

## POZNAŃ PRIMARY HOUSING MARKET: CHANGES AND SUSTAINABLE DEVELOPMENT

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**Introduction/background:** Pursuing sustainable urban and community development should be a key objective for local governments. The needs of the current generation should be accommodated in a way that respects the environment and accounts for the needs of the generations yet to come. It also calls for the need to plan for and maintain a sustainable market for residential properties – a specific real estate market segment that is characterised by its localness and uniqueness and which serves to accommodate the needs of households, both the fundamental ones (those relating to physiology, safety and belonging) and those at a higher level (such as recognition and self-fulfilment).

**Aim of the paper:** This study is meant as a contribution to further research and its purpose is to present certain developments in the local primary housing market over 2016-2020 and identify potential problems that could have an adverse impact on a sustainable development of both the city concerned and its population.

**Materials and methods:** Our discussion here is based on real estate market data, including those found in publications from Statistics Poland (GUS) and the National Bank of Poland (NBP), and on research conducted by the Poznań University of Economics and Business, Department of Investment and Real Estate.

**Results and conclusions:** Our research shows that the local primary market for residential real estate in Poznań is on a dynamic growth path, driving up supply, demand and, consequently, prices. While this is welcome news for many market stakeholders, it also gives rise to legitimate concern about the proper and sustainable development of local communities going forward.

**Keywords:** sustainable development, local housing market, housing supply and prices.

## **1. Introduction – How the market for residential properties operates: the specifics**

Fairly commonly, the residential property market is seen as a discrete segment of the market for real estate. It is understood as an area in which sellers and buyers interact with each other by exchanging rights to (residential) property for other assets (most often, money), or as a certain totality of conditions allowing for a transfer of title to residential properties with specific rights and obligations for transaction parties (Kucharska-Stasiak, 1999, p. 11; Kucharska-Stasiak, 2005, p. 7). Or, following M. Bryx (2006, pp. 18, 87-91), it may be defined as a system – comprised of a number of subsystems (of property trading, investment, financing or management) – involving numerous actors interlinked through various relationships and manifesting their different expectations and preferences (Gawron, 2016, pp. 31-32). We could also look at it through the lens of classical economic definitions according to which a residential market is an area where housing demand and supply meet, shaping housing prices and facilitating housing transactions in the process (Łaszek, 2006, p. 7; Nykiel, 2008, p. 15; 2011, p. 56).

It is not a multitude of definitions, however, that make the residential segment what it is within the larger real estate market, but a number of other notable characteristics. First, what makes it unique is what that market offers to interested parties – housing. The importance of housing in socio-economic life (both individual and collective) has been emphasised in numerous studies (Bryx, 2001, p. 13; Dziworska, Trojanowski, 2007, p. 146; Andrzejewski, 1979, p. 14; Gawron, 1992, p. 84; Kaltenberg-Kwiatkowska, 1982, pp. 7-8; Trzeciak, 1976, p. 394). Most importantly, it is an essential good for every household to function the way it should; as such, it is essential for a country's economic development.

Second, this is not a homogenous market segment. Rather, it features a number of overlapping partial markets, each differing from another in terms of location, type of housing, form of lease, age, quality or financing (Gurran et al., 2015, p. 8). Based on the criteria presented by H. Gawron (2016, pp. 32-33) and E. Kucharska-Stasiak (2016, pp. 59-61), one could distinguish the markets for single-family housing and multi-apartment buildings (what is offered); the markets for sale or long- or short-term lease of housing (ownership); the markets for popular or apartment dwellings (quality); the primary market (where housing is bought straight from property developers) and the secondary market, often referred to as second-hand or used housing market (housing origin). Naturally, a lot more segments could be distinguished.

Third, this is an imperfect market. In terms of organisation, it could be compared to oligopoly. Its actors have a rather limited access to market information, have to cope with significant (relatively large) financial burdens, and often make irrational decisions (not just buyers or tenants, but also sellers and landlords).

