



Review paper

The housing market in Poland during the Covid-19 pandemic

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Abstract: This article examines the impact of economic factors, such as changes in interest rates and inflation, on the primary housing market in Poland from January 2019 to September 2022, with particular focus on the Covid-19 pandemic. The research problem is to understand how these economic factors have affected the housing market, and the research objective is to analyze the activity of developers, building permits issued, investments started, and housing loans granted. The research methodology involves the analysis of data from various sources, including official statistics and reports from developers and investment funds. The research findings suggest that the decreased demand for housing loans has led to a significant decline in the allocation of new housing. However, the emergence of new major players, such as leading European and global investment funds, could provide opportunities for developers. The study concludes that caution is warranted in starting new construction activity and that the best performance in housing production in the transition period to 2021 is unlikely to be exceeded in the current or subsequent years. The implications of this study are that developers need to consider economic factors and market trends when making decisions about new construction and that investment funds may play an increasingly important role in the housing market.

Keywords: housing market, Covid-19 vs housing, interest rate vs housing, investment housing, rental housing

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1. Introduction – Changes in the housing market in Poland in the years 1991–2021

Since the beginning of the economic transformation, the housing market in Poland has shown all the signs of collapse. The number of dwellings being built and completed had already been declining since the end of the 1980s, but from 1990 onwards the situation deteriorated markedly. The Polish monetary authorities pursued an interest-rate-oriented monetary policy, and since 1990 various types of fixed exchange rates were introduced [1]. The inflation rate in Poland rose from 250% in 1989 to 585% in 1990, then fell to 70% in 1991 and later to 40%. The National Bank of Poland (NBP) introduced a floating refinancing rate, which it set monthly. In January 1990 it was 36%, in February 20%, in March 10% and from July 36%, but on an annual basis. These changes resulted in a corresponding increase in interest rates on deposits and loans, including those taken out earlier. The indebtedness of those borrowers who were unable to repay the loans quickly increased sharply [2].

The high interest rates, which after January 1, 1990 were also applied to contracts already concluded between banks and their customers, shook the credit market, including the housing market. It particularly affected housing cooperatives, which were the main “housing developers” in the Polish cities, which were at the same time deprived of all support from the state budget [3]. Individual investors also stopped private housing construction carried out for their own use as far as possible. Construction that had already begun was completed in a hurry, with no hurry to start new ones.

At the same time, new entities emerged to take over the investment market functions of housing cooperatives – developers. According to various sources, the private construction sector, including developers, expanded in Poland after 1989 due to economic reforms and privatization measures that created favorable conditions for private sector development throughout the Polish economy [4,5]. The rise of the new private sector and the decline of the state sector can be confirmed by the overall statistics [6]. The private sector has become the main engine of reforms and economic renewal in Poland [6]. The role of the private sector in the development of housing has also been noted [5]. In the early 1990s, the Central Statistical Office in Poland (GUS) began to collect information on housing built by these companies and classify it as “housing for sale or rent”. The development of the housing market in Poland, illustrated by the number of dwellings completed, is shown in Fig. 1.

In 1996, on the basis of the 1995 Act, the first social housing societies (TBS) were established in Poland [7,8], which, together with the normalization of the economy after the turbulent transition year and the decrease in interest rates, led to an increase in demand for housing. Since this year we can speak of an increasing trend in the number of apartments (housing units) completed and ready for occupancy. Some fluctuations around the trend line are due to normal market activity and government interventions. For example, the significant increase in the number of apartments handed over by individual builders in 2003 was the result of a change in the law that forced this category of builders to report completed construction under threat of an administrative fine [9]. Until 2001, the income tax allowance, which was later replaced by other programs for young people or families, also had an impact on the housing market [9]. Year 2007, on the other hand, brought a

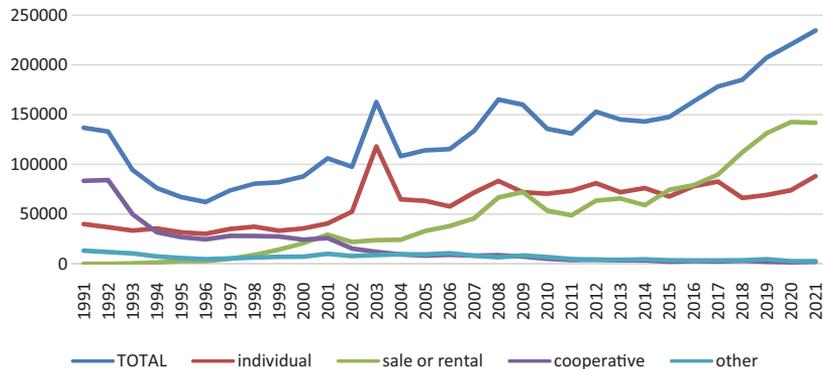


Fig. 1. Number of dwellings completed in Poland in 1991–2021 (in thousand), own study based on GUS data

surge in demand triggered by the Minister of Finance’s information on the abolition of the tax relief and the increase of the VAT rate from 7 to 22% and resulted in an increased number of housing projects completed in the following two years. In the subsequent two years (2009 and 2010), a reduced number of housing units were completed, which was the result of earlier saturation of the market by developers. However, from 2014 onwards, the number of housing completions increased steadily, including the pandemic period between 2020 and 2021, as illustrated in Fig. 2.

