

Analysis of Demand Observed in the Polish Housing Market 2019-2021

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Abstract: Consumer demand has a key impact on the development prospects of the national economy, and the construction sector accounts for a significant share in the structure of Polish GDP. The period of crisis is a special environment conditioning social behaviour and, at the same time, the first stage of the new business cycle. Understanding the social reactions prevailing in this phase influences the forecasting of further parts of the cycle. The aim of the study was to analyse the impact of the economic environment conditioned by the COVID-19 epidemic on the behaviour of residential real estate buyers. In order to achieve the goal, empirical non-reactive and survey research were carried out. The obtained results show why flats in Poland are perceived as a safe form of investment and provide a helpful tool for forecasting the future of the Polish housing market.

Keywords: construction industry, housing market, demand, crisis, COVID-19.

1. Introduction

The global COVID-19 pandemic has significantly impacted the global economy, leading to permanent changes in the operations of various industries. The construction sector, in particular, has experienced substantial transformations. Across the EU, the construction sector typically contributes around 6% to the structure of the Gross Domestic Product (GDP), however, in Poland this is nearly 1.50 percentage points more, placing Poland among the top European leaders in terms of the construction sector's influence on the national economy, just behind Finland (Budimex, 2021). This highlights the significant impact and importance of the construction sector in Poland's economic landscape.

The development prospects of a country's economy are greatly influenced by consumer demand. The years 2019-2021, which received particular attention, represent a narrow but highly interesting period from an economic and financial perspective. The COVID-19 pandemic has created a high level of uncertainty, leading to a significant increase in interest among investors and consumers in tangible assets offered in the housing market. The specific circumstances of this period resulted

in 2021 being a remarkable year for the residential construction sector in several aspects (Central Statistical Office, 2022b).

1.1. Research Aim and Reasons for Undertaking the Topic

The housing industry provides first-necessity products directly related to everyday human life. The quality, size, and technological advancements of the housing stock can provide a reliable indicator of a country's standard of living. Due to increasing requirements and demand, housing construction is a continuously debated and discussed topic, generating strong emotions within Polish society. As a result of the above, initiatives such as the programme (gov.pl, n.d.) can be observed assuming the granting of loans to a specific group of recipients without an initial contribution, the guarantor of which was established by Bank Gospodarstwa Krajowego. Therefore, the analysed topic revolves around pressing social matters.

The research aims to investigate the impact of the economic situation, specifically the COVID-19 epidemic, on the buying behaviour of individuals in the residential real estate market. There has been a significant increase in demand for both new and existing homes in Poland from 2019 to 2021. Understanding consumer demand is crucial for economic development and of interest to businesses and government institutions. By achieving the research objective, one can gain a better understanding of how stakeholders in the Polish housing market react to crisis conditions. It should also be noted that the housing market is a specific area inside the professional construction market due to the uniqueness of the product it offers, as the construction sector mainly provides uniform products, while in the housing market the end users are individual consumers. This state of affairs has an additional positive impact on the perception of this part of the construction sector as an interesting subject of scientific research.

1.2. Research Methods

To achieve the set objective of this study, non-reactive and survey empirical research methods were employed, specifically focusing on non-institutional buyers involved in the primary housing market. In Poland the residential market is primarily influenced by developers, with the impact of government or local government investments being minimal. Non-reactive research entailed an extensive review of literature, market information, reports, and theoretical studies. The author also conducted a diagnostic survey among sixty individuals who had purchased at least one residential property between 2019 and 2021. The data were collected during the author's professional work, including during the transfer of premises to buyers or meetings related to the maintenance of their real estate. As part of the work, deduction and tools of technical analysis of financial markets were also used.

2. Systematising the Situation Inside the Polish Housing Market 2019-2021

To attain the research objective, it was essential to assess the overall state of the housing market during the specified period. Only in 2020, construction works consisting of the erection of buildings accounted for 48.50%, and residential buildings individually generated 18.60% in the structure of revenues resulting from construction and assembly production (Central Statistical Office, 2021b).

The data suggests a consistent upward trend in housing construction in Poland throughout the analysed period (see Figure 1).

