor to develop, **state subsidies or at least a supportive regulatory framework that encourages private actors to step into this market segment would be needed.**[158] Without this, many market actors consider it to be too costly and risky to develop these new products on their own. Financial, or guarantee-based engagement of the state would also be highly welcome, and could boost a change.

■ Another **important challenge identified by most of our interlocutors**[159] **is to shift from short-term project financing to long-term investment financing**. Even in Slovenia, where longer-term project financing and public institutions of rental housing exist, approval of a long-term loan for cooperative or rental housing projects would need to happen on a case-by-case basis and banks would expect a very robust financial structure. In other countries, 25 and 30 year loans were not even realistically on the table, preferring options of co-investment or different ways of financial engineering that would potentially allow for shorter loan repayment periods. In Hungary, for instance, a 10-year project loan is already considered to be long-term, but the maximum duration discussed was 15 years - and thus, **to be able to use bank loans for cooperative or rental housing in this context, significant other resources also need to be mobilized. Beyond financial robustness, the importance of an established, credible legal entity as debtor was also highlighted**.

■ Since banks usually have a more risk-averse attitude, and since such housing projects currently do not exist on a larger scale in CSEE countries, **examples of successful implementation** of similar instruments in other countries can support the process of new product development. Because of lacking examples, banks also mention that they have difficulties benchmarking or knowing what to expect if they were to develop such products.

■ Beyond lacking local examples and experience, guarantee mechanisms are also missing. State guarantees would generally be highly welcome, but some actors also see some options for developing this field **independently from state support**: for instance, through a **guarantee fund** that would be independent from the state (inspired by a similar mechanism put in place by the Italian Banca Etica),[160] and funds could be gathered from engaged private investors, or through EU mechanisms.

■ Another option for local banks to develop more innovative products is through investment from their **parent institution**.[161] The fact that most banks in the region are **local subsidiaries** of international banking groups can thus be both an opportunity and a challenge.

158. Interview 1, 2, 3 and 4
159. Interview 2, 3, 13, 14 and 16
160. Interview 2
161. Nepszava.hu – *Elérhető árú bérlakásokat épít az Erste Bank* (Erste Bank builds affordable rental housing), 2022.08.11.

An opportunity because of potential support from their parent organizations, and **a challenge because major shifts in products or targeted market sectors would have to be introduced at the group level rather than to be expected to get initiated from local branches. Banks that are only locally present can have a bigger margin for maneuver, but less financial resources for innovation.**

- A more general challenge is that **currently economic conditions are very volatile** – inflation, rising interest rates, energy insecurity and the fallout from the Russian invasion of Ukraine make actors reserved to take on new endeavors. As one of the interviewees remarked: "Everything is changing right now."[162]

Housing experts generally agree that **the rental and cooperative housing sector would need to be developed to have more stable and less volatile, vulnerable housing markets**. Under current financial instruments, this is, however, not possible in most countries we investigated. This is mainly because there are **no adequate financial instruments available** (which would allow for long-term returns that are characteristic of rental housing developments), and also because there is **no supportive regulatory environment** in place. As a result, no institutions **would be engaged in (and have as their core business) developing rental and cooperative housing projects**. Slovenia is an exception in this, where public housing funds exist (both on the national and local level) with the mandate to develop more affordable housing. Thus, the challenge that presents itself is how institutions and financial mechanisms allowing for rental and cooperative housing can be developed in the region.

162. Interview 15

Source: Zsombor Katona

3. Target groups for new affordable housing models

It is a common belief in the public discourse of the CSEE countries that people in this part of the world are not interested in becoming tenants and prefer ownership by any means. To make a robust empirical test of this belief, out of eight, we selected four core research countries to conduct a focused, comparative tailor-made survey. **The main survey question was whether there is a demand for new affordable housing solutions, and if yes, what are the characteristics of people belonging to this demand group**.

The four core survey countries were Croatia, Hungary, Serbia and Slovenia. During the research design phase, we narrowed **our focus on the capital cities** (Zagreb, Budapest, Belgrade and Ljubljana). This choice was due to the significant difference between the housing markets of capital cities and the rest of the country in each national context. More pronounced affordability problems in capital cities indicate a potentially higher demand for alternative housing solutions.

The first part of the survey was representative of gender and age groups. The sample size varied according to the number of inhabitants of the respective cities (Table 1). For practical purposes, we only approached people living within the administrative borders of these cities.

TABLE 1: POPULATION NUMBERS AND SURVEY SAMPLE SIZE IN THE FOUR CAPITAL CITIES

City	City population	Number of total respondents
Belgrade	1,683,962	1,341
Budapest	1,723,836	1,762
Ljubljana	292,988	1,004
Zagreb	806,268	1,052

3.1 The size and main characteristics of demand groups

The main survey design logic was to define two potential demand groups: a "Wide Demand Group" (WDG) and a "Narrow Demand Group" (NDG). The WDG was filtered from the whole survey sample group through three questions in the survey's first part. Then, members of the NDG were identified through two additional filter questions.

We defined someone as being part of the WDG if they belonged to any of the following subgroups:

- The respondent was not satisfied with their current housing situation (answered less than 6 when asked, *"On the whole, how satisfied are you with your current housing situation?"* on a scale of 0-10, where 10 was the most satisfied).
- The respondent worried about their housing situation in the future (answered less than 6 when asked, *"Things can change quickly. To what extent are you worried about where and how you are going to live three years from now?"* on a scale of 0-10, where 10 meant being not worried at all).
- The respondent - or someone from the respondent's household - wanted to move out in the near future (answered "Yes" to the question *"Is there a member of your household, including yourself, who would want to move out of your current housing in the next three years, if they had the means to do so?"*).

All the respondents becoming part of the WDG continued to the second part of the survey. In the next step, we defined an NDG through two additional filter questions. The logic was that the NDG respondents should fulfil the specific objective and subjective criteria. Objective operationalized as not being part of the financially most vulnerable segment of society and subjective as being open to new affordable housing models. Therefore, someone would become part of the NDG if belonging to both of the following subgroups:

- The respondent belongs to the fourth or higher income decile.
- The respondent is open to becoming a tenant in secure, affordable rental housing models (answered "Strongly agree", "Agree", or "Neither agree nor disagree" when asked, *"If I had an option to rent a good apartment indefinitely for an affordable price, and if my renter rights were protected, it would be a good solution to my housing problems/ambitions")*.

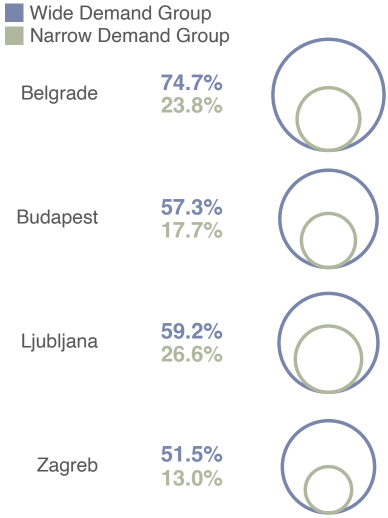
Based on these definitions, 51-75% of the respondents belong to the WDG, while 13-26% belong to the NDG (Figure 39). The highest ratio of the WDG was recorded in Belgrade, while the highest ratio of the NDG was measured in Ljubljana. In both cases, Zagreb had the lowest figures.

These figures mean that more than half of the population in these cities would welcome some change in their housing situation. Approximately one-eighth or one-quarter of them fulfill the most elementary criteria both subjectively (being in principle open to such an idea) and objectively (they are above the financially most vulnerable segments of society) to become users of new, affordable and secure rental housing models.

Before we describe the profile of the average member of both demand groups, we will take a look at the filter variables separating the general population captured in the survey from the demand groups (Table 2).

FIGURE 39

RATIO OF THE DEMAND GROUPS OUT OF THE TOTAL POPULATION IN THE FOUR CITIES



Source: Own survey data, 2022

TABLE 2: AVERAGES OF FILTER VARIABLES IN THE WHOLE SAMPLE AND AMONG DEMAND GROUPS IN THE FOUR CITIES

	Belgrade			Ljubljana			Zagreb			Budapest		
Filter variables	Whole sample	WDG	NDG	Whole sample	WDG	NDG	Whole sample	WDG	NDG	Whole sample	WDG	NDG
City-wide share %	100%	74.7%	23.8%	100%	59.2%	26.6%	100%	51.5%	13.0%	100%	57.3%	17.7%
Housing satisfaction (0-10)	7.3	6.8	6.4	7.7	6.8	6.9	7.9	7	7.2	7.9	7.1	7.1
Housing stability (0-10)	7.1	6.3	6.1	7	5.6	5.6	7.8	6.3	6.8	7.6	6.3	6.4
Intention to move out - proportion of "Yes"	56%	75%	75%	38%	64%	72%	35%	68%	81%	44%	77%	88%
Average income decile	6.4	6.4	6.7	6.7	6.5	7.1	4.4	4.8	6.8	4.8	5.0	6.8
Openness to innovative renting solutions (1 to 5 scale)	2.5	2.5	3.8	3.7	3.7	4.1	3.3	3.3	4.1	2.9	2.9	4

We asked all respondents about their satisfaction with their current housing situation on a 0-10 scale, where 10 was the most satisfactory. Respondents from the demand groups are, on average, less satisfied with their housing. We see a similar trend with the question measuring the respondents' subjective feelings about the stability of their housing situation, similarly on a 0-10 scale, where 10 was the most stable option. It is also logical that respondents from the two demand groups are more frequently considering moving out from their current dwelling. An overwhelming majority of respondents from the NDG have someone from their households who would want to move out in the next three years in case they would have the possibility to do so.

Generally, when comparing the three filter variables of the WDG (Housing satisfaction, Housing stability and Intention to move out), Belgrade has the worst indicators, and Zagreb has the best. Budapest and Ljubljana are in the middle, with indicators of satisfaction and stability closer to the ones recorded in Zagreb. This corresponds to the proportion of the Wide Demand Groups in each city.

As a result of defining the NDG in terms of income, this group has the highest recorded average income decile of the respondents, which is uniform in all four cities and is centered around the 7th income decile. In most cases, the average income of the Wide Demand Group is not in a statistically significant way different from the general population.

Regarding openness towards new renting solutions, the Narrow Demand Group is above the mean of the scale in all four cities, and the average value is centered around 4 (out of 5) as a measure of support towards these types of solutions to housing problems. Other groups are around the center of the scale (3). The general population and the Wide Demand Group in Belgrade have lower-than-average support for these solutions, with the lowest acceptance scores.

Thus, from the perspective of our filter variables, **members of the WDG are typically less satisfied with - and feeling insecure about - their housing situation and are more likely to consider moving out of their current dwelling. The NDG is a subset of the WDG, typically people with more income and open to becoming long-term tenants in new, secure, affordable housing models**.

Regarding socio-demographic characteristics (Table 3), there is a clear difference between the two demand groups and the wider population. **Members of the NDG are typically younger, live in larger households, are more likely to have children and live on a significantly higher income (above median)**. Their average monthly housing-related expenses (on the household level) are around 422€, and they think an acceptable rent for a 50 sqm apartment in their city would be around 300€.

From the perspective of tenure status, however, there are significant differences between the demand groups and among the four cities (Figure 40). Respondents in the NDG are more likely to rent their dwellings. In Budapest and Belgrade, approximately one-third of the NDG are tenants, which is much higher than the average ratio of tenants from official statistics. Suppose we break down the category of "owners". We can see that only a portion of the owners could buy their properties independently without a mortgage. The majority either inherited their dwelling or used a mortgage for the acquisition. In the case of the NDG, there is a slightly higher likelihood of being an outright owner without a mortgage, which is a sign that members of the NDG have more limited access to existing housing

TABLE 3: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE WHOLE SAMPLE AND DEMAND GROUPS IN THE FOUR CITIES, COMBINED

Socio-demographic characteristic	Whole sample	Wide Demand Group	Narrow Demand Group
Average age	52.0	47.9	43.0
Average household size	2.8	3.0	3.2
Average number of children	0.7	0.8	0.9
Average income decile	4.9	5.7	6.8
Average housing quality	..	7.1	7.1
Average monthly housing-related expenses	..	351€	422€
Average acceptable rent	..	298€	310€

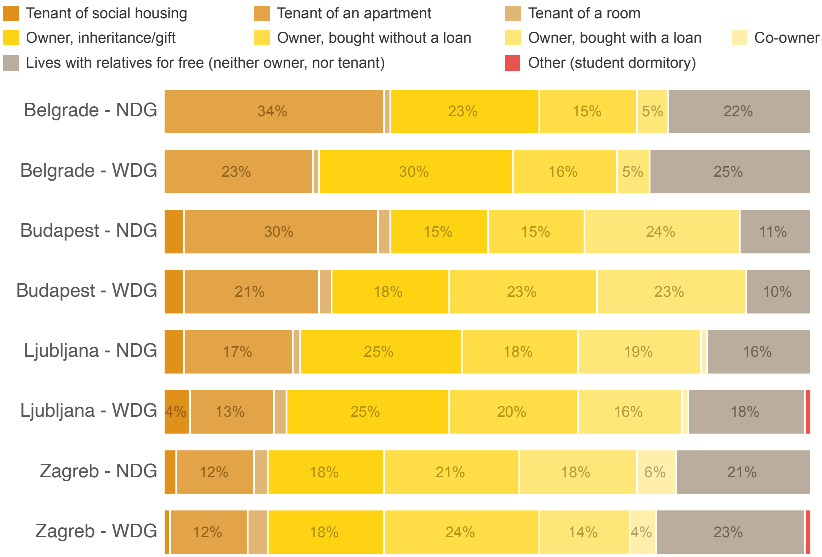
finance products (see below in more detail). Moreover, respondents from the NDG are typically less likely to live in a relative's dwelling for free. We interpret this tenure status as being between the typical cases of "owners" and "tenants"; arguably, the widespread prevalence of this phenomenon is a symptom of affordability and accessibility problems in the housing market. **This means that people in the NDG have limited access to both formal (mortgages) and informal (solving their housing needs based on kinship networks) solutions that could help them to overcome the hardships caused by an increasingly segmented housing market**.

From the perspective of employment status (Figure 41), respondents from the NDG are overwhelmingly formally employed. Compared to the WDG, they are more likely to have a formal work contract. Except for Belgrade, informal employment and self-employment are insignificant in other cases. It is also striking that there are significantly fewer pensioners in the NDG than in the WDG, except for Ljubljana.

Based on these employment-related data, we can see that respondents from the NDG have a more stable financial and existential background, which means that, in principle, they could be consumers of new housing finance products tailored to their needs.

FIGURE 40

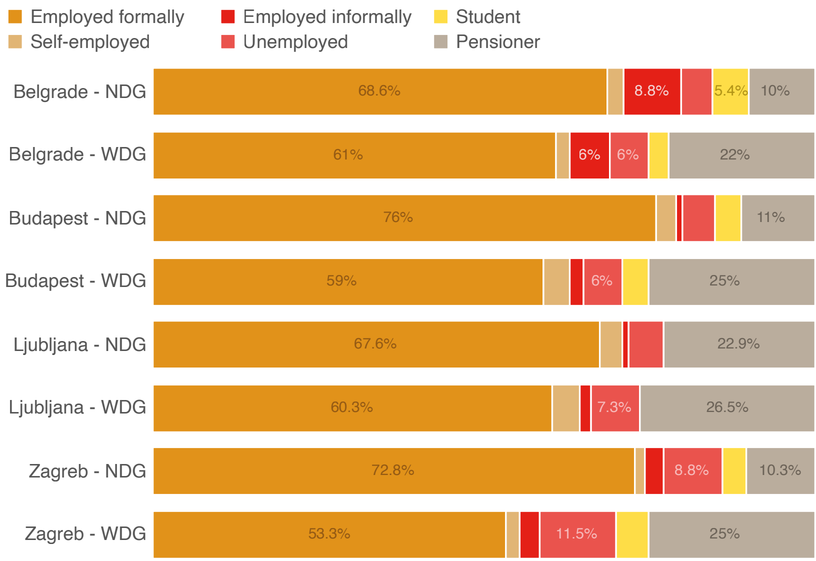
TENURE STATUS OF RESPONDENTS IN THE DEMAND GROUPS



Source: Own survey data, 2022

FIGURE 41

EMPLOYMENT STATUS OF RESPONDENTS IN THE DEMAND GROUPS



Source: Own survey data, 2022

3.2 Housing conditions and affordability

In the survey, we measured some crucial indicators of the respondents' objective housing situations and then compared these figures in the case of the two demand groups (Table 4). Besides the size of the dwelling and the number of rooms, we also measured an affordability indicator: the ratio of housing-related expenses to the total net income of households. We define rooms per person as the number of rooms divided by the number of household members. Households with less than one room per person are considered overcrowded by Eurostat.

