

REVIEW PAPER

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# CONSTRUCTION PRODUCTION TRENDS AND INDUSTRY OPTIMISM IN EU COUNTRIES AFTER THE COVID-19 PANDEMIC

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#### **ABSTRACT**

The purpose of this study is to present the current changing situation of construction markets in selected European countries. Current trends in construction production are presented in relation to changes resulting from the coronavirus pandemic and other factors using the examples of France, the Netherlands, Belgium, Austria, Germany, Spain and Poland. The EU Construction Confidence Index (CCI) and data on the number of building permits issued in selected countries were used for inference. Additional sources of knowledge were publicly available information on ongoing and planned campaigns and government actions affecting local construction markets. The analysis presented shows a clear impact of the pandemic on construction production trends, an increase in optimism in the industry at its extinction and renewed declines in optimism due to the increasing destabilisation of economies as a result of inflation, rising energy prices and the war in Ukraine. Despite the difficulties, construction markets are slowly regaining their pre-pandemic growths, although the aforementioned factors are slowing them down. Strong mature economies, supported by additional government funding, will recover much faster than developing countries where uncertainty is greater. The negative indicators for Poland forecast a slowdown and a longer period of return to pre-pandemic COVID-19 growth.

Key words: construction production, optimism, COVID-19, European Union

#### **INTRODUCTION**

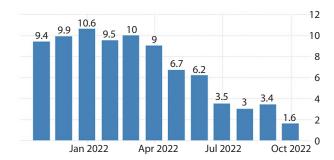
Continued shortages of some construction materials and other economic factors (mainly inflation) make it difficult to expect high increases in investment in the construction sector of EU countries, at least this year and next year.

The European Commission's Directorate General for Economic and Financial Affairs (DG ECFIN) produces monthly confidence indicators for the European Union's (EU) industry, services, retail trade, construction, and consumer sectors. These indicators are based on surveys of representatives from these sectors and

are intended to reflect their economic perceptions and expectations. The confidence indicators are calculated as the average of responses to selected questions from the surveys, with positive and negative answers balanced against each other. The indicators are produced at the country, EU, and eurozone levels for all sectors except financial services. The data is seasonally adjusted.

The EU construction confidence index was positive at the beginning of 2022, only to record a decline during the year (Fig. 1). However, construction output indicators in Poland should be boosted by new investment from the EU Recovery Fund, if it is activated.





**Fig. 1.** European Union Construction Confidence Index (CCI), November 2021 – October 2022

Source: Trading Economics [n.d.].

## INCREASES IN MATERIAL SHORTAGES IN THE LONG TERM

The outlook for construction in EU countries has changed. As recently as last September, construction forecasts for the EU showed that supply chain disruptions caused by the coronavirus crisis were reducing the supply of construction materials. At the same time, construction production was 'bouncing back from the bottom' after the first wave of the coronavirus. This resulted in shortages and rising prices for construction services and materials. An increasing number of contractors in the EU indicated lower production due to a shortage of construction materials or at least a delay in their delivery. This situation worsened in early 2022, with the biggest shortages occurring in the strong economies of France and Germany.

#### Material shortages and a new law in France

In France, most contractors are facing large shortages of building materials compared to other major European countries (Hanotin, 2022). As the volume of French construction has not yet fully reached pre-pandemic levels, strong demand is not the only source of shortages here. France has recently introduced a new law requiring half of the materials used in public buildings to be made of wood or other materials of organic origin (AFP, 2020). This is leading to an increase in demand for these particular materials and to periodic shortages, especially as wood is still a scarce material.

# Example of other countries in the context of supply chain disruptions

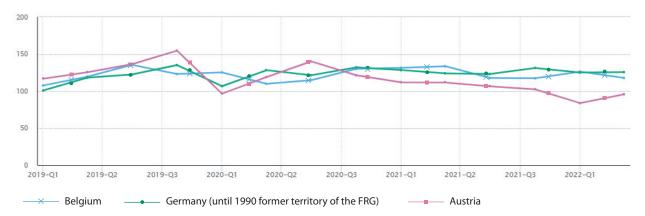
In countries where production levels have been and remain high, material shortages are more acutely felt. Thus, in countries such as Germany, Austria and the Netherlands, demand for inputs is high and these shortages are greatest there. It is very likely that shortages of construction materials will continue for some time to come. Among other things, this is due to the restrictions put in place to contain the coronavirus in cities and ports, which are very important to global production chains. The production of many materials is also linked to the energy sector, which is currently experiencing a deep crisis across Europe (Thiéry & Depreter, 2022).

### Supply constraints generate price increases

Disruptions in the supply chain and higher energy prices lead to reduced production and higher prices for construction materials. This puts pressure on the profitability of investments and therefore construction companies pass on price increases to selling prices. This results in a marked increase in the number of construction companies that have planned and raised prices since the beginning of 2022. The majority of EU construction companies had to raise prices in 2022 (Construction Industry Federation [CIF], 2022). This is a situation not seen in the last 20 years. In particular, German, Austrian and Dutch construction companies have been forced to raise their selling prices. These are the same countries that are facing shortages of building materials due to their high demand.