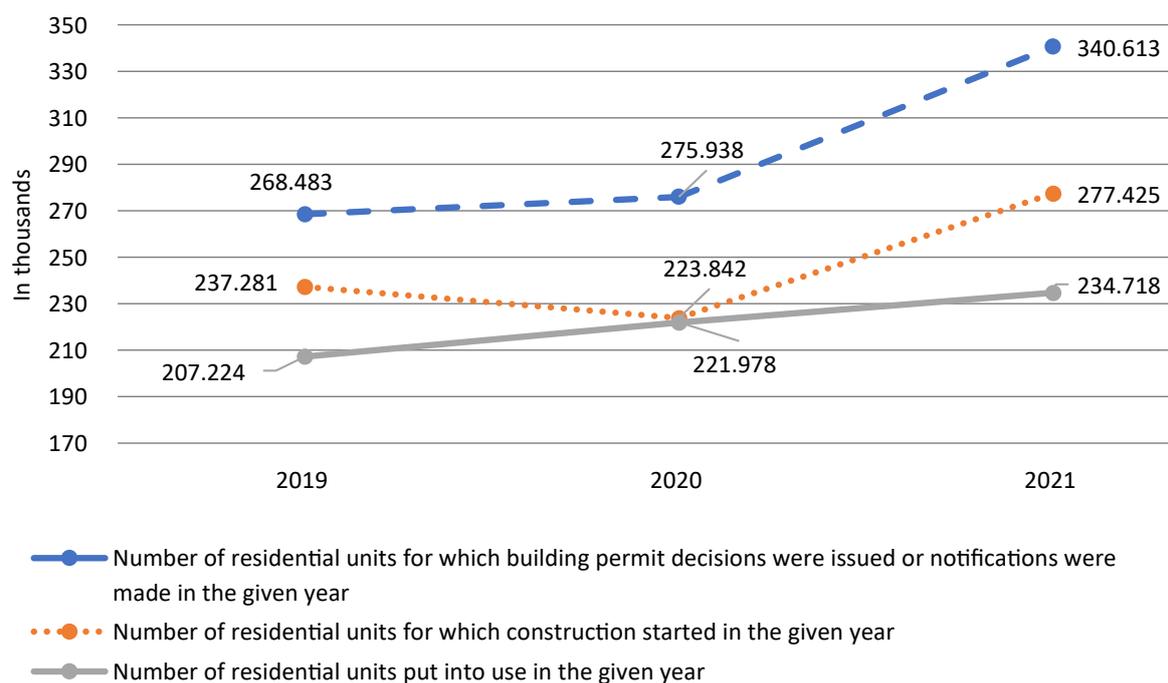


Fig. 1. Selected values describing housing construction in 2019-2021

Source: own elaboration based on Central Statistical Office data.

Table 1 shows the number of residential units sold by major Polish developers listed on the Warsaw Stock Exchange. There is a visible regularity consisting in a slight decrease in the number of transactions concluded in 2020 compared to 2019, and then a significant year-on-year increase compared to 2020 and 2021. Note that during the analysed timeframe, there was a continuous rise in the number of building permits granted and notifications of construction works initiated by developers. The reasons behind this phenomenon can be attributed to the reorganization of developers' sales offices. For several months, these offices operated remotely, which impacted on the efficiency of customer service and prolonged the decision-making process for potential buyers.

Table 1. Sales by selected developers – number of flats in 2019-2021

		2019	2020	2021
Developer	Archicom	1462	1219	1275
	Atal	3196	2896	4258
	Develia	1510	1361	1921
	Dom Development	3661	3756	4066
	Echo Investment	1357	1570	1680

Source: own study based on periodic reports published by the above-mentioned companies.

Despite the increasing supply of residential real estate, prices per square metre on the primary market rose consistently during the periods under review. This indicates a significant demand and pressure on the supply of residential properties. Within the 6 cities average, apart from Warsaw, Cracow and Wroclaw, three other voivodeship cities were included: Lodz, Olsztyn and Lublin (Figure 2).

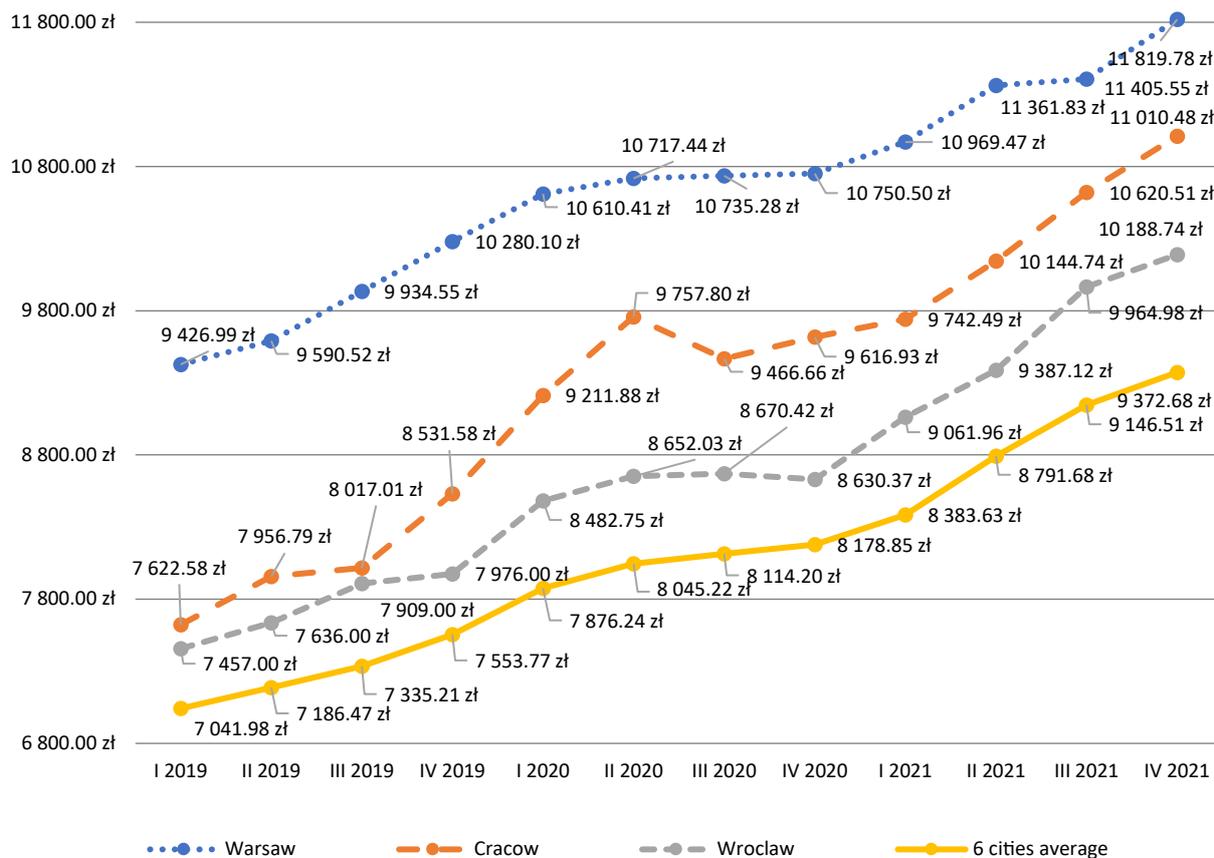


Fig. 2. Trends in offer prices for 1 m² of usable floor space (selected cities)

Source: own study based on NBP data.

