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## BUYERS AT THE HOUSING MARKET OF POZNAN

*The article provides an attempt to specify the characteristics and preferences of buyers at the housing market in Poznan. In order to accomplish the research objective, the information on transactions at the primary and secondary housing markets in the period between 2010 and 2011 was used. This research refers only to the dwellings located in multifamily buildings. The reason for such a choice is the fact that the majority of dwellings are located in multi-family residential (dwelling blocks – up to 90% in big Polish cities). The analysis refers only to the largest groups of buyers (women, men and married couples – 91% of the transactions in the period under study were completed by the representatives of these groups). In the research, 5,037 transactions were used.*

*Keywords: housing market, dwellings, buyers, Poznan.*

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## ПОКУПЦІ НА РИНКУ ЖИТЛА НА ПРИКЛАДІ м. ПОЗНАНЬ (ПОЛЬЩА)

*У статті зроблено спробу виділити характеристики і вподобання покупців на ринку житла в м. Познань. Для цього були зібрані дані про угоди на первинному і вторинному ринках житла в період між 2010 і 2011 роками. Для аналізу використовувалися тільки дані по квартирах у багатоквартирних будинках, оскільки в Польщі у великих містах вони складають до 90% житлової нерухомості. Аналіз відноситься тільки до найбільших груп покупців (жінки, чоловіки і подружні пари – ці категорії покупців здійснили 91% угод у розглянутій період), використані дані по 5037 операціях.*

*Ключові слова: житловий ринок, житло, покупці, Познань.*

*Рис. 10. Табл. 2. Літ. 10.*

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## ПОКУПАТЕЛИ НА РЫНКЕ ЖИЛЬЯ НА ПРИМЕРЕ г. ПОЗНАНЬ (ПОЛЬЩА)

*В статье сделана попытка выделить характеристики и предпочтения покупателей на рынке жилья в г. Познань. Для этого были собраны данные о сделках на первичном и вторичном рынках жилья в период 2010 и 2011 годами. Для анализа использовались только данные по квартирам в многоквартирных домах, поскольку в Польше в крупных городах они составляют до 90% жилой недвижимости. Анализ относится только к крупнейшим группам покупателей (женщины, мужчины и супружеские пары – эти категории покупателей совершили 91% сделок в рассматриваемый период), использованы данные по 5037 сделкам.*

*Ключевые слова: жилищный рынок, жилье, покупатели, Познань.*

### Introduction

A demand concept is defined as the quantity of a good that consumers desire and are able to buy at a given time and at a given price. It is a set of values determined by the relationship between the price of a given good and its quantity (Lubinski 2002). The desire for purchase also means the effective possibility, i.e. having the sufficient income. With regards to the housing market, the size of demand is determined by economic, demographic or legal factors (Kucharska-Stasiak, 2006; Trojanek, 2010, 2011; Palicki, 2012; Tanas, 2012). The literature of the subject indicates the follow-

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ing sociodemographic factors which affect the demand for real estate: the size of the population in the age between 25 and 35, the number of marriages and divorces, the number of people living on their own etc. (Gawron, 2006; Straczkowski, 2010). In the research, the attempt to describe the housing preferences of the particular groups of buyers using the example of Poznan in the years 2010–2011 was made.

#### Demographic and dwelling stock situation of Poznan city

At the end of 2010 Poznan encountered for 551.6 thousand of inhabitants. Since 2005 the decrease of the city's population has been brought about both negative natural increase and negative migration balance. Negative migration balance resulted from an increase of territorial movements, mainly to neighbouring districts. At the end of 2010 Poznan had 551.6 thousand of inhabitants. Within one year, however, this amount decreased of around 3000 of people. Similarly to previous periods predominance of women in Poznan was observed in 2010. Women's share in total number of population was 53.4% in Poznan; the rate of feminisation (number of women for 100 men) amounted 115.

At the end of 2010 the dwelling stock in Poznan made up 234.8 thousand of dwellings consisting of 812 thousand of rooms. Total usable floor space of all dwellings amounted to 15 mln m<sup>2</sup>. Table 1 shows the dwelling stock in Poznan in 2004–2010.

