

# AMRON-SARFiN Report

on housing loans  
and real estate transaction prices

# 4 / 2022



ZWIĄZEK BANKÓW POLSKICH

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## CHAPTER 1

- 3 REPORT IN NUMBERS
- 5 INTRODUCTION
- 8 ANALYSIS OF MARKET ENVIRONMENT

## CHAPTER 2

- 9 SITUATION ON HOUSING LOANS MARKET
- 9 ACTIVE HOUSING LOANS
- 9 TOTAL HOUSING LOANS DEBT
- 10 NEW HOUSING LOANS
- 11 FIXED RATE LOANS
- 12 LOAN CURRENCY
- 13 QUALITY STRUCTURE OF MORTGAGE LOANS PORTFOLIO
- 14 STRUCTURE OF NEW LOANS, BY AMOUNT
- 15
- 17 STRUCTURE OF THE LTV RATIO
- 19 LENDING PERIOD
- 21 HOUSING AVAILABILITY INDEX M3 – HAI M3
- 22 AVERAGE MARGIN LEVELS AND MORTGAGE INTEREST RATES

## CHAPTER 3

- 23 SITUATION ON HOUSING MARKET
- 23 HOUSING MARKET IN TOTAL
- 24 DEVELOPERS' SECTOR PERFORMANCE
- 25 AVERAGE TRANSACTION PRICES OF HOUSING UNITS
- 29 AVERAGE TRANSACTION PRICES OF FLATS IN SMALLER POLISH CITIES
- 33 AVERAGE RENT RATES OF HOUSING UNITS

## CHAPTER 4

- 36 EXPERT'S COMMENT
- 38 SYSTEM FOR ANALYSIS AND MONITORING OF REAL ESTATE TRANSACTIONS
- 38 SYSTEM FOR ANALYSIS OF REAL ESTATE FINANCING MARKET

# REPORT IN NUMBERS

## 2022/2021

# 496.004 billion

| total housing loans debt

change  
2022/2021

# 2.98 %

2.366 million	number of active loan agreements	7.15%	↓
126 315	number of concluded agreements	50.75%	↓
PLN 43.644 billion	value of concluded agreements	49.11%	↓
PLN 339 643	average value of a housing loan	1.96%	↑
137.53 points	Housing Availability Index (HAI M3)	58.85 points	↓
19.55%	share of new housing loans with LtV above 80%	11.04 pp	↓
98.25%	share of new housing loans in PLN. by value	0.95 pp	↓
64.49%	share of new housing loans with lending period of 25–35 years	2.86 pp	↓
PLN 11 213	average transaction price per square meter of a dwelling in Warsaw	1.18%	↑
PLN 2 226	average monthly rent rate of a housing unit in Warsaw	18.03%	↑

# REPORT IN NUMBERS

## Q4 2022/Q3 2022

# 496.004 billion

| total housing loans debt

change  
Q4 2022/Q3 2022

# 2.82 %

2.366 million	number of active loan agreements	2.95%	↓
18 932	number of concluded agreements	10.77%	↓
PLN 6.169 billion	value of concluded agreements	11.97%	↓
PLN 325 153	average value of a housing loan	1.34%	↓
137.53 point	Housing Availability Index (HAI M3)	2.07 points	↑
17.10%	share of new housing loans with LtV above 80%	1.42 pp	↑
97.76%	share of new housing loans in PLN. by value	0.24 pp	↑
59.59%	share of new housing loans with lending period of 25–35 years	4.02 pp	↓
PLN 11 213	average transaction price per square meter of a dwelling in Warsaw	1.64%	↓
PLN 2 226	average monthly rent rate of a housing unit in Warsaw	1.78%	↑



FOR THE MORTGAGE SECTOR, 2022 WAS A PERIOD OF DOWNHILL FROM THE SLOPE IT HAS BEEN CLIMBING SINCE 2014.

*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,

this is the fifty-fourth edition of the AMRON Centre Report published by the Polish Banks Association. For 14 years we have been systematically providing you with up-to-date information on lending activity of Polish banks in the area of housing financing, as well as on trends and transaction prices on the residential real estate market. In current edition of the Report, we present very interesting results not only from the fourth quarter of 2022 year in relation to the results from several previous quarters, but also we summarize the surprising results of the entire year 2022.

For the mortgage sector, 2022 was a period of downhill from the slope it has been climbing since 2014. A series of successive increases of the basic interest rates, initiated in October 2021, resulted in even higher increases in the WIBOR ratio, making mortgage loan more and more expensive. **We entered 2022 with the NBP reference rate at 1.75%, but we closed it with the reference rate at the level of 6.75%.**

Rising cost of living combined with high interest rates on loans resulted in decrease in availability of flats. The Housing Availability Index M3, monitored for 14 years by the AMRON Centre, dropped from the level above 200 points, which had been maintained for the last 5 years, to a level similar to the one recorded in 2012.

A symptomatic signal of a change in the trend on the credit market was **decrease in the average**

**value of newly granted housing loan, recorded for the first time since 2012, from the record level of PLN 353 000 at the end of the first quarter of 2022 to PLN 325 thousand at the end of 2022.**

The number of housing loans granted in the fourth quarter of 2022 amounted to **18 932**, i.e. **10.77%** less compared to the previous quarter. Their value amounted to **PLN 6.2 billion**, which was **11.97%** less than in the third quarter of the previous year. Throughout 2022, banks provided **126 thousand** new housing loans, which meant a decrease by **50.75%** compared to the results of the record year 2021. In terms of value, the result of **PLN 43.6 billion** achieved in 2022 was lower by **49.11%** than in the previous year.

From the beginning of 2022, not only a systematic decrease in volume of new lending was observed, but also a systematic, quarter to quarter decrease in number and value of the portfolio of active loan agreements. Both number and value of newly granted loans in each subsequent quarter were lower than the number and value of loans repaid in the same period, as the rising interest rates on loans encouraged borrowers to repay their loans earlier, at least in part. **The number of active housing loan agreements decreased over the past year by over 182 000 loans, down to the level of 2 366 thousand units, and the total value of the mortgage portfolio decreased by PLN 15.2 billion, to PLN 496 billion.**

In comparison to the credit sector, the results of the housing sector looked very good. **In 2022, construction of 238.6 thousand flats and houses were completed**, that was a few thousand more than in the record year 2021. This marks the best result since 1979. However, it is difficult to celebrate this achievement, when at the same time the housing construction sector experienced the most serious economic downturn of last several years. Compared to the numbers recorded in 2021, **the sale results on primary market in 2022 were lower by 38%**, and the number of transactions returned to the level noted in 2013–2014. Limited access to loans, a decrease in the sale of apartments and a sharp increase in construction costs meant that the numbers of both issued building permits and new investments significantly declined. **In result, the number of commenced investments decreased by over 30%. The number of housing units, the construction of which has started in 2022, was lower by as much as 77 thousand than in the previous year.** We will run out of these flats in two or three years, when lending will increase and the demand for flats will increase as well.

In view of decline in transactions number and a drastic reduction in number of newly granted mortgage loans, year 2022 was marked by a slowdown in transaction prices increase, which at the end of the year reached an average of approx. 3% in the largest agglomerations. The highest increase in prices, at the level of 6.8%, was recorded in Wrocław. Ultimately, price growth slowed down and stopped “on a plateau”, as the President of the NBP would say, and may remain there for the next two years, which, given high inflation, would mean de facto a real decline in housing prices.

Decrease in price availability of flats and decline in creditworthiness of potential borrowers resulted in shifting a significant part of demand from the housing market to the rental market. In addition to the persistently increased demand for apartments for rent from refugees from Ukraine, this was the most important factor of the significant rents increase in 2022. However, also on this market, the increase in rent rates at the end of the year slowed down, although year-to-year increases were still double-digit. In annual terms, the highest rent dynamics, amounting to 19.16%, was recorded in Cracow.

Analysing the successive political decisions with regard to the banking sector taken in the past two or three years and the decisions of courts settling disputes between banks and borrowers, it can be concluded **that a residential mortgage loan has become an instrument of high... political risk.** The greatest threat to the banking sector is, as recent events have shown, unlimited risk of borrowers questioning, with the applause of politicians, any provisions of loan agreements, in huge part signed several years ago and, so far, well serviced.

There are, however, some bright spots in this dark picture. As a result of the call of the Polish Association of Developers, the Association of Financial Advisory Companies and the Polish Banks Association, the Polish Financial Supervision Authority partially withdrew from the rigorous safety buffer introduced in April 2022. Borrowers also hope for a lower loan price due to the conversion of WIBOR to WIRON. This can translate into a result of **approx. 85–90 thousand new loans of the total value of approx. PLN 30 billion in 2023.** Certainly, much depends on the situation beyond our eastern border and on the Polish government’s decisions on European funds for the implementation of the National Recovery Plan.

We entered an election year, so there are already government gifts to help citizens to get the own apartment. **“Safe Loan 2%” promises to be a very attractive solution.** The question is, how many people will ultimately benefit from it? Especially that it will be the most expensive housing support instrument (per beneficiary) in history. And as the experience with other government support instruments showed, the group of beneficiaries may turn out to be very limited. Let me remind you that when assessing the effectiveness of government ideas included in the Polish Deal a year ago, **I estimated that in 2022 a maximum of 1 000 borrowers could get a housing loan without downpayment.** The reality turned out to be even more brutal – **only 329 borrowers took advantage of this solution.** I was also sceptical about the attractiveness of the offer of building houses up to 70 square meters without a construction permit. According to data from the Ministry of Development and Technology, by December 2022, **construction of only 1 058 houses up to 70 sqm was reported throughout the country.**

Lack of consistency in the approach to the housing problem and lack of understanding the mechanisms

operating on this market are evidenced by the latest government idea announced under the slogan of preventing speculative apartments purchases. **The purchase of another (the discussion, which exactly, is still ongoing) apartment for rent is to be “punished” with an additional, higher tax on civil law transactions.** As if we had an oversupply on the market of apartments for rent on one hand and on the other – as if families queued up for apartments from developers.

Is the worst of the mortgage market behind us? If the wages increase continues and the forecasts of cheaper loans come true, we may observe a gradual rebuilding of the creditworthiness of Poles. Let us remember the scale of still unsatisfied housing needs of our compatriots and the additional demand for apartments generated by our guests from Ukraine. High deficit of flats means that new flats will find buyers as soon as their availability improves. We are waiting for European funds, e.g. from the recovery fund, which will ensure a sense of employment stability that is crucial for consumers to make decisions about large expenses or incurring long-term liabilities.

Housing construction can and should be used, as in other countries, as one of the most effective flywheels of the economy. Therefore, it should be in the interest of the state to support both demand and supply on the housing market. We can definitely afford a higher scale of budget expenditures for this purpose than before. It just works for all of us. Latest analyses show that **as much as 37% of the price paid to the developer when buying an apartment on the primary market goes to the state budget in form of different types of fees and taxes!** Today, we have a unique opportunity to organize the mortgage lending market and convince borrowers to use fixed-rate loans, we have favourable conditions for launching

a fixed-rate contract loan in the saving-building societies formula, and finally for the streamlining of the covered bond issue and trading process, which has been lagging for 25 years. There are many proven ways and mechanisms to speed up this flywheel of the economy, which housing construction can and should be. It would be enough for those responsible for Poland to want to implement them.

For years, the Polish Banks Association has been recommending the implementation in Poland of financial solutions and instruments that ensure incomparably more effective protection of citizens' housing needs in neighbouring countries. We need systemic, effective, common and long-term solutions. Representatives of the banking, real estate development, insurance and academic sectors will discuss such solutions at the 19th Residential Real Estate Financing Congress, which will take place on March 8-9, 2023 at the Holiday Inn Hotel in Józefów near Warsaw. Feel invited to participate in the Congress and to follow the coverage of this event, which will be published on the Bank.pl financial portal.

I invite you to read the Report. We will be obliged for any comments that will allow us to improve its future issues. Please send your questions and suggestions to the following e-mail address: Raport@amron.pl. Let me just remind you that interested parties are also offered a (paid) version of the Report in English.

Jacek Furga, PhD

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\* 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

After the dynamic changes recorded in the previous quarters, the fourth quarter of 2022 brought some symptoms of stabilization, both on the mortgage market and the housing market. Although the number and value of housing loans continued to decline, the dynamics of these declines was clearly lower than in previous periods. At the same time, not only the scale of lending slowed down, but also structural changes in the credit market.

After several quarters of dynamic changes in a situation of reduced demand and supply (lower number of offers on the primary and secondary markets), the housing market is slowly reaching equilibrium. However, it should be emphasized that this balance means not only stabilization of prices (at the level reached at the turn of 2021 and 2022), but also a decrease in the number of transactions. The fourth quarter of 2022 also brought a clear slowdown in the growth of rent rates in the largest Polish cities. In a situation of a significant increase in the costs of living and, at the same time, a significant decrease in real wages, it seems that tenants have stopped accepting current high rents.

The activity of investors, both developers and individual, also remained at a stable, low level. The number of building permits obtained and construction commenced in Q4 2022 was close to the level recorded in the “pandemic” year 2020.

The most important factors shaping the situation on the residential real estate market and the

mortgage loan market in the fourth quarter of 2022 are:

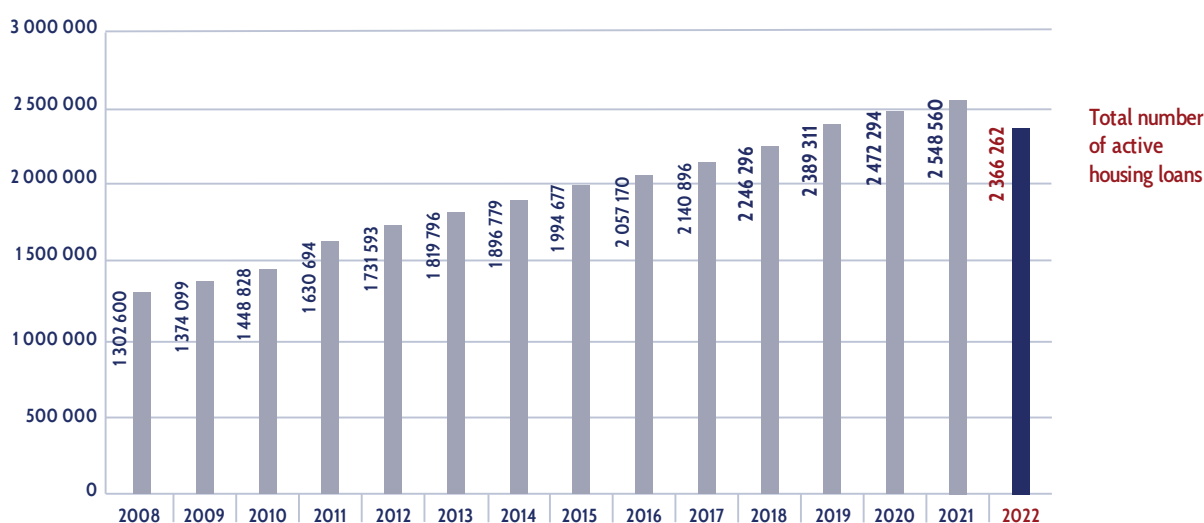
- persistently high level of inflation – in December 2022, the GUS consumer price index amounted to 16.6% compared to the same period of the previous year (in the previous quarter it was 17.2%);
- maintaining the interest rates by the Monetary Policy Council at the level of 6.75%, set on September 9, 2022 – despite rising inflation;
- persistently low level of unemployment – at the end of December 2022, the registered unemployment rate was 5.2%, i.e. it slightly increased (by 0.1%) compared to the end of the previous quarter;
- persistently low level of consumer optimism, visible in the BWUK quotations (consumer confidence index recorded by the Central Statistical Office);
- persistently low level of activity in the development sector;
- further increase in the prices of building materials, higher by 20% on average compared to the corresponding period of the previous year. Prices increased again in all 20 product groups (data from PSB Handel S.A.).

