

Housing Buyers' Preferences and the Relevance of those Preferences. In Researching Poznan Primary Housing Market

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ABSTRACT

Purpose – The local housing market in Poznań is undergoing a dynamic growth, with recent years (2015-2019) seeing more activity from property developers as well as rising demand and prices. Given the above, this paper has the following objectives: (1) To present the local housing market situation in Poznań over 2015-2019; (2) To characterise the buyers of dwelling units in that market; and (3) To describe the housing buyers' preferences and to compare the buyers' expectations with what the property developers could offer them.

Methods – The discussion below is based on surveys among housing trade show participants (sample n=268) who said they were actively seeking to buy a dwelling locally. We have also examined housing offered for sale by property developers.

Findings – Based on our research, we were able to determine the structure of dwellings offered by property developers and the preferences of buyers in the Poznań primary housing market. We have compared the results of our studies and found that, given the rising prices, there is a large discrepancy between the buyers' stated preferences and their adjusted preferences once the real market prices are factored in, and that there are mismatches in the Poznań primary market between what the property developers offer and what the interested housing buyers would prefer to be offered.

Research implications – This might have serious consequences for the market (for example, by cementing its suboptimal structure on the demand side and by hampering sales of some dwellings on the supply side, leading to worse return on investment).

Keywords: primary housing market, housing preferences

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INTRODUCTION: LOCAL HOUSING MARKET AND HOUSING PREFERENCES AND WHY WE NEED TO STUDY BOTH

It is generally accepted that one of the greatest weaknesses surrounding the property market, at least in Poland, is the scarcity of comprehensive and credible data on its condition and development (Gawron, 2009, p. 16). Generally, an average investor has limited (housing or area-related) data at his disposal (Kucharska-Stasiak, 2006, pp. 43-52). Property development is a multi-stage process. It calls for creativity and multi-faceted considerations and ultimately it transforms space in physical, material, social and economic terms. For these reasons, the property development business requires systematic market research (Henzel, 2004, p. 122; Peca, 2009, p. 8; Bryx, 2006, p. 177).

The need for current market research and analysis also stems from the fact that a property developer's knowledge is based on historical data only; as such, it is insufficient to carry out a development project. Given individual project timeframes, historical data cannot be a reliable indicator of what is happening on the market and what could be expected to happen going forward (Mazurczak & Strączkowski, 2014). The investment process, too, cannot proceed without a comprehensive market insight involving such considerations as housing demand and supply or prices. Every investor expects specific return from investment and there can be no such return unless and until the immediate environment and the factors that directly affect project success are properly gauged and interpreted (Gawron, 2011, pp. 18-19; Nowacki, 1996, p. 32).

The need for localised housing market research also stems from the unique nature of that market. Due to physical and economic characteristics of real properties, local housing markets differ from each other in terms of their character or development paths (Schmitz & Brett 2001, pp. 3-18; Stefaniak, 1997, p. 33). They are also highly diversified on the supply side in terms of what they can offer to transaction parties. Each local market also requires analysis of client preferences and behaviours, and of any situational locality-specific factors impacting consumer and investor decisions (Belniak, 2008, pp. 6-7; Głuszak, 2006, p. 29; Belniak & Głuszak, 2011). Apart from substantial investment of time and relatively high costs, research into housing preferences gives rise to some other problems, primarily those

involved in how preferences are measured¹. Studies may rely on the so-called revealed preference method, where the actual choice is the preference indicator; alternatively, the stated preference method might be used, where the intended choice is the indicator (Głuszak, 2006, p. 178; Strączkowski 2009, p. 140; Kersloot & Kauko, 2004, p. 150; Hasanzadeh, Kyttä & Brown, 2019, p. 2). It can be assumed that research utilising one or the other method will reveal discrepancies between the stated and the actual behaviour or choice².

In view of the above, this paper has the following objectives: (1) To present the local housing market situation in Poznań over 2015-2019; (2) To characterise the buyers of dwelling units in that market; and (3) To describe the housing buyers' preferences and to compare the buyers' expectations with what the property developers could offer them. The discussion below is based on surveys among housing trade show participants (sample n=268) who said they were actively seeking to buy housing locally. We have also examined housing offered for sale by property developers.