TABLE 4: HOUSING CONDITIONS OF THE WIDE DEMAND GROUP AND THE NARROW DEMAND GROUP IN THE FOUR CAPITAL CITIES

Housing characteristics	Belgrade		Ljubljana		Zagreb		Budapest	
	WDG	NDG	WDG	NDG	WDG	NDG	WDG	NDG
Average size of dwelling (m^2)	63.66	64.00	88.72	89.50	94.44	101.37	70.44	69.08
Average number of rooms	2.74	2.65	3.50	3.48	3.62	3.71	3.00	3.02
Average ratio of housing costs from household income	24%	24%	17%	17%	22%	13%	22%	22%
Average rooms per person	0.88	0.79	1.44	1.35	1.30	1.17	1.37	1.21

We registered the worst objective housing conditions in Belgrade. Here we find the smallest average dwelling size in both groups, with less than three rooms on average. The average household in both demand groups lives in overcrowded conditions based on Eurostat definitions. The average ratio of housing costs to household income is 24% in the WDG, the highest of all four cities. Again, Zagreb and Ljubljana have the best objective metrics: larger dwellings, more than 3.5 rooms on average, lower relative housing costs and no overcrowding on average. It's worth noting that in the NDG in Zagreb, we have a low number of rooms per person, even though these are relatively high-income respondents living in large apartments (over 100 m^2 on average). Budapest is between these cities, with a larger average housing cost ratio to the households' income.

Once we define unaffordability as a situation where the ratio of housing-related costs is over 30% of the household income, interestingly, it is more likely to find these respondents in the Wide than in the Narrow Demand Group. By this definition, only 35% of the 465 respondents in an unaffordable situation belong to the NDG.

We can interpret this phenomenon as both demand groups being financially stable and living in relatively decent housing. In the Wide Demand Group, 66.6% of the respondents have affordable housing expenses and live in above-average quality housing. In the Narrow Demand Group, that percentage is the same (66%

in total, but 82% in Zagreb, and 65% in Budapest, as the two extremes).

On the other hand, overcrowding is more prominent in both groups, especially in the case of the Narrow Demand Group. In the Wide Demand Group, the percentage of overcrowded households is 34% (20% in Ljubljana, but 61% in Belgrade!). That number jumps in the case of the Narrow Demand Group to 40% (26.6% in Budapest and 68% in Belgrade!).

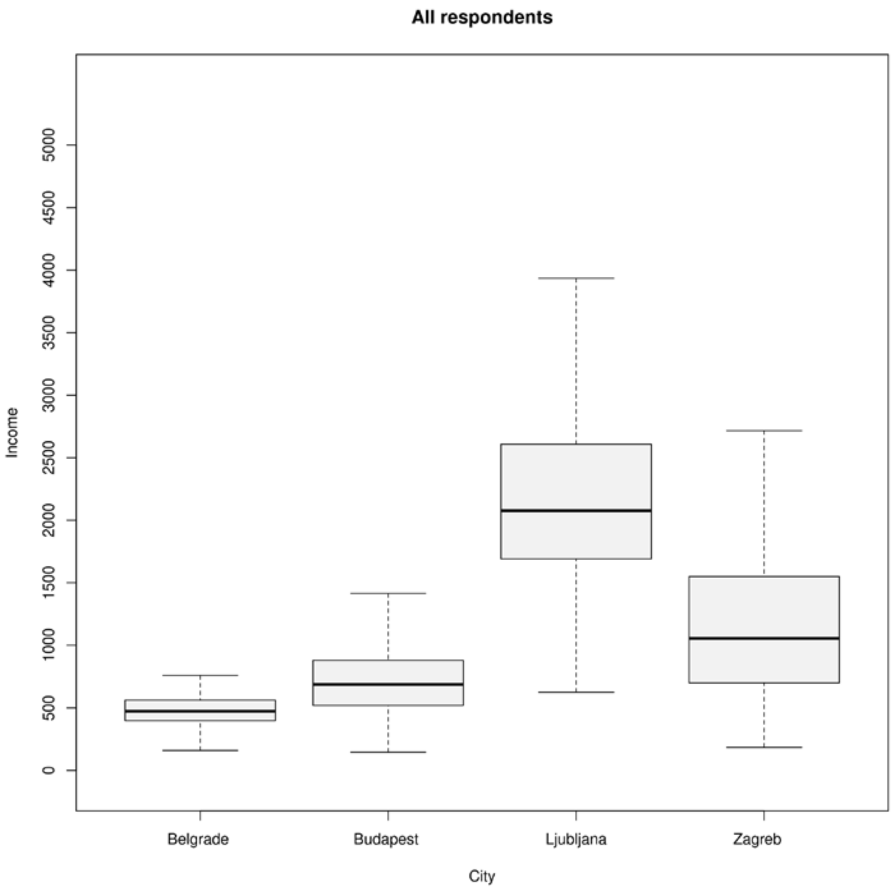
This suggests that members of the Narrow Demand Groups are financially relatively stable but still unable to solve their housing problems in terms of reducing overcrowding. This also explains why we have much higher percentages of those wanting to move in this demand group, and we can conclude that the potential demand of this group signals a potential niche in the housing finance market.

Source: vale

3.3 Household finances

To better understand the financial situation and capacities of the demand groups, we analyzed some aspects of their household finances. First, we gathered information about the total disposable income of the respondent's household. We applied the OECD equivalence scales to filter out differences in household compositions.[163] Per capita income distributions are shown in the boxplots below (Figure 42). The thick black lines show the median per capita income in each city. The highest median income is recorded in Ljubljana, above 2000 €, followed by Zagreb, around 1000 € and then Belgrade and Budapest, below 1000 €.

FIGURE 42: PER CAPITA HOUSEHOLD DISPOSABLE INCOME DISTRIBUTIONS OF THE WHOLE SAMPLES IN THE FOUR CITIES (€)



163. See the OECD's *note on equivalence scales*.

In Budapest, Belgrade and Zagreb, the WDG is spread equally across the normal range of income variations, while in Ljubljana, the WDG is more common around the median income levels than significantly above or below it. Outliers with extremely high income in this demand group are found in all cities except Budapest (Figure 43).

We observe clustering in the upper-income values in the Narrow Demand Group, partly because we defined this demand group through relatively higher income levels. In Belgrade and Budapest, the majority of the NDG have income above 500€, while in the case of Zagreb and Ljubljana, almost every member of this demand group is above the threshold of 1000€ (Figure 44).

FIGURE 43: PER CAPITA HOUSEHOLD DISPOSABLE INCOME DISTRIBUTIONS OF THE WIDE DEMAND GROUPS IN THE FOUR CITIES (€)

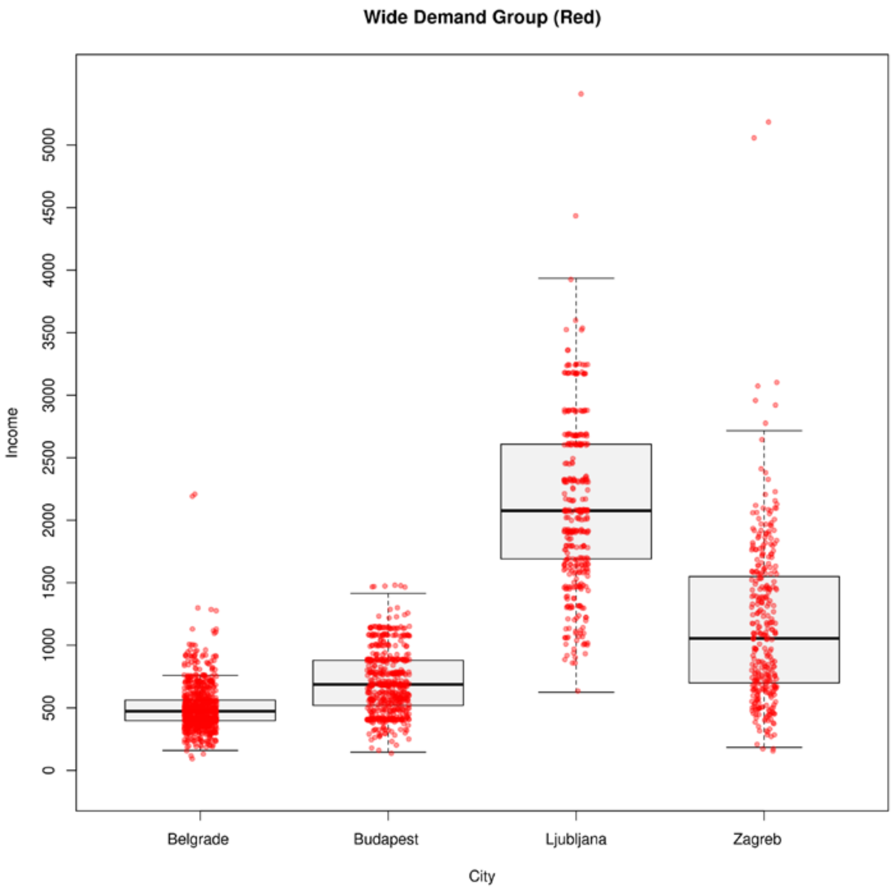
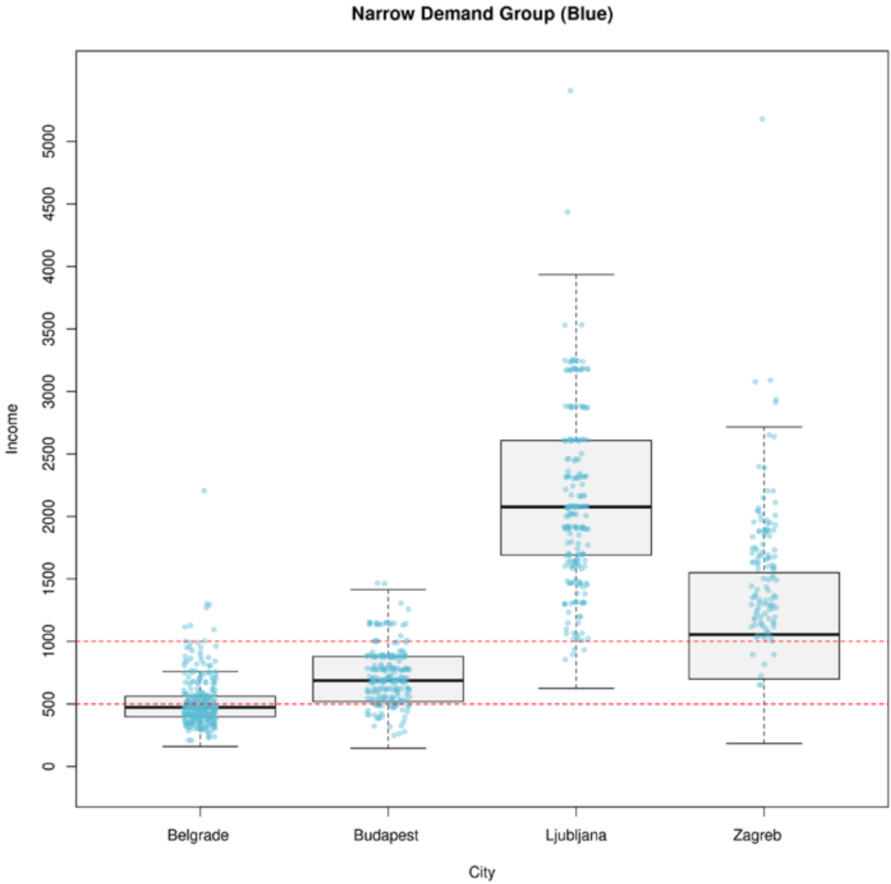


FIGURE 44: PER CAPITA HOUSEHOLD DISPOSABLE INCOME DISTRIBUTIONS OF THE NARROW DEMAND GROUPS IN THE FOUR CITIES (€)



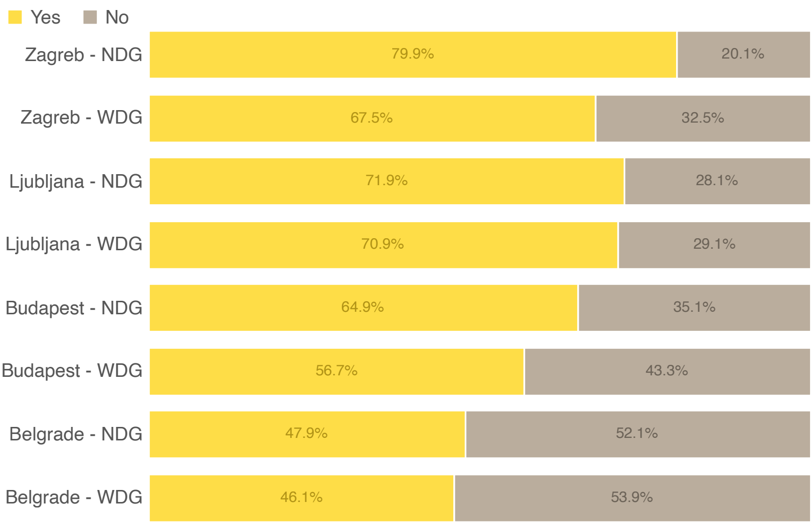
3.4 Demand groups and loans

Our desk research shows that even though there is an upsurge in the housing markets of these countries, there is still a significant portion of the population whose housing needs are not served. This is partially due to the region's countries having lower housing loan penetration rates than richer European countries. In other words, **the current solutions provided by the housing finance market are not suitable for fulfilling the housing needs of large segments of these societies**. That is why we asked survey respondents about their experience with loans.

Over 50% of the respondents (or someone from their household) in both demand groups have a "loan experience". This percentage drops below 50% only in Belgrade (Figure 45). Also, for those who previously did apply for a loan, Belgrade has a higher number of rejections (average three rejections in both demand groups).

FIGURE 45

"HAVE YOU, OR ANY MEMBER OF YOUR HOUSEHOLD, EVER APPLIED FOR ANY TYPE OF BANK LOAN?" (% OF RESPONDENTS)



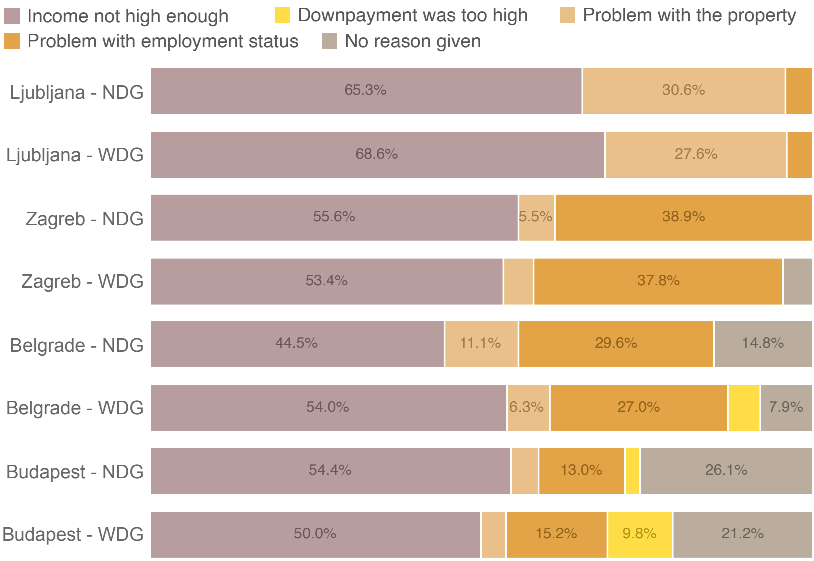
Source: Own survey data, 2022

Across all four cities, **over 20% of the respondents, who had already applied for a loan, experienced some difficulties**. This percentage is consistently higher in the case of the Narrow Demand Group (reaching a maximum of 26.3% in Budapest) even though this group has a significantly higher income.