# SITUATION ON HOUSING LOANS MARKET

## Active housing loans

As of December 31, 2022, the number of active housing loan agreements in Poland amounted to **2 366 262**. This meant a decrease by **2.95%** in the fourth quarter of 2022, i.e. nominally by

**71 875** loans, compared to the end of the previous quarter. Compared to the number of active loans recorded at the end of 2021, this meant a decrease by **182 298** loans (**7.15%**).

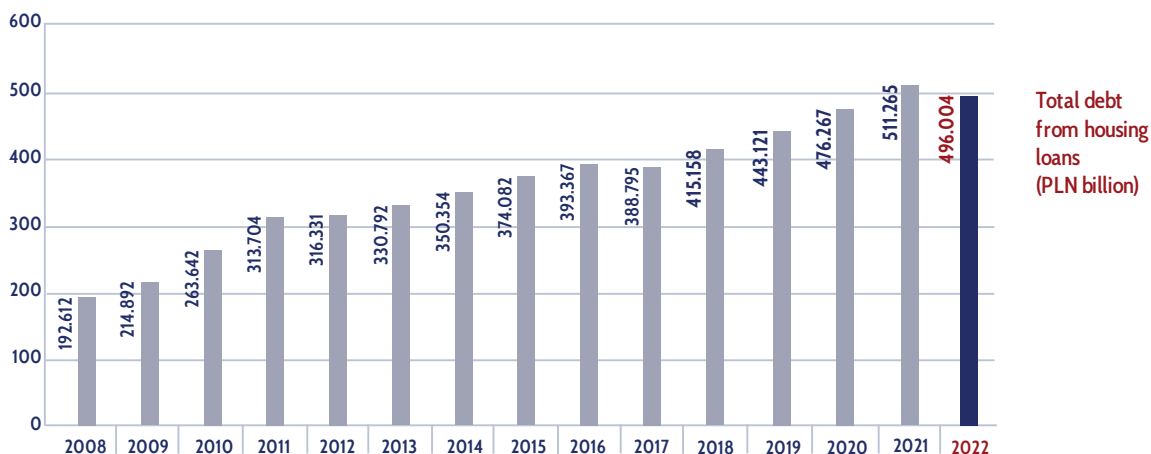


SOURCE: SARFIN

## Total housing loans debt

The total value of Polish households debt due to granted housing loans at the end of the fourth quarter of 2022 amounted to **PLN 496.004 billion** compared to **PLN 510.381 billion** at the end of the previous quarter. In the period from October

to December last year, the total value of active mortgage loans for housing purposes decreased by **2.82%**, i.e. by **PLN 14.376 billion**. Compared to the value recorded at the end of 2021, this meant a decrease by **PLN 15.261 billion (2.98%)**.



SOURCE: SARFIN

## New housing loans

Number of housing loans granted in the fourth quarter of 2022 amounted to **18 932**, which was **10.77%** less than in the previous quarter (less by **2 286 loans** in nominal terms). The value of newly granted mortgage loans amounted to **PLN 6.169 billion**, which meant a decrease by **PLN 839 million**, or **11.97%** compared to the third quarter of the previous year.

In relation to the corresponding period of the previous year, **44 986** (or **70.38%**) fewer loan

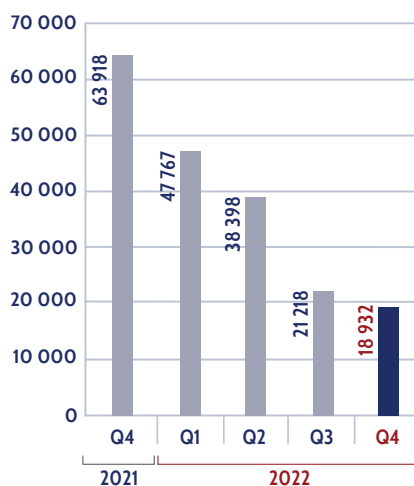
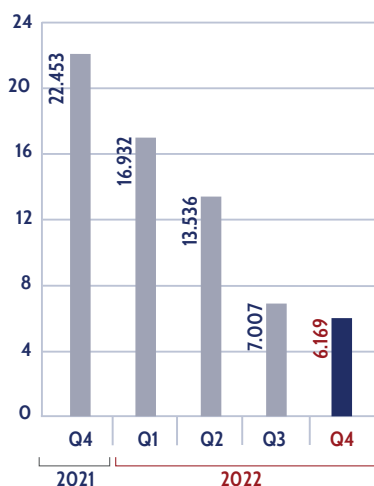
agreements were signed, and the value of new loans was lower by **PLN 16.284 billion (72.53%)**.

Throughout 2022, banks granted **126 315** new housing loans. In comparison to the results achieved by the sector in the previous year, this result was lower by **130 141** loans (a decrease by **50.75%**). In terms of value, the result achieved in 2022 was lower by **PLN 42.117 billion** than the total value of loans granted by banks in 2021 (a decrease by **49.11%**).

QUARTER	VALUE (PLN BILLION)	CHANGE/ previous quarter	NUMBER	CHANGE/ previous quarter
Q4 2021	22.453	3.34% ↓	63 918	6.49% ↓
Q1 2022	16.932	24.59% ↓	47 767	25.27% ↓
Q2 2022	13.536	20.06% ↓	38 398	19.61% ↓
Q3 2022	7.007	48.23% ↓	21 218	44.74% ↓
<b>Q4 2022</b>	<b>6.169</b>	<b>11.97% ↓</b>	<b>18 932</b>	<b>10.77% ↓</b>

Value and number of new housing loans, quarterly

SOURCE: SARFIN



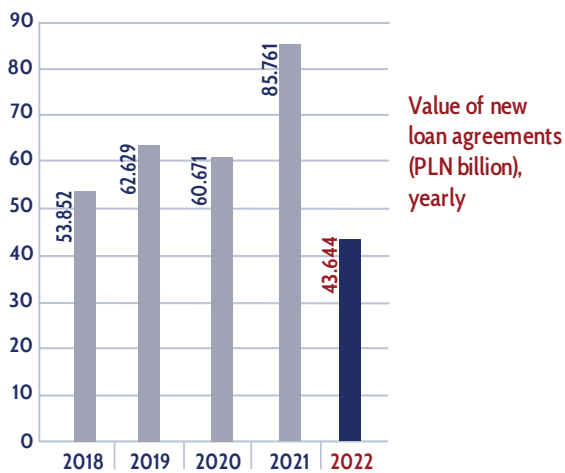
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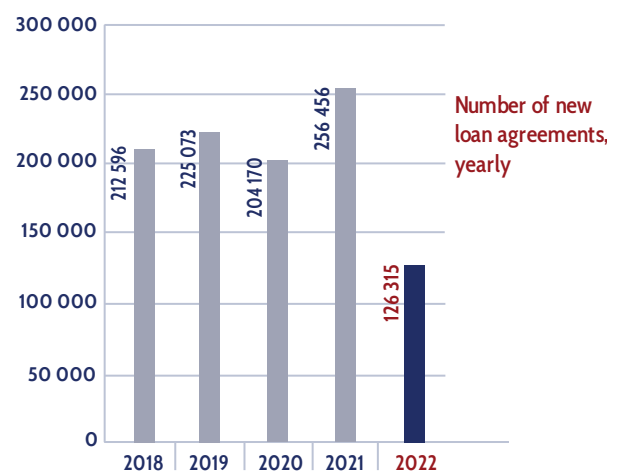
YEAR	VALUE (PLN BILLION)	CHANGE/ previous quarter	NUMBER	CHANGE/ previous period
2018	53.852	20.82% ↑	212 596	11.52% ↑
2019	62.629	16.30% ↑	225 073	5.87% ↑
2020	60.671	3.13% ↓	204 170	9.29% ↓
2021	85.761	41.35% ↑	256 456	25.61% ↑
<b>2022</b>	<b>43.644</b>	<b>49.11% ↓</b>	<b>126 315</b>	<b>50.75% ↓</b>

Value and number of new housing loans, yearly

SOURCE: SARFIN



SOURCE: SARFIN

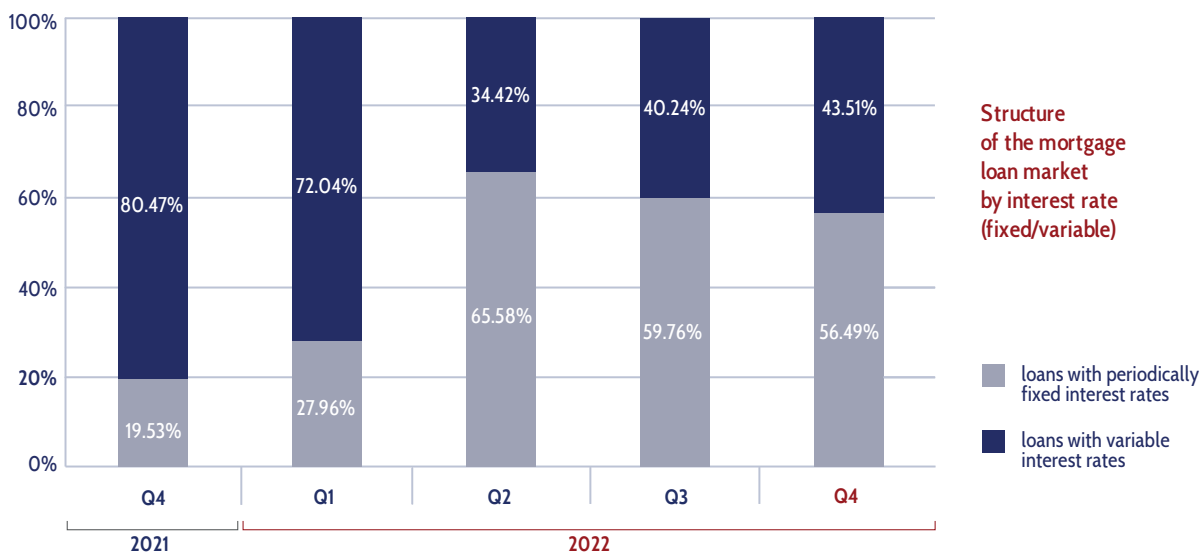


SOURCE: SARFIN

## Fixed rate loans

The number of loans with a periodically fixed interest rate granted in the fourth quarter of 2022 was equal to **19 765**. This number includes both newly signed and annexed agreements. Share of loans with interest rate changed from variable to periodically fixed under the annex signed in the fourth quarter of last year

amounted to **39.35%**, i.e. by **11.08 pp** less than in the previous quarter. The number of newly granted loans with a periodically fixed interest rate amounted to **11 987**, which was **5.46%** less than in the previous quarter. In terms of volume, it accounted for **63.32%** of total mortgage loans sale in Q4 2022.



SOURCE: POLISH BANKS ASSOCIATION

## Loan currency

Changes in the currency structure of newly granted housing loans noted in the third quarter of this year were insignificant. PLN housing loans accounted for **97.76%** of the value of all newly granted mortgage loans, i.e. less by **0.24 pp** compared to the previous quarter. Share of CHF loans in the new loans portfolio remained at the previous quarter's level and amounted to **0.01%**. Share of EUR loans fell to **2.11%**, i.e. by **0.22 pp** compared to the previous quarter and loans granted in other foreign currencies amounted to

**0.12%**, i.e. less by **0.02 pp** than in the third quarter of the last year.

Compared to the fourth quarter of 2021, the share of newly granted loans in PLN decreased by **1.39 pp**, the percentage of housing loans in EUR increased by **1.36 pp**, share of loans denominated in other foreign currencies – by **0.04 pp**, while the share of loans denominated in CHF did not change.

QUARTER	PLN	CHF	EUR	OTHER
Q4 2021	99.15%	0.02%	0.76%	0.08%
Q1 2022	99.08%	0.01%	0.80%	0.10%
Q2 2022	98.64%	0.01%	1.26%	0.09%
Q3 2022	97.52%	0.01%	2.33%	0.14%
<b>Q4 2022</b>	<b>97.76%</b>	<b>0.01%</b>	<b>2.11%</b>	<b>0.12%</b>

Currency structure of new loans in terms of value

SOURCE: SARFIN

With respect to the whole year 2022, PLN loans accounted for **98.25%** of all new housing loans, i.e. by **0.95 pp** less compared to the previous year. The share of loans denominated in foreign currencies amounted to **1.75%**, including share of EUR loans

at the level of **1.63%** (**0.94 pp** less than a year ago), share of loans in Swiss franc accounting for **0.01%** (unchanged comparing to 2021) and share of loans in other foreign currencies, which accounted for **0.11%** (same as in 2021).

QUARTER	PLN	CHF	EUR	OTHER
2018	98.36%	0.01%	1.12%	0.52%
2019	98.49%	0.01%	1.03%	0.47%
2020	98.79%	0.01%	0.90%	0.30%
2021	99.20%	0.01%	0.68%	0.11%
<b>2022</b>	<b>98.25</b>	<b>0.01%</b>	<b>1.63%</b>	<b>0.11%</b>

Currency structure of the value of new loans, yearly

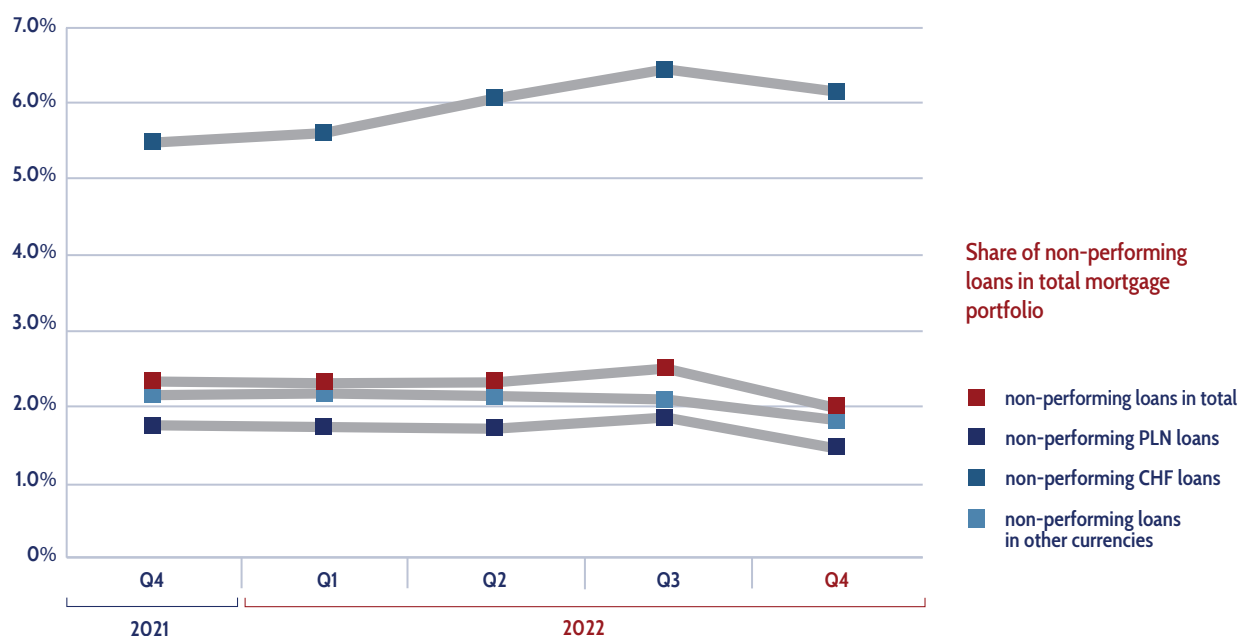
SOURCE: SARFIN

## Quality structure of mortgage loans portfolio

The fourth quarter of 2022 brought insignificant changes in the quality structure of the mortgage loan portfolio. Share of non-performing loans in total housing loan portfolio accounted for **2.04%**, which meant a decrease by **0.46 pp** compared to the level recorded in the previous quarter. PLN housing loans with overdue payments at the end of December 2022 accounted for **1.48%** of the whole PLN loan portfolio, which also meant a decrease by **0.36 pp**. Percentage of

non-performing loans in Swiss franc equalled to **6.11%** of the portfolio (less by **0.26 pp**). Share of non-performing loans in other currencies also decreased – at the end of Q4 2022 it amounted to **1.84%** (less by **0.24 pp**).

