

AMRON-SARFiN Report

on housing loans
and real estate transaction prices

2 / 2018



ZWIĄZEK BANKÓW POLSKICH

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REPORT IN NUMBERS

PLN 403.684 billion

| total housing loans debt

change
Q2 2018 /Q1 2018

2.67%

2.193 million	number of active loan agreements	1.14%	
53 686	number of concluded agreements	2.67%	
PLN 13.741 billion	value of concluded agreements	6.40%	
PLN 255 405	average value of a housing loan	9.08%	
204.55 points	Housing Availability Index (HAI M3)	5.72 points	
41.61%	share of new housing loans with LtV above 80%	1.32 p.p.	
98.41%	share of new housing loans in PLN, by value	0.25 p.p.	
63.26%	share of new housing loans with lending period of 25-35 years	0.82 p.p.	
PLN 7 961	average transaction price per square meter of a dwelling in Warsaw	1.75%	
PLN 1 755	average monthly rent rate of a housing unit in Warsaw	4.34%	



THE VALUE OF NEW LOAN AGREEMENTS GRANTED IN Q2 2018 – IN THE AMOUNT OF ALMOST PLN 14 BILLION – WAS THE BEST QUARTERLY RESULT SINCE 2010.

dr Jacek Furga

*Chairman of the Real Estate Finance Committee, Polish Banks Association and President of the Management Board of Centre of Banking Law and Information (Centrum Prawa Bankowego i Informacji Sp. z o.o.)**

Dear Readers,

It's already the thirty-sixth issue of the AMRON Centre Report on housing loans and real estate transaction prices, published by the Polish Banks Association. Since November 2009, systematically every quarter we have provided you with an assessment of what was happening on the mortgage market, the residential investment market, how the transaction prices of dwellings were changing and, for two years, also the rent rates. In the current edition of the Report we present the results of the second quarter of 2018 with reference to the results from several previous quarters.

The housing market is heating up! In the first half of the year, the results of banks' lending activity were the best for 7 years – almost 109 thousand new housing loans were granted. The value of new loan agreements granted in Q2 2018 – in the amount of almost PLN 14 billion – was the best quarterly result since 2010. **The value of household debt in Poland due to granted housing loans for the first time exceeded the level of PLN 400 billion.**

The average value of newly granted housing loans in domestic currency amounted to PLN 255 861, which was more by PLN 22 250 (9.52%) comparing to the value recorded in Q1 2018. Increasing value of granted housing loans was favoured by good macroeconomic situation in Poland together with increase in housing prices and growing demand for larger dwellings.

On the primary market, a trial of strength between developers and investors in dwellings for rent was observed, which concerned dwellings prices. In Q2 2018 developers started construction of 35 631 dwellings, i.e. by 15.94% more comparing to the previous quarter. However, the number of dwellings completed and the number of construction permits issued were lower, respectively by 12.49% and 11.90%.

High demand on the residential market and growing costs of construction work and building materials led to increase in transaction prices in the largest Polish cities. In Q2 2018, a slight decrease in the average transaction price of 1 sq.m. of floor area was noted only in Białystok – by less than 1% in quarterly terms. In other locations, the quarter's increases at the level from 1.5% to 3% were observed.

As a decrease in supply of new investments in the largest cities was observed, caused by suspension of investment and construction processes, and – at the same time – demand on housing market remained at the high level, continuous increase of transaction prices can be expected, which would translate into increase in value of newly granted loans. The signals from developers indicate that those purchasers, who buy dwellings for their own needs usually take out a mortgage loan, while those, who invest in flats for rent usually pay with cash.

Still no news about the government's 'Flat Plus' Programme, although on June 21 this year, the 'Housing Dialogue Forum' conference organized by BGK Nieruchomości S.A. took place at the National Stadium. With an impressive number of over 400 participants and a full representation of the government, more than 20 debates on the most urgent problems in housing policy were held. Representatives of the Polish Banks Association participated in several of them. The organizers announced that within a year a Green Book will be prepared, based on conclusions from these debates. Meanwhile, the proposals of alternative solutions submitted once again by the Polish Banks Association did not meet with any interest from the government and the Council of Housing.

The results of the first half of the year once again confirm our forecast on the possible exceeding of **200 thousand housing loans for a total value of PLN 50 billion** in 2018.

Enjoy reading. Are you interested in AMRON detailed analyses of Polish real estate market, please do not hesitate to contact us. We will also appreciate your comments, which shall allow us to improve next issues of the Report. Please send your questions and suggestions to the following e-mail address: raport@amron.pl

dr. Jacek Furga

* AMRON Centre was established by Polish Banks Association to manage and develop the System for Analysis and Monitoring of Real Estate Market Transactions and it operates within the organizational structure of a limited-liability company Centre of Banking Law and Information.

ANALYSIS OF MARKET ENVIRONMENT

Polish housing market is still in the expansion phase. In Q2 2018, both demand and supply of residential properties were still at a high level, although a slight decline in developers' activity was noted. An increase in construction costs, including increase in prices of building plots and costs of materials and labour, caused difficulties in maintaining the level of margins and rates of return from housing projects. It enforced increases of housing prices on primary market, which reduced demand. The developers' sales results in Q2 2018 decreased for the first time in a few years, however, it was still close to historical record result. At the same time, very good results were noted on the housing loans market. According to the newest data, the number of new housing loans in Q2 2018, despite the minimal decline, was still at a high level, while the value of new loans increased. This meant that the average value of newly granted housing loans increased significantly, which resulted from higher housing prices.

The most important factors affecting the situation on real estate market and mortgage market in Q2 2018 were:

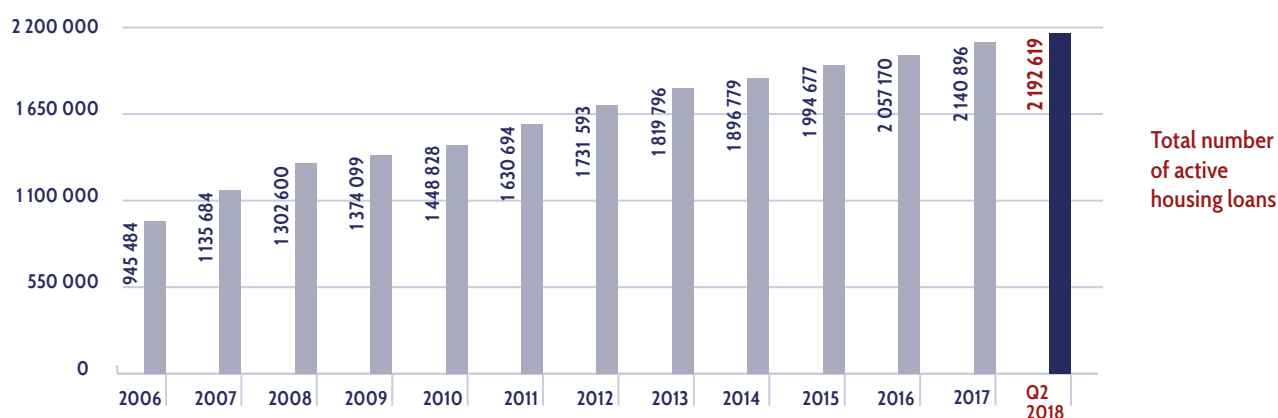
- no significant changes in the macroeconomic environment – relatively high economic growth, further improvement of the labour market situation, an increase in the salary level, low public finance deficit;
- low costs of servicing housing loans resulting from low inflation and interest rates (the NBP' reference rate was maintained at 1.5%);
- growing difficulties on the supply side on primary residential market, i.e. growing building plots prices and construction costs;
- increasing housing prices, which lowered the rent profitability and hampered demand;
- lack of the expected support for housing market under the 'Flat Plus' Programme.

SITUATION ON HOUSING LOANS MARKET

Active housing loans

The increase in active housing loan agreements registered in Q2 this year amounted to **1.14%**, which meant that total mortgage loans portfolio increased by **24 687** agreements in comparison

to the end of the previous quarter. At June 30, 2018, the housing loan portfolio increased to **2 192 619** agreements in comparison to **2 167 932** agreements noted in the end of the first quarter of this year.

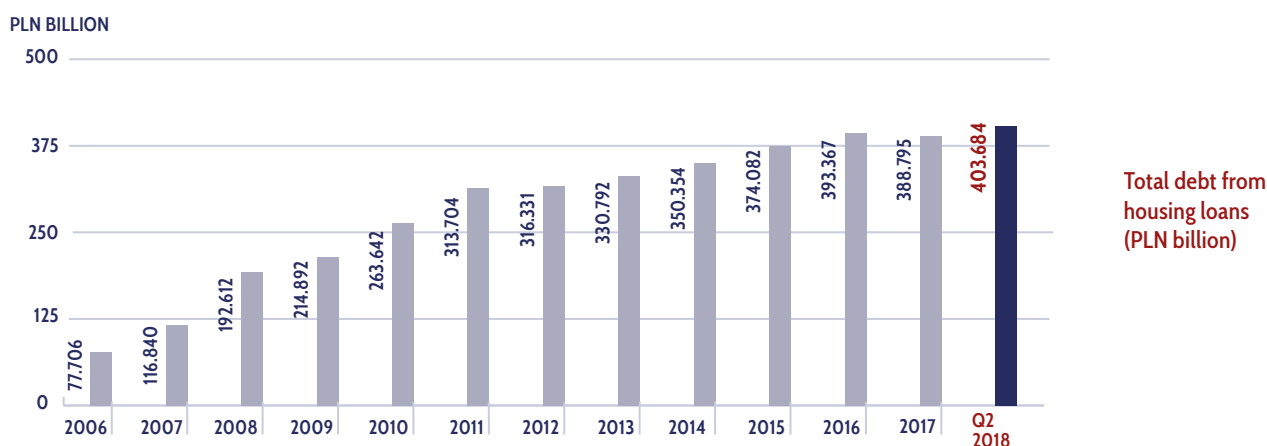


SOURCE: SARFIN

Total housing loans debt

At the end of Q2 2018, the total value of households debt in Poland due to granted housing loans for the first time exceeded **PLN 400 billion**. In the period from April to June this year, the value of active

housing loans increased by **2.67%** in comparison to March 31 this year, i.e. by **PLN 10.503 billion** nominally.



SOURCE: SARFIN

New housing loans

In Q2 2018, the number of newly granted housing loans was lower by **1 470** agreements, i.e. by **2.67%** in comparison to the previous quarter, but still it remained at a very high level. In analysed period, banks in Poland granted **53 686** new mortgage loans. Total value of loan agreements concluded in the period from April to June increased by **6.40%** (nominally by **PLN 826 million**) in relation to Q1 this year, which resulted in the best result from 2010 – **PLN 13.741 billion**. Thus, the difference between the change in number and value of new loans granted

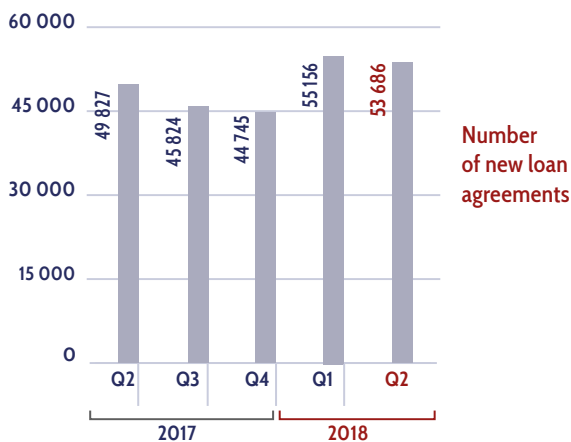
in Q2 2018 amounted to **9.06 p.p.** This meant that the average value of newly granted housing loans increased significantly, which resulted from growing average transaction price, resulted from either increase in housing prices or higher number of expensive apartments financed by mortgage loans.

