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Information on home prices and the situation in the housing and commercial real estate market in Poland in 2020 Q3

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The analysis of the situation in the real estate market in Poland in 2020 Q3¹ leads to the following conclusions:

- In 2020 Q3, a recovery in the housing market was observed, following the restrictions resulting from the COVID-19 pandemic put in place in March 2020. The number of housing contracts sold in the largest primary markets was higher by half in comparison to the previous, record low quarter. Housing construction costs increased slightly; however, the pace of the increase was much lower, while land prices kept rising significantly. Average transaction prices of housing increased in the primary market of the analysed cities and stagnated or fell in the secondary market.
- The impact of the pandemic on the housing market is complex and prices on the primary and secondary markets moved in diverging directions (see Table 1). The rise of offer prices of new housing in the primary market (RPO) slowed down, while developers slightly increased the supply of housing. High offer prices may also be lowered in all kinds of promotions, which facilitates the sales. Transaction prices in the primary market (RPT) increased in all groups of cities, particularly in Warsaw, as dwellings in better locations sold more often. In the secondary market of the largest cities, the demand for owner occupied housing dropped slightly. The analysed offer saw a stabilisation of offer prices (RWO) in the group of 6. and 10. cities, and their slight increase in Warsaw. The transaction prices of housing in secondary markets (RWT) increased in the group of 6. and 10. cities, however, they fell in Warsaw. A certain inertia of the secondary market vis-a-vis the primary one, is a typical phenomenon, since the secondary market is composed of individual sellers who are not prone to lowering the prices, they can also usually postpone the transaction. The hedonically corrected prices grew as well, which means that similar dwellings were sold for a higher price than the quarter before.

Table 1 Q/Q price growth of a square metre of housing in the analysed cities in 2020 Q3.

	PMO	PMT	SMO	SMT
Gdańsk	-1.7%	3.3%	-0.7%	4.4%
Gdynia	1.4%	3.3%	1.4%	2.7%
Kraków	-2.8%	2.0%	-1.3%	0.5%
Łódź	3.4%	5.4%	0.6%	7.0%
Poznań	2.0%	0.3%	0.4%	2.4%
Wrocław	0.2%	0.9%	3.5%	-2.6%
Warsaw	0.2%	7.9%	1.7%	-3.0%
6 cities:	0.2%	1.9%	0.4%	2.5%
10 cities:	3.3%	2.7%	0.6%	0.2%

Source: NBP

- Average (asking and transaction) rental rates per square metre of housing (excluding service charges and fees for utilities) declined in 2020 Q3 in Warsaw but stayed unchanged in the group of 6. and 10. cities. There is a persistently rising supply of internet-based housing offers on long-term rental markets, including those purchased for investment purposes, in the largest cities. This may put a downward pressure on rent rates in the future.

¹ The analysis carried out in this issue of the *Information* is based on data available as at the end of 2020 Q3. Data gathered in the NBP database during listings include data as at 1 September 2020 and transactions concluded from June to August 2020. Due to delays in access to certain data, some charts contain information until 2020 Q2 (inclusive). Data series with average prices per square metre of housing, commercial rents and transaction prices per square metre of retail space reflect the pool of data available at that time. Historical data are subject to revision. Price quotations (BaRN database) for 2020 Q4 include approx. 111.9 thousand records, including approx. 26.9% concerning transactions and 73.1% concerning offers. The total of over 3.8 million records have been gathered in the database, of which 24.2% concern transactions and 75.8% concern offers.

- **Quarterly sales of dwellings and home construction contracts in Poland's six largest primary markets² stood at more than 13.3 thousand dwellings** (see Figure 55), **i.e. it doubled in relation to the previous quarter despite the effects of restrictions related to the COVID-19 pandemic. They did not, however, recover to reach the level from before the pandemic.** The stock of unsold completed dwellings put on the market increased from the previous quarter by approx. 0.4 thousand and amounted to approx. 49.3 thousand at the end of the analysed period. The number of completed dwellings put on sale in 6. cities increased in comparison with the previous quarter by 0.2 thousand to 5.5 thousand and the home selling time in the primary market in the six largest markets stretched to 3.5 quarters from 3.3 quarters in 2020 Q2.
- **The index of the estimated affordability of housing in large cities** (based on average wages in the enterprise sector) **stood at 0.76 square metre in the analysed quarter.** Consequently, it fell slightly short of the previous quarter's figure, yet it was still higher by 0.28 square metre (i.e. by approx. 59%) than the record low observed in 2007 Q3. The index of the estimated maximum availability of residential mortgage loans³ increased slightly. The estimated affordability of loan-financed housing⁴ for an average household also posted a slight increase. Low interest rates on mortgage loans were the main driving force behind the slight increase in the last two availability indices.
- **The decline in rent rates in long-term rental of housing in the 7. largest cities led to falling profitability of rental.** Still, housing investment (excluding transaction costs) was competitive compared with interest rates on bank deposits, investment in 10-year Treasury bonds or investment in commercial real estate.
- **Until the end of 2020 Q3 there was a slight impact of restrictions related to the COVID-19 pandemic on the disbursement of loans to-date.⁵ In the analysed quarter the value of newly granted residential**

² Based on JLL (former REAS) data.

³ The maximum residential mortgage loan available in a particular market is a measure expressed in PLN thousand, taking into account banks' lending requirements and loan parameters (i.e. interest rate, amortisation period of 25 years, minimum wage understood as the minimum income after the repayment of loan instalments). The estimate does not take into consideration changes in banks' lending policy, including lending terms and criteria.

⁴ Availability of loan-financed housing – a measure specifying how many square metres of housing may be purchased with a residential mortgage loan obtained with the average monthly wage in the enterprise sector in a particular market (GUS – Statistics Poland), in view of a given bank's lending requirements and loan parameters (interest rate, amortisation period, minimum subsistence level understood as the minimum income after payment of loan instalments) at an average transaction price of housing (40% in the primary market and 60% in the secondary market) in a particular market (BaRN). The pace of changes of the index and differences between particular markets provide important information.

⁵ The data concerning the interest rate and the value of new residential mortgage loans based on the NBP data available in the "4 OPN2PLN" tab, on the NBP site: https://www.nbp.pl/home.aspx?f=/statystyka/pieniezna_i_bankowa/oprocentowanie.html. According to NBP data, at the end of September 2020 the value of residential mortgage loans stood at PLN 468.3 billion, i.e. was by PLN 5.4 billion higher than in the previous quarter and by PLN 28.2 billion higher than the end of September 2019 figure (a 6.4% y/y increase, in 2019 the increase stood at 7.7%).

mortgage loans in PLN for households^{6,7} (excluding renegotiated agreements) **according to NBP data stood at PLN 13.9bn**, i.e. it was approx. PLN 0.9bn (6.5%) higher than the figures recorded in the previous quarter and approx. PLN 0.7 billion (-4.8%) lower than the 2019 Q3 figure. In the three quarters of 2020, a total of PLN 41.7bn worth of loans was granted, i.e. PLN 0.7bn more in comparison with the same period of 2019. The results of the NBP survey on the situation in the credit market in 2020 Q3⁸ indicate that banks eased the standards of granting housing loans and changed some of the lending conditions, e.g. they raised the credit margin and higher risk margin once again. At the same time they lowered the amount of the borrower's required own contribution. Banks also recorded a pick up in the demand for residential mortgage loans. In 2020 Q4 banks expect further, albeit slight, easing of the lending policy and continued increase in the demand for housing loans. It should be added that temporary difficulties with housing loan repayment, resulting from an exceptionally large shock at the beginning of the pandemic, did not translate into insolvency of borrowers. This was due to loan moratoria and cuts in interest rates.⁹

- **The estimated rate of return on investment projects for housing developers slightly increased and amounted to approx. 21% in 2020 Q3.** Compared to other industries it remains high. This was the result of an increase in transaction prices, which more than covered the increase in the cost of housing producers. Despite high equity (and, consequently, solvency) housing developers may face liquidity problems. This is due to projects being largely financed with debt to contractors. However, so far this has not been reflected in the statistics. According to Coface experts¹⁰ the period surveyed saw a slight decrease y/y in the number of bankruptcies and restructuring proceedings, with the number declining in the construction industry and trade, while rising in manufacturing, the catering industry, agriculture and transport. At the same time the share of the construction industry in the total number of bankruptcies and restructuring

⁶ According to BIK data, in 2020 Q3 banks and credit unions granted approx. 52.3 thousand housing loans in the amount of PLN 14.8 billion to individual clients (compared to 48.3 thousand loans in the amount of PLN 14.1 billion granted in 2020 Q2). September 2020 saw an increase in the number and value of loans, which is the result of requests filed in June-July 2020 (the procedure takes approx. 2 months). The negative y/y growth in sales of housing loans recorded in 2020 Q3 concerned almost all groups of loans, both in terms of number and value. It is only the share of loans of over PLN 350 thousand that is rising – from 42% to 47% (in terms of value) and from 23% to 28% (in terms of the number of loans) in the three quarters of 2019 as compared with 2020. As of 9 November 2020 loan repayment holidays were requested for 124.4 thousand loans to individual clients in the amount of PLN 8.1 bn. In comparison with 7 September 2020, there was a decline of requests to BIK, both in terms of number of accounts (by approx. 302 thousand), and their value (by approx. PLN 26.6bn).

⁷ According to the AMRON report in 2020 Q3, the amount of residential mortgage loan averaged approx. PLN 289.3 thousand, i.e. increased by 2.3% y/y. The share of loans with LtV ranging from 50% to 80% and above 80% increased (to approx. 43.4% and 38.3%, respectively), while the share of loans with LtV below 30% and ranging from 30% to 50% decreased (to approx. 6.5% and approx. 7.0%, respectively). In the structure of new loan agreements, compared to 2019 Q3, the share of residential mortgage loans with a maturity of 25 to 35 years and below 15 years increased (to 63.1% and 8.4%, respectively), while the share of loans with other maturities decreased. At the end of 2020 Q3, the number of active loan agreements (in repayment) stood at approx. 2.47 million; at the end of that period their value amounted to PLN 467.8bn. In 2020 Q3 the number of granted housing loans stood at 48.8 thousand, and it was 8.0% q/q higher (3.7 thousand loans in nominal terms). The value of newly granted mortgage loans stood at PLN 14.1bn, which represented a q/q increase of PLN 0.67bn, i.e. approx. 5.0%.

⁸ "Situation in the credit market – results of the senior loan officer opinion surveys, 2020 Q4," NBP, October 2020 https://www.nbp.pl/systemfinansowy/rynek_kredytowy_2020_4.pdf. In the opinion of the surveyed entities, banks were encouraged to ease their lending policy, among other things, because of a decline in the risk of deterioration in the economic and housing market conditions, and an increase in competitive pressure from other universal banks and mortgage banks.

⁹ In accordance with the "Financial Stability Report. Assessment of the Consequences of the COVID-19 Pandemic, December 2020," the share of mortgage loans subject to moratoria (mainly deferred payments) began to decline quite rapidly from June 2020, despite the extension of the maximum moratoria period to 6 months. (https://www.nbp.pl/home.aspx?f=aktualnosci/wiadomosci_2020/20201203_stabilnosc.html)

¹⁰ According to the opinion of Coface experts ("Bankruptcies and restructuring of enterprises in Poland in the first 3 quarters of 2020"), the number of bankruptcies increased, which is solely due to the simplified proceedings for approval of the arrangement, which were introduced in June 2020 by the "COVID Act". The high increase in proceedings, which would be adequate to the significant deterioration of economic activity recorded in Poland this year, is kept in check by various forms of support for enterprises and a moratorium on submitting bankruptcy petitions. Entrepreneurs threatened with insolvency try to save enterprises by concluding an arrangement with creditors as part of restructuring proceedings. Despite the upturn that started in July 2020, it takes time to recover from the losses caused by the pandemic.

proceedings fell by 1.2 pp in y/y terms. This report may, however, be burdened with underestimation due to the disturbed work of the judiciary and lagged response of enterprises to economic disturbances caused by COVID-19.

- **2020 Q3 saw a record high number of both completed dwellings made ready for occupancy¹¹ (see Figure 51), as well as the number of home construction starts¹² (see Figure 52).** Slightly higher estimated rates of return on housing development projects and the persisting consumer demand urged real estate developers to apply for new home building permits,¹³ however, in 2020 Q3 a smaller number of permits was granted in q/q and y/y terms, which might have been caused by restrictions on the work of municipal offices due to the COVID-19 pandemic.
- **The market of commercial real estate has also been affected by the Covid-19 pandemic, and the resulting limited activity of enterprises will affect rents and real estate sale transactions, particularly in a longer perspective.¹⁴** It should be remembered that rents in commercial properties are agreed on for a few years in advance and rescinding on these contracts results in sanctions, but when the tenant becomes insolvent, he is unable to pay the rent. Some tenants, especially high-profile tenants, use the situation to negotiate rent levels. On the other hand, real estate purchase and sale transactions are the result of a long negotiation process, therefore, on the investment market, the possible impact of the pandemic will be visible with a delay.
- **The pandemic has accelerated the changes taking place in the office market. We are seeing an increase in the vacancy rate and a decrease in demand for office space.** In order to reduce the costs associated with renting office space, companies often decide on remote or hybrid work. Many companies do not want to give up on office space entirely, though.
- **In 2020 Q3 imbalances resulting from the previously observed excess supply of space for rent in relation to demand increased in the office space markets.** The supply of new space and space under construction continues on a high level. This is due to the very large scale of space construction initiated before the pandemic, which the investors want to finalize. Investors probably count on attracting tenants with modern space. According to consulting company data, at the end of 2020 Q3, the stock of office space in the nine largest office markets¹⁵ stood at approx. 11.5 million square metres; approx. 1.4 million square metres of office space was under construction. The demand for office space was largely due to contract renewal. The vacancy rate in these markets increased to 10.7% against 9.0%¹⁶ at the end of 2020 Q2. In

¹¹ According to the Statistics Poland data, in 2020 Q3 a record high number of dwellings (since 2005) was completed and made ready for occupancy – approx. 59.5 thousand, i.e. approx. 8.7 thousand more than in 2019 Q3 and approx. 12.0 thousand more than in the previous quarter. The total of 218.2 thousand dwellings were completed and made ready for occupancy over the last four quarters, i.e. 17.5 thousand more than in the corresponding period of 2019 (a rise of 8.7% y/y).

¹² According to the Statistics Poland data, in 2020 Q3 the construction of approx. 67.4 thousand dwellings was started in Poland, i.e. approx. 4.3 thousand more than in 2019 Q3 and approx. 20.0 thousand more than in the previous quarter. According to the Statistics Poland data the last 4 quarters saw the construction of approx. 226.2 thousand dwellings, i.e. approx. 0.2 thousand fewer than in the same period of 2019 (a decrease of 0.1% y/y).

¹³ According to the Statistics Poland data in 2020 Q3 approx. 69.4 thousand home building permits were issued in Poland, i.e. approx. 2.2 thousand fewer than in 2019 Q3 but still approx. 6.2 thousand more than in the previous quarter. In the last four quarters the total of approx. 259.0 thousand permits were issued, i.e. 6.1 thousand fewer than in the previous four quarters (a 2.3% y/y decrease).

¹⁴ In the commercial market, data on rents is for 2020 Q2.

¹⁵ The nine office space markets include: Warsaw, Kraków, Wrocław, Tri-City Agglomeration of Gdańsk, Sopot and Gdynia, Katowice, Łódź, Poznań, Szczecin, Lublin.

¹⁶ See: Colliers International “Market Insights – 2020 Q3 Report, Poland”.

Warsaw the vacancy rate stood at 9.6% at the end of 2020 Q3¹⁷ compared to 7.9% in 2020 Q2. The vacancy rate of office space depends on the age¹⁸ and mainly on the location of the office building.¹⁹

- **Transaction rents for A class office space in Warsaw, quoted in EUR per square metre per month, slightly declined, so they did in the eight large cities and in seven other smaller voivodship cities.**²⁰ In Warsaw rents in A class office buildings reached approx. EUR 19/sq. M./month. In the remaining 8 largest voivodship cities (8M) those prices ranged from EUR 11 to 14/sq. M./month. **Rents in B class office buildings in the largest markets also posted a slight decrease.** In 2020 Q2 the hedonic index of rents,²¹ which is resistant to changes in the analysed sample, slightly declined for Warsaw and Poznań. In the Tri-City, on the other hand, it remained stable. It should be emphasized that rents observed in the given half a year are analysed. Lease agreements are usually signed every few years, so the possible changes in newly signed contracts have a limited impact on the average rent for the given period.
- **Estimated rate of return on equity from new A class office space at various levels of financial leverage show that such an investment is still profitable.** The highest rate of return on equity was recorded in the case of Warsaw, which explains the very large area of office space under construction. In a simplified analysis²² it has been assumed that the entire process of building an office building and finding tenants will span one calendar year. Such an assumption does not take into account the risk related to changes in the economy taking place during the construction of the building, which may significantly impede renting it out at the prices expected beforehand. Analysis results for Warsaw, Poznań and the Tri-City have been presented in Tables 3-5. Rates of return on a purchase of a B class office building from the existing stock in Warsaw have been falling slightly recently (see Table 6), which is due to stable rents amid rising transaction prices of building purchases. This means that investors accept a rather small risk premium, which is congruent with the observations from Western Europe.
- **In 2020, the retail sector was considerably affected by the consequences of the COVID-19 pandemic.** A large part of retail chains have been renegotiating lease agreements in shopping centres under new commercial terms. Many chains have resigned from their premises in shopping centres and moved their shops to the Internet or retail outlets located in shopping streets. An increase in online shopping has been observed. Even before the outbreak of the pandemic, large shopping centres were transforming into entertainment centres to attract clients. However, current sanitary restrictions prevent them from

¹⁷ See: Colliers International "Market Insights – 2020 Q3 Report, Poland".

¹⁸ Cushman & Wakefield, "Marketing as one of the key factors supporting the modernisation process of older office buildings," 2018.

¹⁹ See: Knight Frank, Report: Poland, Commercial Market, 1st half of 2018.

²⁰ In the case of commercial real estate, the breakdown of the analysed cities is different than in the case of residential real estate. 8 large cities (8M): Katowice, Kraków, Łódź, Poznań, Tricity Agglomeration, Wrocław. The remaining seven cities (7M) include: Białystok, Bydgoszcz, Kielce, Olsztyn, Opole, Rzeszów, Zielona Góra.

²¹ The hedonic index of rents for commercial space includes an adjustment taking into account differences in attributes of buildings and space of the leased premises (e.g. location, usable area, finishing standard) in particular periods. The hedonic index is calculated with the imputed method.

²² A precise methodological description of a model investment in a new office building has been presented in the section entitled "Box 3. Analysis of the profitability of investment in new office space and estimated rates of return under various levels of financial leverage" in the "Report on the situation in the residential and commercial real estate market in Poland in 2019" prepared by NBP. Cost calculations are made for the construction of a "type 1220-102 building, a 3/7-storey office building with a 3-storey underground parking space" and are based on the data from the Sekocenbud Bulletin of Prices of Buildings (BCO), Part I, large buildings. The office building construction costs were augmented by 15% in order to reflect developer costs related to the organization of the investment project and putting the building to commercial use, and to account for the cost of an expert estimate of the price of land (made on the basis of publicly available information). In the case of Poznań and the Tri-City, construction costs provided by Sekocenbud refer to the average for the relevant voivodship. They have been augmented by 10% in order to reflect higher construction costs in voivodship cities. It has been assumed that the investor takes a loan in EUR granted for 25 years with equal instalments payable four times a year. Building amortization stands at 2.5% and is standard for commercial real estate. CIT has been accounted for. ROE denotes net income/equity.

conducting this part of their business. The stock of modern retail space at the end of 2020 Q3 amounted to over 12.2 million sq.m, with an area of 305 thousand sq.m under construction.²³ The low increase in new retail space may indicate that investors consider the market to be saturated, which is confirmed by the emergence of projects transforming the existing commercial centres into commercial and entertainment centres.

- **Transaction rents for retail space in shopping centres in Warsaw slightly declined at the end of 2020 Q2 and remained stable in the markets of other cities.**²⁴ The hedonic rent index for Warsaw fell and for the Tricity it remained stable, while for Poznań it increased slightly in 2020 Q2 compared to 2019 Q4. It should be emphasised that the rents analysed are those prevailing in a given six-month period. Lease agreements are usually signed for several years, therefore any changes in newly signed rents only slightly affect the average of rents applicable in a given period.
- **The modern warehouse space market in Poland was still in the expansion phase. Supply and demand remained at a high level.** New warehouse premises are mainly built in the neighbourhood of large cities. The cost of land is no longer as important as it was a few years ago, while the possibility of immediate customer service and increased turnover encourages tenants to choose warehouses in very good locations. At the end of 2020 Q3, the total stock of the warehouse space market increased to 20.3 million sq. m, with over 1.53 million sq.m of modern warehouse space under construction. However, the vacancy rate across the country recorded a slight increase to 8.2%²⁵ compared to 7.3% in 2019 Q2. The market for modern warehouse space in 2020 Q3 proved relatively insensitive to the current economic situation and was not adversely affected by the pandemic.
- **Further growth of office and warehouse space was possible thanks to the high availability of foreign financing.** This phenomenon may be largely attributed to low interest rate levels in developed countries. On the other hand, only slight increases in retail space have been observed, which may mean that investors consider this market as saturated.
- **The estimated value of investment transactions²⁶ on the commercial real estate market until the end of 2020 Q3 amounted to nearly EUR 4 billion.** Approximately 40% of the transaction value was related to warehouse space, 27% to office space and only 6% to retail space.
- **At the end of 2020 Q3, the stock of real estate loans granted by domestic banks to enterprises amounted to PLN 64.8 billion,** which consisted of loans granted to residential real estate development, office and retail, warehouse and industrial and other real estate. It should be noted that about half of these loans are denominated in foreign currencies, so exchange rate changes had a significant impact on the value of the portfolio denominated in zloty. The value of enterprises' debt due to residential properties at the end of 2020 Q3 decreased to PLN 4.7 billion against PLN 4.9 billion in 2020 Q2. The value of loans for office real estate fell to PLN 17.2 billion compared to PLN 17.7 billion in 2020 Q2. Retail real estate loans remained stable at a level of PLN 17.7 billion. The value of loans granted for warehouse and industrial real estate

²³ See: Colliers International Report: Market Insights, 2020 Q3, Poland.

²⁴The analysis refers to premises with the space from 100 to 500 square metres located in shopping centres in economically significant parts of cities.

²⁵ See: Colliers International Report: Market Insights, 2020 Q3, Poland.

²⁶ On the basis of Comparables. pl data. The above investments concern the sale of the entire operating company which rents the building and derives income from it. Such transactions take place between: 1/ the real estate developer who has commercialised the property and sells it to the investor, or 2 / two investors.

fell to PLN 9.1 billion. On the other hand, the value of loans granted for other real estate²⁷ stood at PLN 16 billion.

- **The ratios of non-performing loans in loans for real estate granted to enterprises were close to those observed in the previous quarter.** The share of non-performing loans in loans for office properties at the end of 2020 Q3 increased slightly to 6.1% compared to 5.9% in 2020 Q2, for loans granted for retail and commercial space, the ratio increased slightly to 12.9% compared to 12.4% in 2020 Q2. The ratio for loans for warehouse and industrial space decreased to 7.3% compared to 7.7% in 2020 Q2, while for other real estate the ratio increased to 8.6% compared to 8.1% in 2020 Q2. The ratio of non-performing loans among loans granted for residential real estate development decreased slightly to 19.4% against 19.5% in 2020 Q2. A relatively high value of this ratio is mainly due to banks holding loans from previous years in their loan portfolio.²⁸
- **Loans are not only granted for the purchase or construction of commercial real estate, but are also secured by this type of real estate.** The value of corporate loans secured on commercial real estate at the end of 2020 Q3 amounted to PLN 139 billion, thus, in practice, it has not changed in relation to Q2.
- **In the market of small office real estate sale, the median of offer prices across Poland and in the majority of the largest cities showed a slight increase.** It is a natural response of this market to interest rate decreases. Median sales offer prices for small commercial premises in the majority of large cities also showed a slight increase. But whole Poland and Wrocław posted a slight decrease in comparison with 2020 Q2.

Box R1. Situation on the primary residential real estate market in Warsaw

Since 2015, the primary residential real estate market in Warsaw has been highly active, with prices rising and a high number of transactions concluded as a consequence of high demand and supply. In 2020 Q1 and Q2, the activity, especially among buyers, declined due to the COVID-19 pandemic and related constraints. An in-depth analysis of price developments will allow to understand developers' pricing strategies regarding these circumstances.

Analysis of prices in the primary residential market in Warsaw

Since 2017, transaction and offer prices in the Warsaw primary residential real estate market have been rising, while since 2018, year-on-year increases have exceeded 10% in most quarters. However, price growth slowed down in 2020 Q2. The quarterly increase in offer prices was lower than in previous quarters, while in the case of transactions prices even a decrease was observed. In annual terms, offer price growth decelerated slightly, although increases were still observed (11.8% in 2020 Q2 and 8.1% in 2020 Q3). In the case of transactions, the y/y dynamics dropped in 2020 Q2 and amounted to 5.7%; however, in Q3 they recovered to the levels recorded earlier, fluctuating around 10% (amounting to 10.8%).

²⁷ See the definition of the financial reporting guidelines FINREP of 2018: "Loans for other real estate – loans for real estate other than residential, office, retail, industrial or warehouse real estate (subcategory of loans for other real estate)".

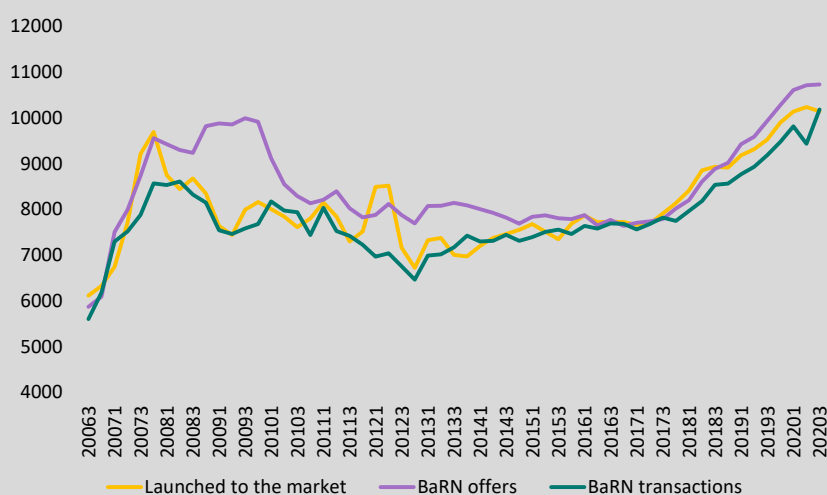
²⁸ See: Financial Stability Report, NBP, December 2018.

Table R1 Developments in prices of residential real estate in the Warsaw primary market (in %)

	q/q			y/y		
	Offers	Transactions	First offers	Offers	Transactions	First offers
I 2017	0,9	-1,6	-0,9	-2,2	-1,0	-2,6
II 2017	0,4	1,6	0,3	1,2	1,3	-0,5
III 2017	0,6	1,8	2,9	0,2	1,6	2,3
IV 2017	3,0	-0,9	2,9	5,0	0,8	5,3
I 2018	2,3	2,8	3,4	6,4	5,3	9,9
II 2018	5,0	2,7	5,2	11,3	6,5	15,2
III 2018	3,2	4,3	0,9	14,1	9,2	12,9
IV 2018	1,5	0,3	-0,2	12,5	10,5	9,5
I 2019	4,5	2,4	3,0	14,9	10,1	9,1
II 2019	1,7	1,8	1,5	11,4	9,2	5,2
III 2019	3,6	2,9	2,3	11,8	7,6	6,7
IV 2019	3,5	3,1	3,9	14,0	10,6	11,0
I 2020	3,2	3,6	2,4	12,6	11,9	10,4
II 2020	1,0	-3,9	1,0	11,8	5,7	9,9
III 2020	0,2	7,9	-0,9	8,1	10,8	6,4

Source: Own study based on BaRN

Despite slight quarter-on-quarter declines in 2020 Q3, prices of dwellings first introduced to the primary market²⁹ in Warsaw, remain at a high level. The average prices of dwellings introduced for sale for the first time are lower than the average offer prices but higher than the average transaction prices, which means that transactions are concluded for cheaper dwellings at prices lower than the average offer price. In 2020 Q3, the average price of newly introduced offers, according to the BaRN data, amounted to PLN 10,144/sq.m and decreased by 0.9% quarter-on-quarter, while in annual terms it increased by 6.4%, whereas in 2020 Q2, the trends were positive and amounted to 9.9% year-on-year and 1% quarter-on-quarter, respectively, reaching levels similar to previous quarters, starting from 2019.