Fourth, it is a local market. A typical residential housing market is limited to its locality. Every town or city is different in terms of their history, spatial configuration and built developments, demographics and economic situation, or housing buyers' habits and preferences. Additionally, that local dimension derives from what forms an essential feature of each real property – housing (as a good) cannot be moved in space. According to S. Belniak (2001, p. 42), this means that supply is “localised”, while demand may be a bit more mobile, originating from both local and non-local areas. All of this means that any inter-market studies and comparisons are difficult, as any phenomena that are present within one market do not have to have the same impacts on the other. On top of that, it would be wrong to copy, or transfer, trends or phenomena present within one local market to another. One example would be the development of the market for apartment buildings in Warsaw that did not occur in Poznań (Strączkowski, 2021, p. 38).

Fifth, this is a market with a relatively low transaction volume compared to other markets. Also, supply here is created over a relatively long time, with new housing stock requiring quite some time to be completed (1.5 to 2 years, on estimates). In that time, the investor faces a number of risks, including a change in the market situation, variable demand or price fluctuations, in addition to running project costs (Gurran et al., 2015, p. 9). Importantly, striking and maintaining a market equilibrium is very difficult – rising prices on housing markets can drive up demand, leading in consequence to higher supply, but that does not necessarily have to bring the price to its equilibrium point.

Sixth, due to its nature, the housing market is considered to be very difficult to balance; in other words, it is characterised by long-term disequilibrium, stemming from the nature of demand and supply. While demand rises over a long time, at a pace that depends on population numbers or income figures, it is subject to short-term fluctuations. Its level may depend on property prices or interest rates for loans. Supply, on the other hand, is completely fixed over a short time, given a long project development timeframe, estimated at 1.5 to 2 years (Belniak, 2001, p. 43; Kucharska-Stasiak, 2006, pp. 65-66). Furthermore, the residential property market does not have to develop evenly at all. Some of its segments may be on a volume growth path, while others may combine both quantitative and qualitative changes (Foryś, 2011, p. 47). Also, local markets feature observable demand-supply mismatches, as reflected in the differences between housing that is offered for sale and one that buyers would prefer to buy, or between the sellers' and buyers' price expectations (Bartkowiak, Strączkowski, 2019, pp. 20-21).

Seventh, the housing has great importance for sustainable urban development. M. Bryx (2021, pp. 83-84) writes that housing construction consumes what is one of the most important non-renewable resources – land. That consumption goes beyond the development (construction) process alone and is also involved in subsequent property use. Hence the discussions and demands concerning proper spatial planning in cities and towns, energy efficiency standards for buildings, wider housing environment (going beyond a dwelling alone

to include any amenities that add to the quality of life), or housing affordability for people that is a condition not just for a proper development of the housing market but also of society more generally – one that is capable of engagement in diverse efforts, both in their own interest and that of the general public (country). All of these considerations mean that the housing market is subject to state interventionism, as reflected in legal frameworks regulating housing trade or management or the programmes created to meet the housing needs of a population. Also, the housing market needs specialists for its operation. Those with a professional involvement (whether close or more remote) in the housing market may, to a certain extent, shape the developments on it. Accordingly, in interpreting the notion of sustainable urban development, we should take into account the issues affecting the development of local housing markets and their individual elements – housing supply and prices and housing demand.

## 2. The local housing market in Poznań: the supply side

The local housing market in Poznań is considered to be one of the largest such markets in Poland. As reported by Statistics Poland (GUS) and the National Bank of Poland (NBP), the city's housing stock is estimated at more than 270,000 dwellings, which makes this market quite saturated at 511 dwelling units per 1,000 residents. At the same time, the market sees quite a lot property development activity and property developers – in the last five years (2016-2020), their number rose from 77 to 100. It is not a coincidence that property developers are now regarded to be a key player in the supply of new housing stock. Between 2016 and 2020, property developers accounted for more than 80% (sometimes even 90%) new dwelling completions – Table 1 (the remaining completions came from the local government and individuals).

