

The impact of the Euro on affordable residential construction in Romania in comparison to Croatia within the European Union

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ABSTRACT: With housing affordability becoming an increasingly pressing issue due to urbanisation, rising housing costs and widening income disparities, the study aims to examine how the introduction of the Euro could affect construction activity, material costs and housing policy in Romania. By examining the Croatian model, where the adoption of the Euro has been associated with economic stability and growth in the construction sector, the study hypothesises that similar outcomes could occur in Romania, potentially accelerating construction processes and facilitating the import of low-cost building materials. A comprehensive review of the existing literature, policy programmes, and quantitative data analysis, focusing on housing privatisation, affordable rental housing, the impact of EU accession, and the effects of currency changes, place the challenges and opportunities of the Romanian housing sector in the broader context of European integration. There are strong contrasts between Croatia's proactive housing policy and Romania's more stagnant approach, with the introduction of the Euro having a positive impact in Croatia, particularly in terms of overcoming inflationary pressures and stimulating sector growth. In Romania, the Euro promises a more dynamic construction sector, but existing shortcomings in housing policy may dampen the immediate impact. Policy reforms and strategic investments in affordable housing are needed to complement the potential benefits of euro adoption. This research contributes to the academic and policy discourse on housing affordability in post-socialist EU countries and provides a comparative analysis that emphasises the need for a sophisticated understanding of the economic, social, and political factors influencing housing policy and trends in the construction industry.

KEYWORDS: affordable housing, construction industry, Romania, housing development, subsidy housing programmes

I. INTRODUCTION

Publicly social housing in terms of its quality, sustainability, and affordability is a topical issue that is more relevant than ever. Affordable housing has emerged as a key factor in national development and socio-economic stability, drawing attention to the economic challenges of housing access on a global scale. Factors contributing to these challenges include urban population concentration, limited urban residential space, increasing housing costs, insufficient housing construction relative to demand, and a widening income disparity. The mentioned factors have led to a greater portion of the population facing financial burdens from housing expenses, which in turn limits spending on other vital life aspects such as education, healthcare, and cultural activities. The term 'affordable housing' has attracted international attention in recent years, both in policymaking and in research. It is often used as a synonym for 'social housing'. More recently, it has also been used to define policy instruments. However, it is not possible to draw a clear dividing line between the two concepts. Measuring affordable housing is a major challenge for most local authorities, federal and state governments. Affordability problems prove to be complex. There is no single measure to assess their nature and extent. This will require an assessment of policy needs on these issues and an identification of indicators which meet specific national policy needs.

Despite common core objectives, housing policies vary across the twenty-eight EU member states, influenced by each country's unique historical development, demand-side characteristics, and national regulatory and financing policies. This diversity is set against the backdrop of national housing stock and evolving housing needs, leading over time to the emergence of distinct national housing policy profiles [1]. To achieve the European politically declared goal of increasing the number of social housing units and ensuring a social mix in cities, the federal and state governments have launched subsidy housing programmes. The support programmes highlight the potential of the cooperative housing sector in Europe as an effective means of bridging the gap between private and public housing, providing an affordable option for both tenants and governments. European countries with robust co-operative housing sectors benefit from an approach that prioritises community and

affordability, with co-operatives acting as developers or registered social landlords, focusing on the provision of high-quality housing at competitive prices without the primary objective of maximising the developer's profit. The importance of innovative housing solutions such as housing cooperatives, supply chains, engineering expertise, building culture, and building standards in tackling the affordable housing crisis is emphasised by the EU. It proposes a more targeted approach to subsidy housing programmes to better support lower income households and reduce market distortions and inefficiencies [2]. The literature has extensively discussed the issue of housing in Eastern European countries, particularly the changes in the housing sector since their accession to the European Union [3] [4] [5] [6] [7]. The current situation of housing access in each state of the European Union is the result of a complex interplay of cultural, social, political, and economic factors that have created the context for development [8]. The lack of a comparative analysis of the affordability of affordable housing under the influence of the introduction of the Euro in Romania and its impact is a research gap in the literature. To address this, the housing market in Croatia will be considered after the introduction of the Euro on 1 January 2023. This analysis will help to identify the current gap between Romania and the European Union in terms of affordable housing. An outlook can be given on how the introduction of the Euro will affect the housing industry in Romania.