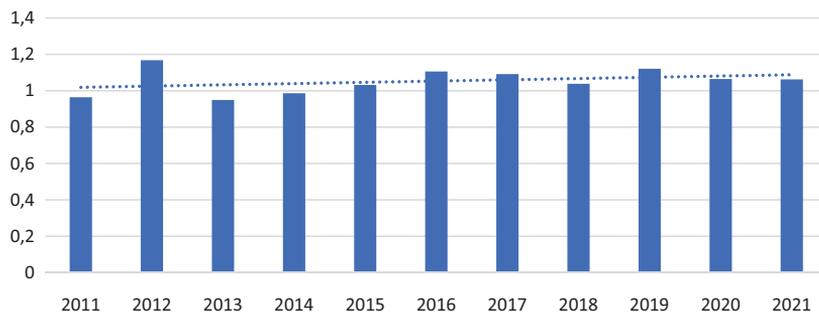


Fig. 2. Increase in the number of dwellings handed over for use, together with the trend line in the years 2011–2021, own study based on GUS data

2. Changes in housing market in Poland during the Covid-19 pandemic

The first diagnosed case of Covid-19 virus infection in Poland occurred on 4 March 2020 [10]. On 12 March, the Government declared the state of epidemic emergency, which included a number of restrictive policies (a.k.a non-pharmaceutical interventions or NPIs)

with regard to public gatherings, service provision, etc. More specifically, throughout the entire duration of the COVID-19 epidemic, national governments choose restrictions and policies in relation to the scale of the problems arising, taking into account both medical and economic factors [11]. It seemed that they also had to restrict the activities of construction companies. Meanwhile, the housing market did not confirm such a trend.

The pandemic COVID-19 had a significant impact on the construction industry in Poland [12–16]. While the sector initially survived the first wave of the pandemic relatively unscathed, it will potentially feel the negative effects in the medium and long term [12]. According to one report, the Polish construction industry was due to shrink by 3–5% in 2020 due to the impact of the pandemic COVID-19 [14]. The introduction of NPIs related to the pandemic in March 2020 had a negative impact on the sale and transfer of real estate to buyers [16]. Therefore, the high position of Polish construction companies (developers), which occupied over 60% of the primary housing market in 2021, requires an evaluation of their activity during the pandemic period [12]. An attempt was made to determine the changes caused by the pandemic by inserting four years of developers' activity into a common chart, with data for 2022 ending in the month of September. This assessment is necessary to understand the impact of the pandemic on the construction industry and to identify any changes in developer activity during that specific period.

The number of dwellings completed between January 2019 and September 2022, despite some fluctuations, showed an upward trend, as illustrated in Fig. 3.

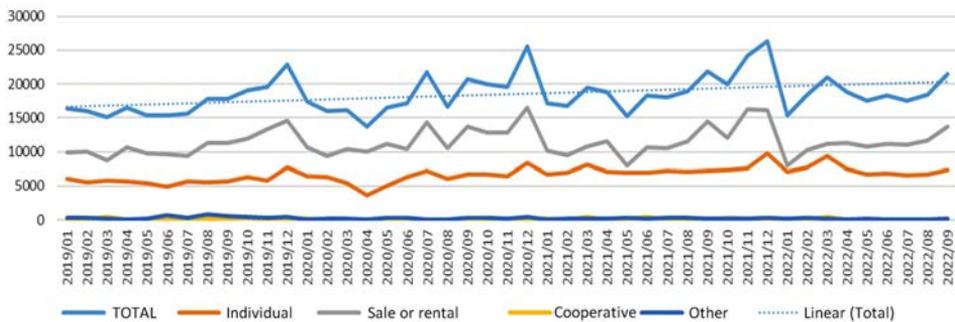


Fig. 3. Dwellings completed and put into use between January 2019 and September 2022, own study based on GUS data

Analysis of Fig. 3 clearly shows a regularity concerning an increase in the number of dwellings completed towards the end of a given year (November-December) and a decrease in this number at the beginning of the following year. This demonstrates the seasonality of investment and construction activity [17]. Despite the outbreak of Covid-19, the Polish housing market did not experience a significant downturn. According to H. Augustyniak, J. Łaszek, and K. Olszewski [18], the impact of the pandemic on the primary housing market in Poland, with a focus on Warsaw, was limited. Moreover, the retail market in Poland functioned without anti-covid restrictions, and retail sales in constant prices increased by 19% in April and May 2022, as reported by K. Lipka [19]. It is worth noting that although

the announcement of the pandemic by the government initially led to some decrease in the number of apartments handed over for use in April 2020, it was mainly related to individual investors who were building with the help of the economic system and whose construction crews were forced to return to their premises. More importantly, this situation was short-lived.

Figure 4 shows how atypical 2020 was compared to the year before and the year after in terms of the number of housing units completed.