**Table 1.**

*Dwelling completions by property developers, Poznań housing market, 2016-2020*

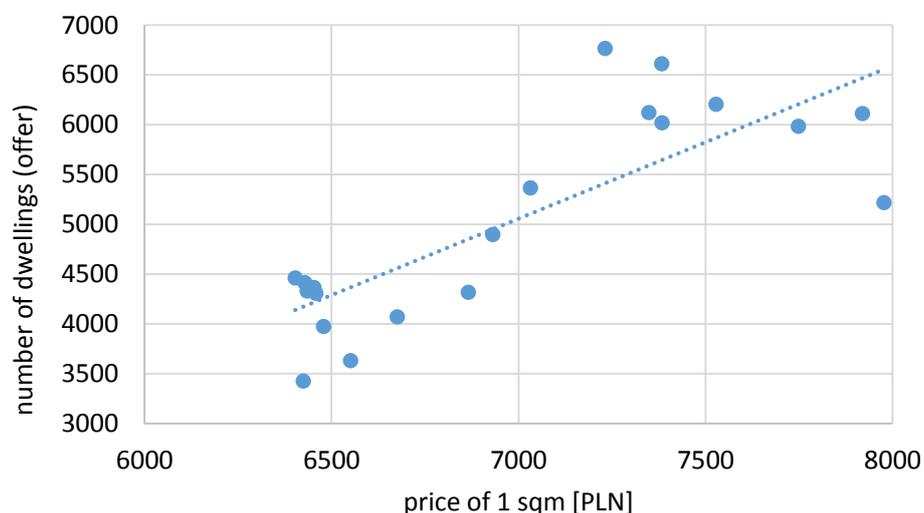
No.	Description	unit	year				
			2016	2017	2018	2019	2020
1.	Number of dwelling completions by property developers	psc	2 453	3 685	3 545	4 182	4 476
2.	Dwelling units from property developers as a share of total dwelling completions	%	84	91	88	83	91
3.	Average area of a completed dwelling unit from a property developer	sqm	52,8	53,3	55,1	54,3	54,8
4.	Number of dwellings offered (end of Q4 data for each year)	psc	4 462	3 632	5 367	6 021	5 219

Source: Own compilation based on data from Statistics Poland (GUS) and the National Bank of Poland (NBP).

This rising activity among property developers is reflected in the figures for dwelling completions. While there was close to 2,500 dwelling completions initially in the reported period, their number at the end of it, in 2020, shot up to nearly 4,500. This means, on average, new housing stock rose by 456 units from year to year. The data are for actual completions – the stock that was actually constructed and formally reported as completed. We should not forget, however, that a large part of housing offered by property developers is sold while still under construction, before its completion. This is why very often the number of dwellings offered for sale (in quantitative terms) is much larger than that of completed dwellings. This is quite important because, in any discussion of new housing supply, these two parameters should be kept separate.

Regarding housing supply, one should also mention the size, or area, of dwellings, whether completed or sold. As for new dwellings, their average area has remained relatively unchanged, ranging between 53 and 55 square metres (sqm). These trends are borne out by the data on the housing on offer:

- The largest percentage here is for dwellings of 40-60 sqm in size (in 2016-2020, 51% on average), albeit their share in the last two years declined, giving way to slightly larger units (60-80 sqm).
- At 25% of the housing offer, the units of 60-80 sqm in size have the second largest share.
- At 7%, the relatively largest units, of more than 80 sqm, have the smallest share (NBP).



**Figure 1.** Number of dwellings on offer and their price per sqm, Poznań primary housing market, 2016-2020 (quarterly data). Source: Own compilation based on data from the National Bank of Poland (NBP).

Comparing the supply and asking prices (and specifically, the average per sqm prices), we can see that the higher the price, the more units there are on offer. This is not a surprise, really, seeing as the rising housing prices encourage property developers to intensify their activity, leading to a large number of development projects.

### 3. The local housing market in Poznań: the prices

Similar to supply, housing prices have been on an upward trajectory in the last few years. This trend is true of both asking and transaction prices (Table 2). Most often, this is explained by a large interest in residential housing or reported demand from buyers. That said, and importantly, the rising prices are the result of rising construction costs. This is reported in the press (Zielińska, 2021; Muratorplus.pl, 2021; Kaźmierczak, 2021) and in publications from the National Bank of Poland (Łaszek et al., p. 20) or Statistics Poland which, when identifying the five largest barriers to construction activity, including general economic uncertainty or high fiscal burdens, also refers to:

- employment costs and shortages of qualified workforce, and
- costs of materials (Błażej, 2020, p. 15).

