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Information on home prices and the situation in the housing and commercial real estate market in Poland in 2018 Q3

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The analysis of the situation in the real estate market in Poland in 2018 Q3¹ leads to the following conclusions:

- **In 2018 Q3, heightened activity in the housing market continued.** Housing demand measured by the number of sold contracts for the construction of dwellings in the largest primary markets (including the investment demand) was slightly below the level recorded in the last seven quarters, still remaining at a level significantly higher than the average sale of 2012-2015. The stable level of sale was observed for more expensive dwellings, with better location, accompanied by a decline in the sale of cheaper housing. As a result of the level of supply being matched with demand, no excessive market tensions were observed.
- **In the analysed period as compared to the previous quarter the average offer and transaction prices per square metre of housing in the analysed cities grew, both in the primary markets (PM) and in the secondary markets (SM.)** The increase in transaction prices in both markets was mainly associated with sale of more expensive housing of better quality and location. The sale of cheaper housing decreased, which may be the consequence of termination of the government-subsidized Housing for the Young (MDM) scheme which used to support demand in the segment of the cheapest dwellings. Prices determined with the use of the hedonic index² increased in 6 cities by approx. 4% q/q and by 11.2% y/y. In Warsaw, hedonic prices increased by 0.6% q/q and by 5.1% y/y. The difference between average transaction and average offer prices remains insignificant, which means that buyers are in a less favourable position than sellers. Average rents (offer and transaction) per square metre of housing increased in the analysed quarter (excluding fees for administration and charges for utilities). The highest rents were recorded in the case of dwellings from the new stock (since 2012) located close to the centre. The growth in the demand for rental in Warsaw, generated mainly by students, resulted in shorter waiting time to conclude a rental agreement.
- **The index of the estimated availability of housing in large cities** (based on average wages in the enterprise sector and home prices) **slightly decreased as compared to the previous quarter** and stood at 0.82 square metre in the analysed quarter; consequently it was higher by 0.34 square metre against the record low observed in 2007 Q3. The index of the estimated maximum availability of a housing loan³ remained at the same level whereas the loan-financed availability of housing for an average household in

¹ The analysis carried out in this issue of the *Information* is based on data available till 2018 Q3. Due to delays in access to data, some figures include data until 2018 Q2 (inclusive). Data series with average prices per square metre of housing, commercial rents and transaction prices per square metre of office space reflect the available pool of data and may be subject to revision according to the new incoming data. Historic data are subject to revision. In 2018, the Central Statistical Office (GUS) introduced changes in the method of calculating the average gross remuneration for the smallest territorial units - the system of data imputation was implemented for the surveyed companies which did not submit the DG-1 report. The data were re-calculated back to 2015 Q1. In 2018, GUS changed the definitions of residential construction. In price listings (BaRN database) concerning 2018 Q3, approx. 110.8 thousand records were collected, including approx. 27.2% records concerning transactions and 72.8% records concerning offers. Altogether over 2.9 million records are collected in the database, including 22.9% records concerning transactions and 77.1% records concerning offers.

² The hedonic index of home prices is adjusted for differences in various attributes of dwellings (e.g. location, usable area, standard of finishing) sold in particular periods. The hedonic index is calculated with the imputed method. A hedonic price is an average transaction price from the base period multiplied by the hedonic index. More information in the article by M. Widłak (2010), *Metody wyznaczania hedonicznych indeksów cen jako sposób kontroli zmian jakości dóbr* [Methods of determining hedonic price indices as a method to control quality changes of goods], „Wiadomości Statystyczne” no. 9.

³ The maximum housing 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 assessment does not take into consideration changes in banks' lending policy, including lending terms and criteria.

Warsaw and in the six analysed cities decreased. The growth in wages and home prices were the main drivers behind the changes in those indices.

- **Housing investment** (excluding transaction costs) **continued to be profitable in the short term** (profitability calculated as a difference in interest rates). Assuming the average rent likely to be negotiated in the Warsaw market and in the six cities, the profitability of housing investment continued to exceed the interest on bank deposits, slightly decreased in relation to yields on 10-year government bonds and remained close to the return likely to be achieved in the commercial property market. The relation of the housing debt servicing costs to rent still enables to finance the cost of credit with income from rent.
- **The value of newly granted housing loans⁴ in PLN** (excluding renegotiated agreements) **in the analysed quarter stood at approx. PLN 13.0 billion**, i.e. was 1.7% higher as compared with the figures recorded in the previous quarter and 10.4% higher as compared with 2017 Q3 figures. The NBP survey concerning the situation in the credit market⁵ has found that banks considerably tightened the criteria of granting housing loans decreasing, at the same time, credit margin and non-interest lending costs. At the same time, banks recorded a slight growth in the demand for housing loans. As a consequence of these processes, the share of loans in financing housing purchase increased. In 2018 Q4, banks expect a significant tightening of lending policy in the mortgage loan segment and expect a major decline in demand for such loans.
- **Since 2012 the share of FX denominated loans⁶ has been on a steady decline in the currency structure of housing loans in banks, which is favourable for financial and macroeconomic stability.** The decreasing share of FX loans⁷ is due to the fact that banks ceased to grant such loans to persons not being in receipt of a regular income in a given currency, due to regular amortisation, earlier repayments, and refinancing of those loans with PLN denominated loans as well as the appreciation of the zloty.
- **The estimated profitability of housing investment projects continues to be high despite its slight decline.** It is associated with growing costs, including the cost of purchase of construction sites. Prices of construction materials and wages in the construction sector continue to grow⁸. Consequently, budgets planned a year ahead for investment projects become obsolete even after the lapse of several months.

⁴ Data concerning the interest rate and the value of new housing loans based on the NBP data available in the "4 OPN2PLN" tab on the NBP internet site: http://www.nbp.pl/home.aspx?f=statystyka/pieniezna_i_bankowa/oprocentowanie.html.

⁵ "Situation in the credit market - results of the senior loan officer opinion survey, 2018 Q4" NBP, October 2018 http://www.nbp.pl/home.aspx?f=aktualnosci/wiadomosci_2018/kredytowy2018_4.htm. The main reasons of changes in lending policy included the expectations regarding future economic situation and the change in the procedures for calculation of creditworthiness taking into account the change in borrowers' retirement age.

⁶ The share of foreign currency denominated loans in the currency structure of housing loans extended by banks as at the end of 2018 Q3 slightly decreased and stood at approx. 32% as compared to 33% recorded at the end of 2018 Q2, and the peak 71% share recorded in 2009 Q1.

⁷ According to the BIK data, in September 2018 banks granted the total of 18.3 thousand housing loans totalling PLN 4.684 billion (9.7% y/y more as expressed in figures and 23.3% y/y in terms of value). In the first three quarters of 2018 banks granted the total of 173.2 thousand housing loans totalling PLN 42.2 billion (i.e. 9.4% y/y more housing loans granted, for the amount higher by 19.1%). The growth rate of housing loans granted in 2018 Q1-Q3/2017 Q1-Q3 depends on the value of loan granted. It is negative for low value loans (-17.5% for loans up to PLN 100 thousand and -5.2% for loans ranging from PLN 100 thousand to PLN 150 thousand), whereas a high and positive growth rate in terms of value (38.5%) and number (37.1%) was recorded for loans over PLN 350 thousand. According to AMRON report, 2018 Q3 saw a growth in the average amount of granted housing loan, whereas the percentage of new loans with LTV ranging from 30 to 50% (approximately 6.7%) slightly increased, with minor decreases in the share of other LTV ranges. The share of housing loans with the maturity from 25 to 35 years in the total structure of new loan agreements slightly decreased, whereas the share of loans up to 25 years increased.

⁸ Real estate developers claim that in the current situation, holding own labour force enables more effective control of costs and deadlines of development projects under construction. Developers cope with the situation in different ways. Some of them have own general contractors in their group. Others have extended their competence. Still others focus on creating packages, i.e. dividing construction works into smaller portions in order to reduce costs. Optimisation of investment costs has become a significant issue in the real estate market.

According to Coface experts⁹ the number of bankruptcies and restructuring proceedings in the construction industry in three quarters of 2018 was comparable to the corresponding period of 2017. At the same time, the share of the construction sector in the total number of bankruptcy and restructuring proceedings decreased by 2.2 percentage points, mainly as a result of growth in the number of bankruptcies in trade and other industries.

- **2018 Q3 saw a decline in the number of issued new home building permits, as compared to the previous quarter¹⁰.** However, the estimated high margins on developers' profits as well as the rates of return on housing projects and high demand urged real estate developers to apply for further home building permits¹¹. A high number of completed dwellings¹² and a growing the number of dwellings under construction were recorded¹³.
- **The sale of dwellings in Poland's six largest primary markets¹⁴ decreased against the previous quarter, reaching approx. 14.2 thousand, remaining at a level considerably above the average observed in the stabilisation period (2012-2015). The pool of unsold completed dwellings and contracts for their construction in the largest markets increased by approx. 1.7 thousand dwellings** as compared with the preceding quarter reaching approx. 46.8 thousand at the end of September. **On the other hand, the number of completed dwellings in the analysed quarter decreased.** The home selling time in the primary market in the six largest markets slightly increased to reach 2.8 quarters in the analysed period. It still means fast sale of new offers and limited choice opportunities for home buyers. The home selling time in the secondary market estimated by the NBP slightly decreased in Warsaw and in 6 cities whereas it remained unchanged in ten cities.
- **In the analysed period, the construction of dwellings in progress¹⁵ in Poland rose, mainly as a result of a higher number of dwellings whose construction was commenced.** A decreasing difference between transaction prices in the PM and SM in six cities and in ten cities means that home buyers do not accept higher developers' prices and shift their demand to the secondary market, triggering price growth there. Warsaw was the only market to see a greater price difference between both markets (transactions in

⁹ According to Coface experts, significantly growing costs of materials and labour in the construction industry pose a problem. Many large entities have started to generate losses or inform they have overestimated the expected returns on implemented projects. The analysis of overestimation cases found that at present, small and medium-sized construction companies face the greatest liquidity problems. Accordingly, this group definitely reports the highest level of payments gridlocks. The coming quarters are likely to bring a growth in the number of bankruptcies or restructuring cases in this sector.

¹⁰ The statistics of the Central Statistical Office (GUS) was influenced by the change of the definition of construction introduced in 2018 in relation to dwellings for sale and for rental as well as individual construction. As a consequence, levels of development construction have increased (individual construction was included in construction for sale and for rental - earlier, it was individual construction). Data for constructed dwellings produced in 2016-2017 were recalculated whereas data for construction projects commenced and for permits issued are still missing.

¹¹ According to the GUS data, in 2018 Q3 approx. 61.0 thousand home building permits were issued in Poland, i.e. approx. 2.7 thousand more than in 2017 Q3 and approx. 4.6 thousand less than in the previous quarter. In the last four quarters, the total of approx. 252.9 thousand permits were issued, i.e. 5.2 thousand more than in the period of 2016 Q4 - 2017 Q3 (a rise by 2.1% y/y).

¹² According to the GUS data, in 2018 Q3 approx. 46.5 thousand homes were completed, which is approx. 5.4 thousand more compared to 2017 Q3 and approx. 0.5 thousand more than in the previous quarter. In the last four quarters, the total of 183.7 thousand homes were completed, i.e. 8.2 thousand more than in the period 2016 Q4 - 2017 Q3 (a rise by 1.1% y/y).

¹³ According to the GUS data, in 2018 Q3, the construction of 60.3 thousand dwellings was started in Poland, i.e. approx. 5.5 thousand more in comparison with 2017 Q3 and approx. 5.4 thousand less compared to the previous quarter. In the last four quarters, the construction of the total of approx. 219.1 thousand dwellings was launched, i.e. approx. 17.4 thousand more than in the period 2016 Q4 - 2017 Q3 (a rise by 8.6% y/y).

¹⁴ Based on REAS/JLL data, not available in other statistics. The change in the REAS/JLL data for 2018 Q2 results from classifying some apartment hotel investment projects (with 23% of VAT, other than classic housing projects with 8% of VAT) in the pool of investments in the primary market.

¹⁵ The ratio calculated on the basis of GUS data as a difference between dwellings for which a building permit was issued and dwellings completed.

dwelling with better location). The structure of dwellings offered deviates from buyers' preferences - not enough relatively small dwellings to meet the demand.

- Continuing high home sales and construction of dwellings in the primary market make it necessary to replenish land banks. **High demand for construction land triggered a rise in the prices of land for developer construction**, particularly in city districts with good transport links, with well-developed urban infrastructure and retail and service facilities, especially in Wrocław and Warsaw. Also cheaper land in poorer location and with less developed infrastructure is purchased. Maintaining flexible supply amid such a high demand is the main challenge of the current market situation and the condition of maintaining stable prices.
- In the hypothetical situation of shocks on the supply or demand side, there is a risk of local imbalances in the housing market.** Shocks on the supply side may be caused due to a growing risk and costs on the developers' side, including a shortage of construction workers and growing costs of works, materials and transport. Until now the high construction activity in the country and growing production costs have not generated excessive market tensions. Compared to the previous expansion phase (in 2006-2008), the growth in lending is much lower and the high demand is largely financed from purchasers' own funds.

Table 1 Housing programmes under implementation in Poland

Programme	Legal basis for the operation of the scheme	Programme launch	Anticipated expenditure	Expected effects	Effects until now
National Housing Scheme					
1) "Housing Plus" Package					
1.1) Scheme supporting the creation of dwellings for rent, protected flats, dormitories, shelters for the homeless, heating rooms and temporary dwellings	Journal of Laws of 2013 item 756	2007	PLN 6.2 billion in 2018-2025		Under the Scheme, 1,544 projects concerning the creation of over 26 thousand dwellings/accommodation places were qualified for financing (the value of projects was about PLN 3.3 billion).
1.2) Support scheme for the construction of social rental dwellings	Journal of Laws of 2018, item 1020, as amended	2016	PLN 4.5 billion over 10 years	30 thousand dwellings over 10 years	So far under the scheme: -186 applications have been submitted for the total amount of PLN 1,067 billion, concerning the construction of 8,668 dwellings, -72 loan agreements have been signed for the total amount of PLN 374 million allocated for financing of 3,292 dwellings, -989 dwellings in 24 projects were completed.

1.2) Housing Plus - equity (BGK Nieruchomości)	Resolution of the Council of Ministers No. 115/2016 of 27.09. 2016 (as amended)	2016		Approximately 8 thousand dwellings under implementation, including: 444 made available for rental, 1080 under construction, over 6210 at the pre-construction stage
2) "Housing for the start" scheme	Journal of Laws of 10 August 2018, item 1540	2019	Maximum limit of expenditure in 2019-2028 - PLN 16 billion	The subsidies are to be granted to persons meeting the conditions provided in the Act. The municipality will be responsible for the qualification of eligible tenants, indicating in agreement with the investor which housing units are covered by subsidies.
Other (besides NHS)				
Housing for the Young	Journal of Laws of 2018, item 604	2014	PLN 3.45 billion in 2014-2018	Cumulatively, since 1 January 2014 support has been provided to 106.8 thousand home buyers in the amount of PLN 2.82 billion, including PLN 0.85 billion for secondary market housing. Financial support allocated for a partial repayment of a loan is still granted. Servicing and control of loans with co-financing of own contribution granted in 2014-2014 will continue.
Borrowers' Support Fund	Journal of Laws of 2015, item 1925	19 February 2016	PLN 593.8 million	Cumulatively, since 19 February 2016, 862 agreements for granting the support for PLN 19.1 million have been concluded and support in the amount of PLN 14.0 million has been disbursed.
Rental Housing Fund (BGK Nieruchomości)		2014		The offer comprises over 1700 dwellings, including 60% already rented.

- In September 2018, the Council of Ministers adopted the draft **Act on companies investing in rental of residential real estate (FINN)**, submitted by the Ministry of Finance. The draft provides for the introduction to the Polish law of a company investing in the rental of real estate which will enjoy a special tax status, based on the model of REIT (Real Estate Investment Trust) entities operating in the EU.
- According to the data of the coordinator of the Housing Council at the Prime Minister, the undertaken regulatory changes are aimed at speeding up the implementation of the Housing plus programme.
- A special law has been introduced (which entered into force on 28 August 2018) aimed to simplify the procedures related to the implementation of housing projects.
- As of 1 January 2019, a programme of rental subsidies will enter into force (the so-called Housing for the Start Scheme) - the Act on State aid in the payment of housing expenses in the first years of home rental; it is only addressed to tenants of new housing created or revitalised as part of cooperation of investors with municipalities. The Scheme is under preparation.

- Works are underway to liberalise land trade. **The draft amendment to the Act on the formation of the agricultural system** of the Ministry of Agriculture provides for certain derogations, e.g. an agricultural parcel of up to 1 ha (currently up to 0.3 ha) may be purchased by a person other than a farmer, and farmers may purchase agricultural land located in the administrative areas of towns and cities. The draft provides for amendments to the Act on the Management of Treasury Real Estate to enable the National Agricultural Support Centre (KOWR) to implement housing investment projects in rural areas (this is to supplement the Housing Plus Scheme in rural areas). The draft also contains liberalisation of the provisions concerning the sale of purchased agricultural property - the purchaser of agricultural land will have to run an agricultural farm for the period of 5 years (so far for 10 years); it will be possible to sell such land before the lapse of 5 years with the consent of the director of the National Agricultural Support Centre (KOWR), on the basis of an administrative decision instead of a court decision.
- The Ministry of Investment and Development is working on a draft amendment to the Act on the **National Housing Stock** (KZM), amending the rules on transferring the land to the National Housing Stock (KZM)¹⁶.
- As of 1 January 2019, **the Act on the transformation of the right of perpetual usufruct of land developed for housing purposes**¹⁷ into the ownership title to such land will enter into force. Under this Act a significant stock of assets will be transferred to households which is likely to boost consumer demand.
- **In the office real estate market, imbalances resulting from oversupply of rental space as compared to demand for such space were reduced.** A strong growth in supply has been accompanied by a high demand. It was fostered by the favourable economic situation, including the creation of new jobs, also by international companies. According to the market estimates, in 2018 Q3 the office space supply in the nine largest office markets¹⁸ exceeded 10 million square metres and approx. 1.6 million square metres were under construction. The vacancy rate in the nine largest office space markets recorded a slight decline to the level of 9.9% as compared to 10.2% in 2018 Q2¹⁹. **The retail and commercial space market continues to see a slight oversupply of space**, whereas the vacancy rate across the country at the end of the first half of 2018 remained at a level of approx. 3.3%²⁰. The continued high availability of foreign financing contributed and will continue to favour a rapid growth in office and commercial real estate. This phenomenon may be largely attributed to a low level of interest rates in developed countries, and thus a low opportunity cost. **The warehouse market** in Poland has been growing rapidly since 2014. There is demand for warehouse space from logistics, courier and manufacturing companies, which is a natural consequence of the development of the trade and e-commerce sector. At the end of 2018 Q3, the total stock of the warehouse space market exceeded 15 million square meters and the vacancy rate across the country remained at the level of 4.5%²¹.

¹⁶In accordance with the assumptions of the draft of the Act (under discussions of the Standing Committee of the Council of Ministers, last meeting on 21 November 2018), state institutions, i.e. the National Agricultural Support Centre or the Military Property Agency will be able to receive a refund of 90% of the value of the land transferred. They will also be able to contribute land to companies not only with local governments, but also with other entities within the framework of public private partnership.

¹⁷Journal of Laws 2018 item 1716 (Act of 20 July 2018, amended on 4 December 2018).

¹⁸Nine cities include: Warsaw, Kraków, Wrocław, Tri City, Katowice, Łódź, Poznań, Szczecin, Lublin.

¹⁹See Colliers International Report: Market Insights, 2018 Q3, Poland.

²⁰See Colliers International Report: Market Insights, 2018 Q3, Poland.

²¹See Cushman & Wakefield, Report on Warehouse market in Poland in 2018 Q3.

- **The estimated value of investment transactions in the commercial real estate market at the end of 2018 Q3²² amounted to EUR 4.65 billion**, with commercial space accounting for 46% of the value of transactions, office space for 42% and warehouse space for 10%.

- **The level of corporate loans granted by domestic banks to enterprises for real estate investment at the end of 2018 Q3 amounted to approx. PLN 61.8 billion**, which comprised loans granted to real estate developers and loans for office space, commercial, warehouse and industrial space and other real estate²³. The level of debt of real estate developers at the end of 2018 Q3 amounted to PLN 5.6 billion against PLN 5.4 billion in 2018 Q2. The value of loans for office real estate dropped to PLN 16.2 billion, as compared to PLN 16.7 billion in 2018 Q2. The level of loans for retail real estate amounted to PLN 16.1 billion (a growth of PLN 3.6 billion as compared to 2018 Q2) and for warehouse and industrial real estate - to PLN 7.9 billion (a growth of PLN 1.5 billion as compared to 2018 Q2). The level of loans granted for other real estate²⁴ amounted to PLN 16 billion against PLN 21 billion in 2018 Q2. The changes in the status of loans stem partially from the fact that banks adjust their reporting to the new FINREP. The ratio of impaired loans in the total corporate loans for real estate stood at 27.8%, which mainly arises from the fact that banks' loan portfolios include impaired loans from previous years²⁵. The share of impaired loans in the total loans for office real estate at the end of 2018 Q3 stood at 7% against 6.7% in 2018 Q2, for loans granted for retail space it stood at 9.7% as compared to 8.6% in 2018 Q2. The same indicator for loans for warehouse and industrial space amounted to 6% as compared to 6.8% in 2018 Q2 and for other real estate - to 9.0% as compared to 10.2% in 2018 Q2. The growth in these indicators seen since the beginning of 2018 probably stems from changes in the banking accounting and reporting principles.

- **Transaction rents for A class office space in Warsaw, quoted in EUR per square metre per month, were stable.** The highest monthly rents in Poland in this class were recorded in Warsaw where they amounted to approx. EUR 20/sq. m/month. In other analysed cities, i.e. in the six large cities and in the nine²⁶ other smaller voivodship cities those prices ranged from EUR 12 to 14/sq. m/month. **Rents in class B office buildings in the largest markets also remain stable.** The hedonic index of rents²⁷ which is resistant to the change in the sample analysed, remains stable for Warsaw and Poznań. However, for Tri City, this index shows a slight decline, which means that space of similar quality is leased at a lower rent than half a year ago. The vacancy rate in Warsaw dropped by 1.1 percentage points, reaching 10% at the end of 2018 Q3²⁸. The vacancy rate of office space depends on age²⁹ and mainly on location of the office building³⁰.

²² The above-mentioned investments concern the sale of the entire operating company which rents the building and derives income from it. Such transactions are concluded between: 1/ the real estate developer who has commercialised the property and sells it to the investor, or 2/ two investors. However, it should be emphasized that these data do not make it possible to draw conclusions as to the participation of foreign investors in possession of commercial real estate in Poland. There is a very large stock of real estate that the owner has built for their own purposes, sometimes even decades ago. Moreover, some domestic investors set up real estate development companies that build rental property for them and then manage it. The above economic events are not accounted for in the statistics on commercial investments.

²³ Starting from 2018, the category of loans granted for other real estate was divided into three categories, i.e. loans for warehouse and industrial real estate, loans for retail real estate, loans for other real estate.

²⁴ See FINREP definition "Loans for other real estate – loans for real estate other than housing, office, commercial, industrial and warehouse real estate (subcategory of loans for other real estate)."

²⁵ See The Financial Stability Report, NBP, June 2018.

²⁶ In the case of commercial real estate, the breakdown of the analysed cities is different than in the case of residential real estate. The six cities include: Katowice, Kraków, Łódź, Poznań, Tri City, Wrocław. The nine cities include: Białystok, Bydgoszcz, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin, Wrocław.

²⁷ 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 individual periods. The hedonic index is calculated with the imputed method.

²⁸ See Colliers International Report: Market Insights, 2018 Q3, Poland.

²⁹ Cushman & Wakefield, Marketing as one of the key factors supporting the modernisation process of older office buildings, 2018.

³⁰ See Knight Frank, Report: Poland, Commercial Market, 1st half of 2018.

- **Transaction rents for retail space in shopping centres in Warsaw are on a slight increase, whereas they are slightly decreasing in the markets of other cities³¹.** The hedonic rents in Poznań and Tri City remain stable whereas in Warsaw they slightly dropped, after a long period of slow growth. In the market of sale of small retail and office space, the median of the offer price all over Poland remained stable.

³¹ The analysis refers to premises with an area ranging from 100 to 500 square metres located in shopping centres in economically significant parts of cities.

The figures below describe the key developments in the housing market in Poland's major cities in 2018 Q3. Charts and figures present:

- 1) home prices (Figures 1-15),
- 2) availability of loan-financed housing, loan availability, profitability of housing investment (Figures 16-23),
- 3) housing loan disbursements and interest rates (Figures 24-32),
- 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 33-46),
- 5) housing construction and the residential market in selected cities in Poland (Figures 47-60),
- 6) rents and transaction prices of commercial real estate (Figures 61-67).
- 7) an extended analysis of real estate developers and construction companies condition, including development firms (Figures 68-103), construction companies implementing volume projects (Figures 104-113), companies dealing with sale of construction materials (Figures 114-136), companies manufacturing construction materials (Figures 137-156).