The nature of difficulties experienced when applying for a loan is somewhat different in the four investigated cities (Figure 46). The top reason is inadequate income in the Wide Demand Group in all cities. Budapest has many cases where no reasons for refusal were given, while in Ljubljana, the second most prominent reason was the legal issues with the property being bought. In Belgrade and Zagreb, the second most significant reason was inadequate legal employment status. This suggests that **in Belgrade and Zagreb, even the members of the NDG - whose income is by definition higher than average - might have issues with their employment status, being categorized as unsuitable by the requirements enforced by the banks**.

FIGURE 46

NATURE OF DIFFICULTIES DURING LOAN APPLICATION (% OF RESPONDENTS)



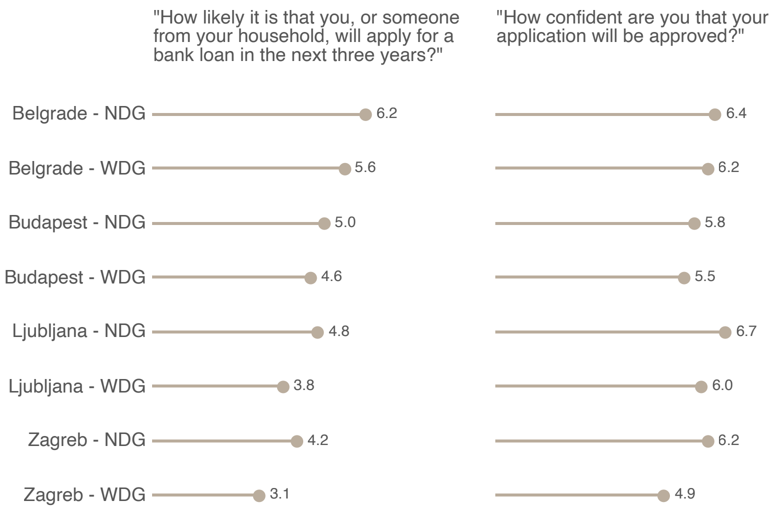
Source: Own survey data, 2022

We also asked the respondents about their (or any member of their household's) intention to apply for a loan in the next three years and to what extent they are confident that their loan request would be approved (Figure 47). Both questions used a 0-10 scale, where 10 expressed the strongest likelihood of applying for a loan and the strongest confidence that they would get it.

Demand groups in Belgrade are most likely to ask for a loan in the future, which might be explained by the significantly low loan penetration. The respondents of Budapest are least likely to do so, which corresponds to the previous years' lending boom in Hungary. In every city, **respondents from the NDG are more likely and confident to get a loan than members of the WDG, which further strengthens our argument that the NDG could be a suitable target group for new housing finance instruments**. The most significant gaps between demand groups are in Zagreb and Budapest, both in terms of likelihood and confidence. Altogether, **43% of the respondents from these four cities found it rather unlikely that they would get a loan approved if they applied**.

FIGURE 47

ATTITUDE TOWARDS FUTURE LOAN APPLICATIONS (AVERAGE ON 0-10 SCALES)



Source: Own survey data, 2022

3.5 Attitude towards new, affordable rental models

All the previous survey results - along with the lessons learnt from the desk research - proved that in the Central and South-Eastern European region, there is a significant proportion of the society whose housing needs are not served either by currently existing market solutions or by any public or non-profit solutions. In other words, we can identify a potential demand for new, alternative, affordable rental solutions. However, it is a commonly shared belief that citizens of these countries prefer homeownership over rental solutions for cultural and historical reasons. Therefore, we tried to test whether this interpretation is accurate or not. As we will show, we conclude that it is rather a myth than an existing obstacle to the future expansion of affordable rental solutions.

In the second part of the survey, we asked the respondents to state their agreement or disagreement with three statements concerning the current and future perspectives on renting in their cities. For all three statements, respondents had 5 options to answer, from “Agree strongly” to “Disagree strongly”.These statements were:

- Renting apartments in my city is too expensive for someone in my situation. (Figure 48)
- Renting is not a solution to housing problems because the renter’s rights are not protected by law, and too much power is given to the landlords. (Figure 49)
- If I had the option to rent a good apartment indefinitely for an affordable price and my renter rights were protected, it would be a good solution to my housing problems/ambitions. (Figure 50)

Answers to the first two questions give us an insight into the subjective perception of respondents on the current market conditions. The third one indicates openness to participate in new - well-designed, and well-functioning - rental models.

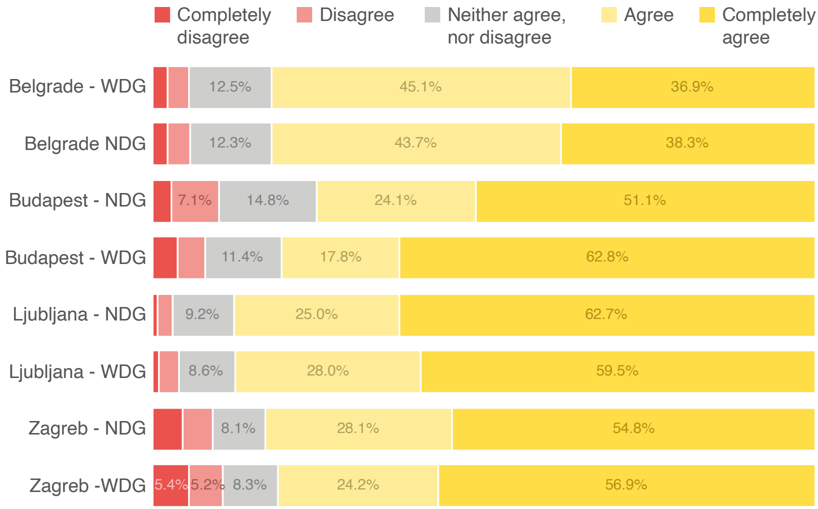
In both demand groups, the overwhelming majority, around 80% of the respondents, agree to some extent that current rents are too expensive for them in their cities (Figure 48). These percentages do not drop in the NDG, even though their income is higher. In Ljubljana, almost 90% of both demand groups agree that rent is too expensive. In Budapest, the percentage of those who disagree (or are indecisive) that rent is expensive is around 20-25%, which is the highest figure. It indicates that in the case of Budapest, there is a subgroup within the demand groups who have a relatively positive experience even with the current private rental market.

In the case of the second question, we see similar patterns (Figure 49). In both demand groups in Belgrade, around 80% of the respondents agree to some extent that renting in the existing market is not a solution to their housing problems, which is the highest figure. In contrast, in the Budapest WDG, only 40% of the respondents agree, and a quarter of them disagree with this statement. These results suggest that attitudes toward the current rental market in Budapest are more polarized than in the rest of the cities. Ljubljana and Zagreb are between these two cities, as 65-70% of demand groups agree with this statement.

FIGURE 48

ATTITUDE TOWARDS CURRENT PRICES ON THE RENTAL MARKET

"Renting apartments in my city is too expensive for someone in my situation."

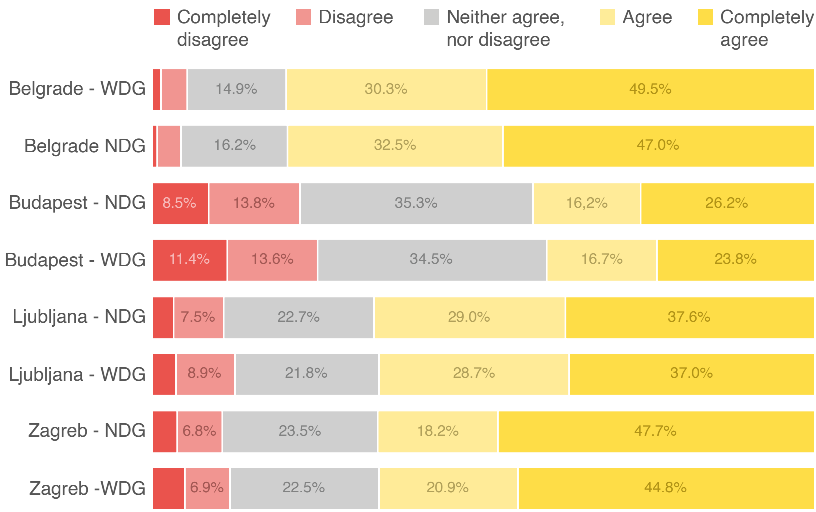


Source: Own survey data, 2022

FIGURE 49

ATTITUDE TOWARDS CURRENT RENTAL MARKET

"Renting is not a solution for housing problems because renter's rights are not protected by law and too much power is given to the landlords."



Source: Own survey data, 2022

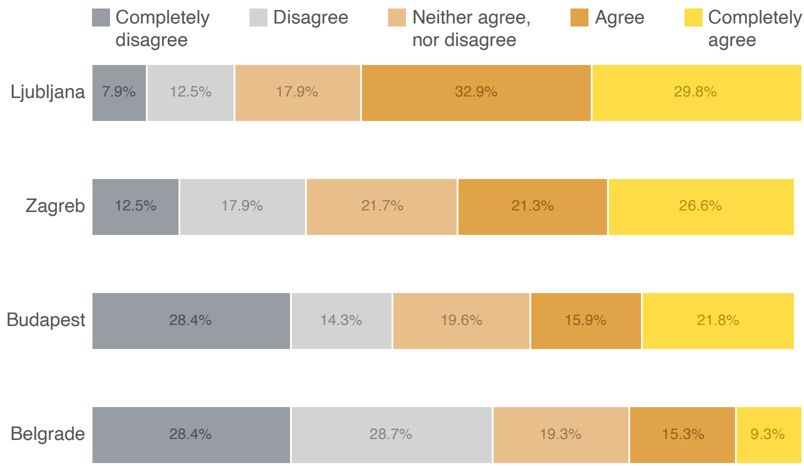
When we analyzed the third question (Figure 50), which measured the attitude towards new, affordable rental models, we only used data from the WDGs, because this question was a defining characteristic of the NDG. Instead, we turned our focus towards tenants who already have first-hand experience with the rental market within the Wide Demand Group.

When comparing cities, the lowest level of openness towards new renting solutions is in Belgrade, where less than 25% of the Wide Demand Group is somewhat open to this idea. In other cities, the range of support is from 37% in Budapest to 61% in Ljubljana. However, when we focus on the tenants within the WDG, the support rises to 84% in Ljubljana and over 50% in both Zagreb and Budapest, with Belgrade again showing the lowest support, with 37% of tenants agreeing that rent under specific solutions can be a solution. This indicates that within the demand groups, specific attention should be given to existing tenants, once new affordable rental models get designed.

FIGURE 50

ATTITUDE TOWARDS AFFORDABLE RENTAL MODELS IN THE WIDE DEMAND GROUP

"If I had an option to rent a good apartment indefinitely for an affordable price and if my renter rights were protected, it would be a good solution to my housing problems/ambitions."



Source: Own survey, 2022

Altogether, we can conclude that most of the respondents in both demand groups agree that current rent levels are overly expensive and that renting cannot solve their housing problems under existing conditions. Budapest stands out because some respondents have a more favorable view of the existing rental market. Respondents from Ljubljana are the most open towards new rental solutions (61% of the WDG is favorable), and respondents from Belgrade are the least open (24% favorable). When we look at tenants from the WDG in all cities except Belgrade, most of them are open to new, affordable rental options as solutions to housing problems or ambitions.

We can take another, deeper look at the differences between those respondents who agree (answered “Agree” or “Completely agree”) with the idea that renting under specific conditions can solve their housing problems and those who don’t (remaining three answers). In Table 5, we summarize the differences between these two groups (and we call them “Agree” and “Disagree”).

There are, across all four cities, specific characteristics of the respondents open towards innovative rental solutions. First of all, there are significantly more tenants in the “Agree” group (for example, three times more in the case of Ljubljana). Second, their total monthly housing-related expenses are higher (50€ higher in Ljubljana and 70€ higher in Budapest), which can partially explain why they are open towards affordable solutions. Third, they are more likely to ask for a loan in the future. Finally, the average housing quality is lower in the “Agree” group.

There are some country-specific elements of the profile as well. Respondents from the “Agree” group are younger in all cities except Ljubljana, where they are, on average, 1.5 years older than the “Disagree” group. In Ljubljana and Budapest, this group is less likely to have loan experience, while in Zagreb, their experience matches the other group. In Belgrade, this group has a higher proportion of loan applicants. The ratio of housing costs to the income of the households is higher in the “Agree” group in each city, except Zagreb. Finally, the housing quality is significantly lower in the “Agree” group in Belgrade compared to the other group in the same city. In Budapest, the housing quality is slightly better in the “Agree” group, which is entirely different from the situation in other cities.

In general, trends seen in the “Agree” group tells us that these r**espondents are more likely to be tenants, are typically younger, are more burdened by their housing expenses, and are looking for ways to solve their housing situation, which increases the likelihood to ask for a loan in the future.**

TABLE 5: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF POPULATIONS ACCORDING TO THE ACCEPTANCE OF NEW RENTAL SOLUTIONS IN THE FOUR CITIES

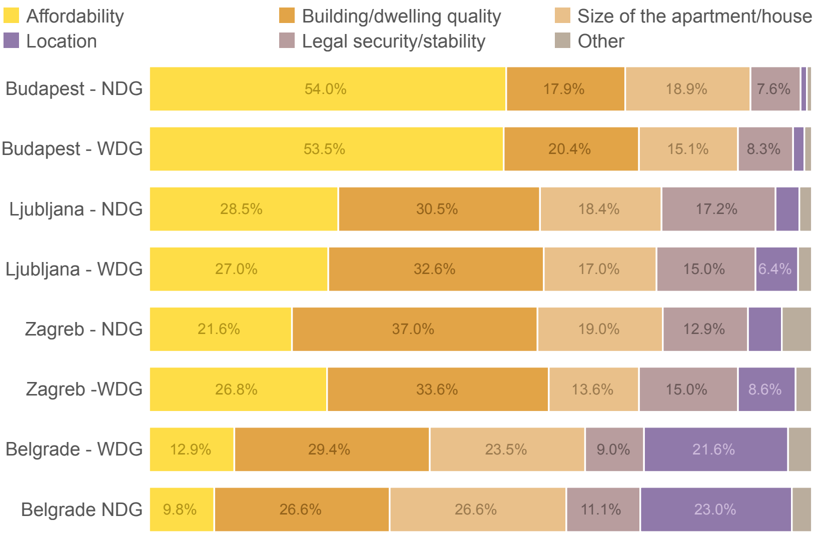
Socio-demographic characteristics	Belgrade		Ljubljana		Zagreb		Budapest	
	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree
Age	38	48	48.5	46.9	45.6	49.6	44.8	49.5
Persons per room	0.86	0.86	1.47	1.37	1.10	1.10	1.33	1.36
Loan experience proportion	48%	42%	65%	73%	66%	66%	53%	58%
Loan application likelihood (0-10 scale)	5.90	5.50	5.03	4.63	4.00	3.70	3.41	3.14
Proportion of tenants	37%	20%	27%	8%	22%	15%	43%	19%
Housing quality (0-10 scale)	6.73	7.47	6.63	6.84	7.11	7.35	7.08	6.93
Avg. monthly housing expenses (EUR)	299	279	653	603	415	407	315	243
Proportion of housing cost from household income	27%	22%	18%	16%	20%	23%	26%	19%

3.6 Moving out factors

We asked respondents to select or name the factors influencing their decision to move to another dwelling. In both demand groups, we find a similar structure, but in every city, different reasons are more prominent in the answers. In Belgrade in the WDG, we have almost an equal prominence of housing quality, size and location, while affordability is in fourth place. In Ljubljana and Zagreb, housing quality is given more priority than affordability, while we also find legal security more often than in general (15%). In Budapest, over 50% of the answers list housing affordability (Figure 51).