In comparison to the same quarter of 2017, Q2 this year ended with a significant increase in both number and value of newly granted housing loans. The number of new mortgage loans increased by **7.74%** (i.e. by **3 859** units), while their value – by **17.59%** (nominally by **PLN 2.055 billion**).

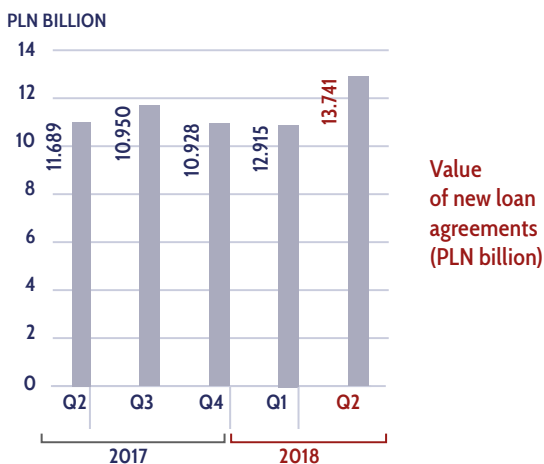
QUARTER	VALUE (PLN BILLION)	CHANGE/ previous quarter	NUMBER	CHANGE/ previous quarter
Q2 2017	11.686	6.14% ↗	49 827	0.82% ↘
Q3 2017	10.950	6.30% ↘	45 824	8.03% ↘
Q4 2017	10.928	0.21% ↘	44 745	2.35% ↘
Q1 2018	12.915	18.19% ↗	55 156	23.27% ↗
Q2 2018	13.741	6.40% ↗	53 686	2.67% ↘

Value and number of new housing loans

SOURCE: SARFIN



SOURCE: SARFIN



SOURCE: SARFIN

Loan currency

In analysed quarter, share of housing loans granted in domestic currency in value of all new mortgage loans diminished by **0.25 p.p.** in comparison to the previous quarter and amounted to **98.41%**. Loans denominated in EUR accounted for **1.10%** of the value of all new mortgage loans – their share increased by **0.20 p.p.** comparing to the result recorded in Q1 2018. Share of loans in CHF did not change and amounted to **0.01%** of the structure, while the share of loans in other foreign currencies accounted for **0.48%**, i.e. by **0.05 p.p.** more than in Q1 2018.

In relation to Q2 last year, a slight decrease in share of newly granted loans in PLN was recorded – by **0.39 p.p.** The percentage of loans denominated in CHF also decreased slightly – by only **0.04 p.p.** Share of loans granted in EUR increased by **0.34 p.p.** and loans in other foreign currencies – by **0.09 p.p.**

QUARTER	PLN	CHF	EUR	OTHER
Q2 2017	98.80%	0.05%	0.76%	0.39%
Q3 2017	99.29%	0.01%	0.50%	0.20%
Q4 2017	98.93%	0.01%	0.71%	0.35%
Q1 2018	98.66%	0.01%	0.90%	0.43%
Q2 2018	98.41%	0.01%	1.10%	0.48%

Currency structure of the value of new loans

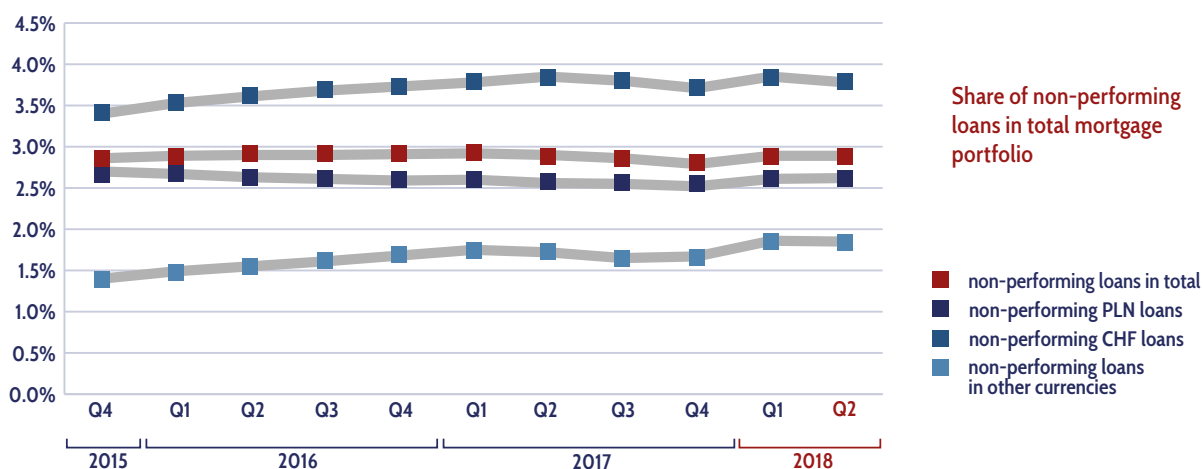
SOURCE: SARFIN

Quality structure of mortgage loans portfolio

In Q2 2018, share of non-performing loans in the total housing loan portfolio amounted to **2.89%**, i.e. as much as it amounted a quarter before. In the same period, PLN housing loans with default on payments accounted for **2.62%** of all PLN loans (by **0.01 p.p.** more than in Q1 2018), non-performing mortgage loans in CHF amounted to **3.78%** of the portfolio (less by **0.07 p.p.**) and non-performing loans in other currencies – **1.85%** (less by **0.01 p.p.**). The difference in the level of the portfolio quality

index is due to suspension of granting new foreign currency loans by banks, which is why the currency loans portfolio is aging faster. The PLN loans portfolio, on the other hand, has a steady inflow of new loans reported as performing.

In comparison to Q2 2017, the share of non-performing housing loans in total also did not change. The share of PLN loans with default on payments increased by **0.06 p.p.**, the share of non-performing loans in CHF decreased by **0.07 p.p.**, while the quality of housing loans in other foreign currencies got worse and the share increased by **0.13 p.p.**



SOURCE: NATIONAL BANK OF POLAND

PERIOD	NON-PERFORMING LOANS IN TOTAL	NON-PERFORMING PLN LOANS	NON-PERFORMING CHF LOANS	NON-PERFORMING LOANS IN OTHER CURRENCIES
Q2 2017	2.90%	2.56%	3.85%	1.72%
Q3 2017	2.86%	2.55%	3.80%	1.65%
Q4 2017	2.79%	2.52%	3.71%	1.67%
Q1 2018	2.89%	2.61%	3.85%	1.86%
Q2 2018*	2.89%	2.62%	3.78%	1.85%

Share of non-performing loans in total mortgage portfolio

SOURCE: NATIONAL BANK OF POLAND

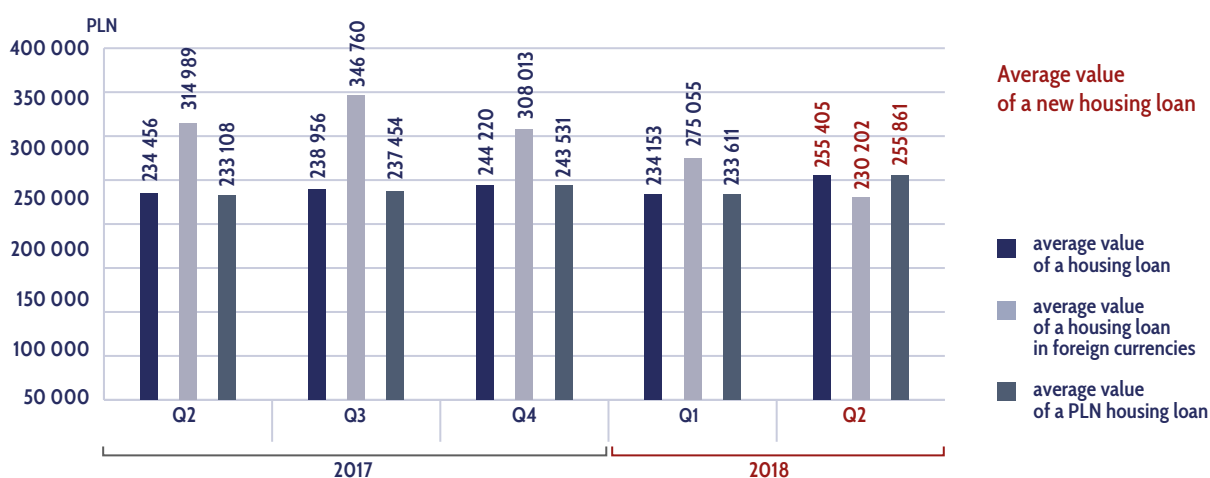
* as at the end of May 2018

From January 2018, the data has been presented in a new layout, resulting from the new international financial reporting standard (IFRS9).

Average value of a loan

The average value of a housing loan granted in Q2 2018 in total amounted to **PLN 255 405**, i.e. more by **PLN 21 252 (9.08%)** in comparison to the previous quarter. The average value of a loan denominated in foreign currency decreased by **PLN 44 853**, i.e. by **16.31%** and amounted to **PLN 230 202**, while the average value of newly granted housing loan in domestic currency amounted to **PLN 255 861**, which was more by **PLN 22 250 (9.52%)** comparing to the value recorded in Q1 2018.

In relation to the corresponding period of the last year, an increase in the average value of newly granted PLN housing loan was recorded (by **9.76%**, i.e. nominally by **PLN 22 754**) and a significant decrease in the average value of loan denominated in foreign currency (by **26.92%**, i.e. by **PLN 84 787**). In analysed quarter, the average value of newly granted housing loan in total increased by **8.89%** (**PLN 20 859**) comparing to Q2 2017.



SOURCE: SARFIN

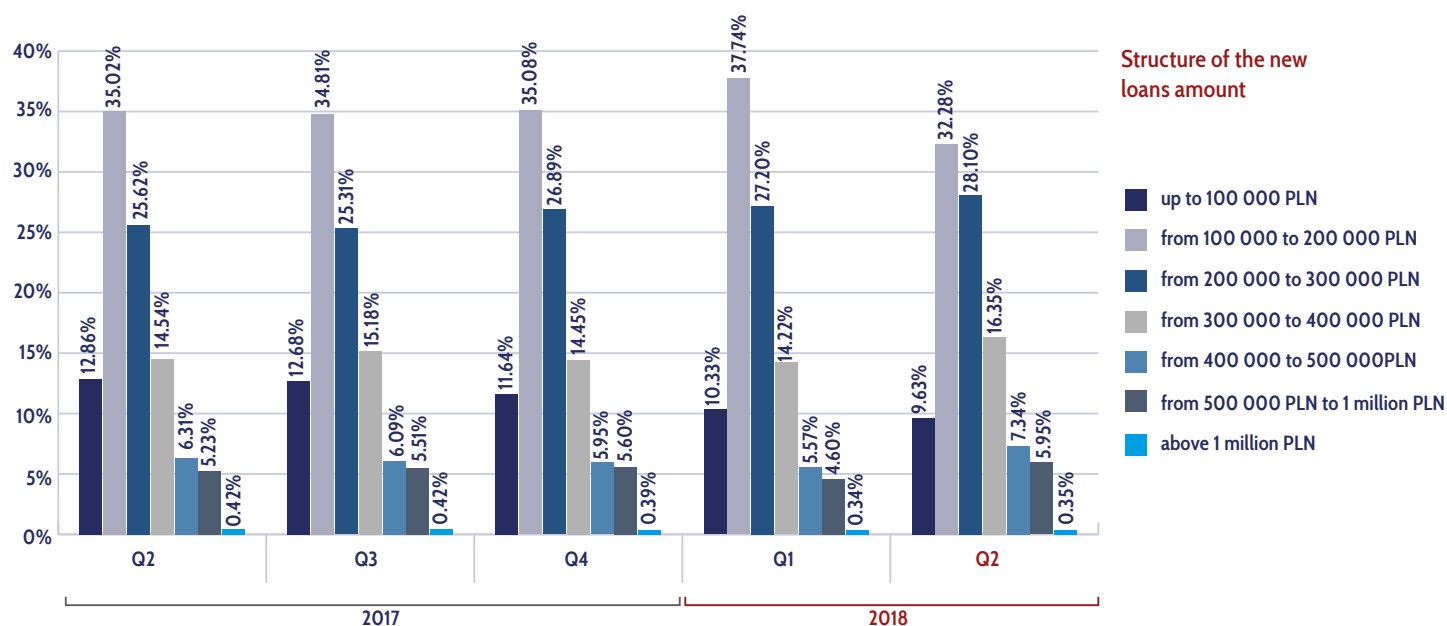
QUARTER	AVERAGE VALUE OF A HOUSING LOAN	AVERAGE VALUE OF A HOUSING LOAN IN FOREIGN CURRENCIES	AVERAGE VALUE OF A PLN HOUSING LOAN
Q2 2017	234 546	314 989	233 108
Q3 2017	238 956	346 760	237 454
Q4 2017	244 220	308 013	243 531
Q1 2018	234 153	275 055	233 611
Q2 2018	255 405	230 202	255 861

SOURCE: SARFIN

Structure of new loans, by amount

In Q2 2018, the share of the most popular loans in the amount ranging from PLN 100 to 200 thousand accounted for **32.28%** of all newly granted housing loans, which meant a decrease by **5.46 p.p.** comparing to the previous quarter. The share of loans for amount up to PLN 100 thousand also decreased – by **PLN 0.70 p.p.** and was equal to **9.63%**. The percentage of loans more than **PLN 1 million** did not change, while in other categories, increases were recorded – the largest in category of loans for the amount between PLN 300 and 400 thousand – by **2.17 p.p.** comparing to Q1 2018.