Figure R1 Average prices of residential real estate in Warsaw (PLN/sq.m)

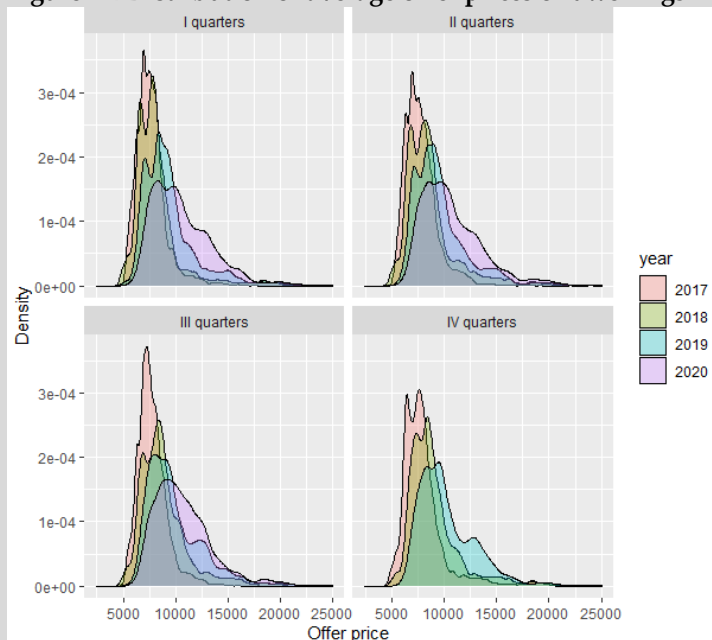
Source: Own study based on BaRN, REAS

The distributions of offer and transaction prices indicate a positive year-on-year dynamic of transaction and offer prices. The density charts are increasingly flatter in subsequent quarters, which results from greater

²⁹ The text analyses statistics on first offers calculated on the basis of the variable: month of sales commencement for offer and transaction data.

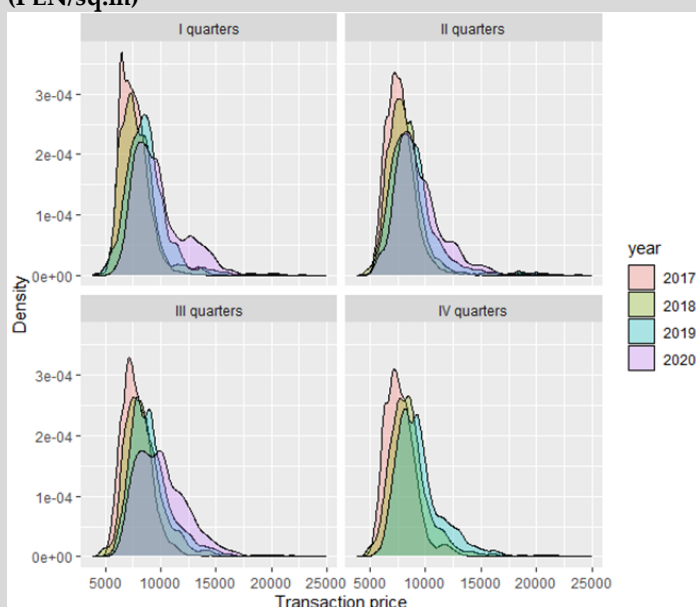
price differentiation in the primary market. The increasing dispersion of prices may indirectly indicate greater flexibility of developers when raising dwelling prices and rigidity when lowering them.

Figure R2 Distribution of average offer prices of dwellings in the Warsaw primary market (PLN/sq.m)



Source: Own study based on BaRN

Figure R3 Distribution of average transaction prices of dwellings in the Warsaw primary market (PLN/sq.m)



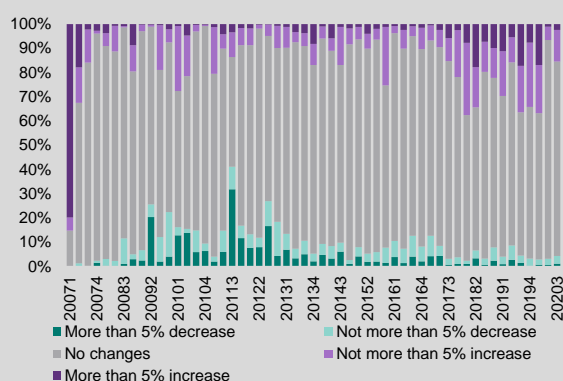
Source: Own study based on BaRN

Buyers' negotiation power and developers' willingness to offer discounts are also reflected in the distributions of transaction and offer price differences compared to the offers from the previous quarter for a given housing unit.³⁰ A comparison of two distributions, one showing price differences between offers and transactions and the other one based only on transactions, shows that developers are not prone to reduce offer prices, such that those are relatively stable. The developer usually agrees to offer a discount when sale

³⁰ The analysis includes observations for which an offer was recorded in the preceding quarter.

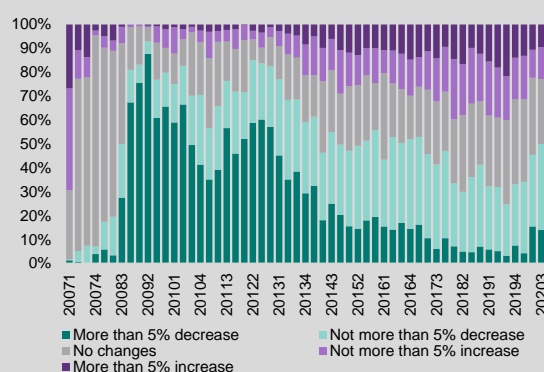
takes place. In 2018-2019, on average, developers agreed to reduce the offer price in order to complete sale in around 33% of observations, while most of these reductions involved small price changes of up to 5% (27% of the entire sample, on average). In the quarters when the pandemic broke out (2020 Q1 and Q2), developers were more inclined to apply price reductions (around 48% of the sample, on average). Offer prices are much more stable. In 2018-2019, approximately 66% of offer prices were stable from quarter to quarter, whereas during the pandemic period, the figure reached as much as 85%. Although in the case of the growth of offer prices for premises in 2020 Q2 and Q3, no changes were observed in the share of price decreases, the level of price increases was lower. The share of increases fell from around 29% in 2018-2019 to only around 11% during the pandemic.

Figure R4 Distribution of changes in offer prices of dwellings in the Warsaw primary market (PLN/sq.m)



Source: Own study based on BaRN

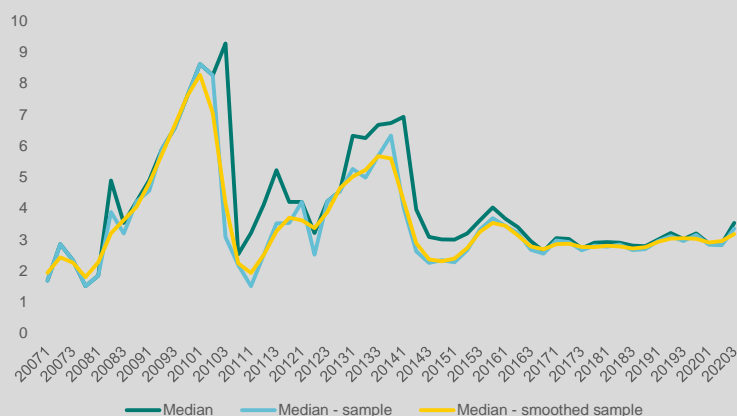
Figure R5 Distribution of changes in transaction prices of dwellings in the Warsaw primary market (PLN/sq.m)



Source: Own study based on BaRN

The median selling time of a dwelling signals the possibility of selling the apartment by the selling party and it is used to assess changes in the terms and conditions on the housing market.³¹ In historic terms, the time of concluding transactions was increasing when the primary housing market faced an oversupply of housing, mainly triggered by decreased demand as a result of an economic downturn (2009-2010, 2012-2013). Starting from 2017, the median selling time of a dwelling offered on the market remained stable and amounted to approximately three quarters. In 2020 Q2, the median selling time reached a level similar to that recorded in 2019, whereas in 2020 Q3, it slightly increased by approximately half a month compared to the corresponding statistical data for the previous year.

³¹ Placing an offer on the market is not tantamount to the commencement of construction.

Figure R6 Average dwelling selling time in the Warsaw primary market (in quarters)³²

Source: Own study based on BaRN

The COVID-19 pandemic affected the residential real estate sector at the peak of the boom, when both sales and prices stood at high levels. The analysis of prices and the sales process in the primary market indicates that so far there have been no signs of risk materialising on the part of developers due to the collapse in demand and prices. So far, developers have been administering demand and supply by gradually raising and diversifying prices. Potential risks for developers occur both on the supply side (availability of employees, ability to sell dwellings, financial liquidity) and on the demand side (situation on the labour market, financial capacity). The observations made so far show that a change in developers' pricing policy could only take place in the event of a major disproportion between demand and supply which, however, is currently not recorded.

The figures below describe the key developments in the housing market in Poland's major cities in 2020 Q2. The charts and figures present:

- 1) home prices (Figures 1– 16),
- 2) availability of loan-financed housing, loan availability, profitability of housing investment (Figures 17–23),
- 3) mortgage loan disbursements and interest rates (Figures 24–33),
- 4) operating profitability of housing and real estate development projects, costs of construction and assembly output and economic situation of real estate developers in Poland (Figures 34–49),
- 5) housing construction and the residential market in selected cities in Poland (Figures 50–63),
- 6) rents and transaction prices of commercial real estate (Figures 64–72),
- 7) in-depth analysis of the situation of real estate developers, non-residential construction companies and related entities (i.e. involved in the construction of non-residential buildings, sale of building materials and manufacturing building materials (Figures 73–155)).

³² "Median sample" means the statistics calculated on cleaned data. The observations with the selling time exceeding 1,000 days were rejected. The series was smoothed with weights: $\frac{1}{2}$ for observations in period t-1, 1 for observations in period t, $\frac{1}{2}$ for observations in period t+1.

The analysis of housing prices (offer, transaction and hedonic) in the primary and secondary markets as well as housing rents relies on the data acquired from the housing market survey of the Real Estate Market Database (BaRN). On the other hand, as part of the survey of the commercial real estate market, the Commercial Real Estate Market Database (BaNK) data on rent, offer prices and transaction prices of commercial real estate are collected and analysed.

In addition, data from PONT Info Nieruchomości, AMRON and SARFIN Polish Banks' Association and Comparables.pl were used in the analyses. The analyses and reports of JLL (former REAS), the Polish Financial Supervision Authority and the aggregate credit data from the Credit Information Bureau were also used. For the structural market analysis, data published by Statistics Poland and many studies containing sector data were used.

List of abbreviations:

5M	5 biggest cities: Gdańsk, Kraków, Łódź, Poznań, Wrocław
6M	6 biggest cities: Gdańsk, Gdynia, Kraków, Łódź, Poznań, Wrocław
7M	7 biggest cities: Gdańsk, Gdynia, Kraków, Łódź, Poznań, Warszawa, Wrocław
10M	10 big cities: Białystok, Bydgoszcz, Katowice, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin, Zielona Góra
BaNK	Commercial Real Estate Market Database
BaRN	Real Estate Market Database
BIK	Biuro Informacji Kredytowej [Credit Information Bureau]
CPI	Consumer Price Index
DFD	Large real estate development company
GD	Household
GUS	Statistics Poland
EURIBOR	Euro Interbank Offer Rate
KNF	Polish Financial Supervision Authority
LIBOR	London Interbank Offered Rate
LTV	The relation of loan value to home value, i.e. Loan-to-Value
MDM	Government-subsidised housing scheme “Mieszkanie dla Młodych” (Housing for the Young)
NBP	Narodowy Bank Polski
PONT	PONT Info Nieruchomości
RNS	Government-subsidized housing scheme “Rodzina na Swoim” (Family on their Own)
PM	Primary housing market
SM	Secondary housing market
ROE	Return on Equity
WIBOR	Warsaw Interbank Offered Rate
WIG20	Index including top 20 companies listed on the Warsaw Stock Exchange with the highest value of publicly traded shares
ZBP	Polish Bank Association
ZKPK	Accumulated index of changes in banks’ credit policy criteria for housing loans

1. Transaction, hedonic and offer prices of housing in the primary market (PM) and in the secondary market (SM)

Figure 1 Transaction prices per square metre of housing in Warsaw and in 6M – PM, in PLN

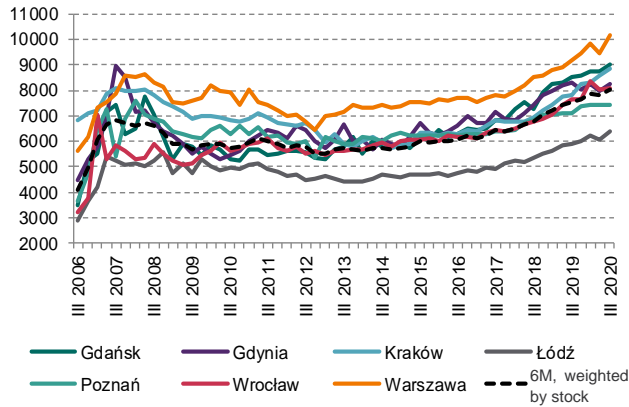
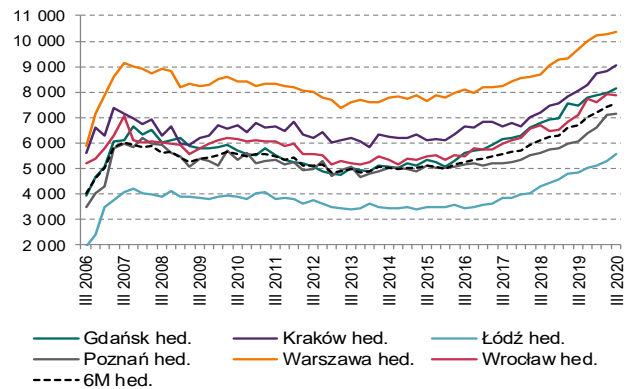


Figure 2 Transaction prices per square metre of housing adjusted by the hedonic index in Warsaw and in 6M – SM



Note: the home price database of NBP (BaRN) has existed since 2006 Q3; the description of the database may be found in the “Report on home prices and the situation in the housing and commercial real estate market in Poland in 2018” available on the bank’s website.

Source: NBP

Source: NBP

Figure 3 Weighted average price per square metre of housing, offers (O) and transactions (T) – PM

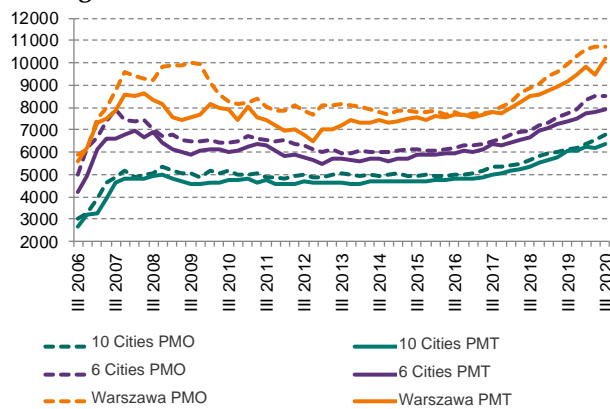
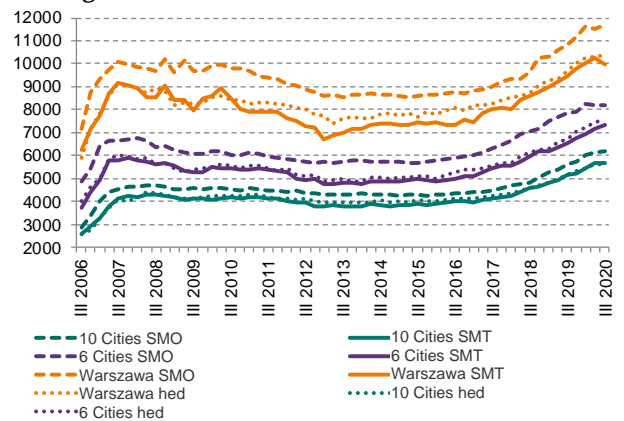


Figure 4 Weighted average price per square metre of housing, offers (O) and transactions (T) – SM



Note to Figures 3-10 and 14-15: prices and rents weighted with the share of housing stock, the average price for Warsaw.

Source: NBP

Source: NBP

Figure 5 Ratio of the average weighted transaction price per square metre of housing – PM to SM

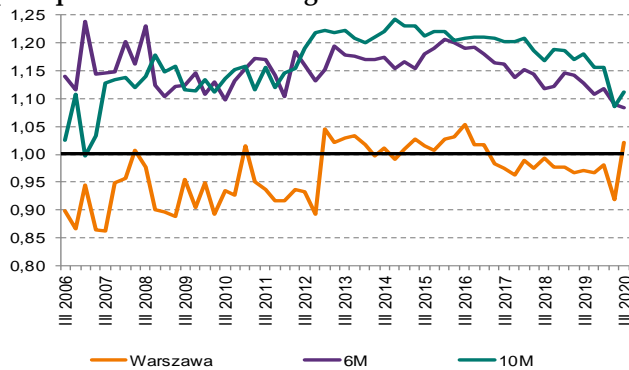
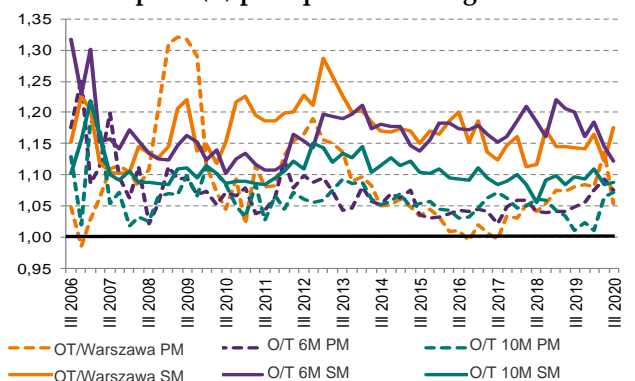


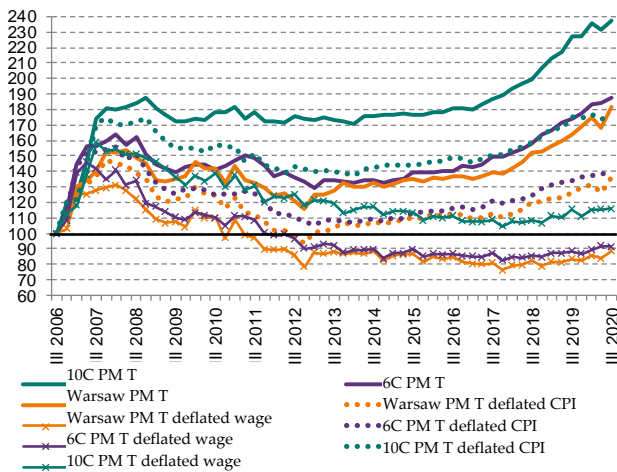
Figure 6 Ratio of the average weighted offer price (O) to transaction price (T) per sq. m of housing – PM and SM



Source: NBP

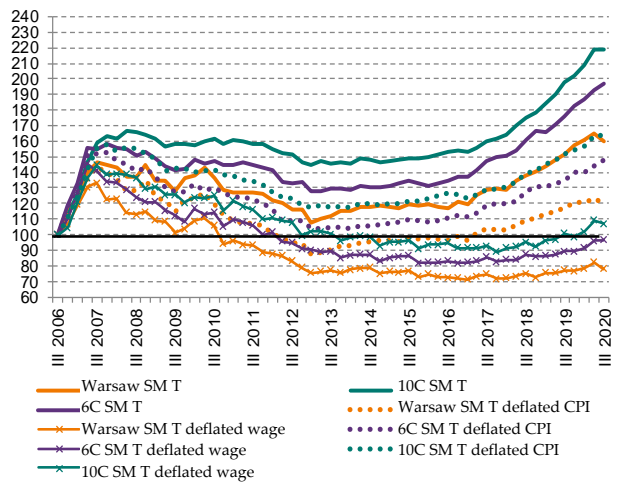
Source: NBP

Figure 7 Index of the average weighted transaction price per square metre of housing in PM, real to CPI deflated price and real to average wage in the enterprise sector (2006 Q3 = 100)



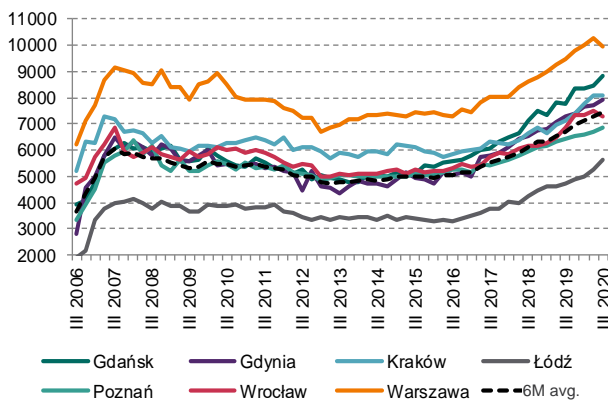
Source: NBP, ZBP (AMRON), GUS

Figure 8 Index of the average weighted transaction price per square metre of housing in SM, real to CPI deflated price and real to average wage in the enterprise sector (2006 Q3 = 100)



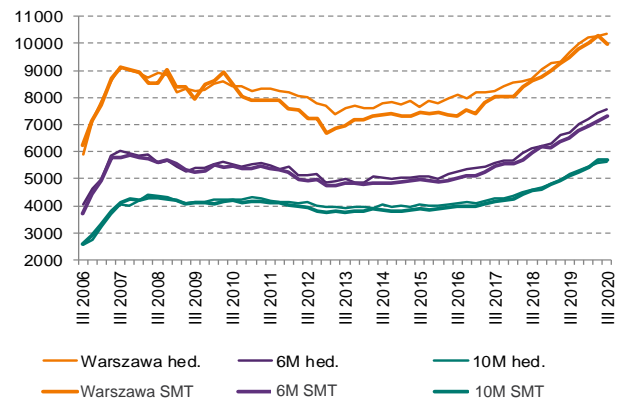
Source: NBP, ZBP (AMRON), GUS

Figure 9 Transaction price per square metre of housing in SM in Warsaw and in 6M



Source: NBP

Figure 10 Weighted average transaction price per square metre of housing in SM and average price adjusted by the hedonic price index, in selected markets



Source: NBP

Figure 11 Average offer prices per square metre of housing in PM, selected markets

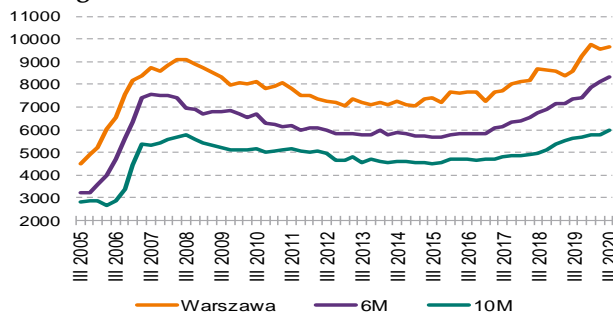
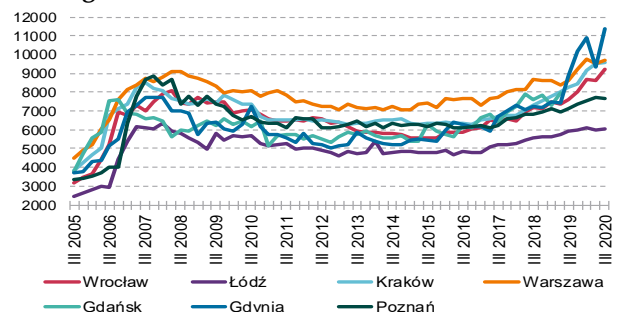


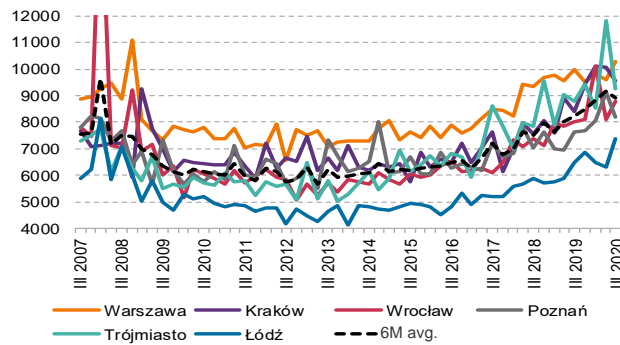
Figure 12 Average offer prices per square metre of housing in PM (Warsaw and 6M)



Note to Figures 11-12: prices are collected from all available sources.

Source: PONT Info Nieruchomości

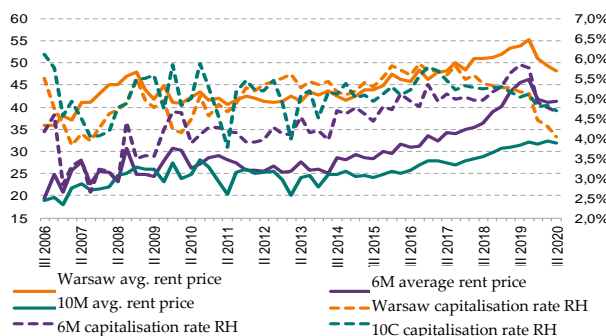
Figure 13 Average offer prices per square metre of housing, new home construction contracts – PM, selected markets



Note: prices refer only to new contracts put on the market for the first time.

Source: JLL/former REAS

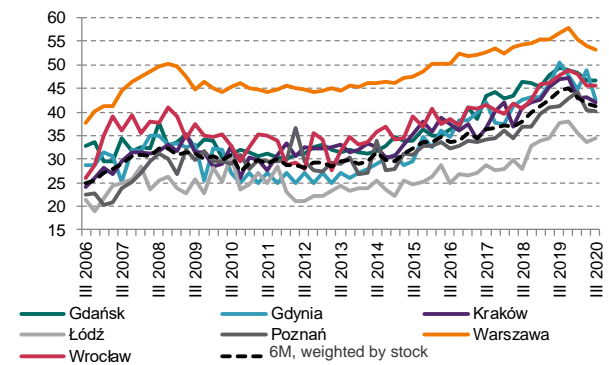
Figure 15 Average rent rates (transactions) per square metre of housing in the SM (left-hand scale) and the estimated profitability of housing rental (right-hand scale) in selected cities



Note to Figure 15: price per square metre of housing calculated as 50% of PM price and 50% of SM price; the price per square metre of housing in the PM was increased to include the average costs of home finishing and 1.5% amortisation; the analysis does not take into account the high transaction costs in the housing market and the potentially long period of disinvestment.

Source: NBP

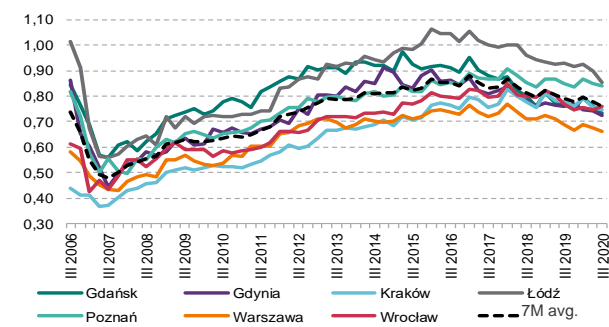
Figure 14 Average rent rates (offers and transactions) per square metre of housing – SM, selected cities



Note: in 2020 the change of sample was observed.

Source: NBP

Figure 16 The estimated availability of housing in selected cities

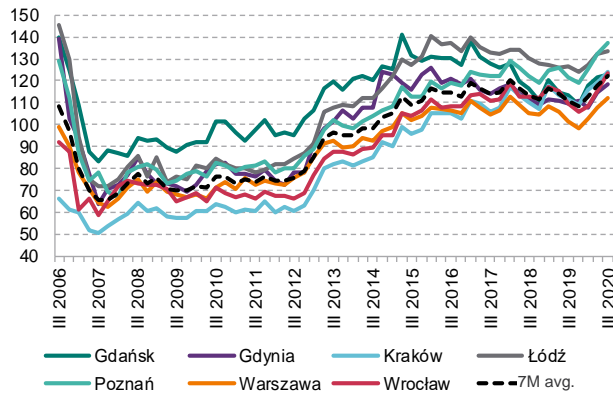


Housing availability – a measure of potential availability to purchase housing space at the transaction price for an average monthly wage in a particular city. It expresses the number of square metres of housing that can be purchased for an average wage in the enterprise sector in a particular city (Statistics Poland) and at an average transaction price in a particular market (40% in the PM and 60% in the SM according to the NBP database).

Source: NBP, Statistics Poland

2. Availability of loan-financed housing, loan availability, profitability of investment in housing

Figure 17 Estimated availability of loan-financed housing (average for 7M)



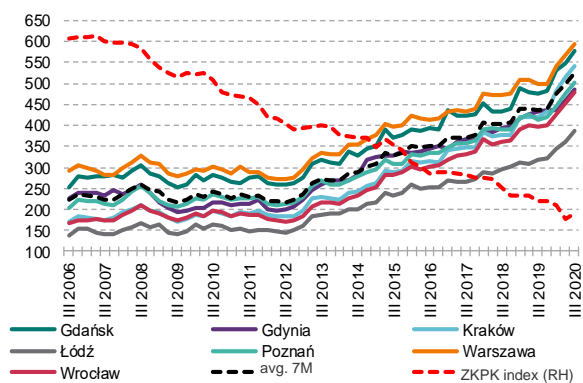
Source: NBP, GUS

Available residential mortgage loan – a measure specifying the potential maximum residential mortgage loan; expressed in PLN thousand in a given market, taking into account the bank’s lending requirements and loan parameters (interest rate, amortisation period, minimum subsistence wage as the minimum income after payment of loan instalments).

Availability of loan-financed housing – a measure specifying how many square metres of housing may be purchased with a mortgage loan obtained basing on the average monthly wage in the enterprises sector in a particular market (Statistics Poland), in view of the bank’s lending requirements and loan parameters (interest rate, depreciation period, social minimum wage understood as the minimum income after payment of loan instalments) at an average transaction price of housing (40% in the PM and 60% in the SM) in a particular market (BaRN). The pace of changes of the index and differences between particular markets provide important information.

ZPK Index – accumulated index of changes in banks’ lending policy criteria; positive values mean easing, and negative values tightening of lending policy as compared to the initial period, i.e. 2003 Q4. Computing methods of the index are described in the *Financial Stability Report*, December 2012, NBP.