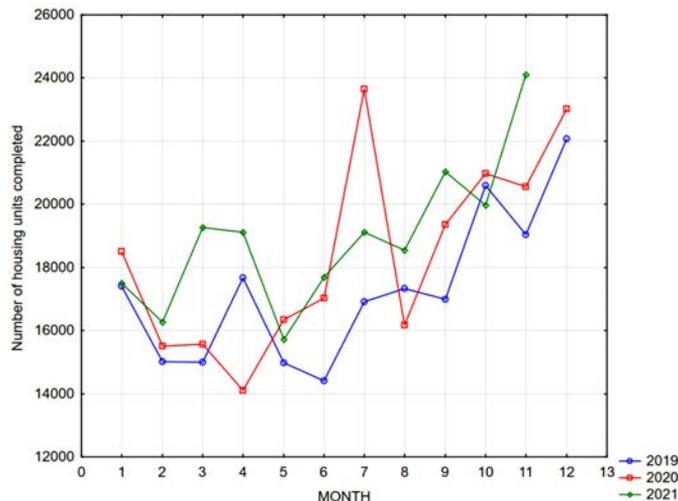


Fig. 4. Number of housing units completed (source: own elaboration based on the GUS)

It is worth noting that in the first half of 2020, there was a shortage of construction materials, especially insulation materials (Styrofoam) [12–20]. This prevented the commissioning of many facilities. A particularly drastic situation occurred in April 2020, when 14,000 facilities were handed over instead of the planned 18,000. The following months through July saw a significant drop in construction output. In July 2020, a record number of housing units were completed, i.e. almost 24,000 instead of the planned 18,000.

While some retailers expected sales to decline due to the pandemic, they have since learned their lessons and now expect more from the market [21]. The impact of Covid-19 on the Polish banking sector was also visible, as changes were made to bank capital regulations to strengthen the resilience of the banking sector, as noted by M. Czaplicki [22]. However, the impact of these changes on the housing market was limited. Overall, the Polish housing market did not confirm the trend of a pandemic-related decline in construction activity.

A study published by M. Bas [23] aimed to evaluate the impact of the socioeconomic situation caused by the pandemic COVID-19 on the residential real estate market in Szczecin, Poland. The study found that the pandemic had a significant impact on the residential real estate market, with short-term changes in the formation of residential real estate prices and the number of completed transactions. Another study published by K. Kocur-Bera [24] examined how the pandemic COVID-19 changed perceptions of environmental features

and physical characteristics of apartments/houses. The study found that the Covid-19 pandemic had a significant impact on the perception of environmental features, but not on the perception of physical features.

More importantly, from the point of view of the impact of the Covid-19 pandemic on the housing market, seems to be the development of the number of building permits obtained and construction actually started.

Several studies have shown that the number of building permits that developers obtain is a critical factor in the future performance of their business [25–27]. Obtaining building permits indicates full readiness to start new construction projects, and the number of construction projects actually started is an indicator of the developer’s commitment to new investments. If the number of construction projects started is persistently lower than the number of building permits issued, it means that the developer’s “land bank” is growing and that it is cautious to provide further financial resources for new investments based on its assessment of the market situation [25]. In addition, the building permit process is a critical factor for entrepreneurs in deciding where to locate their business [25]. Uncertainty about local zoning regulations often makes new buildings prohibitively risky and costly [28]. Therefore, an efficient review and approval process for land development is essential to reduce bureaucracy and reduce the time and cost of issuing building permits [29]. Consequently, the trend in the number of building permits issued and actual construction projects started is an important factor in assessing the impact of the COVID-19 pandemic on the housing market in Poland. A source from Statista [30] reports that developers received 23.5% more building permits in March 2020 than in the same month of the previous year. Another study by M. Załączna and A. Antczak-Stępiak [31] examined the intensity and spatial distribution of residential construction activity and trade in one of the largest cities in Poland. The study found that the COVID-19 pandemic had a significant impact on the construction industry, with a decrease in the number of building permits issued and actual construction work started. The number of the housing building permits in the period from January 2019 till September 2022 is illustrated in Fig. 5.

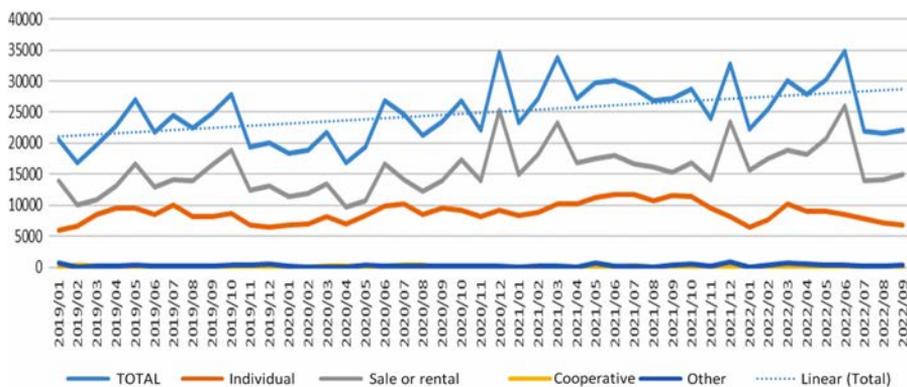


Fig. 5. Dwellings for which building permits were granted or notifications have been made with a construction project, January 2019–September 2022, own elaboration based on GUS data

The progression of the curve depicting the building permits issued with notification was mainly influenced by the activity of developers. The curve depicting the activity of private investors in this respect has a much smoother progression. It is clear that the activity of developers increases towards the end of the year, which is due, on the one hand, to the desire to ensure that new construction can be carried out in the next building season, but also to the changes in technical building regulations, which usually come into force on 1 January of the following year. The desire to obtain a building permit, in advance of the changes concerning the technical aspects of residential buildings (e.g. the building thermal standard), triggers a correspondingly earlier activity to obtain this document.