On a year-to-year basis, a similar trend was observed, i.e. a decrease in the popularity of loans for amount up to PLN 100 thousand and in the range from PLN 100 to 200 thousand – by **3.23 p.p.** and **2.74 p.p.** respectively. It can be considered that the share of loans for amount above PLN 1 million returned to the level from the previous year and the shares of other categories increased. The largest increase was recorded in category of loans between PLN 200 and 300 thousand – **2.48 p.p.** in relation to Q2 last year.



SOURCE: SARFIN

	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
up to PLN 100 000	12.86%	12.68%	11.64%	10.33%	9.63%
from PLN 100 000 to 200 000	35.02%	34.81%	35.08%	37.74%	32.28%
from PLN 200 000 to 300 000	25.62%	25.31%	26.89%	27.20%	28.10%
from PLN 300 000 to 400 000	14.54%	15.18%	14.45%	14.22%	16.35%
from PLN 400 000 to 500 000	6.31%	6.09%	5.95%	5.57%	7.34%
from PLN 500 000 to 1 million	5.23%	5.51%	5.59%	4.60%	5.95%
above PLN 1 million	0.42%	0.42%	0.39%	0.34%	0.35%

Structure of the new loans amount

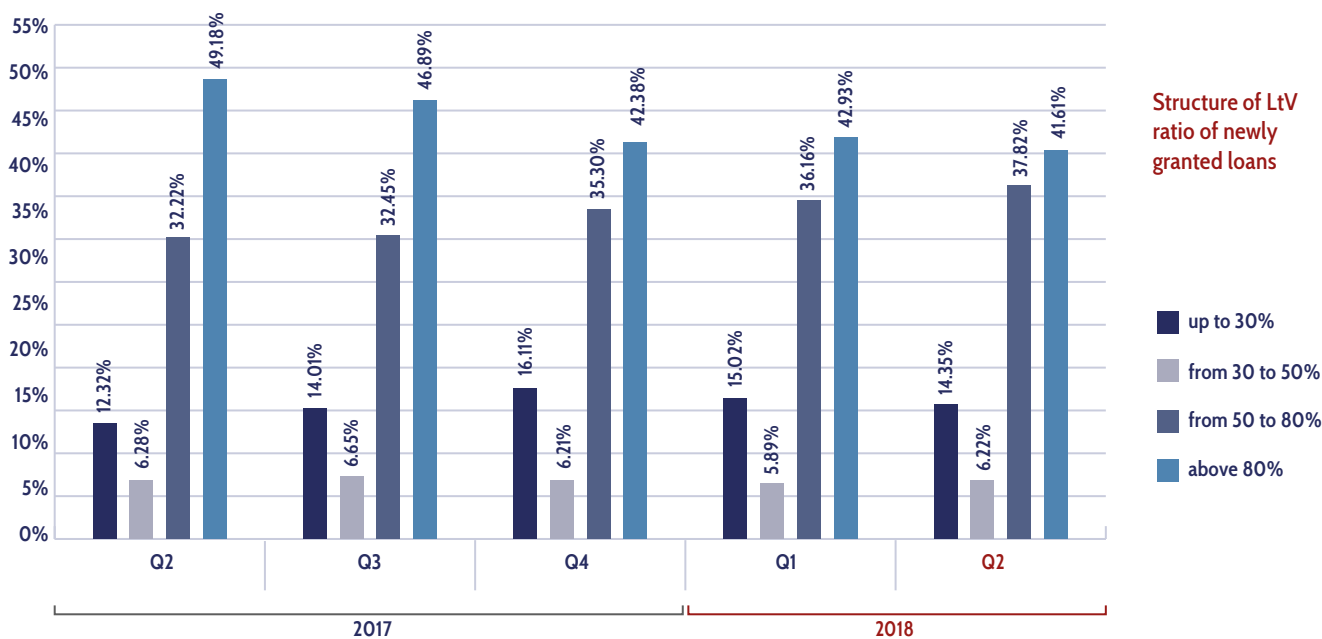
SOURCE: SARFIN

Structure of the LtV ratio

The share of newly granted housing loans with the LtV ratio at the level of at least 80% still constituted the largest part of the value structure of all new loans and amounted to **41.61%**, despite the decline by **1.32 p.p.** recorded in Q2 2018 in quarterly terms. In analysed period, a decrease by **0.67 p.p.** in the category of LtV level up to 30% was recorded and the share of those loans amounted to **14.35%**. In other LtV categories, increases were recorded: loans with LtV ratio from 50% to 80% accounted for **37.82%** of the structure, i.e. more by **1.66 p.p.** than in the previous quarter, and the share of loans with LtV ratio between 30% and

50% amounted to **6.22%**, which meant an increase by **0.33 p.p.**

In comparison to the same period last year, decrease in the share of newly granted housing loans with the borrower's downpayment up to 20% of the property value amounted to **7.57 p.p.** The share of loans with LtV ratio between 30% and 50% returned to the level from the previous year, while the percentage of loans from other LtV categories increased. The share of loans with the lowest LtV ratio up to 30% was higher by **2.03 p.p.** and those with LtV ratio from 50% to 80% – by **5.60 p.p.** comparing to Q2 2017.



SOURCE: SARFIN

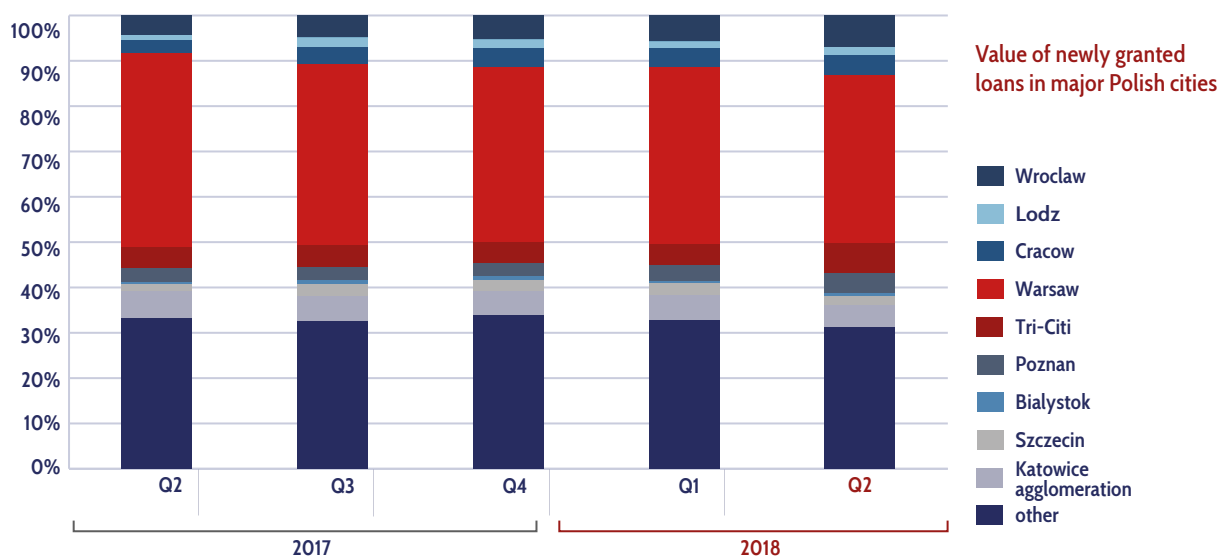
	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
up to 30%	12.32%	14.01%	16.11%	15.02%	14.35%
from 30 to 50%	6.28%	6.65%	6.21%	5.89%	6.22%
from 50 to 80%	32.22%	32.45%	35.30%	36.16%	37.82%
above 80%	49.18%	46.89%	42.38%	42.93%	41.61%

SOURCE: SARFIN

Housing loans in major Polish cities

In Q2 2018, the share of housing loans granted in the largest Polish agglomerations increased by **1.52 p.p.** in relation to the previous quarter and amounted to **68.82%**. The share of Warsaw, the Katowice agglomeration and Szczecin in the structure of all new loans granted in Poland decreased slightly – by **1.76 p.p.**, **0.63 p.p.** and **0.59 p.p.** respectively, and amounted to **37.17%**, **4.98%** and **1.93%**. In the period from April to June, the percentage of mortgage loans granted in Tri-City increased by **1.65 p.p.** (to the level of **6.43%**) and in Poznan and Wroclaw by **1.23 p.p.** (and amounted to **4.60%** and **6.97%** respectively). In other analysed agglomerations only minimal changes were registered.

Also in relation to Q2 2017, a decrease in the share of Warsaw and Katowice agglomeration in total value of newly granted housing loans was recorded, respectively by **5.66 p.p.** and **0.82 p.p.** The share of new loans granted in Szczecin and Bialystok remained at the same level as in the previous year, while in other analysed locations increases were noted – the highest in Wroclaw (by **2.69 p.p.**). Thus, the value share of housing loan agreements concluded in Q2 2018 in the nine largest Polish agglomerations decreased by **2.08 p.p.** in relation to the same period last year.