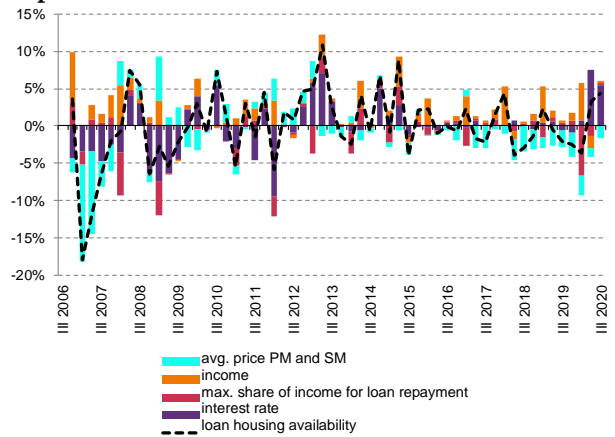
Figure 19 Estimated availability of residential mortgage loan and accumulated index of banks’ mortgage lending policy (ZPKK, right-hand scale)



Note: positive values of ZPKK mean easing and negative values – tightening of the banks’ lending policy in relation to the initial period, i.e. 2003 Q4.

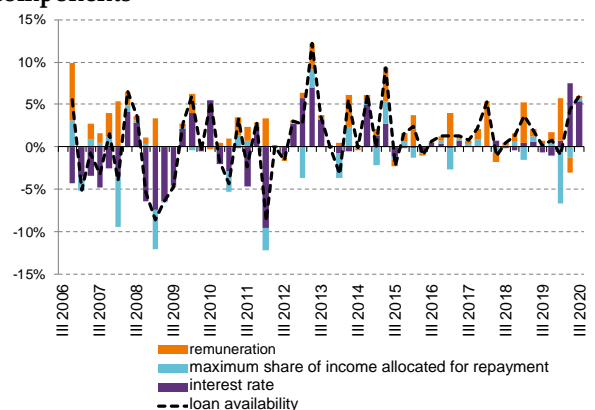
Source: NBP, GUS

Figure 18 Quarterly changes in the estimated availability of loan-financed housing in 7M and the force and directions of the impact of particular components



Source: NBP, GUS

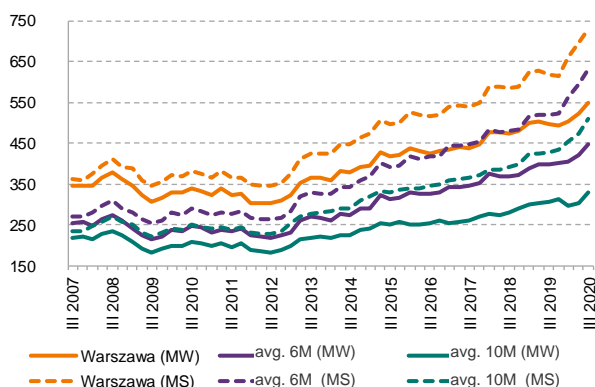
Figure 20 Quarterly changes in the estimated availability of loan-financed housing in 7M and the force and directions of the impact of individual components



Note: the interest on mortgage loan weighted with the share of PLN-denominated and FX loan.

Source: NBP, GUS

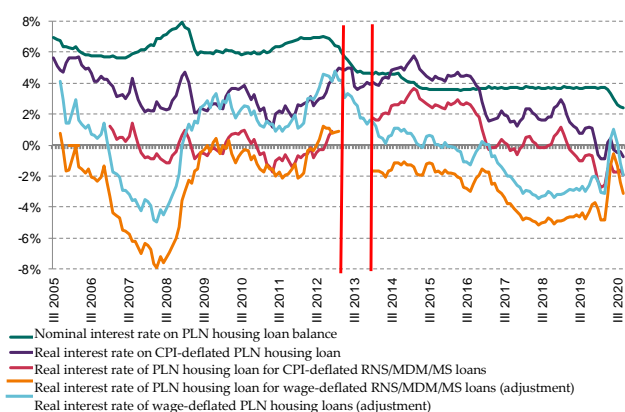
Figure 21 Estimated available mortgage loan for average gross wage in the enterprise sector in selected cities



Note: values estimated with the criterion of minimum subsistence wage left (MS) or minimum wage (MW).

Source: NBP, Statistics Poland, BGK

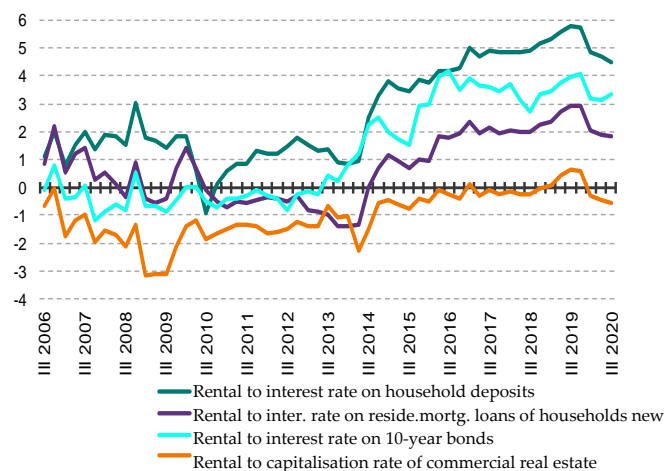
Figure 22 Residential mortgage loan burden for consumer deflated with CPI or wage growth in the enterprise sector



Note: values below 0 denote negative real interest rate for the borrower; red lines separate the period of the absence of the government subsidised housing scheme, i.e. the RNS scheme (operating in the years 2007-2012), the MDM scheme (operating in the years 2014-2018) and the Housing for the Start (MS) operating since 2019.

Source: NBP, Statistics Poland, BGK

Figure 23 Profitability of home rental (average in Warsaw and 6M) as compared with alternative GD investments (differences in interest rates)

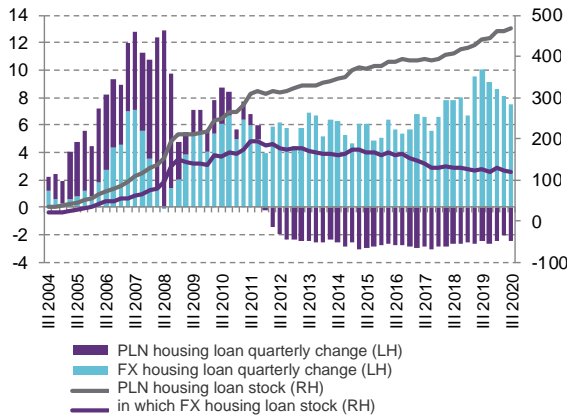


Note to Figure 23: values exceeding 0 denote higher profitability of purchasing property for rental to third persons than other GD investment. This analysis does not take into account high transaction costs in the residential market and the potentially long time of disinvestment.

Source: NBP, Statistics Poland

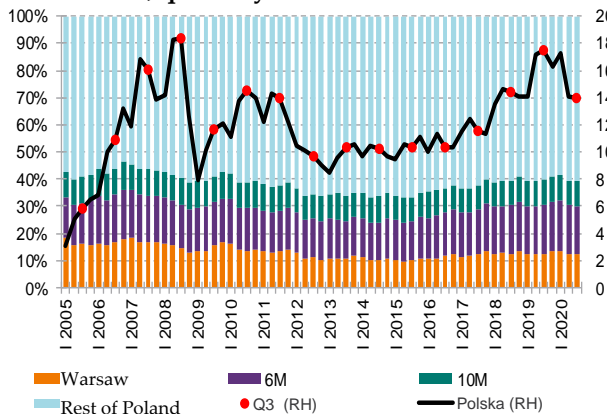
3. Disbursement of housing loans, interest rates

Figure 24 Balance and quarter-on-quarter changes in housing loan receivables from households after adjustments and the currency structure of quarter-on-quarter changes in residential mortgage loan receivables (PLN billion)



Source: NBP

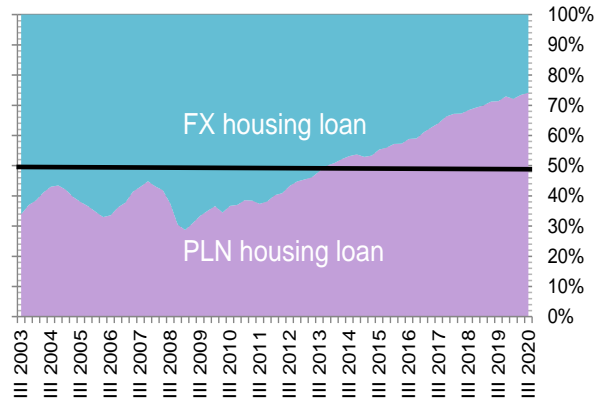
Figure 26 Geographical structure of the value of new residential mortgage loan contracts in Poland's selected cities, quarterly data



Note to Figures 26 and 27: the data provide information about signed residential mortgage loan contracts rather than about the actual disbursement of loans. PP means "the rest of Poland". Only third quarters are marked by red points in Figure 26.

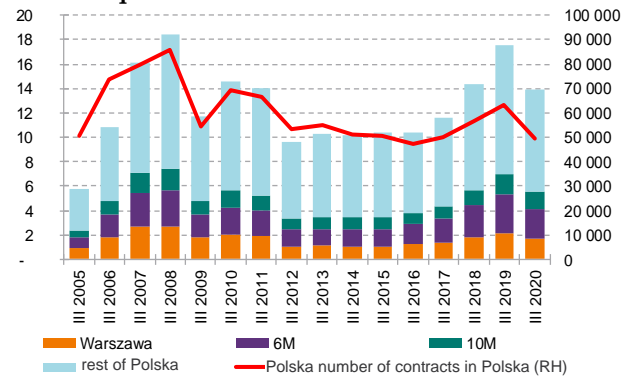
Source: BIK

Figure 25 Currency structure of housing loan receivables from GD (%)



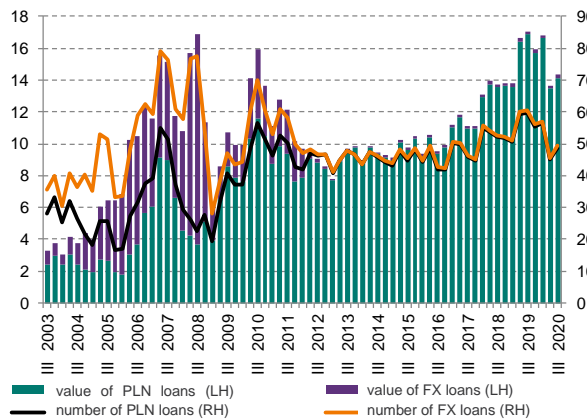
Source: NBP

Figure 27 Value in PLN bn (left-hand axis) and number (right-hand axis) of new residential mortgage loan contracts in Poland's selected cities in the third quarters of 2005-2020



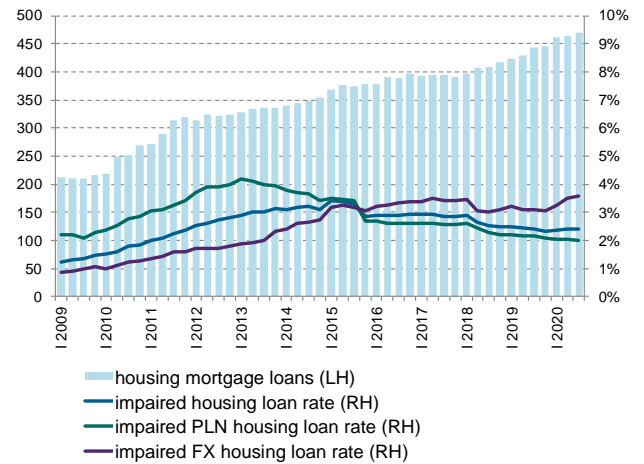
Source: BIK

Figure 28 New residential mortgage loan contracts: value and number, cumulated quarterly values



Source: ZBP (AMRON)

Figure 29 GD loans for housing real estate and indicator of loans recognised as non-performing loans



Note: receivables (loans) with determined loss of value – receivables from portfolio B, in relation to which objective premises of loss in value were observed and a decrease in the expected value of future cash flows (in banks using the IFRS) or which were recognized as non-performing receivables in accordance with the Ordinance of the Minister of Finance on establishing provisions against the risk associated with banking activities (in banks using PAS (Polish Accounting Standards)).

Source: NBP

Figure 30 Interest rates on residential mortgage loans for households in Poland

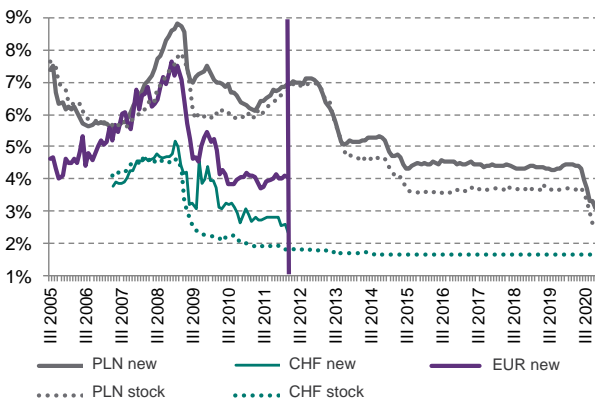
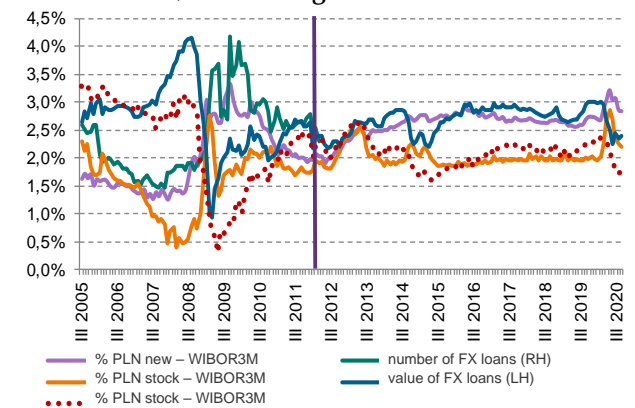


Figure 31 Bank margins (for WIBOR, LIBOR, EURIBOR 3M) for housing loans



Note to Figure 30 and 31: the violet vertical line separates a period with no FX loans which have not been practically granted since 2012. Note to Figure 31: bank margin is the difference between the housing loan rate (NBP data) and the WIBOR3M rate or the LIBORCHF3M rate.

Source: NBP

Source: NBP

Table 2 Estimated gross residential mortgage loan disbursements to households in Poland and the estimated value of cash and loan-financed*/ purchases of developer housing in 7 cities (7M; in PLN million)

Date	Estimated residential mortgage loan disbursement in Poland	Estimated value of housing transaction in the PM in 7M	Loan demand including client's down payment in the PM in 7M	Client's down payment to loans in the PM in 7M	Cash demand for housing (without down payment) in the PM in 7M	Estimated share of cash home purchases in the RP in 7M **/
2015 Q1	8,996	3,980	2,051	513	1,929	61%
2015 Q2	10,640	4,435	2,426	606	2,010	59%
2015 Q3	10,341	4,709	2,358	589	2,351	62%
2015 Q4	11,237	5,113	2,562	641	2,551	62%
2016 Q1	9,742	5,158	2,221	555	2,937	68%
2016 Q2	11,661	5,425	2,659	665	2,767	63%
2016 Q3	9,632	5,234	2,196	549	3,038	69%
2016 Q4	9,933	6,635	2,265	566	4,370	74%
2017 Q1	10,945	6,851	2,495	624	4,356	73%
2017 Q2	12,139	6,480	2,768	692	3,712	68%
2017 Q3	11,794	6,676	2,689	672	3,987	70%
2017 Q4	10,652	7,152	2,429	607	4,724	75%
2018 Q1	11,914	7,015	2,716	679	4,299	71%
2018 Q2	12,807	6,072	2,920	730	3,152	64%
2018 Q3	13,024	5,697	2,969	742	2,727	61%
2018 Q4	12,584	6,759	2,869	717	3,890	68%
2019 Q1	11,865	7,156	2,705	676	4,450	72%
2019 Q2	14,653	6,713	3,341	835	3,372	63%
2019 Q3	14,554	7,282	3,318	830	3,964	66%
2019 Q4	12,770	8,147	2,912	728	5,235	73%
2020 Q1	14,871	9,059	3,391	848	5,669	72%
2020 Q2	13,009	3,244	2,966	742	278	31%***/
2020 Q3	13,859	6,565	3,160	790	3,405	64%

Note to Table 1: the estimates are based on the following assumptions:

The estimated value of loan disbursements is based on the data collected from banks.

*/ Loan-financed home purchases comprise purchases made based on a loan and the minimum share of cash (down payment of 25% was assumed in big cities, which is more restrictive than the 20% that are required by the amended Recommendation S), whereas home cash purchases represent the difference between the value of transactions and credit funds.

In order to calculate the estimated value of PM transactions in 7M (Gdańsk, Gdynia, Kraków, Łódź, Poznań, Warszawa, Wrocław), the average home price 7M (NBP) was multiplied by the average home size in square metres (Statistics Poland data) and the number of housing units sold (JLL/former REAS). On the basis of ZBP data, it was assumed that the value of newly granted loans for the purchase of housing in the primary markets of 7M amounts to approx. 57%. The estimated value of cash transactions was calculated as the difference between transactions in 7M and disbursements of loans requiring the buyer's own contribution (down-payment). Data concerning prices for all the periods have been updated.

**/ Other real estate sold/exchanged may also be the source of own funds.

***/ The decline in the estimated share of home purchases with down payment on the PM in 7M recorded in 2020 Q2 is related to the very low sale of dwellings in this period.

Source: NBP, JLL (former REAS), ZBP, Statistics Poland

Figure 32 Estimated ROE on residential mortgage loans denominated in PLN for banks in Poland, taking into account interest income and non-interest profit, as well as operating costs and bank tax

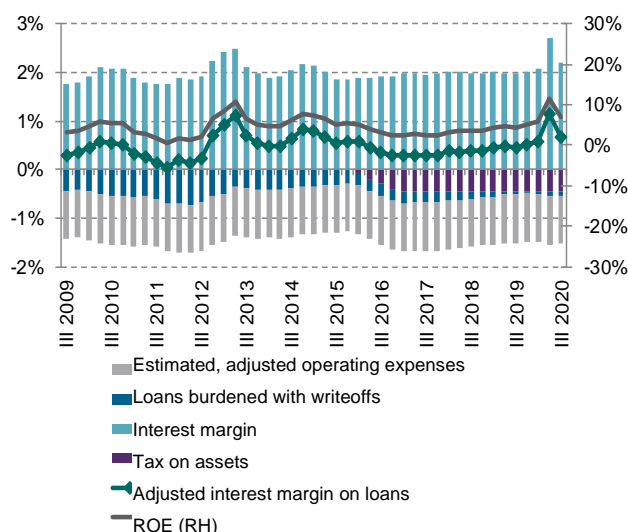
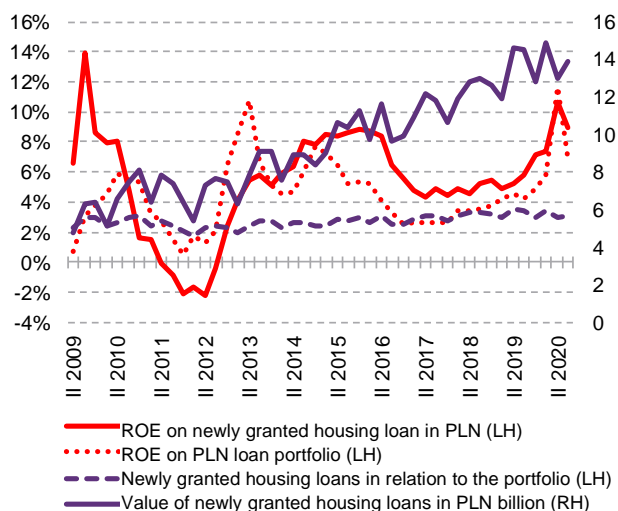


Figure 33 Estimated ROE on residential mortgage loans denominated in PLN for banks in Poland, taking into account interest income and non-interest profit and operating costs and bank tax



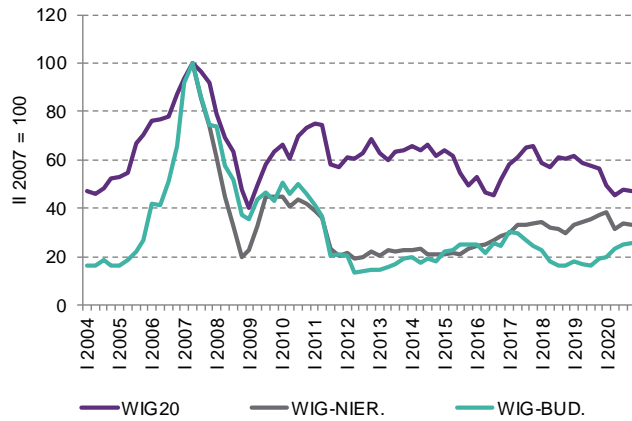
Note to Figures 32 and 33: for calculation, interest income, non-interest income and operating costs were taken into account. The estimated ROE is calculated as the adjusted interest margin in relation to equity. The adjusted interest margin is the interest margin less write-offs, less the estimated operating expenses (adjusted for the non-interest result on residential mortgage loans), less bank tax. Operating expenses less non-interest income were estimated at 1% of the value of the credit portfolio and at 1.5% of the value of new loans. Data concerning equity calculated on the basis of KNF publications. Interest margin based on NBP data.

Source: NBP, KNF

Source: NBP, KNF

4. Operating ROE of housing and real estate development projects, costs of construction and assembly output and economic situation of real estate developers in Poland

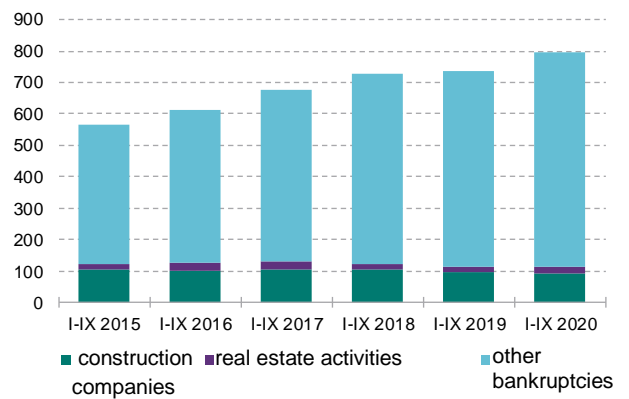
Figure 34 Rescaled exchange indices: WIG20 and for real estate developers (WIG-NIER) and construction companies (WIG-BUD) (2007 Q2=100)



Note: data standardised, 2007 Q2 = 100 (developers' WIG has been listed since 2007 Q2); 2020 Q3, status as at 12 November 2020.

Source: Warsaw Stock Exchange

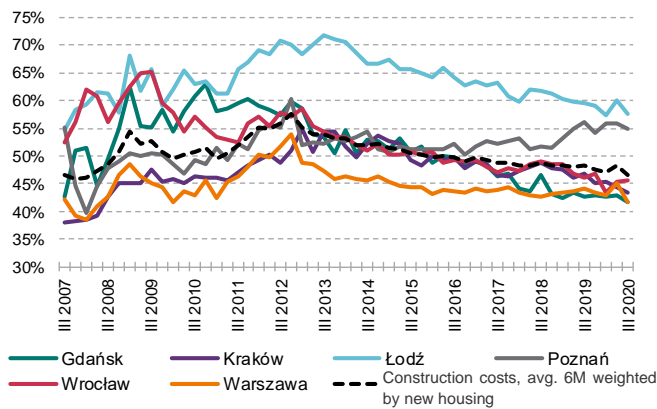
Figure 35 Number of bankruptcies in construction industry (as at the end of the third quarter)



Note: breakdown according to the first entry into the KRS.

Source: Coface Poland

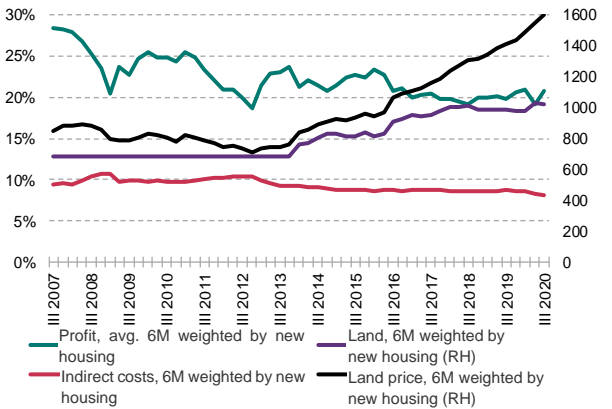
Figure 36 Estimated share of direct construction costs per square metre of the residential building's usable area (type 1122-302³³) in net transaction price in PM of 6M



Note to Figure 36: Since 2014 NBP has used its own appraisal of land for residential multifamily construction.

Source: NBP based on Sekocenbud

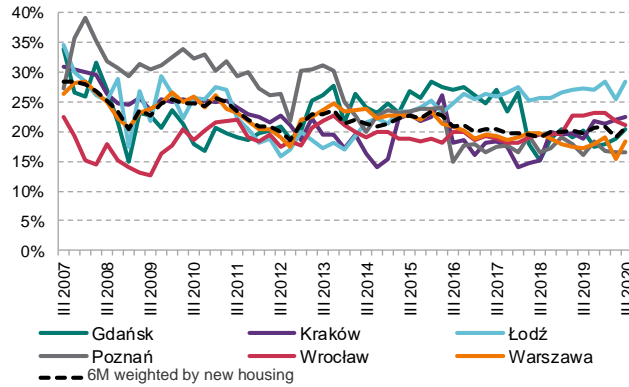
Figure 37 Estimated share of various construction costs per square metre of the residential building's usable area (type 1122-302³³) in net transaction price in PM of 6M



Source: NBP based on Sekocenbud

³³ Half of the building (type 1122-302) monitored by NBP since 2016 Q2 based on Sekocenbud data. An average residential multifamily 5-storey building, with an underground garage, constructed in the technology: foundation footings, construction walls and ceilings – monolithic reinforced concrete, curtain walling – bricked walls of hollow MAX blocks. Change of the type of the analysed building in 2017 is related to closing of the cost estimation of building 1121. Analytical assumptions related to building 1121 have been maintained.

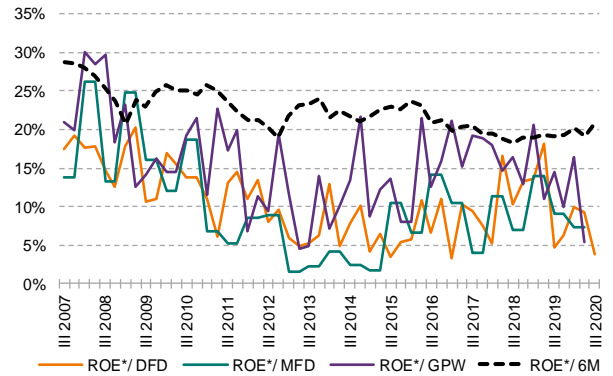
Figure 38 Estimated rate of return on equity in real estate development projects (type 1122-30233/) in the largest cities



*/ROE modified = net financial result/ (income from sale – net result from sale); **/ DFD – average Large Real Estate Development Company (according to Statistics Poland employment =>50 employees), MFD – average Small Real Estate Development Company (employment: 9-49 employees).