II. SCOPE AND KEY TERMS

Defining affordable housing : The concept of affordable housing recognises the needs of households whose incomes are insufficient to afford appropriate housing on the open housing market without assistance [9]. Discussions about the acceptance of affordable housing in society are complicated by the ambiguity of the term. The term 'affordable housing' is not clearly defined, and the term encompasses a range of housing types, rents or prices, and resident income limits. Affordable housing is the latest in an extensive list of synonyms for housing for those who cannot afford the price on the open housing market [10]. The term 'affordable housing' is therefore used to describe housing that helps households on low and middle incomes to find suitable accommodation without causing them undue financial hardship [9]. In recent years, the term 'affordable housing' has been used as an alternative to terms such as 'public', 'social' or 'low cost' housing [11]. Many different definitions have a common cause. This is because understanding the causal factors of the housing affordability problem itself is as complex as conceptualising and measuring the income thresholds for those eligible. As the affordability debate discussion shows, many conceptual and measurement issues arise from contested understandings of the problem. Singles, lone parents, and families with children may have to make trade-offs between high housing costs and low or middle incomes and employment, travel, health, and other consumer needs [11]. The following definition to assist state and federal government by promoting and monitoring the supply of affordable housing is accepted by the Australian policy. "Affordable housing is housing that is appropriate for the needs of a range of low to moderate income households and priced so that low and moderate incomes are able to meet their other essential basic living costs" [12].

Another common definition in the United Kingdom is that affordable housing includes both traditional social housing (publicly or privately owned (by housing associations)) and new forms of below and regulated market housing for sale or rent. In the London Plan, for example, affordable housing is defined as "housing designed to meet the needs of households whose incomes are not sufficient to allow them to access decent and appropriate housing in their borough. Affordable housing comprises social housing, intermediate housing and in some cases, low-cost market housing" [13]. Affordable housing (colloquially known as social housing) in Germany is new housing that is built with direct funding from the federal, state, and local governments. The legal basis for this is the Social Housing Promotion Act (WoFG).

In addition to the principles of affordable housing construction, the Act also regulates the target group, for instance households that cannot adequately provide themselves with housing on the open housing market and are therefore dependent on support. The federal states in Germany are responsible for the legislation and financing of affordable housing, which is why the provisions of federal state law must also be considered [14]. By granting public funds, the newly created dwellings become affordable housing and are subject to the provisions of the Housing Commitment Act (WoBindG). The occupancy commitment ensures that only people in need are granted access to affordable housing based on a housing entitlement certificate (Wohnberechtigungsschein). The responsible authorities issue a housing entitlement certificate, provided that the relevant income limits are not exceeded. Rent control guarantees that the rents of subsidised dwellings are tied to target rates that vary depending on the size of the municipality, location, and facilities. In Romania, the government provides and subsidises affordable housing according to the Housing Act No. 114/1996, a form of accommodation designed for those individuals or families whose economic circumstances prevent them from purchasing or leasing homes in the private market. The cost of renting an affordable housing unit is capped at no

more than 10 % of the tenant's monthly net income. This rent subsidy is determined by examining the family's income over the previous twelve months. Any gap between the actual rent charged and the subsidy provided is financed by the local budget of the administrative-territorial unit in which the social housing resides [15]. Statutory definitions of affordable housing are only explicitly listed in Estonia, Poland, and Romania. These definitions include municipal housing intended to support the most disadvantaged households. For Croatia and other Eastern European countries, there is no explicit definition of affordable housing [16]. The comparative international perspective and the complexity of the topic highlight the impossibility of a standardised definition of the term 'affordable housing'. The definition is specific and depends on the political and programme context in the individual countries in which it is used. The challenge is therefore to identify policy needs in this area and to develop measures that meet policy requirements, for example to identify the scale and form of the problem, assess trends in the housing market, provide information for policy design or provide guidance to the industry [11].