FIGURE 51

IF YOU WANTED TO MOVE OUT FROM YOUR CURRENT DWELLING, WHAT FACTOR WOULD BE THE MOST IMPORTANT TO YOU CONSIDERING THE NEW DWELLING?



Source: Own survey data, 2022

3.7 Summary of the survey results

One of our research questions was about the existence, size and characteristics of social groups in the CSEE region whose housing needs are not met under current market conditions. While our desk research uncovered that large segments of these societies - including parts of the middle class - are struggling with housing affordability issues, with the survey component, we zoomed in to provide a robust evidence base about these households. Our main findings are summarized below.

- We found out that **51-75% of the population in the four cities are part of a Wide Demand Group**, meaning they are not satisfied with their current housing conditions.
- **13-26% of the population belongs to a Narrow Demand Group**; they are, in principle, open to living in affordable and secure rental units for a longer time and are above the three lowest income deciles in their country of residence.
- Members of the NDG are typically younger (their average age is 43 compared to the average 52 of the overall population), have more children on average, their average income is around the 6-7th income decile, and their average housing-related expenses are 20% higher than in the WDG.
- This suggests that **members of the Narrow Demand Group are financially relatively stable but still unable to solve their housing problems**. The potential demand of this group signals a niche in the housing finance market.
- More than 50% of the respondents in both demand groups across the four cities have a “loan experience”. Of these respondents, **20.6% in the WDG and 23.8% in the NDG have experienced some difficulties obtaining a bank loan. Respondents from the NDG are more likely and confident to get a loan than those in the WDG**, which further strengthens our argument that the NDG could be a suitable target group for new housing finance instruments.
- Most of the respondents in both demand groups agree that **rents are too expensive in their cities** (75-87%) and that **renting cannot be a long-term solution** to their housing problems (42-80%) under unstable conditions.
- **Most of the WDG (44-78%) agree with or are neutral towards becoming a long-term tenant if the dwelling is affordable and their tenant rights are protected**. In the case of tenants, it is approximately twice as likely that they are open towards such a housing arrangement.

These results show that there is significant demand for new affordable housing models in CSEE. Moreover, our research proves that for most of the population, the main ambition is not homeownership per se, but a secure and affordable dwelling, even if they are tenants. Thus, the main question is whether this demand can be served with a renewed supply of novel housing finance instruments, which could catalyze the emergence of a nonprofit housing sector in this part of Europe. In the last section, we describe how this shift could be enabled by deploying catalytic capital investments.

“These results show that there is significant demand for new affordable housing models in CSEE.”

Source: https://www.pxfuel.com/en/free-photo-ebcld

4. Enabling the emerging market of rental and cooperative housing through the potential of catalytic capital investment

As demonstrated in the previous sections, current housing finance instruments, predominantly individual mortgages for property acquisition, only serve specific social groups, leaving others unserved. These unserved groups are relatively large: according to our survey, in the four capital cities of our core research countries (Zagreb, Budapest, Belgrade, and Ljubljana), over 50% of the population is somehow unsatisfied with their current housing situation and could represent a target group for new housing solutions. These new housing solutions should be different from the current dominant homeownership model. Our findings underline **the potential for developing new housing models based on new forms of tenure in the region**. More specifically, there is a potential opening for new affordable rental and cooperative housing models to be developed. The **potential demand groups and end users are there** (see previous section on survey results; 13-24% of respondents belong to the narrow demand groups for these models); however, **adequate, long-term financial instruments are lacking**. For these to develop, financial actors need to see **the market potential of new rental and cooperative housing in the CSEE region**.

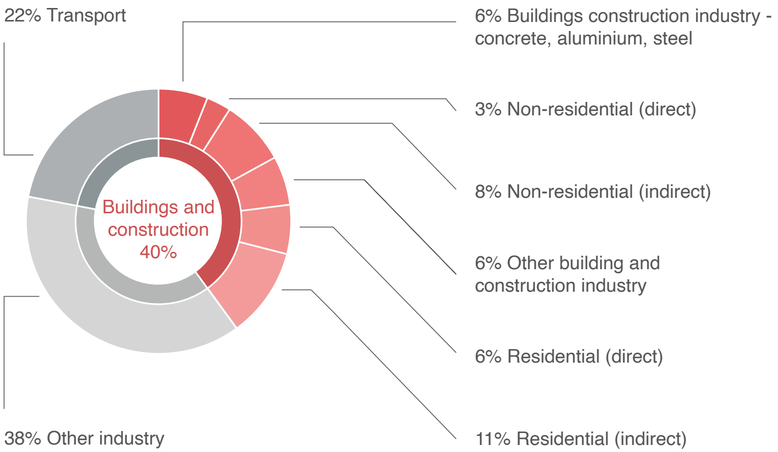
4.1 Benefits of covering the market gap of affordable housing

■ Introducing **long-term housing finance instruments** (adequate for rental and cooperative housing projects) could have a **broader stabilizing effect on the economy** and the real estate sector. Short-termism currently dominates these markets and has far-reaching negative consequences for market actors and households.

■ This sector can also enhance the development of **highly energy-efficient buildings** (either through renovation or new build). Since profitability is not the main criterion of these projects and long-term thinking is inherent, they will use **pioneering energy solutions** more often. This sector also has **attention to renovation, the transformation of existing buildings and brownfield developments**, which market-based projects will not have. Altogether, by channeling investment into the residential real estate sector along a logic of social and environmental sustainability, the affordable rental and cooperative housing sector significantly contributes **to the fight against climate change**. Currently, buildings and construction represent 37% of all final energy demand (out of which 21% is only residential) and 40% of global operational CO_2 emissions (out of this, 17% by residential real estate) (Figures 52 and 53). These are very high numbers, comparable to the combined energy demand and CO_2 emissions of all other industries. Thus, if we manage to strategically intervene in the energy efficiency of buildings, it can have a significant effect. This cannot happen without social and economic considerations of affordability, ownership and tenure structure, and consciousness about target groups.

FIGURE 52

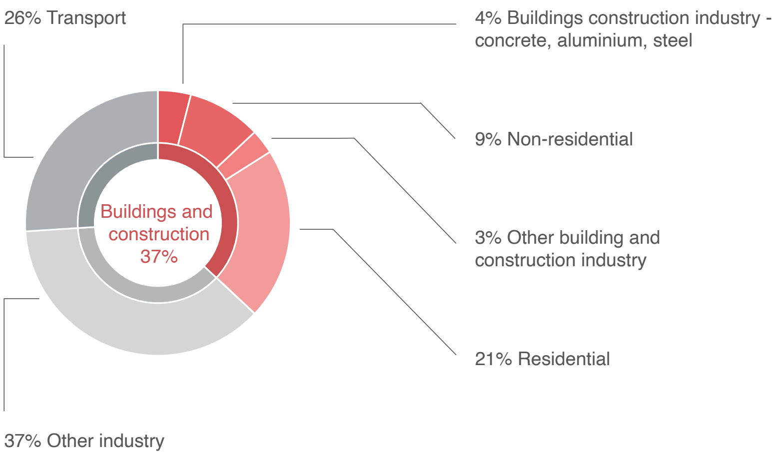
GLOBAL SHARE OF BUILDINGS AND CONSTRUCTION IN OPERATIONAL AND PROCESS CO_2 EMISSIONS, 2021



Source: UN Environmental Program, Global Status Report for Buildings and Construction, 2022 (not only data source, but also source of the figure)

FIGURE 53

GLOBAL SHARE OF BUILDINGS AND CONSTRUCTION IN FINAL ENERGY DEMAND, 2021



Source: UN Environmental Program, Global Status Report for Buildings and Construction, 2022 (not only data source, but also source of the figure)

■ Establishing an affordable institutional rental and cooperative housing sector **creates jobs and economic growth sustainably** (with potential positive spillover effects). Unlike high-end, high-return real estate development projects, not accessible to large parts of the population, affordable rental and cooperative housing projects can expand the real estate industry in a stable way.

■ In the case of housing solutions with community aspects, "soft benefits" such as internal mechanisms of solidarity and stepping up against isolation **make the residents' community more resilient**. This is particularly important in times of crisis.

These investments are currently all the more timely because:

■ The affordable housing sector may have smaller yields than high-end investments but is built on more stable and persistent demand. Thus, it is a **good and crisis-tolerant long-term investment opportunity**. Furthermore, well-designed models can catalyze additional investments both from future residents and public actors.

■ The current housing markets of Central and South-Eastern European countries have become unsustainable, and the **pressure for new models to emerge is getting more and more critical**. At the moment, this is a p**ioneering, niche opportunity** – where the first actors to start will have the most experience and credibility as this new segment expands.

Source: Erin East

4.2 The main bottlenecks to financing rental and cooperative housing in Central and South-Eastern Europe

As demonstrated by our overview of case studies in the Supplement, in countries with developed rental and cooperative housing sectors, affordable housing projects are usually financed through long-term (25+ years) and affordable (under 5% interest rate) debt. However, in the CSEE region, this model, under the current market conditions, runs up against two main bottlenecks: the lack of long-term project finance and the lack of robust experienced housing providers.

In the region, **loan durations are a major obstacle** to developing institutionally run rental or cooperative housing projects. The short-term nature of finance is a self-reinforcing process. Economic actors expect higher returns due to the higher perception of risk and the political and economic conditions that change faster.[164] However, short-term financial resources significantly contribute to and deepen this volatility. Project financing in the residential real estate sector is also short-term and designed for companies that build for sale. Under these conditions, the few actors that engage in market-based rental housing development do so from their own funds. The duration of finance available has a direct implication for costs that need to be borne by residents. **Thus to create affordable solutions, housing finance needs to be long-term.**

Interviewed financial actors identify the reasons for this short-term financial perspective in the lack of long-term financial resources in the region,[165] the lack of adequate regulatory frameworks,[166] and the **lack of end beneficiaries that would have substantial experience in this sector.**[167] The first two concern the housing market's general economic and political framework, but the latter is a factor that can more easily be shifted. Experienced nonprofit housing providers do not exist in the region because this institutional infrastructure was dismantled in the 1990s under rapid privatization and liberalization. The currently existing small organizations cannot upscale because of a lack of adequate financial resources. For starting affordable housing provision organizations, it is also a formidable challenge to demonstrate their creditworthiness, as long existence and larger-scale operations are usually the prerequisites for longer-term, favorable financing.

This produces a catch-22 situation: long-term financial solutions do not develop because banks see no reliable organizations to lend to. At the same time, rental and cooperative housing providers cannot scale up because they do not have access to long-term finance.

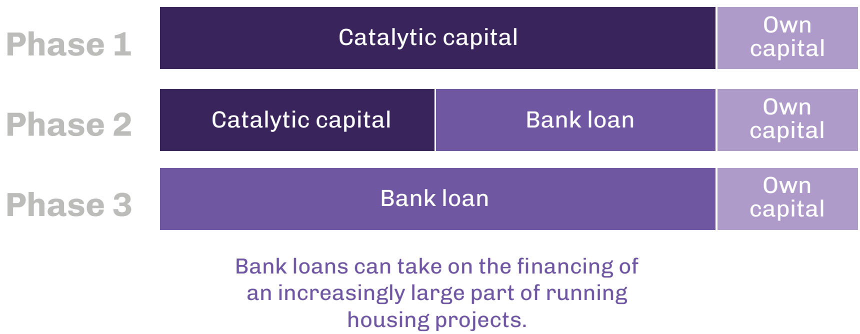
This impasse can be overcome by introducing an **element of time**. Through

164. Interview 22.
165. Interview 1, 4, 19.
166. Interview 3, 21, 23.
167. Interview 2, 19, 21.

our work in the past years, we have learned that these bottlenecks will not be overcome instantly as an immediate next step. **Instead, a process can be imagined where catalytic capital plays a vital role in kickstarting the necessary change, drawing in more traditional financial actors, which can gradually shift their financial practice** (Figure 54). **In this process, more robust housing providers can also grow up**. Thus, the mid-term result can be a similar setup we know in developed rental housing markets: long-term loans directly financing rental and cooperative housing development.

FIGURE 54

TEMPORAL ASPECT: THE FINANCIAL MIX OF THE TOTAL INVESTMENT VOLUME



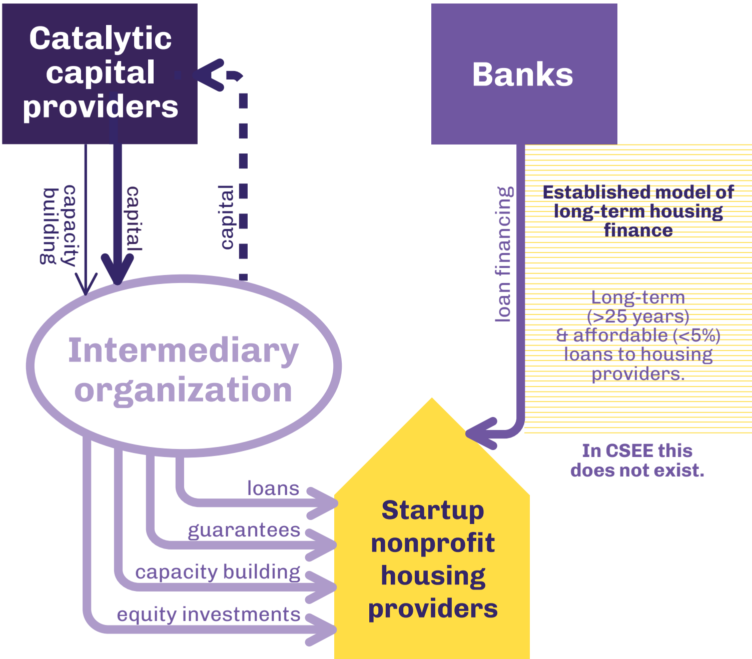
Source: Own edits

4.3 Catalytic capital can kickstart a shift in the housing finance landscape

We propose to bring catalytic capital to bridge the gap of missing long-term finance (Figure 55). This could take the form of complementary financing next to a (mid-term) bank loan and can cover a significant part of the initial investment needed. **With time, as traditional lenders (banks) gain more confidence, the part of loan financing can be increased**. The traditional lenders most likely to engage in the beginning are banks that already show some openness to new instruments in the housing market.

FIGURE 55

CATALYTIC CAPITAL, BRIDGING THE GAP OF MISSING LONG-TERM FINANCE

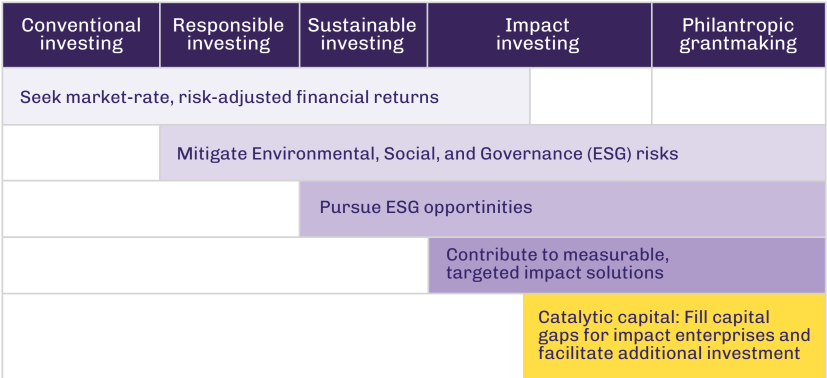


Source: Own edits

The catalytic capital provided in the beginning needs to be very patient, on the spectrum from grants to conventional capital investment (Figure 56). Later on, the return expectations can be more diversified. This initial very patient capital was historically often provided by different state actors. In current circumstances - increasing awareness around the catalytic capital provision and the CSEE context of systematically withdrawing states - this can also be achieved through private initiative.