The analysis of housing prices (offer, transaction and hedonic) in the primary and secondary markets as well as housing rents relies on the data derived from the housing market survey of the Real Estate Market Database (BaRN, NBP). 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 REAS/JLL, 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 the Central Statistical Office 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, Warsaw, Wrocław
10M	10 biggest cities: Białystok, Bydgoszcz, Katowice, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin, Zielona Góra
BaNK	Commercial Real Estate Market Database, created by NBP
BaRN	Real Estate Market Database, created by NBP
BIK	Credit Information Bureau
CPI	Consumer Price Index
DFD	Large real estate development company
GD	Households
GUS	Central Statistical Office
EURIBOR	Euro Interbank Offer Rate
FSA	Polish Financial Supervision Authority
LIBOR	London Interbank Offered Rate
LTV	Loan-to-Value ratio
MDM	Government-subsidised housing scheme Mieszkanie dla Młodych (Housing for the Young)
NBP	Narodowy Bank Polski
PONT	PONT Info Nieruchomości
PAS	Polish Accounting Standards
REAS/JLL	REAS, JLL Residential Advisory
RNS	Government-subsidized housing scheme Rodzina na Swoim (Family on their Own)
PM	Primary housing market
SM	Secondary housing market (existing housing stock)
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	The Polish Bank Association
ZKPK	Accumulated index of changes in banks' credit policy criteria

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 meter of housing in Warsaw and 6M- PM

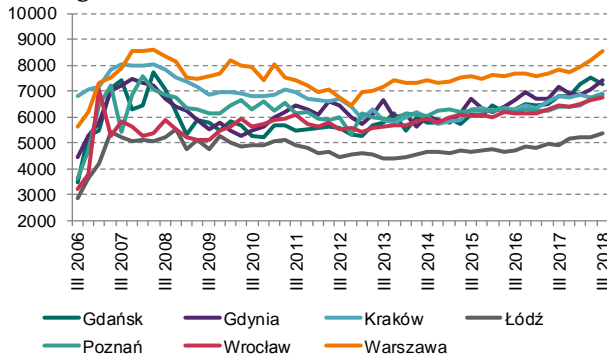
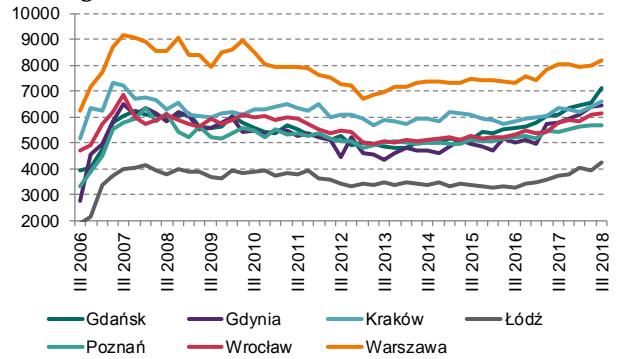


Figure 2 Transaction prices per square meter of housing in Warsaw and 6M- SM



Note: the home price database of NBP (BaRN) has existed since 2006 Q3; description of the database may be found in the “Report on home prices and the situation in housing and commercial real estate market in Poland in 2017” available on the bank’s website.

Source: NBP

Source: NBP

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

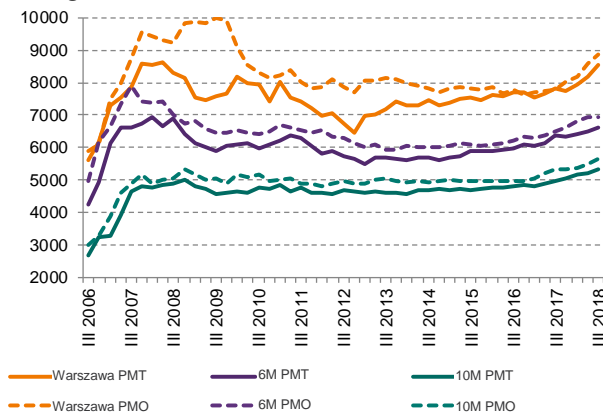
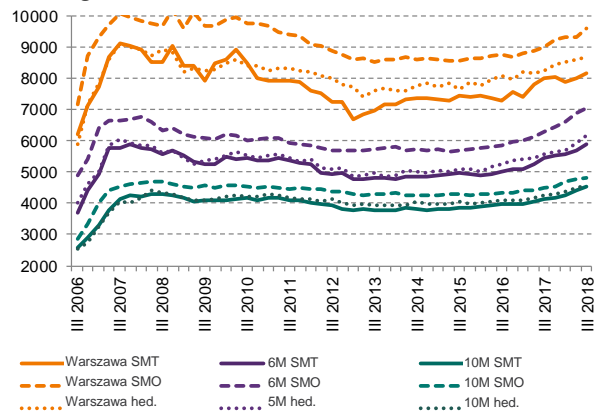


Figure 4 Weighted average price per square meter of housing, offers (O) and transactions (T)- SM



Note to Figures 3-15: the price 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 meter of housing – PM to SM

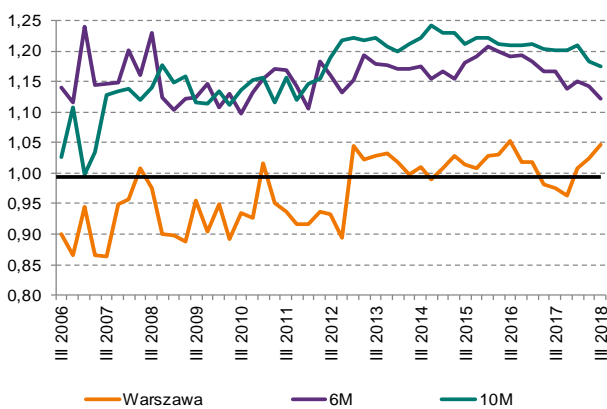
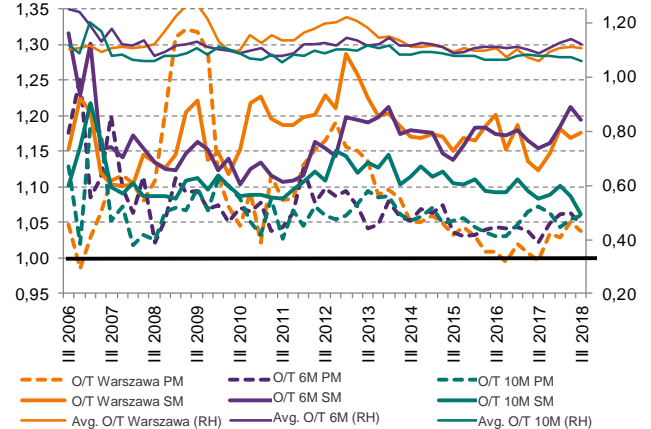


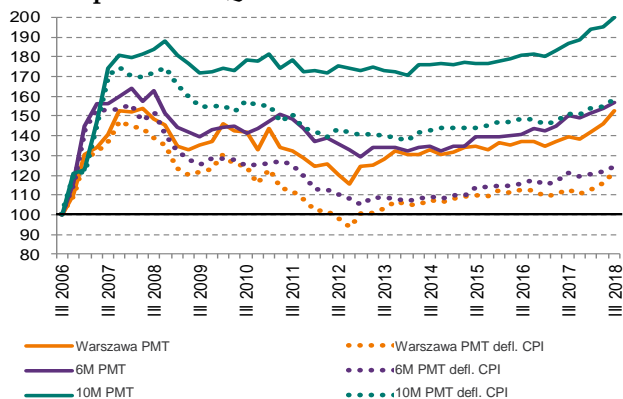
Figure 6 Ratio of the average weighted offer price (O) to transaction price (T) per square meter of housing – PM and SM



Source: NBP

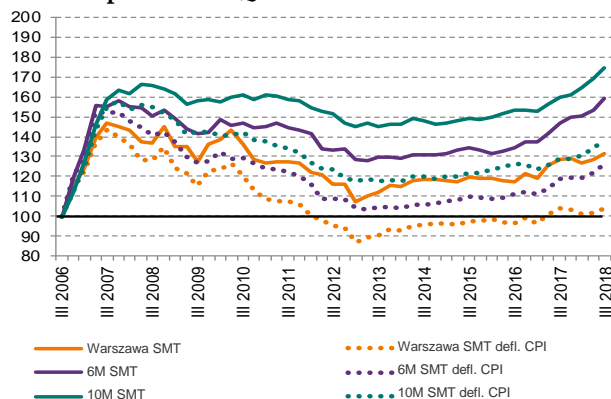
Source: NBP

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



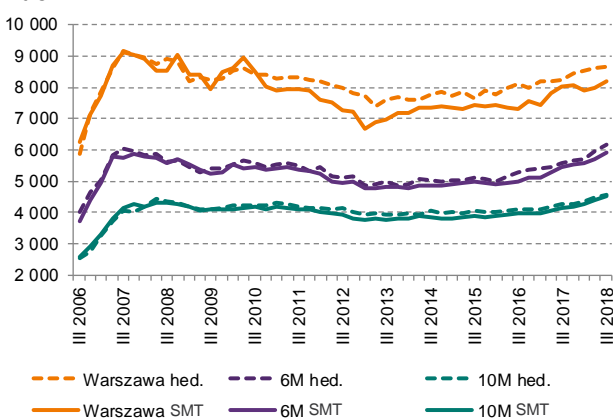
Source: NBP, ZBP (AMRON), GUS

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



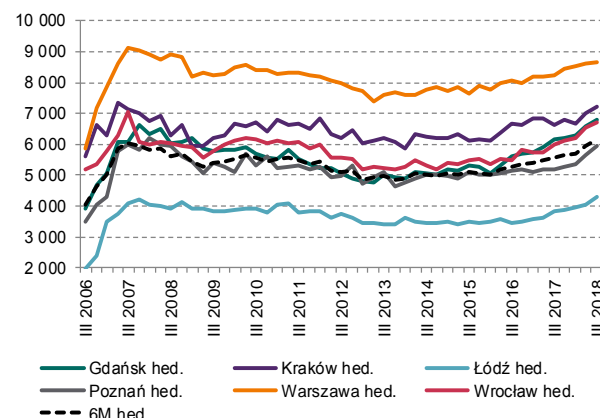
Source: NBP, ZBP (AMRON), GUS

Figure 9 Weighted average price per square metre of housing in SM and price adjusted by the hedonic index



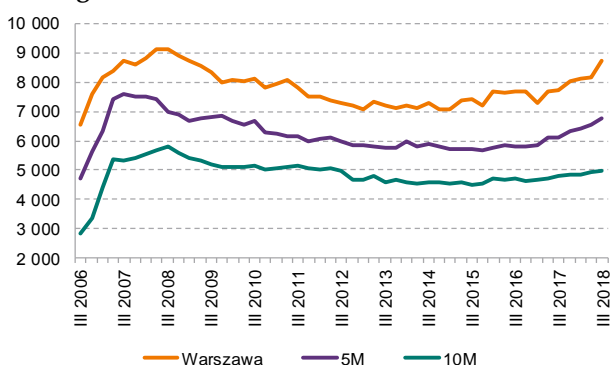
Source: NBP

Figure 10 Weighted average transaction price per square meter of housing in the SM, adjusted by the hedonic price index, in 6M



Source: NBP

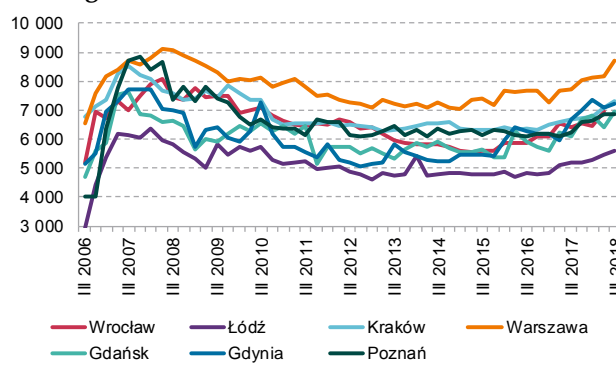
Figure 11 Average offer prices per square meter of housing in PM, selected markets



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

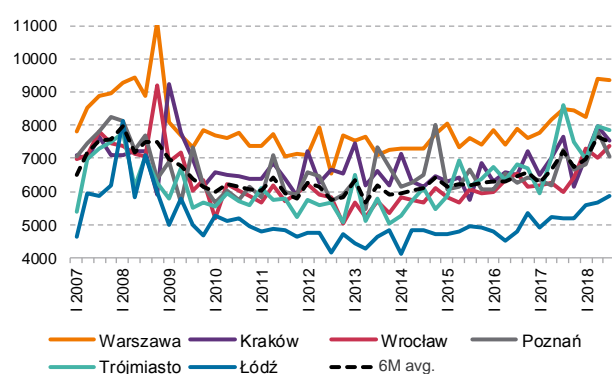
Source: PONT Info Nieruchomości

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



Source: PONT Info Nieruchomości

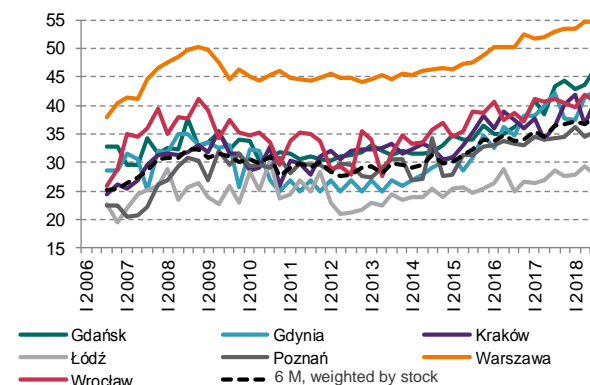
Figure 13 Average offer prices per square meter of housing, new launched housing contracts – PM, selected markets



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

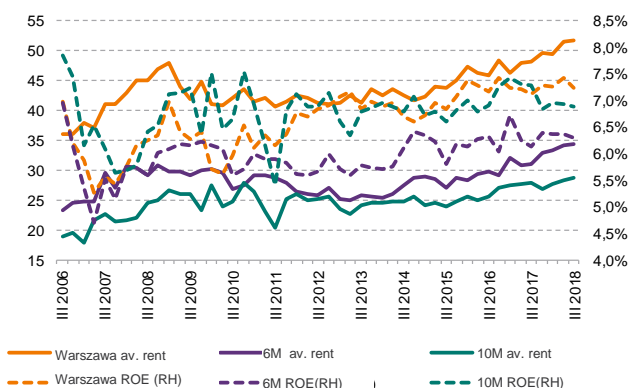
Source: REAS/JLL

Figure 14 Average rent rates (offers and transactions) per square meter of housing - SM, selected markets



Source: NBP

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

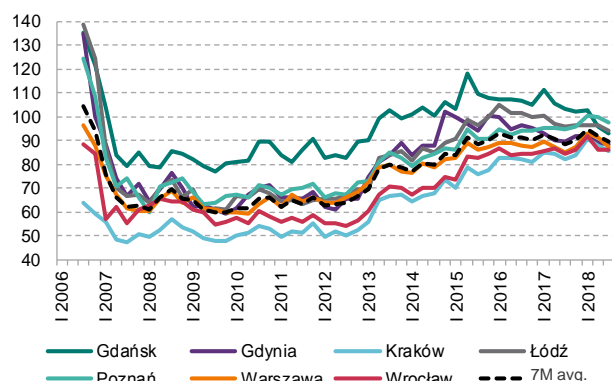


Source: NBP

Note to Figure 15: price per square meter of housing 40% SM and 60% SM; the price per square meter of housing in the PM was increased to include the average costs of home finishing; the analysis does not take into account the high transaction costs in the housing market and the potentially long time needed to exit from such an investment.

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

Figure 16 Estimated availability of loan-financed housing (7M)



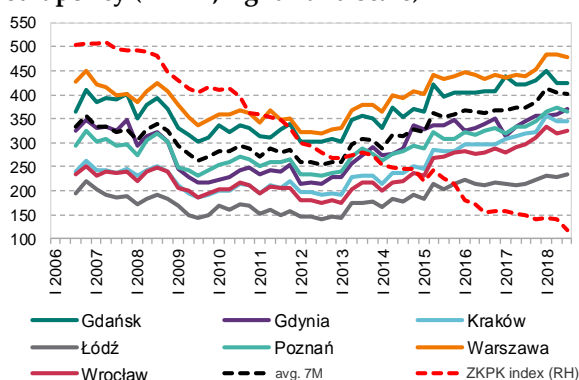
Source: NBP, GUS

Available housing loan – a measure specifying the potential maximum housing loan; expressed in PLN thousand taking into account banks’ lending requirements and loan parameters (interest rate, amortization period, minimum wage, as the minimum income after payment of loan instalments).

Availability of loan-financed housing – a measure specifying how many square meters of housing may be purchased with a mortgage loan obtained basing on the average monthly wage in the enterprises sector in a particular market (CSO), in view of 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 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.

ZKPK Index – accumulated index of changes in banks’ lending policy criteria; positive values mean easing, and negative values tightening of the 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.

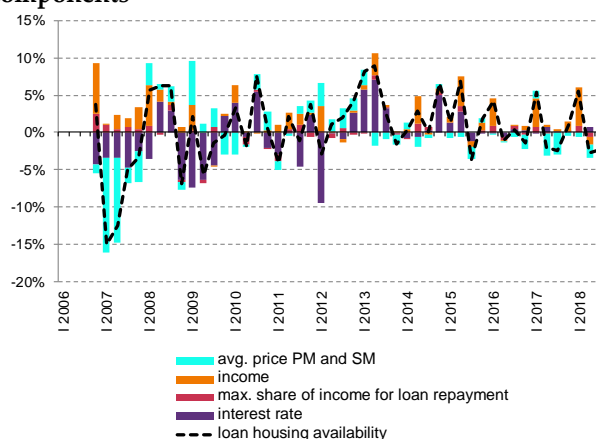
Figure 18 Estimated availability of loan-financed housing and accumulated index of banks’ housing credit policy (ZKPK, right-hand scale)



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

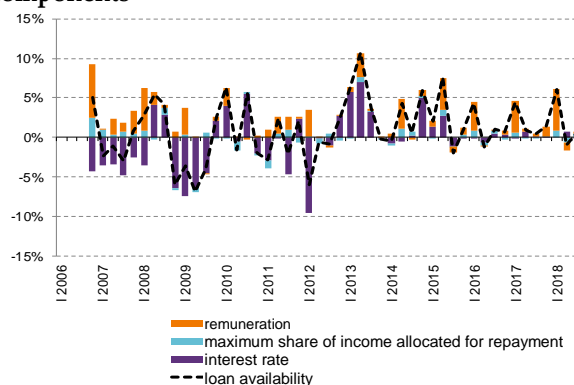
Source: NBP, GUS

Figure 17 Quarterly changes in the estimated availability of loan-financed housing in 7M and the force and directions of the impact of particular components



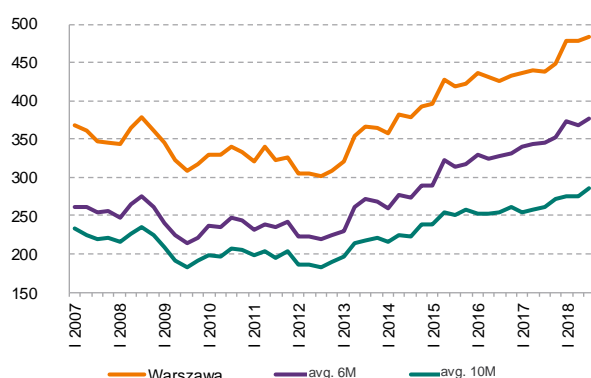
Source: NBP, GUS

Figure 19 Quarterly changes in the estimated availability of loan-financed housing in 7M and the force and directions of the impact of individual components



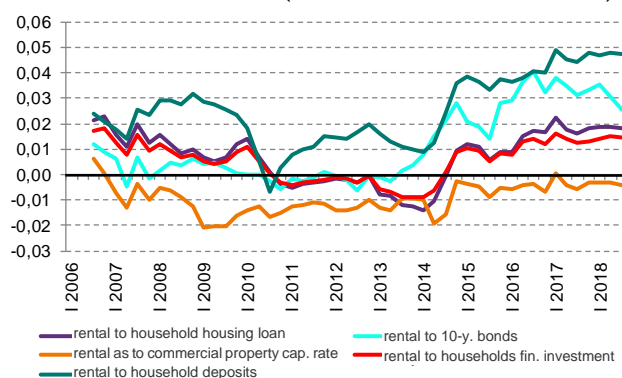
Source: NBP, GUS

Figure 20 Estimated available housing loan in selected cities



Source: NBP, GUS, BGK

Figure 22 Profitability of home rental (average in Warsaw and 6M) as compared with alternative household investments (differences in interest rates)

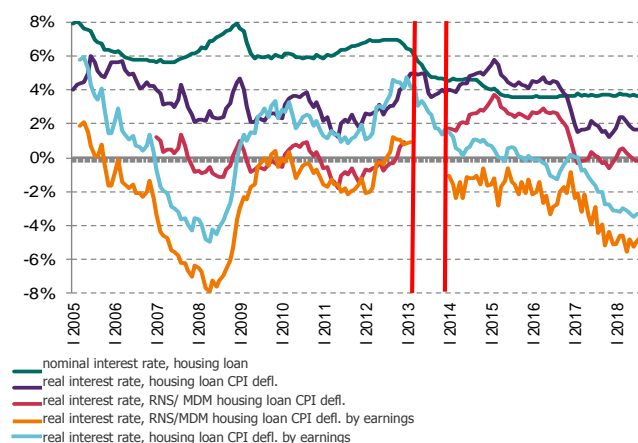


Note to Figure 22: values exceeding 0 denote higher profitability of purchasing property for rental than other GD investment. This analysis does not take into account high transaction costs in the housing market and potentially long payback periods.

Note to Figure 23: the estimated total demand is composed of consumer demand and investment demand; no speculative demand. Consumer demand means the average number of dwellings sold in a quarter (2010 average) multiplied by the growth of weighted availability of loan-financed housing. Investment demand means the number of dwellings sold in a quarter (2010 average) multiplied by 10% (in the period from 2007 Q1 - 2013 Q3), 20% (2013 Q3 to 2016 Q4) and 30% (beyond 2017 Q1), multiplied by the growth (2010 Q1=100) of rental profitability against cash investment (90% - interest rate on deposits, 10% - interest rate on Treasury bonds).

Source: NBP, GUS

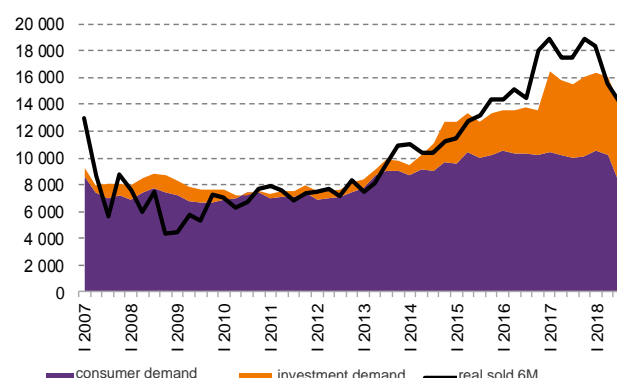
Figure 21 Profitability of housing loans for the consumer deflated with CPI or wage growth in the enterprise sector



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. RNS (operating in 2007-2012) and MDM (operating in 2014-2018).

Source: NBP, GUS, BGK

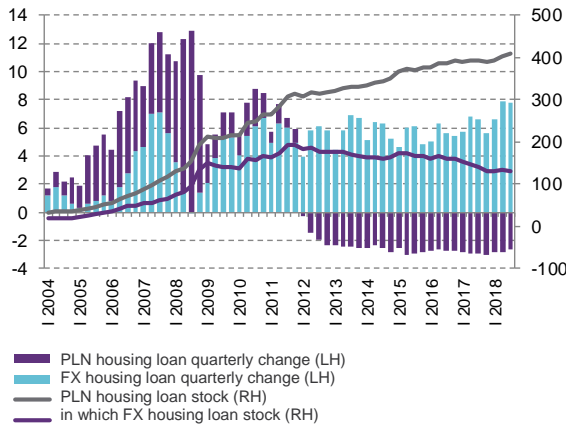
Figure 23 Estimated housing demand in PM (average in Warsaw and 6M) and its components



Source: NBP, REAS/JLL, ZBP, GUS

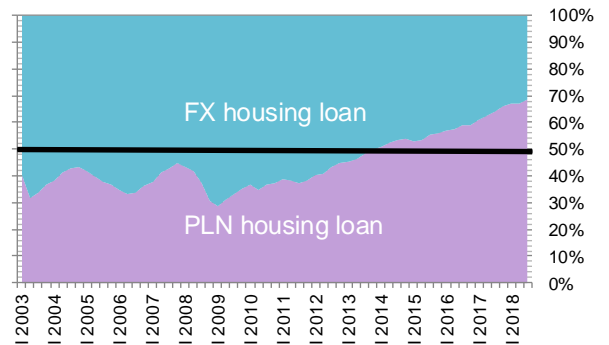
3. Disbursement of residential mortgage loans, interest rates

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)



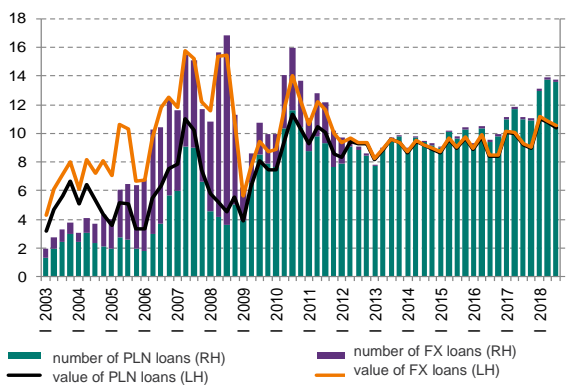
Source: NBP

Figure 25 Currency structure of housing loan receivables from households resulting from residential mortgage loans (%)



Source: NBP

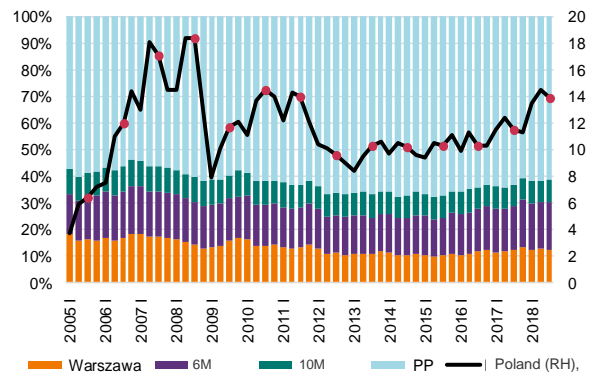
Figure 26 New housing loans: value and number



Note to Figures 26 and 27: the data inform about signed residential mortgage loan contracts and not the actual disbursement of residential mortgage loans. Only third quarters are marked by red points.