DEVELOPMENT IN THE LOCAL HOUSING MARKET, 2015-2019

The last five years (2015-2019) have seen the primary housing market in Poznań undergoing a dynamic growth. Firstly, there has been an increase in housing transactions, from 2,671 in 2015 to more than 5,000 in 2019 (5,402 units), showing a substantial (almost twofold) rise in demand. Some of the reasons cited for that increase are a better situation on the local job market, which boosts optimism among buyers and has a generally positive effect on housing purchase decisions. The improving job situation also means that wages and salaries are growing, which translates into clients' increased purchasing power. This is illustrated by improving housing affordability³, which fell from 4.02 points (in 2015) to 3.78 (in 2019), even though housing continues to be moderately unaffordable (see Tab. 1). Secondly, there has been a substantial increase in supply, from 3,016 dwelling units completed by developers in 2015 to almost 4,200 dwellings supplied annually for sale or

¹ The choice of the research method cannot be based on the methodological superiority of one method over another, but should be directed by the type of information that can be obtained and collected (Jansen, Coolen & Goetgeluk, 2011, p. 12).

² This might give rise to what is called post-purchase dissonance, a situation in which a customer compares what they expected their purchase to be with how their expectations were met. For more on this, see: (Stasiuk & Maison, 2014, p. 28) or (Mruk, Pilarczuk & Szulce, 2007, p. 61).

³ Housing affordability, an indicator recommended by the World Bank among others, is calculated as the ratio of dwelling price (P) to annual household income (I). For more on this indicator and on how it is used and interpreted, see: (Mazurczak & Strączkowski, 2015, pp. 18-23).

rent at the end of the reported period⁴. Importantly, too, dwelling units from developers make up a substantial portion of total completed housing in Poznań. Over 2015-2019, private investors (developers) – provided more than 80% of total new housing stock. It could be argued, therefore, that, generally, new local housing construction comes solely from property developers. On average, a dwelling unit that a property developer offers for sale has an area between 53 and 55 square metres (sqm), and this has remained relatively unchanged for some years now (Tab. 1).

Table 1. Poznań primary housing market, data for 2015-2019

Description	unit of measure	years				
		2015	2016	2017	2018	2019
Number of primary market housing transactions	item	2671	3885	4862	4361	5402
Number of dwelling completions by property developers	item	3106	2453	3685	3545	4182
Dwelling units from property developers as a share of total dwelling completions	%	86	84	91	88	83
Average area of a completed dwelling unit from a property developer	sqm	52,7	52,8	53,3	55,1	54,3
Average gross salary in Poznań	PLN	4549	4771	5062	5406	5743
Average transaction price per one sqm of dwelling area	PLN	6234	6304	6382	7017	7405
Average asking price per one sqm of dwelling area	PLN	6512	6403	6551	7033	7384
Housing affordability for a 50 sqm dwelling unit*	points	4,02	3,88	3,70	3,81	3,78

* This indicator 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).

Source: own compilation based on published data from National Bank of Poland (NBP, www.nbp.pl), Statistical Bulletins from Statistics Poland (GUS, www.stat.gov.pl), and own estimates.

Based on data from the National Bank of Poland, the average (transaction and asking) prices per one sqm of dwelling in the Poznań primary market were rising in the five years concerned (see: Fig. 1). Asking prices saw an increase by close to PLN 900 (13%), while transaction prices rose by PLN

⁴ There is an awareness that the number of completed dwellings is not a clear supply (because in offer one can find flats that are not physically completed), but thanks to that it is possible to describe the direction of supply. That's why it is seemed to be a good indicator. Moreover in public statistic dwellings completed by developers are called "dwellings for sale or rent".

1,200 (19%). In effect, therefore, the difference between average asking and transaction prices has decreased: while it amounted to 4 pp in 2015, in 2019 the buyers had virtually no negotiating power, with property developers unwilling to grant any discounts.