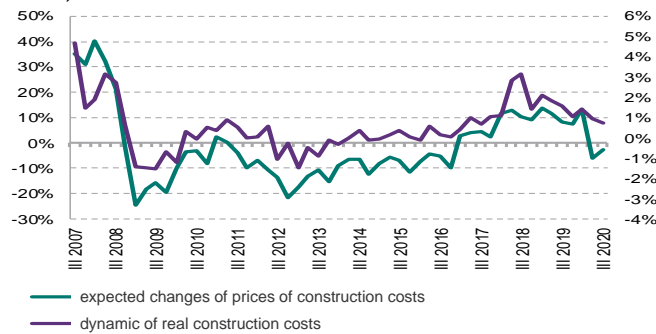
Source: NBP based on Sekocenbud, GUS (F01)

Figure 39 Estimated profitability indicators of development projects ROE* for real estate developers listed on the Stock Exchange, for large real estate developers (DFD)**, small real estate developers (MFD)** and investment projects in 6 cities (6M)



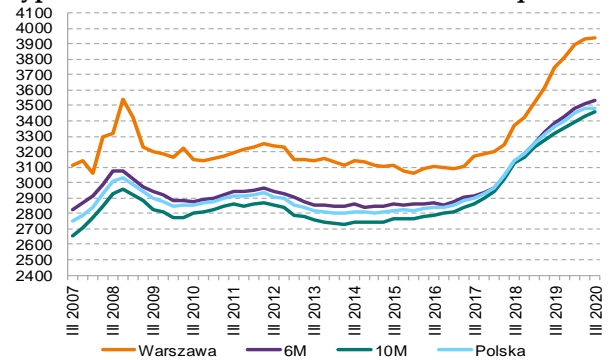
Source: NBP based on Sekocenbud, Financial Statements, Statistics Poland (F01)

Figure 40 Predicted changes in prices of construction and assembly works (+3C) and growth in construction costs of usable area of a residential building (type 1122-30233/)



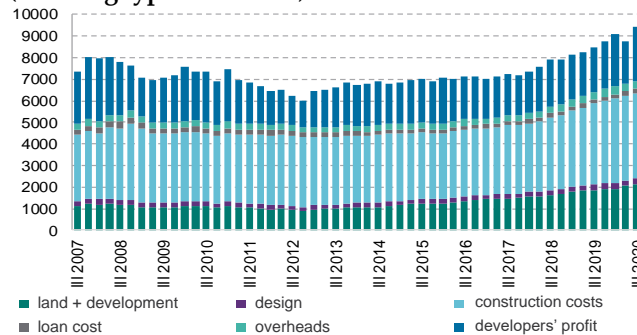
Source: NBP based on CSO data (business conditions survey), Sekocenbud

Figure 41 Average cost of construction of square meter of the residential building's usable area (type 1122- 302³³) in selected markets (PLN/sq.m)



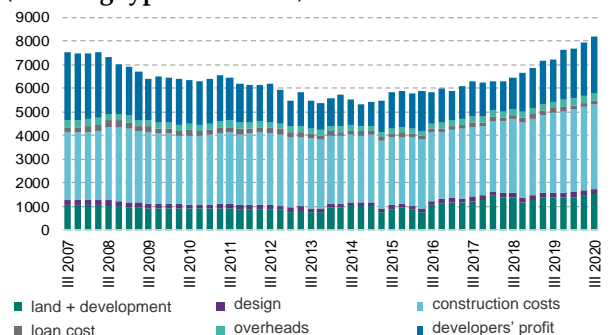
Source: NBP based on Sekocenbud

Figure 42 Warsaw – estimated structure of price per square metre of housing usable area in the PM (building type 1122-302³³) for consumers



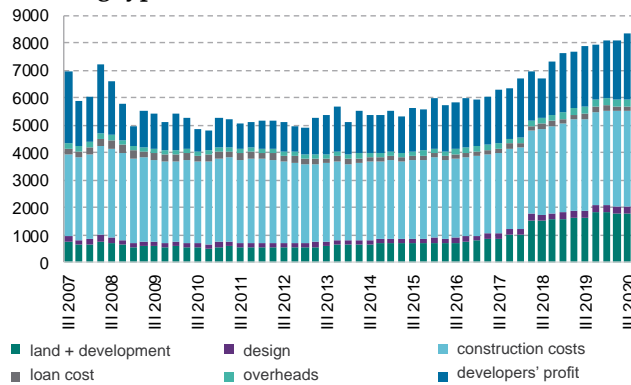
Source: NBP based on Sekocenbud, JLL (former REAS)

Figure 43 Kraków – estimated structure of net price per square metre of housing usable area in the PM (building type 1122-302³³) for consumers



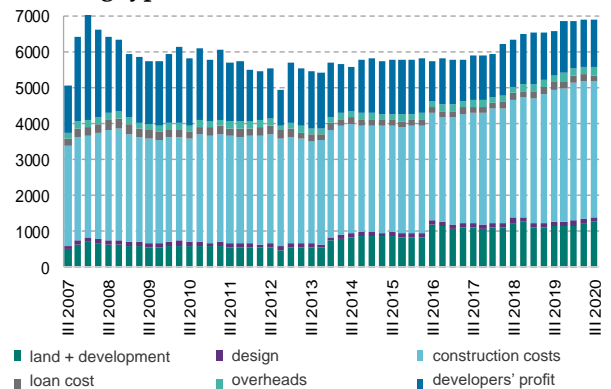
Source: NBP based on Sekocenbud, JLL (former REAS)

Figure 44 Gdańsk – estimated structure of net price per square metre of housing usable area in the PM (building type 1122- 302^{33/}) for consumers



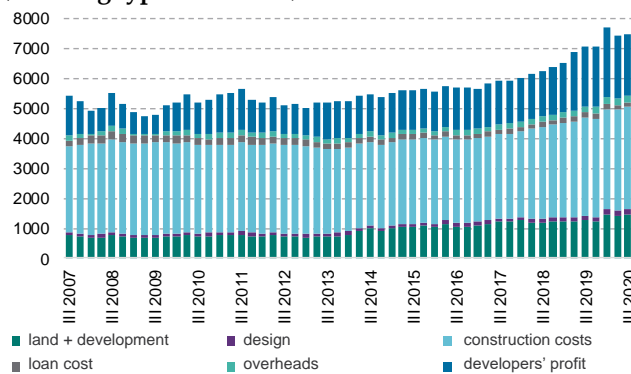
Source: NBP based on Sekocenbud, JLL (former REAS)

Figure 45 Poznań – estimated structure of price per square meter of housing usable area in the PM (building type 1122- 302^{33/}) for consumers



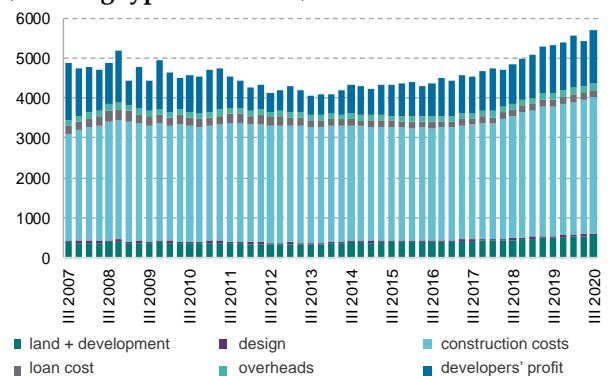
Source: NBP based on Sekocenbud, JLL (former REAS)

Figure 46 Wrocław – estimated structure of price per square metre of housing usable area in the PM (building type 1122-302^{33/}) for consumers



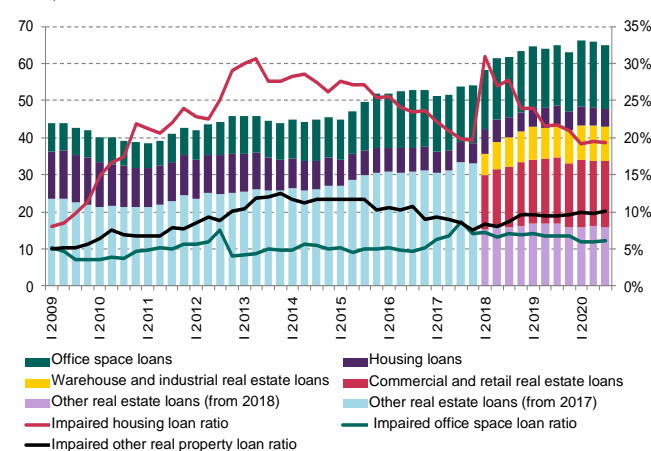
Source: NBP based on Sekocenbud, JLL (former REAS)

Figure 47 Łódź – estimated structure of price per square meter of housing usable area in the PM (building type 1122- 302^{33/}) for consumers



Source: NBP based on Sekocenbud, JLL (former REAS)

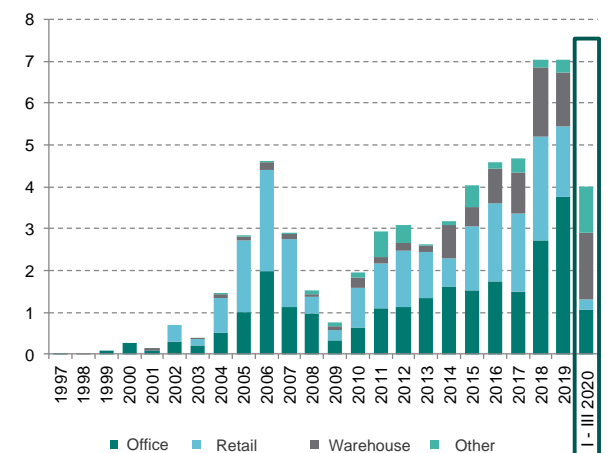
Figure 48 Loans to enterprises for real estate purchases (in PLN billion, left-hand scale) and the share of loans recognised as non-performing loans (in %, right-hand scale)



Note: exclusive of BGK. Since 2018, new accounting standards have been in place.

Source: NBP

Figure 49 Value of investment transactions in the commercial real estate market (EUR billion)



Source: Comparables.pl

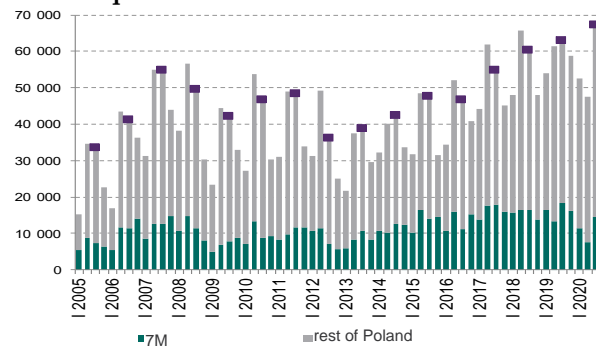
5. Residential construction and the housing market in Poland's selected cities

Figure 50 Structure of residential construction investors in Poland in three quarters of the years 2017–2020



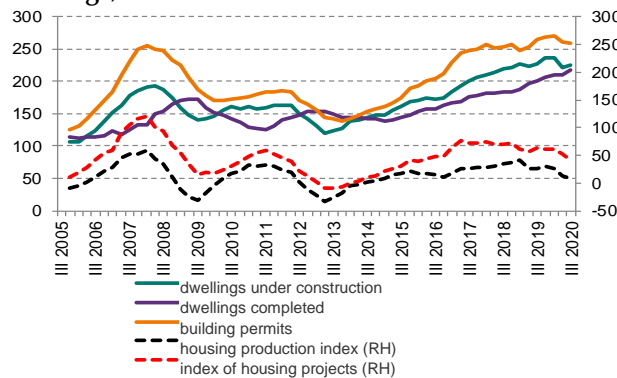
Source: Statistics Poland

Figure 52 Dwellings under construction in Poland, in quarter-on-quarter terms



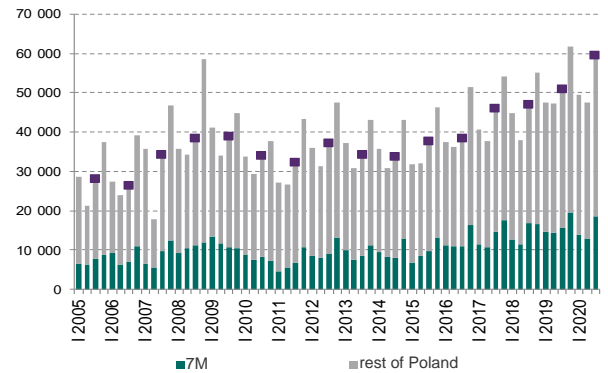
Note: only third quarters have been marked in violet. Source: Statistics Poland

Figure 54 Housing construction in Poland (in thousands of dwellings), home construction in progress (dwellings under construction minus completed dwellings) and investment projects in progress (home construction permits minus completed dwellings)



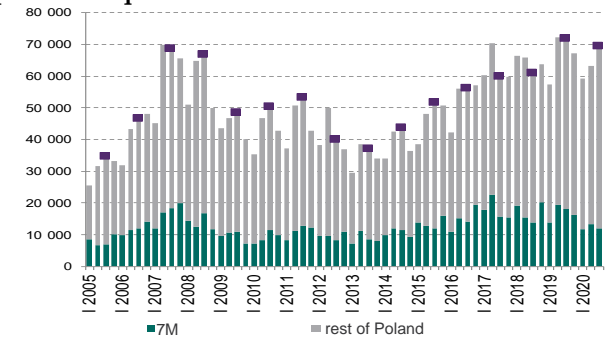
Note: rolling averages for four subsequent quarters. Source: NBP based on PABB and Statistics Poland

Figure 51 Dwellings completed and made ready for occupancy in Poland, in quarter-on-quarter terms



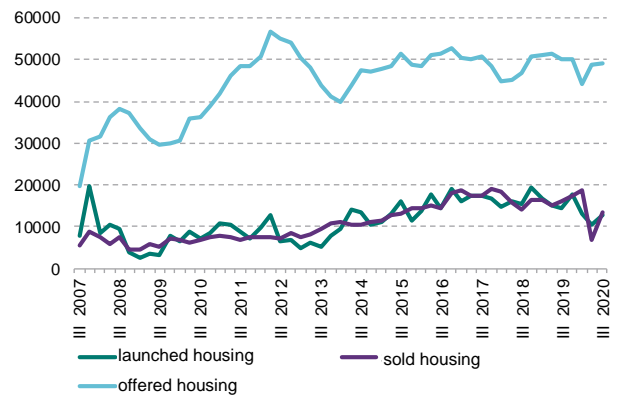
Note: only third quarters have been marked in violet. Source: Statistics Poland

Figure 53 Issued home building permits in Poland, in quarter-on-quarter terms



Note: only third quarters have been marked in violet. Source: Statistics Poland

Figure 55 Number of contracts for the construction of dwellings put on the market, both sold and offered for sale in Poland's 6 largest markets.* /



*/Warsaw, Kraków, Tricity, Wrocław, Poznań, Łódź. Source: JLL/former REAS

Figure 56 Housing supply and the estimated rate of return on housing development projects in PM in 7M

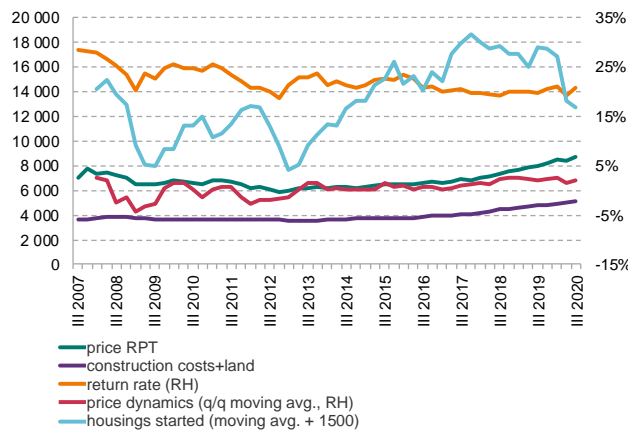
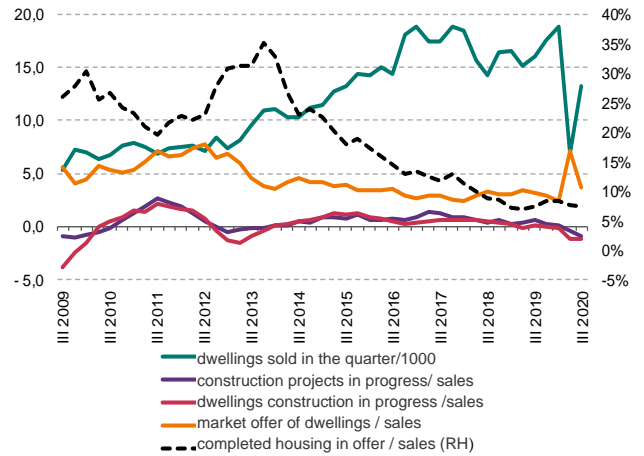


Figure 57 Housing projects, dwellings under construction and dwellings offered for sale in 7M



Note to Figure 57: Housing projects under construction mean building permits for housing units less completed housing units; housing units under construction mean housing units whose construction has started less completed housing units; cumulative values of the last four quarters, divided by sales in the given period.

Source: NBP, Statistics Poland, JLL (former REAS), Sekocenbud

Source: NBP based on Statistics Poland

Figure 58 Measure of adjustment of housing units on offer to demand in terms of area ≤ 50 sq. m, PM in selected cities in Poland

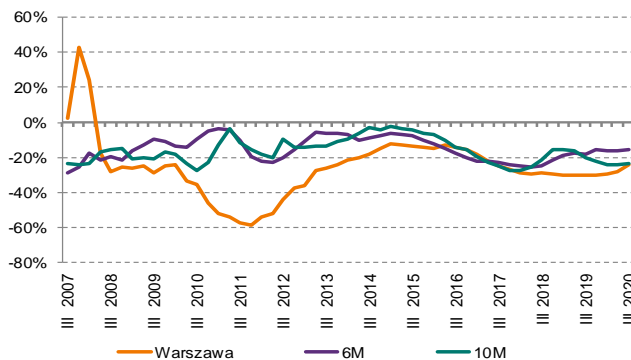
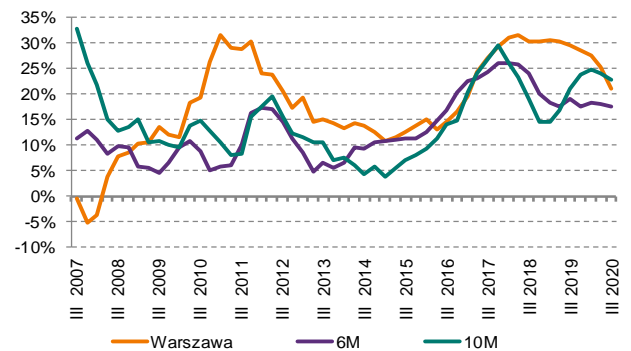


Figure 59 Measure of adjustment of housing units on offer to demand in terms of area > 50 sq. m, PM in selected cities in Poland



Note: Figure 58 presents, in percentage terms, a short-term mismatch in the primary market between supply (developers' housing offer) and the estimated demand (housing transactions) in terms of the dwelling's size, according to the data from the BaRN database. The mismatch is calculated as the ratio of the share of housing units with usable area of up to 50 square meters offered for sale to the number of transactions involving housing units with a total area of up to 50 square meters (the average figure for the last four quarters). The positive result (above the black line) indicates a surplus of housing of this particular size, whereas the negative result indicates a shortage thereof. Figure 59 is parallel for the space above 50 sq.m., Figures 60-61 are parallel, but for SM only.

Source: NBP

Source: NBP

Figure 60 Measure of adjustment of housing units on offer to demand in terms of area ≤ 50 sq.m, SM in Poland's selected cities

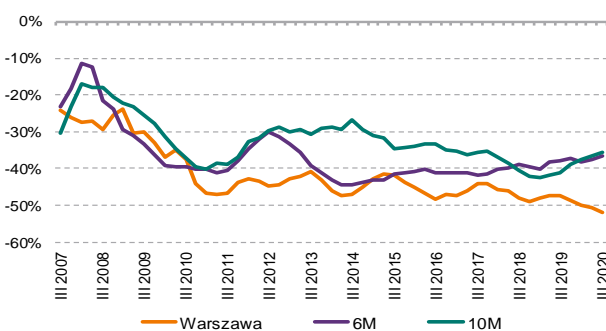
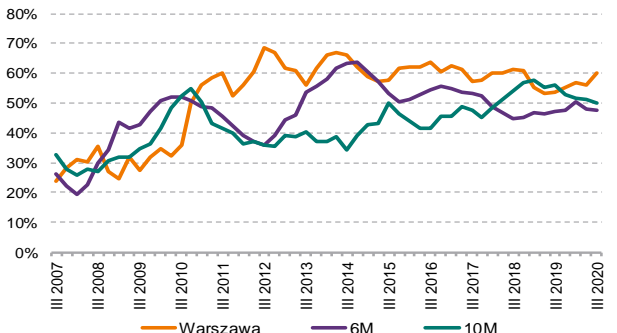


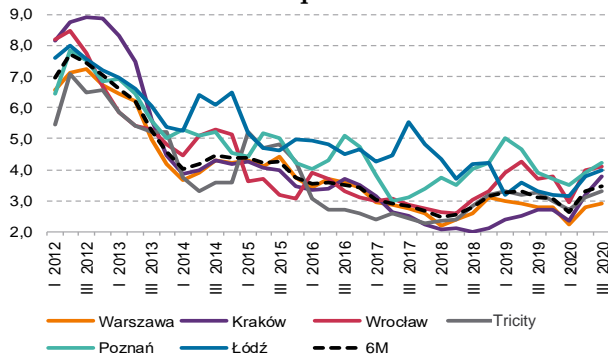
Figure 61 Measure of adjustment of housing units on offer to demand in terms of area > 50 sq. m, SM in selected cities in Poland



Source: NBP

Source: NBP

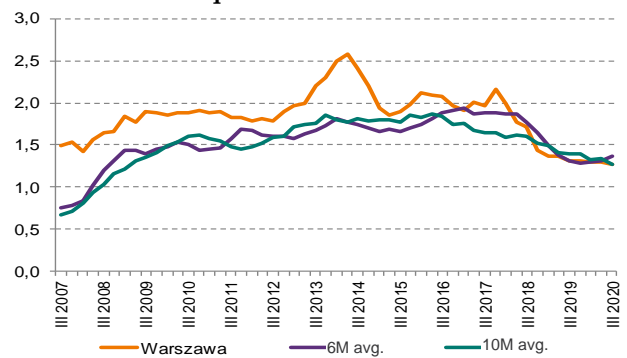
Figure 62 Selling time of dwellings on offer in PM in selected cities (number of quarters)



Note: selling time is the relation of the number of housing units on offer at the end of the current quarter in relation to the number of housing units sold in the last four quarters.

Source: NBP based on JLL (former REAS)

Figure 63 Selling time of dwellings in SM in selected cities (number of quarters)

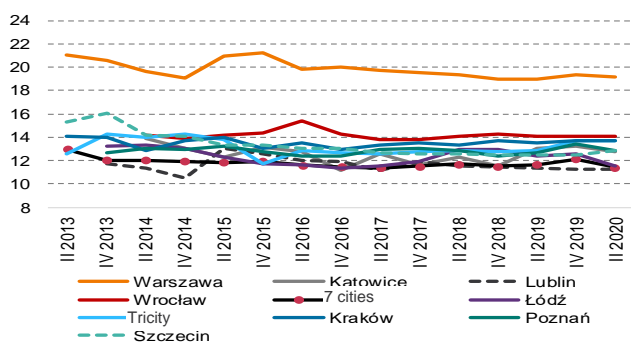


Note: real selling time, average of the last four quarters; data are not comparable with Figure 62. Selling time of housing in the secondary real estate market takes into account only transactions concluded with sales. The data are underestimated since they do not contain offers entered but not sold yet.

Source: NBP

6. Offer prices for commercial real estate

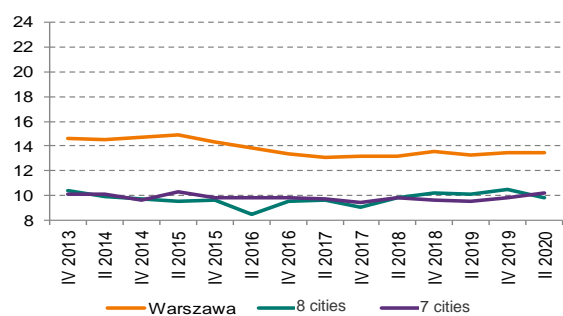
Figure 64 Transaction rents for A class office space (average prices in EUR/sq.m./month)



Notes: 7 cities include: Białystok, Bydgoszcz, Kielce, Olsztyn, Opole, Rzeszów, Zielona Góra.

Source: NBP

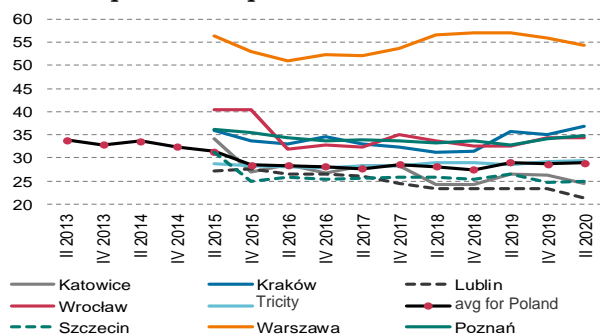
Figure 65 Transaction rents for B class office space (average prices in EUR/sq.m./month)



Notes: 8 cities include: Katowice, Kraków, Lublin, Łódź, Poznań, Szczecin, Tri-City Agglomeration, Wrocław. 7 cities include: Białystok, Bydgoszcz, Kielce, Olsztyn, Opole, Rzeszów, Zielona Góra.

Source: NBP

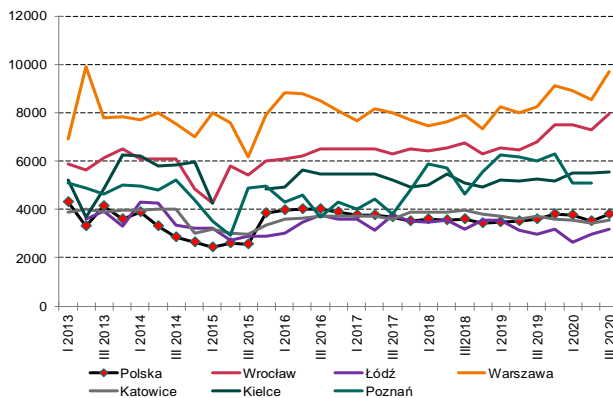
Figure 66 Transaction rents for retail space in shopping centres (shopping malls) with an area of 100-500 sq. m (EUR/sq.m./month)



Source: NBP

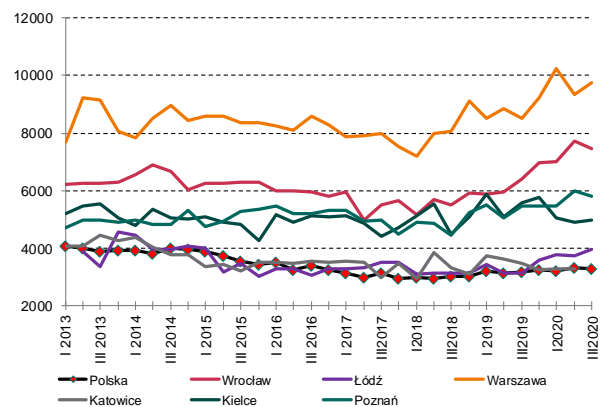
Note to Figure 66: as of the beginning of 2015 Q4, the number of records in the base, including respondents, has increased significantly, consequently changing the analysed sample. Rents for shopping malls are analysed.

Figure 67 Median of offer selling price of small office premises in SM (PLN/sq.m.)



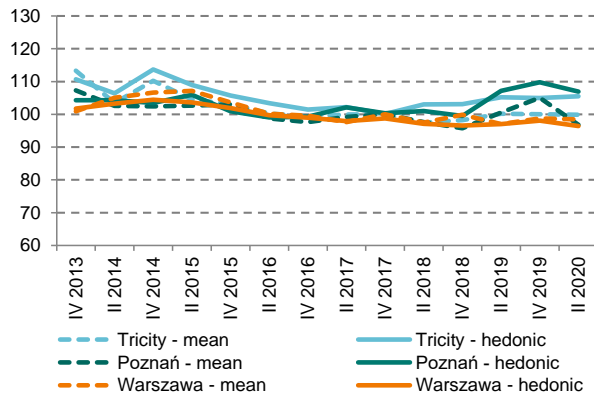
Source: PONT, NBP report

Figure 68 Median of offer selling price of small retail premises in SM (PLN/sq.m.)



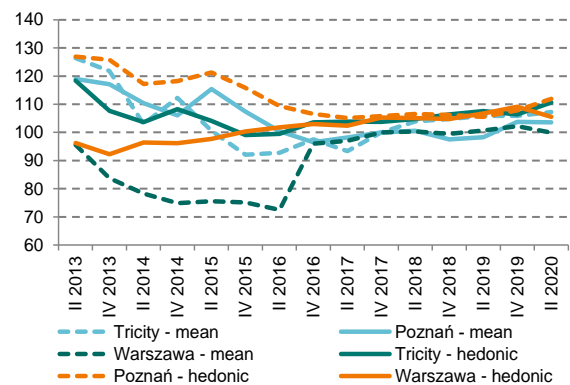
Source: PONT, NBP report

Figure 69 Index of rents for offices, average and hedonic (2017 Q4 = 100)



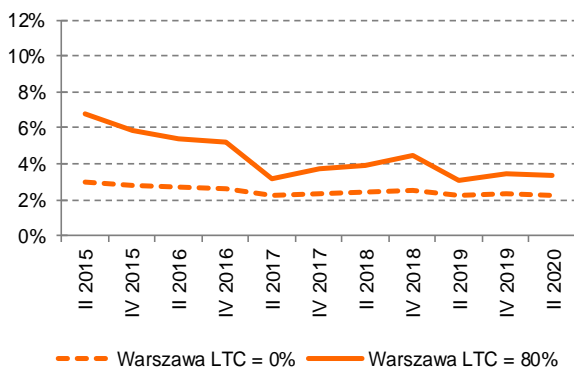
Source: NBP

Figure 70 Index of rents for shopping centres, average and hedonic (2017 Q4 = 100)



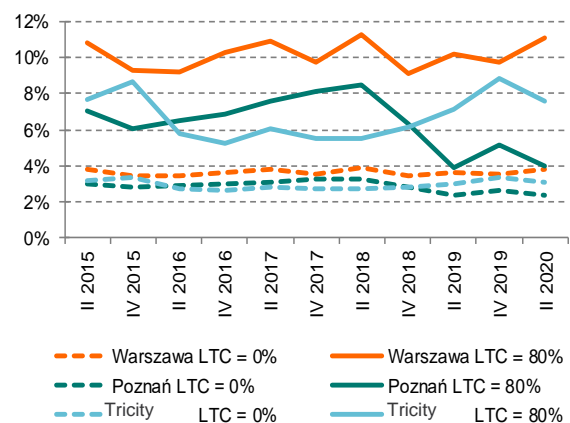
Source: NBP

Table 71 Estimated rate of return on equity from investment in B class office space from the existing stock in Warsaw



Source: NBP

Table 72 Estimated rate of return on equity from investment in the building and putting to commercial use of A class office space



Source: NBP

Table 3 Estimated rate of return on equity from investment in the building and putting to commercial use of A class office building in Warsaw

Date	Average rent per sq.m of space in EUR – A class	Cost of constructed usable area of offices including land, per sq.m in EUR	ROE at LTC = 0%	ROE at LTC = 50%	ROE at LTC = 80%	Average market rates of 10-year Treasury bonds
2015 Q2	20.9	3159	3.8%	5.5%	10.8%	2.8%
2015 Q4	21.2	3026	3.5%	4.9%	9.3%	2.8%
2016 Q2	19.9	2960	3.4%	4.9%	9.2%	3.0%
2016 Q4	20.0	2960	3.7%	5.3%	10.3%	3.3%
2017 Q2	19.7	3091	3.8%	5.6%	10.9%	3.3%
2017 Q4	19.5	3103	3.6%	5.1%	9.8%	3.4%
2018 Q2	19.3	3125	3.9%	5.7%	11.2%	3.2%
2018 Q4	18.9	3210	3.4%	4.8%	9.1%	3.1%
2019 Q2	18.9	3307	3.6%	5.3%	10.2%	2.7%
2019 Q4	19.3	3394	3.5%	5.1%	9.7%	2.1%
2020 Q2	19.1	3289	3.8%	5.6%	11.1%	1.7%

Assumptions: The costs of construction of an office building (Sekocenbud data) were increased by 15% of the developer's costs related to organisation of the investment and commercialisation of the building, as well as the cost of land estimated by experts (based on public information). Loan in euro for 25 years, equal instalments, payable four times a year. Building depreciation of 2.5%, standard for commercial real estate. The calculated capitalisation rate includes the depreciation cost of the building. CIT is included. ROE means net profit/equity contributed. *Source:* NBP (rents and calculations), MF (rates of return on 10-year bonds), estimation of construction costs based on Sekocenbud data, BCO Bulletin of prices of construction facilities, part I – non-residential buildings, facility 1220-102.