Table 1. Dwelling stock in Poznan during 2004–2010, m<sup>2</sup>

	2004	2005	2006	2007	2008	2009	2010
Number of dwellings (in thousands)	218602	221689	224322	228158	231380	234806	237586
Number of rooms (in thousands)	759933	769960	778512	790756	801390	812274	821286
Usable floor space (in millions)	13,82	14,07	14,26	14,56	14,85	15,09	15,29
Average usable floor space of one dwelling	63,21	63,46	63,59	63,83	64,19	64,26	64,35
Number of dwellings per 1000 inhabitants	382,99	390,38	397,06	406,75	415,21	423,67	429,19
Average usable floor space of one dwelling per person	24,21	24,77	25,25	25,96	26,65	27,22	27,62

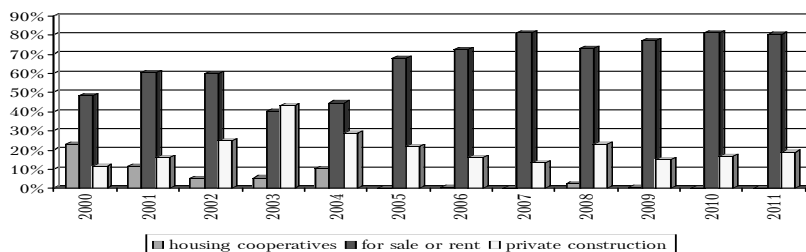
Source: own research based on the data of the Central Statistical Office.

In 2004–2010 the number of dwellings in Poznan increased by more than 19 thousand and usable floor space by around 1.47 mln m<sup>2</sup>. The average dwelling space of one dwelling as well as the average usable floor space of one dwelling per person increased at that time. This situation is caused by not only an increase of dwellings' quantity but also by the decrease of population.

Between 2000–2011 in Poznan 36747 dwellings were completed (average 3062 dwellings per year). Figure 1 presents the number of dwellings completed in Poznan in 2000–2011.

Analysis of Figure 1 shows the changes in the structure of dwellings completed by the construction forms in 2000–2011. In 1995–1998 the majority of dwellings were constructed by co-operatives while in 2005 the share of co-operatives in housing construction decreased practically to zero. This explicit decrease of co-operatives' share in housing resulted from an abandon of further cheap construction credits. Starting from 2006 dwellings for sale or for rent were the main form of housing construction in Poznan. The number of dwellings completed by private construction was the biggest in 2003. It is worth to point out that an increase of dwellings completed by individual investors this year resulted from fear of new required controls after completion of con-

struction works, so they reported construction works as ready before new regulation came into being. The other popular form was not to register construction works as ready because individual investors could make use of tax deduction. That is why we could observe a decrease of number of dwellings completed after 2003.



Source: own research based on the data of the Central Statistical Office

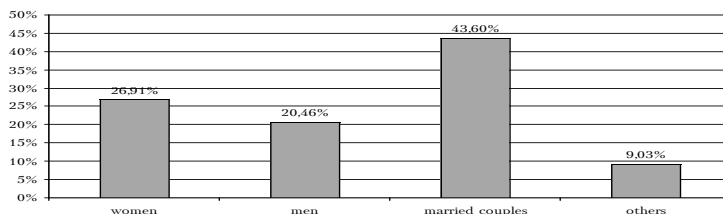
Figure 1. Dwellings completed by forms of construction in Poznan in 2000–2010

**Research methodology and the data sources**

In Poland, most studies on the characteristics of buyers and their preferences regarding the housing market are of the qualitative nature. Questionnaire surveys, usually the targeted ones, are conducted. Their aim is to outline the profile of the potential buyer. In this research, the quantitative methods for specifying the revealed preferences was used. To this end, the information on over 5,000 transactions completed in the primary market (1,648 transactions) and in the secondary market (3,389) in Poznan in 2010–2011 was gathered. In the period under study, there were no significant changes in the prices of flats in Poznan (Trojanek, 2012); hence, the prices were left without changes. Then, using the information obtained from land registers (section II – ownership and section IV – mortgage), the buyers' sex and age, as well as the method of financing the purchase of a property was specified.

**Results**

First, a structure of buyers in the primary and secondary housing market in Poznan in 2010–2011 was developed (Figure 2).

