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_Construction and Real Estate

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Main sector indicators

❝In the first seven months of 2024, there was an increase in the volume of construction works.

_The construction sector cumulatively records the continuation of positive trends. It can be attributed primarily to the implementation of large-scale infrastructure projects, while the real estate market is experiencing a slowdown in activity. Despite numerous negative impacts to which this sector was exposed in the past period (recession 2009–2014, the coronavirus pandemic, the outflow of qualified labor to more developed EU countries), construction still occupies a significant place in the Croatian economy. According to the latest available data from the Croatian Bureau of Statistics, in the first half of 2024, the construction sector participated in the structure of the total economy with a share of about 5.8 percent (Table 1). In addition to the effect on aggregate production, the contribution of construction to total employment was noted. The number of persons employed in this industry in August 2024 was 149,657, which is 8.7 percent of the total number of persons employed in the Republic of Croatia (Figure 2). At the same time, of the total number of persons employed in the construction sector, 82.2 percent were employed in legal entities, and 17.8 percent in trades.

_Table 1
Main sector indicators

Note: The percentage changes are compared to the same period of the previous year.

Source: Croatian Bureau of Statistics.

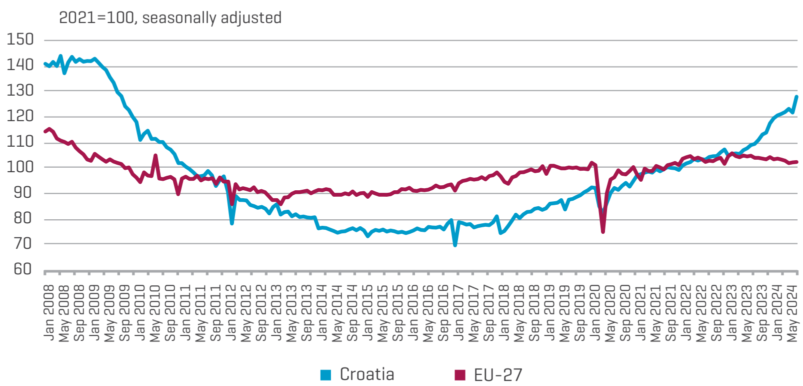
	2021	2022	2023	2024	
Share in GDP (status, in %)	5.0	4.8	4.9	5.8	January–June
Share in total employment (status, in %)	8.1	8.2	8.6	8.7	August
Volume of construction works (percentage change)	9.3	4.0	5.2	17.1	January–July
Number of persons employed (percentage change)	2.1	4.4	8.4	9.0	August
Completed apartments (percentage change)	4.7	26.9	4.3	-	–
Building permits issued (percentage change)	12.2	5.8	3.6	4.9	January–July
Price of sold apartments (percentage change)	7.8	20.2	2.7	7.1	January–June

By observing the year-on-year rates of change of the main sector indicators in 2023, an increase in activity in construction can be observed for all observed indicators (Table 1). Out of the analyzed indicators, the increase in the volume of construction works in 2023 by 5.2 percent year-on-year should be highlighted. The analyzed indicators confirm the slowdown of activity on the real estate market. In 2022, the number of completed new apartments increased by 26.9 percent, and by 4.3 percent in 2023. At the same time, in 2022, the average price of sold apartments increased by 20.2 percent, and by 2.7 percent in 2023.

In 2023, the number of persons employed increased faster compared to other sector indicators (volume of construction works, completed apartments), which indicates a cumulative decline in the productivity of the sector. There is also a slowdown in the issuance of building permits. In 2022, their number increased by 5.8 percent year-on-year, and by 3.6 percent in 2023.

_Figure 1
Volume of construction works in the Republic of Croatia and EU-27, January 2008 – July 2024

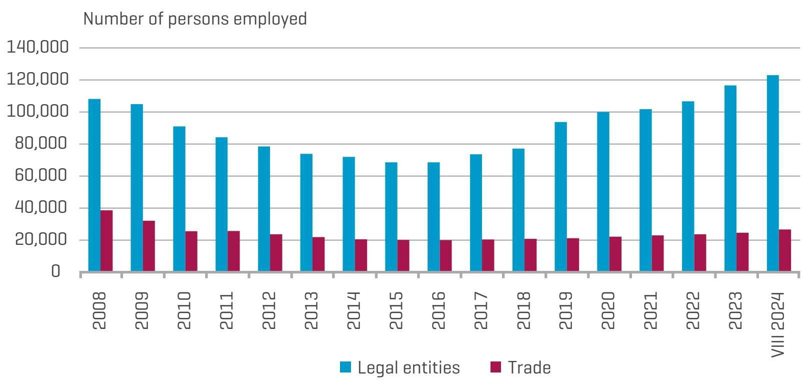
Sources: Croatian Bureau of Statistics and Eurostat.



In 2023, after a significant slowdown in construction, the latest trends at the level of the entire European Union (EU-27) indicate a decrease in the activity of this sector (Figure 1). Thus, the volume of construction works in the EU-27 in the first seven months of 2024 decreased by 1.6 percent compared to the same period last year.

_Figure 2
Number of persons employed in construction in the Republic of Croatia, 2008 – August 2024

Source: Croatian Bureau of Statistics.



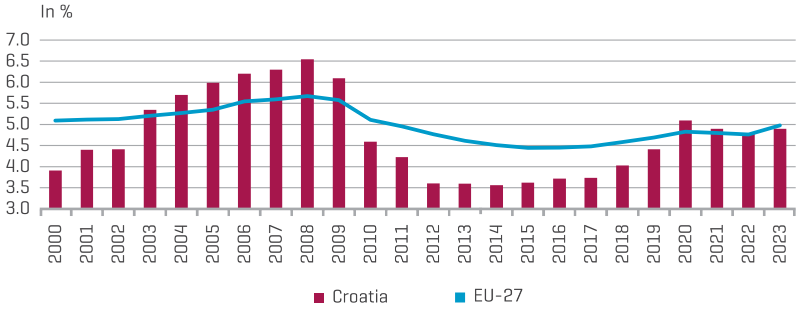
Structural characteristics of the sector and trends

_A more detailed insight into the overall trends in construction is obtained by analyzing longer time series. Analysis of the causes and consequences of trends in this sector, as well as an assessment of the position in relation to other comparable countries, facilitates the formation of expectations of trends in the coming period, and the adoption of appropriate economic policy measures for a stronger increase in construction activity.

