

RESILIENCE OF DEVELOPERS ON THE HOUSING REAL ESTATE MARKET TO ECONOMIC SHOCKS

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Purpose: The aim of the article is to continue research on the resilience of participants in the housing market to economic shocks and disruptions – in this case, the supply side of the market, i.e., the developer. The goal is also to answer research questions such as: does the developer, as a professional market entity, demonstrate resilience in this regard? Previous research results have shown that the demand side of the market is not resilient to such negative phenomena.

Design/methodology/approach: The study is based on the existing literature on resilience concepts and the compilation of statistical data on developers and market conditions during the period of 2018-2023. By analyzing the sales revenues of 32 publicly traded developers during the studied period, their resilience to economic shocks and disruptions was assessed.

Findings: The research found that most developers (about 70%) showed resilience to the effects of the pandemic, the outbreak of the war in Ukraine, and rising inflation. It can be inferred that this resilience is related to the long-term investment process and the specifics of the housing market.

Research limitations/implications: The study's results provide a valuable source of information about resilience of developers in real estate market and partially complements existing research in this area.

Originality/value: The conducted research provides new insights into the resilience of enterprises to economic shocks – in this case, developers in the housing market. The article is primarily aimed at individuals interested in real estate market research as well as those interested in the concept of enterprise resilience.

Keywords: financial resilience, real estate market, developers, COVID-19, inflation.

Category of the paper: Research paper, Viewpoint.

1. Introduction

The situation of participants in the housing market in Poland in recent years appears particularly interesting due to the occurrence of economic shocks and disruptions – the development of the COVID-19 pandemic at the beginning of 2020, the outbreak of the war in Ukraine in February 2022, and rising inflation. These are rare events that can have exceptionally negative economic consequences. The housing market is divided into the demand

side – investors, households – and the supply side – professional entities operating in this market, such as developers, real estate agents, managers, etc. (Kucharska-Stasiak, 2016). In their decision-making processes, these entities must consider, among other things, macroeconomic risks, i.e., the likelihood of events involving economic changes that significantly impact their operations (Martyniak, 2017). For several years, the residential real estate sector and its participants on both sides have been experiencing the effects of these economic shocks and disruptions.

All these events in recent years have brought both positive and negative economic impacts. The impact of the COVID-19 pandemic on the real estate market has become the subject of numerous considerations among researchers interested in this topic (Cesarski, 2022; Koszel, 2022; Samorek, Cichocki, 2023). The outbreak of the war in Ukraine and inflation have also become subjects of research in the context of the housing market (Kępka, Pająk, 2022; Sadura, Sierakowski, 2022). In the author's assessment, it cannot be conclusively stated whether the impact was positive or negative. However, it was definitively observed that it did not lead to a decrease in transaction prices, which have shown a consistent upward trend for almost 20 years (NBP, 2024). Meanwhile, the outbreak of the war in Ukraine and the influx of refugees to Poland caused an increase in rental prices and a short-term decrease in the number of available housing units on the supply side of the market (Bankier.pl, 2023). Moreover, rising inflation has exacerbated existing problems for average households in purchasing their own homes using mortgages, thereby also impacting the supply side of the market.

This article continues the discussion on the resilience of participants in the housing market to economic shocks and disruptions. In the first part of the research, the focus was on households, i.e., the demand side of the housing market. Adopting two dominant definitions of this concept in the literature (Martyniak, 2023):

- Resilience as the ability to cope with disturbances without losing functionality, in other words, the ability to withstand market or environmental shocks without losing the capacity for effective functioning (Perrings, 2006).
- Resilience as the ability of a firm or individual to return to the pre-shock/disruption state (Majchrzak, 2020).

It was shown that these market participants lack resilience to economic shocks and disruptions. According to the author, the research topic has not been exhausted and requires further exploration. Therefore, it is crucial to determine whether the supply side of the market – mainly developers – demonstrates resilience to economic shocks and disruptions. Does experience and acquired knowledge increase their resilience? How can one measure developers' resilience to economic shocks and disruptions? Did the pandemic, the outbreak of the war in Ukraine, and inflation positively or negatively affect their activities? Since the occurrence of these phenomena cannot be predicted, how can their negative impacts be counteracted? These research questions aim to achieve the research goal of demonstrating whether developers, as professional market entities, are resilient to the negative effects of

economic shocks and disruptions. A research hypothesis was also formulated: most developers are characterized by resilience to economic shocks and disruptions.