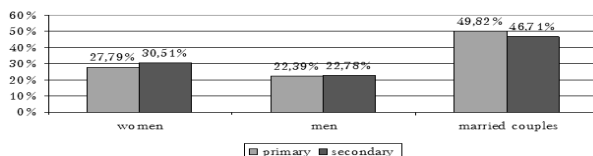


Source: The author's research.

Figure 2. The structure of buyers in the primary and secondary housing markets in Poznan in 2010–2011

In the period under study, it was married couples that bought the biggest number of flats (43.60%). Women purchased 26.91% of the flats, while the purchases made by men accounted for 20.46% of the total<sup>2</sup>. Only the largest groups of buyers were analysed (women, men and married couples – 91% of the transactions in the period

under study were completed by the representatives of these groups). The structure of buyers was similar for both the primary market and the secondary one, which is illustrated in Figure 3.



Source: The author's research.

**Figure 3. The structure of buyers in the primary and secondary housing market in Poznan in 2010–2011**

In Table 2, the average transaction price and the average floor space of a purchased flat have been shown.

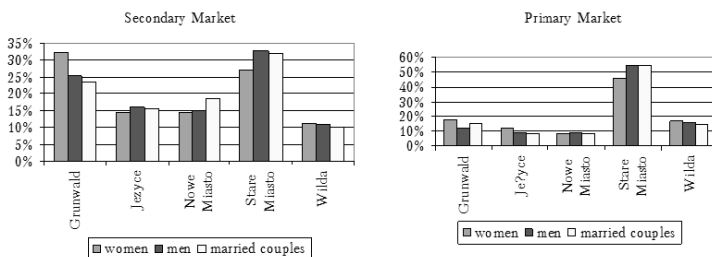
**Table 2. The average transaction price and the average floor space of a flat purchased in Poznan in the period between 2010 and the 3<sup>rd</sup> quarter of 2011**

	Primary market		Secondary market	
	Average price (zlotys)	Average floor space (m <sup>2</sup> )	Average price (zlotys)	Average floor space (m <sup>2</sup> )
Women	302 460.62	51.17	252 020.18	48.42
Men	310 671.55	51.85	276 478.73	52.98
Married couples	322 936.79	54.99	281 424.27	55.29

Source: The author's research.

It was married couples that spent the biggest amounts of money on buying a flat both in the primary and secondary markets. This may result from the fact that they also purchased the largest flats on average (about 55 m<sup>2</sup>). When compared to men, women spent less on average, but they bought relatively smaller flats.

The purchasing power of consumers in the housing market is first of all determined by the availability of mortgage loans. In the period under study, approximately 65% of purchased flats were financed by loan capital<sup>3</sup> (65.5% in the primary market and 64% in the secondary market). Figure 4 presents the percentage of flats bought by the groups under study in the districts of Poznan in the primary and secondary market in 2010–2011.



Source: The author's research.

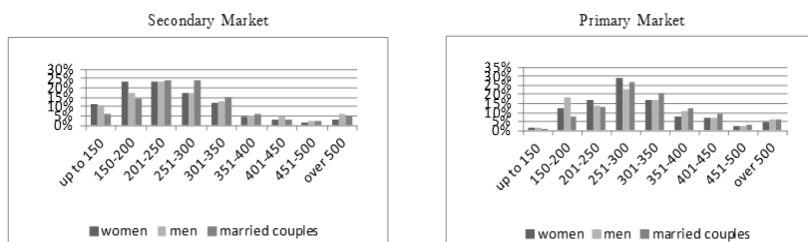
**Figure 4. The percentage of flats bought by the groups under study in the districts of Poznan in the primary and secondary markets in the years 2010–2011**

<sup>2</sup> The group of buyers referred to as "others" includes purchases of flats by two or more women, men or married couples.

<sup>3</sup> Strictly speaking, about 65% of flats were mortgaged.