Nature and extent of the affordable housing problem : Affordable housing is becoming more important every day. However, there is no consensus in the literature on how to measure affordability, nor is there a standardised definition, as already described in the previous subsection. The problem of measuring affordable housing can already be seen in studies from the 19th century. Stigler recognised that there was already some knowledge and attempts to define the measure of affordable housing. Conceptually, theoretically, empirically, and methodologically, there had been numerous attempts to analyse household consumption, but the studies were a comedy of errors [17]. The main practical application in housing was 'a week's wages for a month's rent' which was a common way of describing housing costs in the U.S. Kenngott's 1912 study found that at least twenty percent of the earnings were needed for rent [18]. This late 19th century saying about 'a week's wages...' is like the late 20th century saying that twenty-five or thirty percent of income is the upper limit of housing affordability. Both make only general assumptions about what the average household pays or should pay for housing (the distinction is seldom clarified), with no indication of which household is the average. Over the decades, observations about what some households have been spending have been turned into assumptions about what they 'should' be spending [19].

Although there is agreement throughout Europe that affordable housing is under strain, definitions of affordability vary by country. Therefore, it is crucial to consider the social, economic, and ecological factors that affect household well-being when defining affordable housing. It is widely acknowledged that households allocating over 30 % of their gross income towards securing suitable and decent housing are facing affordability issues. Nonetheless, it is important to recognize that this definition does not enjoy universal agreement [20]. It turns out that affordability problems are overly complex. There is no single measure to assess their nature and extent. It is therefore important to identify the policy needs related to these issues and to develop metrics that are tailored to the specific policy needs in the different countries. In this way, developments in the housing market can be assessed and provide essential information for further policy development [11].

III. RESEARCH QUESTIONS AND HYPOTHESES

With the introduction of the European currency in Croatia in January 2023, there will be opportunities to analyse its impact on the construction industry. This raises the question of potential effects if the Euro is introduced in Romania in the future. Croatia, also a Central and Eastern European (CEE) country, can serve as a basis for such analysis. Existing studies here refer to Europe. A well-founded statement on the development of the construction industry after the introduction after the introduction of the Euro in Croatia compared to Romania, which is a candidate country to the European Monetary Union. The main research question for the following study is: How does the Euro affect affordable housing construction in Romania? Questions that then are consequently asked are: What funding opportunities are there for housing construction in Romania, subsidised by the EU? How will the development of affordable housing progress? Will the Euro facilitate faster and more cost-effective importation of building materials from other EU countries? How will construction industry prices evolve? What benefits will the introduction of the Euro bring to the construction sector in Romania? How will the construction sector be impacted?

The primary objective of the research is to determine the impact of the introduction of the Euro on the construction sector of affordable rental housing in comparison between Croatia and Romania. The research aims to contribute to science by examining the perception and significance of new construction rental housing in the price-linked segment from an economic perspective. The identification of weak points and the formulation of recommendations for improving the construction of affordable housing can be a starting point for a change in housing policy in Romania, increasing the economy and its orientation towards the current needs of the

population in terms of housing. It is hypothesised that the adoption of the Euro speeds up construction activities in Romania. Hypotheses 1 (H1): The introduction of the Euro accelerates construction processes in Romania. Another hypothesis evaluated that the introduction of the Euro could lead to the supply of more cost-effective building materials across European countries. The following hypothesis is therefore proposed. Hypotheses 2 (H2): The introduction of the Euro enables the supply of more cost-efficient building materials throughout Europe.

IV. RESEARCH METHODS

The study provides a comprehensive overview and synthesis of existing literature, legislative frameworks, policy analyses, and programme descriptions to discuss the various aspects of housing policies, market changes, and economic developments in post-socialist contexts and EU integration processes. The research focusses on the comparison of the statistical data available in the Eurostat database available statistical data on the construction industry and the stock and procurement of affordable housing for Croatia and Romania since the fall of the socialist regime in the 1990s. During the documentation phase, numerous specialised articles are consulted to familiarise with the importance of the European Union, the introduction of the Euro, and to choose an approach that best serves the purpose of the study. The text extensively references previous research studies, academic articles, and publications by various authors to gather background information, theoretical frameworks, and empirical evidence related to housing privatisation, EU accession, affordable housing policies, and the impact of the Euro on the housing industry in Croatia and Romania. Qualitative analysis of policies, programmes, and housing trends in Croatia and Romania are conducted, examining the legislative frameworks, government policies, and the impact on housing provision and affordability. Quantitative data is provided to support the discussion on various aspects of housing policies, policy programmes, and on the growth of the construction industry in Romania, residential construction trends, and the value of EU-funded projects. These inferred methods collectively contribute to a nuanced understanding of the complex dynamics at play in the housing sectors of post-socialist countries undergoing EU integration and the adoption of the Euro. They allow for a multifaceted examination of the socio-economic, legislative and market factors influencing housing policy and industry developments.