Compared to the fourth quarter of 2021, share of non-performing housing loans in total decreased by **0.31%**. The share of loans in PLN with arrears in repayments decreased by **0.27 pp**, while share of non-performing loans in other foreign currencies decreased by **0.29 pp**. Only the share of CHF non-performing loans increased, by **0.59 pp**.



SOURCE: NATIONAL BANK OF POLAND

QUARTER	NON-PERFORMING LOANS IN TOTAL	NON-PERFORMING PLN LOANS	NON-PERFORMING CHF LOANS	NON-PERFORMING LOANS IN OTHER CURRENCIES
Q4 2021	2.35%	1.75%	5.52%	2.13%
Q1 2022	2.33%	1.73%	5.63%	2.15%
Q2 2022	2.34%	1.71%	6.03%	2.12%
Q3 2022	2.50%	1.84%	6.37%	2.08%
Q4 2022	2.04%	1.48%	6.11%	1.84%

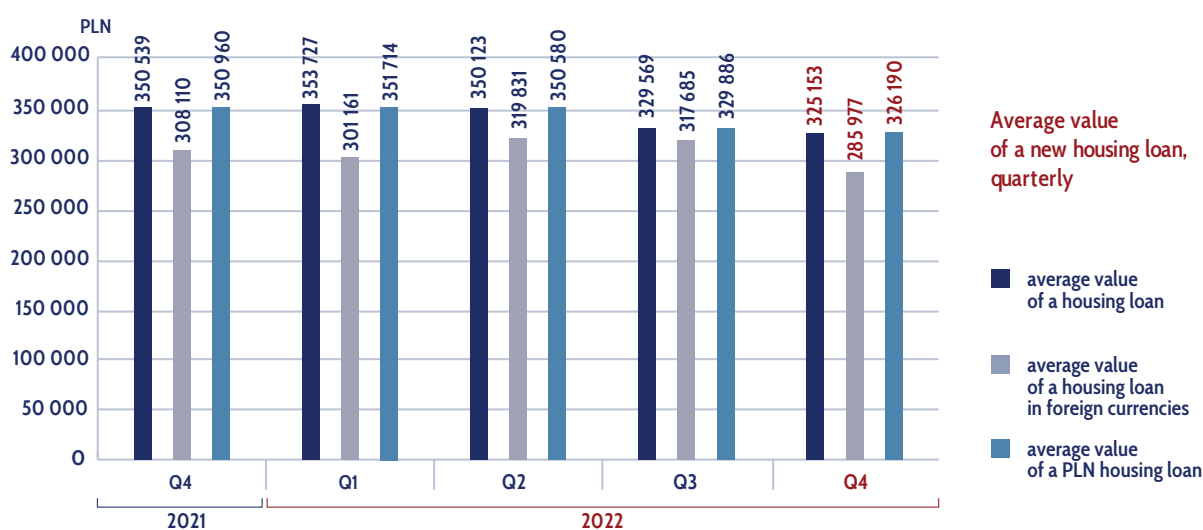
Share of non-performing loans in total mortgage portfolio

SOURCE: NATIONAL BANK OF POLAND

## Average value of a loan

The average value of a housing loan (in total) in Q4 2022 reached the level of **PLN 325 153**, which was less by **PLN 4 416 (1.34%)** compared to the previous quarter. In the same period the average value of a foreign currency loan was equal to **PLN 285 977**, which meant a decrease by **PLN 31 708**, i.e. by **9.98%**. The average amount of a PLN housing loan was **PLN 326 190**, what meant an increase by **PLN 3 696 (1.12%)** compared to the value recorded in the previous quarter.

Comparing to Q4 2021, the average value of a new housing loan granted in the domestic currency in Q4 2021 was lower by **7.06%** (by **PLN 24 769** in nominal terms) and the average value of a loan denominated in foreign currencies – by **7.18%** (i.e. **PLN 22 133**). The average value of a mortgage loan (in total) granted in the surveyed quarter decreased by **7.24%**, i.e. by **PLN 25 387** in nominal terms compared to the corresponding quarter of 2021.



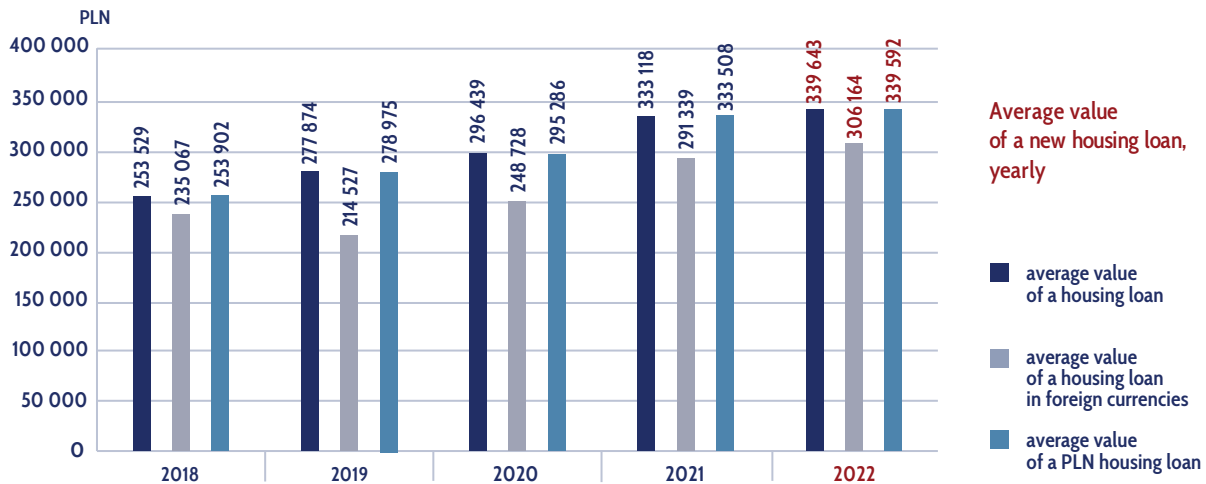
SOURCE: SARFIN

QUARTER	AVERAGE VALUE OF A HOUSING LOAN	AVERAGE VALUE OF A HOUSING LOAN IN FOREIGN CURRENCIES	AVERAGE VALUE OF A PLN HOUSING LOAN
Q4 2021	350 539	308 110	350 960
Q1 2022	353 727	301 161	351 714
Q2 2022	350 123	319 831	350 580
Q3 2022	329 569	317 685	329 886
Q4 2022	325 153	285 977	326 190

SOURCE: SARFIN

The average value of a new PLN loan in entire year 2022 was by **1.82%** higher than the one recorded in the previous year (**PLN 6 085** in nominal terms). and a foreign currency loan

increased by **5.09%** (**PLN 14 825**). Thus. the average value of all housing loans granted in 2022 increased by **1.96%**. i.e. **PLN 6 524**. and amounted to **PLN 339 643**.



SOURCE: SARFIN

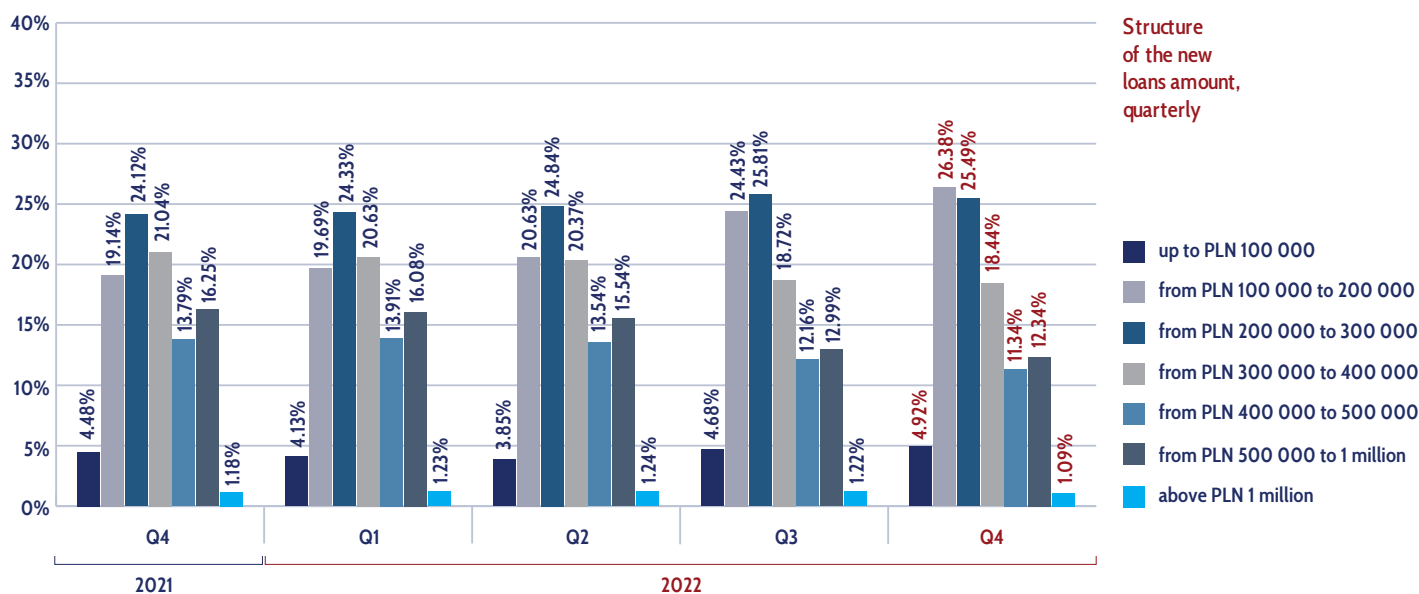
QUARTER	AVERAGE VALUE OF A HOUSING LOAN	AVERAGE VALUE OF A HOUSING LOAN IN FOREIGN CURRENCIES	AVERAGE VALUE OF A PLN HOUSING LOAN
2018	253 529	235 067	253 902
2019	277 874	214 527	278 975
2020	296 439	248 728	295 286
2021	333 118	291 339	333 508
2022	339 643	306 164	339 592

SOURCE: SARFIN

## Structure of new loans, by amount

In the fourth quarter of 2022, the largest change in the structure of newly granted housing loans in terms of value was recorded in the category from PLN 100 000 to PLN 200 000. Share of loans in this category increased by **1.95 pp** compared to the amount recorded in the previous quarter. An increase was recorded also in case of category of loans up to PLN 100 000 – by **0.24 pp**. Shares of other loan categories decreased, with the deepest decline in share of loans from PLN 400 000 to PLN 500 000 PLN – by **0.81 pp**.

Compared to the fourth quarter of 2021, shares of loans of the values exceeding PLN 300 000 decreased. The deepest decrease was recorded in category of loans with values ranging from PLN 500 000 to PLN 1 million – by **3.91 pp**. At the same time, increases were noted in categories of loans up to PLN 300 000. The highest change was the increase of share of loans between PLN 100 000 and PLN 200 000 PLN to **26.38%**, i.e. by **7.24 pp**.



Structure of the new loans amount, quarterly

SOURCE: SARFIN

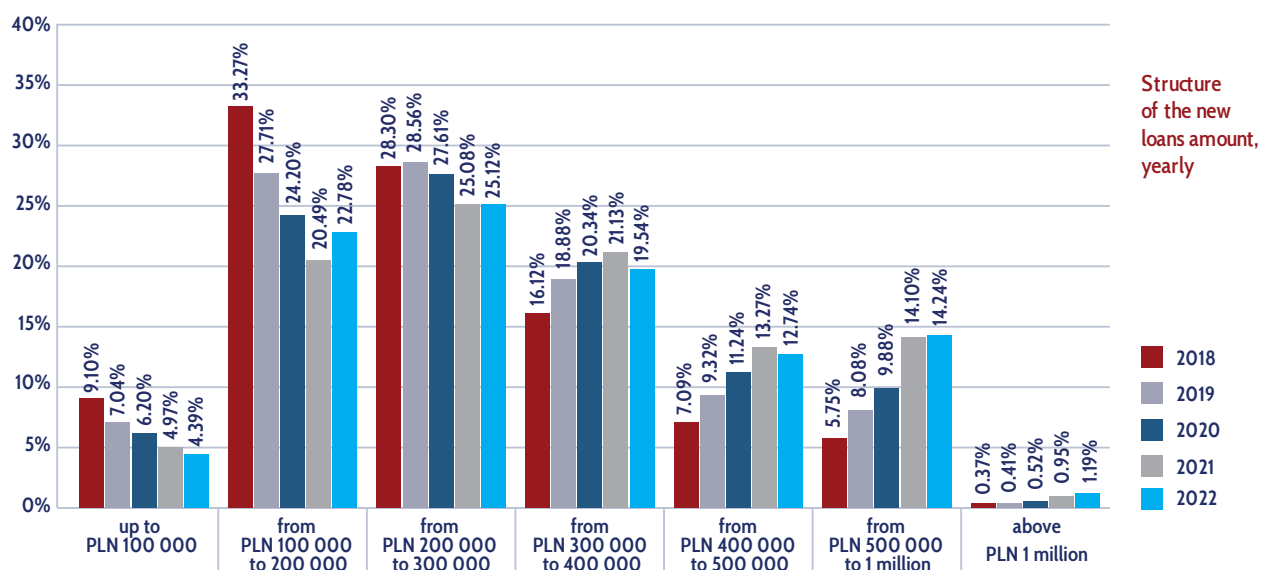
	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
up to PLN 100 000	4.48%	4.13%	3.85%	4.68%	4.92%
from PLN 100 000 to 200 000	19.14%	19.69%	20.63%	24.43%	26.38%
from PLN 200 000 to 300 000	24.12%	24.33%	24.84%	25.81%	25.49%
from PLN 300 000 to 400 000	21.04%	20.63%	20.37%	18.72%	18.44%
from PLN 400 000 to 500 000	13.79%	13.91%	13.54%	12.16%	11.34%
from PLN 500 000 to 1 million	16.25%	16.08%	15.54%	12.99%	12.34%
above PLN 1 million	1.18%	1.23%	1.24%	1.22%	1.09%

Structure of the new loans amount, quarterly

SOURCE: SARFIN

In annual terms (2022/2021), both the slowdown in the downward trend of the popularity of loans with lower values and the slowdown in the dynamics of changes in the market structure are clearly visible. The highest increase in share in the new loans portfolio, by **2.29 pp**, was recorded for loans up to PLN 100 000 and 200 000

(up to **22.78%**). On the other hand, decreases were noted in categories of loans below PLN 100 000 (by **0.58 pp**, to **4.39%**), from PLN 300 to 400 thousand (by **1.59 pp** to **19.54%**) and those in the range between PLN 400 and 500 thousand (by **0.54 pp** to **12.74%**). Changes of shares of other loan categories did not exceed **0.25 pp**.