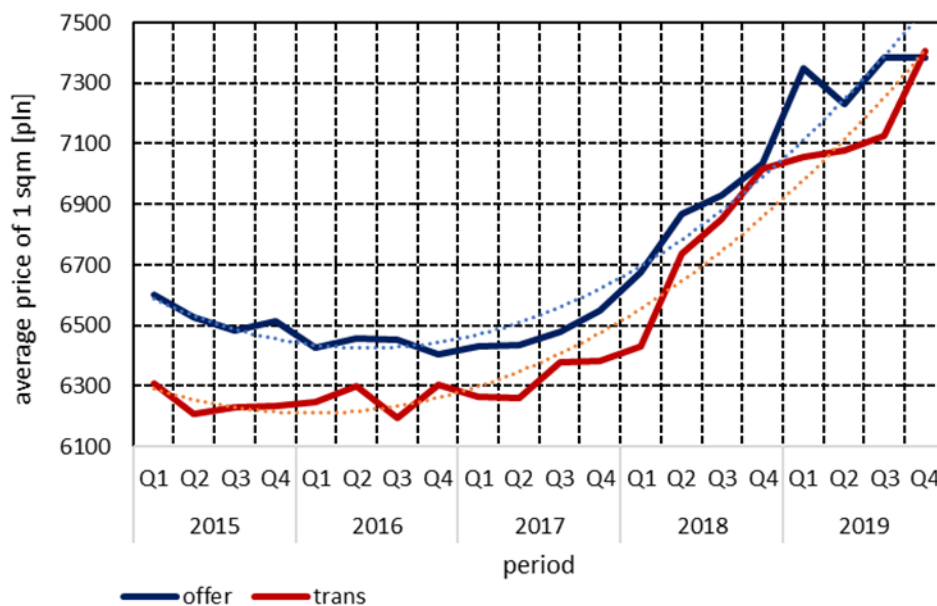


Figure 1. Average asking and transaction prices per one square metre of housing in Poznań primary market, 2015-2019 (quarterly data)

Source: National Bank of Poland (NBP), www.nbp.pl.

These pricing changes were the result of a relatively strong housing demand, fuelled by bank loans and alternative funding sources (cash). This is reflected in data from the National Bank of Poland (NBP) which show a steady and uninterrupted growth in demand for mortgages since 2018 (*Sytuacja na ...*, 2019, p. 5). To quote from the report on the credit market situation: "(...) According to the institutions surveyed, the major drivers of an increasing demand were credit market situation forecasts (53%, net), improvements in households' economic situation (53%), and other factors outside the survey, such as improvements in national macroeconomic situation (98%) (...)." (*Sytuacja na ...*, 2019, p. 9).

Given these developments, it seems interesting to take a look at the local housing market from the point of view the buyers' preferences. The questions to be asked are as follows:

- Who are the clients that want to purchase new dwelling units?

- What are the housing buyers' main preferences in 2019 and what is own contribution in the budget for the purchase of an apartment?
- Are there any differences between the buyers' stated preferences and what property developers can offer them?
- Are there any preference corrections given the rises in housing prices?

RESEARCH METHODOLOGY

To try and answer these questions, we have used data from two studies (see: Tab. 2 for key information about them). The purpose of the first one was to characterise clients with an interest in purchasing new dwellings and to determine their main housing preferences. In this study, we used questionnaires to collect information from housing trade show participants who were actively looking to buy housing (and who confirmed this before being interviewed)⁵. The second study sought to determine the structure of the housing offered and it involved collecting information about dwelling offered for sale by local property developers⁶.

Table 2. Surveys of apartment buyers' preferences and available housing, Poznań primary market, basic information

Description	Study 1 – Structure of housing preferences	Study 2 – Available housing on offer
Scope of study	<ul style="list-style-type: none"> • Study subjects – persons stating their interest in buying a dwelling • Study area – client preferences, deciding factors when choosing a dwelling 	<ul style="list-style-type: none"> • Study subjects – property developers • Study area – available housing on offer (available dwelling units for sale)
Area covered	City of Poznań (administrative boundaries)	
Data collection timeframe ⁷	Q1 2019	Q3 2020
Sampling and sample size	non-random, purposive, n=268 units	non-random, purposive, n=4,514 dwelling units
Purpose of study	To determine a structure of housing preferences in a local market as an	To determine a structure of available housing in a local

⁵ Research material was provided by Home Data Flow Sp. z o.o. which organised and conducted the interviews during housing trade shows (*Targi Mieszkań i Domów*, 2-3 March 2019).

⁶ The Q3 2020 data from the *rynekpiertwotny.pl* website which publishes information about property developers, their development projects and the housing they offer for sale.

⁷ In our opinion of Authors, the break between research of preferences and housing offer, that lasts less than 1,5 years, does not affect the results. The supply on the real estate market is rather inflexible (because of real estate building and investment proces – average time about 1,5 years). Moreover it can be supposed, even if the break would be important, the offer should be more adequate to preferences (from the point of view of rationality of developers and more effective selling process).

	element of market demand; to determine client characteristics	market as an element of market supply
Data collection tool	A direct interview questionnaire with questions regarding client characteristics, dwelling parameters and factors which clients find essential when buying a dwelling	A spreadsheet-based form

Source: own work.