It is also worth emphasising the good condition of the Polish housing market compared to other European countries. In Poland, 5.79 flats were completed per thousand inhabitants, which was the highest value recorded in 2020 among European countries (Deloitte, 2021).

3. Reactions to the Crisis and the Further Course of the Business Cycle

The crisis marks the initial phase of the downward economic cycle while also signaling the start of a new one. During this crisis period, uncertainty and risk increase, leading to complex consumer behaviour. The impact of the crisis is indirect, affecting different economic systems in varying ways and at different times. By considering indicators like GDP, unemployment and inflation rates, as well as data on imports, exports, and production, it is possible to ascertain that the analysed period represents the early stage of the crisis. Efforts are being made to sustain the current level of consumption observed during the peak and upper turning point of the business cycle. The initial phase of the economic cycle is characterised by several factors, including low interest rates, improved consumer creditworthiness, and a rise in the prices of financial and tangible assets (Jabłońska, 2017). Analysing the social reactions during this period is essential for the accurate forecasting of the upcoming stages of the economic cycle. Importantly, the global collapse triggered by the COVID-19 pandemic has affected all participants in the economy. This global dimension of the crisis is particularly perilous as it leads to a unified perception among entities regarding the severity of the crisis, its potential consequences, and the necessary measures to be taken (Śleszyńska-Świdorska, 2017).

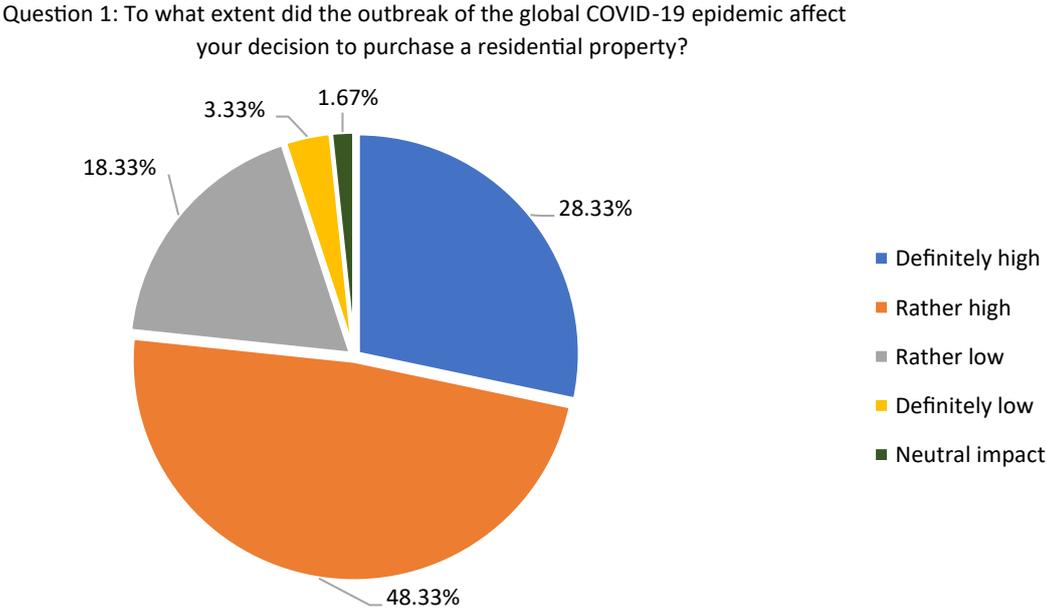


Fig. 3. Answers to question 1

Source: own study.

Only 5% of the respondents indicated that the outbreak of the crisis related to the COVID-19 epidemic had a very low impact on their decision to purchase a residential property, or had no impact at all (Figure 3). This result clearly indicates that purchasing a flat was a response to the changing macroeconomic situation. Additionally, nearly 84% of the respondents acknowledged a substantial increase in consumer demand for real estate market assets during the period when they decided to purchase a property (Figure 4).

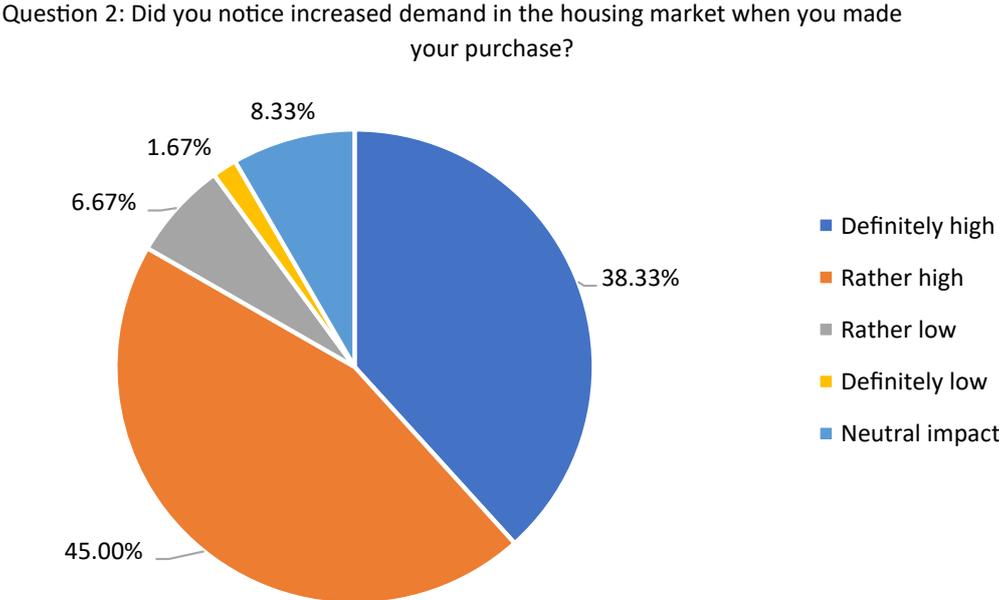


Fig. 4. Answers to question 2

Source: own study.