V. FINDINGS

Housing privatisation process in post-socialist Croatia : Since the fall of the socialist regime in the 1990s, there have been transitional changes across political, economic, and social structures. These changes are most notably seen in the shift towards privatisation and the transformation of housing status. Despite the predominance of home ownership in the housing provision structure, alternative housing solutions such as public rental and affordable housing are crucial. They provide an alternative to the dominant financial and market model that strongly favours home ownership, a trend that is particularly pronounced in post-socialist countries, where it is often referred to as ‘super homeownership’ [21]. The shift in housing is characterised by the features of socialist housing systems, particularly their important levels of home ownership and private housing production [22]. In 1990, Croatia underwent a meaningful change with the constitutional removal of social ownership. This led to the repurchase and denationalisation of socially owned apartments. The aim of this process was to improve the efficiency of housing provision by transferring state or socially owned apartments to private ownership under the tenants. They were able to purchase their homes at prices well below market value, regardless of apartment size [23], thus becoming full owners.

The trend of housing privatisation and ‘right-to-buy’ policies in the post-socialist period is evident in Croatia, as noted by various authors [21] [24] [25] [26] [27] [28]. The emergence of residual housing policy [29] has also contributed to this trend. This movement, which began in the 1990s, has led to an outside proportion of Croatian households owning their own homes. During the transition period, control over housing in Croatia shifted from the state to the citizens. This resulted in a transition to a more neoliberal housing system, characterised by market dominance and minimal state involvement [30]. Liberal regimes are typically characterised by limited interventions aimed at supporting the most disadvantaged, indirect subsidies for wealthier citizens, market-friendly policies in favour of large construction companies and financial institutions, and state efforts focused on consumption rather than production. The transition to a market economy and privatisation has significantly altered property relations by converting socialist housing into private property at extremely low prices. This transformation is expected to have a long-lasting impact on the housing policies of post-socialist countries, including Croatia, as it traps them in a privatisation cycle that obstructs the development of sustainable affordable housing policies after 1990 [21]. Housing privatisation has social consequences beyond its economic impact. It affects living standards, housing quality, and demographic trends, resulting in a comprehensive economic and social transformation that extends beyond mere ownership changes [31].

EU accession and development, and policy programmes addressing affordable housing on the example of Croatia : In Croatia, the widespread privatisation process has made it difficult for various social groups, especially younger workers, the unemployed and marginalised communities, to afford their own homes or to maintain a decent standard of living, due to the lack of rental opportunities for affordable housing. The focus has shifted to home ownership, to the detriment of affordable housing. The Housing Incentive Programme (POS - Program poticane stanogradnje) facilitates the construction of affordable residential properties through state funding, with local governments contributing land and funding for municipal infrastructure connections. So far, it has resulted in the construction of 243 buildings, comprising 8,250 apartments, with more in development or under construction. A total investment of approximately EUR 575 million has been made, of which EUR 150 million comes from public funds. The program aims to offer housing at more favourable conditions than those found in the market. Surveys have been conducted to understand and meet local housing needs effectively. Primarily benefiting young Croatians, the POS programme is considered a strategic investment by the government to retain the younger population by providing them with accessible affordable housing. The implementation of the POS programme is sporadic and does not fully meet the demand, as it focused more on subsidising purchases than affordable renting, and therefore does not differ significantly from private ownership models.