SOURCE: SARFIN

	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
other	33.26%	32.47%	33.90%	32.70%	31.18%
Katowice agglomeration	5.80%	5.66%	5.14%	5.61%	4.98%
Szczecin	1.64%	2.46%	2.60%	2.52%	1.93%
Białystok	0.54%	0.96%	0.85%	0.61%	0.58%
Poznan	2.97%	3.01%	2.80%	3.37%	4.60%
Tri-Citi	4.62%	4.69%	4.77%	4.78%	6.43%
Warsaw	42.83%	39.97%	38.60%	38.93%	37.17%
Cracow	2.81%	3.82%	4.14%	4.23%	4.35%
Łódź	1.25%	2.01%	1.85%	1.51%	1.81%
Wrocław	4.28%	4.95%	5.35%	5.74%	6.97%

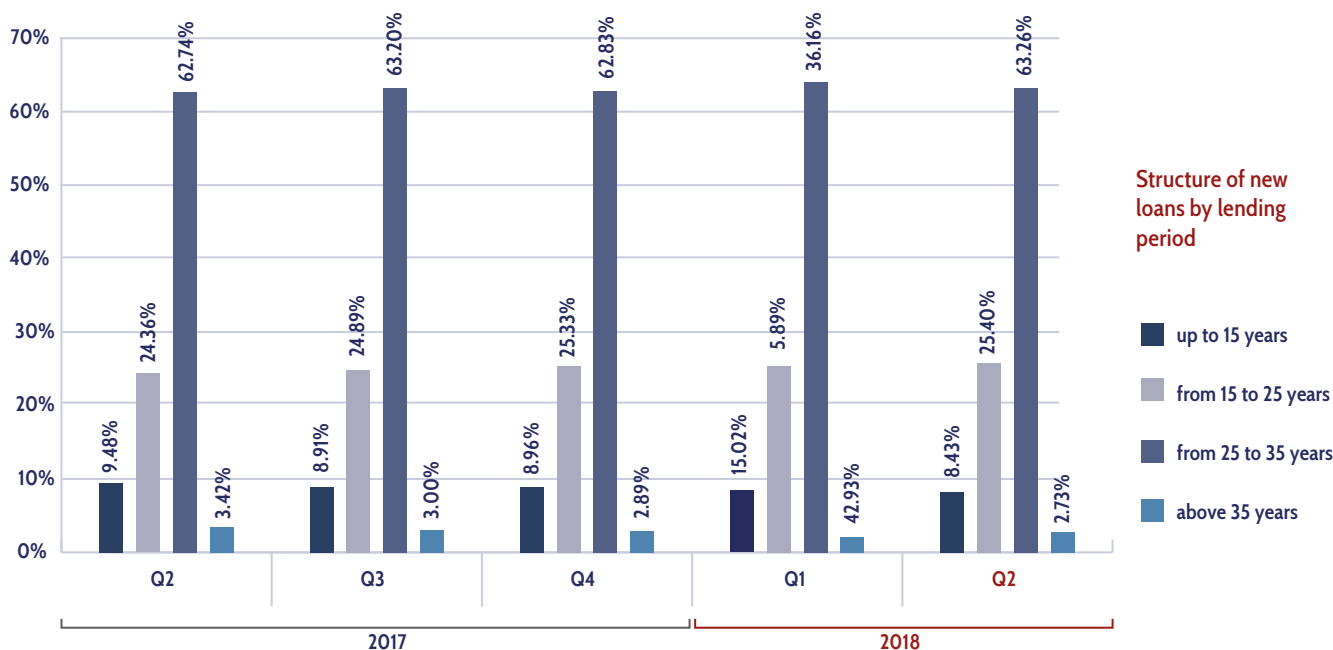
SOURCE: SARFIN

Lending period

In Q2 this year, share of the most popular housing loans with a maturity period from 25 to 35 years in the structure of new loans value amounted to **63.26%**, which meant a decrease by **0.82 p.p.** comparing to Q1. The share of loans granted for the period up to 15 years remained at the level from the previous quarter, while in other categories minimal increases were recorded. The percentage of loans with maturity period between 15 and 25 years increased by **0.35 p.p.** and amounted

to **25.75%**, and loans granted for a period above 35 years – by **0.64 p.p.** and accounted for **2.73%**.

In relation to the corresponding period of the previous year, loans with maturity period from 15 to 25 years and from 25 to 35 years gained in popularity – their share in the portfolio of new housing loans increased by **1.39 p.p.** and **0.52 p.p.** respectively. Share of loans granted for the period up to 15 years decreased by **1.22 p.p.** and share of loans granted for 35 years and more was lower by **0.69 p.p.** in comparison to Q2 2017.



SOURCE: SARFIN

	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
up to 15 years	9.48%	8.91%	8.95%	8.43%	8.26%
from 15 to 25 years	24.36%	24.89%	25.33%	25.40%	25.75%
from 25 to 35 years	62.74%	63.20%	62.83%	64.08%	63.26%
above 35 years	3.42%	3.00%	2.89%	2.09%	2.73%

SOURCE: SARFIN

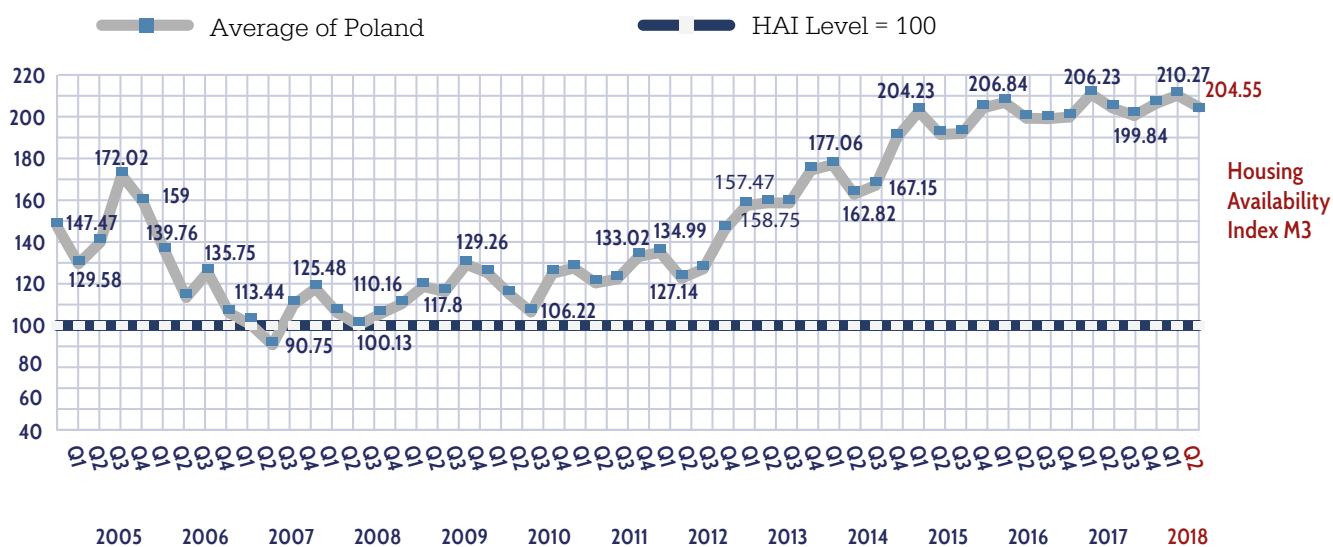
Housing Availability Index M3 – HAI M3

Housing Availability Index (HAI M3), a synthetic measure presented in AMRON-SARFiN Reports, shows quarterly changes in availability of housing units in Poland for the exemplary family comprising of two employed adults with one older child. A slight decrease of dwelling availability in Q2 2018 was influenced by the following factors:

- permanent but still relatively low price increase in analysed housing segment (with floor area from 45 to 55 sq.m.) in monitored cities in order to calculate HAI M3 Index (8 biggest cities) – in Q2 2018 an increase by **1.27%** in relation to Q1 2018;
- a slight decrease in interest rates of newly granted loans – according to National Bank of Poland, the real interest rate of loans granted in Q2 2018 amounted to **4.34%** (in Q1 2018 it was **4.40%**);

- a decrease in the average family income – by **2.35%** in Q2 2018 in comparison to the previous quarter;
- the living costs level, which for the Report purposes are expressed as the minimum subsistence level of the previous quarter (calculated as inflation quarter on quarter due to the postponement of announcing the minimum subsistence level by the Institute of Labour and Social Affairs for the next quarter), increased by **0.27%**.

All the aforementioned factors caused that the disposable income for HAI M3 (which is the difference between the family income and the amount of the loan instalment amount or the value of the minimum subsistence level – in order to calculate the Housing Availability Index the lower amount is taken into account) diminished by **3.87%** and therefore the index decreased by **5.72 points** in Q2 2018 (index level in Q1 2018 amounted to **210.27 points**).

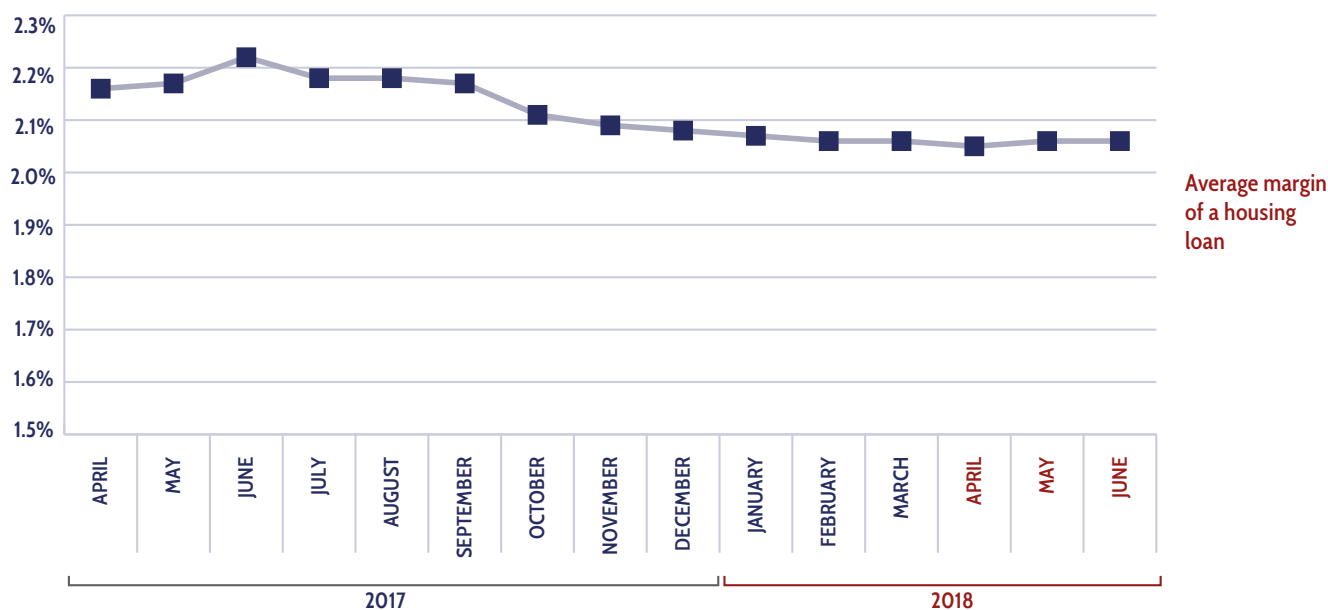


SOURCE: POLISH BANKS ASSOCIATION

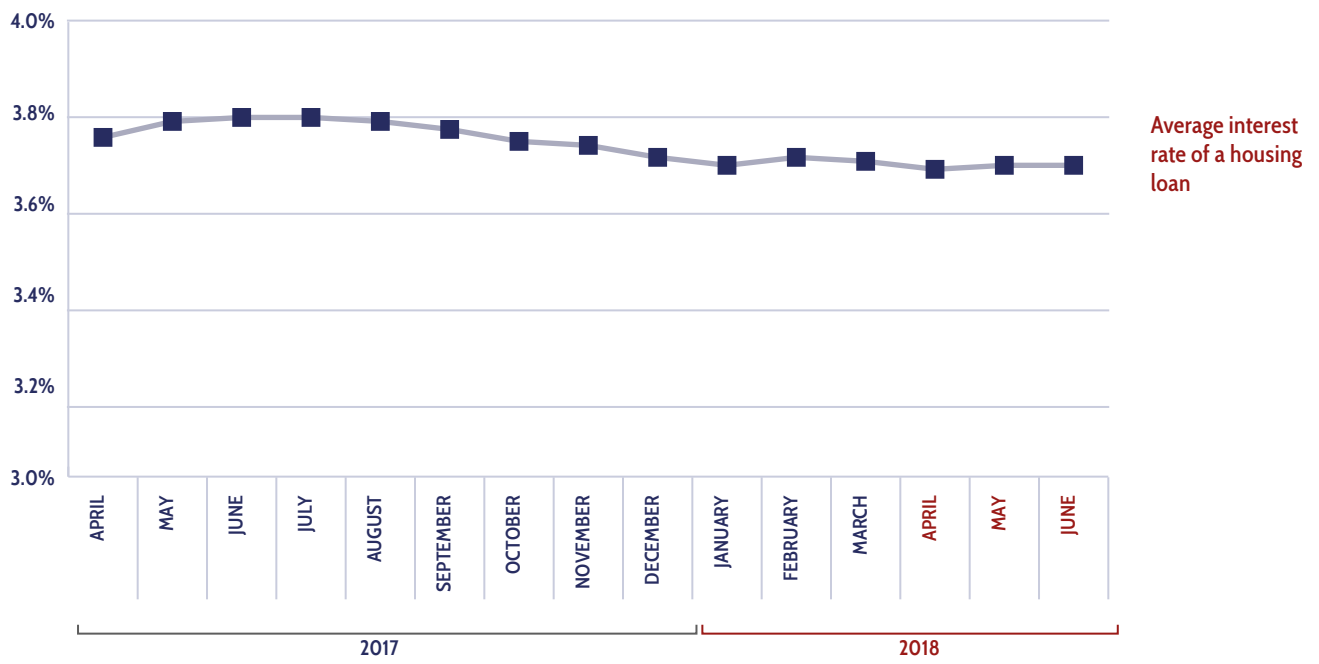
Average margin levels and mortgage interest rates

Both margins and mortgage interest rates in Q2 this year remained at the same level as in the previous quarter. The average margin (for a model mortgage loan in amount of PLN 300 000, at the

LtV ratio of 75% and granted for the period of 25 year) in June 2018 amounted to **2.06%**, while the average interest rate accounted for **3.78%**. The NBP's reference rate was maintained at the level of **1.50%** and WIBOR 3M rate at the end of Q2 2018 amounted to **1.70%**.