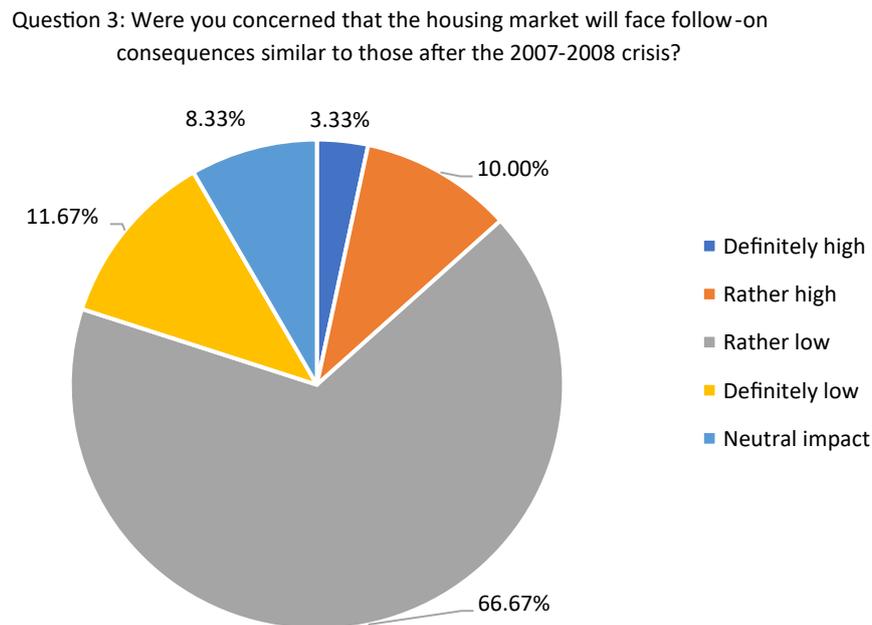


Fig. 5. Answers to question 3

Source: own study.

The respondents did not express significant concerns regarding the potential impact of the global epidemic on the housing market, particularly in relation to the consequences experienced after the 2007-2008 crisis (Figure 5). This finding aligns with the content of the CBOS communication (CBOS, 2020) released in December 2020. In a previous study conducted by CBOS at that time, only 10% of the respondents expressed fears of an economic collapse. Unlike the financial crisis, the paralysis caused by the global pandemic was not directly linked to the real estate sector. The construction industry itself remained operational while many other sectors of the economy faced closures due to lockdown measures. The fact that nearly 80% of the respondents expressed no concerns about the potential collapse of the real estate market signals that Polish society considers flats as a secure and attractive investment even during times of global crisis. This perception undoubtedly contributed to the increased demand observed in both the primary and secondary housing markets.

4. Analysis of Determinants of Demand on the Housing Market 2019-2021

Demand can be influenced by various factors, which can be categorised into objective and subjective determinants. Objective determinants include economic and non-economic factors, while subjective determinants have a psychological basis. Among the pro-demand objective factors are (Kizel, 2000):

- 1) consumer's income level and income sources,
- 2) consumer's access to foreign capital financing,
- 3) savings held by the consumer,
- 4) availability and supply of the desired goods by the consumer,
- 5) price levels of the desired goods by the consumer,
- 6) information dissemination and public awareness in the country,
- 7) general economic situation in the consumer's country,
- 8) demographic, professional, and social conditions of the consumer.

Among the subjective factors, the following should be noted:

- 1) emotions, moods and customs prevailing in the given society,
- 2) private beliefs and habits of the consumer.

During the period 2019-2021, there was a positive correlation between market demand and prices. This means that as prices increased, there was a corresponding increase or stabilisation at a high level in the number of transactions concluded. Selected determinants of non-price demand are analysed below.

4.1. Monetary Policy Conducted by the National Bank of Poland

The first determinant to be examined was the perception of the NBP monetary policy, which is undoubtedly expansive, by the public. At the end of May 2020, the Monetary Policy Council decided to lower the reference rate from 1.50% to 0.10%. The fall in the profitability of money market bills naturally influenced the lending strategy of commercial banks. The cycle of interest rate increases introduced by the National Bank of Poland (NBP) did not start until October 2021. Thus, the NBP reference rate in the analysed period, ranging from 10 to 175 base points, was relatively low compared to the values in force until 2015 (nbp.pl, n.d.). Some respondents (approximately 32%) declared that as a result of the monetary policy pursued by NBP in 2019-2021, their creditworthiness increased to the desired level (Figure 6). Nearly 27% of the respondents indicated that the low value of the reference rate, and thus the low cost of borrowed capital, helped them overcome their reluctance to incur debt. Such reservations may be grounded in insufficient knowledge of how the financial sector works. Participants of the study also indicated that they felt anxiety related to the fact that the housing market had become a speculative space and that their savings would lose value (approximately 17%). While specifying their answers, a large number of the survey participants indicated that the NBP’s actions had a significant yet negative impact on their decisions, and yet housing prices have risen as a result of the NBP’s policies, and the strong pressure against supply may have taken a toll on the quality of workmanship and developers’ adherence to contractual deadlines.

Question 4: To what degree was your decision to purchase an apartment influenced by the NBP's monetary policy using market instruments?