In the observed period from 2001 to 2023, the importance and role of construction in the overall economic structure of Croatia changed significantly. Four phases can be distinguished: the first, from 2001 to 2008, when there was a strong increase in activity; the second, from 2009 to 2014, in which a recession was recorded; the third, from 2015 to 2020, in which stabilization and gradual recovery of activity was recorded; the fourth, from 2021 to 2023, when a growth of the construction sector occurred.

_Figure 3
Share of construction in the gross domestic product in the Republic of Croatia and EU-27, 2000–2023

Sources: Croatian Bureau of Statistics and Eurostat.

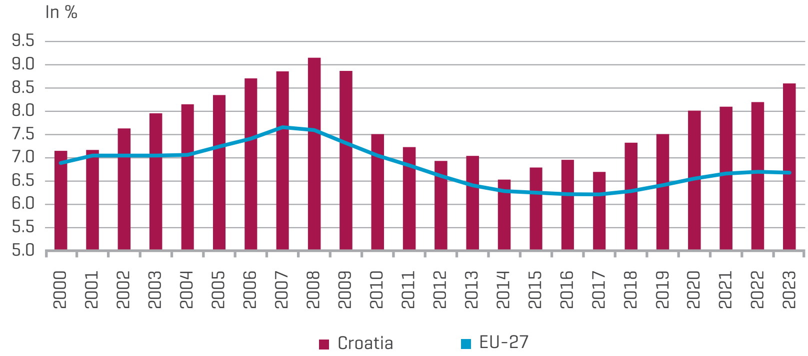


A comparison with the EU-27 shows that similar processes can only be tentatively seen on the trajectories of the share of construction in GDP and the share of total employment (Figures 3 and 4). More precisely, the construction sector at the EU-27 level proved to be much more resistant to crisis conditions, whereby in the recession years (2009–2014) there was a significantly smaller decline in overall activity and employment (Buturac, 2023, p. 7).

COMPARED TO OTHER EU-27 MEMBER STATES, THE CROATIAN CONSTRUCTION SECTOR, WITH 23,207 EUROS OF GROSS VALUE ADDED PER PERSON EMPLOYED IN 2023, IS SIGNIFICANTLY BELOW THE AVERAGE OF THOSE STATES.

_Figure 4
Share of persons employed in construction in total employment in the Republic of Croatia and EU-27, 2000–2023

Sources: Croatian Bureau of Statistics and Eurostat.

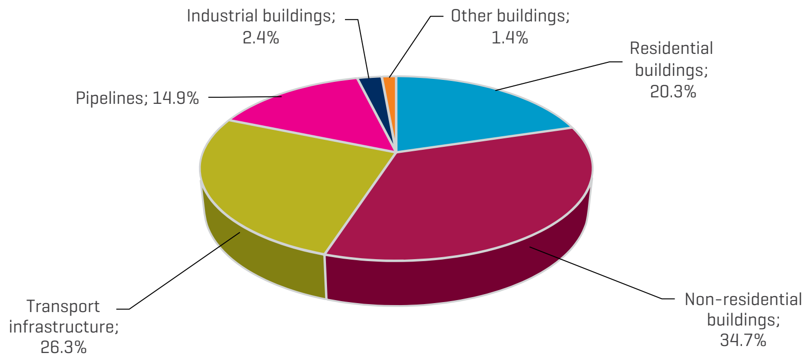


After six years of crisis marked by a significant decline in construction works and employment, 2015 brought a slowdown in negative trends and the first signs of recovery. In 2016, stabilization of activities continued, and in the period 2017–2023, the recovery of the construction sector was recorded. In the first seven months of this year, judging at least by the volume of construction works, a continuation of increase is noticeable. In that period, the volume of construction works increased by 17.1 percent year-on-year.

The analysis of the value of completed works by business entities with 20 or more persons employed according to the types of buildings shows that the trends in the construction sector are mostly conditioned by the construction of transport infrastructure and pipelines, the construction of non-residential buildings, and the construction of residential buildings (Figure 5). In the first six months of this year, the total value of the works carried out with own workers amounted to 3.2 billion euros. Of this amount,

_Figure 5
Structure of completed construction works by type of construction in the Republic of Croatia in the period from January to June 2024

Source: Croatian Bureau of Statistics.



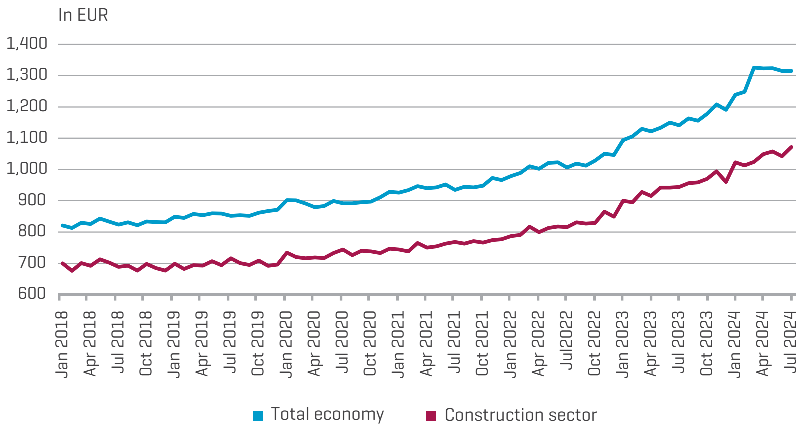
41.2 percent of the works were realized in the construction of transport infrastructure and pipelines, 34.7 percent in the construction of non-residential buildings, and 20.3 percent in the construction of residential buildings.

Wages in construction are still below the economy average. In the period from January to July 2024, the average net wage in the construction sector was 19.9 percent lower than the average net wage in Croatia (Figure 6).