SOURCE: AMRON CENTRE BASED ON BANKS' CREDIT OFFERS



SOURCE: AMRON CENTRE BASED ON BANKS' CREDIT OFFERS

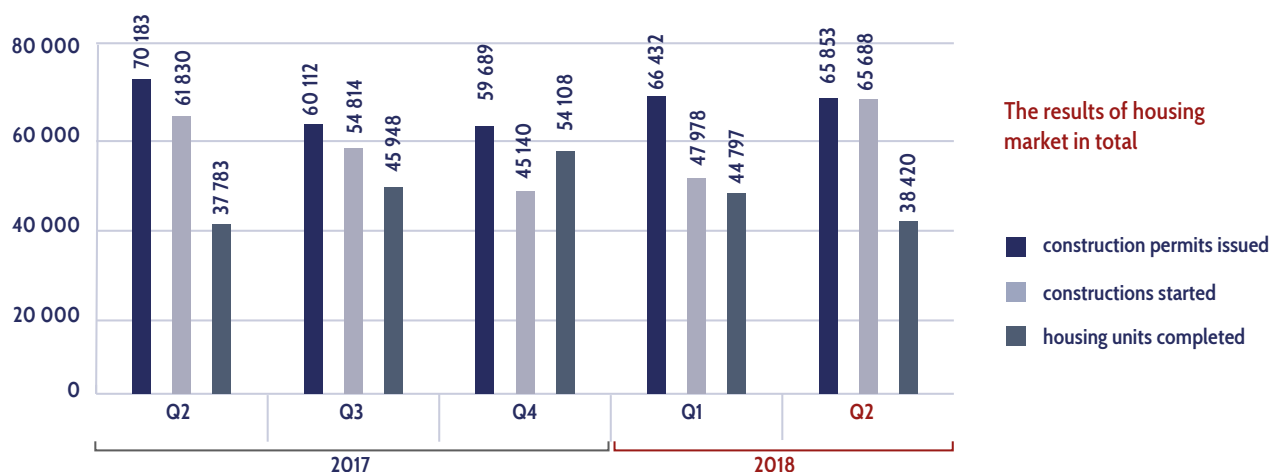
SITUATION ON HOUSING MARKET

Housing market in total

According to preliminary data published by the Central Statistical Office, in the period from April to June 2018, **38 420** new apartments were completed, which was less by **14.24%** than in the previous quarter and the construction of another **65 688** dwellings were started, which meant an increase by **36,91%** in comparison to Q1 2018. In the same period, construction permits for **65 853** dwellings were issued, which was practically as

much as it was in the previous quarter (a decrease by only **0.87%**).

In relation to Q2 2017, in Q2 this year the number of permits for construction of new apartments diminished by **6.17%**, while the number of dwellings completed and the number of started constructions slightly increased – respectively by **1.69%** and **6.24%**.



SOURCE: CENTRAL STATISTICAL OFFICE

Developers' sector

In Q2 2018, developers started the construction of **35 631** dwellings, i.e. by **15.94%** more comparing to the previous quarter. However, the number of dwellings completed and the number of construction permits issued were lower, respectively by **12.49%** and **11.90%**. In the period from April to June this year, the developers' sector completed the construction of **22 475** dwellings and obtained construction permits for **38 690** apartments. These results were still very

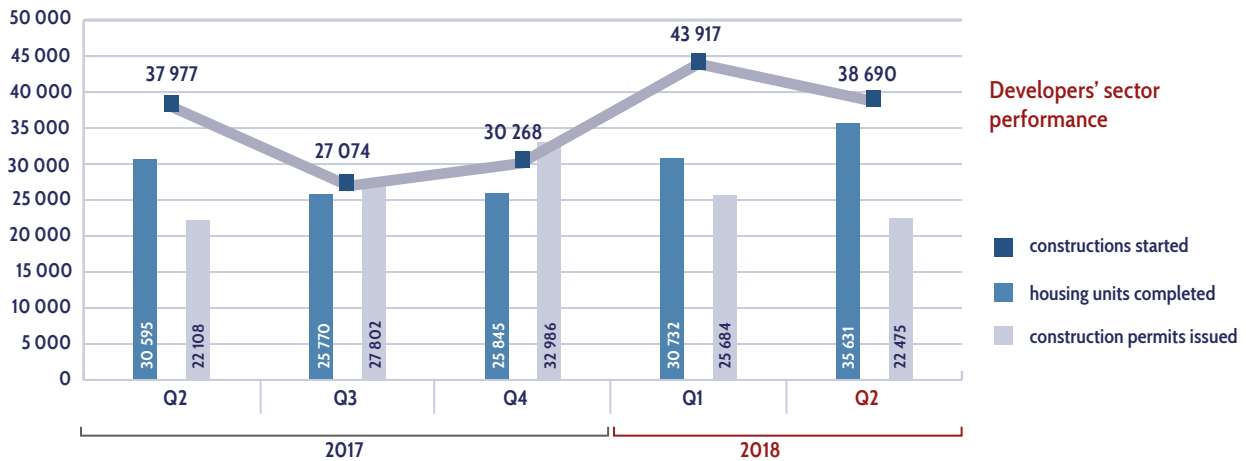
good, however a slight decline in the activity of developers was noted, which probably resulted from difficulties in buying new building plots and decreasing margins due to growing costs of construction.

In relation to the corresponding period of last year, the results of the developers' sector were similar. The number of permits issued for the construction of new apartments recorded in Q2 2018 was higher by only **1.88%** comparing to Q2 2017, the number of dwellings completed – by **1.66%**, while

the number of constructions started increased by **16.46%**.

In Q2 2018, **58.75%** of all construction permits were obtained by developers (less by **7.36 p.p.** than in the previous quarter). The developer's investments, the

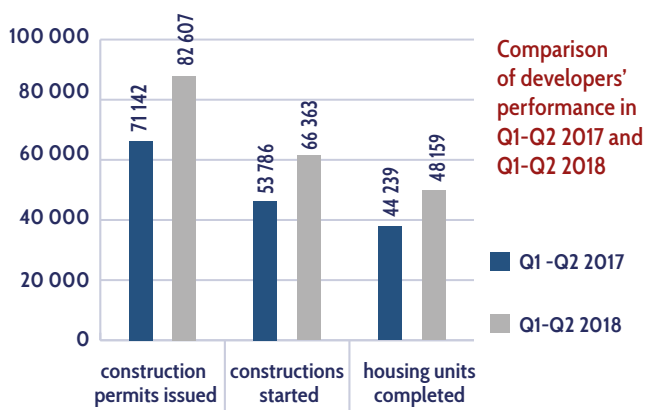
construction of which were started by developers during the analysed period, accounted for **54.24%** (less by **9.81 p.p.**) of all new started constructions, and housing units completed by developers accounted for **58.50%** of all new dwellings (more by **1.16 p.p.** comparing to Q1 2018).



SOURCE: CENTRAL STATISTICAL OFFICE

	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018
Construction permits issued	37 977	27 074	30 268	43 917	38 690
Constructions started	30 595	25 770	25 845	30 732	35 631
Housing units completed	22 108	27 802	32 986	25 684	22 475

SOURCE: CENTRAL STATISTICAL OFFICE



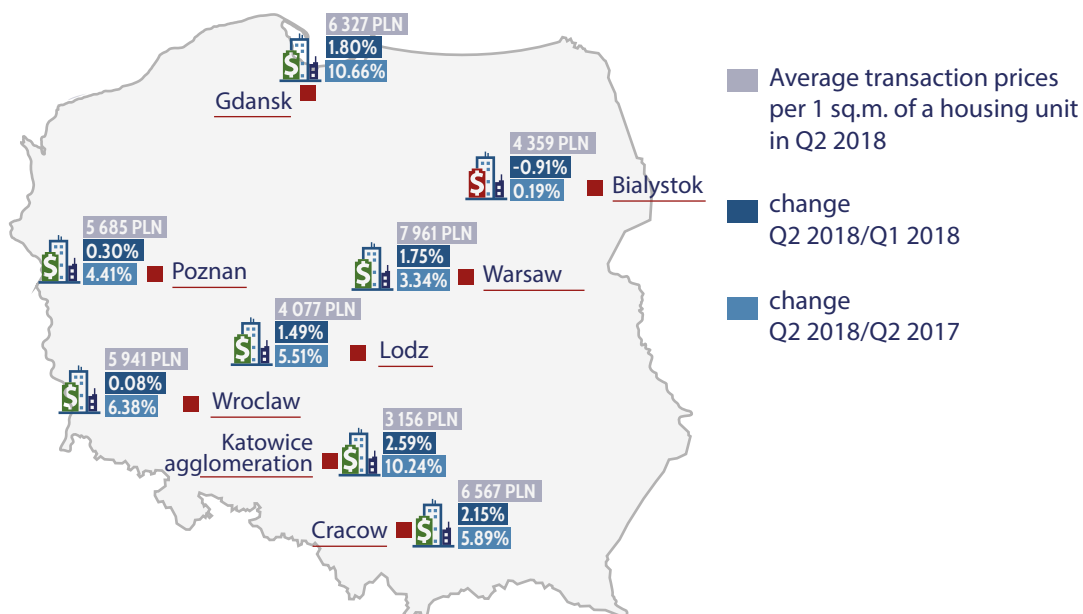
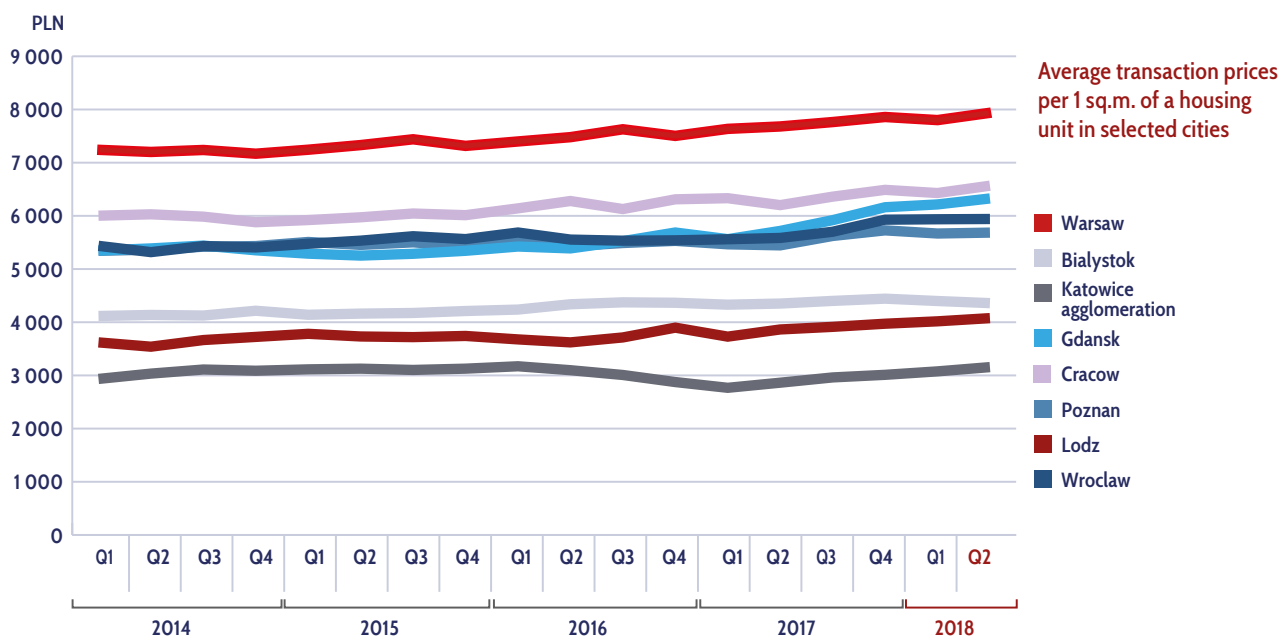
SOURCE: CENTRAL STATISTICAL OFFICE