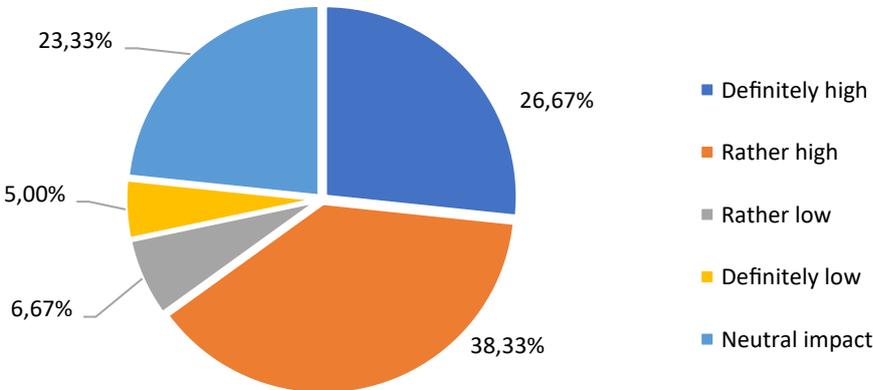


Fig. 6. Answers to question 4
Source: own study.

Question 5: Did you expect inflation to increase significantly despite the NBP's monetary policy with the use of communication instruments?

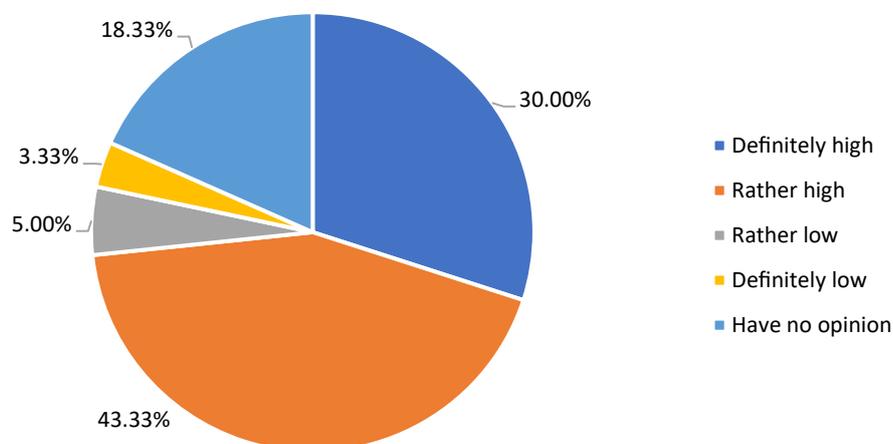


Fig. 7. Answers to question 5

Source: own study.

Expansionary monetary policy is associated with an increase in the money supply in the economy. In order to shape inflation expectations, the NBP authorities used communication tools. The answers to the question indicate that the fears related to the increase in inflation were significant, despite the assurances of the NBP authorities. Some of the respondents (approximately 12%) even decided to buy a flat to counteract the loss of equity due to the expected increase in inflation (Figure 6).

4.2. Social Perception of Apartments as an Attractive Form of Investment

Expectations of changes in consumer prices presented by the NBP authorities did not find reflection in reality. Inflation exceeded 3.50% at the beginning of the second quarter of 2021, and has been steadily growing ever since (stat.gov.pl, n.d.). The expectation of such a turn of events has directed public attention toward methods of protecting one's capital from loss of value.

The primary reason for investing in residential real estate, according to approximately 42% of participants, is the feeling of security they gain from perceiving the investment as having a comparatively lower level of risk. In the study, the author omitted the answer option related to bank deposits due to their negligible profitability. The main factor that influenced approximately 12% of the participants in favour of investing in residential real estate was the ease and simplicity associated with it, as it does not require specialised expertise or preparation. This suggests that they critically assessed their knowledge of finance (Figure 8). Furthermore, the data supports that nearly 37% of the respondents solely focused on residential real estate as their investment choice, without considering other options. In contrast, approximately 15% regarded financial instruments like securities or foreign currencies as potential alternatives (Figure 9).

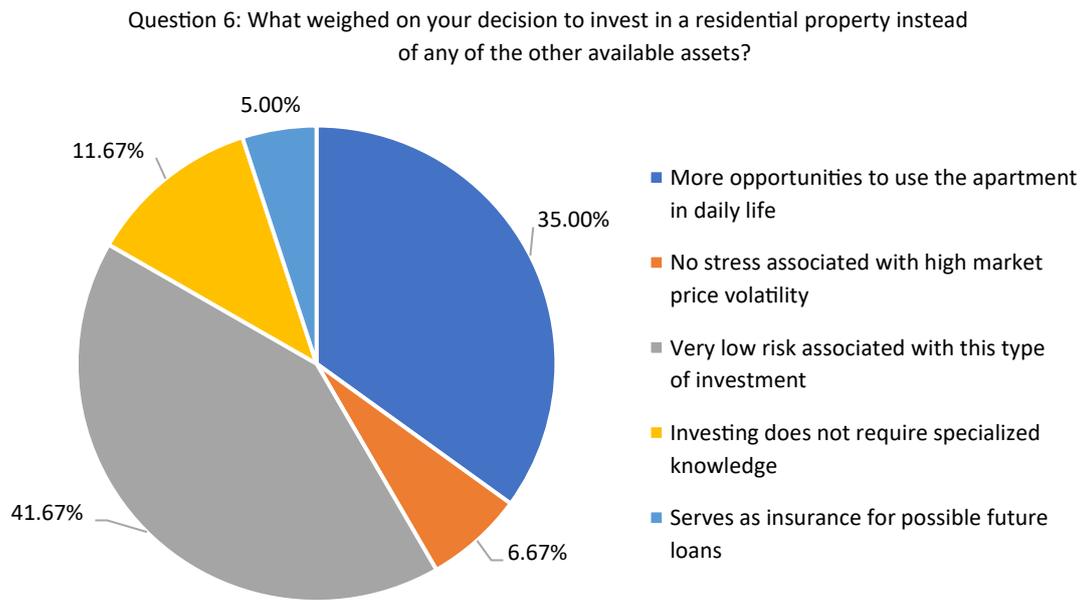


Fig. 8. Answers to question 6

Source: own study.