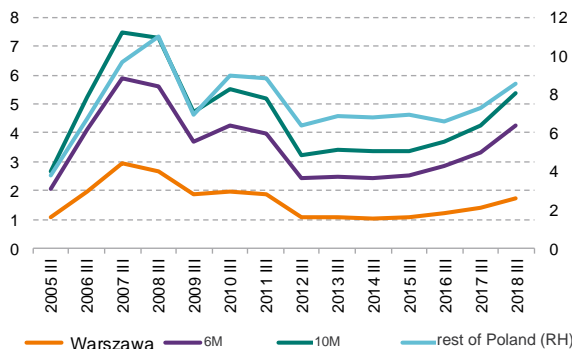
Source: ZBP, from 2017 NBP estimate of FX loans

Figure 27 Geographical structure of the value of new housing loan contracts in Poland



Source: BIK

Figure 28 Values of contracts for residential mortgage loans in third quarters in selected towns in Poland (in PLN billion)



Source: BIK

Figure 29 Interest rates on housing loans for households in Poland

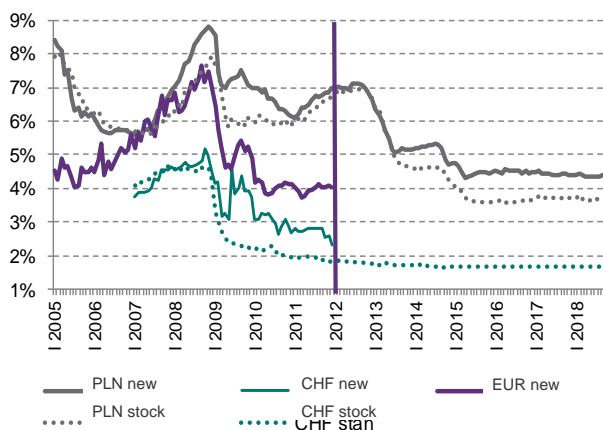
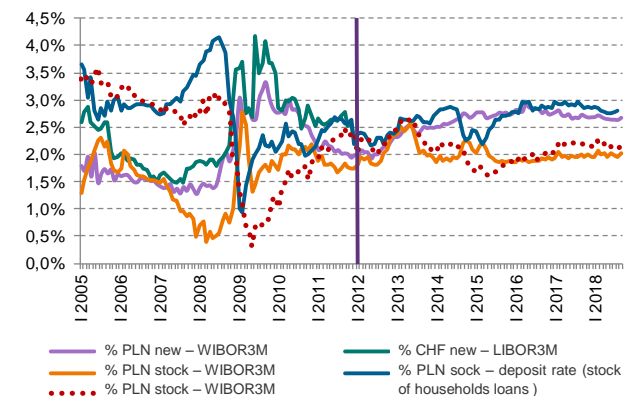


Figure 30 Bank margins (for WIBOR, LIBOR, EURIBOR 3M) in the case of residential mortgage loans



Note to Figure 29 and 30: the violet vertical line separates a period with no FX loans which have not been practically granted since 2012.

Note to Figure 30: the bank margin is the difference between housing loan rate (NBP data) and the WIBOR3M rate or the LIBORCHF3M rate.

Source: NBP

Source: NBP

Table 1. 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 M (in PLN million)

Date	Estimated value of mortgage loans in Poland	Estimated value of housing transactions in the PM and 7M	Loan demand including client's downpayment in the PM in 7M	Downpayment to loans in the PM in 7M	Cash home demand (no downpayment) for the PM in 7M	Estimated value of cash home purchases with client's downpayment in the PM in 7M
2014 Q1	7,571	3,870	1,726	432	2,144	67%
2014 Q2	8,899	3,673	2,029	507	1,644	59%
2014 Q3	8,894	3,709	2,028	507	1,681	59%
2014 Q4	8,416	3,953	1,919	480	2,034	64%
2015 Q1	8,996	3,980	2,051	513	1,929	61%
2015 Q2	10,640	4,437	2,426	606	2,011	59%
2015 Q3	10,341	4,712	2,358	589	2,354	62%
2015 Q4	11,237	5,115	2,562	641	2,553	62%
2016 Q1	9,742	5,142	2,221	555	2,921	68%
2016 Q2	11,661	5,409	2,659	665	2,750	63%
2016 Q3	9,632	5,218	2,196	549	3,022	68%
2016 Q4	9,933	6,617	2,265	566	4,352	74%
2017 Q1	10,945	6,958	2,495	624	4,463	73%
2017 Q2	12,139	6,582	2,768	692	3,815	68%
2017 Q3	11,794	6,781	2,689	672	4,092	70%
2017 Q4	10,652	7,259	2,429	607	4,830	75%
2018 Q1	11,914	7,219	2,716	679	4,502	72%
2018 Q2	12,807	6,240	2,920	730	3,320	65%
2018 Q3	13,024	5,855	2,969	742	2,886	62%

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

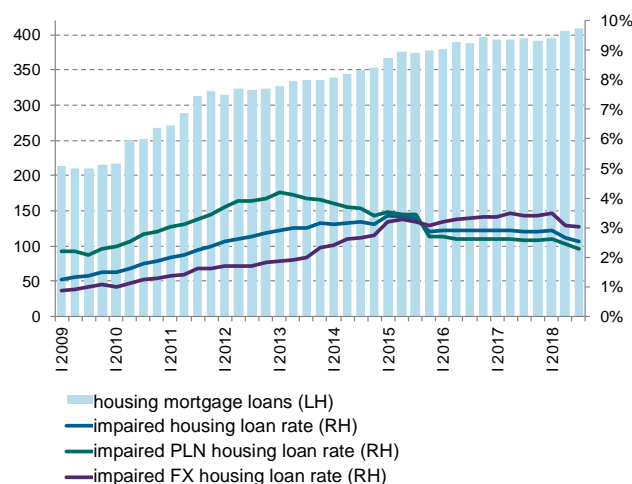
In the period 2014 I-IV, the estimated value of newly granted loans in Poland in particular quarters was based on increases in the volume of loans to households adjusted for loan amortization and flows between the foreign currency loan portfolio and the zloty loan portfolio, available in the NBP reporting. The entire banking system was taken into account, including SKOK credit unions. As of 2015 Q1, the value of disbursements is based on data collected from banks.

*/ Loan-financed home purchases comprise purchases made based on a loan and the minimum share of cash (a down payment of 25% was assumed; in big cities, down payment of 20% more prudently than the requirement of the amended S Recommendation), whereas home cash purchases make a 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 (NBP) was multiplied by the average home size in square metres (GUS data) and the number of housing units sold (REAS/JLL). 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 has amounted to approx. 57% since 2014. The estimated value of cash transactions was calculated as the difference between transactions in 7M and disbursements of loans, including buyer's down payment. Data concerning prices for all the periods have been updated.

Source: NBP, REAS/JLL, ZBP, GUS

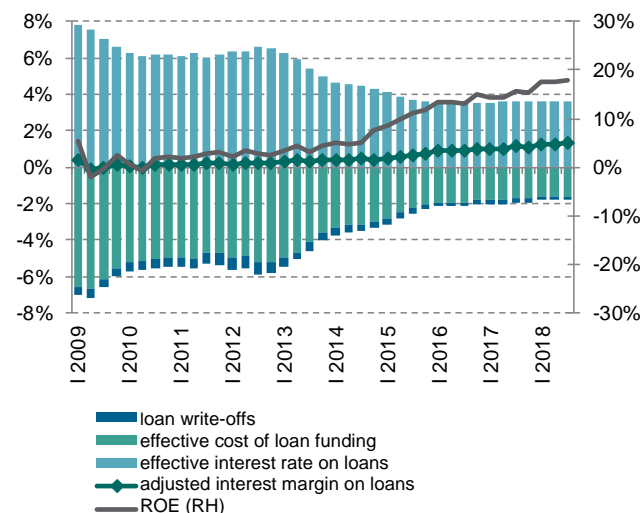
Figure 31 Household loans for housing real estate and indicator of loans recognised as non-performing loans



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 the PAS).

Source: NBP

Figure 32 Estimated RORAC on residential mortgage loans denominated in PLN for banks in Poland, taking into account the result of interest and non-interest profit and operating costs

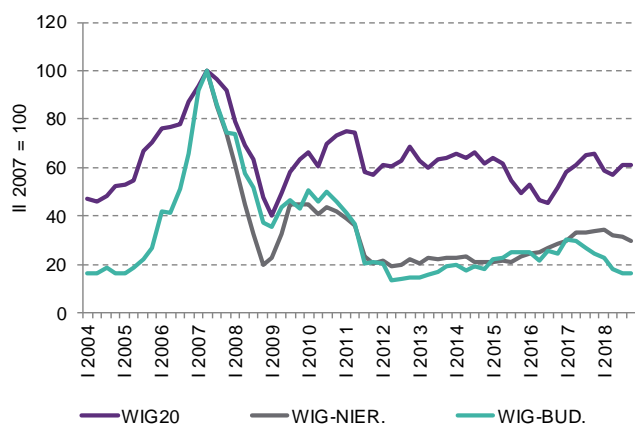


Note: for calculation, interest and non-interest income as well as operating costs were taken into account. The estimated RORAC (*Return On Risk-Adjusted Capital*) is calculated as the adjusted interest margin plus the non-interest result less operating cost for housing loans in relation to the required own capital. Calculation based on KNF publication, *Solvency ratio* - until 2014, *Total capital ratio* - as of 2014. The adjusted interest margin is the result of all income being added and all costs being deducted. The effective cost of financing was computed based on the WIBOR3M rates by adding estimative costs related to bank's own financing.

Source: NBP, KNF

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

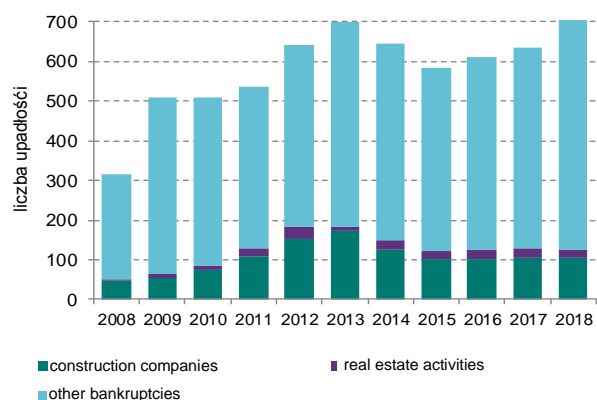
Figure 33 Rescaled exchange indices: WIG20 and for real estate developers and construction companies (2007 Q2=100)



Note: harmonized data, 2007 Q2 = 100. The WIG index for real estate developers has been recorded since 2007 Q2; 2018 Q2 as at 27 August 2018.

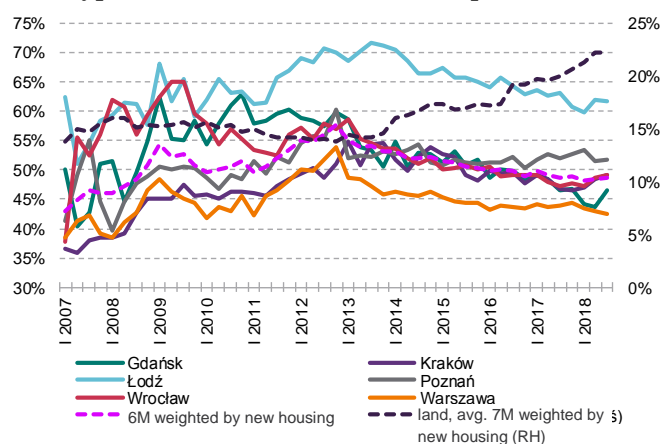
Source: Warsaw Stock Exchange

Figure 34 Number of bankruptcies in particular sectors (as at the end of the third quarter)



Note: breakdown according to the first entry into the KRS.
Source: Coface Poland

Figure 35 Estimated share of direct construction costs per square meter of the residential building's usable area (type 1122-302³²) in the transaction price in the PM

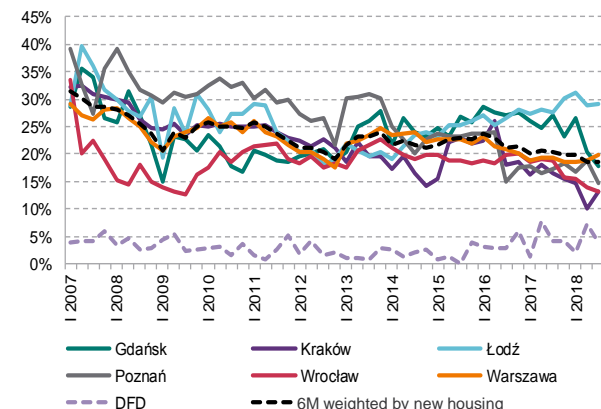


Note to Figure 36: the estimated rate of return on equity from typical new investment projects assuming the currently applicable interest rates, banks' requirements and production costs; calculated on the basis of the diagram included in Annex 3 of the *Report on the situation of the Polish market of residential and commercial real estate in 2011*. Since 2014, NBP's own appraisal of land for housing construction has been used, which has changed the previous estimates.

*/DFD – ROE of an average large real development company according to GUS data (employment =>50 persons).

Source: NBP based on Sekocenbud

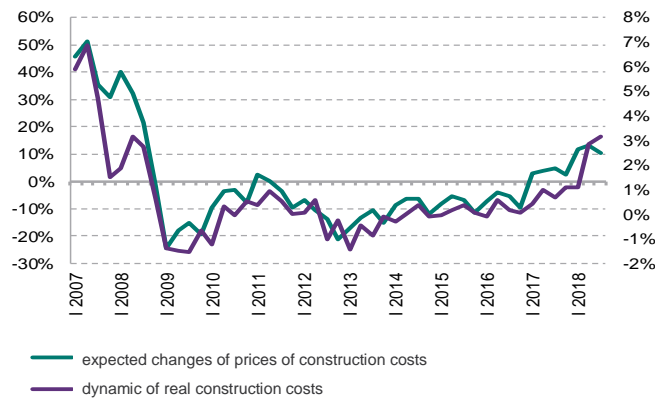
Figure 36 Estimated rate of return from investment projects (type 1122-302³²) in the largest cities and the reported rate of return of real estate developers (DFD*)



Source: NBP based on Sekocenbud, GUS (F01)

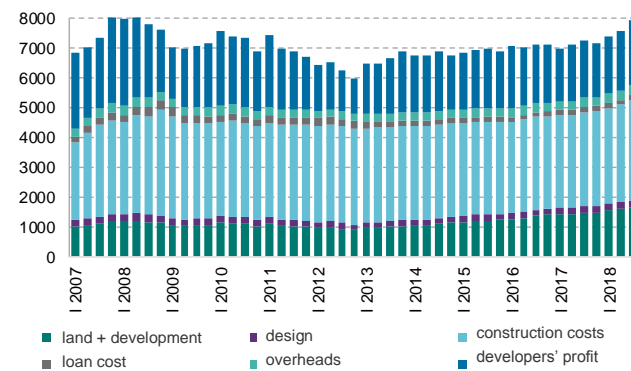
³² Half of the building (type 1122-302) monitored by NBP since 2016 Q2 based on Sekocenbud data: An average residential multi-family building, with an underground garage constructed in the technology: foundation footings, construction walls and ceilings - monolithic reinforced concrete, curtain walling - bricked walls of hollow MAX blocks. Change of the type of the analysed building is related to closing of the cost estimation of facility 1121. Analytical assumptions related to building 1121 have been maintained.

Figure 37 Predicted changes in prices of construction and assembly works (+3M) and growth in construction costs of usable area of a residential building (type 1122-302^{32/})



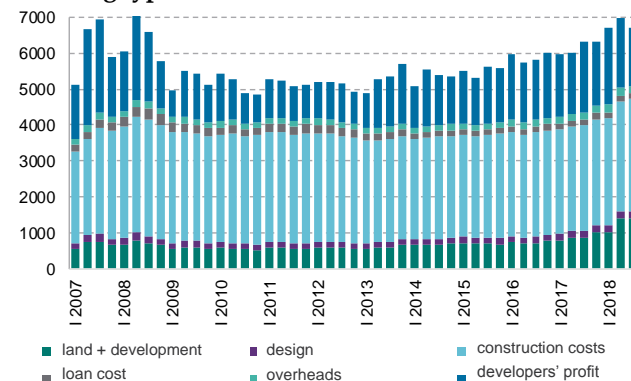
Source: NBP based on GUS data (business conditions survey), Sekocenbud

Figure 39 Warsaw – estimated structure of price per square meter of housing usable area in the PM (building type 1122-302^{32/}) for consumers



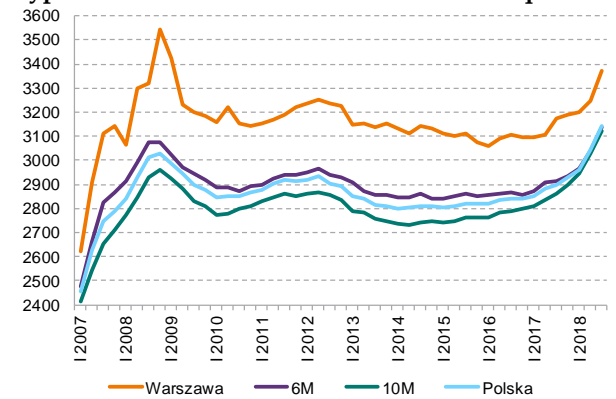
Source: NBP based on Sekocenbud, REAS

Figure 41 Gdańsk – estimated structure of price per square meter of housing usable area in the PM (building type 1122-302^{32/}) for consumers



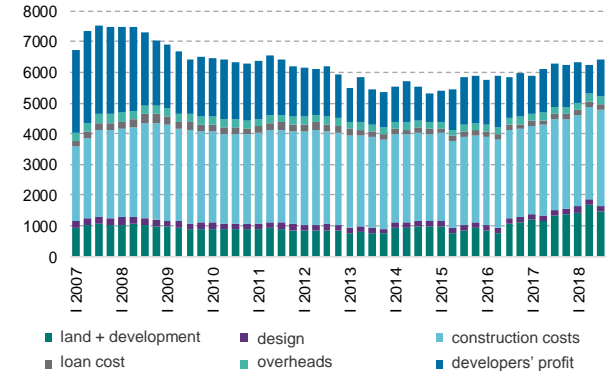
Source: NBP based on Sekocenbud, REAS

Figure 38 Average cost of construction of square meter of the residential building's usable area (type 1122-302^{32/}) in selected markets (PLN/sq.m)



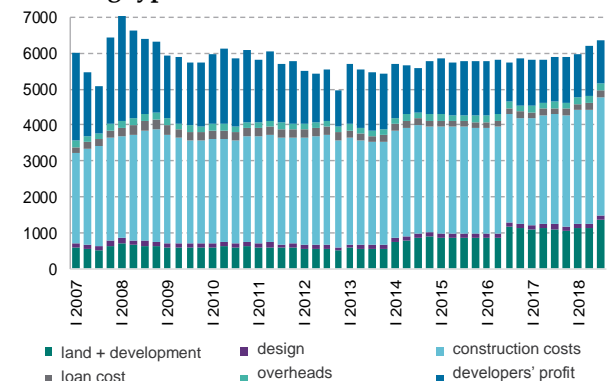
Source: NBP based on Sekocenbud

Figure 40 Kraków – estimated structure of price per square meter of housing usable area in the PM (building type 1122-302^{32/}) for consumers



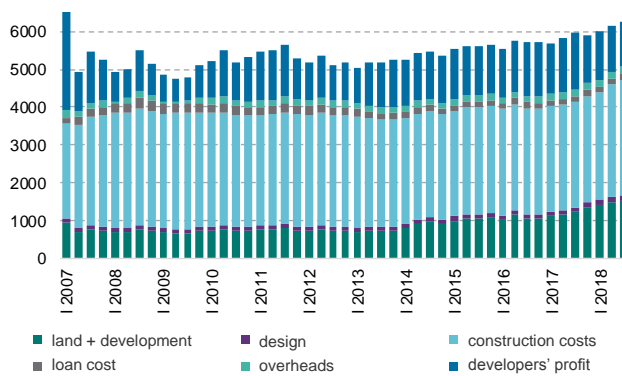
Source: NBP based on Sekocenbud, REAS

Figure 42 Poznań – estimated structure of price per square meter of housing usable area in the PM (building type 1122-302^{32/}) for consumers



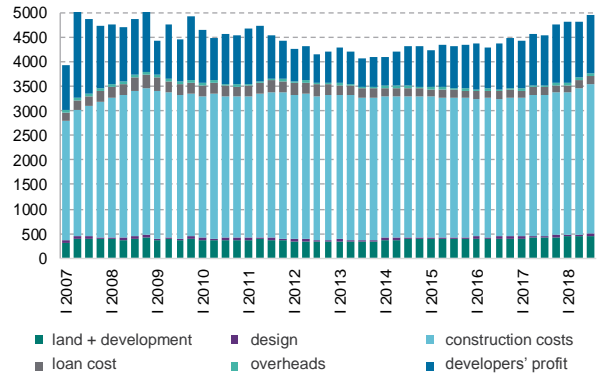
Source: NBP based on Sekocenbud, REAS

Figure 43 Wrocław – estimated structure of price per square meter of housing usable area in the PM (building type 1122-302³²⁾ for consumers



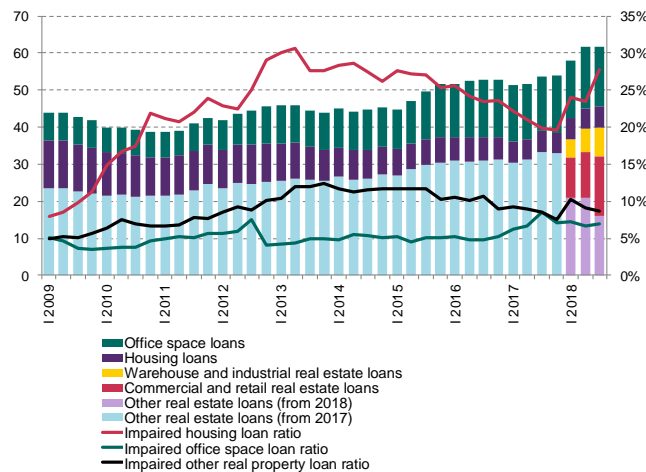
Source: NBP based on Sekocenbud, REAS

Figure 44 Łódź – estimated structure of price per square meter of housing usable area in the PM (building type 1122-302³²⁾ for consumers



Source: NBP based on Sekocenbud, REAS

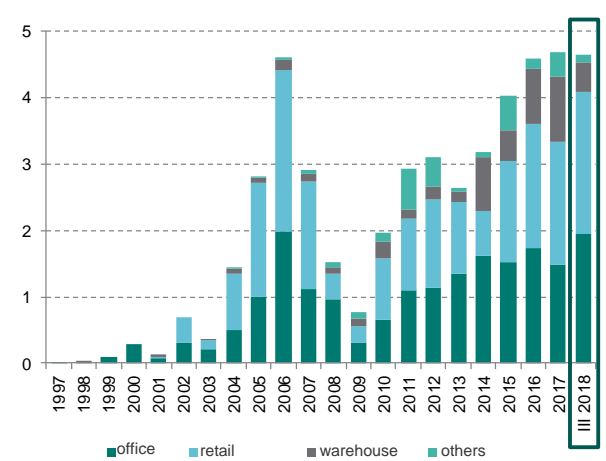
Figure 45 Loans to corporations for real estate purchases (in PLN billion, left-hand scale) and the share of loans recognised as non-performing loans (in % right-hand scale)



Note: Data exclusive of BGK. Since the beginning of 2018, new accounting standards have been applicable.

Source: NBP

Figure 46 Value of investment transactions (EUR billion)



Source: Comparables.pl

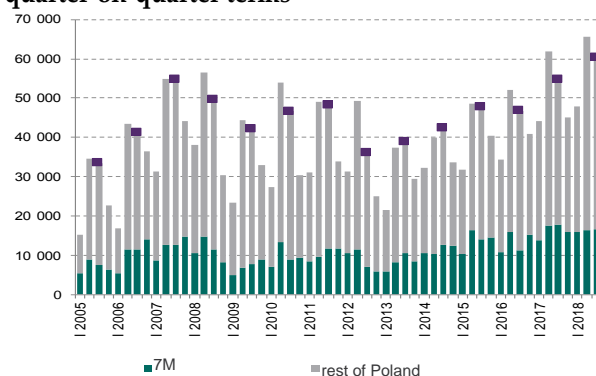
5. Residential construction and the housing market in Poland's selected cities

Figure 47 Structure of residential construction investors in Poland in two quarters of the years 2015-2018



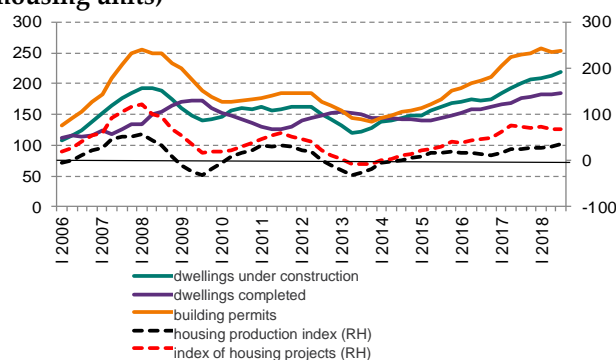
Source: GUS

Figure 49 Housing units under construction in Poland, in quarter-on-quarter terms



Source: GUS

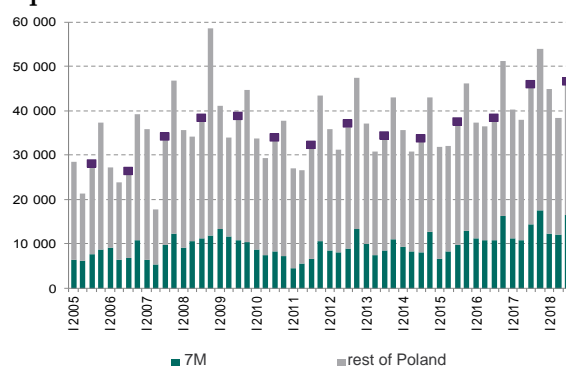
Figure 51 Housing construction (thousand housing units) and home construction indicator in Poland (housing units under construction minus completed housing units)



Note: rolling averages for four subsequent quarters.