This difference has been gradually increasing since 2007, when the average net wage in the construction sector was 13.5 percent lower than the national average (Buturac, 2017, p. 9). The average net wage paid in construction in the first seven months of 2024 was 1,040 euros. Compared to the same period in 2023, it nominally increased by 12.6 percent.

_Figure 6
Average monthly net wages paid in the construction industry and in the overall economy in the Republic of Croatia, January 2018 – July 2024

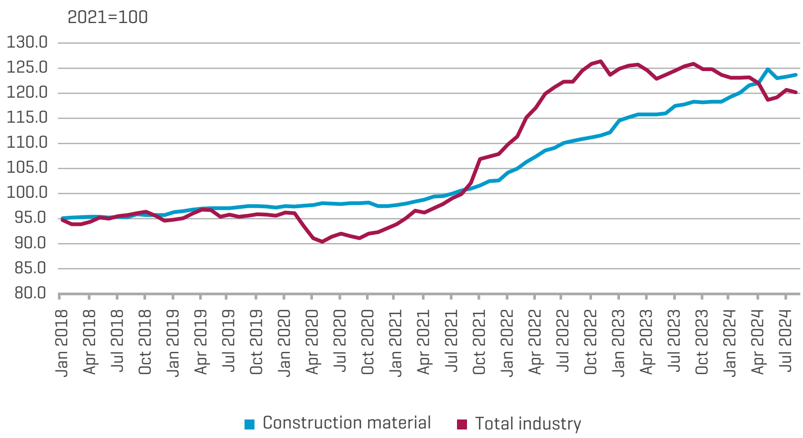
Source: Croatian Bureau of Statistics.



The increase of prices at the level of the overall economy as well as the increase in construction activity contributed to the increase in the prices of building materials. At the same time, in the period January–August 2024, the average price of building materials was higher by 5.3 percent compared to the same period in 2023 (Figure 7). Moreover, the producer prices of the overall industry decreased by 2.7 percent on average.

_Figure 7
Industrial producer price indices and construction material prices in the Republic of Croatia, January 2018 – August 2024

Source: Croatian Bureau of Statistics.



Comparison among EU-27 member states

In most EU member states, construction plays a significant role in overall economic activity (Buturac, 2021, p. 9). It is clear that, on average, this sector has a much greater importance for the economies of the "new" EU-27 member states than for the "old" member states.[1] This can partly be explained by the achieved level of development, whereby in most of the old member states, other economic sectors have a much greater importance for the overall economy compared to construction (Buturac, 2019, p. 11).

_Figure 8
Gross value added of construction in GDP in EU-27 member states in 2023

Source: Eurostat.

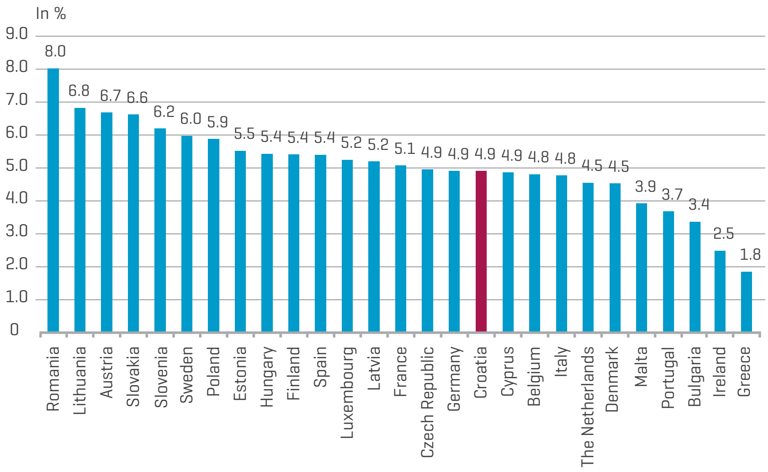


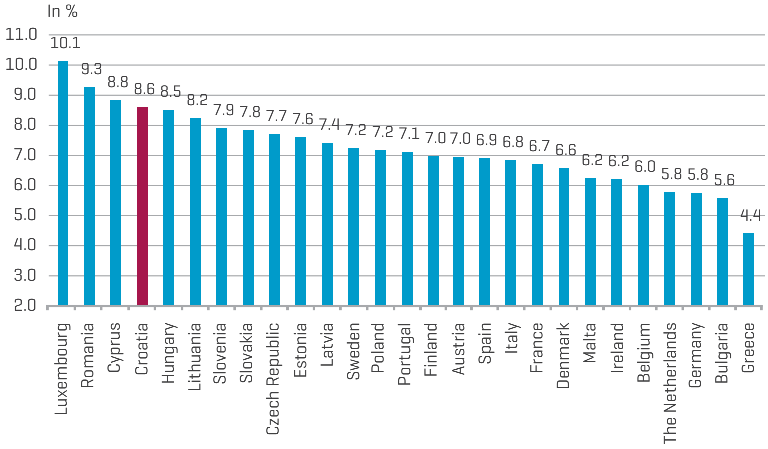
Figure 8 shows a comparison of the share of gross value added of construction in GDP among EU-27 member states in 2023. The share of construction in the GDP in the new EU-27 member states is on average 5.5 percent, while in the old member states it is 4.7 percent. Among the new members, Romania, Lithuania, Slovakia, Slovenia, Poland, and Estonia have an above-average share. Croatia is below the average of the new EU-27 member states, with a share of 4.9 percent.

The analysis of the share of construction in total employment in the EU-27 member states in 2023 further confirms the importance of this sector for the overall economic activity in these countries (Figure 9). In that year, the share of construction in total employment in the EU-27 amounted to 7.2 percent. In the newer EU member states, this share was 7.8 percent, and in the old member states, it was 6.7 percent. The largest share is in Luxembourg (10.1 percent). It is followed by Romania, which has a share of 9.3 percent, Cyprus with a share of 8.8 percent, and Croatia, which has a share of 8.6 percent.