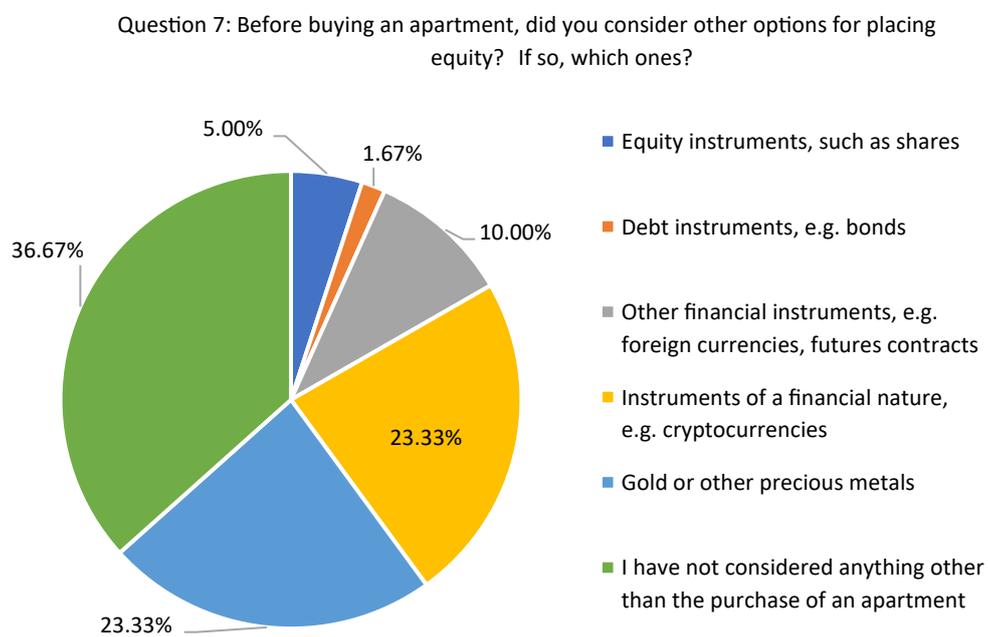


Fig. 9. Answers to question 7

Source: own study.

4.3. Speculative Effect

The demand for residential real estate in Poland is characterised by its inflexibility, primarily due to the unfavourable correlation between the income levels of Polish society and the costs associated with construction (Graczyk and Łoboda, 2011), as well as the unique challenges involved in the construction

process. Based on the observed fluctuations in the asking prices for 1 square metre of residential space during the analysed period, it can be inferred that the rise in market liquidity was accompanied by a speculative effect.

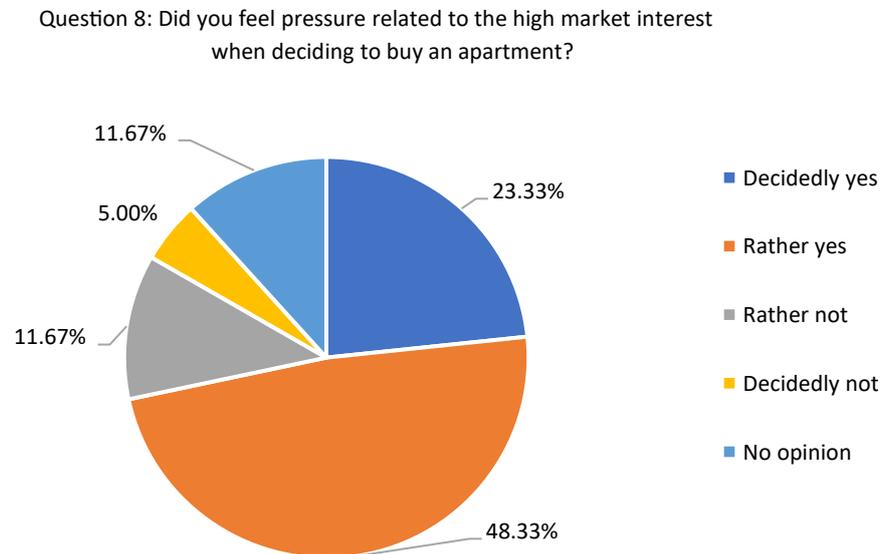


Fig. 10. Answers to question 8

Source: own study.

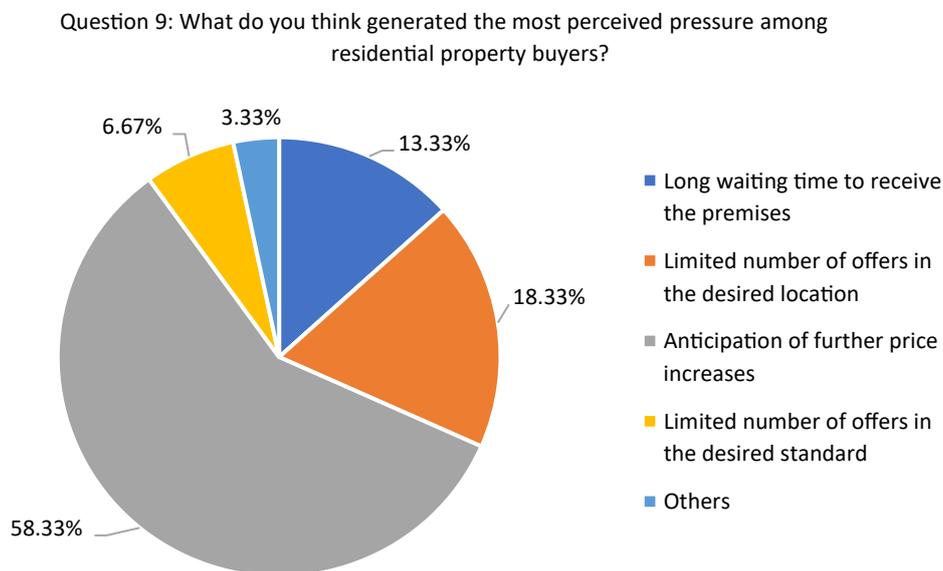


Fig. 11. Answers to question 9

Source: own study.