In the first study, we surveyed 268 respondents using a direct interview questionnaire with questions regarding client characteristics, dwelling parameters of interest to clients, and the factors which clients find to be of utmost importance when choosing and buying a dwelling unit. Regarding our second study, we collected data for 79 Poznań-based development projects. Based on them, we were able to determine the structure of the available housing on offer, including such features as the number of rooms per dwelling unit, unit area (size), or the price per one sqm of dwelling. We have presented the results using measures of descriptive statistics (average, median, minimum value, maximum value) and structure analysis (by feature).

RESULTS & DISCUSSION

We have analysed interviews with the respondents who said they were willing to buy an apartment. Our conclusions are as follows:

- The buyer's average age is 32, with a median at 30 years of age. Structured by age, 53% of the respondents were 30 years old or less, 32% were between 31 and 40 years of age, and the remainder was over 40 years of age.
- Women predominated over men (60% to 40%), with female respondents showing more willingness to answer the questions in the questionnaire.
- The vast majority of housing seekers were in formal or informal relationships (78%), with 20% declaring they had one child, 16% saying they had two children, and 4% having three or more children.
- The majority of respondents were from Poznań (78%).
- Most respondents had their own dwelling, living on their own or with someone (60%), with 40% of the respondents renting their place.
- Prior to purchase, the respondents' dwelling units had 55 square meters on average, with a median at 45 square metres.
- The main reason for purchase was to satisfy one's own housing needs (88%), with 12% of the respondents citing an investment purpose

(importantly, we have consulted the results with property developers and can say that investor-clients visit housing fairs much less frequently).

- The average planned purchase budget is PLN 400,000, with PLN 413,000 for those who want to buy a dwelling for themselves, and PLN 294,000 for those who want to make an investment.
- The average share of own contribution in the budget for the purchase of an apartment is at the level of 31%.

Other results of our research (housing preferences by dwelling feature) are shown in Figures 2 and 3.

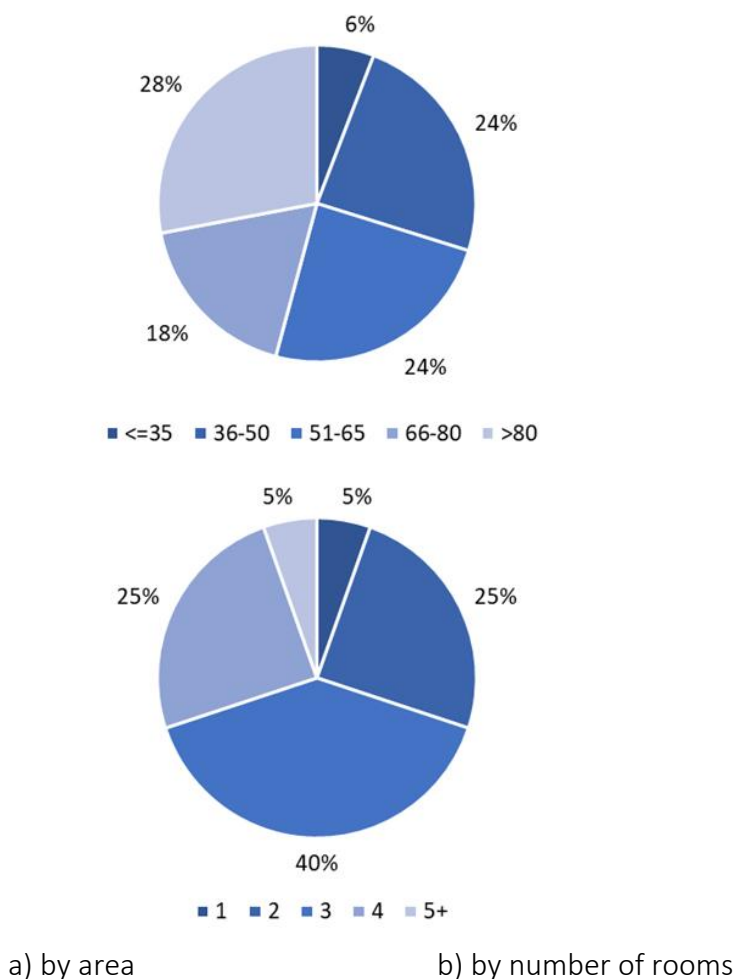


Figure 2. 2019 apartment buyers' housing preferences in terms of dwelling size and number of rooms

Source: own compilation.