**Table 2.**

*Housing prices and costs (PLN), Poznań housing market, 2016-2020*

No.	Description	year				
		2016	2017	2018	2019	2020
1.	Average asking price per one sqm of dwelling area, primary market*	6 403	6 551	7 033	7 394	7 980
2.	Average transaction price per one sqm of dwelling area, primary market*	6 304	6 382	7 017	7 396	7 633
3.	Difference between asking and transaction prices	99	169	16	-2	347
4.	Average expenditure by property developer per 1 sqm of new residential buildings**	4 000	4 145	4 139	4 597	5 012

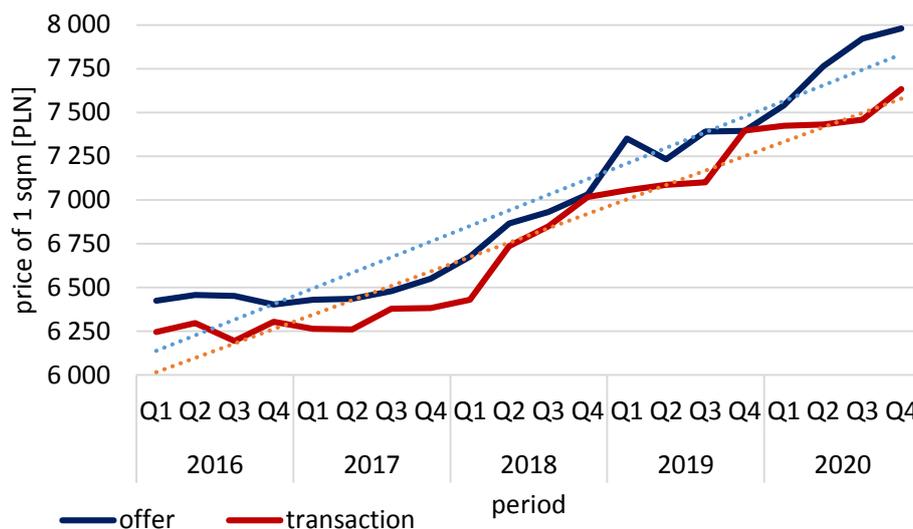
Note:

\* Figures for Q4 in each year.

\*\* No data for Poznań were available, so the figure shown is one for Poland. Given how development projects are implemented (utilising general contractors operating nation-wide), the figure can be considered reliable.

Source: own compilation based on data from Statistics Poland (GUS) and the National Bank of Poland (NBP).

Based on Statistics Poland's published benchmark for average construction expenditure per 1 sqm of new residential buildings, we can see that the cost is now up by 25%, or one percentage point more than the average asking price per sqm, and by 4 percentage points more than the average transaction price per one square metre of dwelling area (Table 2).



**Figure 2.** Changes in asking and transaction prices for one sqm of dwelling area, Poznań primary housing market, 2016-2020 (quarterly data), Source: Own compilation based on data from the National Bank of Poland (NBP).

Looking at quarterly rises in average prices per sqm of dwelling area over 2016-2020 (Fig. 2), we can see that:

- the asking price went up by 24% from PLN 6,400 to PLN 8,000, meaning that it rose on average by PLN 89 from quarter to quarter;
- the transaction price went up by 22% from PLN 6,200 to PLN 7,600, working out to an average increase by PLN 82 (from quarter to quarter).

Note that in rises asking prices were minimally higher and the difference between them and transaction prices, while subject to certain fluctuations, is nevertheless increasing.

#### 4. The local housing market in Poznań: the demand side

Similar to supply and prices, the housing demand over 2016-2020 has been on an upward trend. While recently lower than the year before, the average transaction volume grew by 245 units a year. The Poznań housing market is unique in that most transactions there are on the primary market; importantly, too, the significance of that segment is steadily increasing (Table 3).