FIGURE 56

THE SPECTRUM OF INVESTMENTS



Source: www.macfound.org, Catalytic Capital Consortium, Frequently Asked Questions

Intermediary organizations are needed to channel catalytic capital towards end beneficiaries (startup housing providers). Their role is to collect and structure capital and issue it to end beneficiaries (while supporting them with capacity development) since catalytic capital investors cannot engage directly with the startup housing providers.

Existing examples of funds operating in this logic, providing smaller-scale innovative financial mechanisms for housing purposes in the region, are the *European Fund for Southeast Europe* and *Habitat for Humanity's*[168] revolving fund. However, both funds issue small loans to their end beneficiaries (the average loan amount from EFSE is 11,000 €) since they mainly finance individual home improvements. **Therefore, much more significant sums are needed to kickstart the affordable rental and cooperative housing sector and finance organizations and companies.** This more considerable amount of capital can also be gathered by a regional intermediary organization and **provided to the startup housing providers through equity investments, loans, or guarantees**. Thus, capacity building on the scale of intermediary organizations is also necessary to break the current deadlock.

Using an intermediary organization would have several advantages from the perspective of catalytic capital investors. One is that capital put into the intermediary organization can be withdrawn since **the intermediary fund also has a constant refinancing function**. This also means that these shorter-term investments should function as rolling (constantly refinanced) loans to the intermediary organization rather than investments with actual ownership stakes. Refinancing would be necessary because the short-term (3-5 years) logic of investment funds is not compatible with affordable housing finance and thus needs to be somehow "transformed" into a long-term instrument from the perspective of the end beneficiary housing providers. However, it is essential that the longer term the investment has, the more stable the operations can become. This is important from the perspective of the

168. See *www.efse.lu* and *www.habitat.org.mk*

intermediary organization, which would need to bear the costs and risks of its shifting financial resources. Beyond the risks and costs of refinancing, the intermediary organization would also need to handle the risks and costs associated with investing in different currencies and secure knowledge of the local contexts and housing providers. Altogether, the intermediary organization would also have a crucial matchmaking function between actors on different scales. To perform this role adequately, these intermediaries must be well embedded on different scales. If intermediaries operate on a regional level, mechanisms to manage currency risks are also essential. There are a few good examples of this (for instance, EFSE's practice of multi-currency lending), but this represents a challenge in the CSEE region.

The capital provided in this way would be complementary to bank loans taken by projects, compensating that these loans can only be obtained for a relatively short period. As long as the bank loan is being paid off, the capital contribution through the intermediary organization would be subordinated (with the possibility of refinancing). Mixing bank loans with catalytic capital investment also makes sense from the banks' perspective since it contributes to the equity of the project they finance. Banks would lend on the scale of the real estate, which can provide collateral, financing local legal entities directly, and the reference of being linked to a financially robust intermediary organization will strengthen their trust. The banks participating in this model could realistically be local banks (or local subsidiaries) in the countries where the nonprofit housing providers are active. Thus, they would lend directly, in local currency, to the housing organizations. Some of the local banks which participated in this research could potentially be the ones to step into such models to promote environmental and social sustainability in local housing markets.

This would strengthen smaller-scale housing providers and new nonprofit housing management entities, allowing them to put up a mixed financing structure combining different sources (i.e., shorter-term bank loans, grants, friendly investments). As long as these organizations cannot access long-term financing, non-refundable financial resources will also need to play an essential role in their financial mix. This is not sustainable in the long run (unless government subsidies become accessible), but for kickstarting new housing provision organizations can be crucial. This is also true on the scale of the intermediary organization, for which to fulfill its objectives, initial capital needs to be (at least partially) non-refundable. This will allow for setting up the structures, testing different financial mechanisms and covering for risks.

Such initial resources for developing housing organizations could potentially come from government entities, but this is not likely to happen systematically under current conditions in the CSEE region. Thus, the potential role that philanthropic organizations or transnational entities can play is even more critical. These new housing organizations can develop into self-sustaining social enterprises in the mid-term. If public housing organizations were to be set up, they could partner with nonprofit housing providers, improving their access to long-term finance through loans from large development banks. This shift can also come from smaller nonprofit housing providers teaming up with real estate developers open to the segment of affordable housing provision, who can acquire longer-term loans and can contribute with professional capacity.

4.4 Creating new instruments for cooperative housing finance: the case of MOBA Housing SCE as an intermediary organization

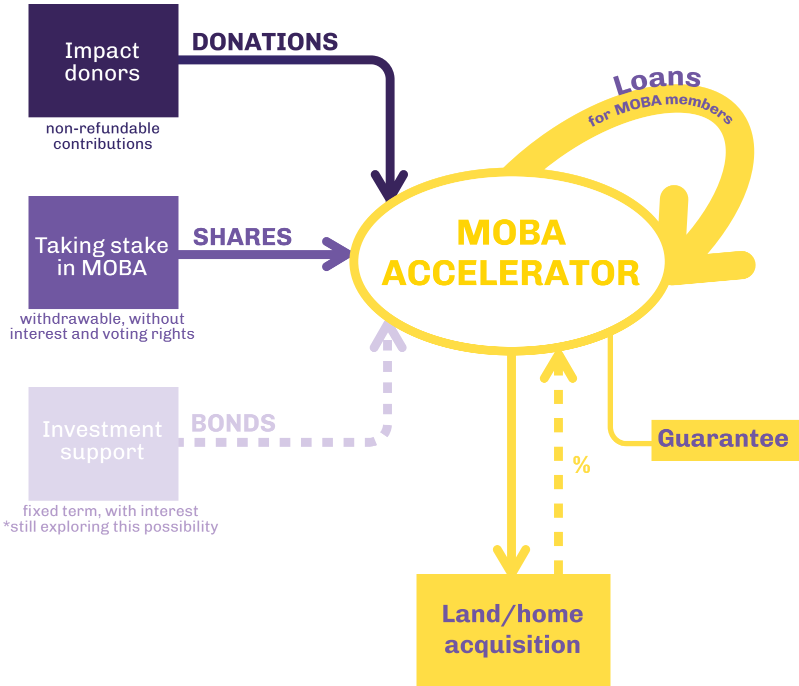
MOBA Housing SCE (MOBA) is a network of pioneering housing cooperative initiatives from the CSEE region. The organization has been incorporated as a European Cooperative Society registered under Croatian jurisdiction since 2020, with full members from Croatia, Czechia, Hungary, Serbia and Slovenia. **One of the main aims of MOBA is to become a regional financial intermediary for new rental-based and limited equity housing cooperatives.** It was brought to life due to recognizing some of the discussed bottlenecks, mainly the lack of adequate financial instruments for novel cooperative housing providers. **The main financial instrument of MOBA is the MOBA Housing Finance Accelerator, which works as a quasi-fund**, collecting capital through donations, investment through shares, and potentially issuing bonds (see Figure 57). Thus, the Accelerator can manage capital across the "impact investment" spectrum. The Accelerator finances full MOBA members through short-term bridge loans (or medium-term subordinated loans) and potentially also by equity investment (once this instrument is more capitalized).

This mechanism allows startup housing cooperatives to move past the bottleneck of financing their initial investment. Since organizations in MOBA countries only have access to short-term bank loans, to be able to service these loans, only a smaller part of the project can be financed through them. However, starting housing providers also experience difficulties bringing in high portions of their own equity. Furthermore, as we saw from the survey conducted in this project, the potential target group of a rental-based cooperative model has only a limited amount of savings to invest. **Thus, the mechanism of the MOBA Accelerator can finance the missing part, complementing its own capital (of the cooperative and its members), as well as the smaller bank loan**. The financing provided by MOBA only needs to be temporary. As the project development phase is over and a stable revenue stream is demonstrated, it can increasingly be refinanced through conventional loans. However, in the initial phase, it could provide a very significant part of the needed capital (potentially even as the sole source of external finance to a project), gradually being refinanced by longer-term resources.

Thus, the MOBA Accelerator can become a regional intermediary discussed in the previous section, collecting catalytic capital investments. **The type of finance needed in the MOBA Accelerator corresponds to how catalytic capital can support the development of affordable rental and cooperative housing in the CSEE region.** Currently, the MOBA Accelerator is in a fundraising phase, aiming to raise 1 million € by the end of 2023. In the initial stage, also non-refundable resources will be required for capacity building and setting up and testing lending mechanisms.

FIGURE 57

THE MOBA HOUSING FINANCE ACCELERATOR



Source: Own edits

More information on MOBA and the MOBA Accelerator can be found here:

www.moba.coop/moba-accelerator/

4.5 Conclusions

As we enter a new crisis, it seems unlikely for new long-term, affordable bank lending practices to develop in the CSEE region in the immediate future. However, precisely in a period when individual mortgage-based lending is expected to come to a halt, setting up strong intermediary organizations and housing providers can make a difference. **This can become a period where matching various resources would allow a new affordable housing segment to develop** and prove its legitimacy. The need for this new housing sector in the CSEE region has only grown during the past decades. An affordable rental and cooperative housing sector would have far-reaching benefits - beyond its future residents - by stabilizing volatility in the housing markets of CSEE countries and creating a more crisis-tolerant housing system.

Current economic insecurities and a retreat in bank lending will favor those actors in the real estate market with sufficient liquidity to enter into transactions with their own capital. The question is **whether this coming period could also benefit smaller, nonprofit actors**, enabling them to acquire properties. For this, they will need catalytic capital to take game-changing steps.

In the model outlined above, banks that provide the loan element of the financial structure would be local, expanding and modifying their existing products to better match the needs of nonprofit housing providers.

However, the important question is **who the engaged catalytic capital providers would be, ensuring the game-changing capital injection**.

Recently, there has been a growing interest in Central and South-Eastern European markets from Western investors, meaning mainly new resources for market-based residential real estate developments.[169] This interest is primarily a result of saturating Western European markets and higher return expectations in Central and South-Eastern Europe. Against this logic, the big challenge is **whether any newly available financial resources can be channeled into the affordable rental and cooperative housing sector.** For this, robust frameworks need to be created now. Catalytic capital investors often prioritize their own context for their investments, making the CSEE region situation more complex since these forms of investment are not established. Thus, in developing this sector, international transfers of catalytic capital will need to be important - until a point that the “capital pool” of CSEE is large enough to establish its own philanthropic investors.[170]

Common to all above is the difficulty for smaller actors to engage with such investors. For this reason, catalytic capital investment needs to be channeled **through committed intermediary organizations** and for **capacity development** to happen both on the scale of local housing providers and intermediary organizations.

169. Real Estate Capital Europe – *Revetas sees strong lender support for CEE investment*, 2022.10.26.
170. Interview 4.

More information about the project “Analyzing the potential of catalytic capital investments in the affordable housing sector of Central and South-Eastern Europe” and about the project partners can be found here:

www.moba.coop/catalytic-capital-investment/

Source: Nikola Aleksic

Annex: Methodological tables

FINANCIAL INSTITUTIONS SUBJECT TO DESK RESEARCH IN THE FOUR CORE RESEARCH COUNTRIES

Index	Name of the institution	Type	County
1	Zagrebačka banka d.d., Zagreb	commercial bank	Croatia
2	Privredna banka Zagreb d.d., Zagreb	commercial bank	Croatia
3	Erste & Steiermärkische Bank d.d., Zagreb	commercial bank	Croatia
4	OTP banka Hrvatska d.d., Split	commercial bank	Croatia
5	Raiffeisenbank Austria d.d., Zagreb	commercial bank	Croatia
6	Hrvatska poštanska banka d.d., Zagreb	commercial bank	Croatia
7	Nova hrvatska banka d.d., Zagreb	commercial bank	Croatia
8	Hrvatska banka za obnovu i razvitak	development bank	Croatia
9	Banca Intesa A.D. Beograd	commercial bank	Serbia
10	Unicredit Bank Srbija A.D. Beograd	commercial bank	Serbia
11	NLB Komercijalna banka AD Beograd	commercial bank	Serbia
12	OTP Banka Srbija akcionarsko društvo Novi Sad	commercial bank	Serbia
13	Raiffeisen banka AD Beograd	commercial bank	Serbia
14	Erste Bank akcionarsko društvo, Novi Sad	commercial bank	Serbia
15	Banka Poštanska štedionica akcionarsko društvo Beograd	commercial bank	Serbia
16	Agroindustrijsko komercijalna banka AIK Banka A.D	commercial bank	Serbia
17	ProCredit Bank AD Beograd	commercial bank	Serbia
18	Eurobank Direktna akcionarsko društvo Beograd	commercial bank	Serbia
19	Nova Ljubljanska banka d.d., Ljubljana	commercial bank	Slovenia
20	BKS Bank A.G. Bančna podružnica	commercial bank	Slovenia
21	Nova Kreditna Banka Maribor d.d.	commercial bank	Slovenia
22	SKB Banka d.d. Ljubljana	commercial bank	Slovenia
23	UniCredit Bank Slovenija d.d.	commercial bank	Slovenia
24	Banka Sparkasse d.d.	commercial bank	Slovenia
25	Stanovanjski Sklad Republike Slovenije	public housing fund	Slovenia
26	Slovenski regionalno razvojni sklad	regional development fund	Slovenia
27	Nepremičninski sklad PIZ d.o.o.	real estate fund for pension and disability insurance	Slovenia
28	Eko sklad, Slovenski okoljski javni sklad	environmental public fund	Slovenia
29	Erste Bank Hungary Zrt.	commercial bank	Hungary
30	MTB Magyar Takarékszövetkezeti Bank Zrt	commercial bank	Hungary
31	OTP Bank Nyrt.	commercial bank	Hungary
32	Raiffeisen Bank Zártkörűen Működő Részvénytársaság	commercial bank	Hungary
33	UniCredit Bank Hungary Zártkörûen Mûködõ Rt.	commercial bank	Hungary
34	MagNet Magyar Közösségi Bank Zártkörűen Működő Részvénytársaság	commercial bank	Hungary
35	GRÁNIT Bank Zártkörûen Mûködõ Részvénytársaság	commercial bank	Hungary
36	MKB Bank Nyrt	commercial bank	Hungary
37	Fundamenta-Lakáskassza Lakástakarékpénztár Zártkörûen Mûködõ Rt.	savings bank	Hungary
38	Kereskedelmi és Hitelbank Zrt.	commercial bank	Hungary
39	MFB Magyar Fejlesztési Bank Zártkörűen Működő Részvénytársaság	development bank	Hungary

LIST OF INTERVIEWS

Domestic interviews				
Interview no.	**Date**	**Type of actor**	**Position of interlocutor**	**Country**
1	2022.06.23	Large bank, also present internationally	Head of mortgage business line	Hungary
2	2022.06.24	Local small innovative bank	Deputy CEO	Hungary
3	2022.07.07	Mortgage refinancing bank	CEO and Head of Capital Markets Department	Hungary
4	2022.09.22	Impact investment fund	Managing Partner	Hungary
5	2022.05.17	Public development bank	Consultant	Croatia
6	2022.06.07	Association of real estate traders	President of the association	Croatia
7	2022.08.29	Commercial bank	Head of real estate company	Croatia
8	n/a	Commercial bank	Senior Product manager and Marketing manager	Slovenia
9	n/a	Commercial bank	Director of Project Finance	Slovenia
10	n/a	Commercial bank	Executive Director	Slovenia
11	n/a	Promotional development and export bank	Director of Export and Project Financing,	Slovenia
13	2022.02.11	Business development bank	Member of the executive board	Serbia
14	2022.08.02	Large bank, also present internationally	Head of social banking unit	Serbia
15	2022.09.28	Large bank, also present internationally	Head of products and payment solutions department	Serbia
16	2022.09.28	Large bank, also present internationally	Head of real estate and specialized financing department	Serbia
17	2022.10.14 2022.11.08	Governmental institution	Head of housing policy department	Serbia

International interviews				
Interview no.	**Date**	**Type of actor**	**Position of interlocutor**	**Geographical scope**
18	2022.05.11	Global development bank	Principal of a Fund	Europe / Global
19	2022.05.18	Regionally present retail bank's subsidiary	CEO	Central Europe
20	2022.07.14	Foundation for anti-speculative land and housing projects	Director	Germany
21	2022.07.15	European development bank	Senior Urban Specialist	Europe
22	2022.07.15	Ethical bank	Housing Branch Coordinator	Germany (and Europe)
23	2022.07.26	Alternative investment fund manager	Senior Investment Officer	Western Balkans and Eastern Europe
24	2022.08.03	Global development bank	Lead Urban Specialist	Global
25	2022.08.04	Ethical bank	Real Estate Finance Manager	Switzerland
26	2022.08.12	Foundation engaged in fighting inequality and climate change	Program Manager for Built Environment	Netherlands (and Global)
27	2022.08.17	Foundation of an investment bank	Managing Director	Switzerland (and Global)

Supplement: Lessons from contemporary and historical case studies

In this section, we present contemporary and historical examples of affordable housing provisions we examined, along with the financial mechanisms that enable them. **The overview aims to un-derstand how such financial mechanisms for affordable housing provision could ideally look today and what can be taken from previous initiatives in the Central and South-Eastern European region.** The contemporary examples from elsewhere serve as inspiration - even though they can not be directly copied into the CSEE context. The historical examples from CSEE are relevant as a reminder, demonstrating there had been local mechanisms to draw on. I**n the case studies, we focus on the financial aspects of affordable housing provision. This is because missing financial mechanisms are currently one of the critical bottlenecks for devel-oping new forms of affordable housing. Furthermore, this is precisely where catalytic capi-tal can contribute.**

In countries where affordable rental and cooperative housing provision functions in a sustainable and scalable way, **usually, there is a web of various entities forming this sector. Public, private and nonprofit actors act harmonized and mutually reinforcing to ensure a functioning affordable housing segment.** This section reviews f**inancial instruments enabling such affordable rental and cooperative housing development**, mainly outside the CSEE region. We use these inspiring examples to highlight elements helpful to develop similar instruments in the CSEE region. The case studies are grouped around public, private and nonprofit actors. **Beyond these contemporary examples, we also discuss historical ones - specifically from the CSEE region**.