SOURCE: SARFIN

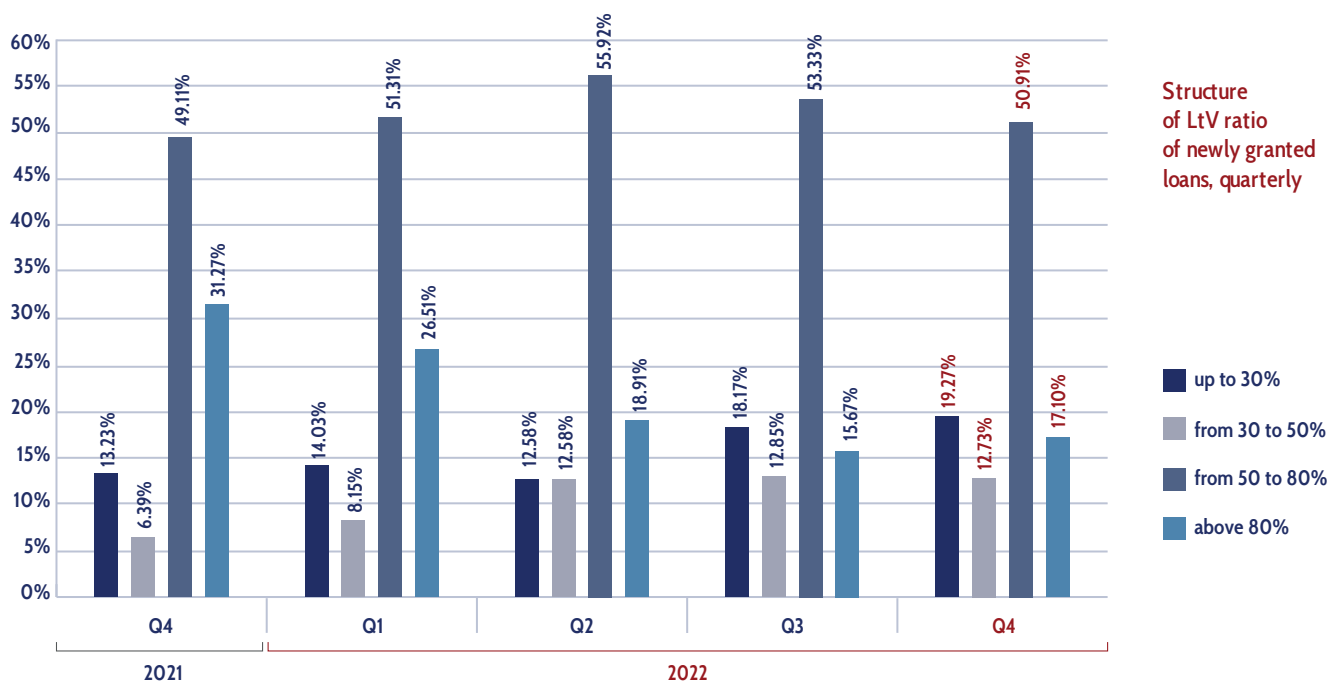
	2018	2019	2020	2021	2022
up to PLN 100 000	9.10%	7.04%	6.20%	4.97%	4.39%
from PLN 100 000 to 200 000	33.27%	27.71%	24.20%	20.49%	22.78%
from PLN 200 000 to 300 000	28.30%	28.56%	27.61%	25.08%	25.12%
from PLN 300 000 to 400 000	16.12%	18.88%	20.34%	21.13%	19.54%
from PLN 400 000 to 500 000	7.09%	9.32%	11.24%	13.27%	12.74%
from PLN 500 000 to 1 million	5.75%	8.08%	9.88%	14.10%	14.24%
above PLN 1 million	0.37%	0.41%	0.52%	0.95%	1.19%

SOURCE: SARFIN

## Structure of the LtV ratio

After dynamic changes in the structure of the mortgage loan market in terms of the LtV ratio, recorded in the third quarter of 2022, the fourth quarter brought a clear decrease in the dynamics of changes. Share of loans with LtV between 50 to 80% decreased by **2.42 pp** and amounted to **50.91%**. Decrease was noted also in share of loans with the LtV level of 30 to 50%. It amounted to **12.73%** and was lower than in the previous quarter by **0.13 pp**. On the other hand, increases were noted in share of loans with the LtV categories to 30% (by **1.13 pp** to the level of **19.27%**) and above 80% – by **1.42 pp**, i.e. to the level of **17.10%**.

In relation to the fourth quarter of 2021, a significant decrease, by **14.17 pp**, was recorded in share of loans with an LtV ratio above 80%. Shares of all other LtV categories increased. Share of loans category with LtV between 50 and 80% increased by **1.79 pp** but more pronounced increases were recorded in the categories of loans with the LtV level from 30 to 50% and up to 30% – by **6.34 pp** and **6.04 pp** respectively.



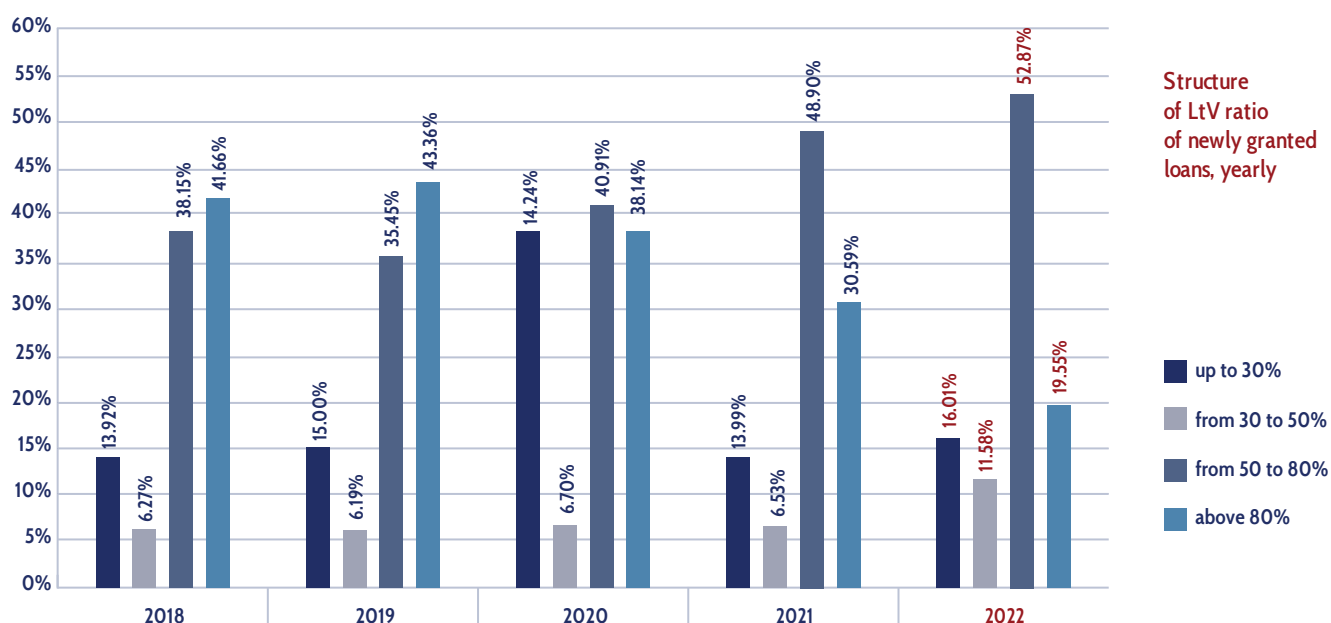
SOURCE: SARFIN

	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
up to 30%	13.23%	14.03%	12.58%	18.15%	19.27%
from 30 to 50%	6.39%	8.15%	12.58%	12.85%	12.73%
from 50 to 80%	49.11%	51.31%	55.92%	53.33%	50.91%
above 80%	31.27%	26.51%	18.91%	15.67%	17.10%

SOURCE: SARFIN

In annual terms, there was a significant decrease in share of loans with an LtV ratio above 80%. In 2022 it was lower than in the previous year by **11.04 pp**. On the other hand, shares of other

categories of mortgage loans increased, with the largest increase, by **5.05 pp**, recorded in case of loans with LtV from 30 to 50%.



SOURCE: SARFIN

	2018	2019	2020	2021	2022
up to 30%	13.92%	15.00%	14.24%	13.99%	16.01%
from 30 to 50%	6.27%	6.19%	6.70%	6.53%	11.58%
from 50 to 80%	38.15%	35.45%	40.91%	48.90%	52.87%
above 80%	41.66%	43.36%	38.14%	30.59%	19.55%

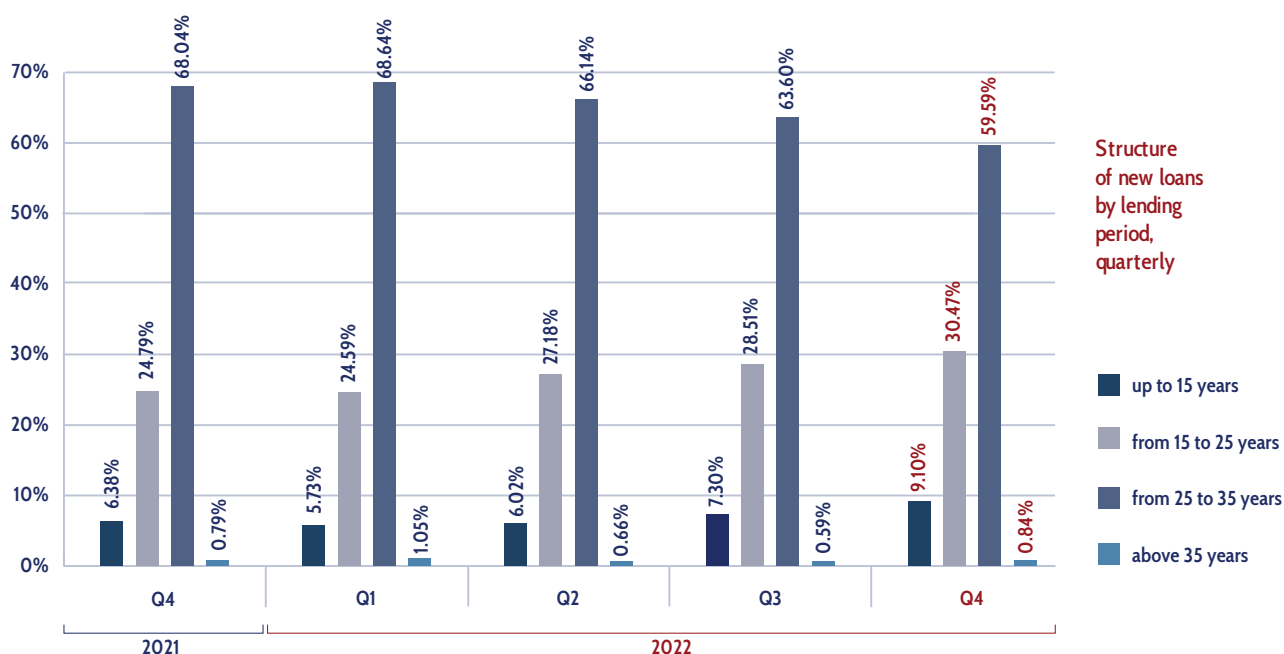
Structure of LtV ratio of newly granted loans, yearly

SOURCE: SARFIN

## Lending period

In the fourth quarter of 2022, in the structure of new housing loans due to the loan period, increases were recorded in categories of loans with maturity of up to 15 years (by **1.79 pp**) and from 15 to 25 years (by **1.97 pp**). Their market shares amounted to **9.10%** and **30.47%** respectively. In other two categories, decreases were recorded – by **4.02 pp** in case of loans taken out for a period from 25 to 35 years and by **0.26 pp** for loans with maturity of more than 35 years.

Compared to the results recorded in the fourth quarter of 2021, increases were noted in share of loans with a maturity of up to 15 years (by **2.72 pp**), from 15 to 25 years (by **5.69 pp**) and slight, by **0.05 pp**, in case of loans with a maturity of over 35 years. A significant decrease, by **8.46 pp**, was recorded at the same time in category of loans with maturities from 25 to 35 years.



SOURCE: SARFIN

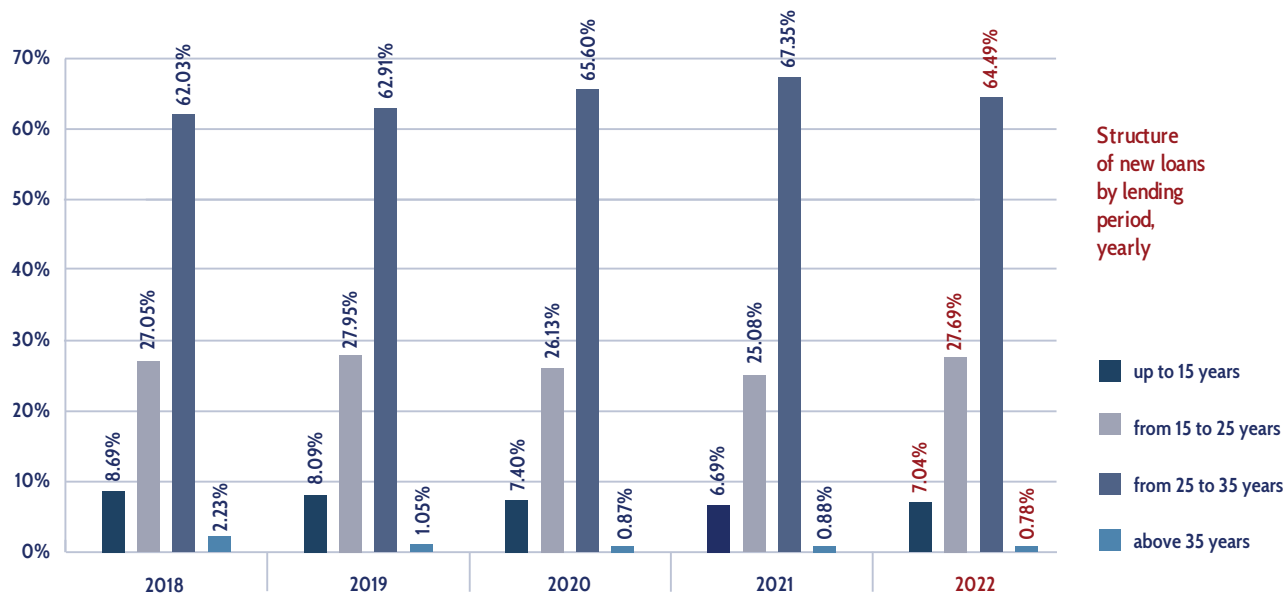
	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
up to 15 years	6.38%	5.73%	6.02%	7.30%	9.10%
from 15 to 25 years	24.79%	24.59%	27.18%	28.51%	30.47%
from 25 to 35 years	68.04%	68.64%	66.14%	63.60%	59.59%
above 35 years	0.79%	1.05%	0.66%	0.59%	0.84%

SOURCE: SARFIN

Structure of new loans by lending period, quarterly

In annual terms, an increase was noted in shares of loans categories with a maturity of up to 25 years – by **0.35 pp** in case of loans granted for a period of up to 15 years and by **2.61 pp** in case of loans granted for a period of 15 to 25 years (to the level

of **27.69%**). Slight declines were recorded in other market segments. Share of loans granted for the period from 25 to 35 years decreased by **2.86 pp**, while the share of loans with a maturity of more than 35 years decreased by **0.10 pp**.