Table 4 Estimated rate of return on equity from investment in the building and putting to commercial use of A class office building in Poznań

Date	Average rent per sq.m of space in EUR - A class	Cost of constructed usable area of offices including land, per sq.m in EUR	ROE at LTC = 0%	ROE at LTC = 50%	ROE at LTC = 80%	Average market rates of 10-year Treasury bonds
2015 Q2	13.3	1969	3.0%	4.0%	7.1%	2.8%
2015 Q4	12.8	1890	2.8%	3.6%	6.0%	2.8%
2016 Q2	12.4	1922	2.9%	3.8%	6.5%	3.0%
2016 Q4	12.4	1900	3.0%	3.9%	6.8%	3.3%
2017 Q2	12.9	2033	3.1%	4.2%	7.6%	3.3%
2017 Q4	13.0	2052	3.2%	4.5%	8.1%	3.4%
2018 Q2	12.9	2056	3.3%	4.6%	8.5%	3.2%
2018 Q4	12.4	2134	2.9%	3.7%	6.3%	3.1%
2019 Q2	12.7	2231	2.4%	2.8%	3.9%	2.7%
2019 Q2	13.4	2288	2.6%	3.3%	5.2%	2.1%
2020 Q2	12.8	2193	2.4%	2.8%	3.9%	1.7%

Assumptions: The costs of construction of an office building (Sekocenbud data) were increased by 15% of the developer's costs related to organisation of the investment and commercialisation of the building, as well as the cost of land estimated by experts (based on public information). Loan in euro for 25 years, equal instalments, payable four times a year. Building depreciation of 2.5%, standard for commercial real estate. The calculated capitalisation rate includes the depreciation cost of the building. CIT is included. ROE means net profit/equity contributed.

Source: NBP (rents and calculations), MF (rates of return on 10-year bonds), estimation of construction costs based on Sekocenbud data, BCO Bulletin of prices of construction facilities, part I – buildings, facility 1220-102.

Table 5 Estimated rate of return on equity from investment in the building and putting to commercial use of A class office building in the Tricity

Assumptions: The costs of construction of an office building (Sekocenbud data) were increased by 15% of the developer's costs related to organisation of the investment and commercialisation of the building, as well as the cost of land estimated by experts (based on public information).

Date	Average rent per sq.m of space in EUR – A class	Cost of constructed usable area of offices including land, per sq.m in EUR	ROE at LTC = 0%	ROE at LTC = 50%	ROE at LTC = 80%	Average market rates of 10-year Treasury bonds
2015 Q2	13.0	2034	3.1%	4.3%	7.7%	2.8%
2015 Q4	12.7	1980	3.3%	4.7%	8.7%	2.8%
2016 Q2	12.3	1901	2.8%	3.5%	5.8%	3.0%
2016 Q4	12.1	1948	2.6%	3.3%	5.2%	3.3%
2017 Q2	12.0	2014	2.8%	3.6%	6.0%	3.3%
2017 Q4	12.1	2044	2.7%	3.4%	5.5%	3.4%
2018 Q2	12.7	2082	2.7%	3.4%	5.6%	3.2%
2018 Q4	12.7	2109	2.8%	3.6%	6.1%	3.1%
2019 Q2	12.8	2228	3.0%	4.0%	7.1%	2.7%
2019 Q4	13.5	2275	3.4%	4.7%	8.9%	2.1%
2020 Q2	13.0	2201	3.1%	4.2%	7.6%	1.7%

Loan in euro for 25 years, equal instalments, payable four times a year. Building depreciation of 2.5%, standard for commercial real estate. The calculated capitalisation rate includes the depreciation cost of the building. CIT is included. ROE means net profit/equity contributed.

Source: NBP (rents and calculations), MF (rates of return on 10-year bonds), estimation of construction costs based on Sekocenbud data, BCO Bulletin of prices of construction facilities, part I – buildings, facility 1220-102.

Table 6 Estimated rate of return on equity from investment in the building and putting to commercial use of A class office building in Warsaw

Date	Hedonic rent per sq.m of space in EUR	Hedonic price per sq.m of space in EUR	Calculated capitalisation rate (yield)	Market capitalisation rate (yield)	ROE at LTC = 0%	ROE at LTC = 50%	ROE at LTC = 80%	Average market rates of 10-year Treasury bonds
2013 Q4	14.9	2318	7.7%	7.0%	3.0%	4.1%	7.3%	4.4%
2014 Q2	15.5	2172	8.5%	7.0%	3.6%	5.2%	10.0%	3.4%
2014 Q4	15.6	2172	8.6%	7.0%	3.7%	5.3%	10.3%	2.6%
2015 Q2	15.7	2531	7.5%	7.0%	2.9%	3.9%	6.7%	2.8%
2015 Q4	15.2	2531	7.2%	7.0%	2.8%	3.6%	5.9%	2.8%
2016 Q2	14.7	2499	7.1%	6.5%	2.7%	3.3%	5.4%	3.0%
2016 Q4	14.7	2499	7.0%	6.5%	2.6%	3.3%	5.2%	3.3%
2017 Q2	14.4	2700	6.4%	6.0%	2.2%	2.5%	3.2%	3.3%
2017 Q4	14.7	2700	6.5%	6.0%	2.3%	2.7%	3.7%	3.4%
2018 Q2	14.3	2600	6.6%	6.0%	2.4%	2.8%	3.9%	3.2%
2018 Q4	14.7	2600	6.8%	6.0%	2.5%	3.0%	4.5%	3.1%
2019 Q2	14.3	2700	6.3%	6.0%	2.2%	2.4%	3.0%	2.7%
2019 Q4	14.5	2700	6.5%	6.0%	2.3%	2.6%	3.4%	2.1%
2020 Q2	14.5	2700	6.4%	6.0%	2.3%	2.5%	3.4%	1.7%

Assumptions: Loan in euro for 25 years, equal instalments, payable four times a year. Building depreciation of 2.5%, standard for commercial real estate. It was assumed that the cost of land in the cost of investment is 20%. The calculated capitalisation rate includes the depreciation cost of the building. CIT is included. ROE means net profit/equity contributed.

Source: NBP (data and calculations), Colliers International (market yield), MF (rates of return on 10-year bonds)

Table 7 Estimated rate of return on investment in housing of 50 sq. m. in Warsaw

date	Transaction rent (PLN/sq.m)	Average transaction price PM (PLN/sq.m)	Calculated capitalisation rate (yield)	ROE with LTV = 0%	ROE with LTV = 50%	ROE with LTV = 80%	Average market rates of return on 10-year Treasury bonds	Interest of a new mortgage in PLN
IV 2013	43,5	7 558	6,9%	4,3%	3,8%	0,9%	4,4%	5,1%
II 2014	43,4	7 574	6,9%	4,3%	3,2%	0,2%	3,4%	5,3%
IV 2014	43,6	7 601	6,9%	4,3%	3,8%	2,3%	2,6%	5,3%
II 2015	43,8	7 659	6,9%	4,2%	4,1%	3,8%	2,8%	4,4%
IV 2015	45,0	7 682	7,0%	4,4%	4,3%	4,0%	2,8%	4,5%
II 2016	46,4	7 719	7,2%	4,5%	4,5%	4,4%	3,0%	4,6%
IV 2016	48,4	7 871	7,4%	4,7%	4,9%	5,5%	3,3%	4,5%
II 2017	47,9	8 002	7,2%	4,5%	4,6%	4,8%	3,3%	4,4%
IV 2017	49,7	8 202	7,3%	4,6%	4,8%	5,3%	3,4%	4,4%
II 2018	50,2	8 638	7,1%	4,5%	4,5%	4,9%	3,2%	4,3%
IV 2018	52,2	9 013	7,0%	4,3%	4,3%	4,1%	3,1%	4,4%
II 2019	53,3	9 414	6,8%	4,2%	4,1%	3,8%	2,7%	4,3%
IV 2019	55,2	9 857	6,6%	4,1%	3,7%	2,5%	2,0%	4,4%
II 2020	49,3	10 029	5,8%	3,3%	3,0%	2,1%	1,4%	3,7%

Assumptions: Transaction price per square metre of housing (50% from the primary market, increased by finishing costs – amounting to +PLN 700/sq.m. since 2018 – and 50% from the secondary market). Average transaction rent. PLN-denominated loan granted for 25 years, equal instalments, payable four times a year. Occupancy of 95%. Calculated capitalization rate includes amortization costs (1.5%; two thorough renovations in the period of 100 years). Taxed with a flat-rate tax of 8.5%. ROE means net profit (return) on equity employed. Calculations have been verified against those presented before.

Source: NBP (data and calculations), MF (rate of return on 10-year bonds)

Table 8 Average prices of a square metre of housing in the PM in Gdańsk

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	9 474	8 534	9 806	8 585	9 904	8 741	9 803	8 733	9 641	9 024
growth (q-o-q)	104,9	103,0	103,5	100,6	101,0	101,8	99,0	99,9	98,3	103,3
growth (y-o-y)	114,6	118,4	114,0	108,4	119,9	105,8	108,5	105,4	101,8	105,7
dwellings price range	4 118	1 331	3 625	1 478	3 110	1 204	3 393	739	3 551	1 189
<=4 000 PLN/sq.m	9	2	14	1	4	1	4	3	13	0
(4 001; 6 000] PLN/sq.m	412	168	172	204	59	84	83	54	42	51
(6 001; 8 000] PLN/sq.m	1 209	441	957	540	1 000	478	1 046	310	1 064	498
(8 001; 10 000] PLN/sq.m	945	410	1 004	331	613	297	767	170	1 057	253
>10 001 PLN/sq.m	1 543	310	1 478	402	1 434	344	1 493	202	1 375	387
dwellings space range	4 118	1 331	3 625	1 478	3 110	1 204	3 393	739	3 551	1 189
<= 40 sq.m	607	341	600	361	416	290	520	169	506	263
(40,1; 60] sq.m	1838	588	1605	707	1430	548	1479	349	1566	600
(60,1; 80] sq.m	1225	334	998	323	872	288	956	170	1010	243
> 80,1 sq.m	448	68	422	87	392	78	438	51	469	83
average price of 1 sq.m. of dwelling	9 474	8 534	9 806	8 585	9 904	8 741	9 803	8 733	9 641	9 024
<=40 sq.m	10 112	9 303	10 941	8 744	10 456	9 575	10 440	8 915	10 156	8 976
(40,1; 60] sq.m	9 398	8 141	9 681	8 404	9 769	8 536	9 656	8 914	9 498	9 072
(60,1; 80] sq.m	8 754	8 320	8 932	8 306	9 257	8 024	9 237	7 785	9 239	8 333
> 80,1 sq.m	10 890	9 128	10 736	10 438	11 252	9 731	10 778	10 051	10 429	10 862
average offer price deviation	11,0%	x	14,2%	x	13,3%	x	12,3%	x	6,8%	x
<= 40 sq.m	8,7%	x	25,1%	x	9,2%	x	17,1%	x	13,1%	x
(40,1; 60] sq.m	15,4%	x	15,2%	x	14,4%	x	8,3%	x	4,7%	x
(60,1; 80] sq.m	5,2%	x	7,5%	x	15,4%	x	18,7%	x	10,9%	x
> 80,1 sq.m	19,3%	x	2,9%	x	15,6%	x	7,2%	x	-4,0%	x

Source: NBP

Table 9 Average prices of a square metre of housing in the SM in Gdańsk

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	9 956	7 767	9 889	8 354	10 573	8 375	10 332	8 465	10 264	8 839
growth (q-o-q)	106,5	99,3	99,3	107,6	106,9	100,3	97,7	101,1	99,3	104,4
growth (y-o-y)	113,9	108,6	111,7	111,3	112,3	113,9	110,6	108,2	103,1	113,8
dwellings price range	1 081	959	1 247	1 112	886	1 254	1 057	853	1 052	559
<=4 000 PLN/sq.m	1	9	0	3	0	11	0	4	2	4
(4 001; 6 000] PLN/sq.m	47	142	40	111	27	105	31	71	45	42
(6 001; 8 000] PLN/sq.m	295	448	345	464	178	497	218	318	211	190
(8 001; 10 000] PLN/sq.m	307	250	391	327	259	430	325	303	324	186
>10 001 PLN/sq.m	431	110	471	207	422	211	483	157	470	137
dwellings space range	1 081	959	1 247	1 112	886	1 254	1 057	853	1 052	559
<= 40 sq.m	205	242	229	284	124	308	160	194	143	128
(40,1; 60] sq.m	409	429	457	558	337	613	422	393	398	254
(60,1; 80] sq.m	279	199	347	195	253	264	289	188	319	132
> 80,1 sq.m	188	89	214	75	172	69	186	78	192	45
average price of 1 sq.m. of dwelling	9 956	7 767	9 889	8 354	10 573	8 375	10 332	8 465	10 264	8 839
<=40 sq.m	10679	8649	10456	9233	11571	8977	11647	9121	12019	9760
(40,1; 60] sq.m	10198	7779	10019	8256	10978	8389	10308	8596	10530	8539
(60,1; 80] sq.m	9224	7130	9414	7529	9700	7669	9739	7714	9482	8393
> 80,1 sq.m	9728	6731	9772	7894	10342	8272	10177	7981	9706	9225
average offer price deviation	28,2%	x	18,4%	x	26,2%	x	22,1%	x	16,1%	x
<= 40 sq.m	23,5%	x	13,2%	x	28,9%	x	27,7%	x	23,1%	x
(40,1; 60] sq.m	31,1%	x	21,4%	x	30,9%	x	19,9%	x	23,3%	x
(60,1; 80] sq.m	29,4%	x	25,0%	x	26,5%	x	26,3%	x	13,0%	x
> 80,1 sq.m	44,5%	x	23,8%	x	25,0%	x	27,5%	x	5,2%	x

Source: NBP

Table 10 Average prices of a square metre of housing in the PM in Kraków

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	8 017	7 786	8 532	8 237	9 212	8 306	9 758	8 591	9 463	8 838
growth (q-o-q)	100,8	100,6	106,4	105,8	108,0	100,8	105,9	103,4	97,0	102,9
growth (y-o-y)	113,9	112,1	116,0	114,4	120,9	111,9	122,6	111,0	118,0	113,5
dw ellings price range	5 415	1 625	6 437	2 029	5 453	2 137	5 984	1 078	7 304	1 330
<=4 000 PLN/sq.m	0	0	0	0	0	0	0	0	0	0
(4 001; 6 000] PLN/sq.m	506	186	358	152	98	158	98	58	95	37
(6 001; 8 000] PLN/sq.m	2 469	811	2 332	799	1 455	826	1 287	400	1 659	435
(8 001; 10 000] PLN/sq.m	1 961	493	2 790	861	2 356	903	2 205	407	3 077	536
>10 001 PLN/sq.m	479	135	957	217	1 544	250	2 394	213	2 473	322
dw ellings space range	5 415	1 625	6 437	2 029	5 453	2 137	5 984	1 078	7 304	1 330
<= 40 sq.m	974	431	1188	556	1030	522	1197	231	1481	381
(40,1; 60] sq.m	2787	828	3220	1017	2591	1112	2761	545	3311	639
(60,1; 80] sq.m	1301	281	1618	354	1468	392	1543	230	1948	245
> 80,1 sq.m	353	85	411	102	364	111	483	72	564	65
average price of 1 sq.m. of dwelling	8 017	7 786	8 532	8 237	9 212	8 306	9 758	8 591	9 463	8 838
<=40 sq.m	8520	8235	8899	8701	9927	8687	10982	9234	10546	9529
(40,1; 60] sq.m	8018	7675	8533	8136	9145	8357	9575	8503	9295	8580
(60,1; 80] sq.m	7689	7502	8266	7823	8851	7743	9078	8304	8876	8330
> 80,1 sq.m	7838	7543	8505	8147	9131	7992	9941	8111	9630	9228
average offer price deviation	3,0%	x	3,6%	x	10,9%	x	13,6%	x	7,1%	x
<= 40 sq.m	3,5%	x	2,3%	x	14,3%	x	18,9%	x	10,7%	x
(40,1; 60] sq.m	4,5%	x	4,9%	x	9,4%	x	12,6%	x	8,3%	x
(60,1; 80] sq.m	2,5%	x	5,7%	x	14,3%	x	9,3%	x	6,6%	x
> 80,1 sq.m	3,9%	x	4,4%	x	14,3%	x	22,6%	x	4,4%	x

Source: NBP

Table 11 Average prices of a square metre of housing in the SM in Kraków

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	8 913	7 135	9 109	7 414	9 518	7 766	9 672	8 061	9 542	8 100
growth (q-o-q)	100,2	102,6	102,2	103,9	104,5	104,8	101,6	103,8	98,7	100,5
growth (y-o-y)	110,6	107,8	107,6	108,3	109,4	117,2	108,7	115,9	107,1	113,5
dw ellings price range	493	344	493	330	569	310	587	201	470	286
<=4 000 PLN/sq.m	0	0	0	0	0	0	0	0	0	0
(4 001; 6 000] PLN/sq.m	19	66	15	47	6	32	2	17	2	16
(6 001; 8 000] PLN/sq.m	175	200	139	176	138	147	132	83	109	130
(8 001; 10 000] PLN/sq.m	181	65	211	94	239	108	253	82	205	110
>10 001 PLN/sq.m	118	13	128	13	186	23	200	19	154	30
dw ellings space range	493	344	493	330	569	310	587	201	470	286
<= 40 sq.m	113	154	123	155	145	128	161	69	124	126
(40,1; 60] sq.m	199	147	208	132	251	140	283	101	227	124
(60,1; 80] sq.m	122	38	111	40	121	39	109	22	91	31
> 80,1 sq.m	59	5	51	3	52	3	34	9	28	5
average price of 1 sq.m. of dwelling	8 913	7 135	9 109	7 414	9 518	7 766	9 672	8 061	9 542	8 100
<=40 sq.m	9894	7674	10079	7821	10512	8463	10614	8249	10359	8614
(40,1; 60] sq.m	8579	6888	8782	7228	9275	7442	9399	8153	9228	7884
(60,1; 80] sq.m	8426	6052	8602	6401	8875	6733	8928	7617	8858	7100
> 80,1 sq.m	9168	6009	9205	8036	9413	6618	9873	6671	10700	6668
average offer price deviation	24,9%	x	22,9%	x	22,6%	x	20,0%	x	17,8%	x
<= 40 sq.m	28,9%	x	28,9%	x	24,2%	x	28,7%	x	20,3%	x
(40,1; 60] sq.m	24,6%	x	21,5%	x	24,6%	x	15,3%	x	17,0%	x
(60,1; 80] sq.m	39,2%	x	34,4%	x	31,8%	x	17,2%	x	24,8%	x
> 80,1 sq.m	52,6%	x	14,5%	x	42,2%	x	48,0%	x	60,5%	x

Source: NBP

Table 12 Average prices of a square metre of housing in the PM in Łódź

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	6 027	5 881	6 274	6 026	6 608	6 249	6 510	6 080	6 734	6 406
growth (q-o-q)	100,3	100,5	104,1	102,5	105,3	103,7	98,5	97,3	103,4	105,4
growth (y-o-y)	109,0	109,8	110,8	109,4	114,0	111,0	108,3	103,9	111,7	108,9
dw ellings price range	1 465	467	1 869	420	1 049	323	1 218	171	1 390	287
<=4 000 PLN/sq.m	2	0	4	0	0	0	0	0	0	0
(4 001; 5 000] PLN/sq.m	34	1	26	4	13	6	5	4	4	2
(5 001; 6 000] PLN/sq.m	800	326	759	260	326	117	399	85	247	91
(6 001; 7 000] PLN/sq.m	559	127	792	129	391	169	533	58	708	135
> 7 000 PLN/sq.m	70	13	288	27	319	31	281	24	431	59
dw ellings space range	1 465	467	1 869	420	1 049	323	1 218	171	1 390	287
<= 40 sq.m	167	91	362	75	232	105	201	34	275	52
(40,1; 60] sq.m	701	240	921	216	529	174	557	83	655	145
(60,1; 80] sq.m	472	79	480	111	221	35	363	42	350	75
> 80,1 sq.m	125	57	106	18	67	9	97	12	110	15
average price of 1 sq.m. of dwelling	6 027	5 881	6 274	6 026	6 608	6 249	6 510	6 080	6 734	6 406
<=40 sq.m	6610	6215	6952	6504	7481	6692	7456	6911	7386	7327
(40,1; 60] sq.m	6084	5875	6177	6007	6542	6079	6464	6002	6701	6405
(60,1; 80] sq.m	5812	5679	5931	5722	5895	5781	6068	5520	6312	5782
> 80,1 sq.m	5742	5656	6354	6143	6467	6200	6463	6225	6637	6346
average offer price deviation	2,5%	x	4,1%	x	5,7%	x	7,1%	x	5,1%	x
<= 40 sq.m	6,4%	x	6,9%	x	11,8%	x	7,9%	x	0,8%	x
(40,1; 60] sq.m	3,6%	x	2,8%	x	7,6%	x	7,7%	x	4,6%	x
(60,1; 80] sq.m	2,3%	x	3,6%	x	2,0%	x	9,9%	x	9,2%	x
> 80,1 sq.m	1,5%	x	3,4%	x	4,3%	x	3,8%	x	4,6%	x

Source: NBP

Table 13 Average prices of a square metre of housing in the SM in Łódź

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	5 203	4 708	5 392	4 870	5 465	5 011	5 432	5 245	5 464	5 613
growth (q-o-q)	101,7	102,4	103,6	103,4	101,3	102,9	99,4	104,7	100,6	107,0
growth (y-o-y)	110,4	110,6	112,1	109,1	108,1	108,6	106,2	114,1	105,0	119,2
dw ellings price range	425	179	304	83	243	167	298	54	264	50
<= 3 000 PLN/sq.m	3	10	4	0	0	2	0	1	0	0
(3 001; 4 000] PLN/sq.m	53	24	25	11	27	19	29	4	24	2
(4 001; 5 000] PLN/sq.m	145	85	87	44	69	71	79	19	68	10
(5 001; 6 000] PLN/sq.m	146	41	122	18	84	49	122	22	103	21
(6 001; 7 000] PLN/sq.m	52	16	38	10	33	22	40	6	49	13
>7 001 PLN/sq.m	26	3	28	0	30	4	28	2	20	4
dw ellings space range	425	179	304	83	243	167	298	54	264	50
<= 40 sq.m	68	67	50	27	25	57	40	14	44	15
(40,1; 60] sq.m	148	76	101	35	84	79	108	29	106	26
(60,1; 80] sq.m	91	25	78	14	57	23	68	10	54	5
> 80,1 sq.m	118	11	75	7	77	8	82	1	60	4
average price of 1 sq.m. of dwelling	5 203	4 708	5 392	4 870	5 465	5 011	5 432	5 245	5 464	5 613
<=40 sq.m	5 692	4 804	5 871	4 982	6 040	5 317	6 004	5 481	5 911	6 280
(40,1; 60] sq.m	5 295	4 653	5 507	4 970	5 660	4 887	5 473	5 340	5 644	5 402
(60,1; 80] sq.m	5 187	4 739	5 349	4 864	5 437	4 810	5 356	4 894	5 312	5 473
> 80,1 sq.m	4 817	4 436	4 962	3 953	5 085	4 631	5 160	2 710	4 953	4 658
average offer price deviation	10,5%	x	10,7%	x	9,1%	x	3,6%	x	-2,7%	x
<= 40 sq.m	18,5%	x	17,8%	x	13,6%	x	9,5%	x	-5,9%	x
(40,1; 60] sq.m	13,8%	x	10,8%	x	15,8%	x	2,5%	x	4,5%	x
(60,1; 80] sq.m	9,5%	x	10,0%	x	13,0%	x	9,4%	x	-2,9%	x
> 80,1 sq.m	8,6%	x	25,5%	x	9,8%	x	90,4%	x	6,3%	x

Source: NBP

Table 14 Average prices of a square metre of housing in the PM in Poznań

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	7 390	7 090	7 395	7 397	7 540	7 418	7 763	7 431	7 920	7 450
growth (q-o-q)	102,2	100,2	100,1	104,3	102,0	100,3	103,0	100,2	102,0	100,3
growth (y-o-y)	106,6	103,5	105,1	105,4	102,6	105,1	107,3	105,0	107,2	105,1
dw ellings price range	6 585	1 391	5 976	1 603	6 145	1 417	5 939	997	6 113	1 099
<=4 000 PLN/sq.m	0	0	0	0	0	0	0	0	0	0
(4 001; 6 000] PLN/sq.m	528	283	453	176	391	127	334	92	213	123
(6 001; 8 000] PLN/sq.m	4 560	868	4 219	1 037	3 913	974	3 511	694	3 518	701
(8 001; 10 000] PLN/sq.m	1 339	220	1 157	358	1 684	278	1 815	179	2 052	246
>10 001 PLN/sq.m	158	20	147	32	157	38	279	32	330	29
dw ellings space range	6 585	1 391	5 976	1 603	6 145	1 417	5 939	997	6 113	1 099
<= 40 sq.m	1314	345	1041	403	1145	410	1044	231	1073	296
(40,1; 60] sq.m	3059	764	2829	872	2711	683	2544	499	2565	549
(60,1; 80] sq.m	1813	215	1740	246	1841	276	1841	226	1940	197
> 80,1 sq.m	399	67	366	82	448	48	510	41	535	57
average price of 1 sq.m. of dwelling	7 390	7 090	7 395	7 397	7 540	7 418	7 763	7 431	7 920	7 450
<=40 sq.m	7 876	7 501	7 965	7 657	8 200	7 682	8 410	7 405	8 661	7 573
(40,1; 60] sq.m	7 366	6 989	7 380	7 322	7 516	7 467	7 727	7 326	7 897	7 322
(60,1; 80] sq.m	7 092	6 970	7 065	7 244	7 157	6 980	7 398	7 231	7 494	7 366
> 80,1 sq.m	7 323	6 515	7 454	7 372	7 577	6 999	7 938	9 941	8 088	8 327
average offer price deviation	4,2%	x	0,0%	x	1,6%	x	4,5%	x	6,3%	x
<= 40 sq.m	5,0%	x	4,0%	x	6,7%	x	13,6%	x	14,4%	x
(40,1; 60] sq.m	5,4%	x	0,8%	x	0,7%	x	5,5%	x	7,8%	x
(60,1; 80] sq.m	1,8%	x	-2,5%	x	2,5%	x	2,3%	x	1,7%	x
> 80,1 sq.m	12,4%	x	1,1%	x	8,3%	x	-20,1%	x	-2,9%	x

Source: NBP

Table 15 Average prices of a square metre of housing in the SM in Poznań

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	7 188	6 414	7 639	6 521	7 809	6 591	7 823	6 724	7 851	6 882
growth (q-o-q)	101,6	101,1	106,3	101,7	102,2	101,1	100,2	102,0	100,4	102,4
growth (y-o-y)	106,3	108,1	110,1	106,7	112,2	107,1	110,6	106,0	109,2	107,3
dw ellings price range	1 530	1 127	740	747	1 192	511	975	347	1 312	295
<=4 000 PLN/sq.m	21	48	5	23	3	13	4	2	2	1
(4 001; 6 000] PLN/sq.m	325	382	115	228	156	159	99	80	115	57
(6 001; 8 000] PLN/sq.m	815	565	367	405	559	280	501	231	686	204
(8 001; 10 000] PLN/sq.m	288	113	175	82	355	51	285	34	397	28
>10 001 PLN/sq.m	81	19	78	9	119	8	86	0	112	5
dw ellings space range	1 530	1 127	740	747	1 192	511	975	347	1 312	295
<= 40 sq.m	267	332	127	233	207	171	165	117	281	123
(40,1; 60] sq.m	652	493	307	349	469	211	440	153	598	115
(60,1; 80] sq.m	357	205	193	129	333	103	250	65	282	47
> 80,1 sq.m	254	97	113	36	183	26	120	12	151	10
average price of 1 sq.m. of dwelling	7 188	6 414	7 639	6 521	7 809	6 591	7 823	6 724	7 851	6 882
<=40 sq.m	8 169	7 125	8 832	7 227	8 895	7 390	8 656	7 190	8 721	7 508
(40,1; 60] sq.m	7 295	6 409	7 816	6 413	8 132	6 441	8 037	6 677	7 870	6 650
(60,1; 80] sq.m	6 742	5 752	6 902	5 869	7 115	5 715	7 192	6 085	7 235	5 904
> 80,1 sq.m	6 509	5 409	7 074	5 330	7 016	6 022	7 207	6 231	7 308	6 442
average offer price deviation	12,1%	x	17,1%	x	18,5%	x	16,4%	x	14,1%	x
<= 40 sq.m	14,7%	x	22,2%	x	20,4%	x	20,4%	x	16,1%	x
(40,1; 60] sq.m	13,8%	x	21,9%	x	26,3%	x	20,4%	x	18,4%	x
(60,1; 80] sq.m	17,2%	x	17,6%	x	24,5%	x	18,2%	x	22,5%	x
> 80,1 sq.m	20,3%	x	32,7%	x	16,5%	x	15,7%	x	13,4%	x