Over 70% of the respondents felt the pressure related to the increased demand on the housing market (Figure 10), while nearly 60% expected a further increase in prices (Figure 11). Another confirmation of the speculative effect among consumers may be the answers of the respondents to question 10 (Figure 12), which are consistent with the behaviour of the index dedicated to developers, i.e. WIG_NRCHOM. Indeed, clear, continuous rises in value were observed in the last quarters of 2019

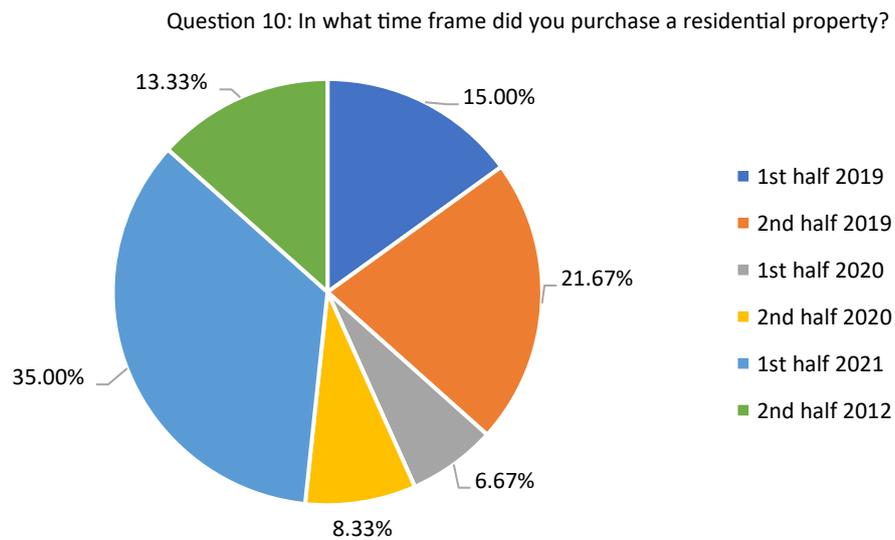


Fig. 12. Answers to question 10

Source: own study.

and 2021, when quotations reached technically designated resistance ranges (Murphy, 2017) at the levels of 2600 points and 3200 points, respectively (stockwatch.pl, n.d.).

4.4. Lockdown Effect

In order to prevent the spread of the Sars-CoV-19 virus during the analysed period of time, restrictions on movement and the functioning of the economy were introduced. The answers given by the respondents to question 11 (Figure 13) clearly indicate that these decisions of the highest state authorities had a significant impact on the increase in demand on the primary housing market.

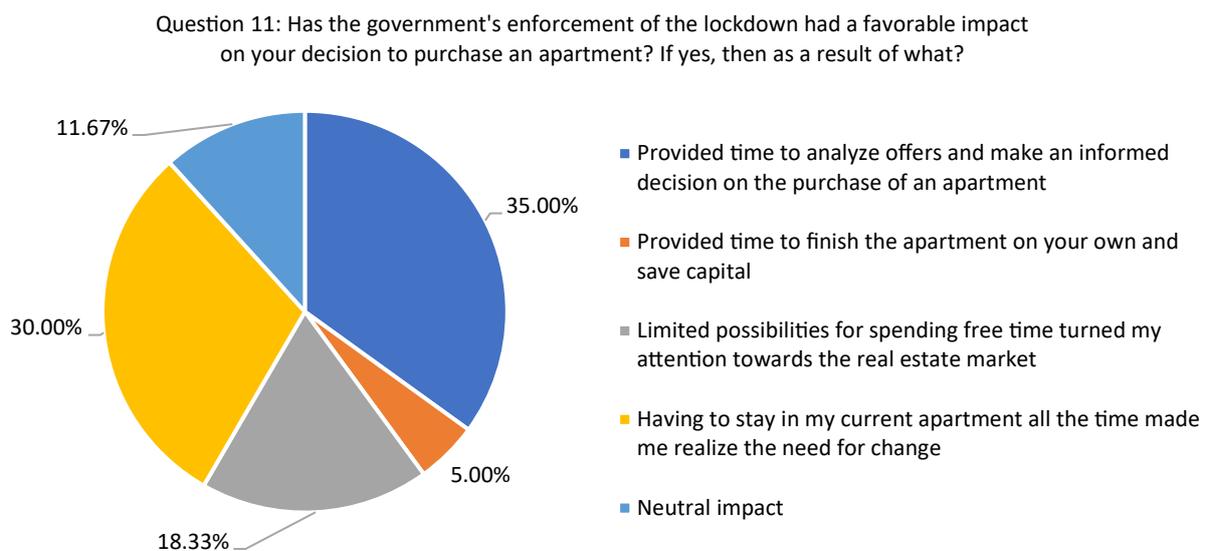


Fig. 13. Answers to question 11

Source: own study.

4.5. Deficit of Housing in Poland

The last of the pro-demand factors that should be looked at is the existence and social awareness of the so-called housing gap. In general terms, the gap can be defined as the negative difference between the housing stock and the projected demand. Nevertheless, the precise formulation of the housing gap should take into account both quantitative and qualitative features (Kamiński, 2019).

Question 12: How did the awareness of the existence of the so-called "housing gap" influence your decision to buy an apartment during the period of increased demand?