1 The new EU member states are transitional countries of the fifth wave of EU enlargement that joined the European Union in 2004 and 2007. These are: Bulgaria, Cyprus, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, and Slovenia. Croatia has been a member state since 2013.

_Figure 9
Share of construction in total employment in EU-27 member states in 2023

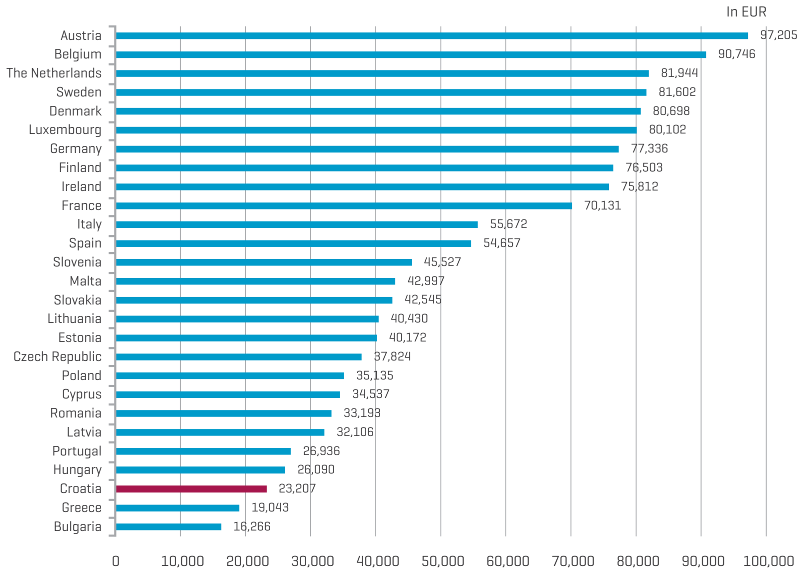
Source: Eurostat.



When looking at employment along with value added, the important question is how many employees create the value added of the sector. The old member states of the EU-27 manage to realize a significantly higher value added of the sector with a smaller number of persons employed compared to the new members. In 2023, the average value added per person employed in the old EU-27 member states was 69,170 euros, and in the new member states it was 34,618 euros. Relatively the highest value added per person employed is achieved by Austria with 97,205 euros. It is followed by Belgium, where the value added per person employed is 90,746 euros, and the Netherlands with 81,944 euros. The economically leading EU-27 states, Germany, and France, also realize significantly higher value added per person employed compared to the new EU-27 members. In Germany, the value added per person employed was 77,336 euros, and in France it was 70,131 euros.

_Figure 10
Gross value added of construction per person employed in EU-27 member states in 2023

Source: Eurostat.



Among the newer member states of the EU-27, Slovenia has the highest value added of construction per person employed with 45,527 euros (Figure 10). It is followed by Malta with 42,997 euros and Slovakia with 42,545 euros. Compared to other newer members, Croatia's 23,207 euros is significantly below the average of the newer EU-27 members. Behind Croatia are Greece and Bulgaria. At the same time, the value added of construction per person employed in Greece is 19,043 euros, and in Bulgaria it is 16,266 euros.

_ Real estate market

> “In 2023, the number of newly built apartments in the City of Zagreb decreased by 19.1 percent year-on-year, while the average price increased by 4.1 percent.

_The real estate market in Croatia is experiencing a slowdown in activity. At the same time, in 2023, there was a slowdown in the increase of the number of new apartments built, and a slowdown in the increase of their average prices. A significant contribution to such trends was made by the City of Zagreb, where the number of newly built apartments significantly decreased. The limitation of the supply of apartments contributed to the increase in their prices in the City of Zagreb. Thus, in 2023, the number of newly built apartments in the City of Zagreb decreased by 19.1 percent year-on-year, while the average price increased by 4.1 percent. In 2023, a total of 16,552 apartments were built in Croatia, which is an increase by 4.3 percent year-on-year (Figure 11). For comparison, in 2022, the increase in the number of newly built apartments was 26.9 percent.

_Table 2
Number of completed new buildings by building type in the Republic of Croatia, 2020–2023

Source: Croatian Bureau of Statistics.

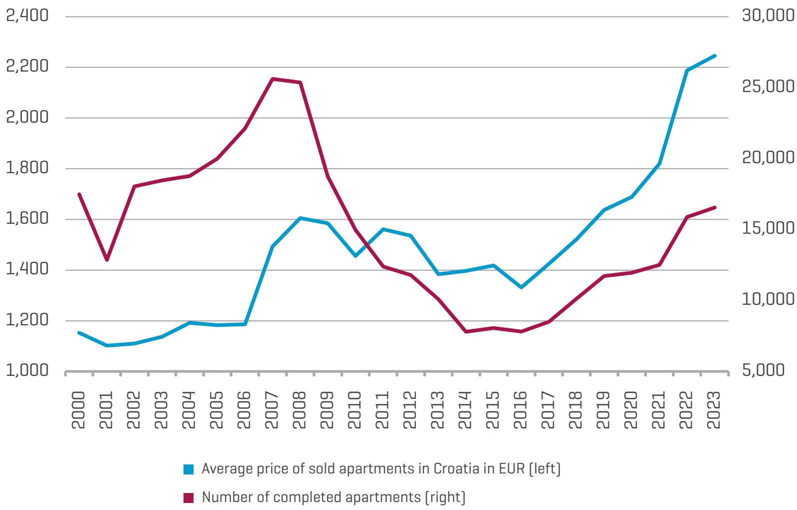
	Completed buildings				
	2020	**2021**	**2022**	**2023**	**Index 2023/2022**
I. RESIDENTIAL BUILDINGS	4,580	5,007	5,660	6,027	106.5
With one apartment	2,945	3,285	3,569	3,844	107.7
With two apartments	556	627	705	736	104.4
With three or more apartments	1,075	1,081	1,379	1,441	104.5
Buildings for residences for communities	4	14	7	6	85.7
II. NON-RESIDENTIAL BUILDINGS	1,165	1,064	1,149	1,005	87.5
Hotels and similar buildings	133	80	130	112	86.2
Office buildings	44	58	52	44	84.6
Buildings for wholesale and retail trade	100	94	134	119	88.8
Traffic and communication buildings	128	132	128	118	92.2
Industrial buildings and warehouses	268	245	274	263	96.0
Educational and healthcare buildings	149	130	96	81	84.4
Other non-residential buildings	343	325	335	268	80.0
TOTAL (I + II)	5,745	6,071	6,809	7,032	103.3