SOURCE: SARFIN

	2018	2019	2020	2021	2022
up to 15 years	8.69%	8.09%	7.40%	6.69%	7.04%
from 15 to 25 years	27.05%	27.95%	26.13%	25.08%	27.69%
from 25 to 35 years	62.03%	62.91%	65.60%	67.35%	64.49%
above 35 years	2.23%	1.05%	0.87%	0.88%	0.78%

SOURCE: SARFIN

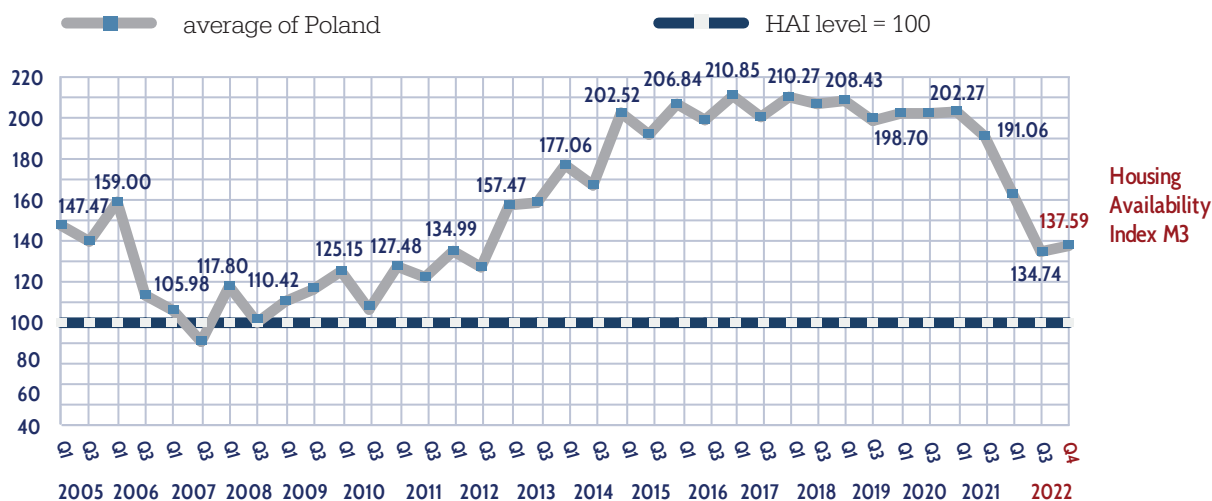
## Housing Availability Index M3 – HAI M3

**Housing Availability Index M3 (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 increase of dwelling availability in Q4 2022 was influenced by the following factors:

- a slight increase in transaction prices in analysed housing segment (with floor area of 45 to 55 sqm) in cities monitored in order to calculate IDM M3 (8 largest cities) – by **2.16%** compared to Q3 2022;
- increase in interest rates on newly granted loans – according to NBP data, the real interest rate on loans granted in the fourth quarter of 2022 amounted to **9.29%** (in the third quarter of 2022, the interest rate was equal to **9.05%**);
- an increase in the average gross family income by **3.9%** in Q4 2022 in comparison to the previous quarter;

- a slight increase in the level of the cost of living, which for the index is expressed as the subsistence minimum at the level of the previous quarter (quarter/ quarter inflation rate due to the postponement of the publication of the subsistence minimum value by the Institute of Labour and Social Affairs for the following quarter) by **3.6%** in relation to the third quarter of 2022.

The disposable income for IDM3 (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) increased by **4.28%**. After taking into account the increase in housing prices, the housing availability index in the fourth quarter of 2022 increased by **2.07 points**, i.e. to the level of **137.59 points**.

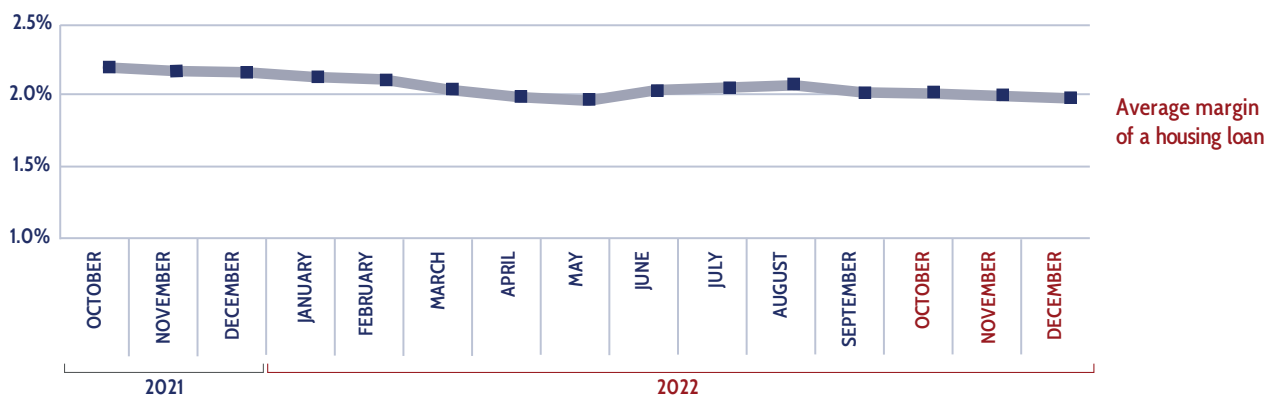


SOURCE: POLISH BANKS ASSOCIATION

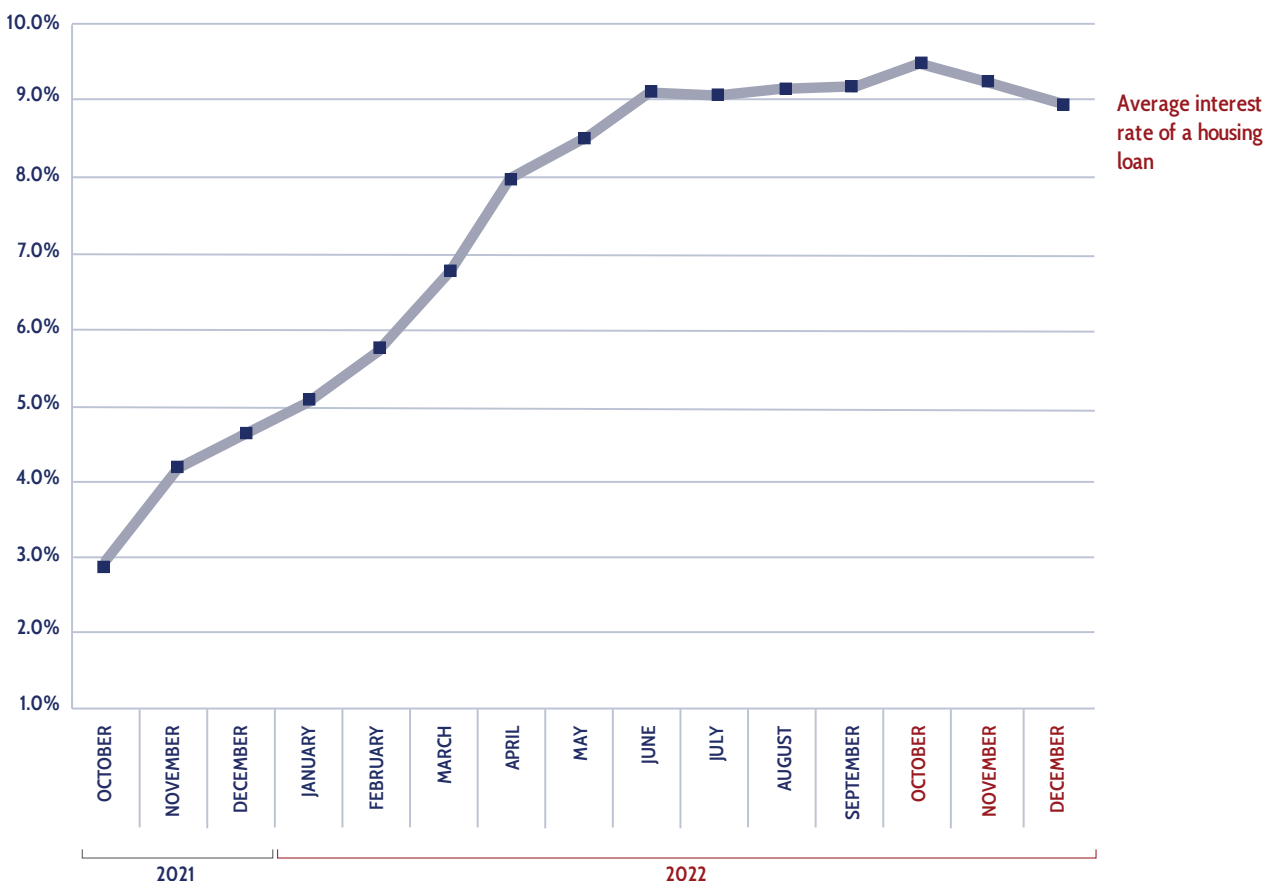
## Average margin levels and mortgage interest rates

At the end of the fourth quarter of 2022, the average offer margin of a sample mortgage loan (in the amount of PLN 300 thousand, at the LtV level of 75%, granted for a period of 25 years) amounted to **2.16%**, i.e. was lower than the one recorded at the end of the third quarter of 2022 by **0.05 pp**. Compared to the end of the corresponding period of 2021, the average mortgage loan margin was higher by **0.22 pp**.

The average interest rate on a model mortgage loan at the end of the fourth quarter of 2022 was equal to **8.96%**, i.e. by **0.28 pp** less compared to the end of the third quarter. Compared to the corresponding period of the previous year, the average interest rate was higher by **4.26 pp**.



SOURCE: AMRON CENTRE BASED ON BANKS' CREDIT OFFERS



SOURCE: AMRON CENTRE BASED ON BANKS' CREDIT OFFERS

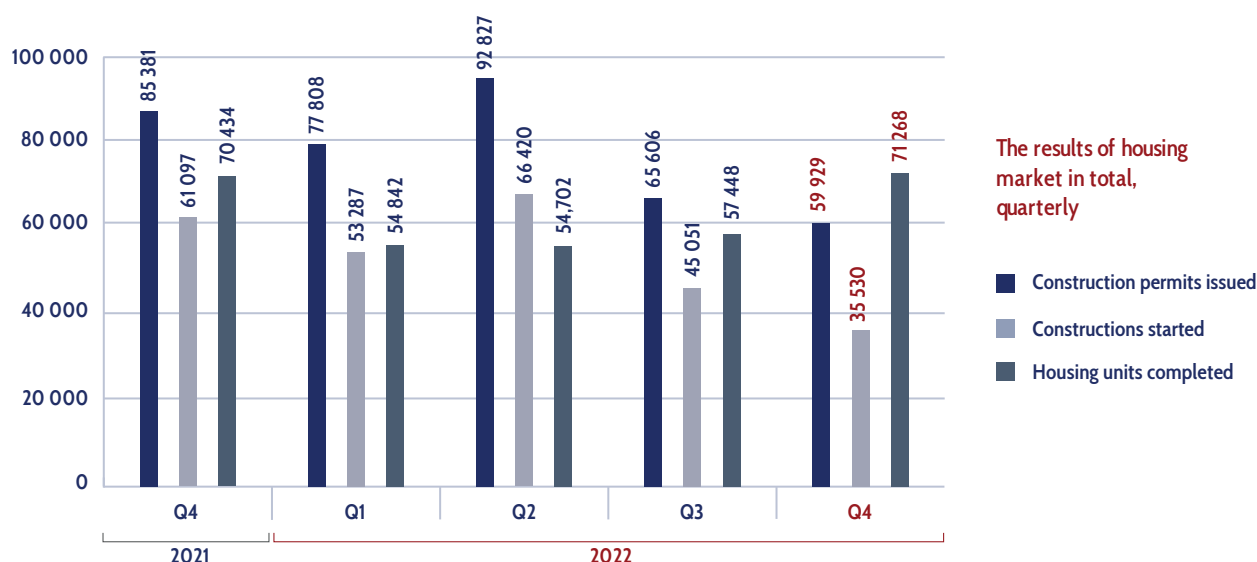
# SITUATION ON HOUSING MARKET

## Housing market in total

The Central Statistical Office data on the results of housing construction clearly indicate a significant reduction in investor activity, both developers and individual investors. It is true that compared to the results recorded in the third quarter of 2022, the number of completed apartments increased by **24.06%**, but it must be remembered that the real barometer of the situation on the construction market are the other two indicators. The number of dwellings, for which a building permit has been issued or a construction project has been notified, has decreased by **8.65%** compared to the previous quarter and amounted to **59 929**, at the same time the number of dwellings, the construction of which has started, decreased by

**21.13%** to the level of **35 530**. What should be emphasized, it was another quarter of declines of both indicators.

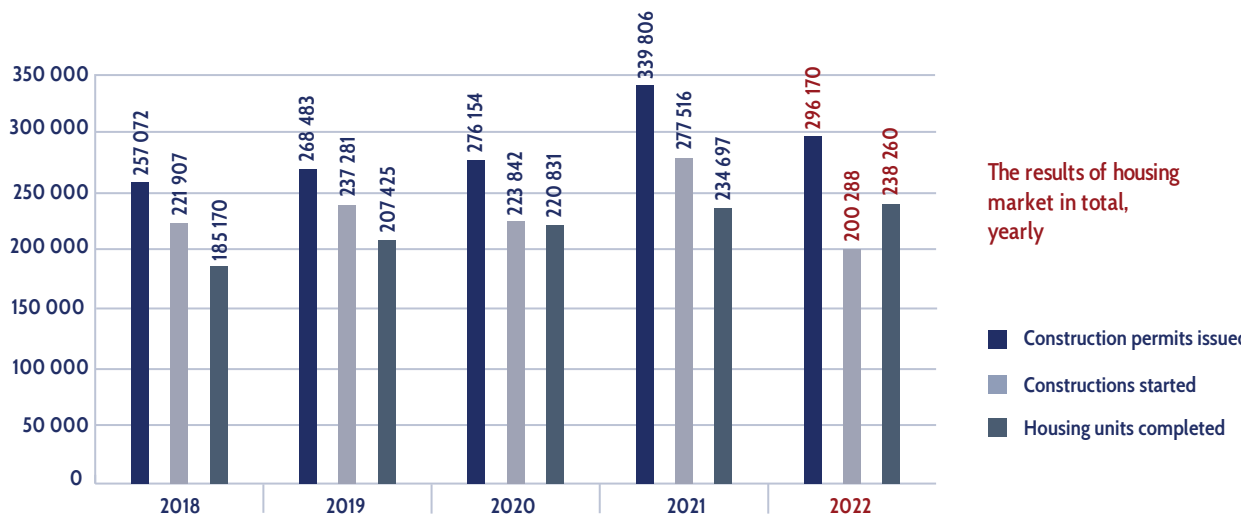
Compared to the results of Q4 2021, a slight increase was recorded in category of completed apartments. In the fourth quarter of 2022, **1.18%** more apartments were completed than in the corresponding period of the previous year. Both the number of dwellings, for which a building permit was issued or a notification with a construction project was made and the number of dwellings, the construction of which had begun, were lower than in the previous year – by **29.81%** and **41.85%**, respectively.



SOURCE: CENTRAL STATISTICAL OFFICE

In relation to the results recorded in 2021, dynamic decreases are noticeable: in case of number of flats, the construction of which has started – by **27.83%** and in case of the number of flats for which a building permit has been issued

or a construction project has been submitted – by **12.84%**. However, the number of flats completed was maintained on the level recorded in the previous year (increase by **1.52%**).



SOURCE: CENTRAL STATISTICAL OFFICE

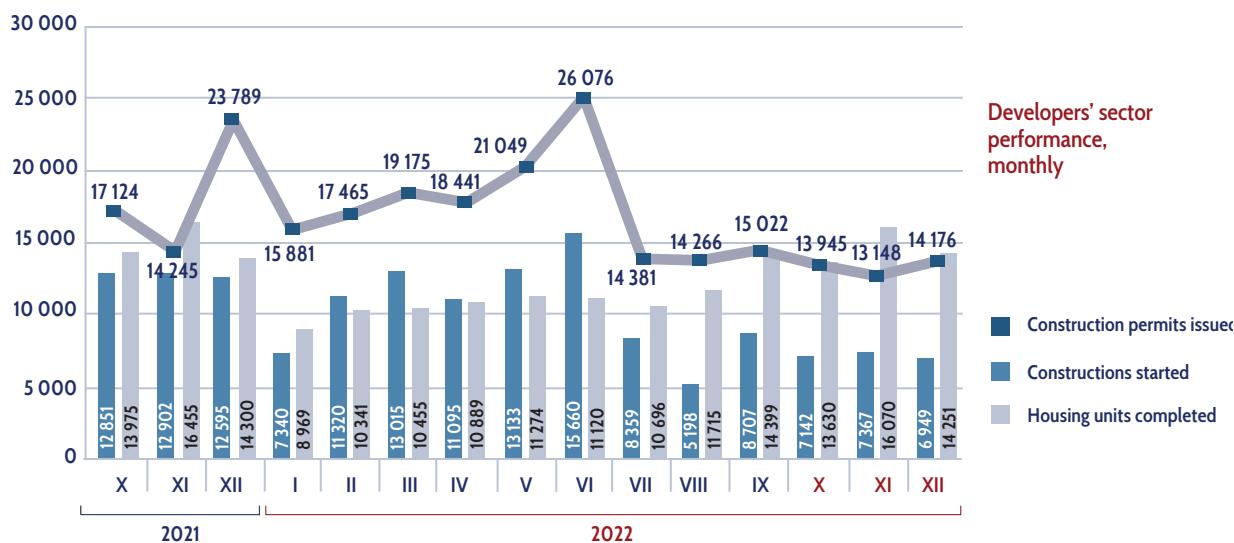
## Developers' sector performance

In the fourth quarter of 2022, developers started construction of **21 458** apartments, which was by **3.62%** less than in the previous quarter. The number of apartments, for which developers obtained building permits in this period amounted to **41 269**, what meant a decrease by **4.15%**. On the other hand, a dynamic growth was recorded in the number of dwellings completed. In Q4, 2022 43 951 flats were completed, which was by **20.90%** more than in the previous period.