Regarding the dwelling size, most respondents (28%) said their preference would for a unit of more than 80 sqm in size. About one in every four respondents intended to buy a dwelling ranging from 36 to 50 or from 51 to 60 square metres in size (24%). The smallest units, of 35 sqm or less in size, were relatively the least popular (6%) (Fig. 2a). Accordingly, the average preferred dwelling size was 71 sqm.

Figure 2b shows the preferred number of rooms per unit. As is seen there, the majority preferred to buy a three-room dwelling (40%). The shares of two- and four-room units were quite large, too, both at 25%. 5% of the respondents were interested in studio flats, or one-room apartments; the same was true of units with the largest number of rooms.

Further, our research shows that purchasing a unit in an apartment block was the most frequent purchasing preference (65%), followed by one in a terraced house (16%), and a single family house (14%). It should be added that, contrary to common opinions, only a small group of respondents said they wanted to live in a tenement house (3%). To a degree, these stated intentions are associated with a chosen dwelling location. Based on their answers, most respondents sought a dwelling in Poznań (68%), although as many as 32% of them said they would like to live outside the city. It is worth adding, too, that while stating their preferred areas of the city or its neighbouring locations, the respondents also added that the choice of location might change should they find a good price offer elsewhere.⁸

The results above show one other thing that is worth noting, namely the quite significant differences in preferences depending on a dwelling location. For those willing to buy a dwelling unit in the city, the average expected dwelling size was 67.2 sqm, with three rooms, while those looking for a place outside the city expected a four-room dwelling with 89.6 sqm in size.

With information about the planned budget at hand, one can also determine the expected price level for one square metre of dwelling area. That level will depend on the chosen location: those willing to buy a unit in Poznań expected the per square metre price to be about PLN 6,600; those seeking an out-of-city location expected it to be PLN 4,800. One should add that, with the Poznań figure, there is a 10% difference between what property developers offer and what their clients expect; for the outskirts

⁸ The relevance of price was also confirmed when respondents were asked to choose between a cheaper dwelling outside the city centre and one that was relatively expensive but was located in the central part of the city, with 58% of them choosing the former option.

locations, the price the buyers expect matches that offered by property developers.

Some other notable aspects of housing choices involve the comfort of living⁹. The most important of them are presented in Table 3.

Table 3. Poznań primary housing market: preferences relating to dwellings, buildings and residential areas

Description	yes	indifferent	no
Balcony/terrace	95%	4%	1%
Lift in the building	73%	20%	7%
Housing estate with commercial facilities	73%	18%	9%
Housing estate with playgrounds	71%	18%	11%
Low-rise building (no more than 4 storeys)	63%	25%	12%
Gated community	44%	31%	25%
Bathroom with a toilet	44%	30%	26%
Kitchen as a separate room	42%	17%	41%
Small common areas	37%	36%	27%

Source: own compilation.

Relatively, the buyers set the greatest store by the following amenities: a balcony or terrace (95%), a lift in the building (73%), commercial facilities on the estate (73%), playgrounds on the estate (71%) and the building height (63%). Answers regarding the other elements in Table 3 above were more varied. For instance, regarding fenced housing estates, while 44% of those surveyed said they would like to live in a gated (walled) community, as many as one fourth of respondents expressed a different opinion, with 31% saying they were indifferent about it. While 42% of the respondents said it was important to them to have a separate kitchen, the same percentage were in favour of a kitchen and living room combo.

⁹ In the questionnaire, apart from identifying their expected dwelling parameters, the respondents could also indicate elements (amenities increasing the comfort of living) they would prefer to see in a dwelling, building or housing estate, saying whether they are important to them (if so, they answered in the positive). Importantly, before giving their answers, the respondents were made aware that, if selected, some amenities might affect the ultimate, total price of their dwelling.