Average transaction prices of housing units

High demand on the residential real estate market and the growing costs of construction work and building materials led to an increase in transaction prices in the largest Polish cities. In Q2 2018, a decrease in the average transaction price of 1 sq.m. of floor area was noted only in Bialystok – by **PLN 40 /sq.m. (0.90%)** compared to Q1 this year. The average price in Wroclaw and Poznan remained at the level from the previous quarter, while in other cities increases were recorded. In the period from April to June, the average transaction price in the Katowice agglomeration

increased by **PLN 80 /sq.m. (2.59%)**, in Cracow – by **PLN 138 /sq.m. (2.15%)**, in Gdansk – by **PLN 112 /sq.m. (1.80%)**, in Warsaw – by **PLN 137 /sq.m. (1.75%)**, and in Lodz – by **PLN 60 /sq.m. (1.49%)** in comparison to Q1 2018.

In relation to Q2 2017, the average transaction price per 1 sq.m. of floor area of a dwelling in Bialystok did not change. In other seven analysed locations, significant increases in average prices of flats were recorded – the largest in Gdansk (**PLN 610 /sq.m.**, i.e. by **10.66%**). In the capital, the average unit price of the flat increased by **PLN 257 /sq.m. (i.e. 3.34%)** compared to Q2 last year.



SOURCE: AMRON

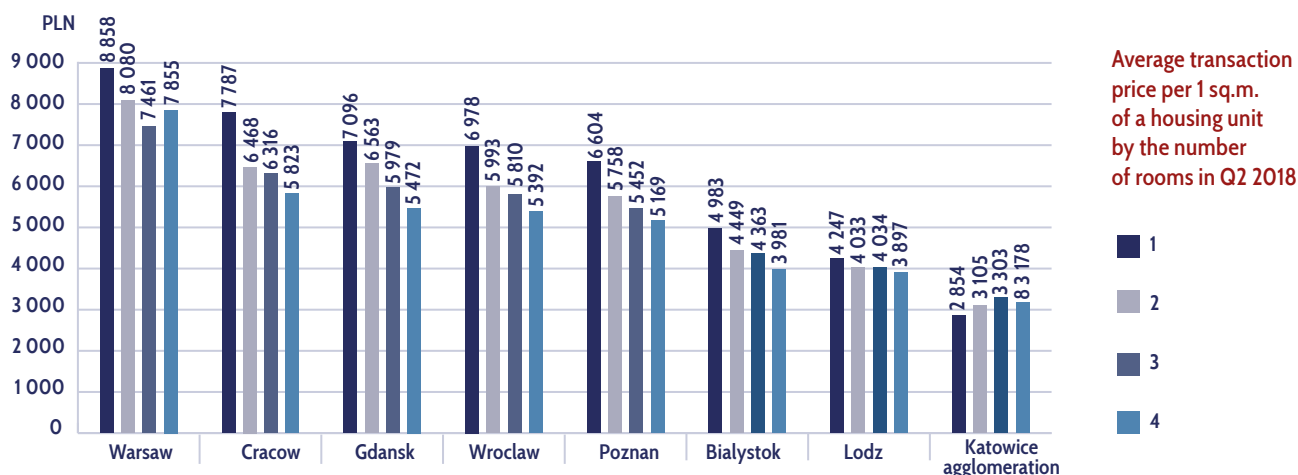
PERIOD	WARSAW	BIALYSTOK	KATOWICE AGGLOMERATION	WROCLAW	GDANSK	CRACOW	POZNAN	LODZ
Q1 2014	7 265	4 117	2 934	5 436	5 347	6 003	5 343	3 621
Q2 2014	7 225	4 137	3 034	5 318	5 388	6 029	5 364	3 540
Q3 2014	7 262	4 126	3 111	5 432	5 441	5 985	5 420	3 665
Q4 2014	7 192	4 216	3 088	5 406	5 352	5 880	5 432	3 724
Q1 2015	7 267	4 140	3 114	5 475	5 289	5 921	5 509	3 782
Q2 2015	7 354	4 162	3 127	5 534	5 253	5 973	5 454	3 732
Q3 2015	7 463	4 174	3 103	5 617	5 287	6 044	5 502	3 720
Q4 2015	7 339	4 211	3 127	5 563	5 343	6 013	5 426	3 742
Q1 2016	7 422	4 238	3 172	5 687	5 423	6 141	5 564	3 677
Q2 2016	7 503	4 338	3 098	5 554	5 388	6 279	5 429	3 621
Q3 2016	7 651	4 374	3 008	5 533	5 525	6 128	5 489	3 714
Q4 2016	7 527	4 366	2 875	5 540	5 687	6 311	5 530	3 898
Q1 2017	7 659	4 330	2 767	5 560	5 562	6 332	5 465	3 729
Q2 2017	7 704	4 351	2 863	5 585	5 717	6 202	5 445	3 864
Q3 2017	7 787	4 401	2 962	5 701	5 919	6 361	5 622	3 913
Q4 2017	7 882	4 443	3 011	5 928	6 162	6 489	5 727	3 972
Q1 2018	7 824	4 399	3 076	5 936	6 215	6 429	5 668	4 017
Q2 2018	7 961	4 359	3 156	5 941	6 327	6 567	5 685	4 077

Average transaction prices
per 1 sq.m. of a housing unit
in selected cities

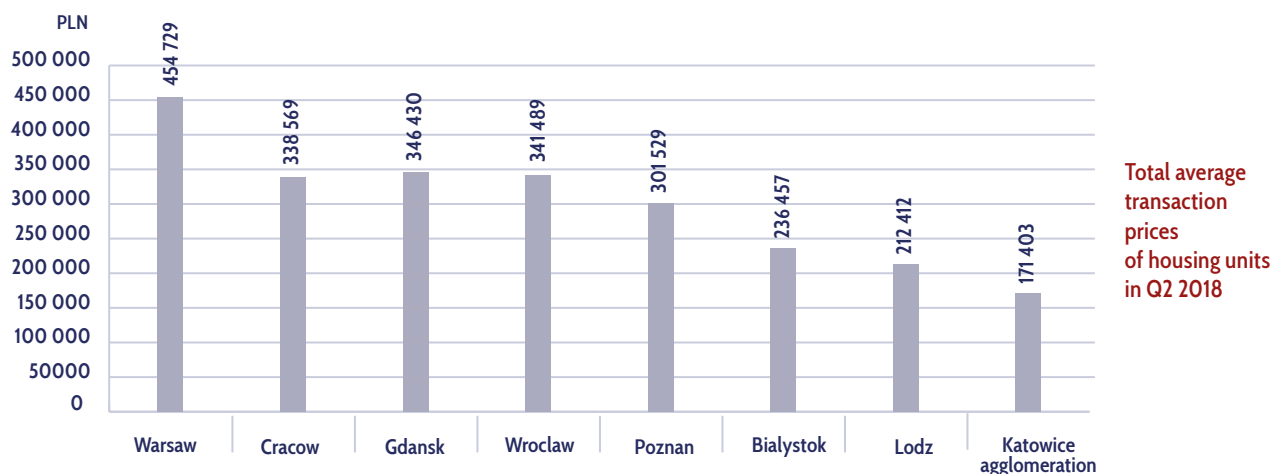
SOURCE: AMRON

In the majority of analysed cities, there was a correlation observed: the greater number of rooms, the lower average price of a square meter. The exception to this principle was Warsaw, where in Q2 this year 1 sq.m. of floor area of a studio cost on average **PLN 8 858**, a two-room flat – **PLN 8 080**, and apartments with three rooms – **PLN 7 461**. The largest premises are considered to

be luxurious, therefore their prices were slightly higher and in analysed period amounted in average to **PLN 7 855**, while in Katowice agglomeration, the average prices were similar regardless of the number of rooms – in Q2 2018 it was in the range of **PLN 2 800 – PLN 3 200 /sq.m.** and studios were the cheapest.



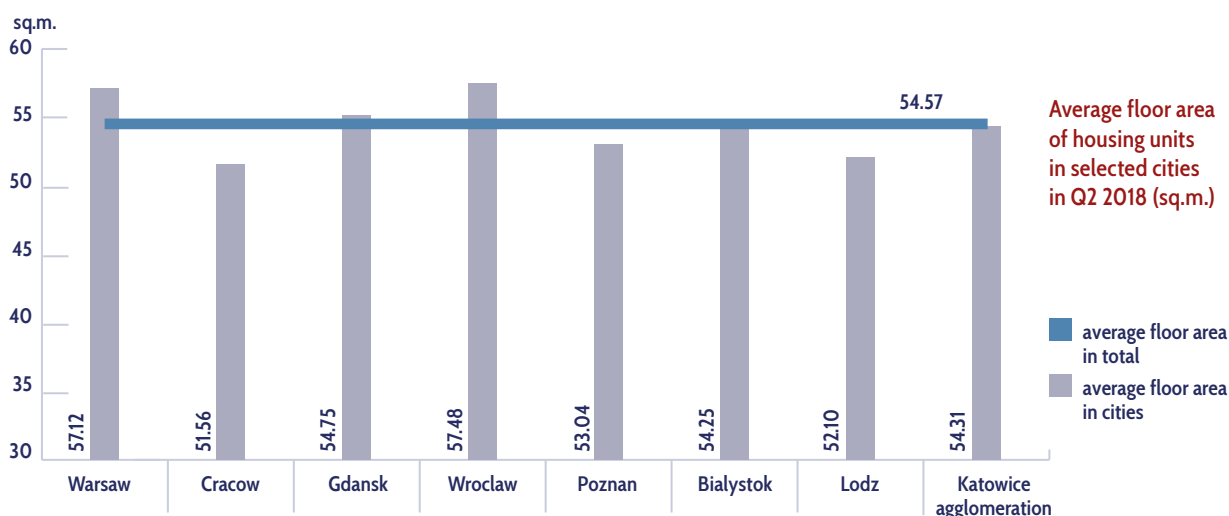
SOURCE: AMRON



SOURCE: AMRON

The average floor area of dwellings purchased in Q2 2018 in the eight largest Polish agglomerations increased by **0.22 sq.m.** and amounted to **54.57 sq.m.** The largest dwellings were purchased in Wroclaw, where the average size of the premises

accounted for **57.48 sq.m.** Apartments with floor area larger than average were bought also in Warsaw and Gdansk. The lowest average floor area of flats was recorded in Cracow (**51.56 sq.m.**) and Lodz (**52.10 sq.m.**).