Source: NBP based on PABB and GUS

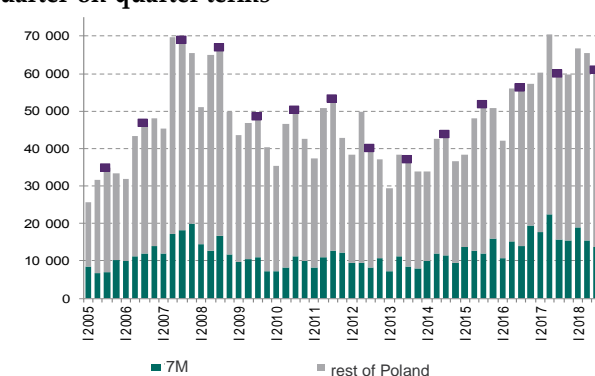
Figure 48 Completed dwellings in Poland, in quarter-on-quarter terms



Note to Figures 48-50: in violet colour only second quarters have been marked.

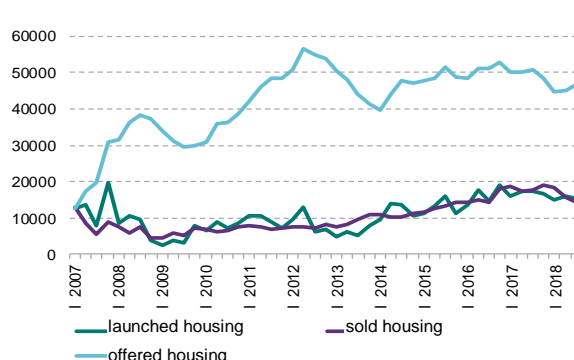
Source: GUS

Figure 50 Issued building permits in Poland, in quarter-on-quarter terms



Source: GUS

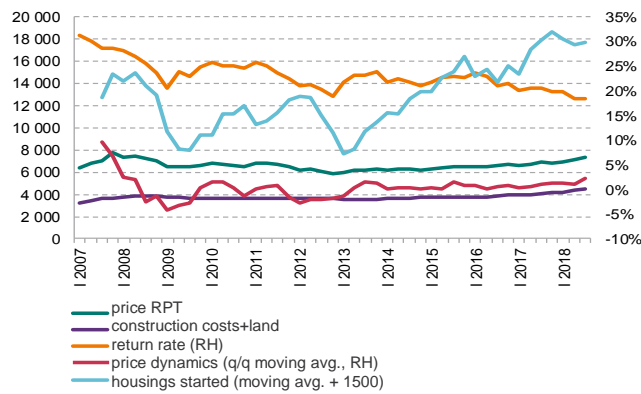
Figure 52 Number of dwellings put on the market, both sold and offered for sale in Poland's 6 largest markets*



*/Warsaw, Kraków, Tricity, Wrocław, Poznań, Łódź.

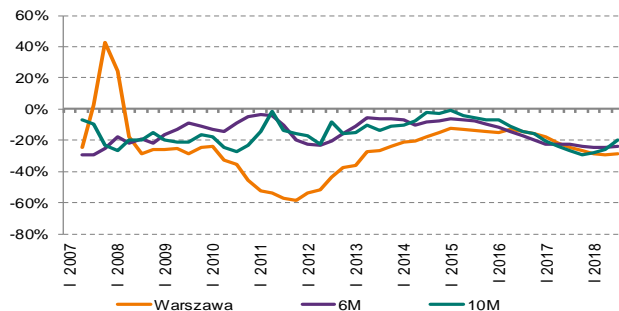
Source: REAS/JLL

Figure 53 Housing supply and estimated rate of return on housing investment in the PM in 7M



Source: NBP, GUS, REAS, Sekocenbud

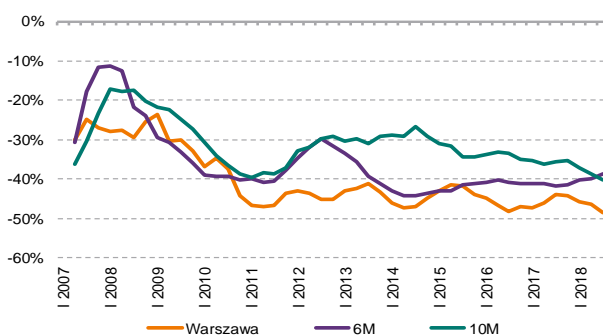
Figure 55 Measure of adjustment of housing units on offer to demand in terms of area ≤ 50 sq. m, PM in selected cities in Poland



Note: Figure 55 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 56 is parallel for the space above 50 sq.m. Figures 57-58 are parallel, but they concern the SM only.

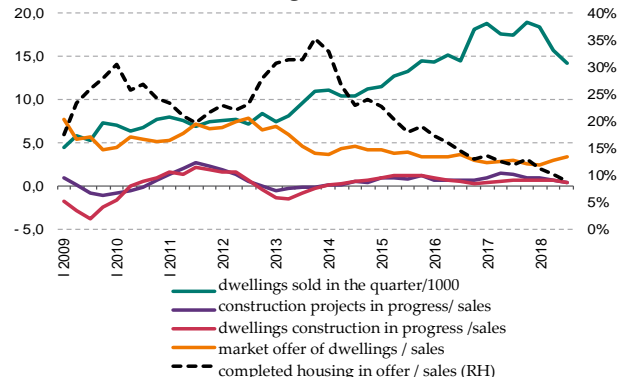
Source: NBP

Figure 57 Measure of adjustment of housing units on offer to demand* in terms of area ≤ 50 sq. m, SM in selected cities



Source: NBP

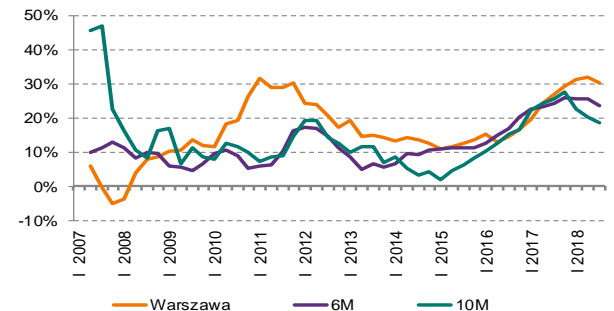
Figure 54 Housing projects and dwellings under construction and dwellings offered for sale in 7M



Note to Figure 54: Housing projects under construction=building permits for housing units minus completed housing units; housing units under construction=housing units whose construction has begun minus completed housing units; cumulative values of the last 4 quarters, divided by sales in the given period.

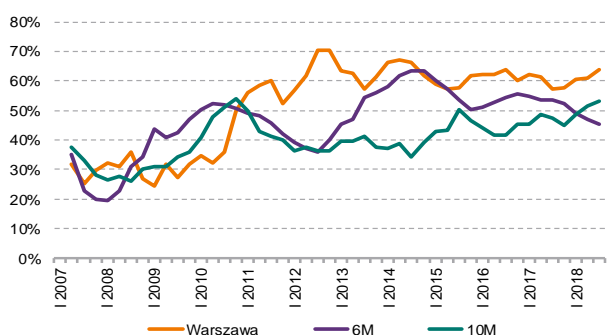
Source: NBP based on GUS

Figure 56 Measure of adjustment of housing units on offer to demand in terms of area > 50 sq. m, PM in selected cities in Poland



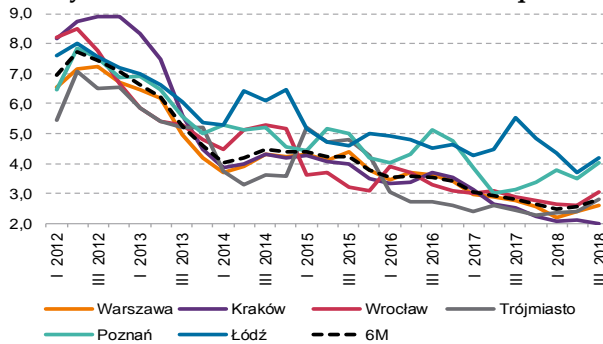
Source: NBP

Figure 58 Measure of adjustment of housing units on offer to demand* in terms of area > 50 sq. m, SM in selected cities



Source: NBP

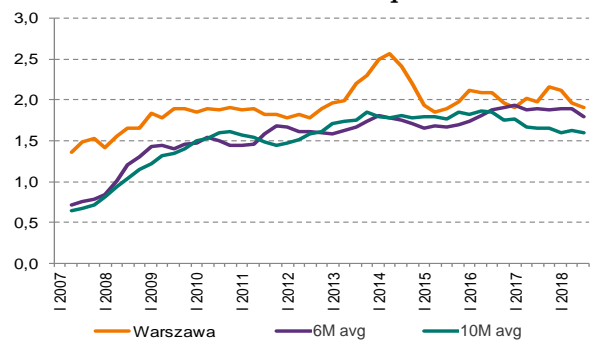
Figure 59 Selling time of dwellings on offer in the primary market in selected cities (number of quarters)



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 REAS

Figure 60 Selling time of housing units on offer in the SM in selected cities (number of quarters)

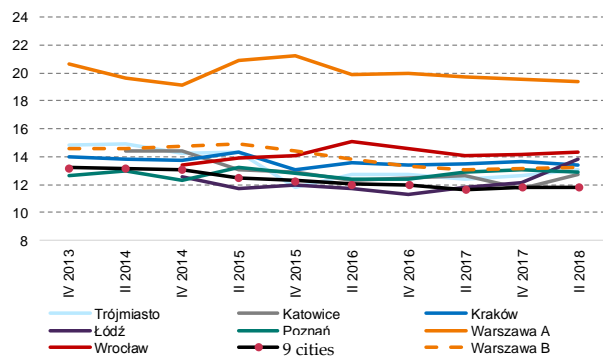


Note: real selling time, average of the last four quarters; data are not comparable with Figure 59. Selling time of housing in the secondary real estate market take into account only transactions concluded with sales. The data are underestimated since they do not contain offers entered but not sold yet..

Source: NBP

6. Rents and transaction prices of commercial real estate

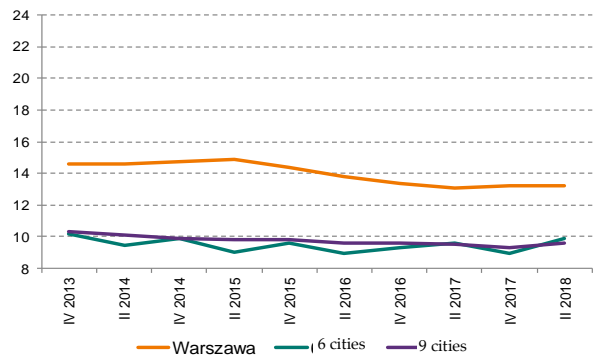
Figure 61 Transaction rents for A class office space (average prices in EUR/sq.m./month)



Note: Warsaw A - office A class office buildings, Warsaw B - office B class office buildings. The nine cities include: Białystok, Bydgoszcz, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin, Wrocław.

Source: NBP

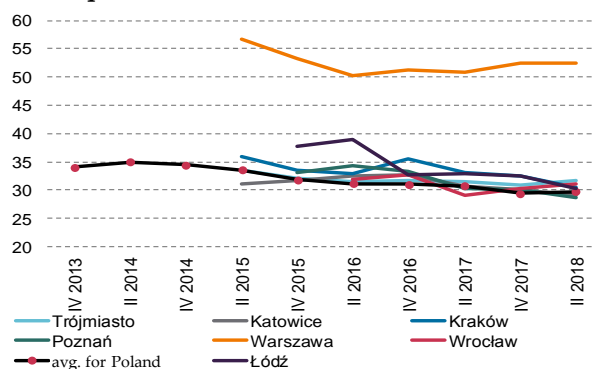
Figure 62 Transaction rents for B class office space (average prices in EUR/sq.m./month)



Note: The six cities include: Katowice, Kraków, Łódź, Poznań, Tri City, Wrocław. The nine cities include: Białystok, Bydgoszcz, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin, Wrocław.

Source: NBP

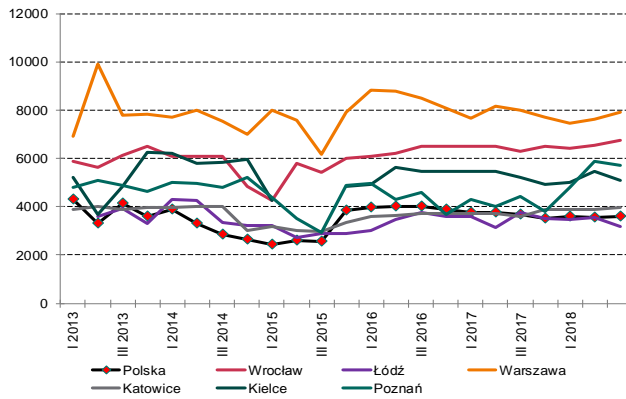
Figure 63 Transaction rents for retail space in shopping centres (shopping malls) with an area of 100-500 sq. m (EUR/sq.m./month)



Source: NBP

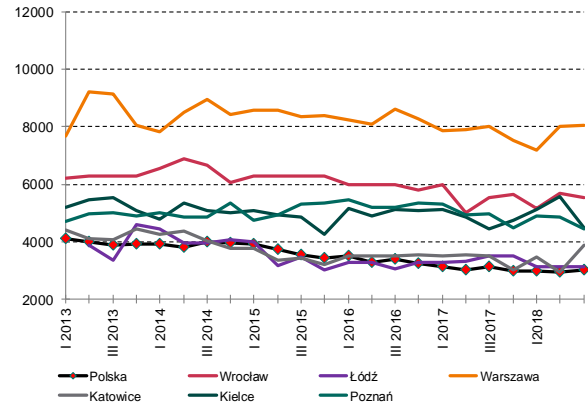
Note to Figure 69: as of the beginning of 2015 Q4, the number of records in the base, including respondents, has increased significantly, consequently changing the analysed sample. Rents for facilities located in economically significant parts of the city are analysed.

Figure 64 Median of offer selling price of small retail and service premises in the SM (PLN/sq.m)



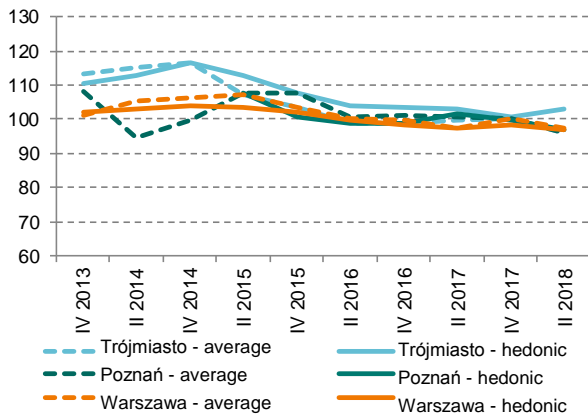
Source: PONT, NBP report

Figure 65 Median of offer selling price of small retail and service premises in the SM (PLN/sq.m)



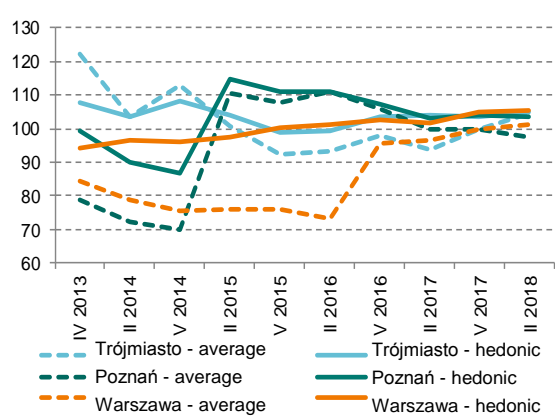
Source: PONT, NBP report

Figure 66 Index of rents for offices, average and hedonic (2017 IV = 100)



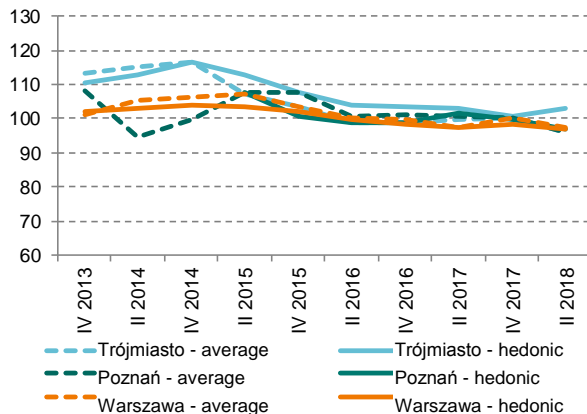
Source: NBP

Figure 67 Index of rents for shopping centres, average and hedonic (2017 IV = 100)



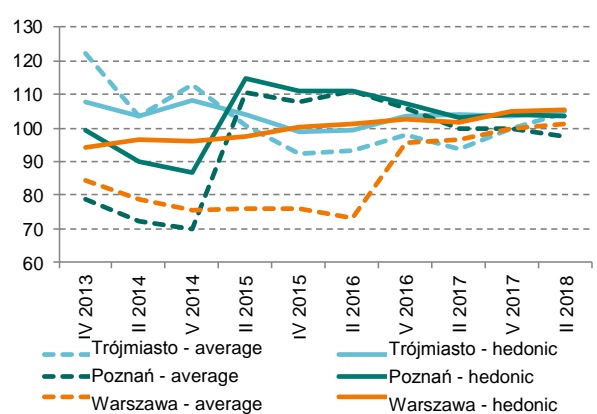
Source: NBP

Figure 68 Index of rents for offices, average and hedonic (2017 IV = 100)



Source: NBP

Figure 69 Index of rents for shopping centres, average and hedonic (2017 IV = 100)



Source: NBP port

Table 2 Estimated rate of return on equity from investment in B 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 (LTC = 50%)	ROE (LTC = 80%)	Average market rates of 10-year Treasury bonds
2013 Q4	14.6	2309	7.6%	7.0%	5.1%	10.1%	4.3%
2014 Q2	15.0	2163	8.3%	7.0%	5.7%	11.9%	3.9%
2014 Q4	15.0	2163	8.3%	7.0%	5.7%	11.9%	2.9%
2015 Q2	15.2	2496	7.3%	7.0%	5.1%	10.0%	2.5%
2015 Q4	15.0	2496	7.2%	7.0%	4.9%	9.5%	2.9%
2016 Q2	14.8	2489	7.1%	6.5%	4.8%	9.3%	3.0%
2016 Q4	14.9	2489	7.2%	6.5%	4.9%	9.4%	3.1%
2017 Q2	14.7	2700	6.5%	6.0%	4.3%	7.7%	3.2%
2017 Q4	15.0	2700	6.6%	6.0%	4.5%	8.1%	3.3%
2018 Q2	14.8	3000	6.1%	6.0%	3.9%	6.5%	2.7%

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

Table 3 Average prices of housing sq. m in the PM in Gdańsk

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	7 329	6 816	7 371	6 829	8 054	7 255	8 422	7 543	8 293	7 257
growth (q-o-q)	108,2	104,9	100,6	100,2	109,3	106,2	104,6	104,0	98,5	96,2
growth (y-o-y)	112,1	108,5	112,5	105,4	124,6	112,8	124,3	116,0	113,2	106,5
dwellings price range	3 656	1 669	3 503	1 817	3 990	1 566	3 371	1 524	4 337	1 463
<=4 000 PLN/sq.m	23	14	8	7	3	5	5	5	8	7
(4 001; 6 000] PLN/sq.m	1 284	535	1 122	688	1 042	611	884	516	1 377	491
(6 001; 8 000] PLN/sq.m	1 105	715	1 285	640	1 373	427	1 096	502	1 285	567
(8 001; 10 000] PLN/sq.m	924	366	780	449	950	405	741	353	636	278
>10 001 PLN/sq.m	320	39	308	33	622	118	645	148	1 031	120
dwellings space range	3 656	1 669	3 503	1 817	3 990	1 566	3 371	1 524	4 333	1 463
<= 40 sq.m	584	511	491	500	630	398	468	437	667	340
(40,1; 60] sq.m	1650	756	1485	889	1675	694	1392	664	1851	646
(60,1; 80] sq.m	1151	326	1243	363	1367	392	1212	346	1420	402
> 80,1 sq.m	271	76	284	65	318	82	299	77	395	75
average price of 1 sq.m. of dwelling	7 329	6 816	7 371	6 829	8 054	7 255	8 422	7 543	8 293	7 257
<=4 000 sq.m	7 587	6 909	7 524	6 882	9 322	7 939	10 883	8 747	9 483	7 395
(40,1; 60] sq.m	7 019	6 751	7 030	6 752	7 738	6 952	8 044	6 815	8 018	7 133
(60,1; 80] sq.m	7 102	6 674	7 179	6 742	7 500	7 007	7 570	7 147	7 698	7 126
> 80,1 sq.m	9 627	7 450	9 731	7 977	9 587	7 683	9 779	8 775	9 712	8 397
average offer price deviation	7,5%	x	7,9%	x	11,0%	x	11,6%	x	14,3%	x
<= 40 sq.m	9,8%	x	9,3%	x	17,4%	x	24,4%	x	28,2%	x
(40,1; 60] sq.m	4,0%	x	4,1%	x	11,3%	x	18,0%	x	12,4%	x
(60,1; 80] sq.m	6,4%	x	6,5%	x	7,0%	x	5,9%	x	8,0%	x
> 80,1 sq.m	29,2%	x	22,0%	x	24,8%	x	11,4%	x	15,7%	x

Source: NBP

Table 4 Average prices of housing sq. m in the SM in Gdańsk

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	7 035	6 065	7 345	6 337	7 712	6 448	8 570	6 563	8 593	7 115
growth (q-o-q)	100,9	100,6	104,4	104,5	105,0	101,8	111,1	101,8	100,3	108,4
growth (y-o-y)	113,0	109,2	113,8	113,0	117,5	111,6	123,0	108,8	122,1	117,3
dwellings price range	1 098	968	1 182	899	1 043	723	744	857	1 833	1 258
<=4 000 PLN/sq.m	41	65	30	39	27	25	10	39	11	34
(4 001; 6 000] PLN/sq.m	438	476	378	407	306	293	144	320	320	345
(6 001; 8 000] PLN/sq.m	367	330	466	337	362	310	256	360	650	561
(8 001; 10 000] PLN/sq.m	108	66	125	73	141	58	124	94	377	218
>10 001 PLN/sq.m	144	31	183	43	207	37	210	44	475	100
dwellings space range	1 098	968	1 182	899	1 043	723	744	857	1 833	1 258
<= 40 sq.m	153	223	164	203	164	174	101	190	300	316
(40,1; 60] sq.m	378	421	460	398	362	321	247	374	668	558
(60,1; 80] sq.m	335	210	324	203	299	163	216	178	529	308
> 80,1 sq.m	232	114	234	95	218	65	180	115	336	76
average price of 1 sq.m. of dwelling	7 035	6 065	7 345	6 337	7 712	6 448	8 570	6 563	8 593	7 115
<=4 000 sq.m	7 494	6 637	8 011	7 037	8 459	7 078	9 143	7 206	9 161	7 653
(40,1; 60] sq.m	7 142	6 063	7 469	6 301	7 882	6 447	8 831	6 609	8 900	7 098
(60,1; 80] sq.m	6 937	5 619	7 223	5 814	7 234	5 930	7 998	6 120	8 027	6 742
> 80,1 sq.m	6 700	5 778	6 805	6 111	7 523	6 064	8 577	6 035	8 366	6 519
average offer price deviation	16,0%	x	15,9%	x	19,6%	x	30,6%	x	20,8%	x
<= 40 sq.m	12,9%	x	13,8%	x	19,5%	x	26,9%	x	19,7%	x
(40,1; 60] sq.m	17,8%	x	18,5%	x	22,3%	x	33,6%	x	25,4%	x
(60,1; 80] sq.m	23,5%	x	24,2%	x	22,0%	x	30,7%	x	19,1%	x
> 80,1 sq.m	16,0%	x	11,4%	x	24,1%	x	42,1%	x	28,3%	x

Source: NBP

Table 5 Average prices of housing sq. m in the PM in Kraków

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	6 931	6 810	6 924	6 755	6 907	6 840	6 901	6 744	7 042	6 915
growth (q-o-q)	102,7	103,4	99,9	99,2	99,8	101,3	99,9	98,6	102,0	102,5
growth (y-o-y)	106,2	108,1	103,2	104,7	104,4	107,3	102,3	102,4	101,6	101,5
dwelling price range	5 916	1 689	5 757	2 292	4 195	1 942	4 192	1 772	3 864	1 629
<=4 000 PLN/sq.m	7	2	6	0	8	2	7	4	1	2
(4 001; 6 000] PLN/sq.m	1 536	530	1 483	722	1 162	646	1 020	498	870	356
(6 001; 8 000] PLN/sq.m	3 359	860	3 303	1 263	2 322	928	2 494	1 024	2 226	986
(8 001; 10 000] PLN/sq.m	821	269	752	264	536	309	568	216	610	249
>10 001 PLN/sq.m	193	28	213	43	167	57	103	30	157	36
dwelling space range	5 916	1 689	5 757	2 292	4 195	1 942	4 192	1 772	3 864	1 629
<= 40 sq.m	1126	513	991	609	610	493	608	404	561	410
(40,1; 60] sq.m	3312	857	3266	1235	2312	1052	2293	960	2062	888
(60,1; 80] sq.m	1125	245	1157	355	979	321	1018	331	980	252
> 80,1 sq.m	353	74	343	93	294	76	273	77	261	79
average price of 1 sq.m. of dwelling	6 931	6 810	6 924	6 755	6 907	6 840	6 901	6 744	7 042	6 915
<=4 000 sq.m	7600	7263	7527	7284	7592	7424	7487	7017	7559	7218
(40,1; 60] sq.m	6630	6472	6695	6502	6681	6571	6735	6596	6919	6765
(60,1; 80] sq.m	6884	6902	6928	6529	6902	6755	6904	6773	6936	6850
> 80,1 sq.m	7782	7287	7349	7524	7278	7140	6981	7026	7299	7240
average offer price deviation	1,8%	x	2,5%	x	1,0%	x	2,3%	x	1,8%	x
<= 40 sq.m	4,6%	x	3,3%	x	2,3%	x	6,7%	x	4,7%	x
(40,1; 60] sq.m	2,4%	x	3,0%	x	1,7%	x	2,1%	x	2,3%	x
(60,1; 80] sq.m	-0,3%	x	6,1%	x	2,2%	x	1,9%	x	1,3%	x
> 80,1 sq.m	6,8%	x	-2,3%	x	1,9%	x	-0,6%	x	0,8%	x