Source: NBP

Table 16 Average prices of a square metre of housing in the PM in Warsaw

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	9 935	9 188	10 280	9 476	10 610	9 819	10 717	9 438	10 735	10 184
growth (q-o-q)	103,6	102,9	103,5	103,1	103,2	103,6	101,0	96,1	100,2	107,9
growth (y-o-y)	116,4	101,9	120,0	100,5	121,0	102,4	120,0	95,0	116,8	99,1
dwelling price range	13 824	4 128	12 204	4 622	11 516	4 773	12 347	2 631	12 735	3 102
<=4 000 PLN/sq.m.	0	0	0	0	0	0	0	0	0	0
(4 001; 6 000] PLN/sq.m.	61	28	35	31	40	15	32	72	26	6
(6 001; 8 000] PLN/sq.m.	3 574	1 285	2 381	1 190	2 089	1 117	2 006	679	1 889	607
(8 001; 10 000] PLN/sq.m.	5 278	1 790	4 679	2 092	3 672	1 996	3 980	1 063	4 053	1 079
>10 001 PLN/sq.m.	4 911	1 025	5 109	1 309	5 715	1 645	6 329	817	6 767	1 410
dwelling space range	13 824	4 128	12 204	4 622	11 516	4 773	12 347	2 631	12 735	3 102
<= 40 sq.m.	1 657	799	1 543	911	1 576	1 048	1 784	533	2 084	635
(40,1; 60] sq.m.	5 898	1 997	4 972	2 193	4 617	2 248	4 995	1 240	5 210	1 309
(60,1; 80] sq.m.	4 554	986	4 101	1 116	3 864	1 129	4 011	647	3 840	838
> 80,1 sq.m.	1 715	346	1 588	402	1 459	348	1 557	211	1 601	320
average price of 1 sq.m. of dwelling	9 935	9 188	10 280	9 476	10 610	9 819	10 717	9 438	10 735	10 184
<=40 sq.m.	12 059	9 829	12 425	10 474	12 458	10 330	12 772	9 933	12 327	10 854
(40,1; 60] sq.m.	9 706	9 022	10 088	9 238	10 460	9 826	10 600	9 315	10 635	10 112
(60,1; 80] sq.m.	9 136	8 804	9 389	8 991	9 717	9 245	9 693	9 034	9 774	9 530
> 80,1 sq.m.	10 790	9 769	11 098	9 856	11 456	10 088	11 378	10 155	11 297	10 857
average offer price deviation	8,1%	x	8,5%	x	8,1%	x	13,6%	x	5,4%	x
<= 40 sq.m.	22,7%	x	18,6%	x	20,6%	x	28,6%	x	13,6%	x
(40,1; 60] sq.m.	7,6%	x	9,2%	x	6,4%	x	13,8%	x	5,2%	x
(60,1; 80] sq.m.	3,8%	x	4,4%	x	5,1%	x	7,3%	x	2,6%	x
> 80,1 sq.m.	10,5%	x	12,6%	x	13,6%	x	12,0%	x	4,0%	x

Source: NBP

Table 17 Average prices of a square metre of housing in the SM in Warsaw

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	10 816	9 461	11 192	9 809	11 656	10 010	11 520	10 274	11 713	9 962
growth (q-o-q)	102,3	102,4	103,5	103,7	104,1	102,1	98,8	102,6	101,7	97,0
growth (y-o-y)	112,5	110,0	108,9	112,0	113,3	111,4	108,9	111,2	108,3	105,3
dwelling price range	2 130	3 941	1 915	3 850	1 859	3 673	2 100	2 222	2 015	936
<=4 000 PLN/sq.m.	0	0	0	0	0	0	0	0	0	0
(4 001; 6 000] PLN/sq.m.	30	90	19	43	12	47	17	24	8	2
(6 001; 8 000] PLN/sq.m.	332	990	247	814	186	690	201	328	169	154
(8 001; 10 000] PLN/sq.m.	651	1 512	549	1 420	471	1 340	585	772	528	377
>10 001 PLN/sq.m.	1 117	1 349	1 100	1 573	1 190	1 596	1 297	1 098	1 310	403
dwelling space range	2 130	3 941	1 915	3 850	1 859	3 673	2 100	2 222	2 015	936
<= 40 sq.m.	280	1 129	231	1 132	209	1 017	268	580	262	328
(40,1; 60] sq.m.	711	1 759	617	1 649	580	1 635	697	1 001	681	378
(60,1; 80] sq.m.	518	678	450	674	456	624	539	407	514	162
> 80,1 sq.m.	621	375	617	395	614	397	596	234	558	68
average price of 1 sq.m. of dwelling	10 816	9 461	11 192	9 809	11 656	10 010	11 520	10 274	11 713	9 962
<=40 sq.m.	11 817	10 107	12 581	10 496	13 095	10 743	12 965	11 045	13 114	10 524
(40,1; 60] sq.m.	10 759	9 137	11 159	9 476	11 677	9 653	11 299	9 957	11 529	9 628
(60,1; 80] sq.m.	10 230	9 096	10 669	9 326	11 089	9 340	11 102	9 701	11 350	9 469
> 80,1 sq.m.	10 917	9 699	11 085	10 056	11 566	10 660	11 505	10 723	11 614	10 283
average offer price deviation	14,3%	x	14,1%	x	16,4%	x	12,1%	x	17,6%	x
<= 40 sq.m.	16,9%	x	19,9%	x	21,9%	x	17,4%	x	24,6%	x
(40,1; 60] sq.m.	17,8%	x	17,8%	x	21,0%	x	13,5%	x	19,7%	x
(60,1; 80] sq.m.	12,5%	x	14,4%	x	18,7%	x	14,4%	x	19,9%	x
> 80,1 sq.m.	12,6%	x	10,2%	x	8,5%	x	7,3%	x	12,9%	x

Source: NBP

Table 18 Average prices of a square metre of housing in the PM in Wrocław

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	7 909	7 661	7 976	7 634	8 483	8 354	8 652	8 041	8 670	8 109
growth (q-o-q)	103,6	103,0	100,8	99,6	106,4	109,4	102,0	96,2	100,2	100,9
growth (y-o-y)	110,7	113,5	110,3	110,6	113,8	118,8	113,3	108,1	109,6	105,8
dwellings price range	6 747	1 563	6 456	1 724	6 491	2 157	6 792	786	6 092	1 487
<=4 000 PLN/sq.m	0	0	0	2	0	0	0	0	0	1
(4 001; 6 000] PLN/sq.m	498	160	609	259	531	138	325	91	375	106
(6 001; 8 000] PLN/sq.m	3 595	838	3 060	874	2 445	777	2 403	350	2 180	708
(8 001; 10 000] PLN/sq.m	1 981	467	2 073	457	2 120	957	2 502	249	2 282	470
>10 001 PLN/sq.m	673	98	714	132	1 395	285	1 562	96	1 255	202
dwellings space range	6 747	1 563	6 456	1 724	6 491	2 157	6 792	786	6 092	1 487
<= 40 sq.m	1213	383	1240	345	1292	559	1531	124	1333	380
(40,1; 60] sq.m	3241	672	3072	856	3133	1046	3185	440	2871	669
(60,1; 80] sq.m	1820	426	1644	446	1581	434	1592	179	1448	357
> 80,1 sq.m	473	82	500	77	485	118	484	43	440	81
average price of 1 sq.m. of dwelling	7 909	7 661	7 976	7 634	8 483	8 354	8 652	8 041	8 670	8 109
<=40 sq.m	8948	8604	8913	8411	9789	9077	9787	9135	9983	8952
(40,1; 60] sq.m	7771	7339	7840	7527	8316	8162	8433	7996	8496	7763
(60,1; 80] sq.m	7389	7262	7489	7253	7771	7816	7929	7448	7774	7748
> 80,1 sq.m	8192	7964	8091	7545	8402	8616	8884	7810	8781	8607
average offer price deviation	3,2%	x	4,5%	x	1,5%	x	7,6%	x	6,9%	x
<= 40 sq.m	4,0%	x	6,0%	x	7,8%	x	7,1%	x	11,5%	x
(40,1; 60] sq.m	5,9%	x	4,2%	x	1,9%	x	5,5%	x	9,4%	x
(60,1; 80] sq.m	1,7%	x	3,3%	x	-0,6%	x	6,5%	x	0,3%	x
> 80,1 sq.m	2,9%	x	7,2%	x	-2,5%	x	13,8%	x	2,0%	x

Source: NBP

Table 19 Average prices of a square metre of housing in the SM in Wrocław

specification	III Q 2019		IV Q 2019		I Q 2020		II Q 2020		III Q 2020	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	7 572	6 858	7 720	7 316	8 158	7 315	8 024	7 496	8 303	7 301
growth (q-o-q)	101,8	105,8	102,0	106,7	105,7	100,0	98,4	102,5	103,5	97,4
growth (y-o-y)	116,7	111,3	117,5	118,2	111,2	116,7	107,8	115,6	109,7	106,5
dwellings price range	1 154	233	1 719	263	1 227	188	1 161	282	2 252	139
<=4 000 PLN/sq.m	0	3	1	5	2	0	2	1	0	3
(4 001; 6 000] PLN/sq.m	144	61	180	53	81	33	74	38	103	28
(6 001; 8 000] PLN/sq.m	666	124	957	123	554	97	552	155	964	63
(8 001; 10 000] PLN/sq.m	266	39	430	65	446	50	413	69	925	33
>10 001 PLN/sq.m	78	6	151	17	144	8	120	19	260	12
dwellings space range	1 154	233	1 719	263	1 227	188	1 161	282	2 252	139
<= 40 sq.m	117	41	214	60	137	34	150	48	293	29
(40,1; 60] sq.m	441	114	660	122	455	78	466	136	964	68
(60,1; 80] sq.m	387	57	548	52	394	50	340	75	656	30
> 80,1 sq.m	209	21	297	29	241	26	205	23	339	12
average price of 1 sq.m. of dwelling	7 572	6 858	7 720	7 316	8 158	7 315	8 024	7 496	8 303	7 301
<=40 sq.m	8 840	8 021	9 099	8 172	9 486	8 196	9 313	8 712	9 534	8 160
(40,1; 60] sq.m	7 666	6 736	7 767	7 128	8 366	7 330	8 126	7 489	8 395	7 240
(60,1; 80] sq.m	7 165	6 393	7 244	6 905	7 826	6 925	7 665	7 040	7 851	6 959
> 80,1 sq.m	7 415	6 510	7 498	7 076	7 555	6 872	7 445	6 488	7 854	6 422
average offer price deviation	10,4%	x	5,5%	x	11,5%	x	7,0%	x	13,7%	x
<= 40 sq.m	10,2%	x	11,3%	x	15,7%	x	6,9%	x	16,8%	x
(40,1; 60] sq.m	13,8%	x	9,0%	x	14,1%	x	8,5%	x	16,0%	x
(60,1; 80] sq.m	12,1%	x	4,9%	x	13,0%	x	8,9%	x	12,8%	x
> 80,1 sq.m	13,9%	x	6,0%	x	9,9%	x	14,7%	x	22,3%	x

Source: NBP

7. Extended analysis of condition of development firms, non-residential construction companies and related entities

7.1 Analysis of financial standing of development firms³⁴

Analysis of NBP data and data available from other sources for 2020 Q3 in relation to the results recorded in the previous quarter indicates **an increase in activity on the housing market among home buyers, despite the uncertain direction of the pandemic situation development and the unstable financial standing of some households. The results of Catalyst-listed developers for Q3 2020 confirmed an improvement in sales performance.** These entities, holding a significant share of housing production in the country in 2020 Q3, sold 4,452 dwellings compared to 2,722 units in the previous quarter and 4,490 units in the corresponding period of 2019.

The recovery of activity related mainly to the markets of seven largest voivodeship cities. According to survey respondents, the higher level of contracting was linked to improved household sentiment, lifting of some of the restrictions in the economic life and was a result of shifting the decision to buy a dwelling from 2020 Q2 to 2020 Q3. The easing of lending policies for buyers and very low interest rates were conducive to purchases both for own use and for investment purposes. In the November 2020 survey,³⁵ **developers indicated a similar structure of purchasers and sources of financing for housing purchases in 2020 in relation to 2019.**

Developers, quite efficiently managing the supply, after observing an increase in demand, increased the offer of dwellings, which was visible mainly in seven larger markets. In the remaining ten voivodeship cities, the demand and supply remained at levels similar to those of the previous quarter. The need to adjust the supply to the growing demand, with a low number of investment projects launched in the previous quarter, provided an incentive to start more projects. According to the data of Statistics Poland, the construction of 67,382 units was commenced in 2020 Q3 (over 42% increase compared to the previous quarter and approximately 7% increase compared to the corresponding period of 2019). **According to the survey data, the majority of developers (79% of respondents) completed their investments in 2020 as previously planned, while the remaining 21% of respondents abandoned one or more investment projects for various reasons.**

Despite the fact that in all markets of sixteen voivodeship cities, sales in 2020 Q3 still remained lower than the averaged quarterly result in 2019, **no adjustment of average offer and transaction prices in the primary market was recorded save for isolated cases, which indicates good financial standing of most developers.** In 2020 Q3, in relation to the previous quarter, a slight increase in the average transaction price in the majority of markets resulted, among others, from an increase in the share of sale of more expensive flats in better locations, largely financed with own funds, the purchase of which was an attractive form of cash investment. Observations of some developers provided in interviews in November this year confirm the sale of premises

³⁴ The calculations and conclusions in this issue of the Information are based on data resulting from F01 reports submitted to Statistics Poland, with the breakdown into two groups of entities: small entities – employing from 9 to 49 employees (data available until the first half of 2020 in semi-annual periods) and larger-sized entities employing more than 49 employees (data available until 2020 Q3 in quarterly periods), engaged in the implementation of building construction projects (PKD 41.10). The analysis of accounting entries in the financial statements of real estate developers listed on the Warsaw Stock Exchange was based on the data covering the period up to 2020 Q2. The analysis of accounting entries was supplemented with information concerning over a dozen residential real estate developers from the Catalyst market (a report on “Standing of the largest residential real estate developers of the Catalyst market after 2020 Q3,” Nawigator Brokerage House, Warsaw, October 2020).

³⁵ The survey conducted by NBP in November 2020 among 212 developers in the country entitled “Survey on the level of supply with elements of demand in the primary housing market in the multi-family construction sector” and among 205 construction companies in the country engaged in non-residential construction: “Survey of the economic position and production capacity of construction companies providing, among others, housing construction services.”

in both good and average locations at the same or higher prices than before the pandemic. According to developers, the demand for housing strengthened in 2020 Q4 after a short-term renewed slowdown in sales in October 2020 as a result of re-tightening of movement restrictions.

According to the data of Statistics Poland for 2020 Q3, a higher number of dwellings were completed and put into operation (an increase of more than 15%) in relation to 2019 Q3, as a result of the completion of some of the dwellings started in 2018. Similar housing construction effects in the period from January to September 2020 in sixteen voivodeship cities in relation to the corresponding period of 2019 (49,082 and 49,458 dwellings completed, respectively) indicate that the implementation of construction work during the pandemic period went on without major disruptions.

After the declines recorded in 2020 Q1 and Q2, the activity of developers in terms of total housing permits obtained in the country was at a higher level in 2020 Q3. In the period under review, 69,457 permits were obtained despite the restrictions on the work of municipal offices, an increase of more than 10% compared to the previous quarter, but the number of permits issued in 2020 Q2 and Q3 remained at a lower level than in the corresponding periods of 2019. According to developers, administrative delays in obtaining permits, approvals and other documents, which had already been a significant impediment before the pandemic, became an even greater challenge in 2020. In the survey, the greatest number of developers indicated difficulties in obtaining administrative decisions as the factor that hindered the implementation of residential projects to the greatest extent in 2020.

According to financial data reported in F01 reports by larger developers (employing more than 49 people), the high value of projects in progress in 2020 Q3 (more than 41% in the asset structure, as in the previous three quarters), the high share of down payments from home buyers (21% in the liability structure) combined with a significant decline in the value of sales revenue (down by 27% q/q and by 32% y/y) and net financial result (down by 29% q/q and by 45% y/y) and a high reading of housing units commissioned indicates, among others, a significant portion of projects with completed construction or at a high stage of development. The final commissioning of dwellings to buyers accumulated or was delayed for formal reasons. Formal impediments in 2020 Q2 and Q3 resulted mainly from movement restrictions and remote work in offices.

The lack of notarial deeds transferring ownership to purchasers prevented developers from reporting revenues and sales results proportionally to the obtained decisions on the completion of construction, which translated into lower reported total revenues (down by 25% q/q and by 28% y/y) and total costs (down by 16% q/q and by 25% y/y) in 2020 Q3 compared to previous quarters. The higher increase in total costs than in total revenues confirms the increasing construction costs of completing non-residential projects according to the entries in the financial statements of small entities in the first half of 2020, as well as listed developers in the 2020 Q2 and larger companies in the 2020 Q3 in relation to the corresponding periods of 2019.

The share of ready-to-occupy dwellings in the asset structure (over 6% share in 2020 Q3) is slightly higher than the shares recorded in individual quarters of 2019 and is similar to the shares reported in the asset structure in 2008 Q4, during the financial crisis (around 7% share). According to survey data, the number of units in buildings ready for handover at the end of November 2020 accounted for 12% of the share of developers' sales offer and was only slightly higher than the status as at the end of December 2019 (9% share in the offer).

In three quarters of 2020, compared to individual quarters of 2019, the averaged land bank value reported in the F01 reports increased slightly; however, its level since 2017 has remained at a much lower level than in 2007-2013. **The high demand for land for multi-family housing and the continuing difficulties in acquiring land have further increased the price of plots in both very good and average locations.**

Every fourth developer surveyed in November 2020 indicated oversupply of housing relative to the demand and the majority of respondents (over 60%) reported a balance between demand and supply. Considering the increasing share of completed and unsold units and the high reading of dwellings with construction started in the face of the uncertain level of housing demand, some developers with a significant number of dwellings started and a low contracting rate are exposed to substantial risks. A decline in revenues with rising costs and liabilities may result in a loss of liquidity.

The vast majority (75%) of developers surveyed in November 2020 assessed their current economic situation as fairly good, while the remainder (14%) assessed it as very good, 8% as poor and a minor percentage (2%) – as bad. The percentage of profitable entities among larger developers in 2020 Q3 reached 77% and was higher than in the previous quarter (71% of entities) and in the corresponding quarter of 2019 (71% of entities), however, significantly more developers (47%) than a year ago (29%) reported profit at a relatively low level (up to PLN 1 million net). Formal problems, rising costs and an increase in financing of activities by external funds aggravated profitability ratios in this group of companies in 2020 Q3 (3.6% – ROS, 1.2% – ROE and 0.5% – ROA) compared to profitability results in the corresponding period of 2019 (4.5% – ROS, 3.0% – ROE and 1.3% – ROA). A decline in profitability was also recorded in the group of small developers in the first half of 2020 and among developers listed on the WSE in 2020 Q2; however, profitability of sales in these groups of entities remained at a higher level than in the group of larger developers.

In the group of developers listed on the Warsaw Stock Exchange, a lower value of generated net profit in cash terms was recorded in 2020 Q2 in relation to the previous quarter and the corresponding quarter in 2019, due to a decrease in the positive balance of the three streams of money flow (operating, investment and financial).

In the analysed groups of larger and small developers, a slight deterioration was recorded in the ratios of total debt, debt to equity and securing of financial liabilities with equity, as well as coverage of assets with equity, however, they remained at a favourable level, ensuring the security of funds entrusted by creditors. An improvement in the aforementioned ratios was observed in 2020 Q2 in the group of developers listed on the WSE, along with an increase in equity. **In all the analysed groups of developers, the share of cash in the asset structure increased,** which ensured that liquidity was maintained at a safe level (the share increased to over 14% in 2020 Q3 in the group of larger entities, to over 13% in the group of small developers in the first half of 2020 and to around 11% in 2020 Q2 in the group of WSE-listed developers).

Among the three analysed groups of developers, in the group of larger entities, the share of equity is the lowest and a decrease in its share in the structure of liabilities was recorded during the year which, if the downward trend continues, may pose a threat to the security of funds entrusted by other entities.

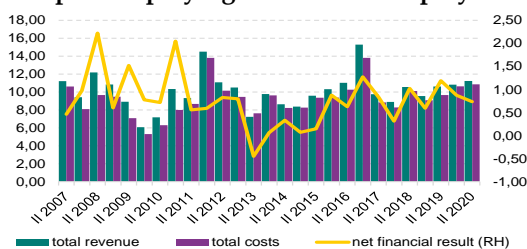
At the end of 2020 Q3, in the group of larger entities, the share of equity stood at around 38% compared to a share of over 42% in 2019 Q3.

Among the external sources of financing of larger developers, an increase was recorded mainly in the share of debt securities (to over 10% at the end of 2020 Q3 compared to 5% share at the end of 2019 Q3). **Loan liabilities** (over 9% of the share), **down payments from purchasers** (around 21% of the share) **and liabilities to project contractors** (around 22% of the share) **remained at a similar level on an annual basis. The value of**

bonds of development companies listed on the Catalyst market also increased in 2020 Q3 by 9% compared to the previous quarter and by 16% in relation to 2019 Q3. A systematic adjustment of the average coupon rate on bonds of development companies listed on this market is recorded (4.11% at the end of 2020 Q3).

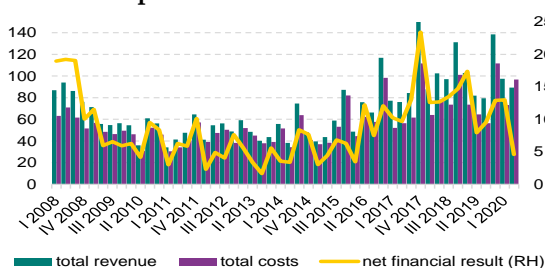
In 2020 Q3, in the group of larger developers, the averaged value of operating costs decreased by 18% with respect to the previous quarter and by 26% with respect to 2019 Q3, despite the increase in the reading of the number of dwellings whose construction was commenced. The analysis of the structure of operating costs showed a 5% decline only in the share of costs to subcontractors and an increase in the share of own costs, including by more than 40% in salaries and social security contributions and by 7% in costs due to the consumption of materials and energy, indicating an increase in the implementation of projects in-house.

Figure 73 Economic indicators of real estate developers employing from 9 to 49 employees



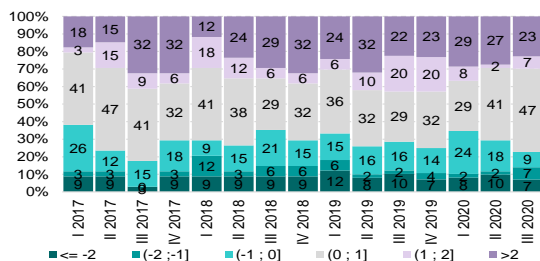
Source: NBP based on Statistics Poland (F01).

Figure 75 Economic indicators of WSE-listed real estate developers



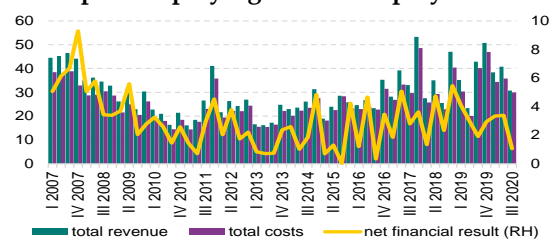
Source: NBP based on financial statements.

Figure 77 Structure of real estate developers employing over 49 employees, depending on the value of net financial result (in %)



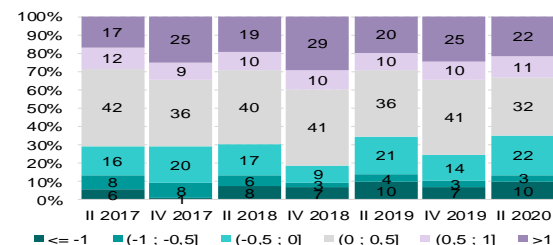
Source: NBP based on Statistics Poland (F01).

Figure 74 Economic indicators of real estate developers employing over 49 employees



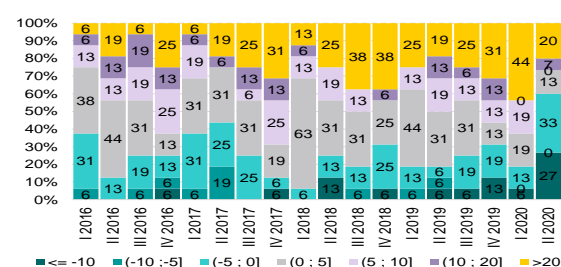
Source: NBP based on Statistics Poland (F01).

Figure 76 Structure of real estate developers employing from 9 to 49 employees, depending on the value of net financial result (in %)



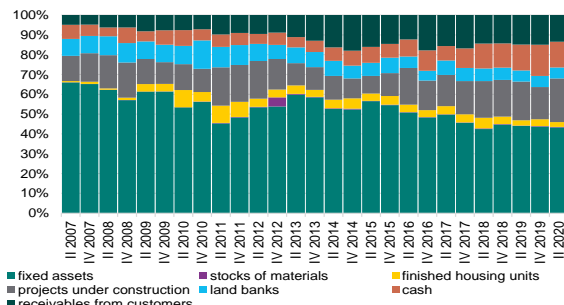
Source: NBP based on Statistics Poland (F01).

Figure 78 Structure of WSE-listed real estate developers, depending on the value of net financial result (in %)



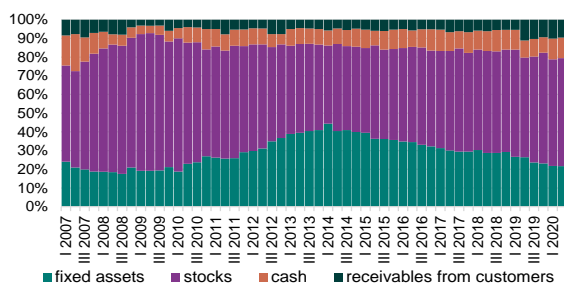
Source: NBP based on financial statements.

Figure 79 Structure of assets of real estate developers employing from 9 to 49 employees



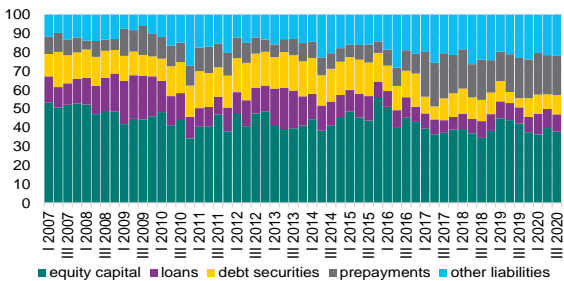
Source: NBP based on Statistics Poland (F01).

Figure 81 Structure of assets of WSE-listed real estate developers



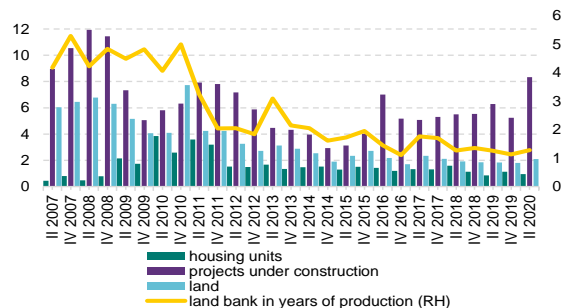
Source: NBP based on financial statements

Figure 83 Structure of liabilities of real estate developers employing over 49 employees



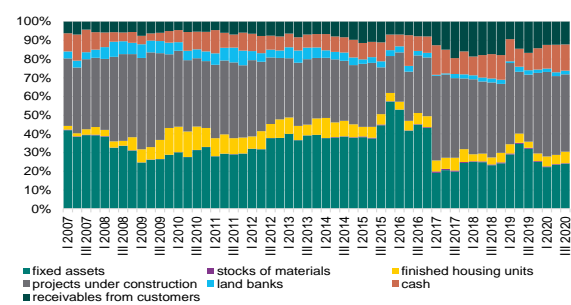
Source: NBP based on Statistics Poland (F01).

Figure 85 Situation of real estate developers employing from 9 to 49 employees



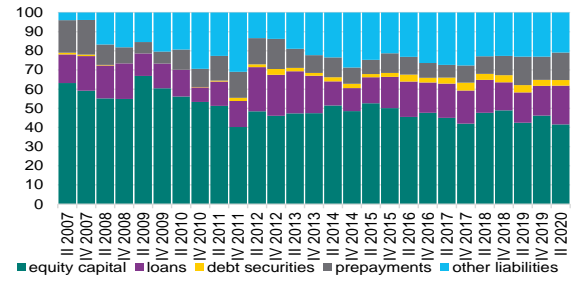
Source: NBP based on Statistics Poland (F01).

Figure 80 Structure of assets of real estate developers employing over 49 employees



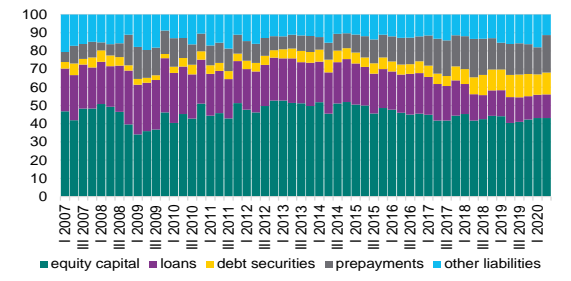
Source: NBP based on Statistics Poland (F01).