Since the 2000s, state subsidies have accelerated the financialisation of housing, supporting home ownership and leading to an excess of housing construction by private companies, especially in areas around Zagreb [1] [32]. During this period, cooperation between the state, construction companies and banks intensified, a trend that can be observed not only in Croatia but also in other transition countries [33]. Despite intentions to provide affordable housing, this model has tended to facilitate home ownership for those with sufficient credit, rather than expanding access to affordable rental housing for the wider population. The so-called real estate bubble, fuelled by state subsidies and private investment, led to an uncontrolled rise in property prices, which, together with the global monetary crisis of 2008, had a significant impact on the Croatian economy and real estate market. Efforts to align with European legislation through EU accession aimed at market liberalisation and the integration of European principles in all policy areas. However, this affected the construction sector and did little to stabilise the housing market. Instead, EU accession led to increased demand and higher property prices as new EU buyers entered the market, rendering subsidised loans for young Croatians ineffective [34]. Croatia shows a sectoral deficiency in housing stock related to the private rental sector. Affordable housing is a lack in residential construction and government policy [1] [35]. The attempt to 'Europeanise' Croatian housing policy has not led to significant positive integration or institutional reform. The country has struggled to keep pace with EU trends and to efficiently use EU funds to develop smarter, sustainable, and inclusive urban environments. This challenge, among others, underlines the complex conditions for improving housing provision and sets the stage for more in-depth analysis in the future [36].

Impact of the Euro on the housing industry and affordable housing in Croatia : The adoption of the Euro in Croatia is based on a historical mistrust of the national currency, dating back to the 1980s when high inflation in Yugoslavia led to the widespread use of the German Deutschmark (D-Mark). Since the introduction of the Kuna in 1994, Croatia has frequently compared its currency to the D-Mark and subsequently the Euro, particularly in sectors such as real estate and banking. This practice, known as 'Euroization', illustrates a shift away from relying on currency devaluation for competitiveness. This is particularly relevant for the tourism-dependent Croatian economy, which has experienced growth. The Croatian government considers the Euro adoption essential for EU integration and economic prosperity. Despite mixed public sentiment, a 2022 survey showed that 55 % of Croatians support joining the Eurozone. Concerns about potential negative impacts persist. Joining the Eurozone could foster economic stability and growth, given Croatia's relatively low public debt and alignment with Eurozone social standards [37].

Croatia's move towards the Eurozone is also geopolitically significant, marking a deliberate pivot from its Yugoslav past towards Western integration. This move has been historically supported by allies such as Germany and Italy. The aim of this transition, which involves joining the Schengen Area and NATO, is to reduce Russian influence in the Balkans and align Croatia with Western interests. Despite some concerns about the economy, Croatia is committed to EU integration and participates in initiatives such as the Three Seas Initiative, demonstrating its efforts to comply with EU norms. The political environment in Croatia is more conducive to EU standards compared to some of its Balkan neighbours. In response to public concerns regarding potential price increases following Croatia's adoption of the Euro, the Croatian government implemented measures to prevent unjustified price hikes.

As a result, overall inflation was minimally impacted. The implementation of the 'Business Code of Ethics for the Introduction of the Euro' aimed to ensure a fair and transparent transition by outlining ethical pricing practices and providing a framework for businesses to accurately recalibrate prices. Despite initial concerns, the transition had a negligible impact on prices. This was confirmed by the Croatian National Bank Governor Boris Vujčić and supported by the Harmonised Index of Consumer Prices (HICP), which showed a strong correlation between Croatian and Euro Area inflation trends. Although there was a brief spike in certain categories, the overall monthly increase in service costs remained limited [38]. Croatia's construction industry has demonstrated resilience, registering a 3.5 % growth in the first seven months of 2023 compared to the same period in 2022, following a 3.9 % growth for the whole of 2022. This positive trend contrasts with the challenges faced by the construction sectors in neighbouring EU countries. These challenges are attributed to Croatia's underdeveloped property market and the urgent need for modernisation and infrastructure development, including renewable energy and railway expansion. The industry receives funding from the EU, including the Reconstruction Fund (ARF) and the Cohesion Fund. It is also involved in repairing earthquake damage from 2020. Non-residential building permits have seen significant increases, particularly for hotel construction and renovations, driven by earthquake repairs and energy-efficient refurbishments. Residential construction has been affected by rising material prices and interest rates. Croatia has received significant EU support for reconstruction and energy efficiency projects. It is expected that the construction sector will experience moderate growth in 2024, driven by ongoing demand for residential and commercial properties, investment in the hotel sector, and public investment anticipation due to the upcoming triple elections. The country's demand for sustainable and high-quality building materials is increasing, leading to a growing reliance on imports. This presents opportunities for international suppliers, particularly those from Germany. Consumer preferences are shifting towards quality and sustainability in building materials [39]. This demonstrates that the adoption of the Euro helped Croatia manage inflationary pressures more effectively. This experience offers valuable insights for other EU Member States considering the Euro, highlighting the potential to limit economic costs associated with inflation during currency transitions [38].