# A decline in the EU construction industry confidence index

Price pressures, inflation and geopolitical uncertainty mean that while business confidence was positive among most contractors in the European Union at the start of 2022, it is now registering a marked decline in confidence in the industry. The highest business volumes in the eurozone continue to be recorded in the Netherlands. Optimism among Dutch contractors was already high before the COVID-19 outbreak and quickly recovered after the first wave of the pandemic, as evidenced by the record-high figures



**Fig. 2.** Number of building permits in Belgium, Germany and Austria in the period of 2019–2022

Source: Eurostat Data Browser [n.d.].

in January 2022. Moreover, construction volumes in countries similar to the Netherlands hardly suffered during the pandemic, as construction sites remained largely open. Unfortunately, the following months of 2022 brought a deterioration in consumer sentiment, mainly due to the outbreak of war, the energy crisis and inflationary pressures across the eurozone.

## RESIDENTIAL BUILDING PERMITS AS AN INDICATOR FOR THE NEAR FUTURE

The issuing of housing permits is a strong indicator of future construction production. Huge housing shortages in many European cities ensured sufficient demand in the housing sector. The number of approved building permits for new homes in the EU was stable in the first three quarters of 2021. Currently, we do not expect high growth rates in the EU housing sector in the coming year. It is worth analysing the differences between selected countries based on Eurostat data up to the second quarter of 2022 (estimated).

# France and Spain record increases in the number of permits

Spain has made up for the decline it faced during the first wave of the coronavirus pandemic. It even issued slightly more building permits in the third quarter of 2021 than at the end of 2019. Spanish production of new housing could benefit from this in 2022. French permit issuance realised a comparable movement,

although the recovery started slightly earlier (Eurostat, 2022). The housing markets in Spain and France are also stimulated by the renovation market. France's MaPrimeRenov programme offers generous subsidies (around 30% of renovation costs) and interest-free loans to help households finance works (Artisan Central, 2021). In Spain, the recovery plan includes 6.8 billion EUR for measures to encourage housing renovation and further measures to increase the energy efficiency of homes (Marlasca, 2022).

#### Permits in Belgium, Germany and Austria

The number of housing permits issued in Belgium, Germany and Austria has been fairly stable over the past few quarters. These three countries, like many other European countries, have strong demand for new homes. Stabilising factors are the shortage of building land, high prices and time-consuming permitting procedures. These factors limit further growth in construction output. In the case of Austria, Figure 2 shows that the number of Austrian permits was still below the level observed at the end of 2019. However, this is due to a peak in the issuing of building permits in Austria in the last quarter of 2019.

## The situation of building permits in the Netherlands

In the Netherlands, the number of building permits issued for new homes fell in the third quarter of 2021. To address the low supply of homes, the Dutch

government has proposed building 100,000 new homes per year (Touray, 2021). This is a very ambitious target, as around 75,000 new homes per year was considered a very good result. Several new logistical measures have been implemented to keep construction at a high level. For example, the central government has agreed to speed up decision-making processes for major housing projects.

# Poland records large decreases in the number of permits

In Poland, the beginning of 2022 indicated a strong return of construction production to a level even above pre-pandemic levels. Unfortunately, as a result of the outbreak of war in Ukraine, record-high prices for construction materials and labour (an exodus of workers from Ukraine and other countries), and, in addition, increases in interest rates on investment loans, there has been a sharp revision of forecasts, particularly in residential construction. The Central Office of Construction Supervision (Główny Urząd Nadzoru Budowlanego) reports that the number of building permits issued in the first half of 2022 fell by 19.3% to the same period in 2021 (Główny Urząd Nadzoru Budowlanego [GUNB], 2022). The decline in construction confidence is at a low level in Poland, but the downward trend is in line with that of the EU as a whole.

### A STABLE EU CONSTRUCTION SECTOR

Overall, despite the clear difficulties, the outlook for the EU construction sector remains moderately optimistic. Despite shortages of construction materials and structural labour shortages, high inflation and credit market constraints, analysts expect output in the EU construction sector to continue to grow in 2022 and 2023. Construction investment could be boosted by new funding from the EU Recovery Fund. Ongoing housing shortages and high house prices provide structural demand for new housing construction. In addition, non-residential construction will already see a marked rebound as the pandemic crisis fades and entrepreneurs are increasingly willing to invest in new industrial and storage facilities.

Positioned as a model, the construction sector in Germany was quite resilient during the COVID-19 crisis. It was practically the only country that did not experience a decline in construction production volumes in 2020. The development of construction production only slowed down significantly in 2021. Weather conditions at the beginning of 2021 and a return to previously reduced VAT rates hampered growth last year. In addition, German contractors are currently among the most constrained by labour and material shortages. However, the strong economy helps to indicate an expectation that German construction will return to earlier growth. Growth in residential building approvals is moderating, order books are at their highest level this century and disruptions in the building materials supply chain are likely to decrease in 2022–2023.