* in 8 surveyed locations

SOURCE: AMRON

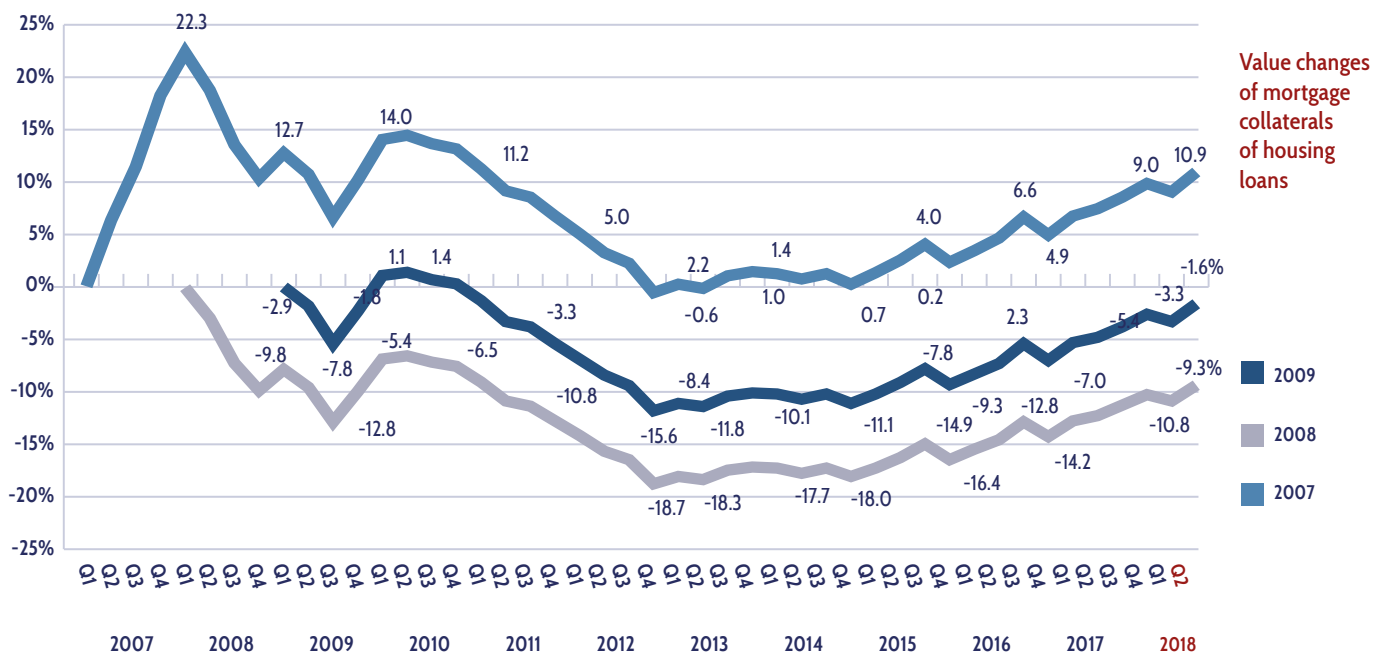
Changes in mortgage collaterals value

Indebtedness of mortgage borrowers, who bought apartments during the so-called 'price hill' on the residential real estate market, is systematically decreasing due to regular loan repayments. Nevertheless, according to data published by the Polish Financial Supervision Authority, at the end of 2017 over 130 thousand flats and houses (constituting collaterals of **6.5%** of all housing loans) were burdened with loans exceeding their market value (LtV ratio higher than 100%). Such properties cannot be sold because the proceeds will not cover the remaining liability amount.

In order to verify the impact of significant declines in housing prices recorded in 2008 - 2012 on the current situation of borrowers, simulation of changes in the value of dwellings bought in Q1 2007, Q1 2008 and Q1 2009 was prepared. Due to high transaction prices and their significant

fluctuations, the average prices on Warsaw market were analysed.

In Q2 2018, an increase in the average price of dwellings in Warsaw was noted, what caused the property value increase and therefore the situation of borrowers from the period of 2007 - 2009 has improved. The value of these properties, which constitute collaterals of loans granted in Q1 2007, currently is higher by **10.9%**, i.e. more by **1.9%p.p.** than in Q1 2018. Despite a steady increase in property prices since 2012, values of dwellings bought in 2008 and 2009 have still not reached the level of the time of purchase. The value of dwellings bought in Q1 2009 decreased by **1.6%** (it was **3.3%** in the previous quarter). Borrowers, who bought dwellings in Q1 2008 (when the prices were the highest), were in the worst situation - decline in the average real estate value amounted to **9.3%** (in the previous quarter it was **10.8%**).



SOURCE: AMRON

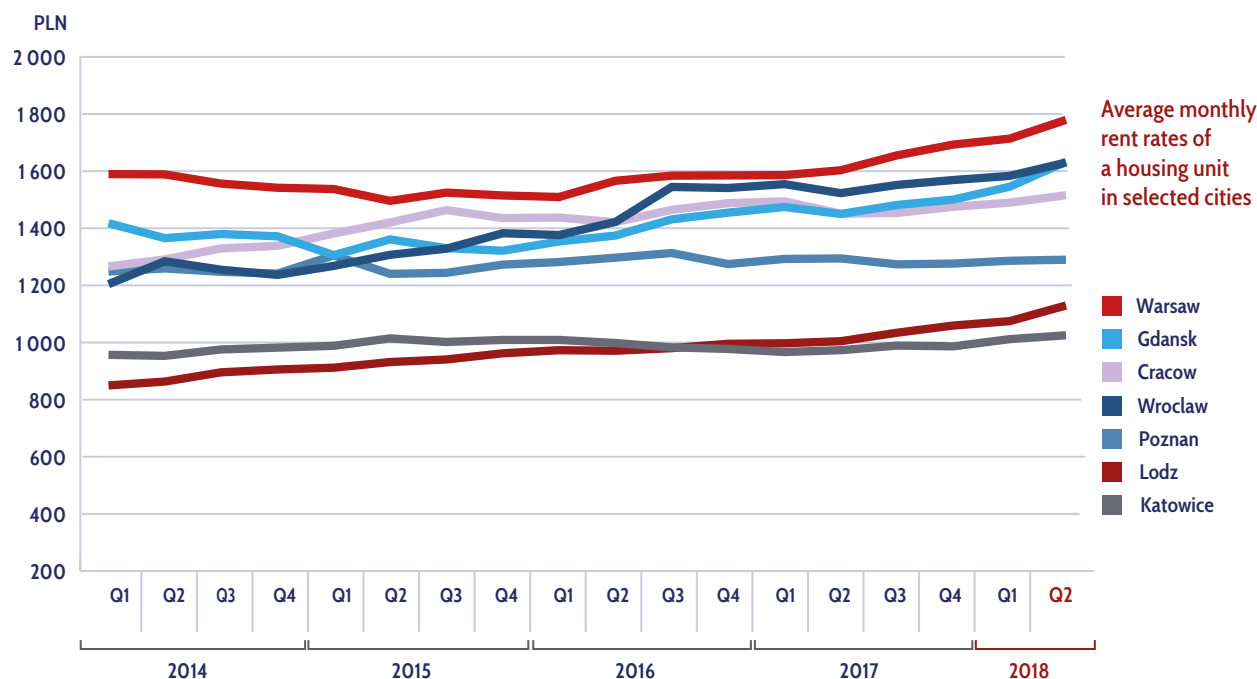
Average rent rates of housing units

In the period from April to June this year, only in Poznan the average rent rate for a dwelling remained at the same level as in the previous quarter. In the other analysed cities, the average rent rate increased – in Gdansk (by **PLN 97**, i.e. **6.49%** in relation to Q1 2018), in Lodz (by **PLN 61**, i.e. **6.28%**) and in Warsaw (by **PLN 73**, i.e. **4.34%**), where increases were the biggest.

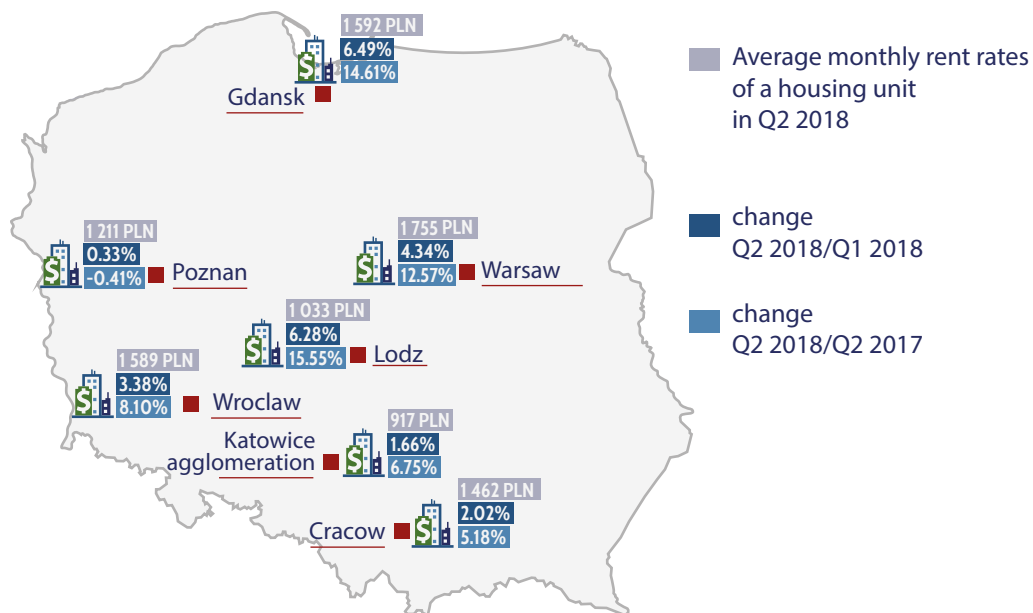
In Q2 2018, the highest average rent rates were recorded in Warsaw (**PLN 1 755**), Gdansk (**PLN 1 592**) and Wroclaw (**PLN 1 589**). The average rent for a flat in the capital city was higher by **PLN 838** than the lowest average rate registered in that period in Katowice (**PLN 917**), which meant that the difference between the two cities increased by **PLN 58** in relation to Q1 2018. The difference between the average rent rate

recorded in Warsaw and Wroclaw amounted to **PLN 166** (i.e. by **PLN 21** more than in the previous quarter), **PLN 293** between Warsaw and Cracow (by **PLN 44** more), **PLN 544** between Warsaw and Poznan (by **PLN 69** more) and **PLN 722** between the capital city and Lodz – (by **PLN 12** more). In analysed quarter, the difference between the average rent rate in Warsaw and Gdansk decreased by **PLN 24** and amounted to **PLN 163**.

During the last year (Q2 2018 / Q2 2017), the average rate of rent in Poznan did not change, while in other analysed agglomerations increases were noted. The average rent rate for a flat in Gdansk increased the most – by **PLN 203 (14.61%)**, in Lodz – by **PLN 139 (15.55%)** and in Warsaw – by **PLN 196 (12.57%)**.