The data presented in Figure 4 may indicate the preferences of the particular groups of buyers as regards the districts of Poznan. Both in the primary market and in the secondary one, women preferred buying flats in the district of Grunwald, while being more reluctant to purchase flats in Stare Miasto than the other groups of buyers (over 30% of the flats bought by women in the secondary market and about 20% of the ones they bought in the primary market were located in Grunwald). In the case of the districts of Jezyce, Nowe Miasto and Wilda, the distribution of transactions in the analysed markets was similar for all groups.

Figure 5 presents the distribution of the flats prices bought by the analysed groups of buyers.

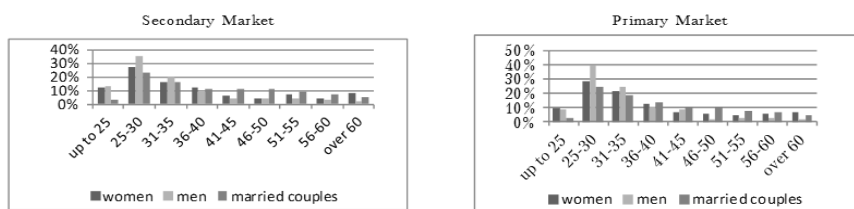


Source: The author's research.

Figure 5. The distribution of the prices (in thousands zlotys) of flats bought by the analysed social groups in Poznan in 2010–2011

The above diagrams show unequal distribution of the flats prices purchased in the secondary and primary markets in Poznan in 2010–2011. In the secondary market, about 60% of the flats were bought at a price ranging from 150,000 zlotys to 300,000 zlotys. This price range included 65% of the flats bought by women, 59% of the ones purchased by men, and 63% of those bought by married couples. In the case of the primary market, 60% of the flats were purchased at a price ranging from 201,000 zlotys to 350,000 zlotys.

Figure 6 presents the distribution of the buyers' age in the particular social groups in Poznan in 2010–2011 (in the case of married couples, the "average age of a couple" measured as the arithmetic average of the age of a husband and a wife).

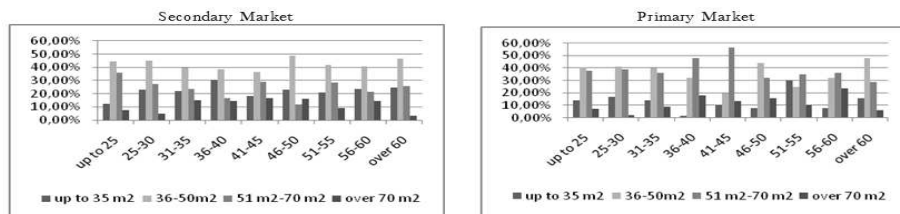


Source: The author's research.

Figure 6. The distribution of the buyers' age in the particular social groups in Poznan in the period between 2010 and 2011

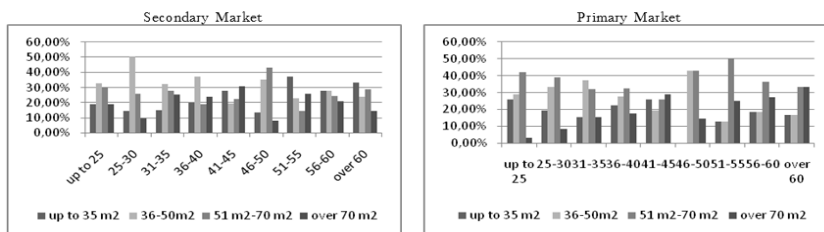
The above diagrams indicate that people in the age of 25–35 constituted the largest group of flat buyers both in the primary and secondary market. Within this group, men were the most active buyers. Flats bought by men in the age of 25–35 accounted for 65% of the flats bought by men in the primary market and 56% in the

secondary one. The percentage of men and women buying flats in the age of up to 25 was more or less equal and amounted to a bit above 10% for both genders. Up to the age of 35, men bought flats more frequently than women; in older age groups this proportion was reversed. In the case of married couples, despite an artificial measure – the average age of a couple – it may be noticed that couples in the average age of 25–35 purchased the biggest number of flats, while in older age groups this number remained at a steady level and accounted for 10% of all flats purchased by this group of buyers. Figures 7, 8 and 9 show the structure of purchased flats with regard to the floor space and the age of buyers in the period under study in Poznan.