In contrast, the example of Spain allows us to expect a recovery of the construction segment this year and next year, but this will not make up for the large decline of the last 2 years. However, the Spanish construction backlog is being better realised, and construction confidence in Spain has seen a marked increase in 2022. In addition, building permits are increasing in Spain, although production will continue to suffer somewhat from the lower levels of the last 2 years. The Spanish construction sector is also expected to see positive effects from investment from EU recovery funds.

In the Netherlands, there has been a stable but slight increase in construction production in 2021. Construction restrictions due to excessive nitrogen emissions have reduced production, especially in the infrastructure sector (Boztas, 2021). Slightly stronger growth is expected in 2023 and 2024. This expectation is due to government measures being introduced. The Dutch government intends to create a fund for a 'national programme' in rural areas. This fund is mainly aimed at reducing nitrogen emissions, which may also bring opportunities for new building projects. Even if the number of building permits fell slightly in the third quarter of 2021, the Dutch building confidence index is still at a high level. Eurostat statistics show that there was steady growth in the first half of 2022 and this trend should continue in the longer term.

We also saw a stable situation in France and Belgium in 2022. The construction sector in these countries was severely affected by the pandemic in 2020, so growth rates reflect a rebound from low levels. In addition, French construction production is still not yet at pre-pandemic levels this year.

The decrease in the number of building permits issued in Poland will probably translate into a decrease in construction production in 2023 and 2024. The forecasts for Poland are not optimistic and negative construction market dynamics can be expected. Declines will be corrected by a stable level of investment in non-residential (infrastructure) construction, especially after the release of EU funds and the Reconstruction and Resilience Facility (RRF) after the coronavirus pandemic (Osiński & Ciechanowicz, 2022).

#### **CONCLUSIONS**

The EU construction confidence index and the number of building permits issued can provide insight into the state of the construction market in the EU. The construction confidence index is a measure of the overall sentiment in the industry, and can indicate whether construction firms are feeling optimistic or pessimistic about the future. A high confidence index suggests that companies are feeling positive about the market and are likely to invest in new projects, while a low confidence index indicates that companies are feeling uncertain and may be hesitant to take on new projects.

The number of building permits issued is also an important indicator of the construction market. Building permits are required before construction can begin on a new project, and the number of permits issued can provide an indication of the level of demand for new construction. A high number of building permits being issued suggests that there is strong demand for new construction, while a low number of building permits suggests that demand is weak. Together, the EU construction confidence index and the number of building permits can provide a good indication of the overall state of the construction market in the EU.

The outlook for the EU construction sector is moderately optimistic. Despite challenges such as material shortages and labour shortages, analysts expect output

in the sector to continue growing in 2022 and 2023. Investment in construction could be boosted by funding from the EU Recovery Fund, and ongoing housing shortages and high house prices provide strong demand for new housing construction. The construction sector in Germany was relatively resilient during the COVID-19 crisis, and growth is expected to continue in the coming years. In contrast, the construction sector in Spain is expected to recover in the coming years, but will not fully make up for the declines in previous years. In the Netherlands, stable but slight growth is expected in the coming years due to government measures, and the construction sector in France and Belgium is rebounding from the effects of the pandemic. In Poland, a decrease in building permits is expected to lead to a decrease in construction production in the coming years.

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### TRENDY PRODUKCJI BUDOWLANEJ A OPTYMIZM W BRANŻY W KRAJACH UE PO PANDEMII COVID-19

#### **STRESZCZENIE**

Celem opracowania jest przedstawienie aktualnej zmiennej sytuacji na rynkach budowlanych w wybranych krajach europejskich. Na przykładzie Francji, Holandii, Belgii, Austrii, Niemiec, Hiszpanii i Polski przedstawiono aktualne trendy w produkcji budowlanej w odniesieniu do zmian wynikających z pandemii koronawirusa i innych czynników. Do wniosków wykorzystano unijny indeks zaufania w budownictwie (ang. *Construction Confidence Index* – CCI) oraz dane dotyczące pozwoleń na budowę. Przedstawiona analiza wskazuje na wyraźny wpływ pandemii COVID-19 na trendy w produkcji budowlanej, wzrost optymizmu w branży przy jej wygaszaniu oraz ponowne spadki optymizmu w związku z postępującą destabilizacją gospodarek w wyniku inflacji, rosnących cen energii i wojny na Ukrainie. Pomimo trudności rynki budowlane powoli odzyskują swoje przedpandemiczne wzrosty, choć spowalniają je wspomniane czynniki. Silne dojrzałe gospodarki, wspierane dodatkowym finansowaniem rządowym, odbudują się znacznie szybciej niż kraje rozwijające się, gdzie niepewność jest większa. Negatywne wskaźniki dla Polski prognozują spowolnienie i dłuższy okres powrotu do wzrostów przed pandemią COVID-19.

Słowa kluczowe: produkcja budowlana, optymizm, COVID-19, Unia Europejska