Compared to the results achieved by the development sector in the fourth quarter of 2021, decreases were recorded in all three indicators. In the fourth quarter of 2022, **1.09%** more flats were completed than in a year ago. In case of dwellings, for which construction permits were issued, the decrease was **24.40%**, while the number of dwellings, the construction of which has begun was lower by **44.04%** compared to the results for the corresponding period of 2021.

The persistently lower level of investors' activity, compared to previous periods, primarily those related to investments being prepared and commenced, is a result of developers adopting to the current situation on the housing market, including, above all, a decrease in demand for apartments related to the collapse of the mortgage market.

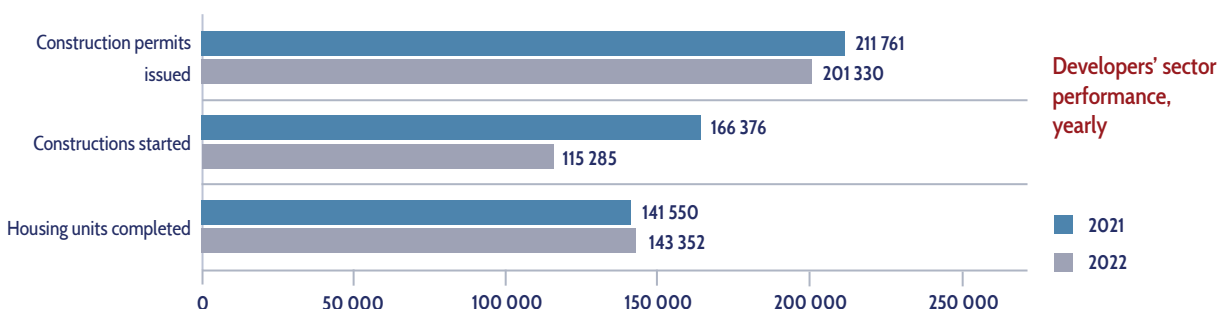
The number of building permits obtained by developers in the fourth quarter of 2022 accounted for **68.86%** of all permits obtained in the residential construction sector. This percentage was higher by **3.23 pp** than in the previous quarter. The number of dwellings, the construction of which was started by developers, amounted to **60.39%** of all commenced investments (increase by **10.97 pp**) and the number of dwellings completed by developers accounted for **61.67%** of all completed dwellings (less by **1.61 pp** compared to the previous quarter).



SOURCE: CENTRAL STATISTICAL OFFICE

	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Construction permits issued	54 586	52 020	64 984	43 057	41 269
Constructions started	38 348	31 675	39 888	22 264	21 458
Housing units completed	44 434	29 765	33 283	36 353	43 951

SOURCE: CENTRAL STATISTICAL OFFICE



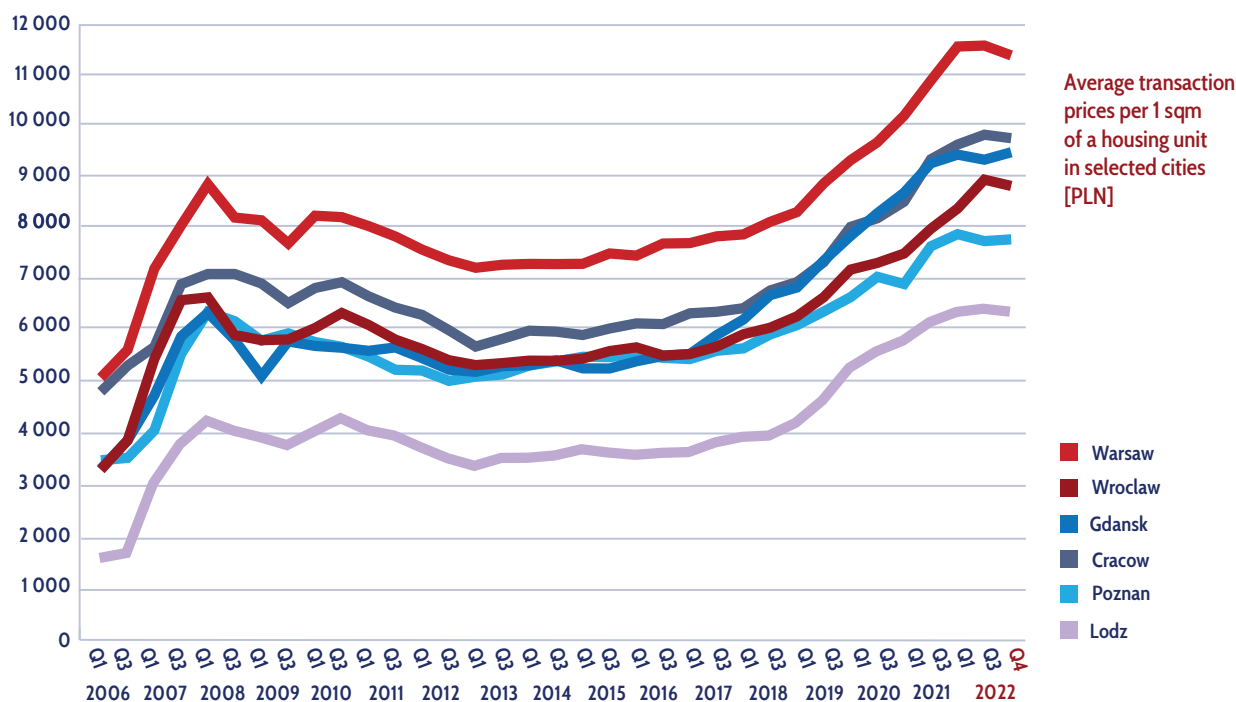
SOURCE: CENTRAL STATISTICAL OFFICE

## Average transaction prices of housing units

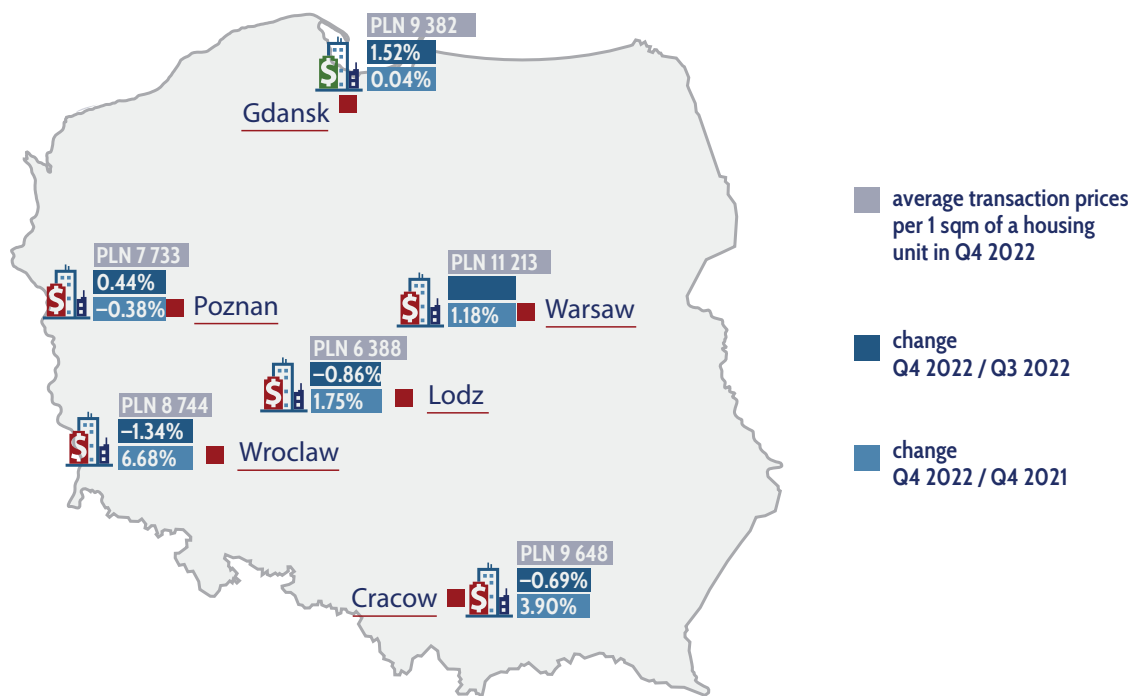
The fourth quarter of 2022 brought a decrease in the dynamics of price changes in most of the analysed local markets. It seems that after several quarters of changes, the housing market in the new situation of reduced both demand and supply (reduced number of offers on the primary and secondary markets), is reaching a new state of equilibrium. It should be emphasized that we are dealing not only with price stabilization at the level reached at the turn of 2021 and 2022, but also with a decrease in the number of transactions. Changes in average prices in any of the largest Polish cities

did not exceed 2%. The highest decreases in the average nominal price were recorded in Warsaw and Wrocław – by **1.64%** and **1.34%**, respectively. The average transaction prices in Q4 2022 in these cities amounted to PLN **11 213/sqm** and **PLN 8 744/sqm**. On the other hand, increases in average prices were recorded in Gdansk – by **1.52%** and in Poznan – by only **0.44%**.

Compared to the corresponding period of 2021, the largest increases in the average price of apartments were recorded in Wrocław and Cracow – by **6.68%** (PLN **547/sqm**) and **3.90%** (PLN **362/sqm**), respectively. The difference in Warsaw was equal to **1.18%** (PLN **131/sqm**).



SOURCE: AMRON



SOURCE: AMRON

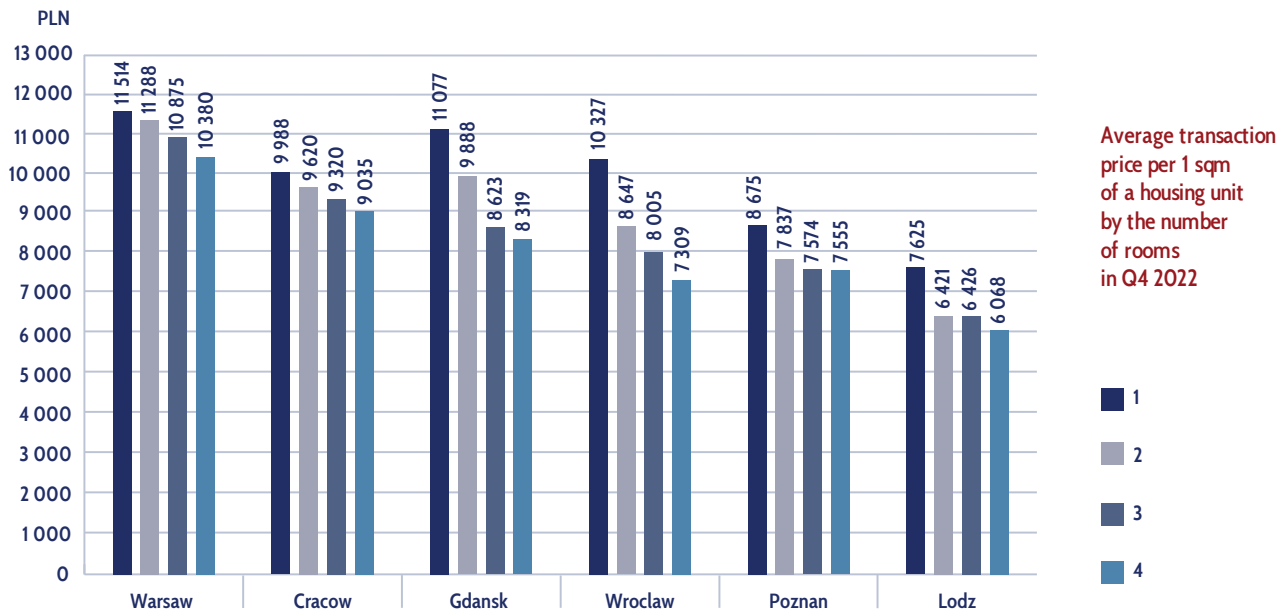
QUARTER	WARSAW	WROCLAW	GDANSK	CRACOW	POZNAN	LODZ
Q1 2016	7 422	5 687	5 423	6 141	5 564	3 677
Q2 2016	7 503	5 554	5 388	6 279	5 429	3 621
Q3 2016	7 651	5 533	5 525	6 128	5 489	3 714
Q4 2016	7 527	5 540	5 687	6 310	5 530	3 898
Q1 2017	7 659	5 560	5 562	6 332	5 465	3 729
Q2 2017	7 704	5 585	5 717	6 202	5 445	3 864
Q3 2017	7 787	5 701	5 919	6 361	5 622	3 913
Q4 2017	7 882	5 928	6 162	6 489	5 727	3 972
Q1 2018	7 824	5 936	6 215	6 429	5 668	4 017
Q2 2018	7 961	5 941	6 327	6 567	5 685	4 077
Q3 2018	8 062	6 060	6 676	6 765	5 932	4 042
Q4 2018	8 117	6 150	6 808	6 789	6 026	4 201
Q1 2019	8 247	6 275	6 821	6 922	6 109	4 284
Q2 2019	8 447	6 546	7 046	7 029	6 214	4 553
Q3 2019	8 790	6 638	7 329	7 301	6 366	4 709
Q4 2019	9 021	6 921	7 711	7 714	6 532	5 037
Q1 2020	9 228	7 160	7 797	7 968	6 637	5 324
Q2 2020	9 331	7 064	8 007	7 873	6 827	5 519
Q3 2020	9 568	7 286	8 227	8 132	7 023	5 633
Q4 2020	10 081	7 227	8 289	8 015	6 988	5 651
Q1 2021	10 073	7 464	8 616	8 446	6 887	5 839
Q2 2021	10 224	7 598	8 757	8 738	7 222	5 853
Q3 2021	10 738	7 932	9 173	9 249	7 601	6 189
Q4 2021	11 082	8 197	9 378	9 285	7 762	6 278
Q1 2022	11 382	8 317	9 337	9 528	7 831	6 382
Q2 2022	11 249	8 713	9 379	9 851	7 673	6 688
Q3 2022	11 400	8 863	9 241	9 714	7 699	6 443
<b>Q4 2022</b>	<b>11 213</b>	<b>8 744</b>	<b>9 382</b>	<b>9 648</b>	<b>7 733</b>	<b>6 388</b>

Average transaction prices per 1 sqm of a housing unit in selected cities [PLN]

SOURCE: AMRON

The analysis of changes in the average transaction price for 1 sqm of usable floor area indicates its strong correlation with the number of rooms in an apartment in most of the analysed locations. The size of the housing market seems to be the key factor here, which certainly is not always strictly related to the size of the city itself or a group of cities. The larger the market, the greater variety

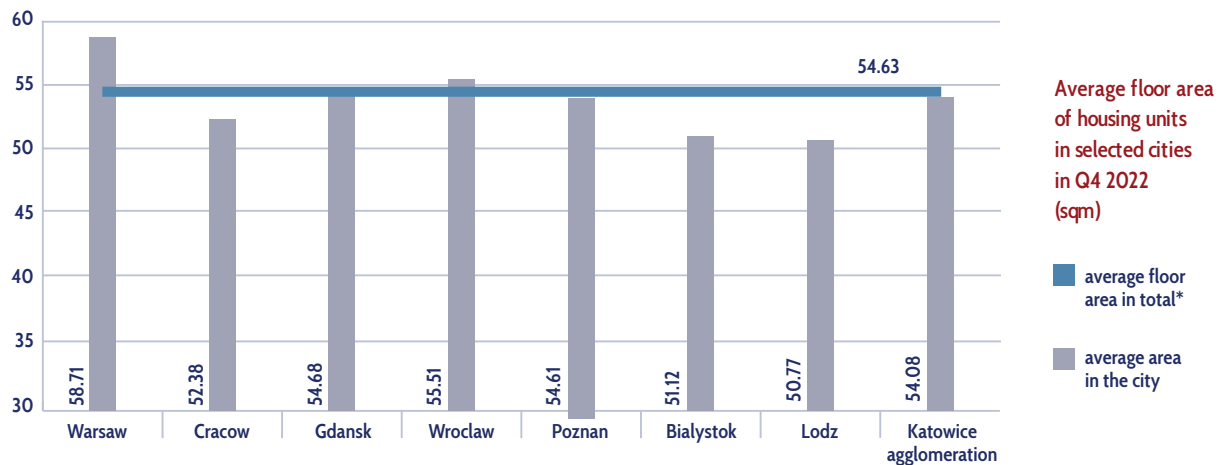
of prices and vice versa – the smaller the market, the more homogeneous in terms of prices. In the fourth quarter of 2022, the average price of 1 square meter of a studio apartment in Warsaw amounted to **PLN 11 514** per sqm, a two-room apartment – **PLN 11 288** per sqm a three-room apartment – **PLN 10 875** per sqm and a four-room apartment – **PLN 10 380** per sqm.