Source: NBP

Table 6 Average prices of housing sq. m in the SM in Kraków

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	7 205	6 347	7 593	6 276	7 767	6 215	8 006	6 400	8 059	6 621
growth (q-o-q)	103,0	105,1	105,4	98,9	102,3	99,0	103,1	103,0	100,7	103,5
growth (y-o-y)	105,4	109,1	109,9	105,5	113,2	103,9	114,5	106,0	111,9	104,3
dwelling price range	766	475	1 505	402	906	361	1 245	278	1 115	318
<=4 000 PLN/sq.m	0	0	1	12	0	2	1	3	0	0
(4 001; 6 000] PLN/sq.m	214	222	341	186	160	177	211	123	153	127
(6 001; 8 000] PLN/sq.m	350	200	700	157	442	142	554	119	501	144
(8 001; 10 000] PLN/sq.m	145	40	287	36	190	31	285	27	298	36
>10 001 PLN/sq.m	57	13	176	11	114	9	194	6	163	11
dwelling space range	766	475	1 505	402	906	361	1 245	278	1 115	318
<= 40 sq.m	155	187	305	164	203	116	255	107	232	130
(40,1; 60] sq.m	302	215	591	159	365	178	474	108	442	145
(60,1; 80] sq.m	214	59	380	69	229	55	309	51	264	35
> 80,1 sq.m	95	14	229	10	109	12	207	12	177	8
average price of 1 sq.m. of dwelling	7 205	6 347	7 593	6 276	7 767	6 215	8 006	6 399	8 059	6 621
<=4 000 sq.m	8 079	6 758	8 837	6 761	8 881	6 768	9 037	7 148	8 678	7 026
(40,1; 60] sq.m	6 824	6 123	7 173	5 905	7 427	6 055	7 623	6 007	7 857	6 400
(60,1; 80] sq.m	7 020	6 006	7 229	6 112	7 167	5 668	7 554	5 847	7 814	6 240
> 80,1 sq.m	7 405	5 759	7 626	5 348	8 093	5 745	8 288	5 605	8 120	5 716
average offer price deviation	13,5%	x	21,0%	x	25,0%	x	25,1%	x	21,7%	x
<= 40 sq.m	19,6%	x	30,7%	x	31,2%	x	26,4%	x	23,5%	x
(40,1; 60] sq.m	11,5%	x	21,5%	x	22,6%	x	26,9%	x	22,8%	x
(60,1; 80] sq.m	16,9%	x	18,3%	x	26,4%	x	29,2%	x	25,2%	x
> 80,1 sq.m	28,6%	x	42,6%	x	40,9%	x	47,9%	x	42,0%	x

Source: NBP

Table 7 Average prices of housing sq. m in the PM in Łódź

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	5 147	4 911	5 332	5 148	5 524	5 211	5 475	5 206	5 528	5 355
growth (q-o-q)	99,4	99,4	102,9	104,2	107,3	106,1	99,1	99,9	101,0	102,9
growth (y-o-y)	105,0	103,9	108,8	108,9	108,1	107,4	105,7	105,4	107,4	109,0
dwelling price range	1 881	352	2 015	435	1 574	328	1 457	475	1 902	483
<=4 000 PLN/sq.m	1	3	0	3	2	1	2	1	2	4
(4 001; 4 500] PLN/sq.m	104	50	67	31	65	31	67	27	18	6
(4 501; 5 000] PLN/sq.m	709	186	477	162	268	122	275	195	225	111
(5 001; 5 500] PLN/sq.m	648	69	862	135	626	69	595	130	953	208
(5 501; 6 000] PLN/sq.m	302	25	339	62	291	73	211	54	322	100
> 6 001 PLN/sq.m	117	19	270	42	322	32	307	68	382	54
dwelling space range	1 881	352	2 015	435	1 574	328	1 457	475	1 903	482
<= 40 sq.m	189	82	228	126	166	54	129	79	268	89
(40,1; 60] sq.m	839	175	904	211	742	166	692	213	928	263
(60,1; 80] sq.m	676	82	699	78	527	88	500	145	575	109
> 80,1 sq.m	177	13	184	20	139	20	136	38	132	21
average price of 1 sq.m. of dwelling	5 147	4 911	5 332	5 148	5 524	5 211	5 475	5 206	5 527	5 356
<=4 000 sq.m	5 304	4 853	5 602	5 250	6 024	5 566	6 071	5 783	5 848	5 462
(40,1; 60] sq.m	5 135	4 938	5 354	5 152	5 546	5 126	5 539	5 234	5 492	5 343
(60,1; 80] sq.m	5 102	4 875	5 232	5 006	5 344	5 121	5 253	4 918	5 433	5 303
> 80,1 sq.m	5 208	5 130	5 266	5 011	5 489	5 354	5 402	4 950	5 524	5 350
average offer price deviation	4,8%	x	3,6%	x	6,0%	x	5,2%	x	3,2%	x
<= 40 sq.m	9,3%	x	6,7%	x	8,2%	x	5,0%	x	7,1%	x
(40,1; 60] sq.m	4,0%	x	3,9%	x	8,2%	x	5,8%	x	2,8%	x
(60,1; 80] sq.m	4,7%	x	4,5%	x	4,4%	x	6,8%	x	2,4%	x
> 80,1 sq.m	1,5%	x	5,1%	x	2,5%	x	9,1%	x	3,2%	x

Source: NBP

Table 8 Average prices of housing sq. m in the SM in Łódź

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	4 241	3 762	4 314	3 784	4 432	4 022	4 642	3 959	4 711	4 256
growth (q-o-q)	103,5	110,1	104,0	107,8	105,4	112,1	104,7	98,4	101,5	107,5
growth (y-o-y)	107,7	114,8	107,6	113,1	109,8	122,5	110,4	110,3	111,1	113,1
dwelling price range	829	123	629	144	631	115	598	112	892	123
<= 3 000 PLN/sq.m	68	18	44	19	27	13	19	11	32	9
(3 001; 3 500] PLN/sq.m	116	21	79	28	71	16	50	17	75	11
(3 501; 4 000] PLN/sq.m	202	38	152	47	133	35	95	35	109	32
(4 001; 4 500] PLN/sq.m	188	31	142	31	149	18	127	26	180	28
(4 500; 5 000] PLN/sq.m.	97	8	94	6	112	19	125	16	199	19
>] 5 001 PLN/sq.m	158	7	118	13	139	14	182	7	297	24
dwelling space range	829	123	629	144	631	115	598	112	892	123
<= 40 sq.m	122	45	91	48	62	32	66	30	114	33
(40,1; 60] sq.m	282	56	233	59	243	52	214	51	318	60
(60,1; 80] sq.m	190	14	140	23	154	20	153	18	203	21
> 80,1 sq.m	235	8	175	14	172	11	165	13	257	9
average price of 1 sq.m. of dwelling	4 241	3 762	4 314	3 784	4 432	4 022	4 642	3 959	4 711	4 256
<=4 000 sq.m	4 118	3 900	3 988	4 087	4 208	4 114	4 821	4 307	4 820	4 541
(40,1; 60] sq.m	4 252	3 868	4 434	3 688	4 576	4 157	4 775	3 896	4 777	4 287
(60,1; 80] sq.m	4 246	3 108	4 347	3 596	4 508	3 908	4 618	3 959	4 837	3 957
> 80,1 sq.m	4 289	3 393	4 305	3 458	4 243	3 320	4 420	3 406	4 480	3 700
average offer price deviation	12,7%	x	14,0%	x	10,2%	x	17,3%	x	10,7%	x
<= 40 sq.m	5,6%	x	-2,4%	x	2,3%	x	11,9%	x	6,1%	x
(40,1; 60] sq.m	9,9%	x	20,3%	x	10,1%	x	22,6%	x	11,4%	x
(60,1; 80] sq.m	36,6%	x	20,9%	x	15,4%	x	16,6%	x	22,2%	x
> 80,1 sq.m	26,4%	x	24,5%	x	27,8%	x	29,8%	x	21,1%	x

Source: NBP

Table 9 Average prices of housing sq. m in the PM in Poznań

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	6 479	6 379	6 551	6 382	6 678	6 427	6 865	6 699	6 959	6 853
growth (q-o-q)	100,7	101,9	101,1	100,1	101,9	100,7	102,8	104,2	101,4	102,3
growth (y-o-y)	100,4	103,0	102,3	101,2	103,9	102,6	106,7	107,0	107,4	107,4
dwelling price range	3 977	1 078	3 632	1 277	4 081	1 043	4 351	1 083	4 927	958
<=4 000 PLN/sq.m	8	4	9	3	8	3	6	5	6	5
(4 001; 6 000] PLN/sq.m	1 250	400	1 075	510	1 136	427	1 072	304	1 130	233
(6 001; 8 000] PLN/sq.m	2 512	632	2 259	703	2 541	529	2 738	646	3 019	610
(8 001; 10 000] PLN/sq.m	178	38	257	42	360	67	417	84	654	90
>10 001 PLN/sq.m	29	4	32	19	36	17	118	44	118	30
dwelling space range	3 977	1 078	3 632	1 277	4 081	1 043	4 351	1 083	4 927	958
<= 40 sq.m	578	242	517	314	585	199	775	208	835	217
(40,1; 60] sq.m	2329	587	2103	731	2424	588	2477	600	2669	543
(60,1; 80] sq.m	832	194	779	182	824	193	850	186	1076	149
> 80,1 sq.m	238	55	233	50	248	63	249	89	347	49
average price of 1 sq.m. of dwelling	6 479	6 379	6 551	6 382	6 678	6 427	6 865	6 699	6 959	6 853
<=4 000 sq.m	6 763	6 552	6 725	6 560	6 918	6 730	6 827	7 178	7 072	7 096
(40,1; 60] sq.m	6 439	6 323	6 506	6 321	6 607	6 335	6 840	6 551	6 926	6 767
(60,1; 80] sq.m	6 376	6 384	6 485	6 386	6 658	6 282	6 933	6 708	6 877	6 653
> 80,1 sq.m	6 548	6 195	6 783	6 149	6 864	6 768	7 003	6 554	7 190	7 339
average offer price deviation	1,6%	x	2,6%	x	3,9%	x	2,5%	x	1,5%	x
<= 40 sq.m	3,2%	x	2,5%	x	2,8%	x	-4,9%	x	-0,3%	x
(40,1; 60] sq.m	1,8%	x	2,9%	x	4,3%	x	4,4%	x	3,4%	x
(60,1; 80] sq.m	-0,1%	x	1,6%	x	6,0%	x	3,4%	x	4,1%	x
> 80,1 sq.m	5,7%	x	10,3%	x	1,4%	x	6,8%	x	-2,0%	x

Source: NBP

Table 10 Average prices of housing sq. m in the SM in Poznań

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	6 053	5 433	6 349	5 550	6 525	5 618	6 655	5 687	6 728	5 668
growth (q-o-q)	99,6	99,4	104,9	102,1	102,8	101,2	102,0	101,2	101,1	99,7
growth (y-o-y)	99,3	103,8	103,7	105,1	109,6	109,0	109,5	104,0	111,1	104,3
dwelling price range	547	993	448	806	374	945	317	663	260	446
<=4 000 PLN/sq.m	39	89	18	72	11	66	9	30	8	15
(4 001; 6 000] PLN/sq.m	284	630	203	461	148	578	121	403	92	272
(6 001; 8 000] PLN/sq.m	160	243	160	253	159	267	132	208	116	154
(8 001; 10 000] PLN/sq.m	51	27	54	17	45	28	42	16	27	4
>10 001 PLN/sq.m	13	4	13	3	11	6	13	6	17	1
dwelling space range	547	993	448	806	374	945	317	663	260	446
<= 40 sq.m	70	291	51	254	52	273	41	198	34	143
(40,1; 60] sq.m	186	453	169	355	141	416	116	294	95	198
(60,1; 80] sq.m	143	183	108	145	93	192	92	125	70	89
> 80,1 sq.m	148	66	120	52	88	64	68	46	61	16
average price of 1 sq.m. of dwelling	6053	5433	6349	5550	6525	5618	6655	5687	6728	5668
<=4 000 sq.m	6387	6029	6895	6023	7165	5986	7478	6200	7704	6218
(40,1; 60] sq.m	6330	5398	6527	5516	6823	5660	6734	5650	6611	5634
(60,1; 80] sq.m	5763	4914	6096	5068	6279	5243	6481	5248	6780	4973
> 80,1 sq.m	5826	4485	6095	4808	5927	4911	6257	4917	6295	5053
average offer price deviation	11,4%	x	14,4%	x	16,1%	x	17,0%	x	18,7%	x
<= 40 sq.m	5,9%	x	14,5%	x	19,7%	x	20,6%	x	23,9%	x
(40,1; 60] sq.m	17,3%	x	18,3%	x	20,6%	x	19,2%	x	17,3%	x
(60,1; 80] sq.m	17,3%	x	20,3%	x	19,8%	x	23,5%	x	36,5%	x
> 80,1 sq.m	29,9%	x	26,8%	x	20,7%	x	27,3%	x	24,6%	x

Source: NBP

Table 11 Average prices of housing sq. m in the PM in Warszawa

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	7 788	7 820	8 020	7 751	8 200	7 965	8 608	8 186	8 880	8 560
growth (q-o-q)	100,6	101,8	103,0	99,1	102,2	102,8	105,0	102,8	103,2	104,6
growth (y-o-y)	100,2	101,6	105,0	100,8	106,4	105,3	111,2	106,6	114,0	109,5
dwelling price range	14 288	4 606	13 587	5 455	11 797	4 857	13 110	4 415	13 925	3 937
<=4 000 PLN/sq.m	0	0	0	2	0	0	0	0	0	0
(4 001; 6 000] PLN/sq.m	888	252	958	393	692	259	602	208	534	96
(6 001; 8 000] PLN/sq.m	8 251	2 507	7 583	3 008	6 195	2 600	5 649	2 115	5 076	1 649
(8 001; 10 000] PLN/sq.m	4 290	1 577	3 745	1 731	3 650	1 599	4 697	1 681	5 334	1 553
>10 001 PLN/sq.m	859	270	1 301	321	1 260	399	2 162	411	2 981	639
dwelling space range	14 288	4 606	13 587	5 455	11 797	4 857	13 110	4 415	13 925	3 937
<= 40 sq.m	1 708	1 066	1 713	1 288	1 358	976	1 575	862	1 812	831
(40,1; 60] sq.m	6 282	2 227	5 978	2 582	5 065	2 381	5 585	2 125	5 860	1 852
(60,1; 80] sq.m	4 571	938	4 220	1 148	3 946	1 099	4 368	1 068	4 548	923
> 80,1 sq.m	1 727	375	1 676	437	1 428	401	1 582	360	1 705	331
average price of 1 sq.m. of dwelling	7 788	7 820	8 020	7 751	8 200	7 965	8 608	8 186	8 880	8 560
<=4 000 sq.m	7 662	8 015	9 290	7 894	9 599	8 366	10 019	8 587	10 357	9 214
(40,1; 60] sq.m	7 672	7 687	7 651	7 648	7 906	7 747	8 363	7 983	8 604	8 360
(60,1; 80] sq.m	7 784	7 744	7 820	7 584	7 937	7 860	8 197	8 073	8 461	8 133
> 80,1 sq.m	8 349	8 244	8 540	8 374	8 637	8 570	9 204	8 763	9 378	9 228
average offer price deviation	-0,4%	x	3,5%	x	2,9%	x	5,2%	x	3,7%	x
<= 40 sq.m	-4,4%	x	17,7%	x	14,7%	x	16,7%	x	12,4%	x
(40,1; 60] sq.m	-0,2%	x	0,0%	x	2,1%	x	4,8%	x	2,9%	x
> 80,1 sq.m	1,3%	x	2,0%	x	0,8%	x	5,0%	x	1,6%	x

Source: NBP

Table 12 Average prices of housing sq. m in the SM in Warszawa

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	9 009	8 020	9 235	7 592	9 346	7 910	9 347	7 996	9 612	8 175
growth (q-o-q)	101,4	201,5	102,5	95,4	101,2	98,2	100,0	101,1	102,8	102,2
growth (y-o-y)	102,6	109,7	106,0	100,5	106,0	106,5	105,2	102,2	106,7	101,9
dwelling price range	4 764	3 297	3 499	1 206	3 312	2 294	3 338	1 449	2 996	1 272
<=4 000 PLN/sq.m	0	2	0	0	0	1	0	2	0	1
(4 001; 6 000] PLN/sq.m	335	428	229	188	190	341	146	175	144	122
(6 001; 8 000] PLN/sq.m	1 618	1 456	1 073	586	1 019	990	1 033	663	799	547
(8 001; 10 000] PLN/sq.m	1 618	949	1 183	332	1 118	670	1 136	419	1 020	413
>10 001 PLN/sq.m	1 193	462	1 014	100	985	292	1 023	190	1 033	189
dwelling space range	4 764	3 297	3 499	1 206	3 312	2 294	3 338	1 449	2 996	1 272
<= 40 sq.m	730	1 008	565	406	449	820	474	452	363	415
(40,1; 60] sq.m	1 674	1 429	1 253	542	1 187	963	1 268	628	1 050	543
(60,1; 80] sq.m	1 107	538	808	193	801	353	821	269	740	221
> 80,1 sq.m	1 253	322	873	65	875	158	775	100	843	93
average price of 1 sq.m. of dwelling	9 009	8 020	9 235	7 592	9 346	7 910	9 347	7 996	9 612	8 175
<=4 000 sq.m	9 450	8 345	9 818	8 180	9 923	8 531	10 139	8 791	10 435	8 853
(40,1; 60] sq.m	8 671	7 707	8 901	7 333	9 098	7 600	9 111	7 796	9 437	7 805
(60,1; 80] sq.m	8 514	7 607	8 692	7 042	8 930	7 123	8 780	7 221	9 072	7 621
> 80,1 sq.m	9 640	9 080	9 841	7 703	9 768	8 331	9 849	7 908	9 950	8 632
average offer price deviation	12,3%	x	14,7%	x	18,2%	x	16,9%	x	17,6%	x
<= 40 sq.m	13,3%	x	16,3%	x	16,3%	x	15,3%	x	17,9%	x
(40,1; 60] sq.m	12,5%	x	14,6%	x	19,7%	x	17,3%	x	20,9%	x
(60,1; 80] sq.m	11,9%	x	13,5%	x	25,4%	x	21,6%	x	19,0%	x
> 80,1 sq.m	6,2%	x	12,5%	x	17,3%	x	24,5%	x	15,3%	x

Source: NBP

Table 13 Average prices of housing sq. m in the PM in Wrocław

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	6 390	6 433	6 526	6 389	6 745	6 508	7 020	6 651	7 145	6 750
growth (q-o-q)	98,9	101,9	102,1	99,3	103,4	101,9	104,1	102,2	101,8	101,5
growth (y-o-y)	100,9	104,4	101,3	103,7	104,4	106,1	108,7	105,3	111,8	104,9
dwelling price range	5 343	1 751	5 853	2 156	5 538	1 633	5 777	1 676	5 510	1 614
<=4 000 PLN/sq.m	9	7	7	2	1	1	7	1	7	7
(4 001; 6 000] PLN/sq.m	2 338	762	2 451	875	2 125	583	1 955	653	1 568	498
(6 001; 8 000] PLN/sq.m	2 456	778	2 719	1 077	2 482	901	2 469	787	2 503	874
(8 001; 10 000] PLN/sq.m	419	155	509	179	731	131	1 018	172	1 124	212
>10 001 PLN/sq.m	121	49	167	23	200	17	328	63	315	23
dwelling space range	5 343	1 751	5 853	2 156	5 538	1 633	5 777	1 676	5 510	1 614
<= 40 sq.m	593	365	752	374	752	289	949	292	921	302
(40,1; 60] sq.m	2781	907	2900	1171	2752	824	2739	821	2621	828
(60,1; 80] sq.m	1606	412	1805	511	1694	442	1753	474	1643	400
> 80,1 sq.m	363	67	396	100	340	78	336	89	325	84
average price of 1 sq.m. of dwelling	6 390	6 433	6 526	6 389	6 745	6 508	7 020	6 651	7 145	6 750
<=4 000 sq.m	7082	7432	7010	6986	7469	6945	8279	7152	8397	7419
(40,1; 60] sq.m	6358	6239	6508	6369	6713	6420	6861	6573	7008	6579
(60,1; 80] sq.m	6160	5998	6335	5969	6469	6377	6566	6474	6613	6626
> 80,1 sq.m	6515	6300	6614	6547	6774	6564	7136	6674	7396	6626
average offer price deviation	-0,7%	x	2,1%	x	3,6%	x	5,5%	x	5,9%	x
<= 40 sq.m	-4,7%	x	0,3%	x	7,5%	x	15,7%	x	13,2%	x
(40,1; 60] sq.m	1,9%	x	2,2%	x	4,6%	x	4,4%	x	6,5%	x
(60,1; 80] sq.m	2,7%	x	6,1%	x	1,4%	x	1,4%	x	-0,2%	x
> 80,1 sq.m	3,4%	x	1,0%	x	3,2%	x	6,9%	x	11,6%	x

Source: NBP

Table 14 Average prices of housing sq. m in the SM in Wrocław

specification	III Q 2017		IV Q 2017		I Q 2018		II Q 2018		III Q 2018	
	offer	trans.	offer	trans.	offer	trans.	offer	trans.	offer	trans.
average price (PLN/sq.m.)	6 293	5 764	6 365	5 906	6 423	5 841	6 485	6 077	6 491	6 159
growth (q-o-q)	100,4	105,9	101,2	102,5	100,9	98,9	101,0	104,0	100,1	101,3
growth (y-o-y)	103,8	108,1	103,3	107,8	102,7	108,4	103,5	111,6	103,1	106,9
dwelling price range	1 542	254	1 512	294	1 406	289	1 544	272	1 554	248
<=4 000 PLN/sq.m	29	17	25	13	20	12	18	7	19	4
(4 001; 6 000] PLN/sq.m	749	136	715	148	648	159	686	141	676	113
(6 001; 8 000] PLN/sq.m	615	89	609	115	580	105	649	103	667	113
(8 001; 10 000] PLN/sq.m	102	12	108	17	99	12	125	19	131	14
>10 001 PLN/sq.m	47		55	1	59	1	66	2	61	4
dwelling space range	1 542	254	1 512	294	1 406	289	1 544	272	1 554	248
<= 40 sq.m	220	55	227	65	206	48	231	41	233	37
(40,1; 60] sq.m	598	118	599	128	561	123	592	122	606	111
(60,1; 80] sq.m	468	61	441	73	418	80	477	83	482	78
> 80,1 sq.m	256	20	245	28	221	38	244	26	233	22
average price of 1 sq.m. of dwelling	6 293	5 764	6 365	5 906	6 423	5 841	6 485	6 077	6 491	6 159
<=4 000 sq.m	7 140	6 524	7 175	6 819	7 236	6 607	7 330	7 079	7 338	7 023
(40,1; 60] sq.m	6 362	5 848	6 396	5 888	6 464	5 985	6 498	6 248	6 502	6 325
(60,1; 80] sq.m	6 021	5 220	6 113	5 385	6 143	5 366	6 220	5 611	6 256	5 638
> 80,1 sq.m	5 898	4 836	5 994	5 226	6 090	5 410	6 170	5 184	6 101	5 724
average offer price deviation	9,2%	x	7,8%	x	10,0%	x	6,7%	x	5,4%	x
<= 40 sq.m	9,4%	x	5,2%	x	9,5%	x	3,5%	x	4,5%	x
(40,1; 60] sq.m	8,8%	x	8,6%	x	8,0%	x	4,0%	x	2,8%	x
(60,1; 80] sq.m	15,4%	x	13,5%	x	14,5%	x	10,9%	x	11,0%	x
> 80,1 sq.m	22,0%	x	14,7%	x	12,6%	x	19,0%	x	6,6%	x

Source: NBP

7. Extended analysis of real estate developers and construction companies condition

7.1. Analysis of financial standing of development firms³³

In the first three quarters of 2018, the sales growth clearly slowed down, however, in the reference period (2017) it is record high. The analysis of the financial standing of development companies shows that fourteen real estate developers holding bonds listed on the Catalyst market sold 7.8% less dwellings in the first three quarters of 2018 compared to the corresponding period in 2017. In the third quarter of 2018 alone, sales results were lower by 20.5% y/y. The decline in residential sales is mainly a result of problems on the supply side (shortage of construction workers, high costs of labour and prices of construction materials). However, the analysis of GUS data for the period from January to October 2018 points to signs of a new recovery. In this period, compared to the corresponding period of 2017, the number of dwellings whose construction has been launched increased by 9.5%, 3.1% more dwellings were completed and made ready for occupancy and the number of dwellings for which construction permits were issued increased by 2.2%.

According to the accounting records, in the period from January to September 2018 developers remained prudent in commencing new residential projects. In the group of large developers, in the three quarters of 2018, the value of residential projects under construction increased slightly in quarter to quarter terms although it was lower than in the same quarters of 2017. The average value of total revenues and costs as well as the net financial result also decreased which indicates a decrease in the scale of operations and the number of apartments completed and made ready for occupancy in this period. In 2018 Q3, as compared to 2017 Q3, among more than 76% of profitable entities the share of developers with a higher financial result decreased. On the other hand, the value of land banks is increasing which indicates that these entities manage to purchase land for multi-family housing despite the increase in its prices and restriction of access to construction areas.

In the group of smaller developers, the value of revenues, costs and financial result increased in the first half of 2018 compared to the previous two semi-annual periods. The level of profitable companies remained at approx. 70%. Since the second half of 2016, smaller developers have been reporting a stable level of investment with a slight upward trend. In the first half of 2018 they focused on the implementation of previously launched projects. After the growth in 2017, their stock of land decreased in the first half of 2018, which may indicate problems with purchasing construction land in this group of entrepreneurs.

In both groups of entities, the stock of available dwellings remains at a stable and relatively low level.

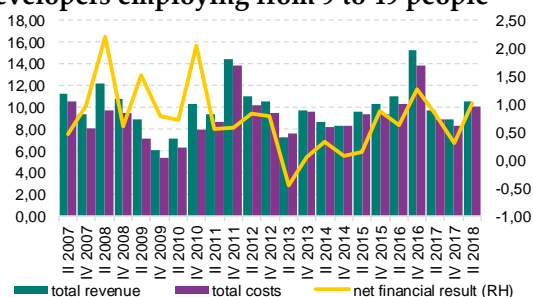
The profitability ratios of sales, equity and corporate assets in both groups of developers remain at a safe level, while they improved in the group of smaller entities due to the increase in the value of the average net financial result. Deterioration of profitability was recorded in the group of large developers and, to a lesser extent, among developers listed on the WSE.