Croatia's integration into the Schengen area and the eurozone is expected to bring about changes in the dynamics of the construction industry, reflecting the country's developing economy. It is worth noting that one third of Croatian houses are purchased by foreigners. The changeover to the Euro in Croatia, like previous currency changes, has had minimal impact on consumer prices, although the country is facing a tougher inflationary climate. Future data will provide a clearer picture of the price changes resulting from the introduction of the Euro, including how these changes affect the construction sector. Continuous monitoring is crucial. This experience is a valuable lesson for Romania as it endeavours to adopt the Euro, as it shows that the economic impact of the currency changeover on inflation is limited and temporary [40] [41].

Housing privatisation process in Romania : The approach to privatising former public housing varied significantly across CEE countries. Estonia, Romania, and Slovakia implemented large-scale privatization by granting tenants the right to purchase their homes. Slovakia applied a more limited version of this policy. Legislation in these countries established basic rules for privatisation, such as calculating sale prices and registering condominiums. This left municipalities with limited control over the breadth or core terms of the process. In contrast, Poland and the Czech Republic underwent a slower and more controlled privatization process. Tenants did not have an automatic right to buy, and municipalities had greater autonomy in determining the extent and conditions of privatisation. Bulgaria is unique due to its history of public rental housing privatisation, even during the Communist era. Therefore, CEE countries can be categorised into three groups based on their pace and methods of privatisation: fast privatisers, slow privatisers, and Bulgaria with its distinct history [16]. In Romania, tenants are allowed to buy the public rental housing they live in if they can afford the initial down payment and secure a qualified mortgage. The Savings and Deposits Bank provides these qualified loans, which have a maturity period of twenty-five years and an annual nominal interest rate of 4 %. For married couples under the age of thirty-five, the terms are even more favourable, with a 30-year maturity and a reduced interest rate of 2 %. The houses were sold at a significantly reduced price. The price varied according to the date of construction. The National Housing Agency (Agentia Nationala pentru Locuinte or ANL) in Romania serves as a property developer and loan financing provider. It is a public interest entity responsible for approving building contractors, overseeing the construction process, and selling properties to qualified buyers. Sales are conducted in partnership with commercial banks, which issue a 'solvency certificate' for each potential buyer to demonstrate their ability to repay a loan. The agency implements several measures to maintain the prices of its dwellings below market rates. These measures include offering land at no cost through municipalities, exempting occupants from property tax, and absorbing the costs for issuing building permits. It is worth noting that the eligibility for these measures is not determined through means testing [16].

The benefits and costs of Romania's accession to the European Union with reference to affordable housing : Romania's accession to the EU marked its participation in the globalisation of social policies. This has shifted certain decision-making from national to supranational levels and reduced the influence of national governments on social policies. As a result, Romania's fiscal and social policies have undergone significant changes, including a departure from the goal of zero unemployment, which has been impacted by the realities of the global economy [42]. The free movement of capital within the EU has altered power dynamics between states, companies, and labour unions, leading to higher unemployment and reduced union influence. As a result, government taxation and social spending have decreased, driven by the need to reduce costs and remain competitive within the EU. EU integration has required Romania to harmonise its social policies with those of the EU, under the influence of global organisations such as the World Bank and IMF (International Monetary Fund). A global approach to social policies has emerged, focusing on redistribution among states, global regulations, and empowerment. Romania has contributed to and benefited from European funds to address economic and social crises. Integrating Romania's social policies into the EU framework remains a work in progress due to challenges in harmonising social protection models among EU countries [43]. Economic integration into the EU presents both opportunities and risks for Romania. It offers potential for foreign investment but also exposes the country to external economic shocks and challenges such as organized crime. The security structures of the country encounter challenge in combating sophisticated crimes, such as money laundering. Additionally, Romania's ethnic diversity poses challenges to social cohesion, which requires inclusive policies.