By analyzing the number of completed new buildings by type of building, it can be stated that in 2023 there was a significant decrease in the number of newly constructed non-residential buildings. At the same time, the number of residential buildings increased. In 2023, the construction of non-residential buildings decreased by 12.5 percent year-on-year, while the construction of residential buildings increased by 6.5 percent (Table 2). At the same time, the construction of non-residential buildings showed a decline in the construction of hotels and similar buildings by 13.8 percent. Furthermore, there was a decrease in the construction of office buildings (by 15.4 percent), the construction of buildings for wholesale and retail trade (by 11.2 percent), the construction of transport and communication buildings (by 7.8 percent), the construction of industrial buildings and warehouses (by 4.0 percent), and the construction of educational and healthcare buildings (by 5.6 percent).

The analysis of the construction of residential buildings shows that the construction of residential buildings with one apartment increased the most, i.e., by 7.7 percent. The construction of buildings with three or more apartments increased by 4.5 percent, while the construction of buildings with two apartments increased by 4.4 percent.

_Figure 11
Average price of sold apartments per square meter and number of completed apartments in Croatia, 2000–2023

Source: Croatian Bureau of Statistics.



In 2023, there was a slowdown in the increase of prices of new apartments. Thus, in 2023, the average price of a newly built apartment was 2.7 percent higher compared to the price in 2022.

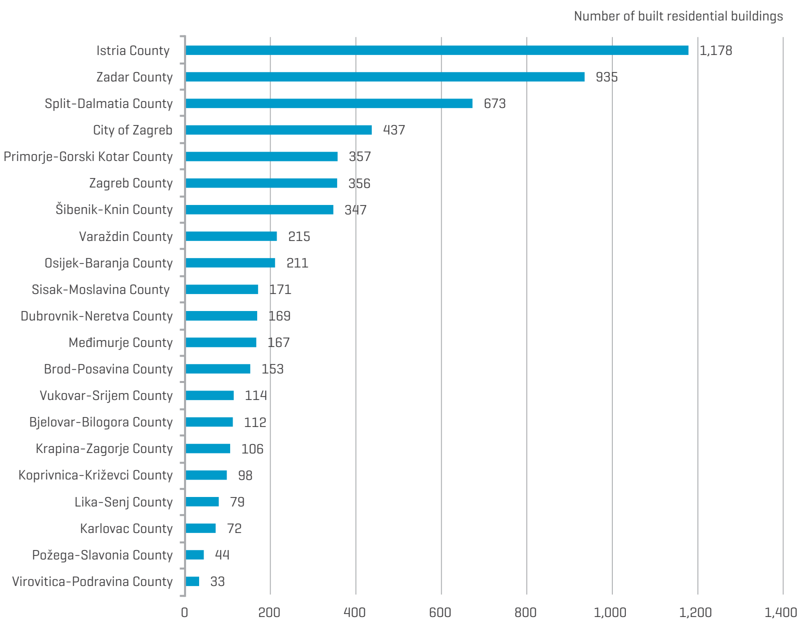
The latest trends from the first half of 2024 confirm a more noticeable increase in the prices of newly built apartments. Thus, in the first six months, the average price of a newly built apartment at the level of the Republic of Croatia increased by 7.1 percent compared to the same period last year. A significant contribution to price increase was made by the City of Zagreb, where the average price of a newly built apartment increased by 7.9 percent.

The average price increase of apartments in the Republic of Croatia and in the City of Zagreb is only partially due to the increase in the price of construction materials. The reasons are primarily due to the supply and demand for apartments. On the one hand, the supply is largely limited due to the lack of qualified labor and the outflow of a part of the construction workforce towards the more developed countries of the European Union. At the same time, a decline in the productivity of the sector can be noted. Furthermore, the effect of the relatively slow reconstruction of damaged buildings and housing units due to the earthquake should not be overlooked. On the other hand, the demand pressure is conditioned by a number of factors. One part certainly lies in the continuation of the trend of uneven economic and regional development in Croatia, with a significant concentration of the economic structure, and consequently the workforce, in the City of Zagreb and its surroundings. Secondly, there is also the effect of still very low interest rates on savings, which has made the purchase of real estate a desirable investment for some investors. Finally, we should not leave out the effects of inflationary pressures and price increases, which additionally contributed to the demand for real estate in order to preserve as much as possible the value of savings resulting from earned income in previous periods.

It seems interesting to analyze the distribution of built residential buildings by county. The results of the analysis shown in Figure 12 confirm that, in 2023, the largest number of residential buildings were built on the coast. More precisely, the largest number of residential buildings were built in the Istria County, i.e., 1,178 of them. It is followed by Zadar County, where 935 residential buildings were built, and Split-Dalmatia County, where 673 residential buildings were built.

_Figure 12
Number of built residential buildings by county in 2023

Source: Croatian Bureau of Statistics.