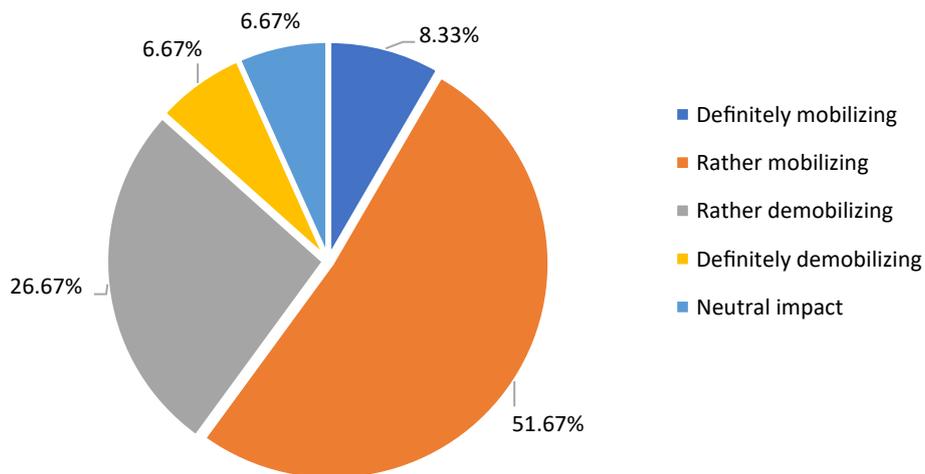


Fig. 14. Answers to question 12

Source: own study.

Question 13: In your opinion, has the phenomenon of the so-called "housing gap" worsened due to a significant increase in demand for residential real estate in 2019-2021?

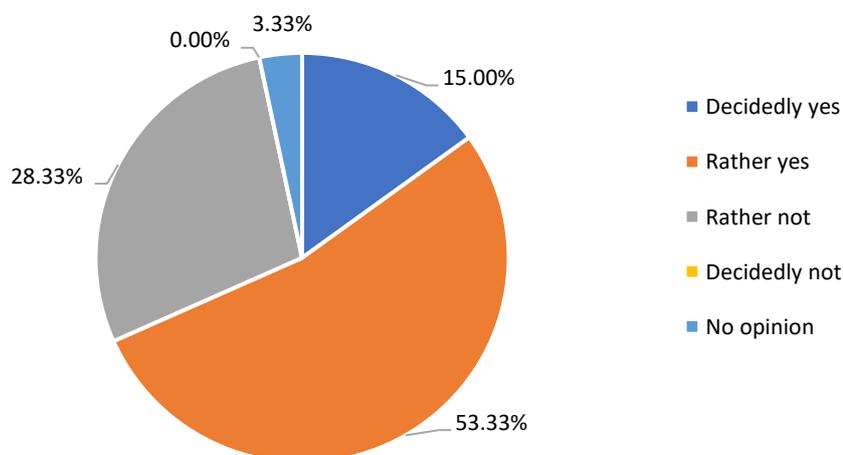


Fig. 15. Answers to question 13

Source: own study.

It is estimated (PwC, 2022) that the deficit of flats in Poland is about 2 million, while assuming that 37% of the entire population of Poland live in overcrowded flats. The latter looks unfavorable compared to the average for the EU member states, according to which the above problem affects 18% of their total population. In Poland there is slightly more than one room per person, while on average in the EU, it is more than one and a half rooms per inhabitant, i.e. about 50% more. The awareness of the housing gap had a mobilising effect on most of the respondents (Figure 14). At the same time, close to 70% believed that the housing shortfall in Poland worsened due to the actions of individuals involved in the housing market between 2019 and 2021 (Figure 15).

5. Conclusions

The period from 2019 to 2021 was undoubtedly intense for the stakeholders of the Polish housing sector. The residential market in Poland maintained its upward trend, initiated in 2012, despite a large degree of uncertainty resulting from the need to counteract the effects of the global epidemic. An important distinction between the COVID-19 induced crisis and the 2007-2008 economic crisis in Poland is the notable absence of a decline in housing prices. It can be assumed that the predominance of building permits obtained by developers in relation to the actually started construction will prove to be a powerful argument in the hands of developers in the process of further price development. The speed of sales has lost its priority. Due to the prevailing perception of residential real estate as a secure form of investment and the public's increasing awareness of the existing "housing gap," it is reasonable to anticipate that the upward trajectory of Poland's housing market will persist and remain stable.

Another emerging conclusion from the study seems to be the need to popularise financial knowledge among the public. In Poland, there is an aversion to financing one's needs with foreign capital, as well as to financial instruments, which has its genesis in the misunderstanding of the financial sector by the majority of society. The consequences of this are very serious, because the financial market, along with the labour market and the market for goods and services, is crucial to the development of the Polish economy.

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Analiza popytu zaobserwowanego na polskim rynku mieszkaniowym w latach 2019-2021

Streszczenie: Popyt konsumpcyjny ma kluczowy wpływ na perspektywy rozwoju gospodarki krajowej, a sektor budowlany stanowi znaczny udział w strukturze polskiego PKB. Okres kryzysu jest szczególnym środowiskiem warunkującym zachowania społeczne i zarazem pierwszym etapem nowego cyklu koniunkturalnego. Identyfikacja reakcji społecznych panujących w tej fazie rzutuje na prognozowanie dalszych części cyklu. Celem badań było przeanalizowanie wpływu środowiska gospodarczego uwarunkowanego epidemią COVID-19 na zachowania nabywców nieruchomości mieszkaniowych. Aby osiągnąć cel, wykonano badania empiryczne niereaktywne i sondażowe. Uzyskane rezultaty wskazują, dlaczego w Polsce mieszkania postrzegane są jako bezpieczną formę inwestycji, oraz stanowią pomocne narzędzie do prognozowania przyszłości polskiego rynku mieszkaniowego.

Słowa kluczowe: budownictwo, rynek mieszkaniowy, popyt, kryzys, COVID-19.