2. Developer as a professional participant of the housing market - creator of supply

The specifics of the real estate market depend on many components. Real estate itself, as a commodity, is unique – its permanence with the land means it cannot be moved to another market, for example, one with higher prices (Kucharska-Stasiak, 2016). Residential properties are considered luxury goods, which is closely related to high capital intensity. The construction process itself involves many types of risk and, in the case of residential construction, takes years (Siemińska, 2012). This investment process, which is the main activity of the developer, is exceptionally complex and simultaneously limited by resources, time constraints (one cannot build flats indefinitely), and budget, often with rising construction costs (Kawecki, 2022). Therefore, the real estate market is an imbalanced market, where the supply of real estate is often considered rigid, as it does not quickly keep pace with changes in demand (Załączna, 2004). Despite this, the developer is essentially the sole creator of residential usable space, and thus the construction of housing. Moreover, their presence in the housing market requires professional knowledge and experience. Thus, they hold a superior position compared to the participants on the demand side of the housing market, especially in terms of access to information and the ability (and accuracy) of its analysis (Martyniak, 2021). It is also worth noting that access to the information about real estate market for non-professional entities is very difficult; even professional market entities have problems with the proper interpretation of data, and furthermore, with access to it (Cesarski, 2023).

Kawecki (2022) examined the impact of the pandemic on the developer industry. Among the responses from developers, the most highly rated negative effects of the pandemic were: increased construction costs, slowing of administrative processes, and customers' fears of taking out a mortgage. The decision to halt new investment projects was also highly rated. A pandemic on the scale experienced in 2020-2021 was completely unpredictable, and many companies did not know what decisions to make. Therefore, it is not surprising that a high percentage indicated this response. As many as 70% of the surveyed developers indicated decision-making problems in this regard. It should be noted that halting decisions on starting new investments significantly delays the entire investment process – thus delaying profit generation from sales, which is an unfavorable situation for developers. The slowdown in administrative activities also delays the issuance of building permits and other administrative actions related to the possibility of acquiring land for development.

Developers' difficulties related to the pandemic may also result from the behavior of households during this period. Zaniewska and Kobylińska (2023) examined the impact of the pandemic on customer behavior in the real estate market. The research results showed that as many as 75% did not decide to purchase real estate despite available offers and favorable financing conditions. Forty percent of respondents stated that the pandemic negatively affected their perception of the real estate sector. It should also be noted that preferences for choosing real estate to purchase changed, often in favor of building a private home, thus depriving developers of potential customers.

Conversely, Myrczek, Tworek, and Podstawka (2021) examined the financial management efficiency of business activities conducted by developer companies during the COVID-19 pandemic. The research results indicate that as many as 75% of developer companies assessed their economic situation as good or very good. Only three developers reported temporary difficulties, which, however, did not pose a threat to the companies' survival. All respondents were able to pay their obligations on time, indicating no liquidity risk. Moreover, none of the companies used government assistance in the form of an anti-crisis shield, further proving their good financial situation.

Considering the above, it is difficult to assess the overall situation of developers in the housing market during the studied period. On one hand, they faced many difficulties, including cost structures and unfavorable operating conditions – on the other hand, their superior position as supply creators in the housing market gives them significant leverage. It is also noteworthy that in 2021, they assessed their financial situation as good or very good. This may indicate that as professional entities in the housing market, they may demonstrate resilience to economic shocks and disruptions.

3. Methodology

As this article continues research on the resilience of entities in the residential real estate market, specifically the supply side (developers), the previously established concepts of resilience derived from a critical analysis of the literature were adopted to verify the hypothesis. The focus was also on analyzing the developer as a market entity and the conditions under which they operated during the pandemic, the war in Ukraine, and inflation. Therefore, the research period covers the years 2018-2023, i.e., before the occurrence of phenomena with negative economic effects, during their occurrence, and afterward. This allowed for the assessment of developers' resilience to economic shocks and disturbances such as the pandemic, the war in Ukraine, and inflation.