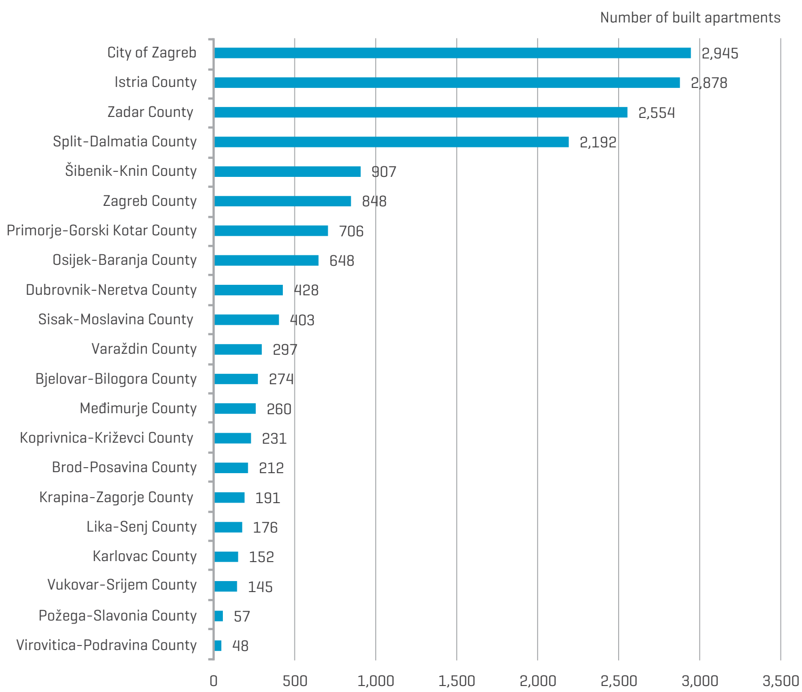
IN THE FIRST HALF OF THIS YEAR, THE AVERAGE PRICE OF NEWLY BUILT APARTMENTS IN THE REPUBLIC OF CROATIA INCREASED BY 7.1 PERCENT YEAR-ON-YEAR.

The results of the analysis of the number of apartments built by county in 2023 indicate a relatively high concentration of construction on the coast and in the City of Zagreb compared to the rest of Croatia. Thus, of the total number of newly built apartments, 58.4 percent were built on the coast, 17.8 percent in the City of Zagreb, while 23.8 percent were built in the rest of Croatia. Observing the distribution of newly built apartments by county, it is noticeable that despite the significant decline in the construction of new apartments in the City of Zagreb in 2023, it still maintained a leading position in relation to other counties.

More precisely, 2,945 apartments were built in the City of Zagreb last year (Figure 13). It is followed by the Istria County with 2,878 built apartments, the Zadar County with 2,554 built apartments, and the Split-Dalmatia County with 2,192 newly built apartments.

_Figure 13
Number of built apartments by county in 2023

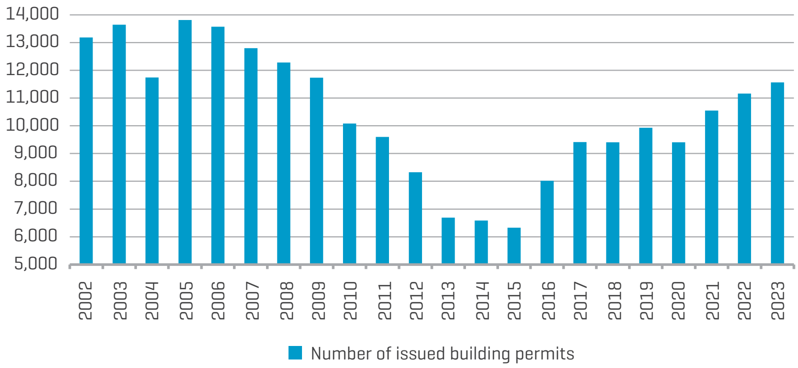
Source: Croatian Bureau of Statistics.



A more detailed insight into the expected trends in the real estate market is provided by the analysis of issued building permits. After a period of dynamic growth of the real estate market, judging by the number of building permits issued, a continuation of the slowdown in construction activities can be expected in the coming period (Figure 14). In 2021, the number

_Figure 14
Building permits issued in the Republic of Croatia, 2002–2023

Source: Croatian Bureau of Statistics.



of building permits issued increased year-on-year by 12.2 percent, by 5.8 percent in 2022, and by 3.6 percent in 2023.

When analyzing supply, demand, and real estate price trends in Croatia, the heterogeneity of the market must be taken into account. During the summer months, the demand for real estate on the coast increases, which results in a higher number of realized transactions, but also in an increase in prices in locations by the sea. Although at a slower pace, residential real estate prices also rose in the area of the City of Zagreb, while demand in the rest of continental Croatia is still relatively weak. Until now, real estate still had the status of a desirable investment. However, on the demand side, certain changes occurred continuously. At the same time, investors were mainly looking for real estate that can generate a return, and in case of a residential real estate in the City of Zagreb, investors would look for those that were built more recently. It can be expected that the price differences between newer and better quality real estate, on the one hand, and older and lower quality ones, on the other hand, will continue to increase.

The big news on the real estate market is the announcement of the introduction of the real estate tax. Just by the announcement and the planned introduction of this tax, residential real estate could lose its primacy as a desirable investment for investors. This could result in a decline in demand for newly built apartments and, accordingly, reduced construction activity regarding the construction of new apartments. Considerable heterogeneity of the market should be taken into account. At the same time, a different degree of elasticity to the introduction of real estate tax can be expected. The demand for real estate in the coastal area could show a significantly higher degree of inelasticity to the introduction of the tax, considering the participation of a large number of foreigners in the real estate market in that area. For foreign investors, as well as some domestic ones, the purchase of residential real estate on the Croatian coast could retain the status of a desirable investment. In the City of Zagreb, the introduction of real estate tax could further affect the continuation of the process of limiting the supply of new apartments on the market.

It seems interesting to analyze the data of the Tax Administration and the Croatian Real Estate Exchange (*Burza nekretnina*) on the number of residential real estate transactions. Thus, in the first half of 2024, there was a slowdown in real estate transactions. This is a continuation of the trend from 2023, when, according to data from the Tax Administration and the Croatian Real Estate Exchange, the turnover of residential real estate decreased by 6.9 percent year-on-year. This can only be partly attributed to the increase of interest rates in the Eurozone and the reduction of inflationary pressures.[2] The announced introduction of the real estate tax could contribute to the new trends in the real estate market, which are reflected in the slowdown in price increase, but also in the slowdown in the construction of new residential properties.