The question arises as to how these permits are further used, in other words, do they translate into the number of construction launches? The answer to this question can be found by analysing Fig. 6.

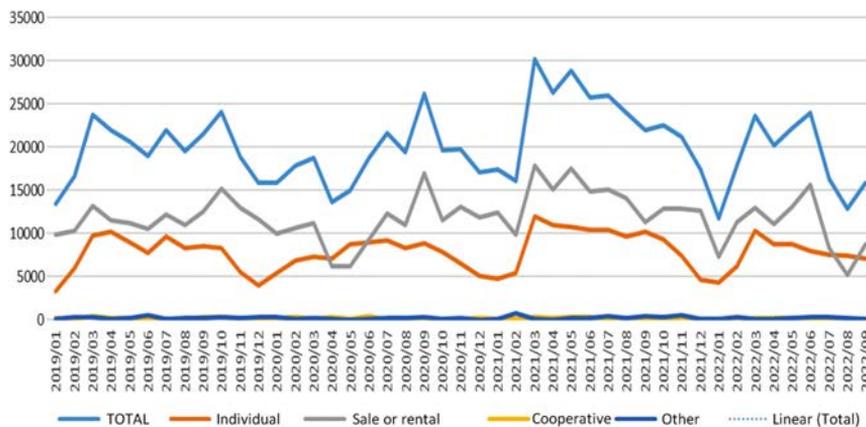


Fig. 6. Number of dwellings with construction launched between January 2019 and September 2022, own study based on GUS data

The analysis of this chart also indicates more regularities due to the seasonality of construction production rather than the effect of the constraints caused by the pandemic: a fall in the number of construction launches at the turn of the year, followed by an increase in the following spring. Some disruption is apparent just after the declaration of the epidemic threat, but the situation then normalises [32]. The seasonality of the construction industry is a well-known phenomenon that affects the volume of production [33].

3. Development of developers' activity (flats for sale and rent)

It is also clear from the Figures presented how high the impact of property development activity is on the final total curve in all three aspects studied. In 2006, developers delivered 33% of completed dwellings. Since then, their share of housing production has increased

steadily. In 2015, it exceeded the number of dwellings built by individual investors and the developers' share has been growing steadily since then. It can even be said that the growth rate of developers' activities have increased the size of the housing market in Poland. However, the rise of "patho-developers" is a controversial issue in Poland [34, 35]. These developers minimize the square footage of commercial units to maximize profits, leading to concerns about the quality of housing [35]. Nevertheless, developers in Poland are building and selling at record rates. Most decisions are made by developers and the number of houses offered by developers in the outskirts of Polish cities is increasing. The demand for new housing in Poland has also led developers to look for alternative business models. Overall, the growth of developer activity is having a significant impact on the housing market in Poland, but it is important to address concerns about the quality of housing and the practices of some developers. Ł. Drozda [34] notes that during the Covid-19 pandemic, Poles began to focus on housing and the term "patho-developer" emerged. The demand for new apartments in Poland has also led to homebuilders seeking alternative business models. Overall, the increase in developer activity has had a significant impact on the housing market in Poland, but it is important to address concerns about the quality of housing and the practices of some developers. The structural changes in this market are shown in Fig. 7.

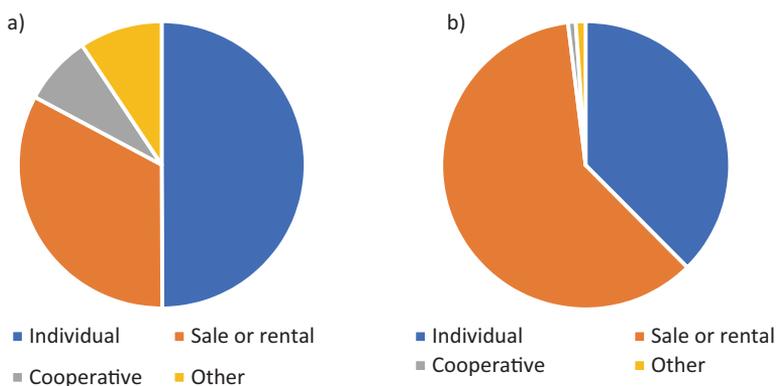


Fig. 7. Structure of dwellings completed, by investor in: a) 2006 and b) 2021, own study based on GUS data

This high position of developers, who occupied over 60% of the primary housing market, requires an assessment of their activity during the pandemic period [12]. An attempt has been made to identify the changes brought about by the pandemic by superimposing 4 years of developer activity onto a common graph, with the data for the current year (2022) ending in the month of September.