Methodological note

Our primary information sources for this section were interviews conducted with representatives of different international financial institutions (and a few foundations) and desk research (mainly concerning EU financial mechanisms and CSEE historical examples). Unless referenced otherwise, the information summarized for each of the actors and case studies stems from interviews conducted with representatives of the organization in question.

S1. Public (or publicly funded) financial actors

Public financial actors have always played an essential role in financing affordable housing, with a significant role usually taken on by national-scale public financial institutions. Besides implementing specific financial instruments, national governments have an important role in setting up the legal and regulatory framework of affordable housing provision. Although local governments also have an important role in affordable housing provision in different contexts, they will not be addressed here. In the research, we put specific attention to the international scale, as one that can influence the development of financing affordable housing provision in contexts that do not have a favorable local regulatory and financial context, the case of most CSEE countries. The European Union does not have any formal role in providing affordable housing and housing finance in the member states. However, due to the withdrawal of national governments from housing provision (although this trend is currently turning around) and the issue of affordable housing being pushed forward on the European political agenda, the presence of EU actors is increasing nowadays. The campaign and report of #Housing2030[171] supported this process. Through pre-accession financing mechanisms, EU actors can also have a role outside member states. Outside the EU, much of the international financial resources for housing are available in the development finance framework. Such mechanisms were also established after the Yugoslav wars in the 1990s to support postwar reconstruction in the region. These latter experiences can be especially informative to learn from.

The European Investment Bank (EIB)

The EIB, the European Union's development bank, finances projects that have importance from the EU perspective. **The EIB finances social and affordable housing projects through its urban development division. Potential projects include renovating existing housing units and constructing new ones**.[172] The EIB does not finance market-based housing developers but only legal entities committed to affordable housing provision. These can be organizations of affordable rental housing (both publicly and privately owned) or housing cooperatives. 70% of the entities they finance are publicly owned, while the other 30% are typically third-sector organizations (cooperatives or nonprofit housing providers). The EIB operates with large ticket sizes and is generally conservative and risk-averse in its lending policy. Thus, it won't be an innovative financier for new small-scale projects. Still, if public entities are willing to engage in long-term institution-building (investing their initial funds for this purpose), they can provide the very long-term, affordable and patient finance necessary for producing affordable rental and cooperative housing.

171. #Housing2030 *website*
172. European Investment Bank – *Social and affordable housing*

Currently, the EIB is less able to finance housing projects in Central and South-Eastern Europe, mainly as the organizations mandated to develop this sector are largely missing. Also, most CSEE governments do not have a political perspective on developing the affordable housing sector. Instead, they prefer addressing the housing issues through individual homeownership subsidies - without recognizing how this exacerbates housing access problems. To increase the EIB's lending for affordable housing purposes in CSEE, they emphasize technical assistance and advisory work (provided free of charge to public entities). The EIB also provides skills transfer to local development banks interested in starting lending to affordable housing projects or intermediaries for EIB financing.

A recent positive example is Poland, where the government has put in place a framework for boosting public housing investment and has set up a structure that provides technical assistance and financing to local municipalities to create their own publicly owned housing companies. The hope is that this mechanism will significantly increase public rental housing stock.

In terms of the exact structure of financing and the target groups for projects, the EIB relies on the existing regulatory system in the given country. Thus, they finance within the current legal and institutional framework for social and affordable housing provision and expect the projects to meet the local regulatory criteria - for instance, target groups and rent levels. This policy creates a further obstacle to accessing EIB financing if the given country has no regulatory and institutional framework for social and affordable housing. In this case, financing on the municipal level can be a solution, if the municipality has the necessary regulatory frameworks and institutions.

Other European financial instruments and development banks

Through the InvestEU program, the European Commission currently deploys significant investment volumes for strategic purposes, which might finance housing projects indirectly. The program is being implemented by the European Investment Fund, which can be indirectly involved in housing projects through guarantee mechanisms provided either to commercial banks or to the EIB. These guarantee programs can allow the banks to expand their existing lending practices and integrate actors or projects deemed riskier / more innovative into their portfolios. For instance, Erste Social Banking has been using the EU Programme for Employment and Social Innovation (EaSI) guarantee scheme of the European Investment Fund (EIF) to allow better lending to social enterprises.

The European Union is also present in financing housing programs through grant mechanisms. Some of these are accessible directly from the European Commission, such as the European Urban Initiative funds. Other sources that can be used for housing projects arrive to member states through operational programs and are usually distributed on a tender basis by the national government.

Generally, the EU does not have strong rights or obligations in housing. However, with the increasing pressure of affordability and the need for more extensive renovations for energy efficiency, various expert voices - such as Housing Europe[173] - are pushing for more presence of the transnational scale in housing issues.

The **Council of Europe Development Bank (CEB)** also has an important role in financing different social, and among them housing projects in the Central and South-Eastern European region. The CEB was established in 1956 in response to the post-World War II refugee crisis in Europe.[174] It has a social mandate, aiming to strengthen social cohesion and social integration in Europe, focusing mainly on 22 target countries in Central, Eastern and South-Eastern Europe.[175] Beyond loan instruments, the CEB also deploys grants in the target countries.[176] The main CEB instrument are loans to member states' governments. Throughout past decades, the CEB financed various housing projects, mainly in the target countries of the organization. Short evaluations of these projects can be found on the CEB website under sections "Housing for low-income persons"[177] and "Housing for social integration"[178]. These housing projects were most active in the early 2000s, and in 2011, 27% of all CEB loans in target countries were related to housing.[179]

The **European Bank for Reconstruction and Development (EBRD)** is another European-scale development bank with an important presence in the Central and South-Eastern European region. It was created in April 1991 to 'foster the transition towards open market-oriented economies and to promote private and entrepreneurial initiative'.[180] Thus, this institution also has a particular focus on the CSEE region due to its historical legacy. The main profile of this institution is to support the development of businesses with preferential loans. The EBRD only has relatively few housing-related projects, most focusing on post-soviet countries. In the Central and South-Eastern Europe countries, there is currently a project on district heating in Kragujevac, Serbia;[181] and a project for developing rental housing provision in Poland,[182] also in response to the wave of refugees arriving from Ukraine.

Finance in Motion / European Fund for Southeast Europe

Finance in Motion (FiM) is a licensed alternative investment fund manager (AIFM) focused on impact investing in emerging markets and with a significant track record of channeling public investment money into the Western Balkans region. It manages 6 funds in total, out of which the Green Growth Fund (GGF) and the European Fund for Southeast Europe (EFSE) focus on the Balkans region. They create blended finance solutions, which combine public (and/or philanthropic) funds with private ones. This public-private partnership approach

173. Housing Europe *website*
174. European Association of Long-Term Investors – *Members: Council of Europe Development Bank*
175. European Association of Long-Term Investors – *Members: Council of Europe Development Bank*
176. Council of Europe Development Bank – *Financing social projects in CEB target countries*
177. Council of Europe Development Bank – *Housing for low-income persons*
178. Council of Europe Development Bank – *Housing for social integration*
179. Council of Europe Development Bank – *Financing social projects in CEB target countries*
180. European Bank for Reconstruction and Development *website*
181. European Bank for Reconstruction and Development – *Management and Reuse of the Ashes/Slag from the Kragujevac District Heating Plant - Serbia*
182. European Bank for Reconstruction and Development - *RLF - Resi4Rent (housing in Poland)*

is used to mobilize more investment to the region and sectors with considerable impact potential.

Finance in Motion (FiM)[183] is not a public legal entity, but public investments are important in its functioning. 45% of its funding comes from public investors, 33% from international financial institutions (many also public / multi-country institutions), while only 22% from private investors.[184]

Out of the funds managed by Finance in Motion, we will discuss **EFSE (European Fund for Southeast Europe)**[185] in more detail since it is the most relevant from the perspective of this research (the GGF does not currently have a specific engagement with housing). The predecessor of EFSE was established in the 1990s as the European governments' joint channel for supporting the post-war reconstruction in the Balkans - for more detail on this, see the section below on historical examples. Their operations are focused on the Western Balkans and non-EU Eastern European countries (in the region, they have offices in Sarajevo, Skopje, Priština, Belgrade, Podgorica), as well as Turkey and the ENR region (European North of Russia). Among EU countries, they are open to activity with the latest-entrant EU members (Bulgaria, Romania, Croatia), but generally, they are focused on non-EU countries.

Finance in Motion became the manager of EFSE in 2009, and it is the biggest fund FiM manages. EFSE is a public-private partnership: in total, 76% of funding comes from different public institutions (EU Commission, the Government of Albania, Austrian Development Bank, KfW (German public development bank), EBRD, and a few other Western European governments), and 24% is from private financial institutions (e.g. commercial banks). The total fund volume is now about 1 billion €.[186]

They work similarly to other development finance agencies present in the region, such as EBRD and KfW (Kreditanstalt für Wiederaufbau), but focus on smaller actors and have quicker and more adaptive procedures. There are also microfinance institutions in the region they collaborate with or provide with similar kinds of financial products.

The end beneficiaries of EFSE are micro and small enterprises and households. The average loan size is 11,000 € - relatively low but already higher than before. The reason for small loans sizes is that the fund had mainly focused on microfinancing. The principal loan types are small enterprise loans, agricultural loans, and housing and home improvement loans for private households. Housing loans are usually for home improvement, on a scale of 3-4000 euros, or contributions to individuals' home purchases. Housing loans today amount to about 23% of their portfolio, lower than before (during the reconstruction period following the Yugoslav wars, housing loans were the most common product of the fund). Today, this share is going down because EFSE does not currently see impactful ways to invest in housing. They would potentially consider it if new, more progressive, and financeable ways are demonstrated.

Financing always goes through local financial intermediaries. EFSE does not finance end beneficiaries. These intermediaries are usually banks or microfinance institutions but can also be less conventional organizations. For instance, EFSE works with FED Invest, a financial coop-

183. Finance in Motion *website*
184. Finance in Motion - *Impact Report* 2021, p.30.
185. European Fund for Southeast Europe *website*
186. European Fund for Southeast Europe – *Q1 2022 Development Performance, Quarterly Fact Sheet*

erative providing financial tools to farmers in Albania. Due to currently increasing interest rates and the decreasing liquidity of banks, EFSE (and similar "alternative" lenders) is becoming more interesting for banks than in previous years. The form of housing finance EFSE provides to intermediaries is debt-based, usually for 5-10 years.

EFSE only has limited experience in equity financing and, for the time being, has not engaged in it because this form of financing needs more expertise in the specific field of activity and comes with more risk. However, they are exploring the possibilities of equity investments for the future. Through another fund managed by Finance in Motion, GGF, it is already possible to make equity investments and direct corporate project financing without an intermediary. This fund is earmarked for climate change management projects with high energy efficiency levels for housing purposes and green energy generation.

EFSE has developed a mechanism for local currency lending, which they use primarily in the Eastern European neighborhood region and in Serbia to some extent. This mechanism covers currency exchange risks from two perspectives: on the one hand, donors can commit money in different local currencies through the so-called L-shares. On the other hand, when money is lent out, it is also hedged by EFSE, which results in higher costs, but more security for the borrower. Currently, 63% of sub-loans are provided in local currencies this way.

EFSE recognizes that capacity building, technical assistance and mentoring on the level of financial intermediaries are essential. Also, they prioritize working with business support/business development organizations which aim to develop social entrepreneurship (e.g. ACT group in Croatia, Smart Kolektiv in Serbia, Mozaik group in Bosnia and Herzegovina) to multiply their impact.

Their broader view on impact financing in the region is that Western European mother banks are usually the driving forces behind impact finance. This can push for a change in lending practices, but the lack of any local regulatory requirements in this direction creates an obstacle. Sustainable financial practices remain voluntary in the region for the moment, making integrating these practices much slower.

S2. Social and "impact" approaches of private financial institutions

Some private financial institutions have social and environmental concerns as a structuring aspect of their business, while others have established separate divisions or legal entities to engage in social and environmental sustainability. This section discusses institutions of both types and their different forms of financing affordable housing projects.

Erste Social Banking

Erste Bank was established in 1819 as the first Austrian savings bank. Today, the social mission of Erste Bank is reflected by its Social Banking division, its Social Finance Holding and the fact that ERSTE Foundation is a key shareholder of the group, keeping the bank on track in terms of its core values. Erste is primarily a retail bank with a presence in all of the countries of this research. It is the leading bank in these countries in terms of its asset size (for a more detailed analysis of its regional position, see section 2.1). Erste Bank's Social Banking division was established in 2008; it was a pioneer in integrating social concerns with financial practice at that time. This division is embedded within the bank (both at the mother institution and local subsidiaries), which is a benefit in scale and access to know-how and capital.

After the 2008 financial crisis, the focus area of Erste Social Banking was unemployment. They saw this as the most urgent social issue in the Central and Eastern European region. Thus, Erste Social banking started supporting startups and microenterprises which could create workplaces. Since 2013-2014, the employment situation has improved, but house prices have been constantly on the rise since then. **Thus, currently, they prioritize housing unaffordability as the primary social issue in the region**. Erste Social Banking started to address the housing issue in the CSEE region with a housing project in Slovakia enabling the financing of self-built houses for segregated Roma communities. In 2019 Erste's subsidiary in Slovakia launched a joint venture with Slovak public investment holding that acquires flats to be rented for people with limited housing access via cooperation with NGOs and municipalities (current stock ca. 200 apartments). In Austria, Erste provides housing microloans for apartment deposits and downpayments, enabling access to cooperative and private rental flats.

Seeing the magnitude of the housing affordability problem impacting not only households with lower incomes but also the middle class, Erste Group has also launched an ambitious project to develop its own rental housing companies in its CEE markets. The initiative is built on the experience from Austria, where Erste owns multiple public-benefit housing companies that operate approximately 12,000 flats. In July 2022, Erste Group announced that they would finance the construction of 15,000 apartments for affordable renting in Central and Eastern Europe[187] In the Czech Republic, for example, a separate company, CS Affordable Housing, has already been

187. Tportal.hr – *Dobit Erste Bank Group veća za 24 posto, do 2030. će financirati 15.000 stanova za subvencionirano stanovanje u srednjoj i istočnoj Europi* (Erste Bank Group's profit increases by 24 percent, until 2030 it will finance 15,000 apartments for subsidized housing in Central and Eastern Europe), 2022.08.01.

established to build affordable housing units for rent.[188] In Croatia, Erste Group is negotiating with multiple municipalities about the realization of such a project, where the city would give land for construction, and the bank would finance it.[189] In Hungary, the local Erste subsidiary is negotiating with some municipalities about the project.[190] In these new housing companies owned by Erste, the bank will utilize its own equity and debt funding lines.