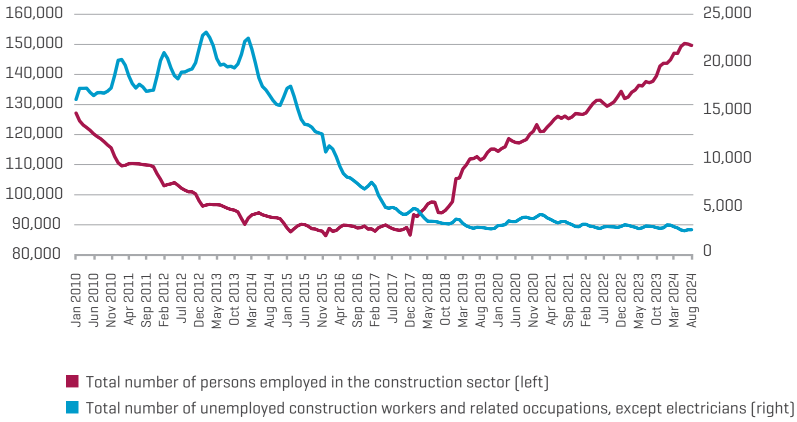
According to the research of The Institute of Economics, Zagreb (Rašić, Slijepčević, Stojčić, & Vizek, 2024), in 2023, the total value of transactions on the real estate market was 12.0 percent of the value of GDP. For comparison, in 2022, this share was 13.0 percent, and 14.0 percent in 2021. With regard to the type of real estate, in 2023, the most significant share in the value of purchases on the real estate market is recorded by the purchase and sale of agricultural land. It accounts for 27.6 percent of the value of contracted sales. It is followed by the purchase and sale of apartments/vacation apartments with a share of 22.2 percent, construction land with a share of 20.3 percent, while the purchase and sale of family houses accounted for 12.2 percent of the total number of sales on the real estate market in 2023. According to the same research, the analysis of price heterogeneity shows that the highest median price of an apartment/vacation apartment was achieved in Bale (4,264 euros per m^2). In addition to Bale, the median price of an apartment/vacation apartment is over 3,000 euros per m^2 in Punat (3,427 euros), Omišalj (3,149 euros), Rovinj (3,120 euros), and Malinska-Dubašnica (3,017 euros). The mentioned cities are followed by Opatija, Dubrovnik, Split, Lovran, Baška, Umag, Dobrinj, Hvar, and Krk with median prices of apartments/vacation apartments above 2,500 euros per m^2. The City of Zagreb with the median price of an apartment/vacation apartment per m^2 of 2,299 euros is in a group of 41 local self-government units (LGUs) in which the median price of an apartment/vacation apartment ranges from 2,001 to 2,500 euros per m^2.

Special attention in future trends should be focused on the needs for appropriate profiles of workers in the construction industry, as well as on trends in the labor market. Figure 15 shows the relationship between the total number of persons employed in construction (legal

2 Croatian Real Estate Exchange (2024), https://www.burza-nekretnina.com

_Figure 15
Total number of persons employed in the construction sector and the total number of unemployed construction workers and related occupations (except electricians), January 2010 – August 2024

Source: Analysis by the author according to the data of the Croatian Bureau of Statistics and the Croatian Employment Service.



entities + trades) and the total number of unemployed construction workers and related occupations (except electricians) in the period from January 2010 to August 2024.

The results of the analysis indicate a significant outflow of the construction workforce from the Republic of Croatia, which was especially pronounced in the recession years (Buturac, 2020, p. 19). Thus, from January 2010 to January 2015, the number of persons employed in the construction sector decreased by as many as 39,951 persons employed, while at the same time the number of unemployed construction workers and related occupations increased by only 1,162 persons employed. A significant outflow of qualified labor may become a limiting factor in the increase in construction activity in the coming period. Data for the period from January 2018 to August 2024 already indicate problems related to the lack of labor force. More precisely, the results suggest that during that period the number of persons employed in construction increased significantly. However, at the same time, the increase in the number of persons employed exceeds the decline in the number of unemployed many times over, which indicates a significant import of labor from other countries. The increase of employment in construction is significantly higher than the increase in the volume of construction works and the number of newly built real estate, which indicates a decline in the productivity of the sector. An additional problem in attracting qualified employees of the construction profession to Croatia can be the inadequate income of the persons employed. More precisely, the average monthly net wages paid in the construction industry lag significantly behind the economy average, with indications that this gap has been gradually deepening since 2007. In that year, the average net wage in the construction sector was 13.5 percent lower than the economy average, and in the first seven months of 2024 it was 19.9 percent lower.

The largest companies

A more detailed insight into the state and dynamics of the real estate market is provided by an analysis of the financial indicators of ten leading companies in the field of residential and non-residential building construction. The results shown in Table 3 indicate an increase in the activities of the leading companies in this activity in 2023. Increased activity is primarily reflected in the growth of total revenue, which cumulatively increased by 27.4 percent.

_Table 3
Ten leading companies in the construction of residential and non-residential buildings in the Republic of Croatia, 2020–2023

	2020	2021	2022	2023	Index 2023/2022
Total revenue (in millions of euros)	648.7	747.3	827.6	1,054.2	127.4
Profit/loss before tax (in millions of euros)	34.9	69.1	36.7	91.0	248.2
Number of persons employed	2,805	2,829	2,782	2,837	102.0
Gross margin (in %)	5.38	9.25	4.43	8.63	194.9
Profitability of assets (in %)	5.78	13.21	4.86	11.99	246.6
Labor productivity (revenue in HRK million per person employed)	0.23	0.26	0.30	0.37	124.9
Asset turnover ratio	1.35	1.56	1.45	1.69	116.0
Current ratio	1.70	2.10	2.15	2.40	111.8
Debt ratio	0.44	0.40	0.42	0.36	85.2

Notes: Includes leading companies: Kamgrad, Strabag, Radnik, GIP Pionir, Ing-grad, Projektgradnja plus, Tehnika, AB gradnja, Lavčević, and Mešić Com.

Gross margin = gross profit/total revenue * 100; profitability of assets = net profit/total assets * 100; labor productivity = total revenue/number of persons employed; asset turnover ratio = total revenue/total assets; current ratio = current assets/current liabilities; debt ratio = total liabilities/total assets.