The analyses detailed in the article were based on statistical data from the Central Statistical Office (GUS), the Local Data Bank, offer and transaction prices from the National Bank of Poland (NBP), and financial reports of selected developer companies. The study included 32 developer companies listed on the Warsaw Stock Exchange (GPW), Sector: Developers, as of September 2023. By mid-2024, the composition of this index is slightly different – three of these companies are no longer listed on the stock exchange. Delisting is neither rare nor common, meaning it should not be equated with a lack of resilience among developers in the market. These companies were therefore excluded from the analysis.

This sample selection allowed for the standardization of the data set while including the largest representatives of this industry. Additionally, the analysis of press releases published by developers listed in this sector provided closer information about these companies, such as planned investments, financial results, and overall material condition. It was decided to use the sales revenue indicator in the analysis because it is the most popular indicator associated with measuring a company's success.

4. Research on the resilience of developers in the primary housing market in the context of economic shocks and upheavals

As indicated in chapter two, the developer occupies a unique, even dominant position among other market participants in the residential real estate market. As the supply creator in the long-term investment project of building residential properties, the developer essentially competes only with other developers. There are not many developers in the local market, especially considering the coincidence of completing subsequent investment stages or the location, which is often a key element of investors' purchasing decisions (Załączna, Antczak-Stępnia, 2022; Gajowniczek, 2021).

Table 1 presents data from the primary market regarding apartments in market transactions. Data for the year 2023 have not yet been published, so the analysis covers the years 2018-2022. The sale of apartments, with almost unchanged average usable area, has significantly increased over the four years of analysis (approximately 40 thousand apartments). The price per square meter of usable area has also steadily increased (by approximately 2 thousand PLN per square meter).

Table 1.

Central Statistical Office data from the primary market of residential premises as part of market transactions, broken down by year

Years	2018	2019	2020	2021	2022	2023
sales of flats (pcs)	81,221	79,763	84,729	101,219	106,862	no data
Average usable area (m ²)	55.88	56.78	56.77	57.53	57.11	no data
Average price per 1m ² (PLN)	5,581	5,752	6,212	6,899	7,466	no data

The presented data applies only to the primary market.

Source: Own study based on Bank Danych Lokalnych 2024, <https://bdl.stat.gov.pl/bdl/pomoc/stanzasilenia?active=0#>.

According to NBP data for 2023, the average transaction price on the primary market in the 17 largest cities in Poland was already 9,917 PLN, nearly 80 percent higher than before the occurrence of the pandemic, the war in Ukraine, and inflation (NBP, 2024).

One of the measures of success in the real estate market is sales indicators, which are directly related to the ordinary activities of an entity (GUS, 2024). The analysis of sales revenues of stock-listed developers can provide significant comparative data. Table 2 presents the sales revenues of 32 developers for the period 2018-2023, thus before, during, and after the occurrence of economic shocks and disturbances.

Table 2.

Sales revenues of developers listed in the GPW sector: developers in 2018-2023 [in thousands PLN]