SOURCE: AMRON

The average usable floor space of flats traded in the fourth quarter of 2022 in the eight largest Polish agglomerations decreased comparing to the value from the previous quarter and amounted to **54.63 sqm**. The

highest average floor area of sold flats was recorded in Warsaw (**58.71 sqm**) and Wroclaw (**55.51 sqm**), while the smallest flats were traded in Lodz, where the average floor area was equal to **50.77 sqm**.



\* in 8 surveyed locations

SOURCE: AMRON

## Average transaction prices of flats in smaller Polish cities

The analysis below presents changes in the average prices of 1 sqm of dwellings in all voivodship capital cities and in the largest cities of the Katowice agglomeration, by regions.

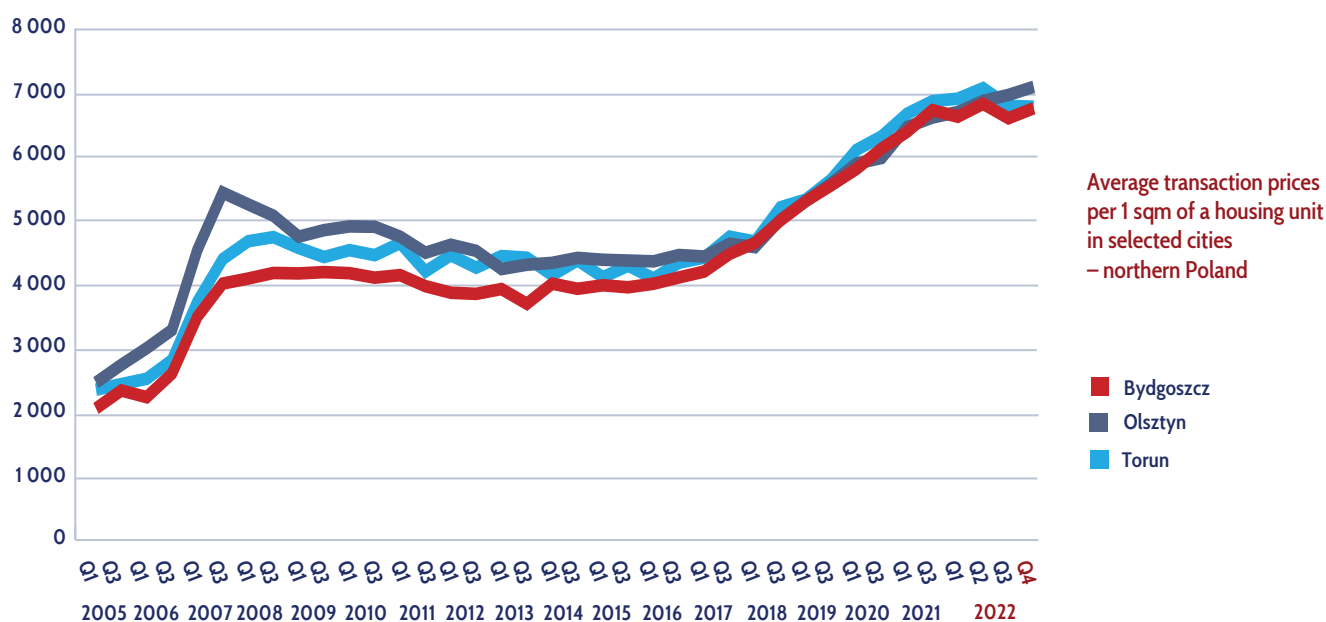
### Region – Northern Poland

In the fourth quarter of 2022, among the cities of the northern region, the highest average price per square

meter of a flat was recorded in **Olsztyn – PLN 6 960**. The highest dynamics of the average price compared to the third quarter of 2022 – a decrease of **2.20%** – was recorded in **Torun**. The average price recorded in **Bydgoszcz** was **2.38%** higher than in the previous quarter. In relation to the fourth quarter of the previous year, the highest decrease was recorded in **Torun** – by **6.85%**. The average price in **Olsztyn** was **1.68%** higher than in the previous year.

city	Price in Q4 2022	Change Q4 2022/Q3 2022	Change Q4 2022/Q4 2021
Bydgoszcz	6 629	2.38%	-1.10%
Olsztyn	6 960	1.83%	1.68%
Torun	6 654	-0.20%	-6.85%

SOURCE: AMRON



SOURCE: AMRON

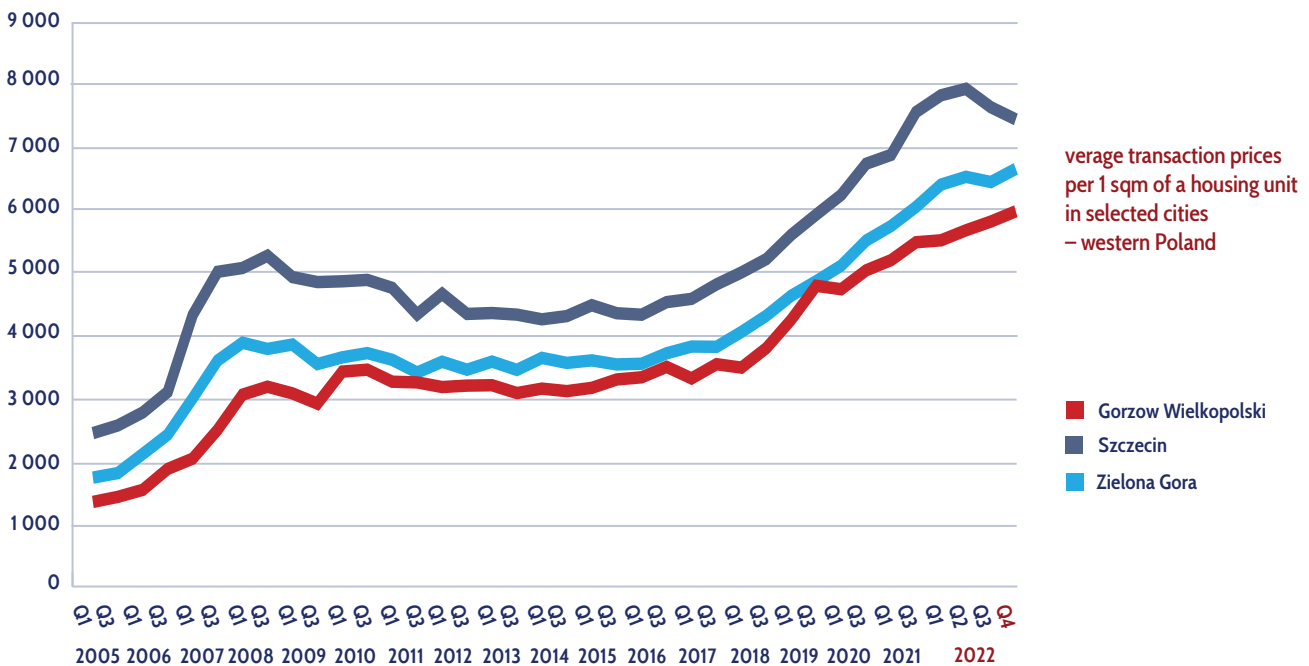
## Region – Western Poland

Among the cities of Western Poland, the highest average price was recorded in **Szczecin**. In the fourth quarter of 2022, the average price of a square meter of a flat there was **PLN 7 288** on average and was lower than the one recorded in the previous quarter by **2.55%**. The highest dynamics of

the average price in this period was recorded in **Zielona Gora (3.27%)**. The lowest average price was recorded in **Gorzow Wielkopolski** – it was **PLN 5.852**. In annual terms, the highest price dynamics was also recorded in **Gorzow Wielkopolski** – an increase of **7.61%**.

city	Price in Q4 2022	Change Q4 2022/Q3 2022	Change Q4 2022/Q4 2021
Gorzow Wielkopolski	5 852	2.81%	7.61%
Szczecin	7 288	-2.55%	-6.69%
Zielona Gora	6 517	3.27%	3.32%

SOURCE: AMRON



SOURCE: AMRON

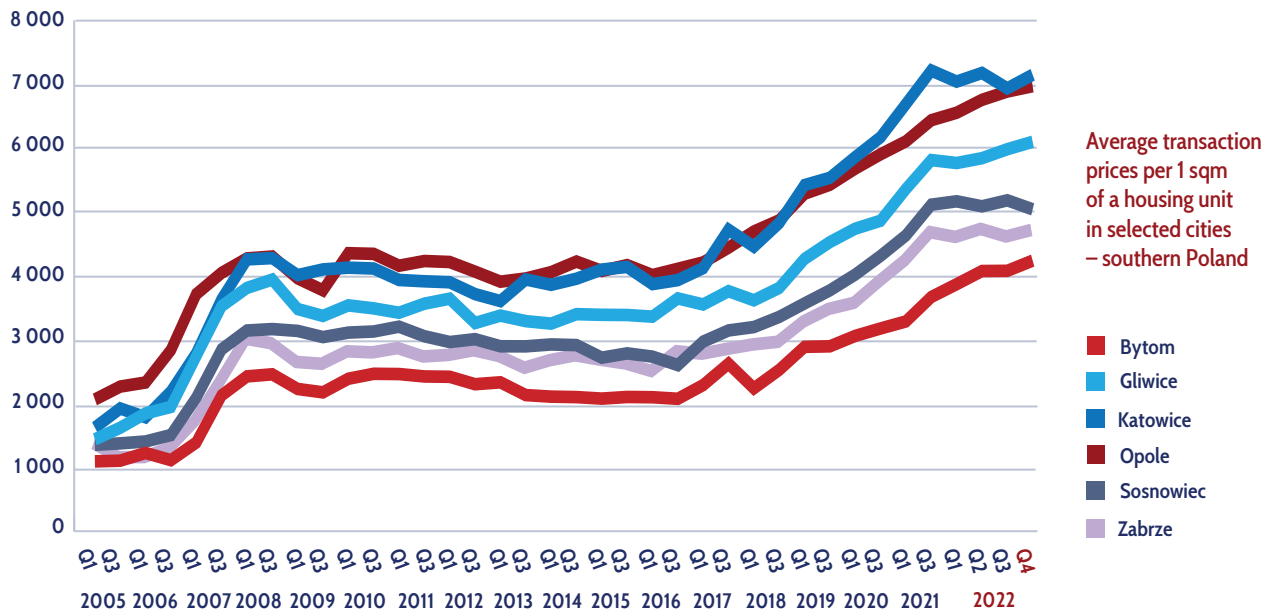
## Region – Southern Poland

**Katowice** remained the most expensive city in the region. The average price of a square meter of an apartment in the fourth quarter of 2022 was **PLN 7 009** and was higher than the one recorded in the previous quarter by **3.06%**. The only centre, where a drop in the average price was recorded in this period, was **Sosnowiec (-2.71%)**. The highest

increase in the average price was recorded in **Bytom** – by **3.94%**. In other centres of the region, slight increases in prices were recorded. In annual terms, the city with the highest price dynamics was **Gliwice**, where the average price recorded in the fourth quarter of 2022 was by **5.24%** higher than the value recorded a year earlier.

city	Price in Q4 2022	Change Q4 2022/Q3 2022	Change Q4 2022/Q4 2021
Bytom	4 153	3.94%	4.19%
Gliwice	5 980	1.94%	5.24%
Katowice	7 009	3.06%	1.47%
Opole	6 834	1.22%	3.39%
Sosnowiec	4 943	-2.71%	-2.44%
Zabrze	4 651	2.18%	-0.94%

SOURCE: AMRON



SOURCE: AMRON

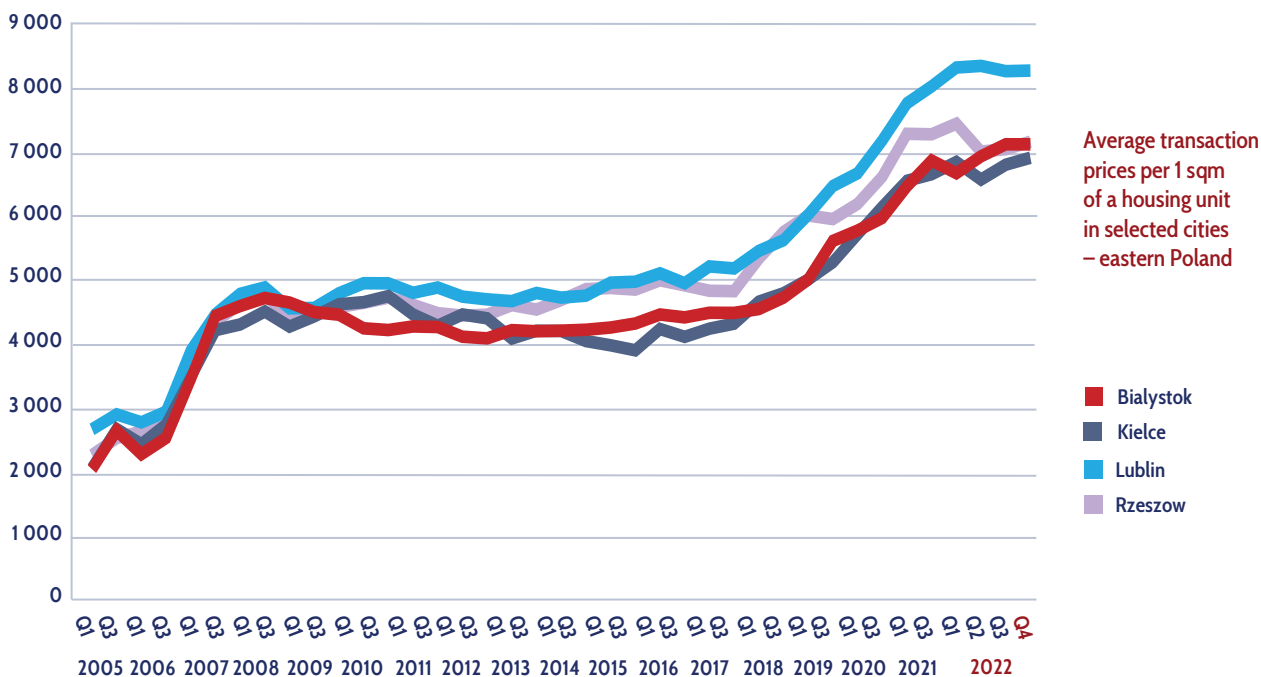
## Region – Eastern Poland

In the fourth quarter of 2022, the highest average price among cities in eastern Poland was recorded in **Lublin** – **PLN 8 122**. The highest price dynamics – an increase of **1.66%** compared to the value recorded in the previous quarter, was recorded in **Rzeszow**. The lowest average

price was recorded in the same period in **Kielce** – **PLN 6 684**. In annual terms, the largest change in housing prices was again recorded in **Bialystok**, where the price recorded in the fourth quarter of 2022 was by **6.76%** higher than the one recorded a year earlier.