Firstly, it is worth comparing the number of dwellings completed by developers in consecutive months of the last four years, as illustrated in Fig. 8.

As Figure 8 shows, the line showing the number of dwellings completed indicates a similar pattern in all years. It can be argued that it saw the lowest surge prior to the pandemic – in 2019 – but the following years are similar, with the exception of a surge in July 2020,

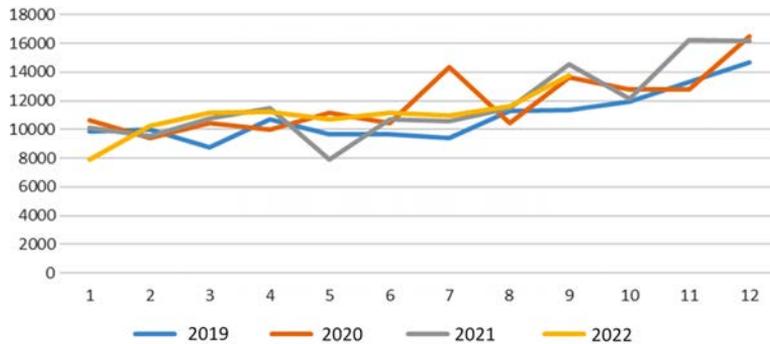


Fig. 8. Number of dwellings completed and put into use by developers by month in 2019–2022, own study based on GUS data

which also resulted in a reduced number of dwellings delivered in the following month. Similarly, the last two months of 2021 are record-breaking, but the December 2020 results are even slightly better than those of December 2021. In this rising trend, not even 2022 stands out with its results, which fits quite precisely into the curves showing the results of the two preceding years. The number of dwellings completed this year is also significantly higher compared to the year before the pandemic (with the exception of January). Taking into account rising inflation, it seems that developers want to hand over their contracted buildings as quickly as possible at agreed prices, incurring as little loss as possible.

4. Current versus future performance of developers' activity

Taking into account the length of the investment cycle, the future performance of a developer's business is determined by today's activities and, above all, by the number of building permits obtained, showing the full readiness to start new construction projects and the number of construction projects actually started. Several studies have shown that the number of building permits obtained by developers is a crucial factor in determining the future performance of their business [27]. If the latter number is permanently lower than the number of permits obtained, it means that the developers' "land bank" is expanding and that they show caution in committing further financial resources to new investments, resulting from their assessment of the market situation. Figure 9 shows the number of dwellings with building permits obtained by developers by month in 2019–2022.

If one compares the number of residential building permits received by developers, a clear slump is visible in April and May 2020, after the declaration of the epidemic emergency state, compared to 2019. However, the number then increased, exceeding the June 2020 results of June 2019, then approaching 2019 to be clearly higher in November and especially December. On the contrary, 2021 and 2022 saw a marked increase in the

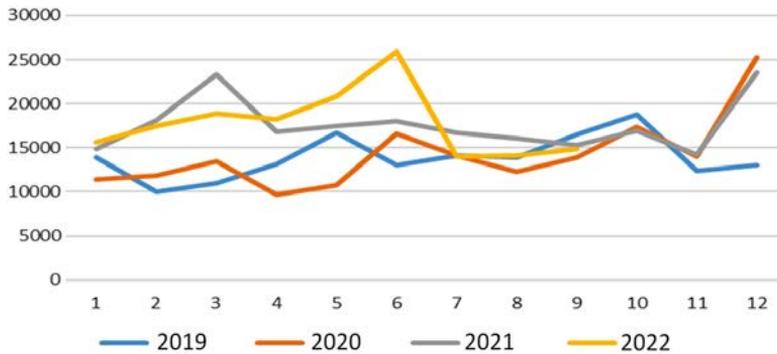


Fig. 9. Number of dwellings with building permits obtained by developers by month in 2019–2022, own study based on GUS data

number of building permits obtained by developers. For a full interpretation of developers' activities, the Fig. 10 showing the number of dwellings started by developers during the period in question should be included.

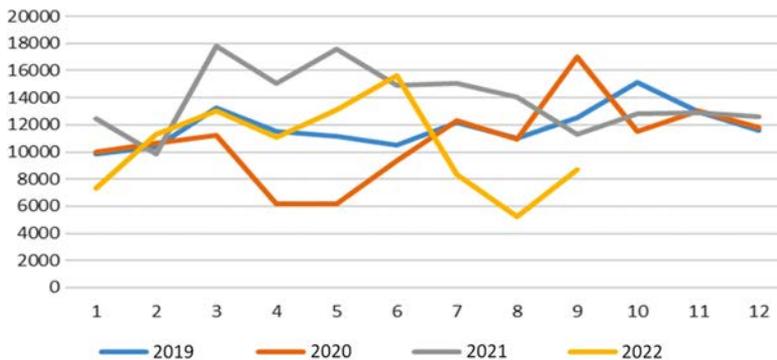


Fig. 10. Number of dwellings started by developers in each month of 2019–2022, own study based on GUS data

If we take the pre-pandemic year 2019 as a benchmark for evaluation, it is true that April and May of the following year, just after the declaration of the epidemic emergency, showed a marked drop in construction launches. However, after this period, investors gained confidence in their operations, which was undoubtedly prompted by the demand for housing. 2021 saw the highest number of housing starts ever, in the first half of the year, before the trend weakened in the third quarter and continued in the fourth quarter at less than 13,000. 2022 showed an upward trend until peaking in June, before clearly breaking down in July and August, suggesting a definitely worsening trend, followed by a rebound in September. However, it is difficult to foresee how long this rebound will last [36,37]. As of December 2022, Poland's house prices grew 9.5% YoY [38].