Sector GPW: Developers	2018	2019	2020	2021	2022	2023
08N (08OCTAVA)	3,869	-2,978	58	-472	1,124	1,209
1AT (ATAL)	1,055,023	720,167	1,167,354	1,679,193	1,657,823	1,500,486
AAT (ALTA)	1,177	929	871	760	599	553
ARH (ARCHICOM)	484,474	508,187	669,887	596,310	499,678	1,101,064
BBD (BBIDEV)	10,319	20,770	84,501	20,901	16,273	24,444
CAV (CAVATINA)	21,124	39,466	59,021	40,445	72,691	94,317
CPD (CELTIC)	21,485	46,834	18,559	19,080	17,758	24,089
CPG (CPGROUP)	145,836	123,730	57,621	65,394	127,447	no data
CZT (CZTOREBKA)	2,095	4,871	6,141	23,582	7 343	14,452
DOM (DOMDEV)	1,661,721	1,815,012	1,897,491	2,419,308	2,419,308	2,550,313
DVL (DEVELIA)	796,734	819,264	517,114	911,934	1,067,919	1,607,825
ECH (ECHO)	713,035	880,133	1,212,854	1,532,665	1,394,306	1,573,293
EDI (EDINVEST)	40,304	43,653	91,481	59,683	78,918	135,470
EKP (ELKOP)	4,593	9,334	11,381	12,286	16,170	18,962
GTC	656,040	729,637	711,706	785,369	780,664	18,962
HMI (HMINWEST)	47,829	93,820	104,219	184,789	92,548	255,197
IBS (IBSM)	283	0	2	3,844	18,854	16,631
IIA (IIAAV)	1,435,241	1,561,422	1,743,015	1,725,010	1,980,076	3,160,805
INP (INPRO)	258,982	270,549	382,638	321,397	357,690	308,606
LKD (LOKUM)	322,434	285,859	190,993	309,847	366,738	451,308
MLG (MLPGROUP)	141,502	140,032	190,695	200,588	279,073	360,760
MVP (MARVIPOL)	266,129	290,784	431,385	393,735	588,585	377,511
OPG (ORCOGROUP)	114,862	100,969	307,396	311,034	46,432	240,175
PHN	169,000	199,500	733,700	480,500	627,000	570,900
PLZ (PLAZACNTR)	10,032	15,688	6,701	0	0	0
RHD (REINHOLD)	232	0	no data	no data	no data	no data

Cont. table 2.

RNK (RANKPROGR)	88,481	103,953	119,640	61,464	61,079	71,184
SHD (SOHODEV)	115,386	8,266	1,429	44	<i>no data</i>	<i>no data</i>
TOW (TOWERINVT)	43,271	38,959	19,389	50,023	26,563	7,800
TRI (TRITON)	32,854	18,713	32,288	38,225	31,191	15,123
WIK (WIKANA)	43,779	77,051	71,848	138,224	75,550	78,366
WXF (WARIMPEX)	125,422	134,743	118,416	122,896	211,683	216,030

* no longer belongs to the stock exchange index.

Source: own study based on data from <https://www.biznesradar.pl/spolki-raporty-finansowe-rachunek-zyskow-i-strat/sektor:dew,C,IncomeRevenues,0,1,4>.

The period of the COVID-19 pandemic is marked in grey and the period of the outbreak of the war in Ukraine in blue. The largest disproportions between individual revenues are marked in bold. Assuming that the resilience of developers on the housing market can be defined as the ability to survive a crisis without major difficulties, it can be assumed that the selected companies struggled with such problems. A significant drop or fluctuation in sales revenues can certainly be classified as such a situation. However, when analysing today's data and source information about the developers in question, it should be noted that none of them declared bankruptcy, all of them are still operating, only three withdrew from the stock exchange. Therefore, it can be assumed that despite the difficulties, they ultimately overcame them. Therefore, this part of developers, constituting a smaller part of the studied group, showed partial resistance, while the rest can be considered resistant.

Table 3.

Resilience of listed developers of the GPW sector: developers based on sales revenues in individual years in thousands PLN

Sector GPW: Developers	2018	2019 base year	2022 year of comparison	2023 year of comparison	Resilience 2022	Resilience 2023
08N (08OCTAVA)	3,869	-2,978	1,124	1,209	1	1
1AT (ATAL)	1,055,023	720,167	1,657,823	1,500,486	1	1
AAT (ALTA)	1,177	929	599	553	0	0
ARH (ARCHICOM)	484,474	508,187	499,678	1,101,064	0	1
BBD (BBIDEV)	10,319	20,770	16,273	24,444	0	1
CAV (CAVATINA)	21,124	39,466	72,691	94,317	1	1
CPD (CELTIC)	21,485	46,834	17,758	24,089	0	0
CPG (CPGROUP)*	145,836	123,730	127,447	<i>no data</i>	1	<i>no data</i>
CZT (CZTOREBKA)	2,095	4,871	7,343	14,452	1	1
DOM (DOMDEV)	1,661,721	1,815,012	1,897,491	2,550,313	1	1
DVL (DEVELIA)	796,734	819,264	1,067,919	1,607,825	1	1
ECH (ECHO)	713,035	880,133	1,394,306	1,573,293	1	1
EDI (EDINVEST)	40,304	43,653	78,918	135,470	1	1
EKP (ELKOP)	4,593	9,334	16,170	18,962	1	1
GTC	656,040	729,637	780,664	18,962	1	0
HMI (HMINWEST)	47,829	93,820	92,548	255,197	0	1
IBS (IBSM)	283	0	18,854	16,631	1	1
IIA (IIAAV)	1,435,241	1,561,422	1,980,076	3,160,805	1	1
INP (INPRO)	258,982	270,549	357,690	308,606	1	1
LKD (LOKUM)	322,434	285,859	366,738	451,308	1	1