The consequences of EU accession transform multinational companies into transnational entities, influencing global economic dynamics. The integration process can weaken the negotiating power of national governments in relation to transnational corporations and global markets, resulting in changes in political and economic influence. Romania must adapt to these changes by embracing European structures while preserving its identity and addressing domestic and international challenges [43]. Since 1990, Romania has constructed a minimal amount of social housing annually. This is in sharp contrast to the significant pre-crisis social housing production in other post-socialist countries such as the Czech Republic, Slovakia, Slovenia, Serbia, and Poland. The limited output in Romania is attributed to the low priority given to affordable housing in Romanian social policy and a dramatic decrease in funding, from 8.7 % of public expenditure in 1989 to 0.8 % in 2000. The proportion of new social housing in overall housing construction decreased from 8.9% in 2005 to 3.9% in 2009. The Romanian Housing Act No. 114/1996 defines social housing, outlines eligibility criteria, and specifies the roles of local authorities in its provision. The challenge of providing affordable housing persists throughout Eastern Europe. Municipalities often view social housing as a financial burden, which leads to the continued privatisation and exclusion of the poorest households [4]. In Romania, the term 'social housing' encompasses both rented social housing and affordable housing. These options only make up 2.5 % of the total housing stock, highlighting a significant gap in meeting the housing needs with a welfare focus [44].

Affordable housing in Romania is aimed at individuals under the age of thirty-five with an income and serves as a middle ground between rented social housing and the private rental market. It enables occupants to gradually own their home through shared ownership or equity. Since 2000, Romania has directed its limited social housing resources towards affordable housing. The National Housing Agency (ANL) was established in 1999 to facilitate this through programs such as the Rental Housing for Young People (Locuinte pentru Tineri), which is supported by various international financial institutions. Although comprehensive data is lacking, it is evident that Romania's production of new affordable housing has been minimal. There was a significant drop in units from 1990 to 2000 due to privatisation, followed by a slight increase up to 2008. In the early 2000s, a new variant of affordable housing, termed 'self-help', emerged for households with some capital but unable to afford market prices or mortgages. This approach has been criticised for potentially leading to sub-standard living conditions and being in less desirable areas. Publicly available data on new affordable housing construction in Romania since 1990 is lacking. It is evident that the production of new social housing has been minimal, with a significant reduction in affordable housing units from 42,820 in 1990 to 1,160 in 2000 due to privatisation efforts. A slight improvement was observed from 2001 to 2008, with the number of units rising to 6,084. This suggests that most of the recent social housing developments are aimed at affordable housing. [15] [44]. Romania's construction sector experienced a notable growth of 13 % in real terms in 2022, reaching a value of EUR 6.8 billion. In the EU construction activity in November 2023 fell by 2.5 % in building construction. The highest annual increases in production in the construction industry were observed in Romania with a raise of 30.7 % [45]. This expansion is partly attributed to EU-funded projects aimed at enhancing infrastructure and erecting non-residential structures. The construction industry represents about 7 % of Romania's GDP, which itself saw a growth of 4.8 % in 2022. Conversely, residential construction is on the decline due to escalating

material costs and financing expenses, making it challenging for families to afford new homes in the short term. A Roland Berger study suggests that as household incomes in Romania are expected to grow, demand for housing is likely to rebound in the medium term. Additionally, there is a significant opportunity in the energy-efficient refurbishment of homes, supported by EUR 2.8 billion in EU funding available until 2027. Foreign, mostly European, construction firms, are actively involved in Romania, with firms being particularly noted for their punctuality and quality. While large contracts tend to favour international companies due to their global experience and superior financing and project management capabilities, the higher pricing by German firms for example sometimes poses challenges. Collaborations between foreign and Romanian firms vary widely, with local subcontractors, architects, or engineers often participating in projects to bring valuable insights into national building regulations [46]. To ensure Romania's long-term prosperity in the European context, it is essential to emphasize efficiency in social policies, enhance workforce competitiveness, and foster economic integration [44].