³³The calculations and conclusions in this issue of the Information are based on data resulting from F01 reports submitted to GUS, with the breakdown into two groups of entities: those employing from 9 to 49 persons (data available until the first half of 2018) and those employing above 49 persons (data available until 2018 Q3), engaged in the construction of buildings (PKD 41.10). As data were made available at a later date the analysis of accounting records in financial statements of developers listed on the Warsaw Stock Exchange was based on data covering the period until 2018 Q2. The analysis of accounting records was supplemented with the information concerning 14 housing real estate developers from the Catalyst market (a report on "Situation of the largest housing real estate developers of the Catalyst market in 2018 Q3", Navigator Brokerage House, Warsaw, October 2018).

The ratio of operating expenses to sales revenues remains at a safe level. The most favourable level of this indicator is recorded in the group of developers listed on the WSE. In the group of large development firms, third-party services account for the largest share in operating costs; their lower value in the 2018 Q3 may confirm a significant level of in-house production. Despite the decrease in the average number of employees, payroll costs increased. In the group of smaller developers, the increase in third party services in the first half of 2018, with a simultaneous decrease in payroll costs, may indicate that investment projects are largely subcontracted. Own capital plays an important role in development financing. As regards external sources of financing in the group of large entities, in 2018 Q3, as compared to 2018 Q2, an increase was seen in the share of buyers' down-payments (from 17.6% to 21.4%) and, to a minor extent, bank lending (from 7.8% to 8.9%). Liabilities due to debt securities remained at a level exceeding 11%. Liabilities towards service providers and contractors slightly decreased - from 26.2% to 23.9% of the share in the structure of liabilities while the period of settlement of liabilities is relatively long, which may indicate continuing financing from unpaid invoices towards providers of construction services. Financial liquidity approached an unfavourable level. According to the data of existing smaller developers, in the first half of 2018, as compared to 2017, the average value of liabilities on account of external sources of financing (bank credits, debt securities and down-payments of home buyers) slightly decreased. Accounts payable to service providers significantly decreased - from 27.6% at the end of December 2017 to 22.8% in the total liabilities at the end of June 2018. In this group, the period of receivables collection and the time of settlement of liabilities was shorter whereas financial liquidity and, consequently, the ability to repay liabilities improved to a limited extent only. In the group of developers listed on the WSE, in 2018 Q2, as compared to 2018 Q1, accounts payable to service providers increased to over 13% in the total of liabilities, liabilities resulting from clients' down-payments to over 21% and liabilities resulting from debt securities to over 9%. On the other hand, liabilities on account of bank lending decreased.

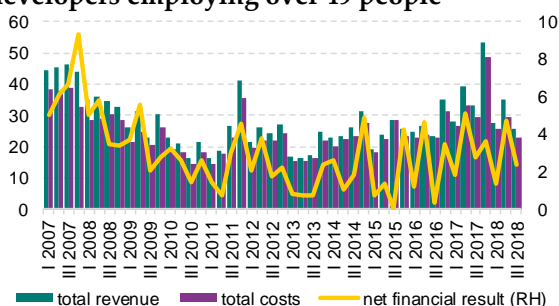
In all groups of enterprises, the ratios of total debt, debt to equity, as well as the coverage of assets and securing financial liabilities with equity remain at a safe level. This ensures appropriate conditions while examining loan applications and security of the funds entrusted by creditors. In 2018 Q3, the corporate debt market saw low activity of residential real estate developers, with a further slight decrease in the average interest rate of bond coupons.

Figure 70 Economic indicators of real estate developers employing from 9 to 49 people



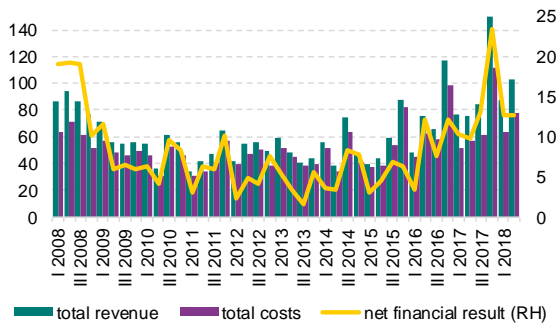
Source: NBP based on GUS (F01)

Figure 71 Economic indicators of real estate developers employing over 49 people



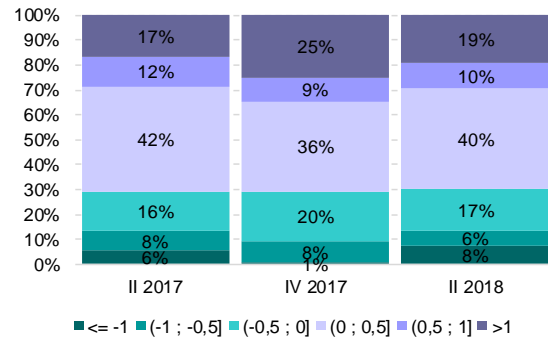
Source: NBP based on GUS (F01)

Figure 72 Economic indicators of real estate developers listed on the WSE



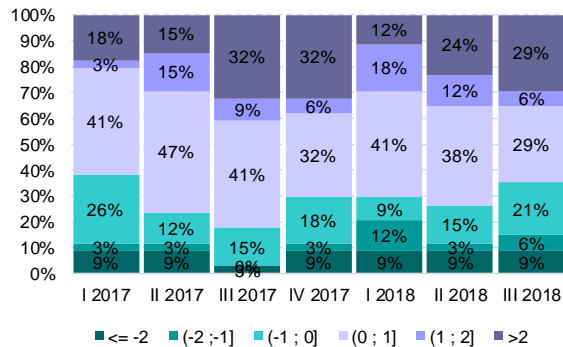
Source: NBP based on financial statements

Figure 73 Structure of developers (the same entities) employing from 9 to 49 people according to the value of net financial result in PLN million in a given semi-annual period (intervals, PLN million)



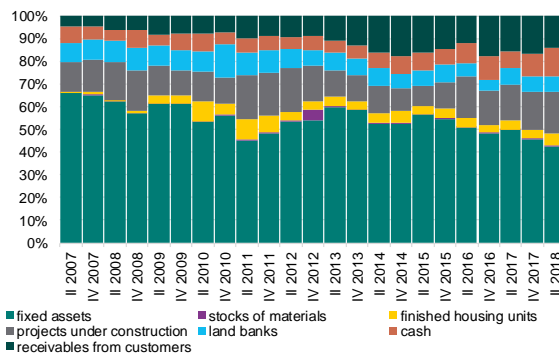
Source: NBP based on GUS (F01)

Figure 74 Structure of developers (the same entities) employing over 49 people according to the value of net financial result in PLN million in a given semi-annual period (intervals, PLN million)



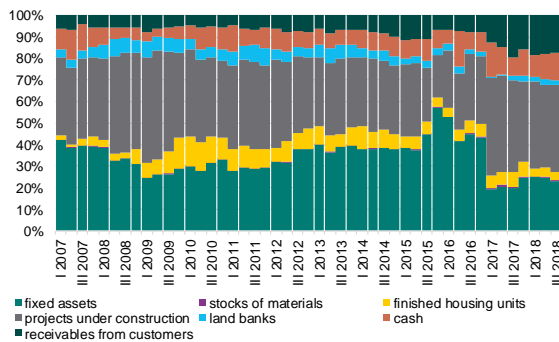
Source: NBP based on GUS (F01)

Figure 75 Structure of assets of real estate developers employing from 9 to 49 people



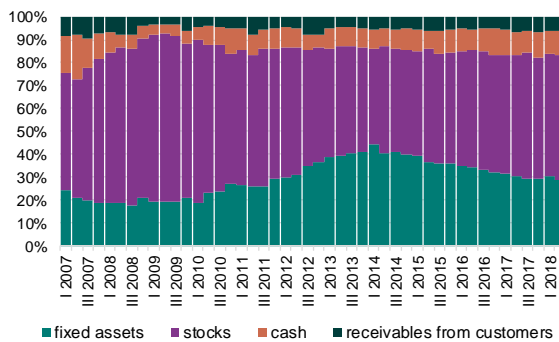
Source: NBP based on GUS (F01)

Figure 76 Structure of assets of real estate developers employing over 49 people



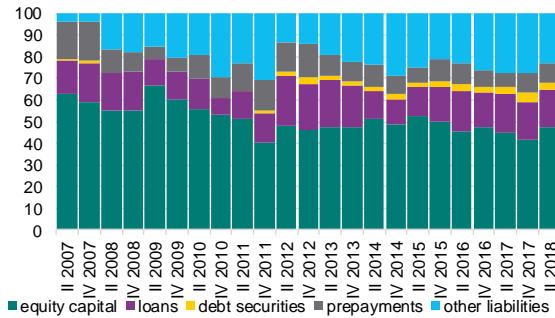
Source: NBP based on GUS (F01)

Figures 77 Structure of assets of real estate developers listed on the WSE



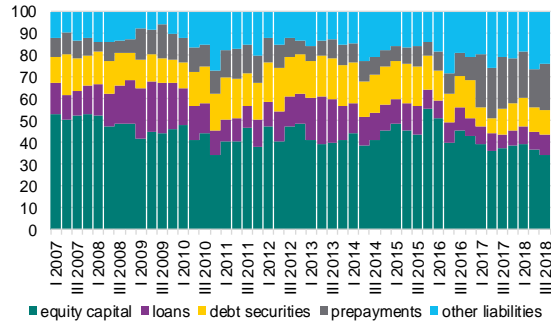
Source: NBP based on financial statements

Figure 78 Structure of liabilities of real estate developers employing from 9 to 49 people



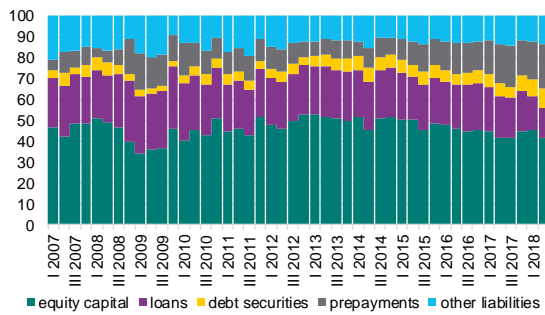
Source: NBP based on GUS (F01)

Figure 79 Structure of liabilities of real estate developers employing over 49 people



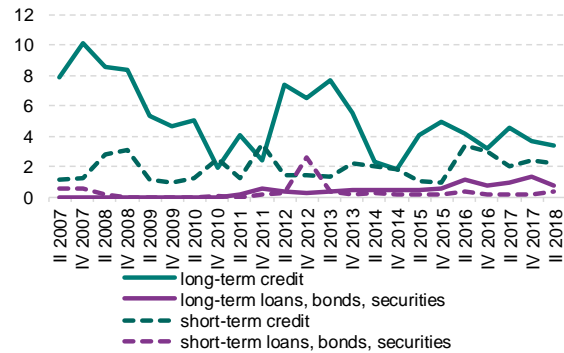
Source: NBP based on GUS (F01)

Figure 80 Structure of liabilities of real estate developers listed on the WSE



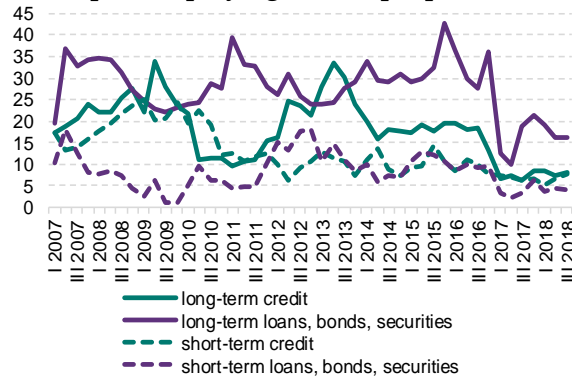
Source: NBP based on financial statements

Figure 81 Sources of financing of real estate developers employing from 9 to 49 people



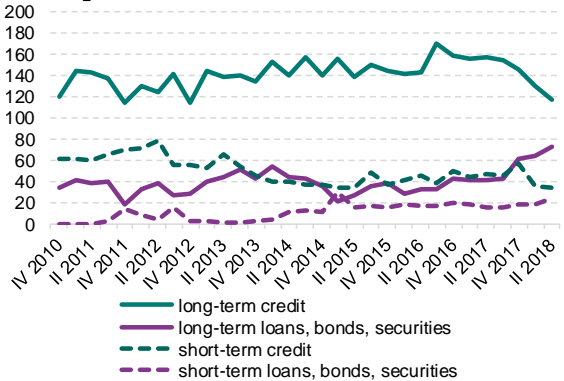
Source: NBP based on GUS (F01)

Figure 82 Sources of financing of real estate developers employing over 49 people



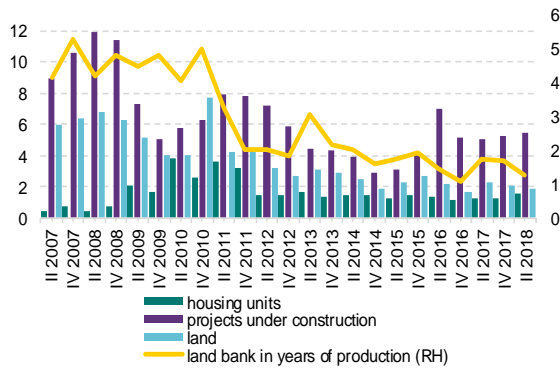
Source: NBP based on GUS (F01)

Figure 83 Sources of financing of real estate developers listed on the WSE



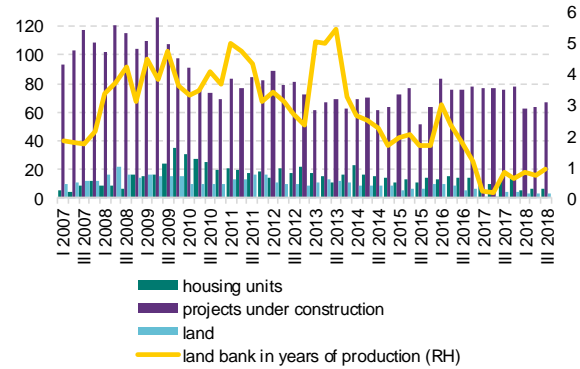
Source: NBP based on financial statements

Figure 82 Situation of real estate developers employing from 9 to 49 people



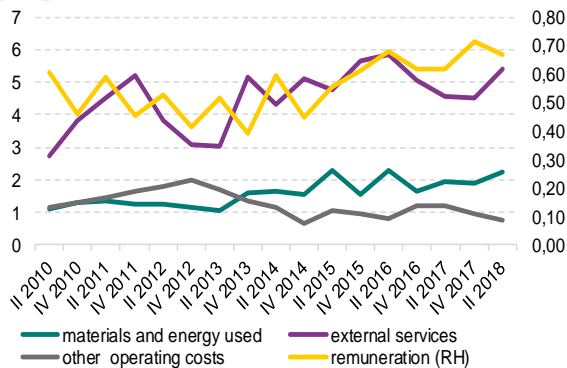
Source: NBP based on GUS (F01)

Figure 83 Situation of real estate developers employing over 49 people



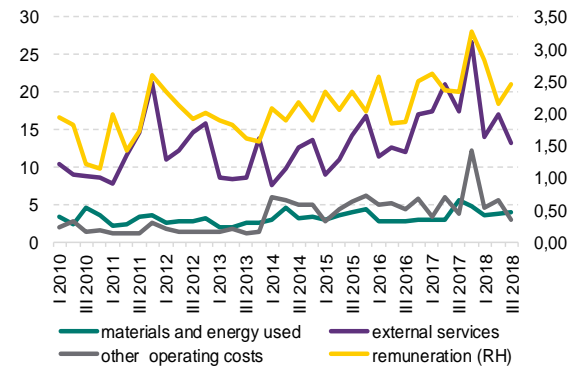
Source: NBP based on GUS (F01)

Figure 84 Costs of operating activity of real estate developers employing from 9 to 49 people



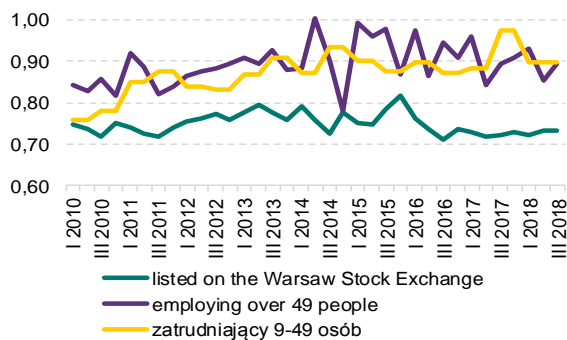
Source: NBP based on GUS (F01) and financial statements

Figure 85 Costs of operating activity of real estate developers employing over 49 people



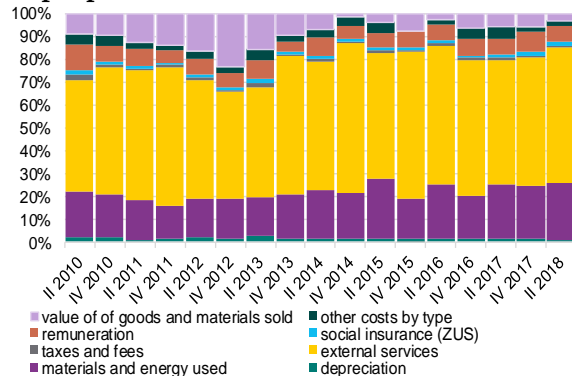
Source: NBP based on GUS (F01)

Figure 86 Operating cost levels according to groups of developers



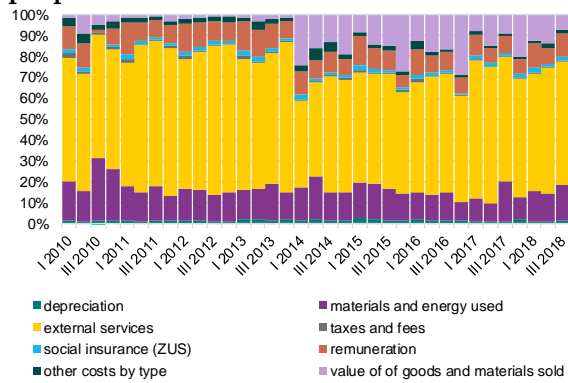
Source: NBP based on GUS (F01)

Figure 87 Structure of operating activity costs of real estate developers employing from 9 to 49 people



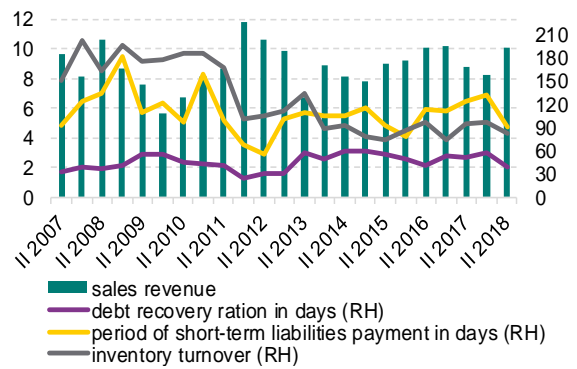
Source: NBP based on GUS (F01)

Figure 88 Structure of operating activity costs of real estate developers employing over 49 people



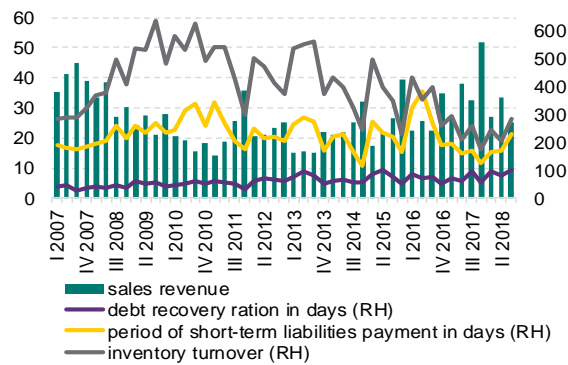
Source: NBP based on GUS (F01)

Figure 89 Turnover of inventory, receivables and liabilities of real estate developers employing from 9 to 49 people



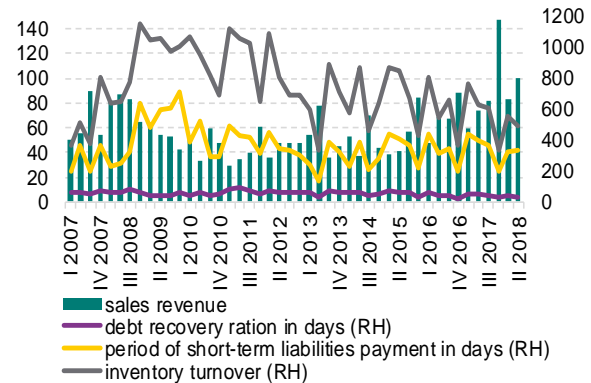
Source: NBP based on GUS (F01)

Figure 90 Turnover of inventory, receivables and liabilities of real estate developers employing over 49 people



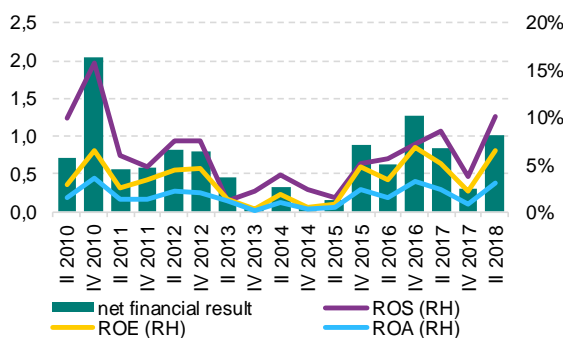
Source: NBP based on GUS (F01)

Figure 91 Turnover of inventory, receivables and liabilities of real estate developers listed on the WSE



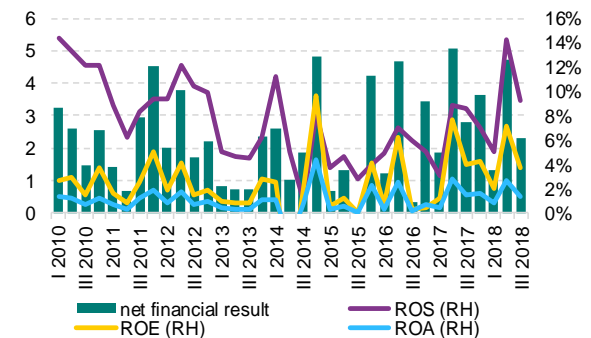
Source: NBP based on financial statements

Figure 92 Profitability of real estate developers employing from 9 to 49 people



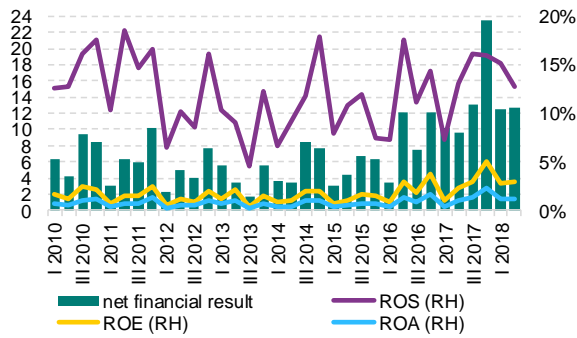
Source: NBP based on GUS (F01)

Figure 93 Profitability of real estate developers employing over 49 people



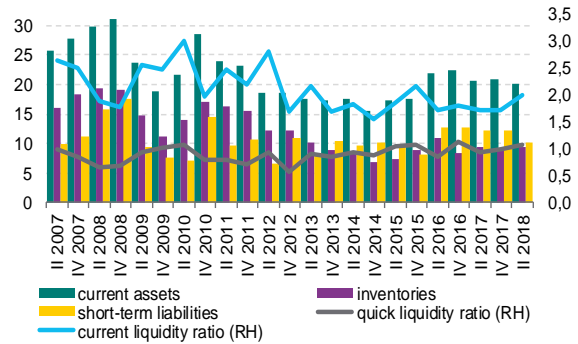
Source: NBP based on GUS (F01)

Figure 94 Profitability of real estate developers listed on the WSE



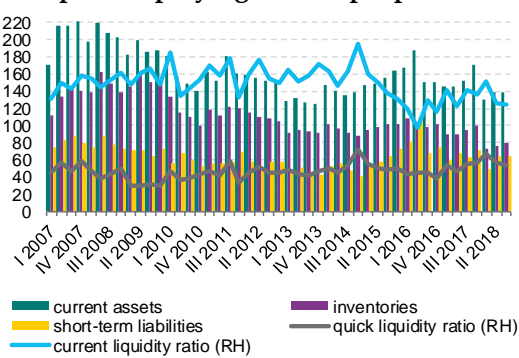
Source: NBP based on financial statements

Figure 95 Liquidity ratios of real estate developers employing from 9 to 49 people



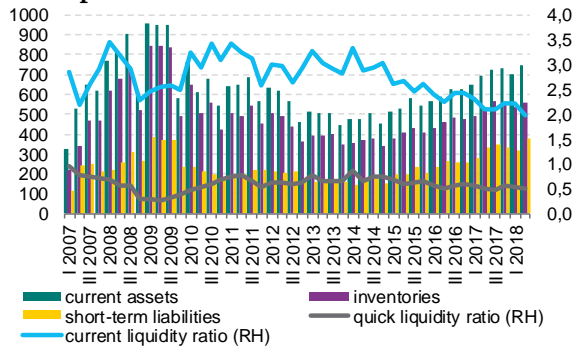
Source: NBP based on GUS (F01)

Figure 96 Liquidity ratios of real estate developers employing over 49 people



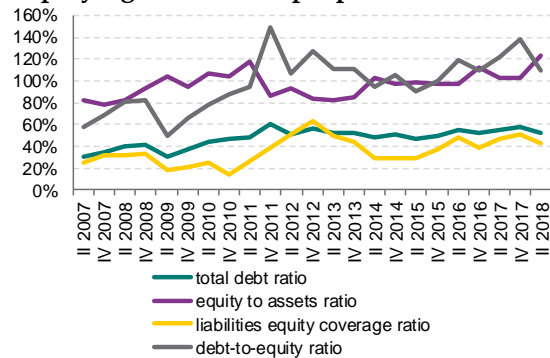
Source: NBP based on GUS (F01)