In the experience of Erste Social Banking, when seeking to finance organizations in the field of affordable housing, a common bottleneck is the lack of minimum own capital (equity) required for a loan. Furthermore, no existing housing organizations would have sufficient human capacity and expertise to run larger real estate development projects.

One of the initiatives to bridge the missing equity gap was to introduce a "quasi-equity" instrument provided by Erste's Social Finance Holding. This company, a joint venture of Erste Group Bank and ERSTE Foundation, acts as an investor and intermediary in the CSEE region, with equity and quasi-equity investments.[191] The quasi-equity instrument is combined with loans provided by the local Erste Group banks and can help in materializing capital-intensive projects (such as housing). This is regionally beneficial - even though it increases financial costs compared to purely loan-based financing.

In terms of bridging the gap in human capacities, Erste Social Banking recognizes the importance of capacity building and mentoring and works on this in collaboration with ERSTE Foundation. Furthermore, they see potential in integrating professionals from commercial real estate development into the emerging affordable housing sector in the region.

GLS Bank

GLS is one of Europe's most reputed and largest ethical banks, with a long practice of financing socially and environmentally sustainable projects. It was established in 1974 as the first German bank of its kind. The bank is very active in financing housing cooperatives in Germany and, more recently, in Austria and the Netherlands (their only activity outside of Germany).

Housing is the most significant part of GLS Bank's portfolio, currently representing around 30%. Due to increasing housing, land and construction prices, the loans allocated to housing cooperatives are getting larger. In their selection of housing projects, GLS only finances projects that can demonstrate mid-term affordability (that is, can prevent rising rent levels and be 30-40% below market rents in 10 years), exclude speculation and are non-commercial. There are no restrictions regarding the legal form of a project. Unlike regular commercial banks, GLS does not finance projects developing and selling housing units. An eligibility criterion is that the legal entity developing the project holds the building long term. GLS's long-term (30 years) loans usually come with a fixed interest rate for the first 10 years. The bank loan usually covers 40-60% of the total project costs, and

188. Novac.jutarnji.hr - *Do 2030. austrijska grupacija u Hrvatskoj planira sagraditi priuštive stanove: Najam bi bio po pristupačnoj cijeni* (By 2030, the Austrian group plans to build affordable apartments in Croatia: The rent would be at an affordable price), 2022.08.02.
189. Varaždinski.hr – *U Varaždinu će se graditi stanovi za najam: 'Za dvosobni stan mjesečno to ne bi bilo više od 200 eura'* (Apartments for rent will be built in Varaždin: 'For a two-room apartment, it would not be more than 200 euros per month'), 2022.09.12.
190. Nepszava.hu – *Elérhető árú bérlakásokat épít az Erste Bank* (Erste Bank builds affordable rental housing), 2022.08.11.
191. Erste Social Finance – *About us*

25-30% is equity (including direct loans, in case the project needs them). The rest is either public loans (currently, 30-40% of new German housing cooperatives use government loans with restrictions concerning target groups and rents) or donations. This financing structure is also a result of rising house and land prices: previously, the bank loan would amount to a higher share of total costs. Rising land prices and building costs are the main bottlenecks to developing new affordable housing projects. This could be overcome by collaborating with public actors and using affordable green technologies (e.g. wood), all the more because environmental standards have become an essential element of GLS Bank's selection for housing projects.

GLS has a **process-oriented approach** to loan decisions, supporting projects in finding a financing solution. Long-standing experience with these types of housing projects counts a lot in the support process. Thus, **a bank needs to have professionals with experience in the field of bottom-up, collaborative housing projects to give relevant support to organizations**. From this perspective, it is also precious that GLS is open to **engaging in exchanges with international counterparts** interested in taking steps in ethical financing, specifically cooperative housing financing. Most bottom-up housing projects have an advisor working on project development or are part of an umbrella organization such as the Mietshäuser Syndikat. GLS welcomes umbrella organizations' support but always finances the projects directly, where the loan can be tied to collateral (i.e., the loan always needs to be taken by the organization that owns the building).

The direct engagement of GLS to finance housing cooperatives in Austria and the Netherlands was a socially oriented decision to develop "lighthouse" projects that would convince local political actors to create a favorable regulatory and financial environment for cooperatives. However, the bank does not want to expand lending to projects abroad further, and the current deteriorating macroeconomic situation also does not favor this kind of expansion.

It is important to note that GLS is a classical ethical bank with long-term financing structures. They do not engage in a startup or venture-type financial mechanisms. However, they act as an intermediary for individuals involved in impact investing through their asset manager GLS Treuhand,[192] and through their crowdfunding platform GLS Crowd[193] - the total size of both of these ventures is relatively small.

Banque Alternative Suisse (BAS)

The Alternative Bank Switzerland (BAS) is a socially and environmentally responsible bank which aims to further the common good. The bank is selective in the sectors in which it engages. BAS is very active in financing the cooperative housing sector in Switzerland and has recently become interested in expanding its activities internationally.

The BAS has been financing housing cooperatives since the bank's foundation in 1990. At that time, the beginning of the revival of housing cooperatives in Switzerland, housing cooperatives were seen as risky. Today many banks are interested in financing housing cooperatives since they have proven to be credible partners. 60% of BAS's financing goes towards

192. GLS Treuhand *website*
193. GLS Crowd *website*

housing cooperatives, with generally good experiences. Housing cooperatives are also more financially stable due to the higher support they can receive from the public sector. In financing cooperatives, two main difficulty periods were identified: first, the project development phase, when a cooperative does not have sufficient capacity and resources for the planning, and second, the period of construction, where costs can get out of hand due to unpredictabilities in the construction industry. In light of the recent rise in construction costs, cooperatives need to have more equity (own capital) or accept an increase in their monthly rents to service a larger bank loan. In the case of bottom-up, self-organized cooperatives, the long-term stability of the individuals who take responsibility for the project is also crucial. The experience of BAS is that public financial and institutional support is critical in the early stages of a project, and it works best if the bank loan is taken only for the project's construction phase. Furthermore, in the bank financing phase, non-financial support, such as capacity building and mentoring, can be crucial.

BAS has a nonprofit entity, the Association Fonds d'Innovation (Innovation Fund Association)[194] which was established in 1996 with the mission to **channel financing towards projects with significant social and/or environmental value but could not access regular bank financing**. The bank secures financing for this fund, and its shareholders can choose to donate their yearly dividends to the fund. To a smaller extent, the fund also collects donations from external (non-shareholder) individuals. The fund finances through smaller, 50-100,000 CHF loans or equity investments and is not subject to bank regulation. Projects are to be aligned with the bank's values, but they do not need to pass through the regular risk assessment process. About 5-6 projects are financed annually (except in 2020, when BAS made more resources available). There is also a possibility to shift between financing from the bank and the association for projects: projects deemed not "bankable" but important in their mission can receive financing from the association. It also works vice versa; when projects financed by the association have become more robust, they can move on to larger-scale bank financing.

The recent interest of BAS in international presence is mainly through partnerships through international federations of ethical banks, in which they are members (the Global Alliance for Banking on Values - GABV and the European Federation of Ethical and Alternative Banks and Financiers - FEBEA). The BAS is not considering directly financing projects abroad but rather establishing partnerships with banks that know the local contexts and can serve as intermediaries towards end beneficiaries. **The concern with local knowledge and the need for competent and, at the same time, aligned local partners/intermediaries is an aspect that often comes up when considering the possibilities of expanding ethical financial practices internationally**. The BAS would be able to support the development of sustainable projects through its good liquidity situation. Financing can be imagined by co-financing specific projects or participating in local banks. They are also interested in spreading their approach and know-how within the financial sector.

194. Banque Alternative Suisse – *Association Fonds d'innovation*

S3. Nonprofit actors

Foundations and other nonprofit actors are traditionally present in the field of affordable housing. However, perhaps it is rare for them to seek to intervene in the market-based production of housing and channel market finance towards sustainable and affordable housing solutions. In this section, we give two examples of nonprofit organizations which channel market-based finance into legal and financial structures of affordable housing provision.

Stiftung trias

The Stiftung trias[195] is one of the most recognized European foundations working specifically in the field of nonprofit, anti-speculative real estate projects in Germany. The foundation was established in 2002, and the three main themes they address are land, ecology and housing. About 80% of their projects are housing projects, and the two other themes are intertwined with housing. At the foundation's start, housing was identified as one of the key societal challenges. Their primary model is to separate the ownership of land and the building on top of it, with the foundation having the land ownership. In this way, the land is taken off the market (according to the statutes, the foundation can not sell it), and thus the long-term anti-speculative use of the building for affordable housing purposes can be ensured. The buildings are owned by the entities managing the house projects, which pay a regular land lease fee to the foundation. This makes the projects more expensive since the land lease fee - adjusted to inflation - persists throughout the project's entire lifetime. However, this element of solidarity is vital in making the model sustainable in the long term. The fees paid by current projects allow the foundation to maintain and expand its capital stock and invest in further projects.

The foundation's capital is ensured 75% by donations, while 25% are loans. **All equity is invested into purchasing land, and the foundation ensures its economic sustainability through active participation in the economic segment it seeks to influence - that is, in land issues and housing.** This makes them different from many other foundations, which would generate income through investments in other business sectors and promote their aims only through philanthropic activity. In this sense, Stiftung trias acts like a social enterprise since it also takes loans to invest more in its objectives. The long-term investment of the foundation's assets in land ownership needs a long-term perspective (land lease fees paid by the projects are relatively small compared to the loans). Therefore, loan repayments are balanced through a mixture of loans. Financing partners are usually private loan-givers, other foundations who see it as impact investing, and similarly-minded banks, notably the GLS Bank and Umweltbank.

The main challenge Stiftung trias sees in developing housing projects is the capacity and stability of the groups and

195. Stiftung trias *website*

organizations developing them. Furthermore, due to price increases, it is also in-creasingly difficult for groups to secure sufficient equity (usually about one-third of all project costs). A further question is whether their model would be adaptable outside Germany. Stiftung trias will not go abroad (due to unknown legal and financial systems) but is open to collaboration to spread its model. This raises the question of how common legal institutions of land lease rights are in other countries.

According to the research and on-the-ground experiences of the partners in this project, in some countries of Central and South-Eastern Europe, the legal possibility for separating the ownership of the land and building exists, while in others, it does not. Even in countries where it does exist, it is not commonly used and generates suspicion. Thus, the learnings from this model can only be adapted through a more gradual process.

Habitat for Humanity International (HFHI)

HFHI[196] is one of the most recognized housing NGOs globally. They are present in more than 70 countries worldwide and work with branded national offices or partner organizations. Habitat has been present in the Central and South-Eastern European region since the early 1990s, and has had a heavy involvement here ever since.[197] Their office for Europe and the Middle East based in Bratislava, Slovakia, has also been a partner in this research project.

Channeling market resources into affordable housing has been at the core of Habitat for Humanity's activity since the beginning: the original organization in the United States would support people in constructing their homes through a preferential loan from a revolving fund called "The Fund for Humanity".[198]

More recently, Habitat for Humanity expanded its efforts of channeling finance into affordable housing through the Terwilliger Center for Innovation in Shelter (launched in October 2016). It aims "to bring market-based solutions to low-income families worldwide to improve their housing conditions".[199]

The three focus areas of the Center are housing finance systems, housing technology and entrepreneurship, as well as construction decisions and practices. In the region of our interest, the Terwilliger Center has supported Habitat projects in Bosnia and Herzegovina, Albania, Kosovo, North Macedonia, Bulgaria, Romania and Moldova. The Terwilliger Center has launched two funds that support capital investment in affordable housing projects: the Shelter Venture Lab Fund[200] and the MicroBuild Fund.[201] Both funds mainly operate in developing countries (in Sub-Saharan Africa, India and Southeast Asia, South America). The Shelter Venture Fund invests in innovative and small-but-growing businesses working to improve housing conditions, often through small-scale technological innovations. The MicroBuild Fund is a $100 million impact investment vehicle for housing-purpose microfinance, which is currently in a wind-down phase, with the possibility of continuing with the following fund being examined. The fund gathers capital that it lends to local microfinance institutions and provides technical assistance, offering small loans to families for

196. Habitat for Humanity International *website*
197. Habitat for Humanity International – *Europe and the Middle East*
198. Habitat for Humanity International – *Learn more about how Habitat began*
199. Habitat for Humanity International – *Terwilliger Center for Innovation in Shelter*
200. Habitat for Humanity International – *Shelter Venture Fund*
201. Habitat for Humanity International – *MicroBuild Fund*

building or improving their homes. Most of the loans are used for home improvement and small constructions.[202] The MicroBuild Fund is also successful in leveraging further investors for the microfinance institutions it supports. It helps microfinance institutions develop new housing loan products. Beyond Habitat for Humanity International's initial donation, large institutional donors (such as Triple Jump, Omidyar Network and MetLife Foundation) have invested money in the fund. Within the CSEE region, the MicroBuild Fund has invested in microfinance institutions in Bosnia and Herzegovina, Albania, Kosovo and Moldova. Some of the loans were given to energy efficiency renovations.[203]

Another strategic direction Habitat took in the CSEE region has been investments in the energy efficiency of owner-occupied multi-apartment buildings. Between 2009 and 2013, USAID funded the initial project in Macedonia.[204] To continue the work, Habitat for Humanity Macedonia created a Residential Energy Efficiency Revolving Fund, which is still operational. The recent results of Habitat's projects on energy efficiency in the Western Balkans[205] are summarized on the project website "Get Warm Homes".[206] Their experience in housing interventions and fund management is unique in the Central and South-Eastern European region. It thus can be very valuable to new initiatives of affordable housing finance.

202. Habitat for Humanity International – *MicroBuild Fund Annual Report, 2021*
203. Habitat for Humanity International – *MicroBuild Fund*
204. Get Warm Homes – *Our approach to residential energy efficiency*
205. Get Warm Homes – *Energy poverty in recent publications*
206. Get Warm Homes *website*

S4. Historical case studies

Beyond contemporary cases, we find it important to draw inspiration from historical examples of affordable housing finance from the CSEE region. Here we specifically - but not only - focus on historical examples of financing housing cooperatives in the region.

Housing cooperatives in Bulgaria from the 1920s[207]

The construction of residential buildings by housing cooperatives became possible in Bulgaria at the beginning of the 1920s, when the government adopted laws encouraging the establishment of cooperatives for different purposes, including housing. As a result, housing cooperatives built residential buildings primarily in the capital city of Sofia due to the housing crisis after World War I and the mass migration to Sofia from other regions in the country. However, such buildings were also constructed in other large cities such as Varna and Burgas.

Housing cooperative residential buildings started to appear in the mid-1920s when the buildings “Asenovets”, “Musala”, and others were built. One of the most emblematic early housing cooperatives is the “Saint Sofia”, completed at the end of 1928 in the center of Sofia. It was the tallest residential building of its time and housed nearly 100 families who contributed their savings. It was an architectural and social innovation, made possible by Lazar Parashkevanov, the initiator, architect and principal investor of the project.[208] Parashkevanov purchased the plots of land and also took several large loans himself, even mortgaging his own home to make the project happen. These capital injections were necessary because only the savings of the future residents would not have been sufficient, and construction costs increased during construction. This also demonstrates that more significant external financial resources are needed for creating housing cooperatives. However, Parashkevanov was determined to prove the idea’s viability, believing that housing cooperatives would be a better way of creating new housing in big cities. This would counter urban sprawl as a consequence of each family independently managing with small-scale individual units built out of low-quality materials.