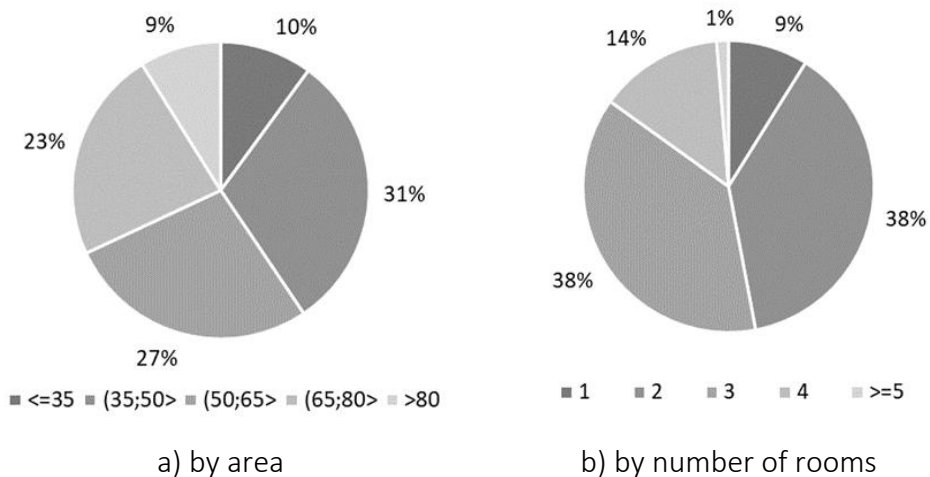


Figure 3. Structure of the housing offered locally in 2020 by area and number of rooms

Source: own compilation.

As regards the housing on offer, our conclusions are as follows:

- In terms of sales, the largest percentage is made up of dwelling units with sizes ranging from 35 to 50 sqm (31%), followed by those between 51 and 65 sqm in size (27%). The largest-sized dwellings account for one tenth of what is offered, as do the smallest dwellings.
- At 76% of all units, two- and three-room dwellings are predominant. Dwellings with five or more rooms are a negligible part of what is on offer (see Fig. 3).
- Most dwellings on offer are between the ground and fourth floors (77%), reflecting the low-rise nature of these local projects.
- Most dwellings on offer have the square metre price of between PLN 7,000 and PLN 8,000 (37%); the relatively cheaper dwellings make up 31% of what is offered, and the remainder are the more expensive units.

These findings assume greater significance when:

- a) the buyers' preferences and expectations are adjusted for the actual market prices for dwellings;
- b) the buyers' adjusted preferences are compared with what property developers can offer.

The respondents' preferences were adjusted based on their purchasing power – that is, their stated purchase budgets and the average

market-observable asking price for one sqm of dwelling area (PLN 7,500)¹⁰. The transaction price was not taken into consideration given the unwillingness on the part of property developers to cut their prices in the current market situation (high demand), as mentioned above. This pricing adjustment has led to adjusted housing preferences, with the average dwelling area now at 53 sqm, down by 18 sqm against the stated preference, but closer to the value of the average completed dwelling from property developers (54 sqm).

This is illustrated in a figure below comparing the stated preferences for dwelling sizes with such preferences as adjusted by market prices and what property developers have on offer.

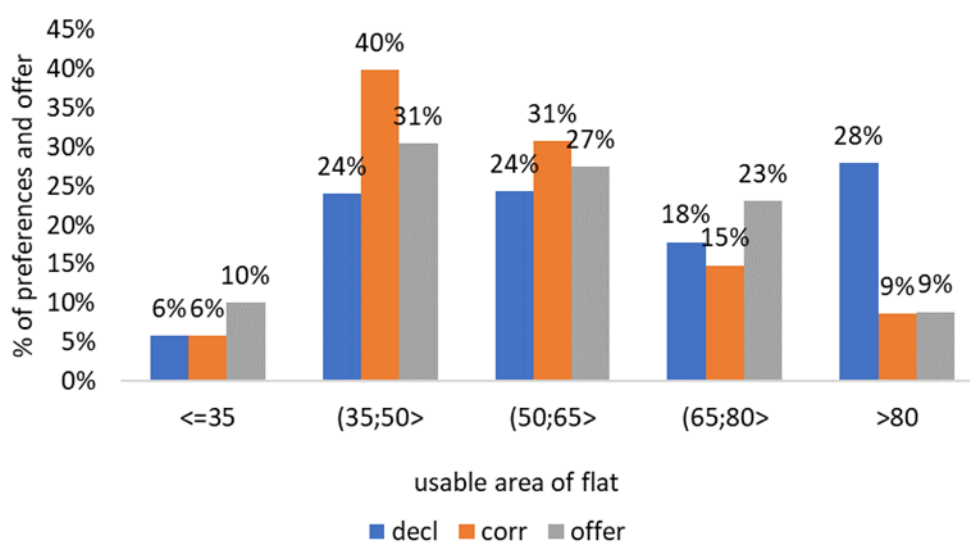


Figure 4. Preferences for dwelling sizes as stated vs. as adjusted by market prices and property developers' offering. A comparison

Source: own compilation.