city	Price in Q4 2022	Change Q4 2022/Q3 2022	Change Q4 2022/Q4 2021
Bialystok	6 987	-0.01%	6.76%
Kielce	6 784	1.61%	0.97%
Lublin	8 122	0.11%	-0.57%
Rzeszow	7 030	1.66%	-3.77%

SOURCE: AMRON

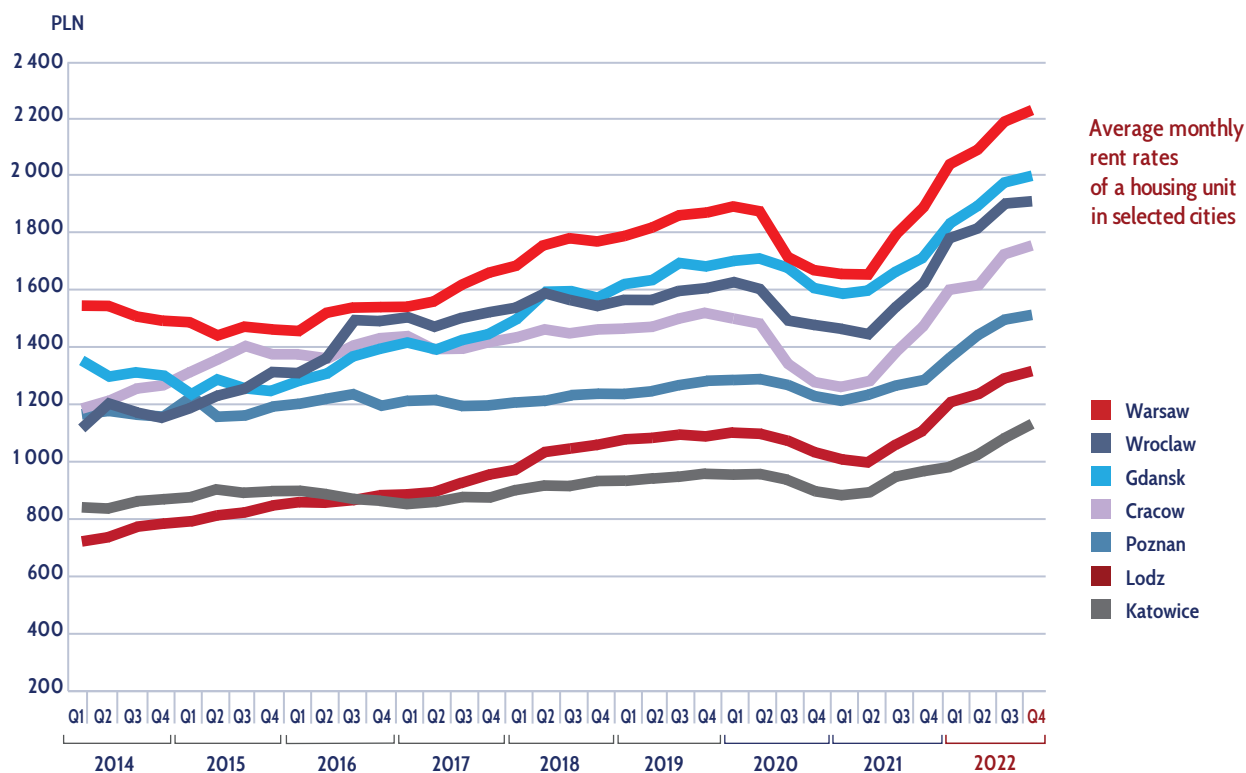


SOURCE: AMRON

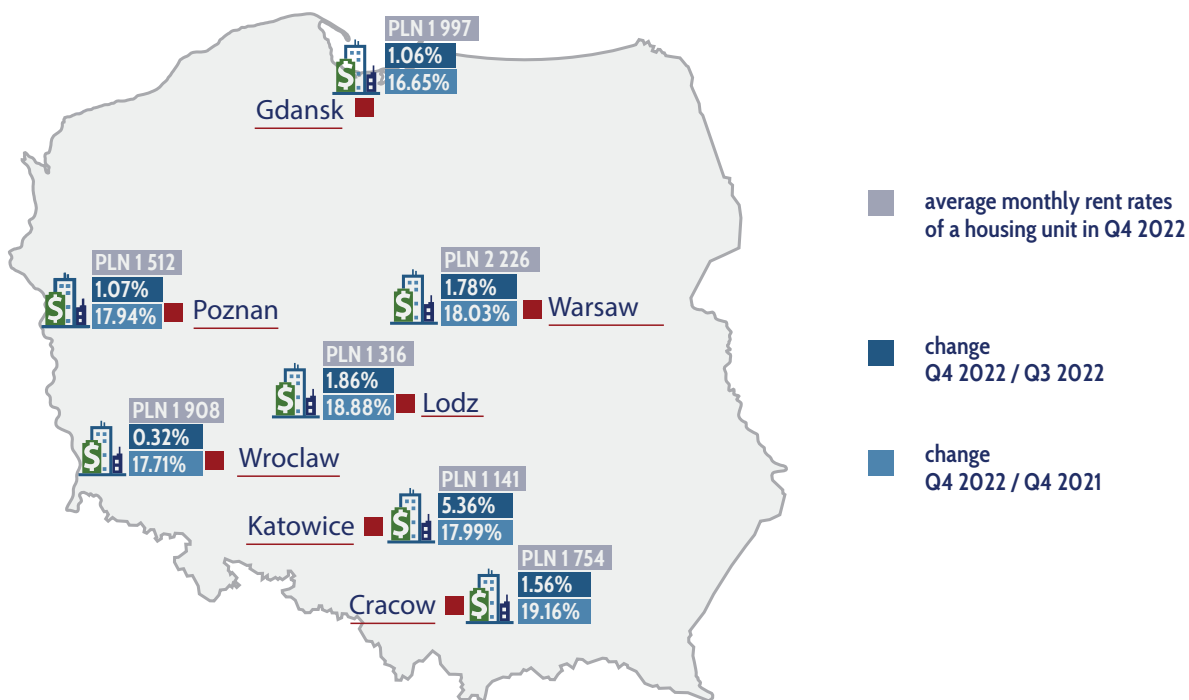
## Average rent rates of housing units

The fourth quarter of 2022 brought a clear slowdown in the increase in rent rates of apartments in the largest Polish cities. During this period, we witnessed a gradual decrease in demand pressure, both from refugees from Ukraine residing in Poland and from those, for whom, after interest rate increases, renting a flat remained the only available method of meeting their housing needs. In a situation of significant increase in the cost of living and, at the same time, decreases in real wages, it seems that tenants have stopped accepting the current high rents.

The average rent rate for an apartment in **Warsaw** in the fourth quarter of 2022 amounted to **PLN 2 226** and was higher by **PLN 39 (1.78%)** than in the previous quarter. The highest increase in the average rent rate was recorded in **Katowice** – by **4.52%**. In other cities, slight increases, not exceeding the level of 2%, were recorded. In **Lodz**, the average rent increased by **1.86% (PLN 24)**. The average rent in **Gdansk** amounted to **PLN 1 997**, which was by **1.06%** more than in the previous quarter. The lowest rent increase, by **0.32%**, was recorded in **Wroclaw**. In annual terms, the highest rent dynamics were recorded in **Cracow** – **19.16%** and **Lodz** – **18.88%**. In the same period, rents in **Gdansk** grew the slowest – by **16.65%**.



SOURCE: AMRON



SOURCE: AMRON

QUARTER	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	1 456	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	1 193	927
Q4 2017	1 659	874	1 521	1 445	1 417	1 196	955

Average monthly rent rates of a housing unit in selected cities [PLN]

QUARTER	WARSAW	KATOWICE	WROCLAW	GDANSK	CRACOW	POZNAN	LODZ
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
Q3 2018	1 780	915	1 563	1 594	1 447	1 232	1 046
Q4 2018	1 767	934	1 542	1 571	1 462	1 237	1 059
Q1 2019	1 787	933	1 565	1 620	1 464	1 236	1 078
Q2 2019	1 816	941	1 564	1 632	1 470	1 246	1 083
Q3 2019	1 859	948	1 596	1 695	1 499	1 267	1 094
Q4 2019	1 868	959	1 604	1 680	1 519	1 282	1 088
Q1 2020	1 891	955	1 627	1 700	1 499	1 285	1 103
Q2 2020	1 872	957	1 603	1 709	1 484	1 288	1 099
Q3 2020	1 714	937	1 492	1 676	1 342	1 268	1 073
Q4 2020	1 666	897	1 476	1 603	1 275	1 227	1 033
Q1 2021	1 654	884	1 463	1 585	1 260	1 212	1 008
Q2 2021	1 652	892	1 442	1 597	1 278	1 234	998
Q3 2021	1 793	951	1 541	1 664	1 383	1 266	1 061
Q4 2021	1 886	967	1 621	1 712	1 472	1 282	1 107
Q1 2022	2 042	982	1 786	1 833	1 606	1 365	1 211
Q2 2022	2 087	1 024	1 812	1 892	1 611	1 441	1 234
Q3 2022	2 187	1 083	1 902	1 976	1 727	1 496	1 292
<b>Q4 2022</b>	<b>2 226</b>	<b>1 141</b>	<b>1 908</b>	<b>1 997</b>	<b>1 754</b>	<b>1 512</b>	<b>1 316</b>

Average monthly rent rates of a housing unit in selected cities [PLN]

SOURCE: AMRON

The rent rates survey was based on the information from current rent agreements (active at the date of the review). 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.



COMPARING THE SITUATION FROM THE YEARS 2006–2010 WITH THE CURRENT ONE IN THE EURO AREA AND IN POLAND, DESPITE SIMILARITY OF CAUSES OF OVEREXPANSION AND BREAKDOWNS (FINANCIAL SECTOR, MONETARY POLICY, INFLUENCE OF POLITICS), IT SEEMS THAT SOME LESSONS HAVE BEEN LEARNT, WHICH IS REFLECTED IN A SIGNIFICANTLY SMALLER SCALE OF PROBLEMS SO FAR DIRECTLY RELATED TO CYCLICALITY.

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### Real estate is a cyclical sector

Finally we have a classic textbook situation – the cycle on residential and commercial real estate markets are closing practically throughout Europe. Historically, especially on a global scale, there were many leading causes of real estate cycles and crises. The current one can be described as classic, textbook inscribed in the financial cycle, with which the modern, developed real estate sector is interconnected. Nevertheless, it proceeds with different dynamics in individual countries.

Three aspects seem to be interesting:

**Synchronization of national cycles**, which should not come as a surprise, given the dominance of the common currency, but which did not occur on such a scale in the past. Other global factors, such as COVID-19 or the war in Ukraine also had an impact in the same period, although with varying intensity, on the entire group of countries, what only strengthened this effect.

**Large differences in the dynamics of phenomena and effects in individual countries**, which prove still significant “local” nature of this sector, despite many years of convergence processes. It is also an important experience for the future to pay less attention to external experiences and more to analyse internal conditions.

**The first practical experience of sectoral macroprudential policy**, introduced by the ECB/ESRB after the bad experiences of the GFC

and local problems in Spain, Ireland and other countries. It was supposed to be a remedy for the inclinations and consequences of excessively liberal monetary and fiscal policy, but it turned out to be ineffective against the upward price pressure. Now the remaining areas of its impact are being tested.

The very mechanism of the phenomenon is similar and repeatable starting from the 19<sup>th</sup> century, and recorded since the Great Depression in 1929, i.e. since the economic statistics are being drawn up. Years of liberal policy of ultra-low interest rates and quantitative easing in the euro area made consumers and business entities convinced about the durability of those economic conditions and encouraged large real estate investments both in own apartments (OOH sector), apartments for rent, as well as in commercial real estate sector (mainly offices and retail and service space). As a consequence of the credit impact of the monetary transmission channel (increase in demand), OOH housing prices began to grow in almost all EU countries, in some of them even reaching levels considered on the basis of historical data as a threat of a market collapse. The investment channel also had an impact – the value of income-producing financial instruments increased due to low discount rates, which generated an additional imbalance in the financial market. In commercial real estate, the mechanism of the tax shield and financial leverage was of primary importance, which ensured relatively decent returns (5–7%), despite low operating rates of return, as financial leverage reduced equity and interest was tax

deductible. In the meantime, disparities in the market were growing as rents slowly fell and vacancy rates rose. Ultimately, however, it was not falling rents and vacancies that led to the collapse, but rising inflation, which made it necessary to raise interest rates. Although the increases were moderate in absolute terms, the starting point was very low, which resulted in a significant decrease in creditworthiness and a significant decrease in the demand for housing loans. Bigger problems appeared on commercial markets, where some investments started to generate losses. The relatively mild reaction of the housing markets may be explained by two factors: a relatively high, at least in some countries, share of fixed-rate loans, which limited the shock related to increase in interest rates, as well as the use of credit risk mitigation instruments, such as borrower-oriented limits (LtV, DTI or DSTI) or capital buffers strengthening banks' funds. Whether these measures will prove effective in preventing major market crashes, remains to be seen.

Against this background, Polish case looks quite interesting, as in some aspects it does not fit the pattern. As in the EU countries, monetary policy in recent years has also been more liberal than in earlier periods, but the level of interest rates was significantly higher than in the euro area. Thus, a situation of ultra-low interest rates was avoided in an environment of increasing general inflation and rapid increase in housing prices, which would have resulted in a credit boom and acceleration on the housing market, as occurred in some countries. As in the EU countries, we have observed a construction boom in the residential and commercial sectors, but there were significant differences. Boom in commercial markets was a consequence of low interest rates in the euro zone, from where most investors originated. Boom on the housing markets was a consequence of the investment boom (not the credit boom), as more than half of the funds to finance the housing purchases came from own funds of the households

looking for favourable deposits for their savings. This limited the risk for banking sector. The housing supply turned out to be quite flexible and in consequence, despite increases in nominal prices, tensions in the sector remained at a safe level for a long time. This situation has changed due to the COVID-19 pandemic and the war in Ukraine. Fiscal and monetary interventions resulted in strong growth of housing demand and, as a result, fast increases in prices of production factors, in particular construction land, which translated into growth in prices of flats. Accelerating inflation prompted the need for relatively high increases in interest rates, which stopped credit demand and limited investment demand, despite the rent levels growth. An important factor limiting the demand was also increase in income buffers of households, introduced by financial regulators to mitigate the risk of further interest rates increases. As a result, demand on primary market declined significantly and for the first time since 2013 there was observed an oversupply on the market. Therefore, it may be concluded that the cycle reversal problem on the housing market refers to the development and construction sectors rather than to the banking sector, which is safer for the economy.

Thus, comparing the situation from the years 2006–2010 with the current one in the euro area and in Poland, despite similarity of causes of overexpansion and breakdowns (financial sector, monetary policy, influence of politics), it seems that some lessons have been learnt, which is reflected in a significantly smaller scale of problems so far directly related to cyclicity. However, I would not like to formulate hard conclusions too early. This is only a beginning of troubles and the reality surprises us all the time.

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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 standardised, 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.

During this period, we have collected more than 3.91 million data on prices and real estate values and we gained both huge experience and the trust of our business partners. Our offer also includes periodic analytical publications and standard reports as well as 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.



## 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.



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## About AMRON-SARFiN Report

This Report was developed by AMRON Centre in cooperation with the Committee for Housing Finance at Polish Banks Association and prof. Jacek Łaszek. Figures and comments have been developed by AMRON and SARFiN teams under the direction of Jerzy Ptaszyński ([jerzy.ptaszynski@amron.pl](mailto:jerzy.ptaszynski@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.

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