SOURCE: AMRON



SOURCE: AMRON

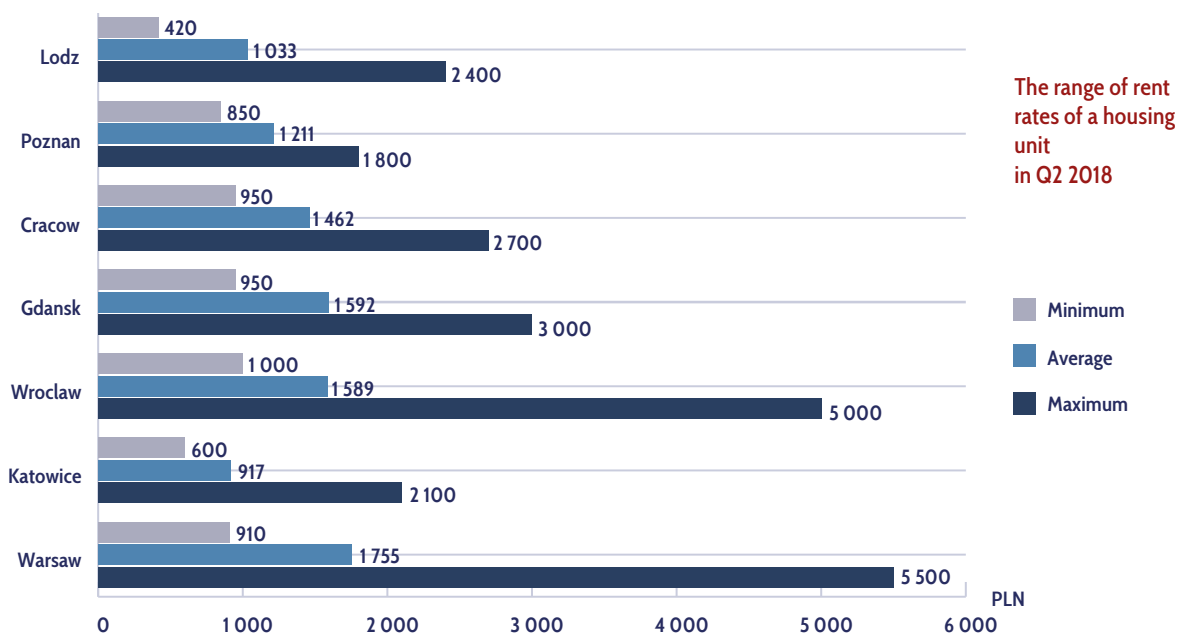
PERIOD	WARSAW	KATOWICE	WROCLAW	GDANSK	CRACOW	POZNAN	LODZ
Q1 2014	1 544	841	1 116	1 353	1 185	1 165	722
Q2 2014	1 543	837	1 205	1 295	1 212	1 177	737
Q3 2014	1 507	862	1 172	1 311	1 255	1 164	773
Q4 2014	1 491	869	1 152	1 302	1 265	1 157	784
Q1 2015	1 486	876	1 187	1 229	1 313	1 228	791
Q2 2015	1 440	905	1 230	1 290	1 356	1 156	813
Q3 2015	1 472	891	1 254	1 256	1 404	1 160	823
Q4 2015	1 461	899	1 314	1 246	1 373	1 192	847
Q1 2016	1 455	899	1 307	1 282	1 375	1 202	859
Q2 2016	1 518	887	1 358	1 305	1 357	1 219	857
Q3 2016	1 538	870	1 494	1 368	1 405	1 237	867
Q4 2016	1 539	864	1 490	1 394	1 431	1 194	884
Q1 2017	1 540	852	1 505	1 416	1 438	1 214	886
Q2 2017	1 559	859	1 470	1 389	1 390	1 216	894
Q3 2017	1 617	877	1 502	1 424	1 393	1 207	927
Q4 2017	1 659	874	1 521	1 445	1 417	1 196	955
Q1 2018	1 682	902	1 537	1 495	1 433	1 196	972
Q2 2018	1 755	917	1 589	1 592	1 462	1 211	1 033

Average monthly rent rates of a housing unit in selected cities

SOURCE: AMRON

According to data from current lease agreements in Q2 2018, the largest price range between the highest and the lowest rent rate was recorded in Warsaw (**PLN 4 590**), while the smallest – in Poznan (**PLN 950**). In Poznan, the lowest maximum

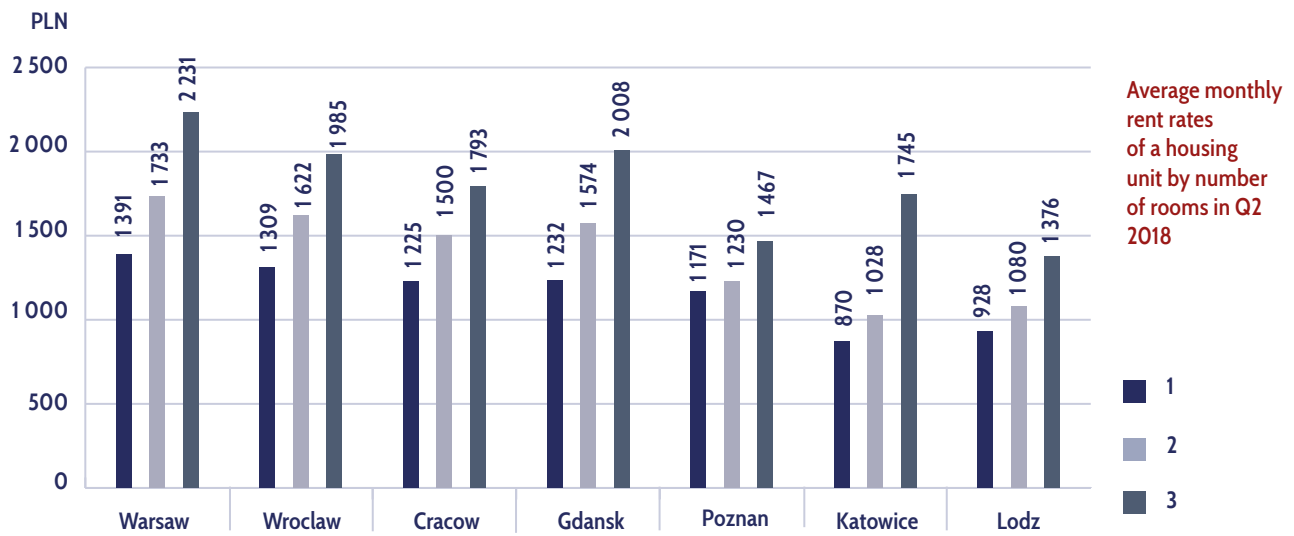
rent rate was also recorded – **PLN 1 800**, while the highest minimum rate was noted in Wroclaw – **PLN 1 000**. Out of the seven analysed cities, the lowest rent rate was recorded in Lodz – **PLN 420** per month, and the highest in Warsaw – **PLN 5 500**.



SOURCE: AMRON

In Q2 2018 (based on data from lease agreements in force in this period), the average rent for one-room flats did not change comparing to the previous quarter only in Poznan. In other cities, renting a studio was more expensive than in Q1 2018 – the biggest increase in the average rent was recorded in Warsaw (**PLN 84**) and in Wroclaw (**PLN 78**). The cost of renting a two-room apartment in Wroclaw and Cracow decreased – by **PLN 18** and **PLN 15** respectively, while in Gdansk and Poznan a slight increases were noted – by **PLN 13** and **PLN 17** respectively. Renting a three-room flat in Wroclaw was cheaper by **PLN 21**, in Katowice the average rent rate of such a flat did not change, and in other analysed cities an increase of rent was recorded – the largest in Poznan (by **PLN 167**).

Renting a flat in the capital city was the most expensive regardless of the number of rooms. In analysed quarter, the average monthly rent rate for a studio in Warsaw amounted to **PLN 1 391**, for a two-room dwelling – **PLN 1 733**, and a three-room dwelling – **PLN 2 231** per month. The second most expensive city in terms of average rent rates was Wroclaw. In this city, renting a studio cost **PLN 1 309** on average, a two-room dwelling – **PLN 1 622**, and a flat with three rooms – **PLN 1 985**. The lowest average rent rate for a studio and flat with two rooms was registered in Katowice (**PLN 870** and **PLN 1 028** respectively), while the cheapest three-room flats were in Lodz (**PLN 1 376**).



SOURCE: AMRON

The analysis was based on the monthly amounts owed to the landlord before tax, excluding administration fees and maintenance costs, rent management fees, projected and current utility charges, etc.

The analysis was based on rent rates entered into the AMRON System, among others, by Mzuri Sp. z o.o., leader on the Polish private rent market.



PARTNER'S COMMENTARY



Krzysztof Bystrosz

*director of strategic projects
at Mzuri Sp. z o.o.*

Over the last year (comparing Q2 2018 to Q2 2017), dynamics of average rents in Lodz (an increase by 15.5%), Gdansk (an increase by 14.6%) and Warsaw (an increase by 12.6%) were the highest. From the owners point of view, changes of rents in Poznan were the worst, where a minimal decrease was noted during this period (-0.4%). However, it should be noted that Poznan is a city with the most stable average rents in 2017-2018.

Lodz and Gdansk were the cities that have 'caught up' with rents in relation to Warsaw, despite a two-digit increase in rents in the capital city, i.e. by 12.6%. In Q2 2017 rents in Lodz were on average more than 43% lower than in Warsaw, currently the difference is only slightly over 40%. For Gdansk, the difference decreased from 14% to approx. 9%. The biggest difference in average rents in relation to Warsaw was noted in Katowice – in Q2 2018 it was 52.3% while a year ago it was 55.1%.

It is interesting to summarize the current data over the last three years (Q2 2015 vs. Q2 2018), when the average increase recorded in the analysed markets amounted to 16.5%. In the last thirty-six months, the increase in rent rates in Wroclaw amounted to almost 30%, in Lodz – 27.1% and in

Gdansk – 23.4%. The fourth position in the 'three-year classification' was taken by Warsaw with an increase by 21.9%, which indicates the still high potential of the most expensive city in Poland. On the other hand, at the end of the list was Katowice, where in the last 3 years an increase by only 1.3% was recorded, which may also indicate potential for growth in the near future.

While analysing the dynamics of rents, it should be remembered that the sample of flats, on the basis of which the analysis was carried out, mainly includes studios and two-room flats. The dynamics of rents for large dwellings (i.e. three-room and larger) may be different, but the sample of these types of flats owned by Mzuri is too small to draw reliable conclusions.

The hottest period on the residential rent market is approaching. Many people, including students who in June emptied the previously rented premises for summer holidays, return in August and September to cities and universities. At the same time, many rent agreements for the most popular period of 12 months end and start. During this time, the demand for flats in popular city districts often exceeds supply, which is why we expect noticeable price changes.

Expert's comments published in AMRON-SARFiN Report reflect authors' opinions, which not always are consistent with opinions presented by Polish Banks Association and AMRON Centre.



System for Analysis and Monitoring of Real Estate Transactions

AMRON System is a standardized, nationwide database on real estate prices and values, equipped with advanced reporting and analytical modules for monitoring changes on the property market. System was established in 2004 in response to the banking supervisory requirements related to credit risk management and monitoring security instruments for mortgage lending. Since 2010, System is available for all real estate market participants.

Our offer also includes periodic analytical publications and reports on prices changes of housing unit, construction plots and rural areas in selected provincial real estate markets. We also offer the individual reports prepared accordingly to the detailed specifics of the market segment, location and time period. Since the beginning of 2014, we also offer services of real estate valuation realized by a network of appraisers cooperating with AMRON Centre.



System for Analysis of Real Estate Financing Market

SARFiN System is a system for exchanging information on sales of housing loans and information relating to the monitoring of the risk portfolio of housing loans. The System is run by the Polish Banks Association since July 2001 and it is available for banks only. Access to the data stored in the SARFiN System has also the National Bank of Poland.

The data processed in the SARFiN System are also used in specialist analytical publications prepared by AMRON Centre, developed at the individual request of banks, investors, developers and other entities interested with reliable information about a particular market segment in the selected location and time period.



Agnieszka Pilcicka

*Analyst, Market Service Specialist
Research and Market Service Division
AMRON Centre*

About AMRON-SARFiN Report

This Report was developed by AMRON Centre and edited by Agnieszka Pilcicka (agnieszka.pilcicka@amron.pl). Figures and comments have been developed by AMRON and SARFiN teams: Agnieszka Pilcicka (agnieszka.pilcicka@amron.pl), Jerzy Ptaszyński (jerzy.ptaszynski@amron.pl), Bolesław Meluch (boleslaw.meluch@zbp.pl) and Marta Polkowska (marta.polkowska@amron.pl).

In addition to the data collected in the AMRON and SARFiN Systems, this Report also includes data from Central Statistical Office and National Bank of Poland.

AMRON Centre

ul. Cicha 7
00-353 Warszawa
www.amron.pl
raport@amron.pl
phone No.: +48 22 463 47 50