Summarising the considerations on the number of housing permits obtained by developers versus the number of dwellings with construction actually launched, it is worth noting the trend shown in Fig. 11.

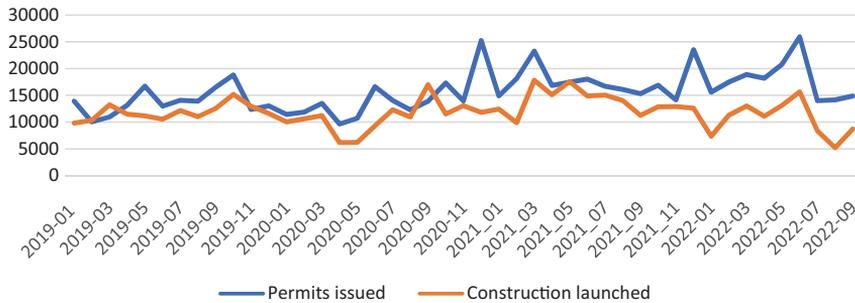


Fig. 11. Number of housing permits and number of dwellings started by developers in individual months of 2019–2022, own study based on GUS data

As Figure 11 shows, the number of building permits in the period under review was higher than the number of housing launches. There are exceptions to this clear trend. In the pre-pandemic period, the number of dwellings started exceeded twice the number of building permits obtained; this happened in March and November 2019. In the following months, this situation occurred only once – in September 2020, which should be attributed to the sentiment of developers and the market situation after the first stage of the pandemic was brought under control. In May 2021, on the other hand, the numbers levelled off, and since then there has been a widening gap between the number of housing launches and building permits obtained, which is particularly evident this year.

5. Housing market vs. credit market

A comparison of the performance of development activity in these three areas in 2019–2022 shows that it is difficult to find here a clear, long-term negative impact of the Covid-19 pandemic on the development activity. However, some sources suggest that the general economic development in Poland was not as affected by the pandemic as other European countries [39]. Additionally, a report on residential construction during the pandemic in Poland was published in 2021 [40], and there have been changes in the construction process due to COVID-19 [41]. However, there is no clear evidence to support the claim that the pandemic has not had a long-term negative impact on construction development activity in Poland.

If one considers the number of dwellings completed, which is the result of previous activities, however, one cannot see, apart from May 2021, any clear bump in this trend that could be attributed to the impact of the Covid-19 pandemic. Similarly, the numbers of building permits issued (apart from April and May 2020) showed an upward trend, with numbers clearly higher than in 2019, so the pandemic had no impact on that. On the

contrary, the chart illustrating the number of construction launches by developers shows two clear collapses. One just after the announcement of the pandemic and the other from June 2022, when the impact of the pandemic has basically been forgotten and the country functions normally. Standard classes at schools and colleges, conventions, conferences take place, restaurants, shops are open, etc. This raises a legitimate question regarding the reason that the number of housing launches by developers dropped dramatically, despite the building permits they have?

According to unanimous expert opinions, the reason for the changes in the housing market is the change in the interest rate by the NBP, affecting the creditworthiness of those buying flats from developers [42,43]. The NBP reference rate was 1.5% as of 5 March 2015, but it was reduced to 1% on 18 March 2020, then to 0.5% at the beginning of April 2020, and finally to 0.1% at the end of May 2020 [43]. This unprecedentedly low interest rate, which lasted until October 2021 when it was raised again to 0.5%, was driving demand for housing and loans for home purchases [43]. The evidence suggests that explosive dynamics in housing markets may be linked to interest rates [43,44].

The NBP adopted a novel solution by offering six- and nine-month term deposits with higher-than-market interest rates to address banking challenges [45]. The steady cycle in the Polish housing market is explained by the still unsatisfied demand for housing and continuously rising wages [46]. The dynamic growth of housing prices on the housing market, which has averaged 50% in real terms over the last 14 years, has negative consequences for the financial stability of households [42]. The lack of reliable information on the functioning of the housing market in Poland, including the presence or absence of price bubbles, is a challenge [42,44]. The calculation of the price-rent ratio using data from the NBP on the level of housing rents and prices shows that the Polish rental housing market has become a place for institutional investment for several years [42].

Non-interest-bearing bank deposits provided no security for the real value of the cash held. This situation did not change even with the increase of this rate in November 2021 to 1.25% and in December to 1.75%. On the contrary, 2022 saw a monthly change in this rate, as shown in Table 1 and Fig. 12.