VI. DISCUSSION

The results of the study provide an insight into the complex dynamics of the Romanian construction and affordable housing industry, especially regarding the possible introduction of the Euro. The discussion analyses these findings, contextualises them within existing research and assesses their consistency with the initial hypotheses. The research reveals a growth course in the Romanian construction industry, driven by EU-funded projects and non-residential infrastructure projects. This growth, reflected in a 30.7 % increase in construction value by 2023, underlines the key role of EU investment in driving economic expansion. In the context of this growth, residential construction faces challenges, due to rising material costs and financing constraints, resulting in a decline in housing affordability for private households. The research highlights the lack of affordable housing initiatives and the historical evolution of housing privatisation in Romania. Despite efforts to provide affordable housing options, such as the ANL programmes, the production of new housing units remains minimal. The emergence of 'self-help' affordable housing in the early 2000s underlines the complexities and shortcomings of existing housing policies, particularly in addressing the housing needs of vulnerable communities and ensuring equitable access to decent housing. In comparison, the case of Croatia's transition to the Eurozone provides valuable insights into the potential impact of the introduction of the Euro on the construction sector and the provision of affordable housing. The Croatian experience shows the importance of reducing inflationary pressures and promoting economic stability during currency transitions. Croatia's underdeveloped housing market and the predominance of owner-occupation points to the challenges of balancing housing policies to ensure affordability and integration.

The initial hypotheses posited that the Euro introduction would accelerate construction activities in Romania (H1) and enable more cost-effective building material supply across Europe (H2). The Croatian case supports these hypotheses, with observable improvements in construction efficiency and material procurement after the introduction of the Euro. The results suggest that the introduction of the Euro has the potential to rationalise construction activities and to facilitate access to affordable construction materials, thus potentially increasing the efficiency and cost-effectiveness of the construction sector. The Romanian context presents a diverse scenario. While the introduction of the Euro promises to increase the dynamics of the construction sector, existing structural and policy challenges in the affordable housing segment may limit the immediate impact. The gap between Croatia's progress and Romania's stagnation in social housing development suggests that while the Euro may facilitate sectoral growth, comprehensive policy reforms and strategic investments are equally crucial for sustained progress.

VII. CONCLUSION

Examining the construction industry in Romania, particularly in the context of affordable housing, provides valuable insights into the country's economic and social dynamics. The analysis highlights the multifaceted impact of several factors, including EU integration, currency changes, housing policy and international cooperation, on the Romanian construction sector. The discussion about the adoption of the euro in Croatia and its potential impact on Romania raises important questions about the future development of the construction industry. The hypothesis that the introduction of the Euro could speed up construction processes and facilitate the import of low-cost building materials across Europe opens avenues for further exploration. By drawing parallels with the Croatian experience, Romania can better anticipate the potential benefits and challenges associated with the adoption of the Euro. The story of housing privatisation and affordable housing initiatives in post-socialist Romania highlights the complex interplay between market forces, government policies and societal needs. Despite efforts to promote affordable housing, Romania has struggled to adequately meet demand, given the limited resources allocated to social housing development. The emergence of alternative housing models, such as self-help affordable housing, underlines the need for innovative approaches to address

The housing shortage while ensuring sustainability and social inclusion. The analysis of the Romanian construction industry highlights the resilience and growth potential of the sector, driven by EU-funded projects and increasing demand for energy-efficient renovations. Challenges such as rising material costs and financing constraints pose significant obstacles to residential construction, underlining the importance of proactive policy interventions and strategic investments. The evolution of Romania's construction sector reflects larger trends of economic integration, social policy transformation and geopolitical realignments within the European framework. As Romania moves towards greater European integration and economic prosperity, it must prioritise efficiency, competitiveness, and inclusive development to ensure long-term sustainability and resilience.

The study concludes that the research emphasises the need to address structural barriers and policy gaps to promote inclusive and sustainable housing in Romania. The findings provide valuable insights into the potential impact of the introduction of the Euro on the construction sector and the provision of affordable housing, while underscoring the need for comprehensive policy reforms to address housing inequalities and ensure the realisation of housing rights for all segments of society. The complexities and dynamics of the Romanian construction industry offer valuable lessons and insights for policy makers, stakeholders, and researchers alike. By addressing the challenges and opportunities outlined in this analysis, Romania can position itself for continued growth, prosperity, and social progress in the evolving European landscape.

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