Looking at the comparison above of the stated vs. adjusted preferences for dwelling sizes (Fig. 4), the conclusions are as follows:

- In terms of their stated preferences, quite a large percentage of the buyers are interested in relatively large dwellings, between 65 and 80 sqm or above 80 sqm (18% and 28%, respectively). In terms of market price-adjusted preferences, the majority focuses on units from 35 to 50 sqm and from 51 to 65 sqm in size (40% and 31%, respectively).

¹⁰ The assumed price of PLN 7.5 thousand PLN - this is a level close to the average price of 1 sqm of residential space, published by the National Bank of Poland for the second quarter of 2020 (offer price - PLN 7.7 thousand, transaction price - PLN 7.4 thousand).

This means that a large portion of clients who were interested in buying relatively large dwellings had to (or will be forced to) adjust their preferences and opt for smaller units.

- What property developers have on offer does not fully match what their clients prefer, although the mismatch is lower for the adjusted preferences than for the stated ones.

The conclusions prompt further reflection. One could assume that if the buyer's needs and expectations are so far removed from their ability to satisfy them in Poznań, including in terms of available funds, then some of them will naturally leave the city in search of cheaper, and larger, housing outside of it (accordingly, one should expect further population outflows from Poznań and greater activity in the primary suburban market). On the other hand, those wishing for whatever reasons to stay in the city will have to trim their housing expectations. The question remains open as whether a smaller place will actually satisfy their needs?

CONCLUSION

The purpose of this article was to present the local housing market situation in Poznań over 2015-2019, (2) characterise the buyers of dwelling units in that market, and (3) describe the housing buyers' preferences and compare the buyers' expectations with what the property developers could offer them. Based on our research, we were able to determine some basic characteristics of housing buyers. They can be said (based on our respondents) to include mostly young people under 30 years of age who are only planning further developments for their households (similar results were obtained by Głuszak (2008, p. 30)). We have also determined the main (stated) housing preferences, including what the buyers believe are elements that improve their comfort of living. We have also found that buyers look for relatively large-sized dwellings but expect them to be priced lower than as offered by property developers¹¹.

The respondents' preferences were adjusted based on their purchasing power – that is, their stated purchase budgets and the average market-observable asking price for one sqm of dwelling area, leading to an adjustment in their housing preferences, with the average expected dwelling area closer to the value of the average completed dwelling from property developers (54 sqm). One could also argue that a large portion of clients who

¹¹ From among the respondents, only 12% indicated that they had a budget for the purchase of a flat for over PLN 500,000 PLN (a similar result was obtained by M. Głuszak in Kraków – see: (Głuszak, 2013, p. 14)).

were interested in buying relatively large dwellings had to (or will be forced to) adjust their preferences and opt for smaller units. Also, what property developers have on offer does not fully match what their clients prefer, although the mismatch is lower for the adjusted preferences than for the stated ones (differences between the declared preferences and the offer were also observed in 2013 – see: (Mazurczak & Strączkowski, 2014)).

This begs the question of where those differences could originate from and what consequences they might have for the market and for investors/property developers. The mismatches are likely to originate from low affordability of housing. Growing wages compensate for the increase in housing prices only to a small extent (compare the housing affordability indicator – Tab. 1.). Also, larger dwellings are characterised by much worse affordability indicators, leaving a prospective buyer no choice but to look for a smaller unit with fewer rooms (with demand shifting towards small dwellings).

The other explanation for this state of affairs might be investors having insufficient insight into their clients' needs. Property developers might be lacking information about what their clients prefer, and especially about their ability to fund their housing purchases.

Mismatches between what the market offers and what buyers expect can have serious consequences. For clients, this could mean they will be limited in their ability to satisfy their actual housing needs, including the discomfort of living in a smaller dwelling, clients drifting away to the suburban market offering with its more affordable prices. For property developers, this could mean selling problems going forward (such as client unwillingness to buy too expensive and too small dwellings, a prolonged exposure time for dwellings, or being forced into price cuts).

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