Figure 82 Structure of liabilities of real estate developers employing from 9 to 49 employees



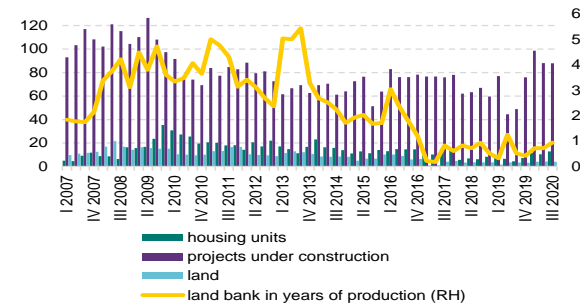
Source: NBP based on Statistics Poland (F01).

Figure 84 Structure of liabilities of WSE-listed real estate developers



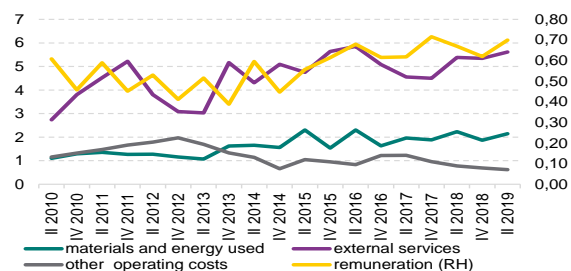
Source: NBP based on financial statements.

Figure 86 Situation of real estate developers employing over 49 employees



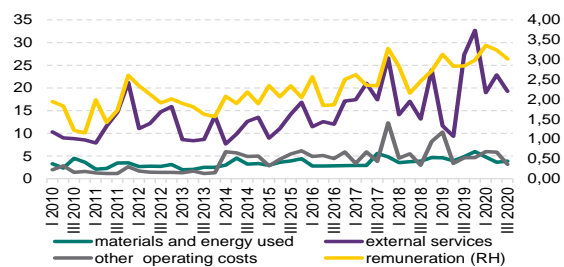
Source: NBP based on Statistics Poland (F01).

Figure 87 Operating expenses of real estate developers employing from 9 to 49 employees



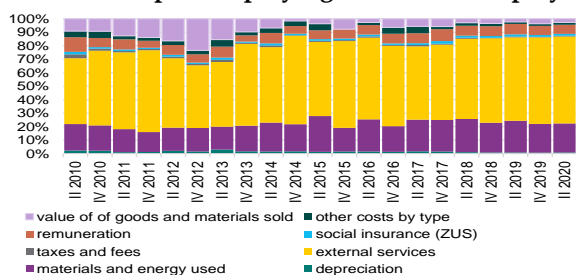
Source: NBP based on Statistics Poland (F01).

Figure 88 Operating expenses of real estate developers employing over 49 employees



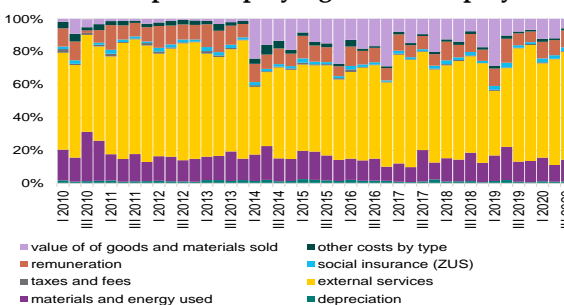
Source: NBP based on Statistics Poland (F01).

Figure 89 Structure of operating expenses of real estate developers employing from 9 to 49 employees



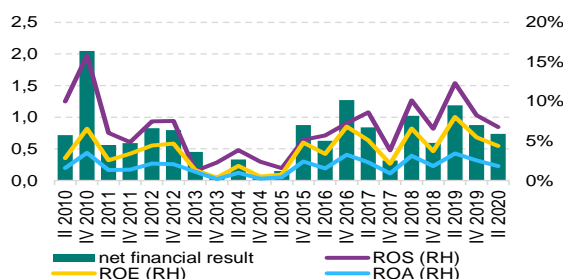
Source: NBP based on Statistics Poland (F01) and financial statements.

Figure 90 Structure of operating expenses of real estate developers employing over 49 employees



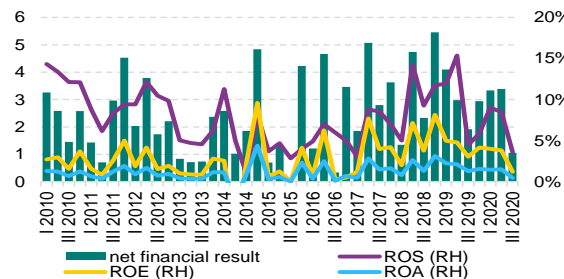
Source: NBP based on Statistics Poland (F01) and financial statements.

Figure 91 Profitability of activities of real estate developers employing from 9 to 49 employees



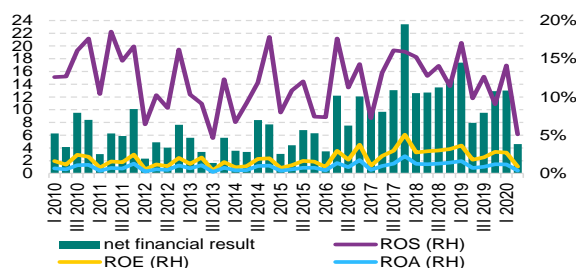
Source: NBP based on Statistics Poland (F01).

Figure 92 Profitability of activities of real estate developers employing more than 49 employees



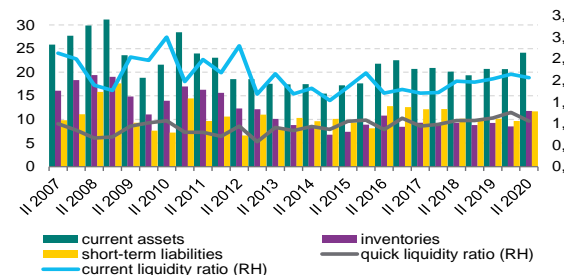
Source: NBP based on Statistics Poland (F01).

Figure 93 Profitability of activities of WSE-listed real estate developers



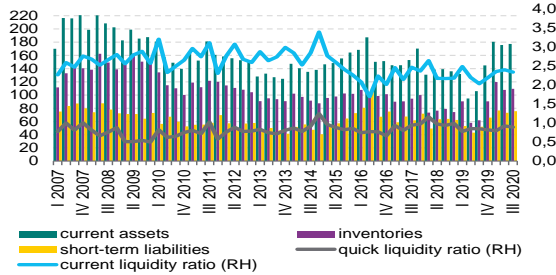
Source: NBP based on financial statements.

Figure 94 Liquidity ratios of real estate developers employing from 9 to 49 employees



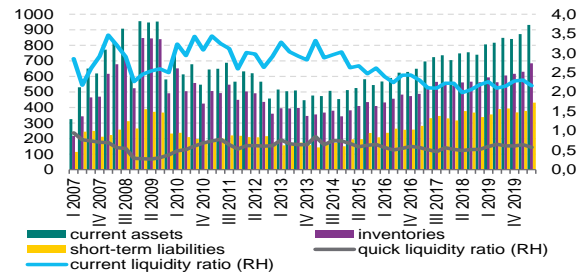
Source: NBP based on Statistics Poland (F01).

Figure 95 Liquidity ratios of real estate developers employing over 49 employees



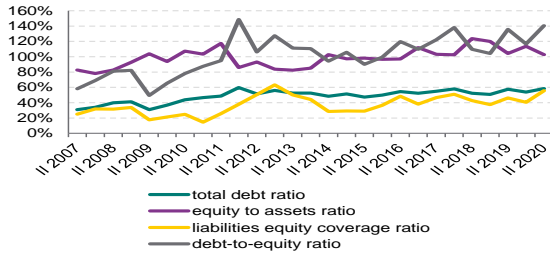
Source: NBP based on Statistics Poland (F01).

Figure 96 Liquidity ratios of WSE-listed real estate developers



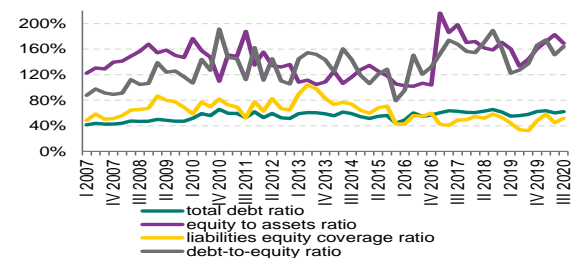
Source: NBP based on financial statements.

Figure 97 Debt ratios and indicators of securing liabilities of developers employing from 9 to 49 employees



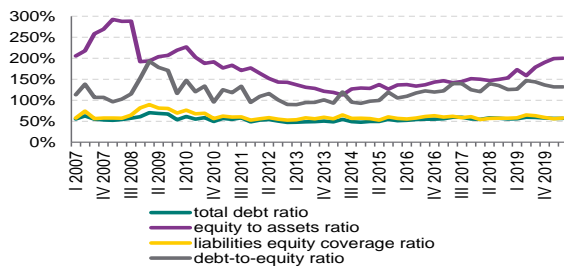
Source: NBP based on Statistics Poland (F01).

Figure 98 Debt ratios and indicators of securing liabilities of developers employing over 49 employees



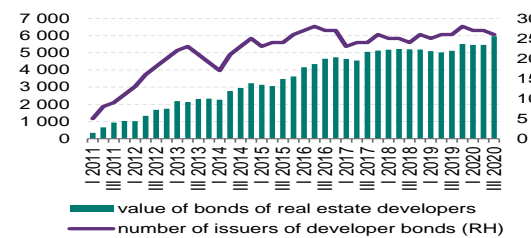
Source: NBP based on Statistics Poland (F01).

Figure 99 Debt ratios and indicators of securing liabilities of WSE-listed real estate developers



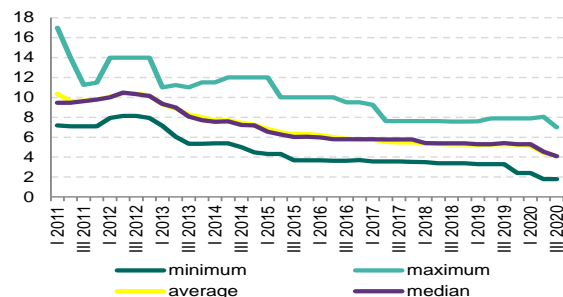
Source: NBP based on financial statements.

Figure 100 Value of bonds of real estate developers and the number of issuers of developer bonds in the Catalyst market



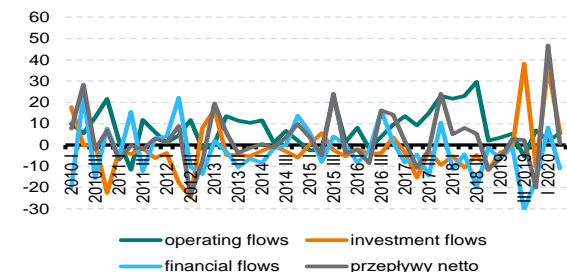
Source: NBP based on Catalyst data.

Figure 101 Interest on bond coupons of real estate developers listed on the Catalyst market



Source: NBP based on Catalyst data.

Figure 102 Flows of WSE-listed real estate developers



Source: NBP based on financial statements.

7.2 Analysis of financial standing of non-residential developers³⁶

Entries reported in F01 reports submitted to Statistics Poland for the period of three quarters of 2020 by larger entities (employing more than 49 employees) carrying out construction works related to the erection of residential and non-residential buildings indicate a decline in the works performed in the non-residential construction industry in relation to those assumed at the beginning of 2020. In the analysed group of entities, the averaged value of both revenues and total costs, and net financial result in 2020 Q3 decreased by 19% in relation to the corresponding quarter in 2019. Confirmation of the decline in works in the non-residential construction is also the decrease in the averaged value of work in progress (by 17%) in 2020 Q2 and Q3 in relation to the corresponding periods in 2019, average employment (by 10%) and costs incurred from operating activities (by 20%), including all components of operating costs. According to 42% of non-residential construction companies surveyed in November 2020, the pandemic had a significant impact on the decline in service sales volumes, according to 36% of respondents the impact was negligible, and 22% of survey respondents reported no impact.³⁷ **The analysis of financial data reported by developers and information obtained in the additional survey conducted by NBP among developers and construction companies dealing mainly with residential construction indicates a moderate impact of the pandemic on the implementation of works in residential construction.** Information from the market concerning the recovery of the demand for dwellings and the data of Statistics Poland showing high readings of the number of dwellings commissioned, the number of dwelling construction permits issued and the number of dwellings the construction of which was commenced confirm the high demand for services in the residential construction sector. However, restrictions limiting the movement of people as well as the introduction of remote working and the growth of e-commerce have encouraged a considerable number of tenants to look for savings and reduce their leased office or retail space. **The decline in the interest in leasing large commercial space influenced the relatively fast verification of investors' plans and the postponement or cancellation of the launching of new office or retail projects, which reduced the portfolio of orders and turnover of some construction companies.** In the survey, the majority of construction companies that reported a decline in revenues indicated changes in investors' plans (suspension or cancellation of investment projects) as the main reason for the downturn. A much smaller percentage of respondents indicated problems with service subcontractors or their own difficulties (outflow of employees, deterioration of liquidity, rising costs) as the reason for the decline in sales in 2020. The capacity utilisation rate in November 2020 was estimated at 86%.

The vast majority of construction companies surveyed assessed their economic situation in November 2020 as fairly good (65% of respondents) and 5% as very good. Poor condition was reported by 25% of entities and bad condition by 4%. According to the data reported in the financial statements, profitability in the group of larger volume construction companies in the third quarter of 2020 and among small entities in the first half of 2020 was at a favourable level despite a slight deterioration in both groups in relation to both previous periods and corresponding periods in 2019. Profitability ratios of larger construction companies in 2020 Q3 (6.2% – ROS, 3.7% – ROE, 1.6% – ROA) were at a lower level than for smaller entities in 2020 H1 (8.2% – ROS, 5.8% – ROE, 3.0% – ROA). According to 61% of the survey respondents, the profitability of sales from January to November

³⁶ The calculations and conclusions in this issue of the Information are based on data resulting from F01 reports submitted to Statistics Poland, with the breakdown into two groups of entities: small entities – employing from 9 to 49 employees (data available until the first half of 2020 in semi-annual periods) and larger-sized entities employing more than 49 employees (data available until 2020 Q3 in quarterly periods) performing works related to the construction of residential and non-residential buildings (PKD 41.20).

³⁷ The questionnaire survey conducted by NBP in November 2020 among 205 construction companies in the country dealing with non-residential construction: "Survey of the economic position and production capacity of construction companies providing, among others, housing construction services."

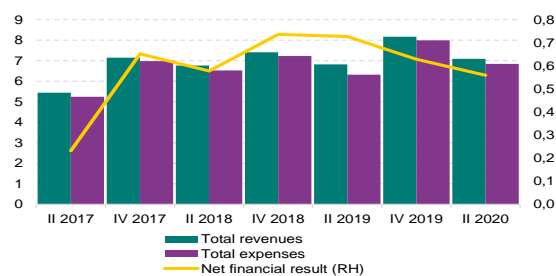
2020 was satisfactory, according to 30% it was unfavourable but remained positive, and 9% of the entities recorded losses.

In the group of small construction companies in the first half of 2020, the deterioration in the profitability of operations was due to a higher growth rate of costs compared to revenues and an increase in the financing of operations by external funds, including bank lending and debt securities. In the structure of liabilities of this group of entities, bank loans reached 12%, debt securities – 6%, and liabilities to subcontractors decreased to a 22% share.

In the group of larger construction companies, liabilities to service contractors play a greater role in financing their activities, with their share in the structure of liabilities peaking for four quarters (40% share) – considering the period since the beginning of 2017 –and becoming twice as high as in the case of small entities. In the group of larger construction companies, the high share of receivables from customers and the balance of liabilities owed to subcontractors of works, with a simultaneous reduction in production in progress, indicates continuing payment problems. Equity in this group of entities remains high (49% in the structure of liabilities in 2020 Q3) and is significantly lower than in the group of small companies (59% in the structure of liabilities in 2020 H1).

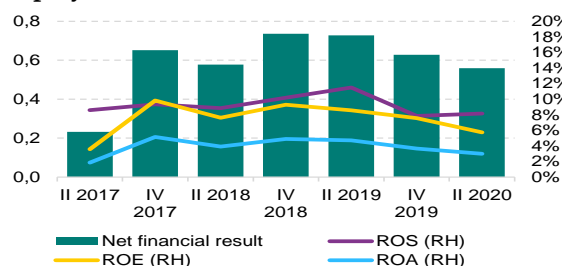
The period for collecting receivables and settlement of liabilities has increased; however, the high level of cash maintains financial liquidity ratios at levels confirming the ability to pay the required current liabilities on time. Concerns and uncertainty regarding the financial situation and the future portfolio of acquired orders have encouraged companies to accumulate high cash balances, whose share in the structure of assets in the group of large entities reached 21% in 2020 Q3 compared to 14% in 2019 Q3 and 15% in the group of small companies in 2020 H1 compared to 12% in 2019 H1.

Figure 103 Economic indicators of construction companies employing from 9 to 49 employees



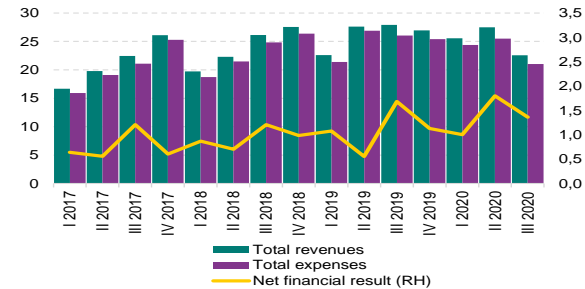
Source: NBP based on Statistics Poland.

Figure 105 Profitability of operations of construction companies employing from 9 to 49 employees



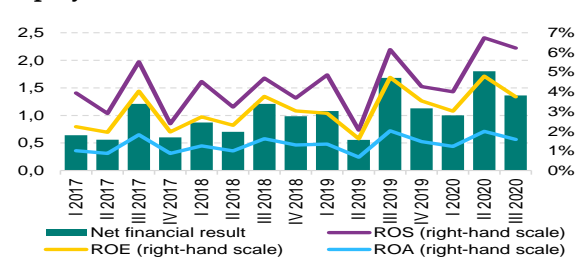
Source: NBP based on Statistics Poland.

Figure 104 Economic indicators of construction companies employing more than 49 employees



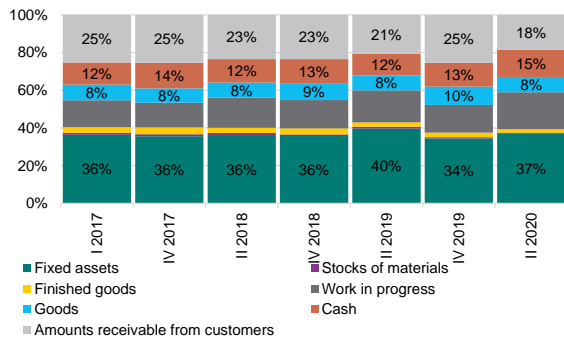
Source: NBP based on Statistics Poland.

Figure 106 Profitability of operations of construction companies employing more than 49 employees



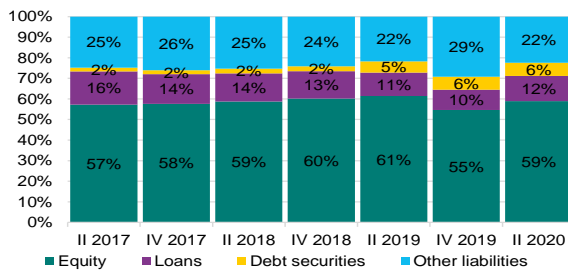
Source: NBP based on Statistics Poland.

Figure 107 Structure of assets of construction companies employing from 9 to 49 employees



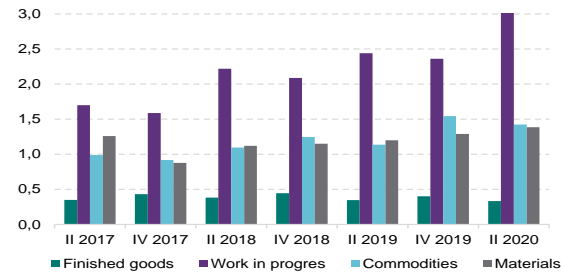
Source: NBP based on Statistics Poland.

Figure 109 Structure of liabilities of construction companies employing from 9 to 49 employees



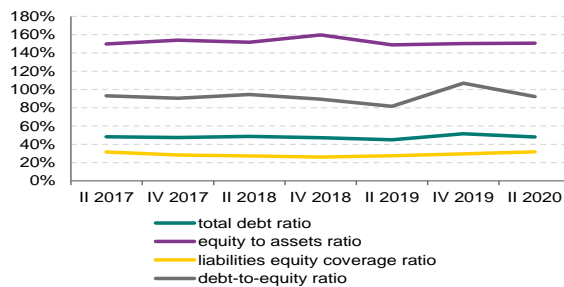
Source: NBP based on Statistics Poland.

Figure 111 Situation of real estate developers employing from 9 to 49 employees



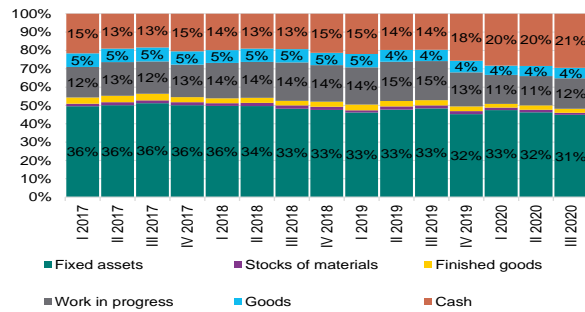
Source: NBP based on Statistics Poland.

Figure 113 Debt ratios and indicators of securing liabilities of construction companies employing from 9 to 49 employees



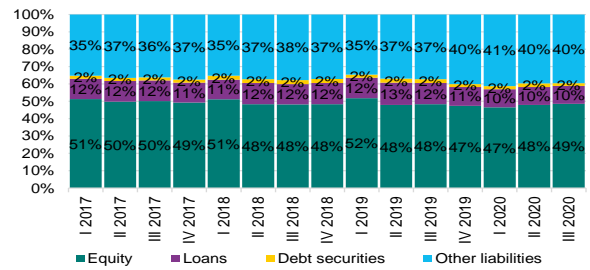
Source: NBP based on Statistics Poland.

Figure 108 Structure of assets of construction companies employing more than 49 employees



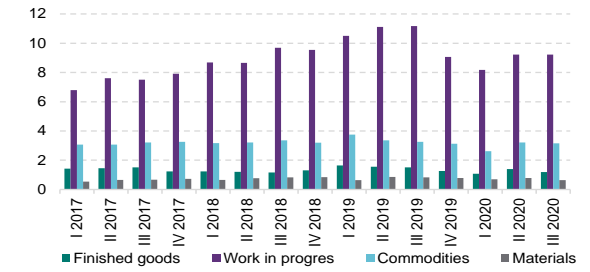
Source: NBP based on Statistics Poland.

Figure 110 Structure of liabilities of construction companies employing more than 49 employees



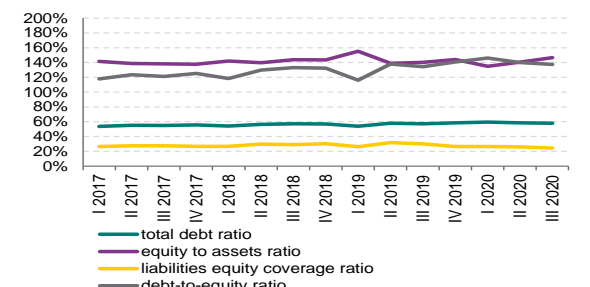
Source: NBP based on Statistics Poland.

Figure 112 Situation of real estate developers employing over 49 employees

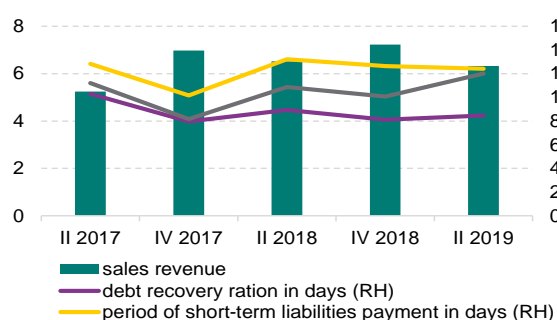


Source: NBP based on Statistics Poland.

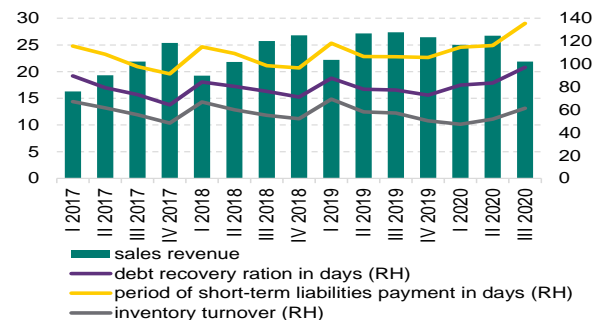
Figure 114 Debt ratios and indicators of securing liabilities of construction companies employing over 49 employees



Source: NBP based on Statistics Poland.

Figure 115 Turnover of inventory, receivables and liabilities of construction companies employing from 9 to 49 employees

Source: NBP based on Statistics Poland.

Figure 116 Turnover of inventory, receivables and liabilities of construction companies employing more than 49 employees

Source: NBP based on Statistics Poland.

7.3 Analysis of financial standing of companies dealing with sale of construction materials³⁸

Tensions on real estate markets require a broader view not only of the situation of real estate developers and construction companies, but also of the financial condition of other related parties in the process of implementation of residential and commercial projects. The rising costs of investment development observed for several years, including an increase in prices of construction materials, are becoming a factor shaping the profitability of projects and the liquidity of entities.

According to data of the Polskie Składy Budowlane Group, prices of materials in the period from January to October 2020, compared to the corresponding period of 2019, increased on average by 1.4% in sixteen commodity groups. The highest price increase related to the groups: cement, lime (by 6.9%), joinery (by 3.2%), installations and heating (by 3.2%), garden, hobbies (by 3.1%), equipment, household appliances (by 2.9%), tools (by 2.8%), construction chemicals (by 2.5%), paints, varnishes (by 2.3%), finishes (up 2.3%), tiles, bathrooms, kitchens (by 2.2%), lighting, electrical equipment (by 2.1%), drywall (by 2.1%), decorations (by 2.1%), automotive products (by 0.9%), roofs, gutters (by 0.8%) and home surroundings (by 0.4%). Prices fell in four groups: walls and chimneys (by 0.6%), waterproofing (by 0.9%), thermal insulation (by 3.8%) and OSB panels (by 6.6%). A year ago, i.e. in the period from January to October 2019, compared to the same period in 2018, the increase in prices of materials was higher and reached 4%.

An analysis of the entries in the F01 reports sent to Statistics Poland indicates the continuation of the good overall situation of building material wholesalers and a slight improvement in the profitability of their performance. In larger wholesale companies (employing more than 49 employees) in 2020 Q3, compared to 2019 Q3, a slight increase was observed in the level of averaged total revenue (by 4%) with a smaller increase in total costs (by 2%), which allowed them to generate a significantly higher net financial result. The high level of turnover of building material wholesalers confirms the continued high level of demand for building materials and the execution of works in the construction industry. In the group of small wholesalers, a similar level of total revenues and costs was recorded in the first half of 2020 compared to the corresponding period of 2019, along with an improvement in the net financial result.

³⁸ The calculations and conclusions in this issue of the Information are based on the data resulting from F01 reports submitted to Statistics Poland, with the breakdown into two groups of entities: small entities – employing from 9 to 49 employees (data available until the first half of 2020 in semi-annual periods) and larger-sized entities employing more than 49 employees (data available until 2020 Q3 in quarterly periods) acting as agents involved in the sale of wood and building materials (PKD 4613) and deal with the wholesale of building materials and sanitary equipment (PKD 4673). The accounting records were supplemented with information on the change in prices of building materials (“Change in prices of materials for construction, home and garden – a PSB analysis” in October 2019 and in October 2020, Grupa PSB Handel S.A., November 2019 and November 2020).

The share of profitable entities increased in the group of larger wholesale companies (93% of entities with a positive net financial result in 2020 Q3 versus 90% of entities in 2019 Q3) and in the group of small entities (84% of companies in 2020 H1 versus 81% in 2019 H1). In the periods analysed, both groups of entities showed an improvement in profitability ratios, including a similar level of return on sales. In the group of small entities, return on equity and return on assets are twice as high as in the group of larger entities.

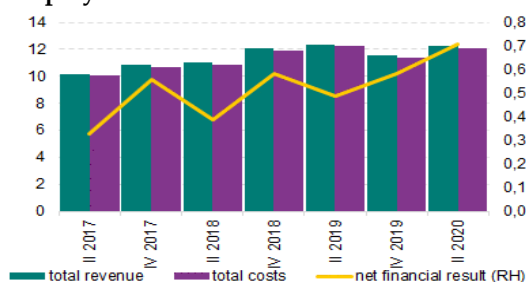
The main source of financing in construction material trading enterprises is equity, whose share in the structure of liabilities has been relatively stable for three years (about 52% in the group of larger entities and 54% in the group of small companies as at the end of 2020 H1).

In both groups, in the structure of liabilities, apart from equity, liabilities to contractors, including mainly to producers of construction materials (about 36% share), represent a high and similar share. In large wholesale companies, a decrease in the share of bank loan liabilities was recorded over three quarters of 2020 (13%, 13% and 12% in the structure of liabilities in 2020 Q1, Q2 and Q3, respectively, compared to 15%, 15% and 14% in 2019 Q1, Q2 and Q3, respectively). In smaller entities, the share of lending liabilities was stable and stood at 12%. Debt securities constitute an insignificant source of financing.