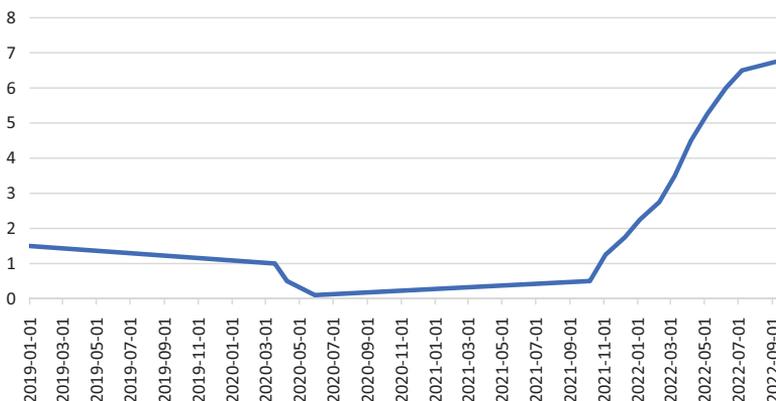


Fig. 12. The development of the NBP reference rate in 2015–2022, own study based on NBP data

Table 1. Changes in the NBP reference rate in the period 2015–2022 [47]

Effective from	Reference rate	Lombard rate	Deposit rate	Bill rediscount rate	Discount rate on bills of exchange
2015					
2015-03-05	1.50	2.50	0.50	1.75	*
2020					
2020-03-18	1.00	1.50	0.50	1.05	1.10
2020-04-09	0.50	1.00	0.00	0.55	0.60
2020-05-29	0.10	0.50	0.00	0.11	0.12
2021					
2021-10-07	0.50	1.00	0.00	0.51	0.52
2021-11-04	1.25	1.75	0.75	1.30	1.35
2021-12-09	1.75	2.25	1.25	1.80	1.85
2022					
2022-01-05	2.25	2.75	1.75	2.30	2.35
2022-02-09	2.75	3.25	2.25	2.80	2.85
2022-03-09	3.50	4.00	3.00	3.55	3.60
2022-04-07	4.50	5.00	4.00	4.55	4.60
2022-05-06	5.25	5.75	4.75	5.30	5.35
2022-06-09	6.00	6.50	5.50	6.05	6.10
2022-07-08	6.50	7.00	6.00	6.55	6.60
2022-09-08	6.75	7.25	6.25	6.80	6.85

The low interest rate, until December 2021 of no more than 1.5%, faced simultaneous inflation which became increasingly high from the second quarter of 2019 onwards [48]. According to L. Christiansen, C. Ebeke, K. Krogulski, and R. Sierhej [49], inflation in Poland has declined since mid-2012 despite monetary easing. O. Arratibel, and H. Michaelis [50] suggest that prices in Poland were more responsive to an interest rate shock during the first half of the sample, when Poland experienced high inflation. L.T. Orłowski [51] examines the sensitivity of short-term interest rates to inflation and exchange rate in Poland over the past two decades. The mechanism behind it was explained in the work by J. Sobieraj and D. Metelski [52]. R. Benecki, and A. Antoniuk [53] note that interest rates in Poland were left unchanged amid slightly lower inflation projections in March 2023. P. Skolimowski [54] suggests that Poland's central bank should raise interest rates to counter inflation doubts.

It is worth noting that the sustained low interest rates for many years led to the search for a rational investment for capital, with housing proving to be most profitable, alongside precious metals and currencies [55]. This is due to both the real value of the property, its residual value, but also its income value, as flats could be rented on the market earning a

return of around 4% per year [56]. With interest-free cash deposits at banks, the outflow of cash from people's bank accounts began. The situation became even more drastic in 2022. If one compares the lines in Figures 12 and 13, it is clear that, despite the increase in the reference rate, it is at least 10 percentage points below the inflation rate.

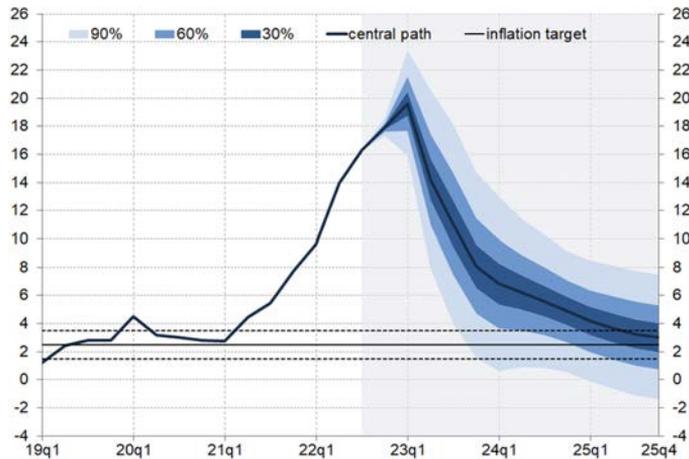


Fig. 13. Inflation rate from 2019 Q1 to 2022 Q4 including the forecast [57]

The rise in inflation and interest rates must have taken its toll on interest in residential mortgage loans. The data published by the BIK (Private Credit Bureau) shows a more or less constant growth in the demand for credit in 2019, a collapse of this demand in April and May 2020, a gradual recovery until it peaked in March 2021 (Fig. 14). On the other hand, from around mid-2021 onwards, we can observe a steady decline in the growth of lending, which fell by 70.6% in volume and 71.3% in value between September 2021 and September 2022. we have seen a steady decline in the growth rate of lending, which decreased between