Source: Author's calculation according to Poslovna Hrvatska data.

More significant growth in total revenue was accompanied by a slight increase in the number of persons employed, which speaks in favor of a more pronounced increase in labor productivity. In 2023, it increased by 24.9 percent year-on-year.

IN 2023, THE LEADING COMPANIES ON THE REAL ESTATE MARKET RECORDED AN IMPROVEMENT IN LIQUIDITY AND A REDUCTION IN INDEBTEDNESS.

"In 2023, the increase in total revenue cumulatively for ten leading companies in the construction of residential and non-residential buildings was accompanied by a slight increase in the number of persons employed, so labor productivity increased.

The values of the other analyzed indicators also indicate positive trends in ten leading companies in the construction of residential and non-residential buildings. Thus, in 2023, all ten analyzed companies operated profitably (Table 4).

In 2023, the asset turnover ratio increased by 16.0 percent year-on-year (Table 3). At the same time, indebtedness decreased and liquidity improved. The debt ratio decreased by 14.8 percent, while the current ratio increased by 11.8 percent (Table 3).

A more detailed insight into the operations of ten leading companies in the construction of residential and non-residential buildings is provided by an overview of selected financial and accounting indicators in Table 4.

_Table 4
Selected indicators of ten leading companies in the construction of residential and non-residential buildings in the Republic of Croatia in 2023

Source: Author's calculation according to Poslovna Hrvatska data.

	Total revenue (in millions of euros)	Debt ratio	Current ratio	Gross margin (in %)
Kamgrad	264.6	0.42	1.81	10.42
Strabag	217.0	0.29	2.39	7.48
Radnik	165.7	0.23	2.97	7.58
GIP Pionir	114.7	0.15	7.92	4.73
Ing-grad	98.2	0.25	3.76	14.36
Projektgradnja plus	61.3	0.51	2.45	5.25
Tehnika	38.0	1.37	0.42	3.38
AB gradnja	33.1	0.38	2.44	18.03
Lavčević	31.3	0.44	1.78	0.35
Mešić Com	30.3	0.52	1.89	14.89

Conclusion and expectations

The latest trends in construction indicate a slowdown in activity in this industry. Such trends can partly be explained by the slowdown in the real estate market, primarily in the City of Zagreb, where, in 2023, a significant decline in the number of newly built apartments was recorded. According to the data of the Tax Administration and the Croatian Real Estate Exchange, there is a trend of a decrease in number of residential real estate transactions. The decrease in the number of residential real estate transactions consequently led to a slowdown in the price increase of newly built apartments. Limiting the supply of newly built apartments due to the slowdown in their construction supports the increase of new apartment prices.

An additional impetus to the slowdown in construction activity comes as a result of the outflow of qualified labor from Croatia to the more developed countries of the European Union. The increase in the number of persons employed in this sector due to the import of labor from other countries was not accompanied by a corresponding increase in the volume of construction works and the number of newly built real estate. The end result is a decline in the productivity of the construction sector. The results of the conducted analysis confirm that the decline in productivity, measured by gross value added per employed person, is reflected in Croatia's significant lagging behind the developed countries of the European Union. Compared to other members of the European Union, in 2023, only Greece and Bulgaria realized a lower gross value added per person employed than Croatia.

The decline in the productivity of the construction sector suggests that the continuation of the process of outflow of qualified labor from Croatia could become one of the main limiting factors in the realization of a stronger momentum of construction activity in the future. In addition, the outflow of labor force from the field of construction and related activities could have negative effects on the demand for real estate. An additional problem in attracting employees of the construction profession to Croatia could be the inadequate wages of the persons employed. More precisely, the average monthly net wages paid in the construction industry significantly

THE OUTFLOW OF QUALIFIED LABOR FROM CROATIA CONTRIBUTES TO THE DECLINE IN PRODUCTIVITY OF THE SECTOR AND COULD SIGNIFICANTLY AFFECT THE LIMITATION OF ACTIVITY INCREASE IN THE COMING PERIODS.

lag behind the average of the economy of the Republic of Croatia. According to the analysis carried out, it is to be expected that activities in other sectors, primarily in tourism and industry, could significantly determine the direction and dynamics of the construction sector in the coming period.

When forming expectations about future trends in the construction sector, it is certainly necessary to take into account the overall demographic trends in the country, which are quite unfavorable. They are characterized by significant emigration of the population, which was particularly pronounced in the years after Croatia's accession to the European Union, but also by extremely negative natural increase. Unfavorable demographic trends are already leaving a deep mark on construction activity in regions such as Slavonia, Lika, and Dalmatian Hinterland. The results of the analysis confirm the dominant concentration of construction activity on the coast and in the City of Zagreb. Thus, in 2023, more than three quarters of new apartments were built on the coast and in the City of Zagreb.

“The announced introduction of real estate tax could contribute to a reduction in the construction of new apartments and cause negative multiplier effects on other sectors.

The announcement of the introduction of the real estate tax could lead to a reduction in the pressure on the demand side for newly built apartments, which could be reflected in the mitigating of the increase in real estate prices or even their decline. In contrast, a decline in demand for newly built residential real estate could result in a reduction in new housing construction and continued supply restrictions. This will certainly support the increase of housing prices. The decline in demand and decrease in activity could have negative consequences on the continuation of the process of outflow of construction workforce and qualified labor from Croatia to the more developed countries of the European Union. Decreased activity on the real estate market can cause negative multiplier effects on other economic sectors such as manufacture in mining and quarrying (gravel and sand), manufacturing industry (cement, brick, glass, timber, sanitary ware, furniture), business services – design, etc. This could ultimately have a negative impact on the overall economic trends in the country and on the reduction of the purchasing power of domestic residents, making desirable real estate even more unaffordable.

The direction and dynamics of the real estate market in the coming period will largely be determined by economic conditions in Croatia and the European Union. The European Commission's estimates of GDP trends for Croatia in 2025 indicate a slight slowdown in economic growth (European Commission, 2024). This could further contribute to a reduction in the number of transactions and a slowdown in real estate market activity.

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