Cont. table 3.

MLG (MLPGROUP)	141,502	140,032	279,073	360,760	1	1
MVP (MARVIPOL)	266,129	290,784	588,585	377,511	1	1
OPG (ORCOGROUP)	114,862	100,969	46,432	240,175	0	1
PHN	169,000	199,500	627,000	570,900	1	1
PLZ (PLAZACNTR)	10,032	15,688	0	0	0	0
RHD (REINHOLD)*	232	0	<i>no data</i>	<i>no data</i>	<i>no data</i>	<i>no data</i>
RNK (RANKPROGR)	88,481	103,953	61,079	71,184	0	0
SHD (SOHODEV)*	115,386	8,266	<i>no data</i>	<i>no data</i>	<i>no data</i>	<i>no data</i>
TOW (TOWERINVT)	43,271	38,959	26,563	7,800	0	0
TRI (TRITON)	32,854	18,713	31,191	15,123	1	0
WIK (WIKANA)	43,779	77,051	75,550	78,366	0	1
WXF (WARIMPEX)	125,422	134,743	211,683	216,030	1	1
				<i>sum</i>	20	22

* no longer belongs to the stock exchange index.

Source: own study based on data from <https://www.biznesradar.pl/spolki-raporty-finansowe-rachunek-zyskow-i-strat/sektor:dew,C,IncomeRevenues,0,1,4>.

The results of the comparison of sales revenues in accordance with the second adopted definition of resilience, i.e. the ability of the enterprise to return to the state before the occurrence of economic shocks and upheavals are presented in Table 3 in relation to the base year 2019 and the years of the end of the pandemic - 2022 and 2023. In the Resilience 2022 column and Resilience 2023, the developer's return to the financial situation from before the base year was marked (1 - resilience) and the deterioration of sales revenues (0 - no resilience). Therefore, out of 32 developers in 2022, as many as 20 can be considered resilient, while a year later this number increased by another two companies. It is possible that inflationary price increases and the influx of refugees from Ukraine contributed to the increase in this indicator. The wealthier ones, instead of renting, purchased real estate to meet their housing needs.

Therefore, the adopted research hypothesis, as most developers are resistant to shocks and economic shocks, was positively verified. Both in the case of the first and second definitions.

5. Conclusions

Resilience of enterprises to the effects of economic shocks and upheavals is a highly relevant topic. Companies dealing with the consequences of unforeseen events such as the pandemic, the war in Ukraine, or inflation had to revise their development strategies and quickly adapt to new market conditions. If an enterprise demonstrates resilience to macroeconomic shocks, it will be able to better manage its resources and development.

From the presented data on the situation of developers in Poland during the period of these negative macroeconomic phenomena, it appears that the prolonged investment process, such as housing construction, positively impacted their operations. Data from the primary market show

upward trends in the number of sold apartments and transaction prices, which also positively influenced developers' activities despite the difficult and unforeseen macroeconomic situation.

Rising real estate prices, increased sales, and the mere fact of remaining on the market during such a challenging period prove that, in contrast to households in the housing market, developers demonstrate at least partial resilience to macroeconomic shocks and disruptions. This is confirmed by the analysis of sales revenues of 32 developers listed on the Warsaw Stock Exchange. Referring to the adopted definition of resilience, i.e., restoring the state before the occurrence of an economic shock or disruption, in 2022, as many as 20 developers achieved higher sales revenues than in the base year, while in 2023, their number further increased to 22 enterprises. This indicates that the majority of developers demonstrated resilience to economic shocks and disruptions.

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