The construction of most housing cooperatives’ buildings took place in the 1930s. A separate law on housing cooperatives was adopted in 1933. Today, the buildings constructed by housing cooperatives dominate the appearance of the central part of Sofia. Housing cooperatives continued building until 1946, when, due to the political regime change, all architectural associations were forbidden, and the Law on housing cooperatives was abolished.

The construction of residential buildings by housing cooperatives was made possible again in 1953 with the adoption of a decree by the Bulgarian Council of Ministers. The decree strongly encouraged the local governments to provide land for residential construction to the housing cooperatives and exempted the

207. Section written by Assya Dobrudjalieva from Habitat for Humanity Bulgaria.
208. Bakalova-Sedloyeva, Rada (2001) My grandfather Lazar Parashkevanov and his dreams come true. Sofia, Ivan Vazov Editions, p. 261.

latter from the Law on the Rents.[209] A new Law on Housing Cooperatives was adopted in 1978. According to media publications (unofficial data), even in 2019, 15% of all new residential constructions were done by housing cooperatives.

However, Bulgarian cooperatives were always ownership-based (meaning the housing units are in individual ownership), and the general practice was for the legal entity of the housing cooperative to be terminated after constructing the building. The housing unit ownership was distributed to the individual member, and the building became a condominium. In this sense, the Bulgarian housing cooperatives were more similar to legal entities for "construction communities" in other contexts. Nevertheless, this model contributed to creating more affordable housing without any large-scale government support - although, before 1990, housing cooperatives were assigned municipal land. Beyond this, relative affordability has been achieved through the cost efficiency of a collective construction process (mainly members' participation) and the lack of a profit incentive. Prices are also more stable, and social cohesion is stronger among members. The tradition of constructing through a housing cooperative is well established in Bulgaria and thus could potentially expand beyond the cooperation model for construction. However, for this, the existing Law on Housing Cooperatives must be updated to bring it in line with modern requirements.

Cooperative housing activity in Croatia from 1945 until the end of the 1980s

In Croatia, cooperative housing construction emerged in significant volume in the second part of the 20th century as one of the housing provision programs supported by the state. After World War II, the housing provision in Croatia, as in the rest of Yugoslavia, was principally characterized by the decentralized construction of societally-owned housing developed through self-management principles. This model, in place between 1945-1989, meant that housing was allocated within a complex institutional framework operated by local governments and societally owned enterprises, giving long-term tenancy rights. Tenants received a lifelong right to use the housing unit allocated to them. The societally-owned housing stock represented more than a quarter of Croatia's total housing stock at that time. However, there was still a shortage of housing units. Housing provisions in this period also included public co-financing of the construction of single-family houses and cooperative housing units with low-interest loans. In the 1970s, the responsibility to organize all housing development models was assigned to the so-called Self-Managing Communities of Interest (Samoupravne interesne zajednice, SIZ). These communities could be established at different levels by geographical or administrative units such as municipalities or local governments, by societally owned enterprises and by associations of private entities. SIZs also decided on construction projects of cooperatives.

The first legislation on housing cooperatives in Yugoslavia was passed after World War II. Until the beginning of the 1970s, housing cooperatives were identified as enterprises and were meant to use

209. The Law on the Rents required all uninhabited rooms to be reported within seven days and regulated, among others, the maximum allowed space – one room for a household of two persons; two rooms for a household of three persons, etc

people's savings to supplement public funds allocated to housing. In the first period, cooperatives were primarily set up by enterprises, construction companies and local authorities. Later, by 1988, about 55% of all cooperatives were established by individuals or workers. Afterwards, they followed trade unions, construction companies, public organizations active within the housing sector, and municipal trade unions. Since the 1970s, cooperatives in Croatia have had the status of self-managed nonprofit organizations that invested money in housing construction for their members. The cooperatives were supervised and regulated under the common SIZ umbrella, the same as the entire Yugoslav tenure system. SIZ also decided on construction investments, taking into account urban planning regulations. The common condition for being allowed to join a cooperative was an unmet housing need. However, it is important to mention that cooperatives in Yugoslavia and Croatia did not exist as a distinct type of tenure based on collective ownership. **The households were cooperative members only during the construction phase; once the construction was completed, they would become owner-occupiers and usually stopped actively participating in the organization**.

Apart from the members' personal savings, the material basis for cooperative housing construction included public funds allocated to housing, assets that cooperative members could mobilize (building land or a suitable apartment) and personal labor (sweat equity). The cooperative members directly managed the funds invested in the cooperative, and the value of personal work and other funds that members of the cooperative could contribute was determined by the cooperative's statutes.

The legislative framework and political climate substantially affected the formation and development of cooperatives. At the end of the 1950s and early 1960s, there was a highly serviceable form of credit available to individual members of a cooperative, with favorable amortization and mortgage conditions. Individual members had to deposit 25% of the housing unit's value, and the remaining part had to be repaid during 40 years of amortization at 1% interest. Besides that, cooperatives were exempted from building permit charges, which made the model highly attractive. However, as not only cooperative members but also all private house-builders drew on this credit policy, the public funds allocated for this stream of housing provision did not endure for a long time. Afterwards, Croatia adopted a less favorable credit policy, implemented more market-oriented housing policies, and strengthened state-led housing construction. In the end, these changes made cooperative construction less attractive as a model of housing provision.[210]

In terms of affordability of the model, while in the 1950s and 1960s, most of the cooperative members belonged to the working class (people with high school education or qualified workers with only elementary education), in the 1980s, cooperative housing was no longer an affordable housing solution available to wider social groups. Only those working in better-paid management positions and people working abroad and investing in Croatia could afford to pursue it. This was mainly because, by that time, credit was provided to cover only 40-50% of the real estate value, the repayment period was reduced to 15-20 years, and the

210. Nord, L. (1999) Socialist Yugoslavia: Embryo of a Co-operative Republic (Housing Cooperatives in Socialist Yugoslavia) in: Gregory Andrusz (ed.) The Co-operative Alternative in Europe: The Case of Housing, Routledge.

interest rate was raised to 2-4%. Because of inflation and other major economic problems at the end of the 1980s, credit terms became even more demanding later. By 1986, the annual repayment of the housing loan for an average apartment could often exceed the average personal income. This process demonstrates how financial terms and possibilities directly influence housing affordability and runs up against limitations to finance housing cooperatives through individual loans.

Nevertheless, between 1981 and 1985, in Croatia, 20,000 housing units were built through cooperatives (for every 100 private housing constructions, 20 were built by cooperatives). Of that number, 5,199 were in Zagreb between 1981 and 1986 (by 13 cooperatives).

The main factor for the feasibility of the cooperative model of housing provision was the direct allocation of public land. Municipalities were expected to allocate available land to cooperative housing construction (same as for the societal housing provision) and to include it in medium- and short-term land use plans (and in the cities' housing policy in general).[211] In practice, however, many housing cooperatives could not obtain land, due to missing coordination protocols and a lack of strict law enforcement. The lack of coordinated action in the cooperative-municipal relationship mainly caused this. The shortage of available building locations led to the termination of many cooperative initiatives.

The significance of direct land allocation is well demonstrated by the fact that, even in the economically challenging first part of the 1980s, successful cooperations between cooperatives and municipal authorities resulted in the construction costs being up to 10% lower than for the predominant societally owned housing construction. With that in mind, Croatia's Association of Housing Cooperatives particularly emphasized the importance of timely and guaranteed direct land allocation and of including the cooperatives in the municipal land use plans.

Čaršija MINEL in Serbia in the 1980s

One interesting, but little-known venture into collective, self-organized housing from the mid-1980s Belgrade, is the attempt of the MINEL factory's workers to construct their neighborhood in Belgrade's suburb of Ripanj.[212] The initiative was launched in 1983 by the factory's youth organization, a group of young and enthusiastic workers who understood that it would take a long time before they ranked high enough on the waiting list to receive a societally-owned apartment, a housing unit provided to households, financed from a percentage of the income of all the employees across Yugoslavia. The Minel factory had 1800 employees at the time, of which 400 did not have their housing situation resolved, while factories of that scale could provide about a dozen societal apartments a year. At the same time, the competition to get through the bureaucracy to get to these apartments was fierce.

In this context, a group of young workers set out to solve their housing situation more affordably, based on construction without an intermediary, through direct financing, by applying

211. Kerbler, J. (1987) Zagrebačko stambeno zadrugarstvo (Cooperative housing in Zagreb), Association of Croatian housing cooperatives - Coordination committee of the Association of housing cooperatives in Zagreb.
212. Đorđe Bobić (2012) Traganje za gradom (In Search for the City), Orion / Art. The author was the leader of the working team at CEP.

principles of self-organization and self-construction, building on the land which belonged to the factory.

With questions about how such a neighborhood could be made, the workers approached the Center for Urban Planning (CEP), which proposed to create the concept, calculate the resources needed, and make the urban plan. This unique project was an attempt to bring an alternative to the - at the time already present - informal construction on the city perimeter. Here, on the land allocated by the factory (including the basic infrastructural layout), step-by-step, as their resources permitted and using the factory's technology and loans guaranteed by the factory, the workers were to build their neighborhood. The streets, initially dirt roads, would be asphalted over when finances permitted, while houses were to start with a maximum of one or two rooms and a bathroom so that residents could move in quickly, and further rooms could potentially be added later. According to the plans, it was to take several years for the houses and neighborhood to be built.

The project and its planning went very far, but its full implementation became blocked by a political decision 'from above'. An opportunity to test this model of 'bottom-up' self-management in practice was lost. Left once again to their own means, the Minel workers, as well as many others, resorted to figuring out other options. Many of them started to build on their own, without permits, contributing to informal housing in the city.

For a couple of decades after World War II, until the mid-1980s, housing policy in Yugoslavia (as in many other European countries) was based on the premise that housing provision was a societal task. A consequence was that a societal apartment was an option for many employees. **By the mid-1980s, the ideas started to shift towards more significant involvement of people in fulfilling their own housing needs**, leading to privatization and enabling different forms of cooperatives. Financial participation of the workers was welcomed (as well as co-ownership), but only through a registered construction company and not as a self-construction model. Arguments for this were that the work would be taken from professional construction workers, that the self-builders would spend energy on building "their apartments" instead of collective spaces, that if residents became owners, they would later sell out, and that technical requirements would not be met.

The "European Funds" in the Western Balkans in the 1990s

The predecessor of the European Fund for Southeast Europe (EFSE - established in 2005, discussed above), before it **was institutionalized, was a coordinated effort of different European donors (the "European Funds") under the technical management and coordination of KfW**, the German state-owned investment and development bank. The purpose of the so-called European Funds was to more efficiently channel donor money into post-war reconstruction in the 1990s, first in Bosnia and Herzegovina and then in Montenegro, Kosovo and Serbia. Its first focus was on housing finance to support the reconstruction, and then the subsequent tranches were opened for SME (small and medium-sized enterprise) development and rural development.

In 2004, the Donor Information Resource Center published an analysis of the experience, focusing on the management of financial flows.[213] This regional coordination mechanism is relevant even though the housing finance facility was providing loans to individuals as end beneficiaries.

The key element of the housing finance mechanism was to turn grants from large donors into a pool for revolving loans. The loans from the revolving fund would be taken by local organizations that could, in turn, finance individuals' housing purposes. The individuals could thus have access to loans they otherwise would not have had in the context of a destroyed economy and financial system. Due to the revolving nature of the fund on the intermediary level, the donors' money could work several times. The additional benefit was that KfW could simultaneously manage different donors' money, pooling expertise and administrative capacities. This way, the money allocated for post-war reconstruction could be used much more efficiently. From the donors' perspective, it was also more cost-efficient to delegate management to KfW, which had the necessary experience to manage significant funds.

The challenges and learnings highlighted by the above-cited report are the following:

- Donors wanted to earmark their money and keep track of it separately (for the different countries and economic segments). This made the revolving fund less efficient than if all money could have been pooled together. The money came back from borrowers slower due to the separation of different tranches, which meant more time needed to pass until lending it out again.

- A regional-level fund would have been more efficient (also for reasons of scale) than different ones for each country. This also would have required less individual control over money tranches from different donors. (Later on, with EFSE, this ambition was realized.)

- The administrative burden was very high, also because of the different reporting requirements for each tranche described above.

- Donors were not sufficiently prepared for what the revolving nature of the fund would mean. With the revolving fund, their grant had an impact in the longer run - which is more beneficial, but it also means that they can not expect all the results only from the first disbursement.

In the case of the Western Balkans region, the legacy of the "European Funds" and the existing infrastructure of the European Fund for Southeast Europe are relevant experiences on which new initiatives for financing collaborative housing can be built.

213. Ann Duval and Ruth Goodwin-Groen (2004) *Collaboration for Post-Conflict Rebuilding and Financial System Development: European Donors with KfW Leadership in Southeastern Europe*, CGAP Direct – Donor Information Resource Center, no.13.

S5. Factors favoring the development of innovative financing for housing

This overview of contemporary and historical examples of different financial instruments for affordable housing has demonstrated that the most straightforward forms of financing affordable rental and cooperative housing models are long-term preferential loans to housing providers. In some cases, this is done by public entities (e.g. local development banks or the EIB) and in others (where engagement in such markets is not seen as risky, e.g. the BAS in Switzerland or GLS in Germany) by private actors.

Otherwise, when long-term resources are not available straightforwardly, different intermediary steps need to be taken, and additional financial resources need to be used. These additional financial resources are usually a form of capital which does not require regular repayment. One example is Stiftung trias, which purchases land for housing projects, thus reducing the necessary loan amount to the cost of the building itself. In the long term, the project pays a land lease fee. There are several historical and contemporary examples of such **land-based capital contributions** by public actors, typically municipalities. When a public actor provides the land for nonprofit housing purposes, it is often exempt from land use fees. Another type of capital contribution is when **part of the project is financed through equity investments**. This was the example of Erste's Social Finance quasi-equity fund or companies that historically gave plots and/or loans for their workers to establish housing. More recently, philanthropic or impact-based private investment initiatives function along this logic.

Altogether, an important learning from the reviewed examples is that some **more significant external financial resource, with a long duration**, is needed for setting up affordable housing projects. In the case of cooperatives, members' contributions alone are usually insufficient or would only be so in the case of high-income households. In the case of some Southern European countries, historical examples (Serbia, Bulgaria) have shown how cooperative housing can be an alternative to informal housing solutions. Cooperative members can contribute both in terms of their financial resources and physical work. Still, a larger external financial input is also needed - such as the private initiative of an engineer-investor in the Bulgarian case or of a large company in the Serbian case.

Self-organized solutions can be seen as contradicting and complementing state-led solutions to affordable housing provision. While in the Bulgarian case, the new state socialist top-down system of housing provision banned housing cooperatives, in Croatia, within the Yugoslav system of self-determination, state-led and cooperative housing provision could develop in a symbiosis.

The presence of the state supports the development of affordable housing provisions. In the CSEE region, however, state presence in the field of housing is not continuous and not stable. When social pressure is big enough, states are more likely to take a role in financing housing provisions. This pressure drastically increases due to war (such as the post-World War II Europe), and in some cases, due to economic crisis and escalating housing unaffordability. In the CSEE region, the last period of large-scale state participation in affordable housing provision was in the 1970s. Currently, one of the important questions is how affordable housing provision could be boosted even if different social actors do not manage to push for more significant state participation. One way is for the state only to provide an enabling (regulatory) framework for private actors to be able to develop new financing mechanisms. This would be an important step in the current context. Still, it is questionable whether such an enabling framework would be sufficient in the current economic turbulence or whether the risk adversity of financial actors would still prove to be strong.

A further interesting historical period to consider was the 1990s, and early 2000s in the Western Balkans, with international reconstruction efforts in the aftermath of the Yugoslav wars. This period provides examples of third-party organizations handling public funds (cf. the summary on the European Funds above). It was also a period of microfinance institutions' development in the region. Contrary to EU member states and countries with larger and more capitalized banking systems, countries in the Western Balkans have experience with these more flexible financial instru-ments for housing purposes. These experiences can be valuable when searching for alternatives to the current housing finance system.