The ratios of financial liquidity, indebtedness and securing of assets with equity in both analysed groups remain at a stable level, enabling companies to settle their liabilities on time and ensuring creditworthiness. Since mid-2019, the reduction in the share of receivables from customers in both groups of entities has enabled the accumulation of cash, which ensured an improvement in liquidity visible mainly in the group of small wholesale companies (14% share of cash in the structure of assets in 2020 H1 against 8% share in 2019 H1).

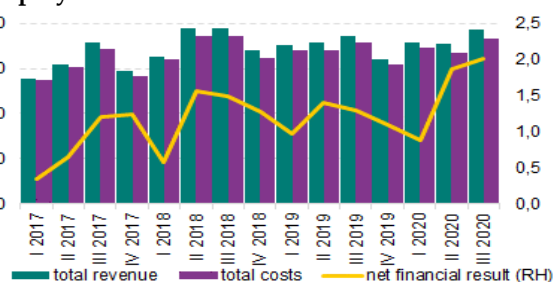
In the third quarter of 2020, in relation to the corresponding quarter of 2019, among large wholesalers, operating costs increased (by 3%) due to an increase in costs due to the sale of goods (by 5%), which confirms the high portfolio of orders under execution in the construction industry. At the same time, other operating costs decreased slightly in this group of entities (due to services provided by other entities and own costs due to wages and salaries and consumption of materials and electricity).

Figure 117 Economic indicators of companies selling construction materials employing from 9 to 49 employees



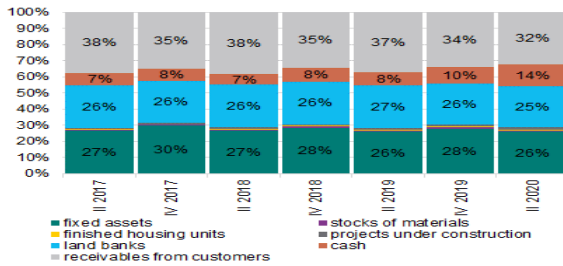
Source: NBP based on Statistics Poland (F01).

Figure 118 Economic indicators of companies selling construction materials employing more than 49 employees



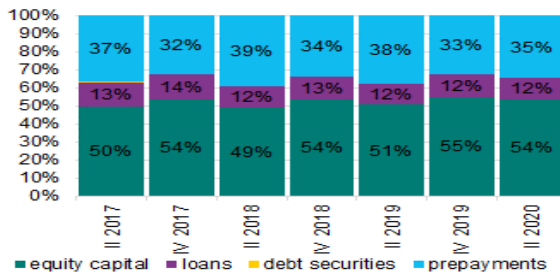
Source: NBP based on Statistics Poland (F01).

Figure 119 Structure of assets of construction material suppliers employing from 9 to 49 employees



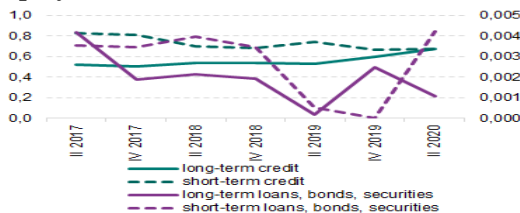
Source: NBP based on Statistics Poland (F01).

Figure 121 Structure of liabilities of construction material suppliers employing from 9 to 49 employees



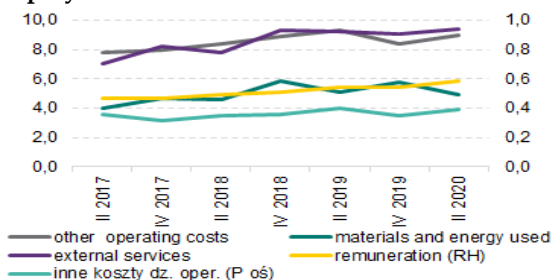
Source: NBP based on Statistics Poland (F01).

Figure 123 Sources of financing of construction material suppliers employing from 9 to 49 employees



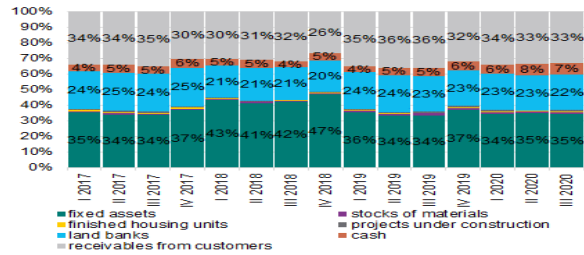
Source: NBP based on Statistics Poland (F01).

Figure 125 Operating expenses of construction material suppliers employing from 9 to 49 employees



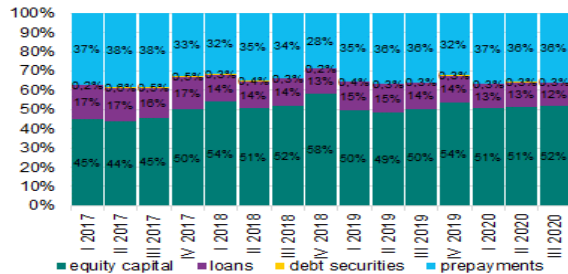
Source: NBP based on Statistics Poland (F01).

Figure 120 Structure of assets of construction material suppliers employing more than 49 employees



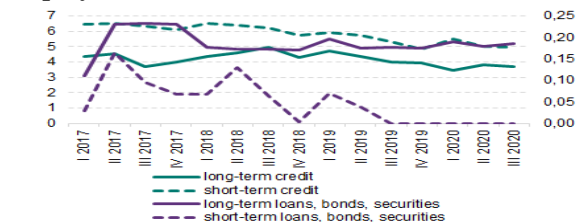
Source: NBP based on Statistics Poland (F01).

Figure 122 Structure of liabilities of construction material suppliers employing more than 49 employees



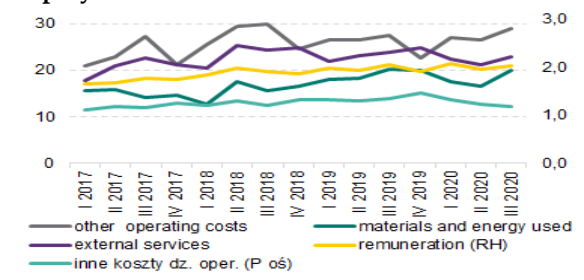
Source: NBP based on Statistics Poland (F01).

Figure 124 Sources of financing of construction material suppliers employing more than 49 employees



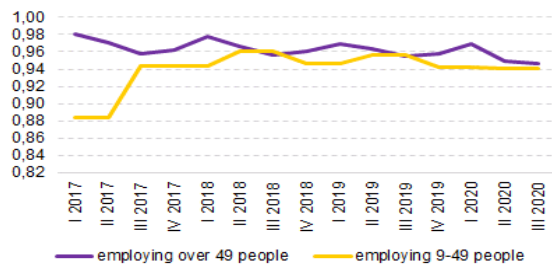
Source: NBP based on Statistics Poland (F01).

Figure 126 Operating expenses of construction material suppliers employing more than 49 employees



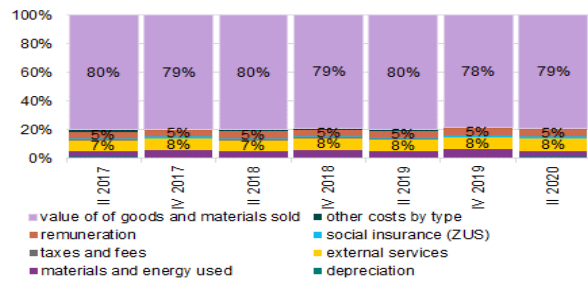
Source: NBP based on Statistics Poland (F01).

Figure 127 Indicators of level of operating expenses according to groups of construction material suppliers



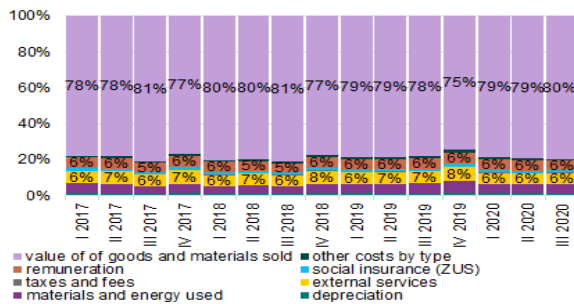
Source: NBP based on Statistics Poland (F01).

Figure 128 Structure of operating expenses of construction material suppliers employing from 9 to 49 employees



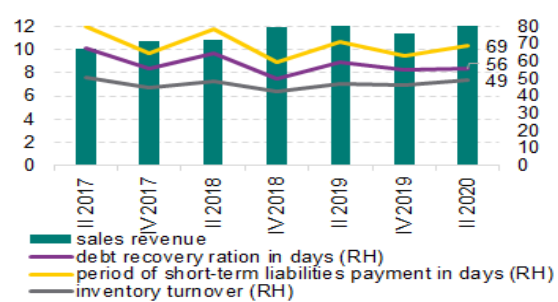
Source: NBP based on Statistics Poland (F01).

Figure 129 Structure of operating expenses of construction material suppliers employing more than 49 employees



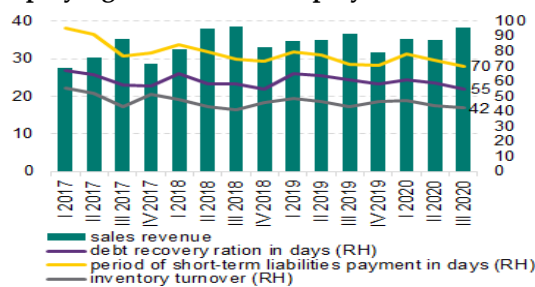
Source: NBP based on Statistics Poland (F01).

Figure 130 Turnover of inventory, receivables and liabilities of construction material suppliers employing from 9 to 49 employees



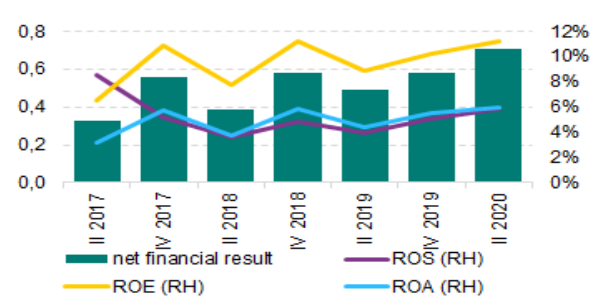
Source: NBP based on Statistics Poland (F01).

Figure 131 Turnover of inventory, receivables and liabilities of construction material suppliers employing more than 49 employees



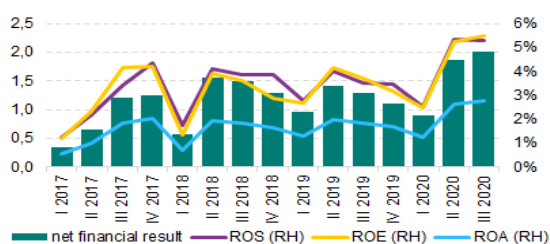
Source: NBP based on Statistics Poland (F01).

Figure 132 Profitability of activities of construction material suppliers employing from 9 to 49 employees



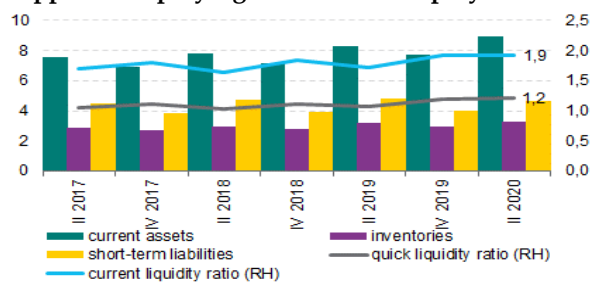
Source: NBP based on Statistics Poland (F01).

Figure 133 Profitability of activities of construction material suppliers employing more than 49 employees



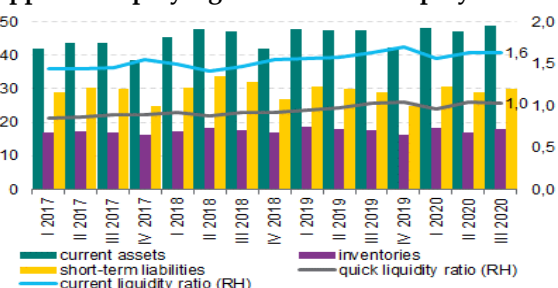
Source: NBP based on Statistics Poland (F01).

Figure 134 Liquidity ratios of construction material suppliers employing from 9 to 49 employees



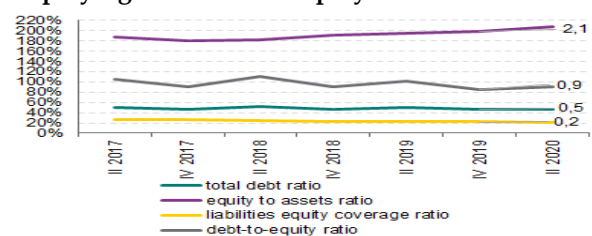
Source: NBP based on Statistics Poland (F01).

Figure 135 Liquidity ratios of construction material suppliers employing more than 49 employees



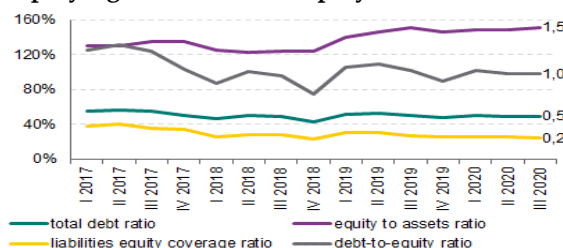
Source: NBP based on Statistics Poland (F01).

Figure 136 Debt ratios and indicators of securing liabilities of construction material suppliers employing from 9 to 49 employees



Source: NBP based on Statistics Poland (F01).

Figure 137 Debt ratios and indicators of securing liabilities of construction material suppliers employing more than 49 employees



Source: NBP based on Statistics Poland (F01).

7.4. Analysis of financial standing of construction material producers³⁹

The increased demand for construction materials in 2020 Q3 is confirmed by higher levels of key economic indicators of larger construction material suppliers (those employing more than 49 employees). According to the financial data reported in the F01 reports for 2020 Q3, on an annual basis, both total revenues and sales revenues increased by 6% and total costs increased by 5%, generating a 16% higher value of the averaged net financial result.

³⁹ The calculations and conclusions in this issue of the Information are based on the data resulting from F01 reports submitted to Statistics Poland, with the breakdown into two groups of entities: small entities – employing from 9 to 49 employees (data available until the first half of 2020 in semi-annual periods) and larger-sized entities employing more than 49 employees (data available until 2020 Q3 in quarterly periods) which are involved in the production of building materials (PKD 1623, 2223, 2320, 2332, 2351, 2352, 2361, 2362, 2363, 2364).

The current situation of construction material producers is characterised by high equity, good economic standing and profitability of their operations. In the group of larger entities, in 2020 Q3, the return on sales ratio was over 11% compared to over 10% in the corresponding period of 2019. Small entities reported a lower return on sales (around 9% in 2020 H1 compared to 6% in 2019 H1). On the other hand, larger producers have a less favourable return on equity and assets than small entities, which means that larger entities are less reliable for banks and other creditors. In the group of larger entities, in 2020 Q3 the return on equity and return on assets stood at over 5% and over 3%, respectively, compared to higher ratios in the group of small producers in 2020 H1 (approximately 11% and over 6%, respectively).

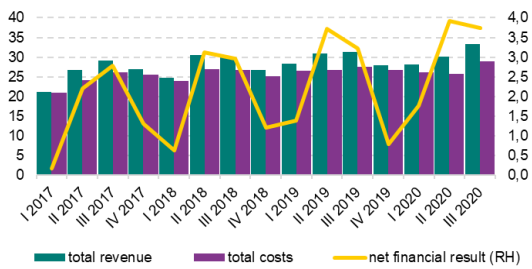
In the group of larger producers, in 2020 Q3, compared to the corresponding period in 2019, operating expenses increased by 5%. The value of all components of operating expenses increased, and to the greatest extent – costs of external services (by 11%) and the value of materials and goods sold (by 11%). Despite the increase in the value of individual components of operating costs, their structure remained at a similar level, with costs due to materials and energy used accounting for more than half of the share (51%).

In 2020 Q3, the group of larger entities maintained a stable, favourable structure of liabilities, including a high share of equity (64%). The remaining part consisted of external liabilities, including liabilities to material suppliers and service contractors (22% share) and on account of loans (14% share). A relatively low and stable share of receivables from customers (16% share) was recorded in the asset structure, resulting in a debt settlement ratio of 65 days and a debt collection ratio of 47 days. Financial liquidity remains at a stable level, ensuring the settlement of current liabilities. The share of accumulated cash increased to 11% of the asset structure in 2020 Q3 compared to a 7% share in the corresponding period of 2019.

In the group of small entities, in the first half of 2020, a higher share of liabilities to suppliers and service contractors (27% share in the structure of liabilities) and the balance of receivables from customers of construction materials (28% share in the structure of assets) than in the case of larger producers may indicate increased payment problems in this group of entities, as evidenced by a longer average time to collect receivables (68 days). The index of settling short-term liabilities in the group of small producers (78 days) is higher than for larger producers (65 days).

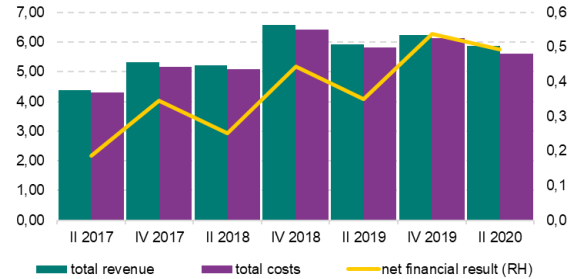
The decrease in investment expenditures (by 20%) indicates a decline in investment activity of small producers. In this group, financial liquidity and securing the coverage of assets with equity and the indebtedness of equity have improved to a small extent.

Figure 138 Economic indicators of construction material producers employing more than 49 employees



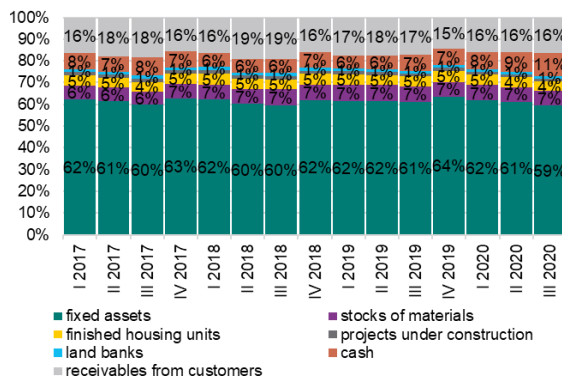
Source: NBP based on Statistics Poland (F01).

Figure 139 Economic indicators of construction material producers employing from 9 to 49 employees



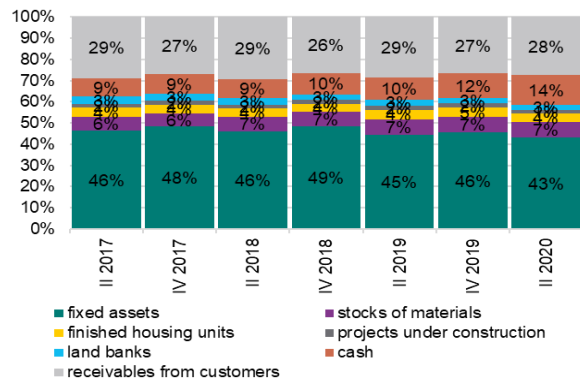
Source: NBP based on Statistics Poland (F01).

Figure 140 Structure of assets of construction material producers employing more than 49 employees



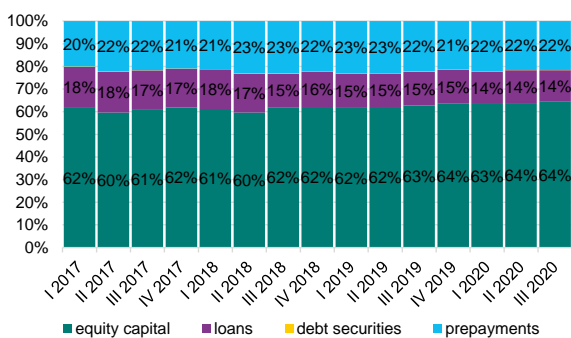
Source: NBP based on Statistics Poland (F01).

Figure 141 Structure of assets of construction materials producers employing from 9 to 49 employees



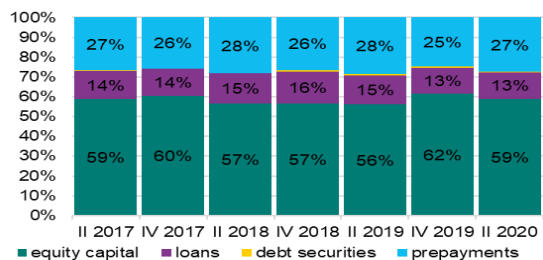
Source: NBP based on Statistics Poland (F01).

Figure 142 Structure of liabilities of construction material producers employing over 49 employees



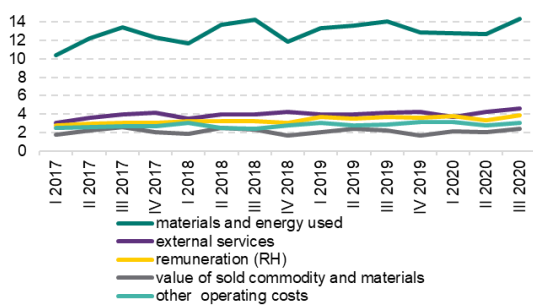
Source: NBP based on Statistics Poland (F01).

Figure 143 Structure of liabilities of construction material producers employing from 9 to 49 employees



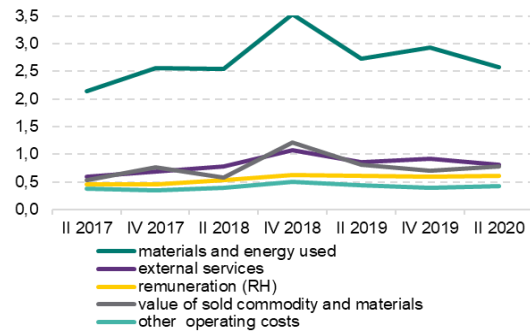
Source: NBP based on Statistics Poland (F01).

Figure 144 Operating expenses of construction material producers employing more than 49 employees



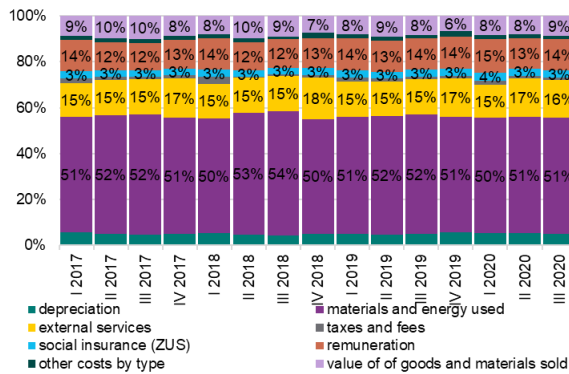
Source: NBP based on Statistics Poland (F01).

Figure 145 Operating expenses of construction material producers employing from 9 to 49 people



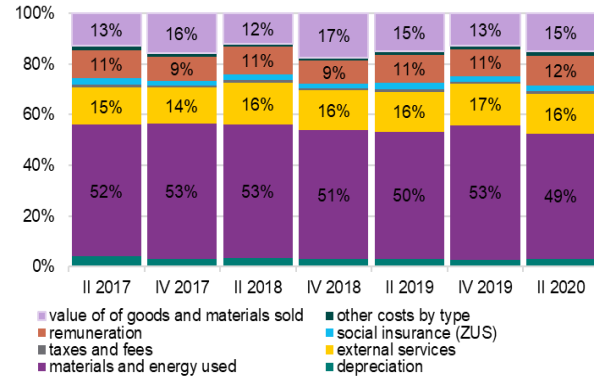
Source: NBP based on Statistics Poland (F01).

Figure 146 Structure of operating expenses of construction material producers employing more than 49 employees



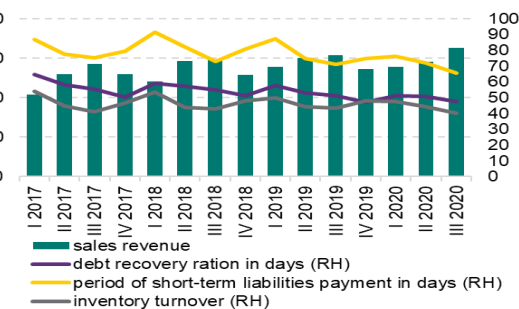
Source: NBP based on Statistics Poland (F01).

Figure 147 Structure of operating expenses of construction material producers employing from 9 to 49 employees



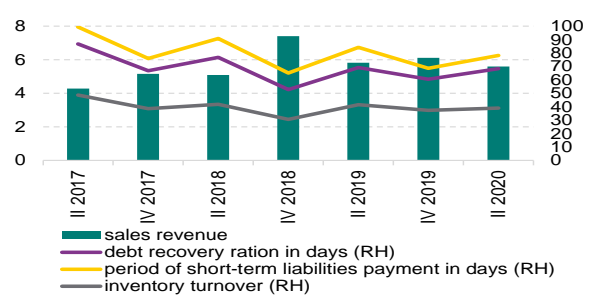
Source: NBP based on Statistics Poland (F01).

Figure 148 Turnover of inventory, receivables and liabilities of construction material producers employing more than 49 employees



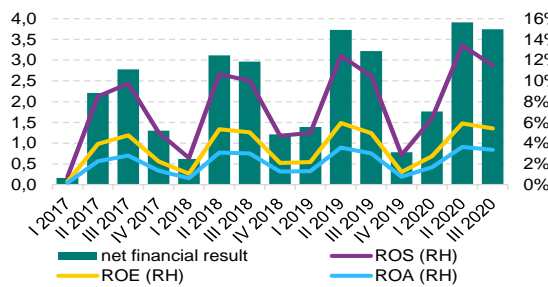
Source: NBP based on Statistics Poland (F01).

Figure 149 Turnover of inventory, receivables and liabilities of construction material producers employing from 9 to 49 employees



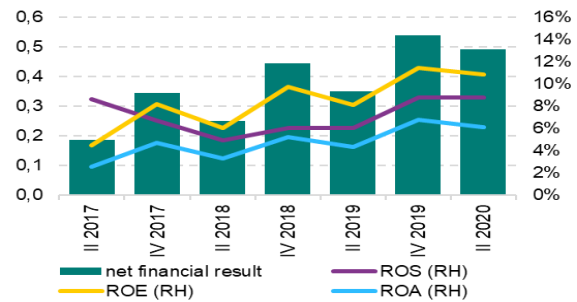
Source: NBP based on Statistics Poland (F01).

Figure 150 Profitability of activities of construction material producers employing more than 49 employees



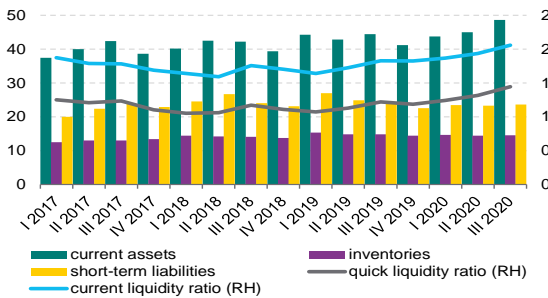
Source: NBP based on Statistics Poland (F01).

Figure 151 Profitability of activity of construction material producers employing from 9 to 49 employees



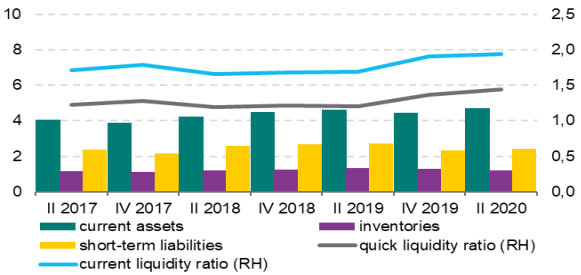
Source: NBP based on Statistics Poland (F01).

Figure 152 Liquidity ratios of construction material producers employing more than 49 employees



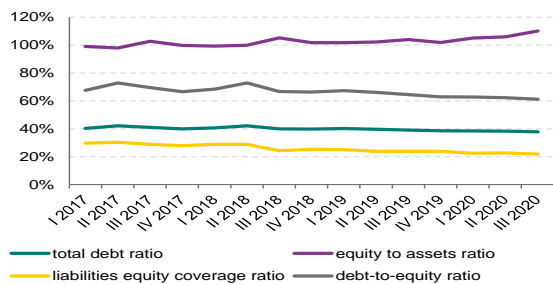
Source: NBP based on Statistics Poland (F01).

Figure 153 Liquidity ratios of construction material producers employing from 9 to 49 employees



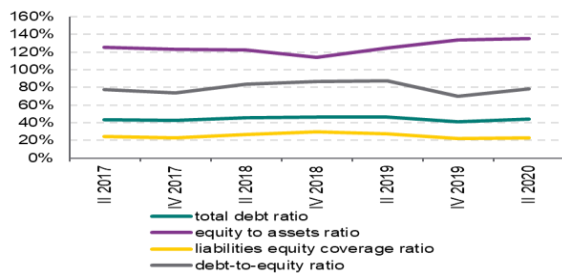
Source: NBP based on Statistics Poland (F01).

Figure 154 Debt ratios and indicators of securing liabilities of construction material producers employing more than 49 employees



Source: NBP based on Statistics Poland (F01).

Figure 155 Debt ratios and indicators of securing liabilities of construction material producers employing from 9 to 49 employees



Source: NBP based on Statistics Poland (F01).

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