**Table 3.**  
*Poznań primary housing market indices, 2016-2020*

No.	Description	unit	year				
			2016	2017	2018	2019	2020
1.	Number of dwellings bought	pcs.	3 885	4 805	4 465	5 414	4 807
2.	Percentage of dwellings bought on the primary market	%	55	62	62	68	70
3.	Average gross salary	PLN	4 771	5 062	5 406	5 743	5 998
4.	Housing affordability on the primary market*	points	3,82	3,65	3,76	3,73	3,68

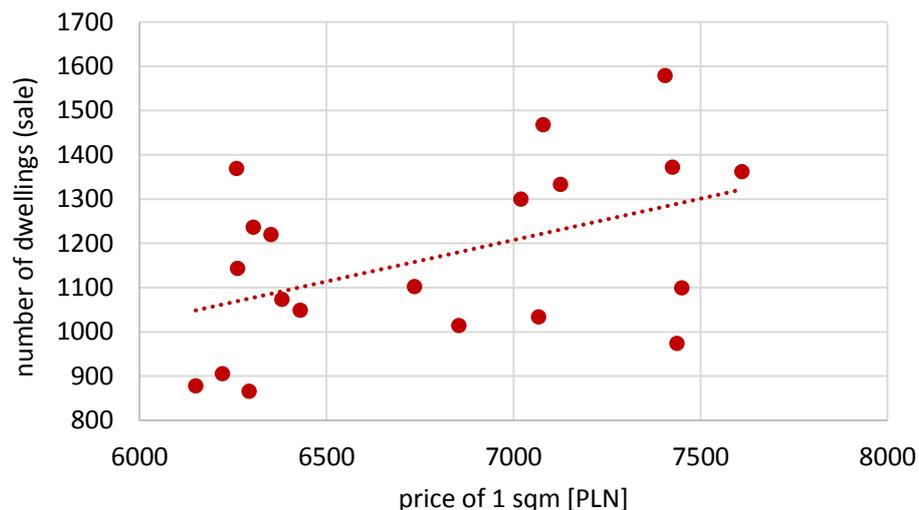
\* This index is shown for a 50 sqm dwelling as a typical unit in development projects and for a two-person household's average annual net income (actual income received). This is the so-called P/I ratio which factors in housing prices and household's annual income. The score of up to 3 points reflects housing affordability for households; the score of 3.1-4.0 reflects moderate unaffordability; the score of 4.1-5.0 reflects unaffordability; and the score of more than 5 points means high unaffordability (more on the ratio in: Mazurczak, Strączkowski, 2014, p. 107).

Source: own compilation based on data from Statistics Poland (GUS) and the National Bank of Poland (NBP).

Interestingly, the rising housing prices notwithstanding, the housing affordability index has been improving, even if minimally. While at 3.82 initially in the reported period, 2020 saw it drop to 3.68 in 2020. It should be recalled, however, that the index is estimated for a 50 sqm dwelling and the average pay in the enterprise sector (which grew faster than prices). As such, the ratio should be treated with some caution, especially as its level is interpreted as reflecting entrenched moderate unaffordability (in other words, housing is relatively expensive).

Another aspect that is worth looking into when discussing housing demand are the sizes of dwellings bought and their structure. As regards new dwellings, their average area has remained relatively unchanged, and was slightly upwards of 50 sqm. These trends are borne out by the data on housing sales, as follows:

- The largest percentage of dwellings bought is for units of 40-60 sqm in size (in 2016-2020, 52% on average), albeit their share in the last two years declined, giving way to slightly larger units (60-80 sqm).
- At 25% of the housing offer, the units of 60-80 sqm in size have the second largest share.
- At 5%, the relatively largest units, of more than 80sqm, have the smallest share (NBP).



**Figure 3.** Number of dwellings sold and their price per sqm, Poznań primary housing market, 2016-2020 (quarterly data). Source: Own compilation based on data from the National Bank of Poland (NBP).

Comparing sales figures and transaction prices (and specifically, the average per sqm prices), we can see that the higher the price, the more units are bought. What we have here, then, is a situation where, encouraged by a strong interest from buyers, property developers can raise their housing prices, while the buyers, afraid of their further rises, factor in even higher price levels in their decision-making processes. The question that remains is about the factors that drive the demand for housing.