Figure 97 Liquidity ratios of real estate developers listed on the WSE



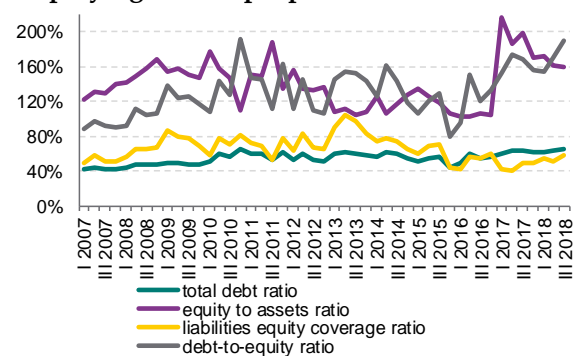
Source: NBP based on financial statements

Figure 98 Debt ratios and indicators of securing liabilities of real estate developers employing from 9 to 49 people



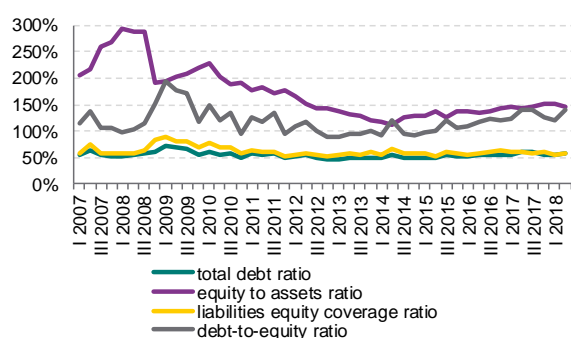
Source: NBP based on GUS (F01)

Figure 99 Debt ratios and indicators of securing liabilities of real estate developers employing over 49 people



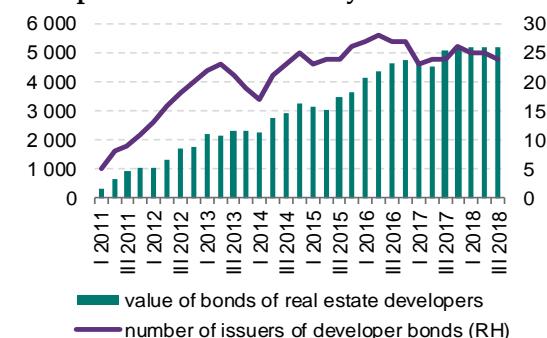
Source: NBP based on GUS (F01)

Figure 100 Debt ratios and indicators of securing liabilities of real estate developers listed on the WSE



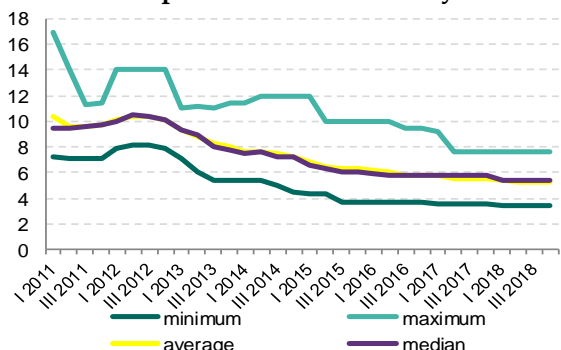
Source: NBP based on financial statements

Figure 101 Value of bonds of real estate developers and the number of issuers of developer bonds in the Catalyst market



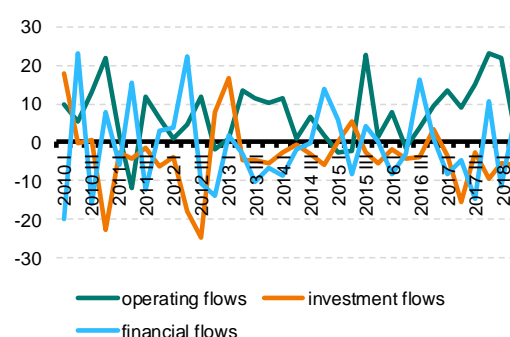
Source: NBP based on Catalyst

Figure 102 Interest on bond coupons of real estate developers listed on the Catalyst market



Source: NBP based on Catalyst

Figure 103 Flows of real estate developers listed on the WSE (in bln.)



Source: NBP based on financial statements

7.2. Analysis of the financial standing of construction companies engaged in the construction of residential and non-residential buildings ³⁴

According to the GUS data, after the first three quarters of 2018 as compared to the three quarters of 2017, the investment recovery in the construction industry continued. In this period, the value of production sold in the construction industry in current prices increased by 26%. As a result, the construction industry faces a number of challenges, such as growing costs and underestimated contracts. As a result, the situation of some construction companies deteriorated.

The accounting records of construction companies engaged in the construction of residential and non-residential buildings reported in the F-01 statements, large construction companies face a difficult financial standing whereas medium-sized entities enjoy a stable situation. In 2018 Q3, the average revenues from sales by large companies did not cover the costs actually incurred. The negative value of the average net financial result translated into negative return on sales ratios (-1.8), equity (-1.9) and corporate assets (-0.6), which point to insufficient cost control and ineffective equity and asset management. In the group of large construction companies, the average financial result generated in three quarters of 2018 was at a level lower than in the corresponding periods of 2017, and since the beginning of 2017 revenues from sale

³⁴ The calculations and conclusions in this issue of the Information are based on data resulting from F01 reports submitted to GUS, with the breakdown into two groups of companies: medium-sized entities employing from 50 to 249 persons x and large entities employing more than 249 persons (data available until 2018 Q3), engaged in the construction of residential and non-residential buildings (PKD 41.20)

of construction services have been on a decline. The negative or low level of sales margin recorded for four quarters, creates tensions and poses a threat of bankruptcies.

A more optimistic situation is presented in the financial analysis of data reported in the financial statements of medium-sized construction companies. Since the beginning of 2017, revenues on sales of services has been slightly rising and a stable, positive level of the average financial result has continued. In 2018 Q3, compared to the previous quarter, the profitability ratios of sales (6.1), equity (5.2) and company's assets (2.2) improved. In the construction industry, due to seasonality of works, higher financial results are usually recorded in the third quarter which, however, does not mean the situation in the industry has improved. Twice higher return on equity than return on assets may mean that the profitability of construction companies strongly depends on external financing.

In both groups of companies, the share of third party services dominates in the structure of operating expenses (over 59% in the group of large companies and 61% in the group of medium-sized companies).

Costs of materials and electricity consumed account to 25% of costs incurred by the analysed construction companies, whereas the payroll costs to over 9%.

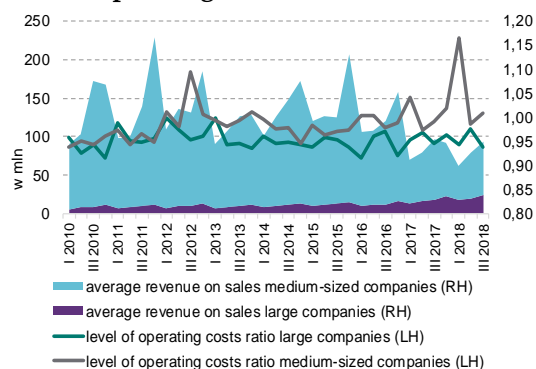
In 2018 Q3, compared to the previous quarter, the average period of payment of liabilities and collection of receivables by medium-sized construction companies has decreased. In the case of large construction companies, the time of payment of liabilities and collection of receivables is slightly shorter. According to the accounting records, the time of receivables collection was shorter than that of payment of liabilities.

Although large construction companies find it difficult to achieve a satisfactory sales margin, financial liquidity in both groups of construction companies remains at a safe level, which means that construction companies are able to pay their current liabilities in a timely manner. The volatility of the liquidity ratio of large companies in 2017-2018 may also result from a decline in accounts payable to subcontractors of construction services related to the termination of some unprofitable long-term contracts.

In the group of medium-sized construction companies in 2018 Q3, the ratios of total debt, equity to assets coverage, equity to financial liabilities and debt to equity remained at a safe and stable level which suggests that companies are able to settle their liabilities and ensures the security of funds entrusted by creditors.

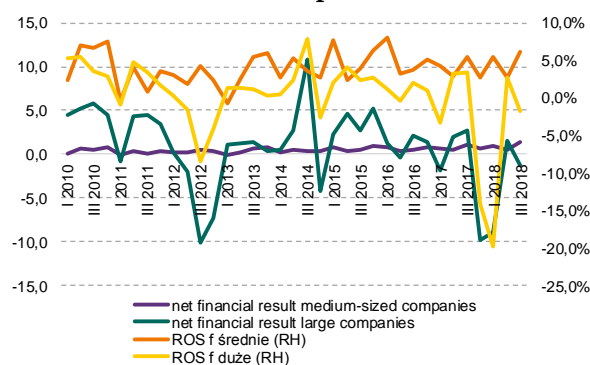
In the group of large construction companies, the total debt ratio remained at a similar level in the three quarters of 2018, with a higher, less favourable ratio than in the corresponding periods of 2017, which may indicate a possibility of losing the ability to settle liabilities. In this group of companies, since 2017 Q4 the equity to assets ratio has significantly deteriorated, which indicates worsening of the financial stability of large construction companies. In 2018 Q3, total liabilities considerably exceeded the value of equity, which means that equity does not guarantee the repayment of incurred liabilities. With rising debt levels, the creditworthiness and reliability of these companies deteriorated.

Figure 104 Averaged revenues in million and the operating cost level



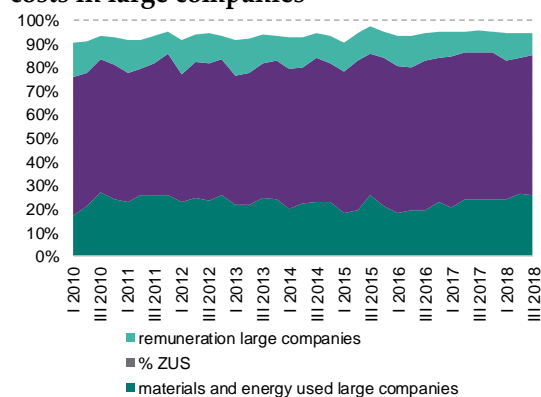
Source: NBP based on GUS

Figure 105 Sales profitability ratios and net result of construction companies



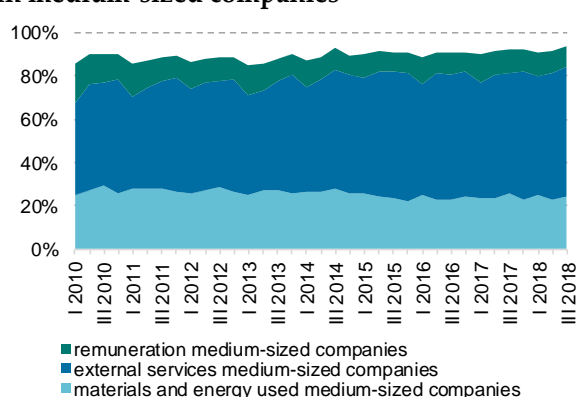
Source: NBP based on GUS

Figure 106 Structure of selected operating costs in large companies



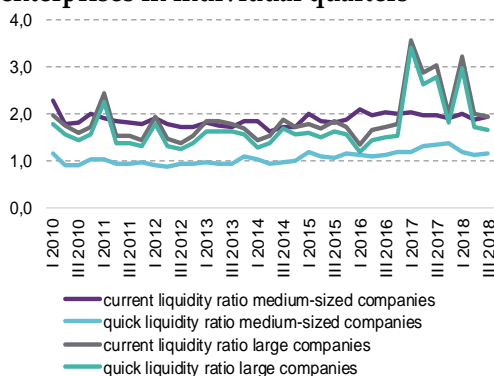
Source: NBP based on GUS

Figure 107 Structure of selected operating costs in medium-sized companies



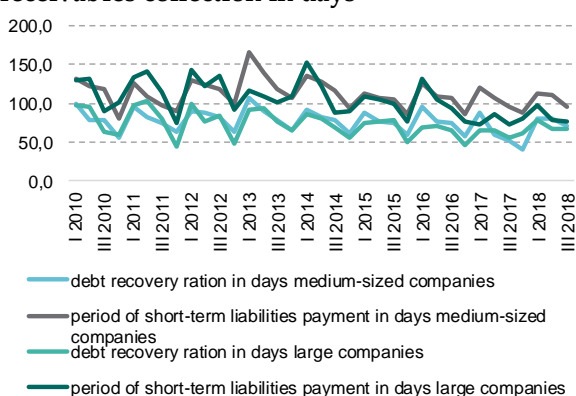
Source: NBP based on GUS

Figure 108 Economic liquidity ratios of enterprises in individual quarters

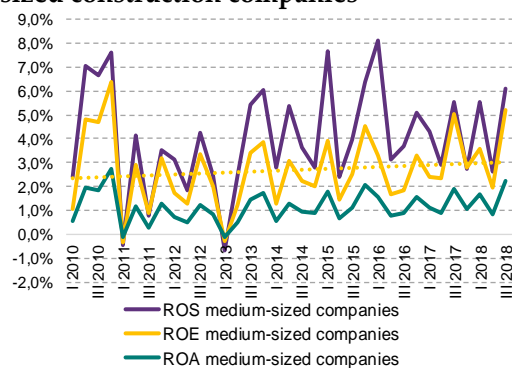


Source: NBP based on GUS

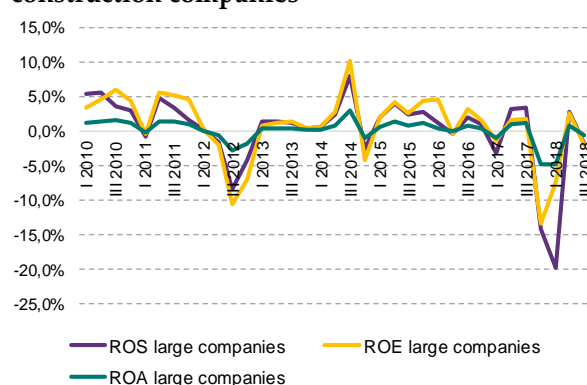
Figure 109 Period of settlement of liabilities and receivables collection in days



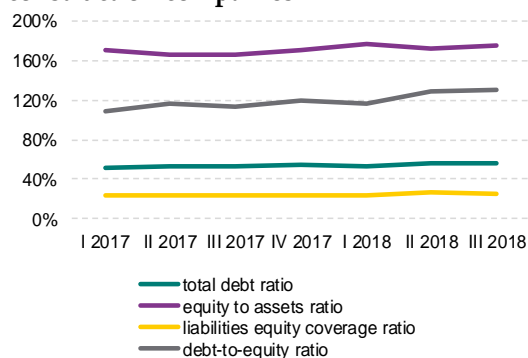
Source: NBP based on GUS

Figure 110 Profitability ratios of medium-sized construction companies

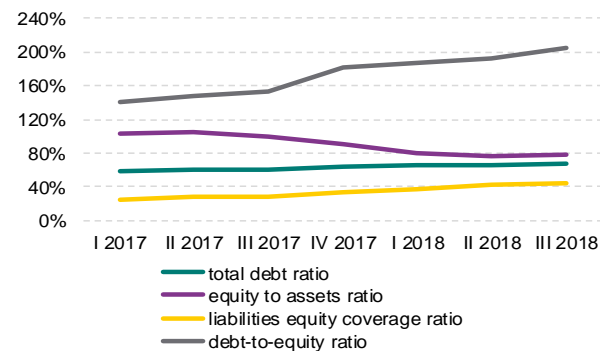
Source: NBP based on GUS

Figure 111 Profitability ratios of medium-sized construction companies

Source: NBP based on GUS

Figure 112 Debt ratios and indicators of securing liabilities of medium-sized construction companies

Source: NBP based on GUS

Figure 113 Debt ratios and indicators of securing liabilities of large construction companies

Source: NBP based on GUS

7.3. Analysis of the financial standing of companies dealing with sales of construction materials³⁵

In order to assess the supply in the residential real estate market, we analysed the economic and financial condition of companies involved in the trading in construction materials. Growing prices of materials is one of the main problems of the construction industry and largely results an increase in orders for construction materials. According to the data of the Polskie Składy Budowlane Group, in the period from January to October 2018, prices of materials increased in eighteen product groups as compared to the corresponding period of 2017. The highest price increase referred to OSB panels and wood (by 31%), walls and chimneys (by 13.1%) and thermal insulation (by 9.5%). According to the records reported in the financial statements by companies selling construction materials in 2018 Q2 and Q3, compared to the individual quarters of 2017, a significantly higher average value of total revenues and costs and the

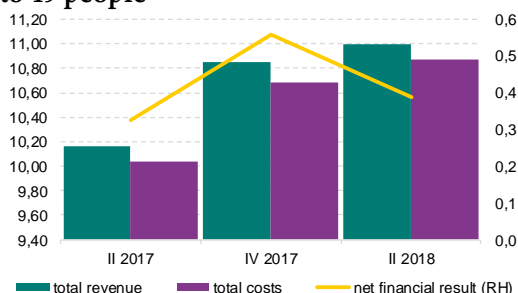
³⁵ The calculations and conclusions are based on the data resulting from F01 reports submitted to GUS, with the breakdown into two groups of entities: those employing from 9 to 49 persons - data available until 2018 Q2 and those employing above 49 persons - data available until 2018 Q3, involved in the sale of timber and construction materials (PKD 4613) and involved in the wholesale of construction materials and sanitary equipment (PKD 4673). The accounting records were supplemented with information on the change in prices of building materials ("Change in the prices of materials for construction, home and garden in October 2018 - PSB Group analysis", Grupa PSB Handel S.A., November 2018).

financial result generated was recorded, which confirms the continuing demand for construction materials. The group of large companies dealing with trade recorded an increase in the stock of goods and a rise in receivables from customers. Own capital is the main source of financing with the share in the structure of liabilities reaching 52% in the group of large companies at the end of 2018 Q3 and 49% in the group of smaller companies at the end of 2018 Q2. The major external sources of financing, are accounts payable to manufacturers of construction materials and bank loans.. In the analysed periods, companies selling construction materials achieved a short period of payment of liabilities, collection of receivables and turnover of inventories, which means they have no significant problem with payment bottlenecks. The level of financial liquidity makes it possible for companies to quickly settle their current liabilities. Moderate optimism stems from the data collected in the NBP " Quick Monitoring" survey. According to the survey data, more than 75% of entities involved in the sale of construction materials had no problems with financial liquidity in 2018 Q3 and approx. 25% of companies sporadically lost their financial liquidity.

The majority of companies had no problem with timely payment of obligations (75%) while others indicated some difficulties (about 19% of respondents faced such problems occasionally and more than 6% frequently). Approx. 12% of respondents did not have any overdue trade receivables . In the case of 42% of companies overdue trade receivables did not exceed 10% of the total receivables and in the case of 47% of respondents they exceeded 10% of the total receivables. Approx. 47% of construction materials sellers did not have any overdue trade liabilities. In the case of more than 41% of respondents such liabilities did not exceed 10% of the total liabilities.. About 12% of companies engaged in the sale of construction materials reported higher levels of overdue liabilities.

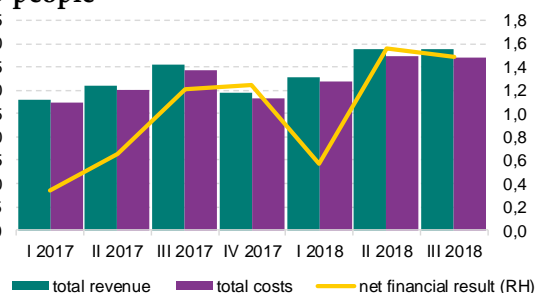
The good condition and profitability of the construction materials trade is confirmed by favourable profitability ratios of sales, assets and effective use of equity capital in the company. The ratios of general debt and security of liabilities towards other entities remain at a safe level.

Figure 114 Economic indicators of companies selling construction materials employing from 9 to 49 people



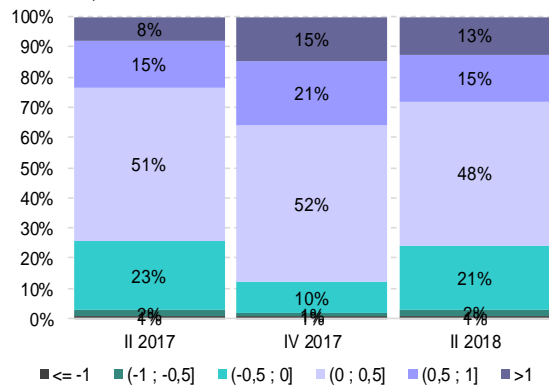
Source: NBP based on GUS (F01)

Figure 115 Economic indicators of companies selling construction materials employing over 49 people



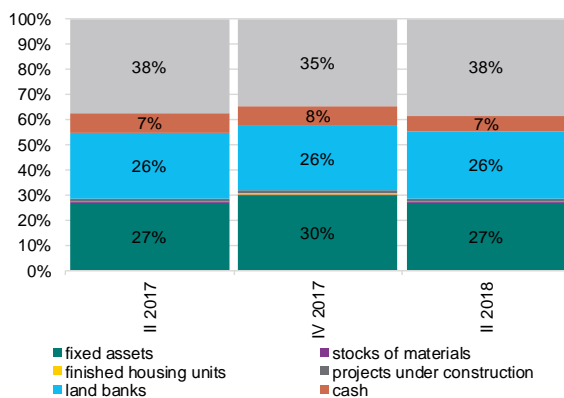
Source: NBP based on GUS (F01)

Figure 116 Structure of companies selling construction materials (data of the same entities) employing from 9 to 49 people in the value of net financial result (intervals, PLN million)



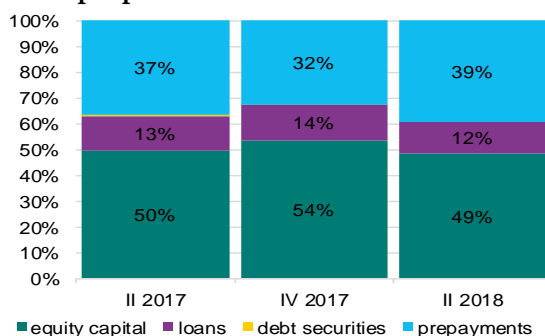
Source: NBP based on GUS (F01)

Figure 118 Structure of assets of companies selling construction materials employing from 9 to 49 people



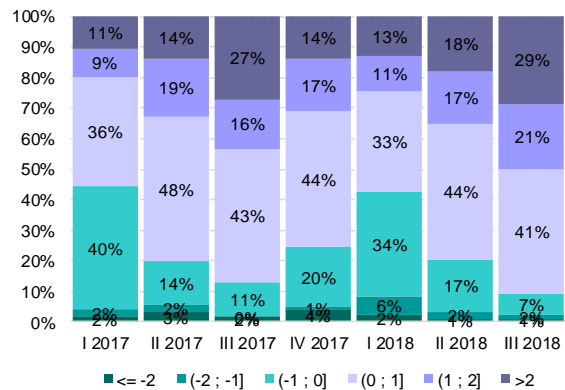
Source: NBP based on GUS (F01)

Figure 120 Structure of liabilities of companies selling construction materials employing from 9 to 49 people



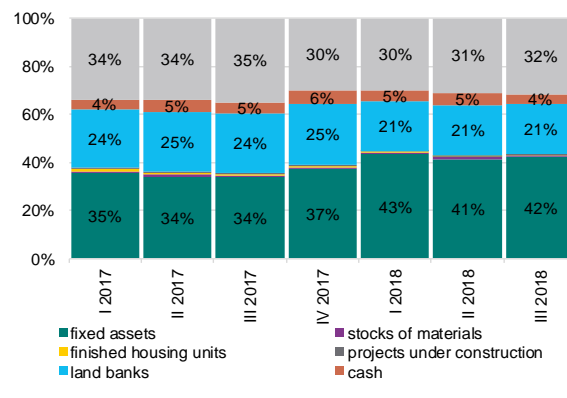
Source: NBP based on GUS (F01)

Figure 117 Structure of companies selling construction materials (data of the same entities) employing over 49 people in the value of net financial result (intervals, PLN million)



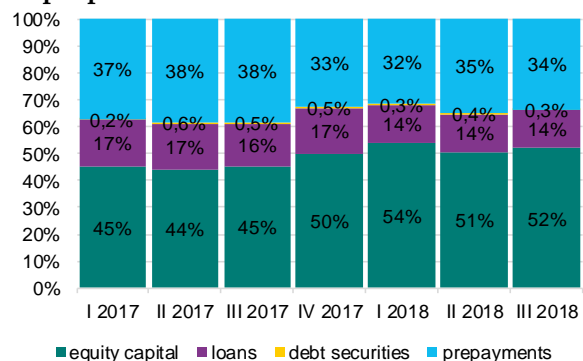
Source: NBP based on GUS (F01)

Figure 119 Structure of assets of companies selling construction materials employing over 49 people



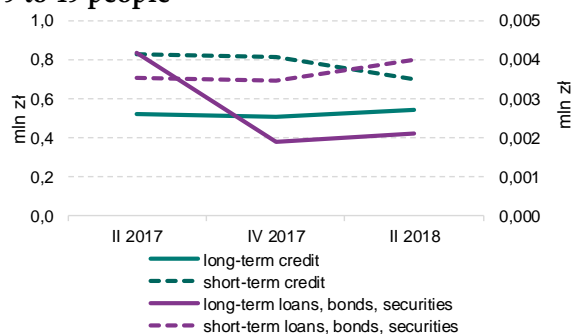
Source: NBP based on GUS (F01)

Figure 121 Structure of liabilities of companies selling construction materials employing over 49 people



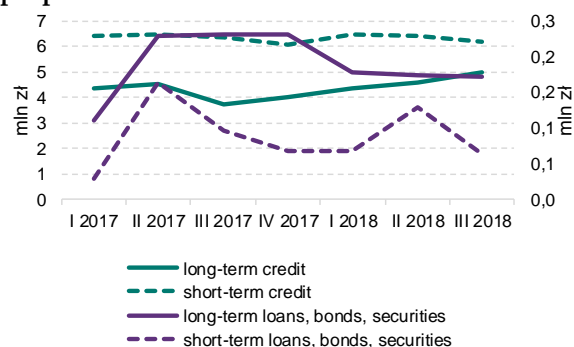
Source: NBP based on GUS (F01)