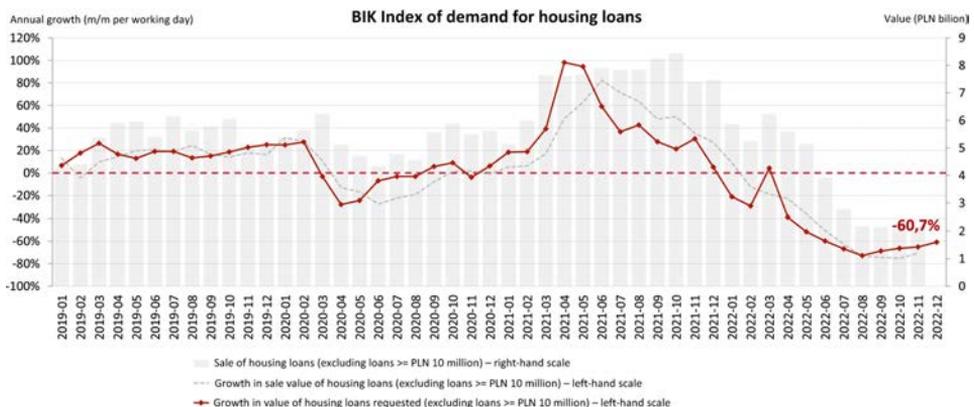


Fig. 14. Housing loan demand index [58]

September 2021 and September 2022: 1) in quantitative terms by 70.6%; 2) in terms of value by 71.3%.

These figures even testify the collapse of the housing loan market in Poland in 2022 Q2, Q3 and Q4.

6. Conclusions

The article examined the Polish housing market from January 2019 to September 2022, focusing on the impact of economic conditions on the primary housing market. The research problem was to identify the factors that contributed to the changes in the housing market during this period. The study objective was to analyze developer activity, building permits issued, investments started, and home loans made during this period.

The research methodology involved a quantitative analysis of data collected from various sources, including the Central Statistical Office and the NBP. The results of the study show that the economic situation, especially the changes in interest rates and the increase in inflation, had the greatest impact on the housing market. Lower demand for housing loans led to a decrease in demand for housing, which resulted in a significant decrease in new housing construction (i.e. new launches).

The study also found that developers' caution in taking on new construction was warranted, as the majority of homebuyers took out home loans. However, the search for a lucrative investment in the housing market by those with cash is probably not over. Developers' hopes of surviving the downturn are being raised by the emergence of new major players – leading European and global investment funds that are buying entire buildings or even estates of 400–600 apartments at a time.

The study concludes that the best performance in housing production in the 2021 transition period will not be surpassed in subsequent years. This means that the housing market in Poland is likely to stagnate in the short term, with developers and investors adopting a cautious stance. However, the emergence of new major players on the market suggests that there is still growth potential in the long term.

In summary, the study provides valuable insights into the housing market in Poland and highlights the importance of economic conditions in shaping the market. The findings of the study can be useful to developers, investors, policymakers, and other stakeholders in the housing market. The research provides a basis for further studies on the housing market in Poland and other emerging economies facing similar challenges.

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Rynek mieszkaniowy w Polsce w okresie pandemii Covid-19

Słowa kluczowe: rynek mieszkaniowy, Covid-19 a mieszkania, stopa procentowa a mieszkania, mieszkania inwestycyjne, mieszkania na wynajem

Streszczenie:

W artykule przeanalizowano wpływ czynników ekonomicznych, takich jak zmiany stóp procentowych i inflacji, na pierwotny rynek mieszkaniowy w Polsce od stycznia 2019 r. do września 2022 r., ze szczególnym uwzględnieniem pandemii Covid-19. Problemem badawczym jest zrozumienie, jak te czynniki ekonomiczne wpłynęły na rynek mieszkaniowy, a celem badawczym jest analiza aktywności deweloperów, wydanych pozwoleń na budowę, rozpoczętych inwestycji oraz udzielonych kredytów mieszkaniowych. Metodologia badania obejmuje analizę danych z różnych źródeł, w tym oficjalnych statystyk oraz raportów od deweloperów i funduszy inwestycyjnych. Wyniki badań sugerują, że zmniejszony popyt na kredyty mieszkaniowe doprowadził do znacznego ograniczenia liczby nowych inwestycji mieszkaniowych, ale pojawienie się nowych dużych graczy, takich jak wiodące europejskie i globalne fundusze inwestycyjne, może stanowić szansę dla deweloperów. Z badania wynika, że ostrożność w rozpoczynaniu nowych budów jest uzasadniona, a najlepsze wyniki produkcji mieszkaniowej w okresie przejściowym 2021 r. prawdopodobnie nie zostaną pobite w bieżącym lub kolejnych latach. Implikacje tego badania są takie, że deweloperzy muszą być świadomi czynników ekonomicznych i trendów rynkowych przy podejmowaniu decyzji o nowym budownictwie, a fundusze inwestycyjne mogą odgrywać coraz większą rolę na rynku mieszkaniowym.

Received: 2023-03-03, Revised: 2023-06-20