Those who take out home loans are encouraged by bank lending policy and low interest rates. Interestingly, the Financial Stability Department at the National Bank of Poland expects a further easing of lending policy criteria and a continued growth of what is already a strong demand in 2021 (Sytuacja..., 2021, p. 1). Inflation is certainly one of the factors driving up housing purchases: with low interest rates, some people venture onto the property market and grab the opportunity to earn money there, e.g. from leases. As such, the strong housing demand also results from investors' activity, as is reflected by NBP's surveys into the sources of funding for home purchases depending on reasons why people bought housing in 2020. It turns out that those who buy it as an investment (almost 30%) most often pay for it in cash (63% among those intend to resell at the right time and 50% want to lease their premises) (Łaszek et al., 2021, p. 38).

## 5. Changes on the housing market and sustainable development

These reported changes – in supply, prices and demand – are for the primary housing market in Poznań. On the supply side, what they show is that, on the one hand, the growing prices act as a strong driver for property development (to build new stock), and that, on the other hand,

the rising construction costs force the developers' hand to up their asking prices so that they can protect their planned margins. This ties in with the producer theory and its tenets. In turn, the strong demand on what is a specific and spatially limited local market is a price-generating factor. It is worth noting, though, that this situation might complicate the operation of the market going forward. Already discussions are underway about property developers' pricing and cost policies, while the buyers, afraid of potential price hikes, might be investing their funds in available properties either not quite well informed or even against their judgment. Also, the strong pressure to build new housing might strain some urban areas excessively, but also potentially compromising the general quality of life across the residential environment (premises, building, and surrounding area).

To sum up, the housing market, including how it develops, is of crucial importance. The situation on that market now (with the housing prices and demand both rising) might be welcome for many of the actors professionally involved in its workings, especially property developers (who can sell their output quite quickly) and banks (who can onboard and service new borrowers). It might worry the buyers, though, both due to rapidly rising prices and because of their limited ability to negotiate the terms of purchase with developers.

The situation on the ground should also give pause for consideration of how it might develop going forward, especially in the context of wider sustainable development. Assuming that one of its purposes is to build sustainable cities and communities, where the needs of the current generation are met in sustainably, with respect for the environment and accommodating the needs of future generations (Serwis Rzeczypospolitej Polskiej, 2021), there is no hiding that sustainability should be sought across all areas of urban activity, including on the housing market, and in particular with a view to creating the real opportunities for home ownership.

As things are, however, the rising prices on the Poznań housing market might present an ever greater barrier to home ownership, including by young people (those aged 35 or less), a cohort which studies show to represent the largest group of buyers (NAR, 2017; NAR, 2019; Strączkowski, 2021, p. 167). Not only that – young people find it difficult to rent a place, seeing as the rent payments alone, without operating charges, eat into nearly a third of what young couples earn. What we see, then, is a form of exclusion and a number of negative developments that affect housing, especially as (Rudzka, 2021; Bartkowiak, Strączkowski, 2021):

- 45.1% of young people aged 25-34 live with their parents (with the EU average at 28.6%);
- in 2018, the most frequent pay in Poland (the statistical mode) was PLN 1,765 net (GUS, 2020), while it is common knowledge that young people are paid less than more experienced persons in the job market;
- not having a place of one's own can effectively deter any plans to marry or have a child (Strączkowski, 2012, pp. 12-14);

- despite rising average wages, 80% childless married couples, 55% married couples with one child, 45% with two children and 35% with three children are considered creditworthy (Stan mieszkalnictwa w Polsce, 2020, pp. 9-10);
- more than half of young people (55%) do not believe they will be able to buy their own place.

This raises questions about the future and how to ensure proper (across-the-board) development pathways not just for the country's housing market and economy, but also – and perhaps most importantly – the future generations of Poles.

Questions abound, too, about the acceptable limits to housing prices and about how much demand can be stimulated locally. Also, more and more concerns are being voiced about the future housing rental market: other than during the COVID-19 pandemic when they went down, the last years have seen their rent rates steadily increasing. At the same time, the supply of rented accommodation is growing from year to year, giving rise to legitimate concerns about falling profitability for rentals. Certainly, these considerations provide an input for further research into the rules and principles for ensuring sustainable development of the housing market.

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