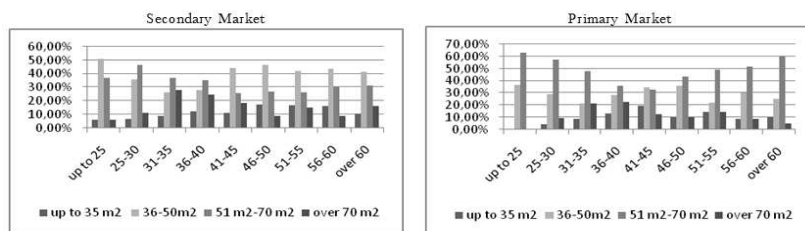
Source: The author's research.

Figure 7. The floor space of purchased flats based on the age of buyers – women



Source: The author's research.

Figure 8. The floor space of purchased flats based on the age of buyers – men



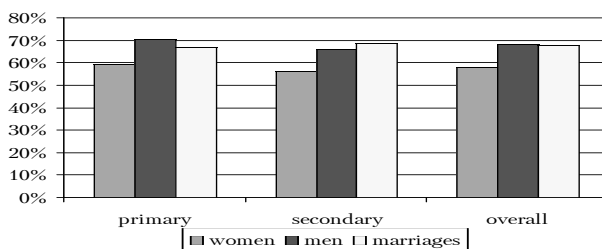
Source: The author's research.

Figure 9. The floor space of purchased flats based on the age of buyers – married couples

The analysis of diagrams 7, 8 and 9 provides valuable information about the size of flats bought by particular groups. In the secondary market, women in all age groups usually purchased flats with the floor space ranging from 36 m<sup>2</sup> to 50 m<sup>2</sup>. In the case of the primary market, they tended to buy bigger flats – from 51 m<sup>2</sup> to 70 m<sup>2</sup>. Men followed the similar purchasing pattern, with a tendency to buy larger flats in the primary market. Among married couples, small flats (of up to 35 m<sup>2</sup>) were the least

attractive for buyers. Couples usually chose flats with the floor space ranging from 36 m<sup>2</sup> to 50 m<sup>2</sup> in the secondary market and from 51 m<sup>2</sup> to 70 m<sup>2</sup> in the primary market.

What is interesting from the perspective of the analysis of buyers' preferences in the secondary and primary market is a method of financing a purchase. Figure 10 presents the percentage of flats bought with mortgage loans by the particular groups of buyers in 2010–2011.



Source: The author's research.

**Figure 10. The percentage of flats bought with mortgage loans by the particular groups of buyers in 2010–2011**

The above research that mainly married couples and men took out mortgage loans. In both of these groups, about 68% of flats were purchased with the use of loan capital. Women were less willing to buy flats on credit (about 58%).

**Conclusions**

The aim of this paper was to identify the selected characteristics and preferences of buyers in the primary and secondary housing markets in Poznan. The analysis that we conducted let us conclude that in 2010–2011 in the secondary market in Poznan:

- married couples bought the biggest number of flats (about 44%), followed by women (about 27%), and men (21%);
- married couples bought the largest flats (the average floor space of about 55 m<sup>2</sup>), followed by men (53 m<sup>2</sup>), and women (about 49 m<sup>2</sup>);
- in the period under study in Poznan, married couples and men showed the highest tendency to take out mortgage loans. In the case of both groups, about 68% of flats were bought using loan capital;
- flats in the price range from 201,000 zlotys to 300,000 zlotys were among the most frequently bought ones. About 42% of flats bought by women, 40% of the ones bought by men, and 45% of those purchased by married couples were included in this range;
- people in the age from 25 to 35 bought the biggest number of flats;
- in the period under study, women, in almost all age groups (the only exception being the age group of 41–45) usually bought flats with the floor space from 36 m<sup>2</sup> to 50 m<sup>2</sup>;
- married couples usually purchased flats with the floor space from 36 m<sup>2</sup> to 50 m<sup>2</sup> and from 51 m<sup>2</sup> to 70 m<sup>2</sup> (about 74% of the total number of flats bought by couples).

The obtained results may serve as the basis for further discussion on the demographic factors determining the demand in the housing market. They seem to reflect the ongoing processes of changes in lifestyle patterns, family models and economic determinants.

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