Figure 122 Sources of financing of companies selling construction materials employing from 9 to 49 people



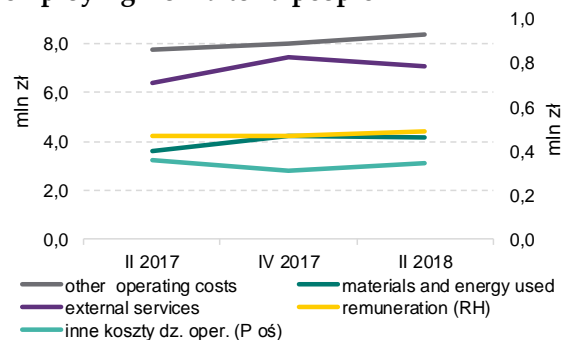
Source: NBP based on financial statements

Figure 123 Sources of financing of companies selling construction materials employing over 49 people



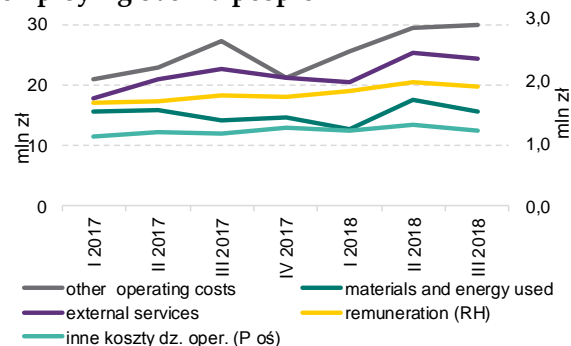
Source: NBP based on GUS (F01)

Figure 124 Costs of operating activity of companies selling construction materials employing from 9 to 49 people



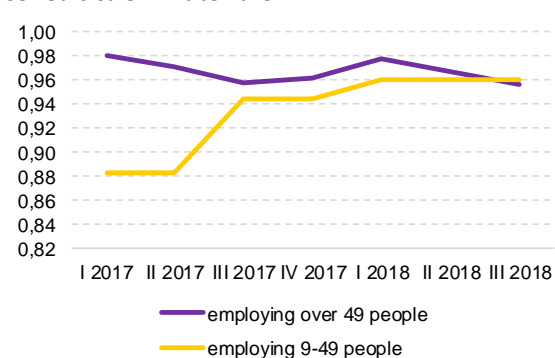
Source: NBP based on GUS (F01) and financial statements

Figure 125 Costs of operating activity of companies selling construction materials employing over 49 people



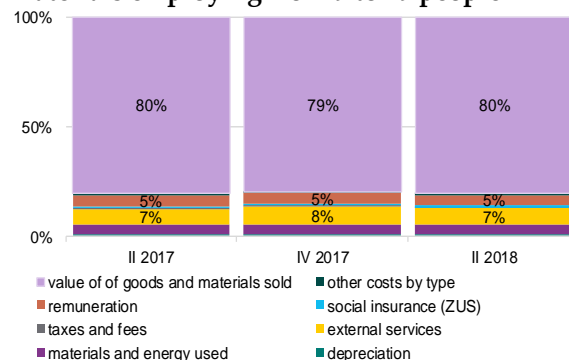
Source: NBP based on GUS (F01)

Figure 126 Indicators of level of operating costs according to groups of companies selling construction materials



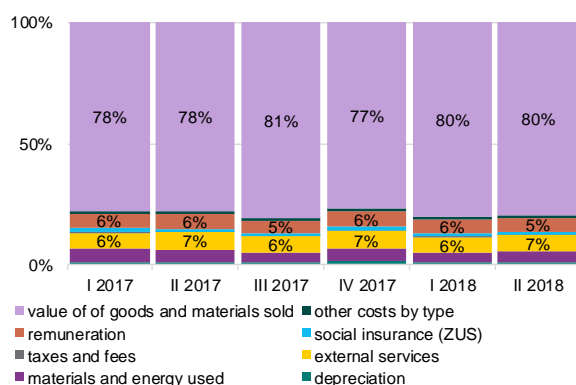
Source: NBP based on GUS (F01)

Figure 127 Structure of costs of operating activity of companies selling construction materials employing from 9 to 49 people



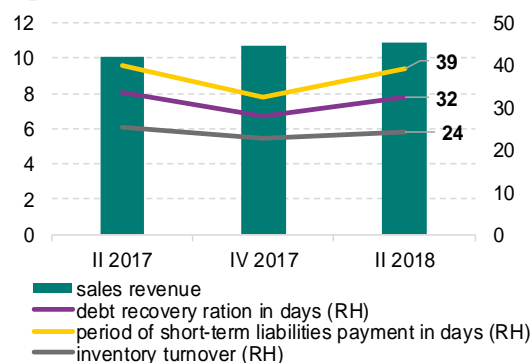
Source: NBP based on GUS (F01)

Figure 128 Structure of costs of operating activity of companies selling construction materials employing over 49 people



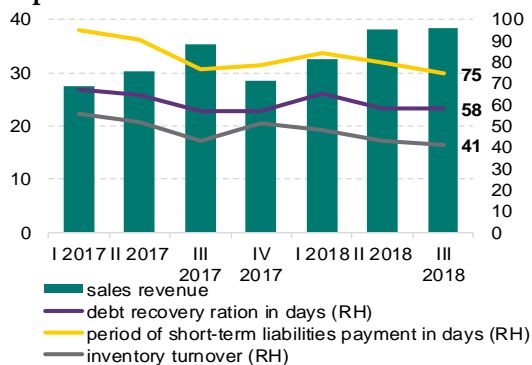
Source: NBP based on GUS (F01)

Figure 129 Turnover of inventory, receivables and liabilities of companies selling construction materials employing from 9 to 49 people



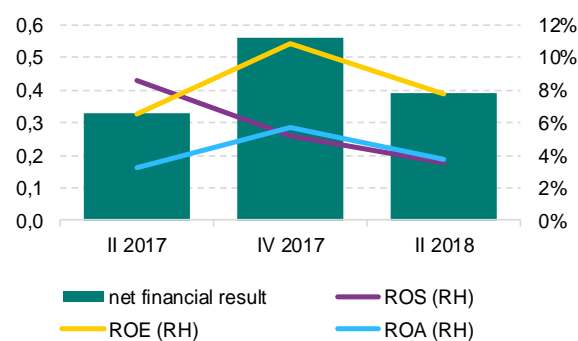
Source: NBP based on GUS (F01)

Figure 130 Turnover of inventory, receivables and liabilities of companies selling construction materials employing over 49 people



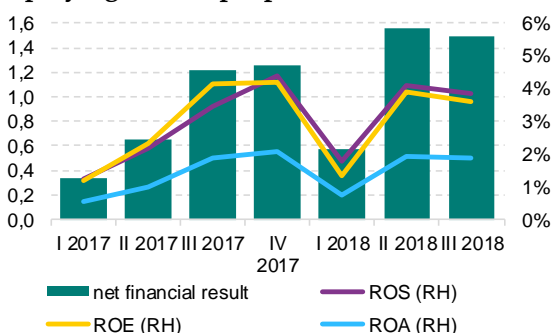
Source: NBP based on GUS (F01)

Figure 131 Profitability of activities of companies selling construction materials employing from 9 to 49 people



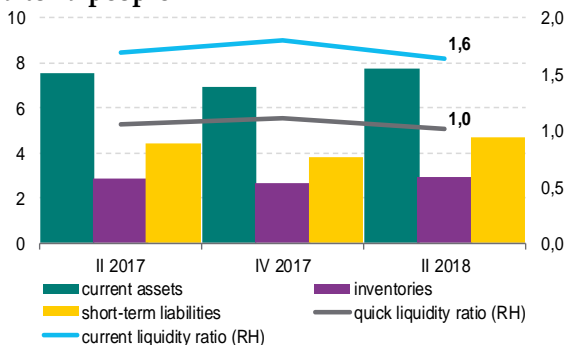
Source: NBP based on GUS (F01)

Figure 132 Profitability of activities of companies selling construction materials employing over 49 people



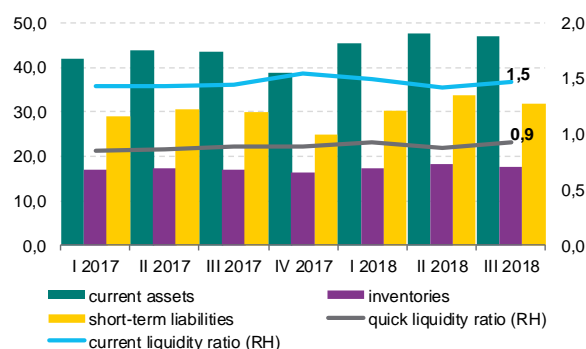
Source: NBP based on GUS (F01)

Figure 133 Liquidity ratios of companies selling construction materials employing from 9 to 49 people



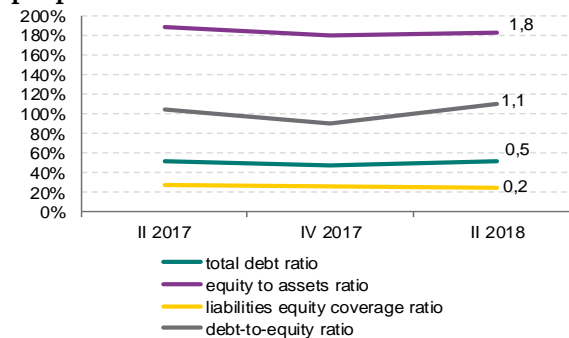
Source: NBP based on GUS (F01)

Figure 134 Liquidity ratios of companies selling construction materials employing over 49 people



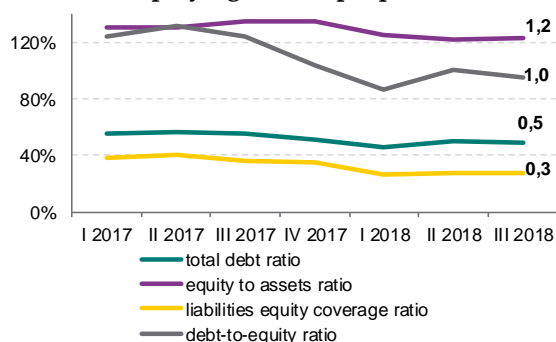
Source: NBP based on financial statements

Figure 135 Debt ratios and indicators of securing liabilities of companies selling construction materials employing from 9 to 49 people



Source: NBP based on GUS (F01)

Figure 136 Debt ratios and indicators of securing liabilities of companies selling construction materials employing over 49 people



Source: NBP based on GUS (F01)

7.4. Analysis of financial standing of companies manufacturing construction materials³⁶

Companies manufacturing construction materials are the ones to benefit from high demand for housing, and generally for construction services. As indicated by the data for the first three quarters of 2018, the year may close with a record level of sales. Average revenues of companies manufacturing construction materials employing more than 49 people in the three quarters of 2018 are 11% higher than in the corresponding period of 2017. At a lower growth rate of costs, the high demand for construction materials made it possible to achieve higher margins. As a result, the net profit was higher by 30% y/y in 2018 Q1-Q3. 90% of companies in this group generated a positive result for 2018 Q3. On the other hand, companies employing 9-49 people achieved net profit higher by 35% in this period although only 66% of them reached positive net results for 2018 Q3.

Profitability ratios in the industry indicate a relatively high efficiency of the business. High demand for construction materials translates into short periods of collecting receivables, settlement of liabilities and turnover of inventories at a level of 43 days in companies employing more than 49 people and 21 days in

³⁶ The calculations and conclusions in this issue of the Information are based on data resulting from F01 reports submitted to GUS, with the breakdown into two groups of companies: those employing from 9 to 49 persons (data available until the first half of 2018) and those employing above 49 persons (data available until 2018 Q3), engaged in the manufacturing of construction materials (PKD 1623, 2223, 2320, 2332, 2351, 2352, 2361, 2362, 2363, 2364).

companies employing 9-49 people. Liquidity ratios remain at optimum levels. Positive financial results made it possible to significantly reduce external financing and improved debt ratios of large production companies. According to the questionnaire data collected in the NBP "Quick Monitoring" survey, about 77% of companies manufacturing construction materials had no problems with maintaining financial liquidity in 2018 Q3, over 16% of respondents lost their financial liquidity sporadically and over 7% - frequently.

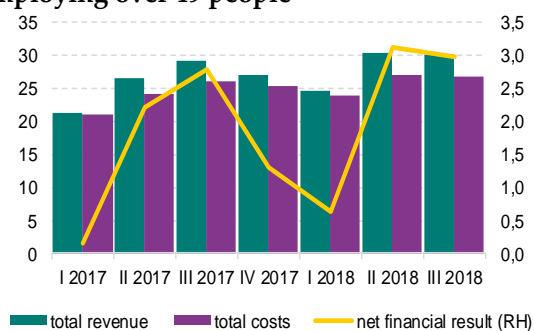
More than 64% of manufacturers did not experience any problems with the timely payment of liabilities. Other respondents indicated difficulties in their settlement (about 29% occasionally and over 7% frequently).

Approx. 13% of entities did not have any overdue trade receivables. However, in the case of over 46% they constituted no more than 10% and in the case of nearly 41% of respondents of the share of overdue receivables was much higher.

Nearly 39% of manufacturers of construction materials did not have any overdue trade liabilities.. Trade liabilities did not exceed 10% in the case of more than 44% of respondents. Higher levels of overdue liabilities were reported only occasionally.

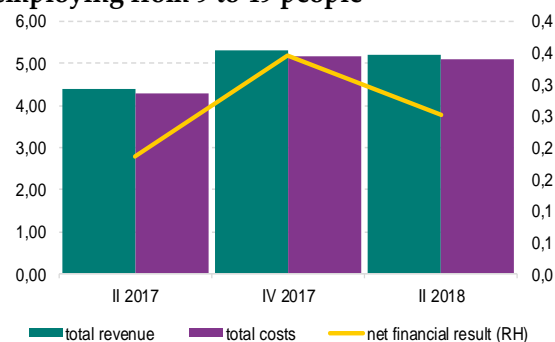
An analysis of industry costs shows a significant share of material and energy costs in the total of production costs, with electricity in the direct bill not exceeding 10%. Thus, it can be anticipated that rising energy prices may further boost the price of building materials, depending on the compensatory option chosen. However, in the rolling costs, the share of these costs is significantly higher, which may trigger their further increase.

Figure 137 Economic indicators of manufacturers of construction materials employing over 49 people



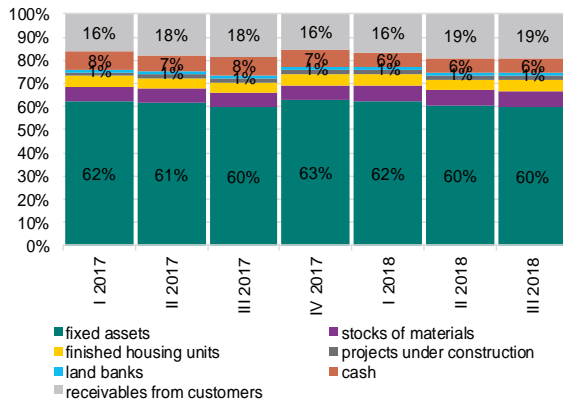
Source: NBP based on GUS (F01)

Figure 138 Economic indicators of manufacturers of construction materials employing from 9 to 49 people



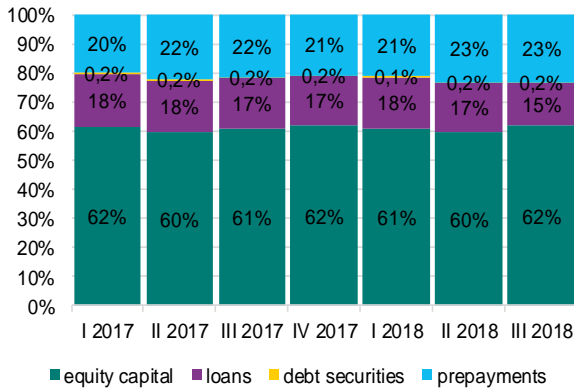
Source: NBP based on GUS (F01)

Figure 139 Structure of assets of manufacturers of construction materials employing from 9 to 49 people



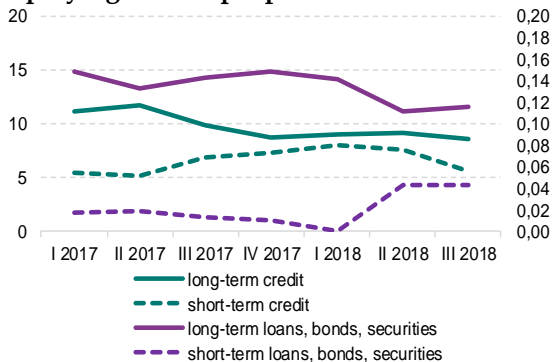
Source: NBP based on GUS (F01)

Figure 141 Structure of liabilities of manufacturers of construction materials employing over 49 people



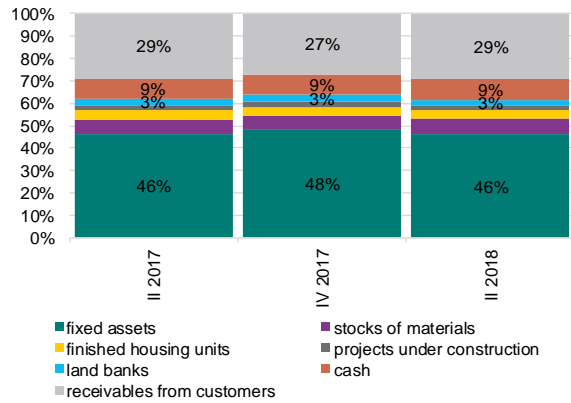
Source: NBP based on GUS (F01)

Figure 143 Sources of financing of manufacturers of construction materials employing over 49 people



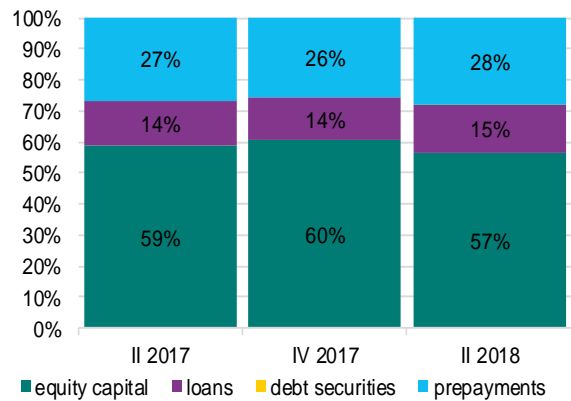
Source: NBP based on GUS (F01)

Figure 140 Structure of assets of manufacturers of construction materials employing over 49 people



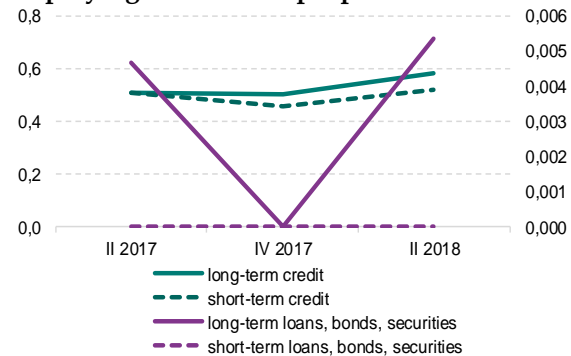
Source: NBP based on GUS (F01)

Figure 142 Structure of liabilities of manufacturers of construction materials employing from 9 to 49 people



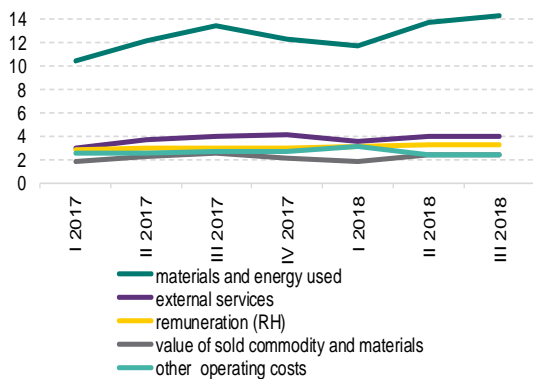
Source: NBP based on GUS (F01)

Figure 144 Sources of financing of manufacturers of construction materials employing from 9 to 49 people



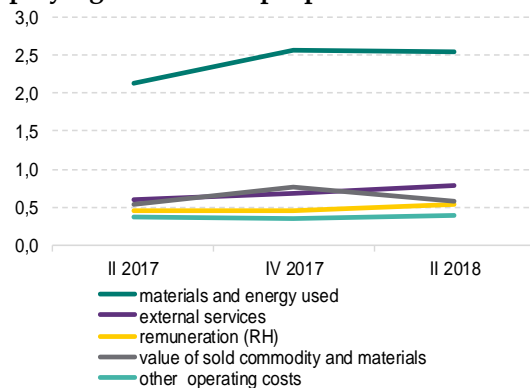
Source: NBP based on GUS (F01)

Figure 145 Costs of operating activity of manufacturers of construction materials employing over 49 people



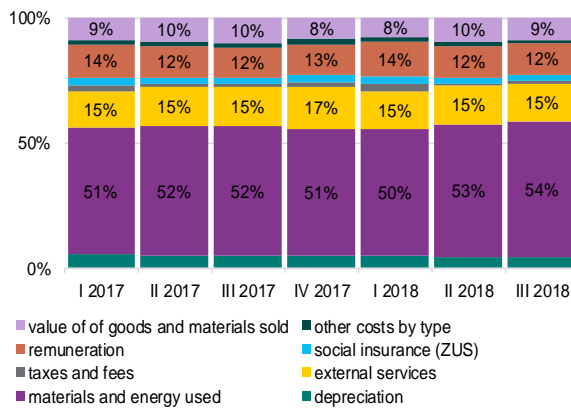
Source: NBP based on GUS (F01) and financial statements

Figure 145 Costs of operating activity manufacturers of construction materials employing from 9 to 49 people



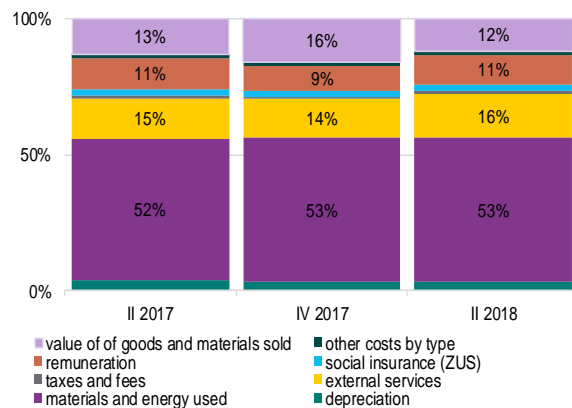
Source: NBP based on GUS (F01)

Figure 146 Structure of costs of operating activity of manufacturers of construction materials employing over 49 people



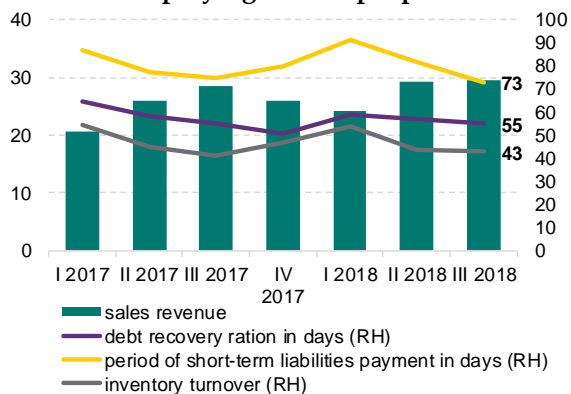
Source: NBP based on GUS (F01)

Figure 147 Structure of costs of operating activity of manufacturers of construction materials employing from 9 to 49 people



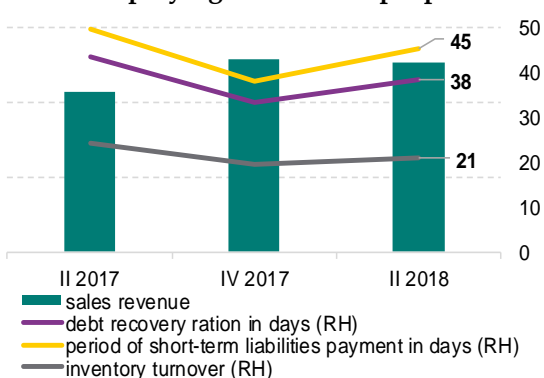
Source: NBP based on GUS (F01)

Figure 148 Turnover of inventory, receivables and liabilities of manufacturers of construction materials employing over 49 people



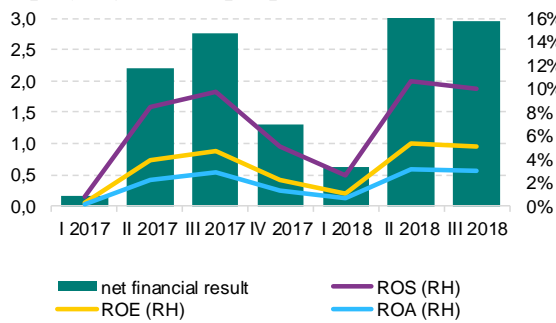
Source: NBP based on GUS (F01)

Figure 149 Turnover of inventory, receivables and liabilities of manufacturers of construction materials employing from 9 to 49 people



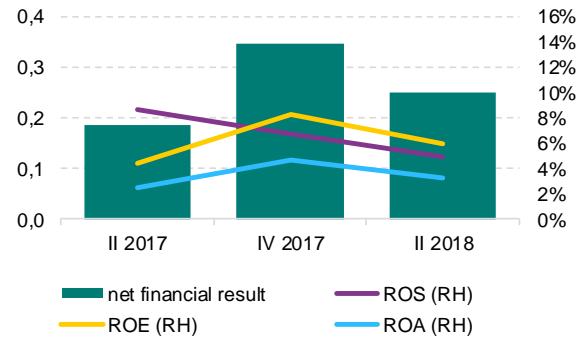
Source: NBP based on GUS (F01)

Figure 150 Profitability of manufacturers of construction materials manufacturers employing over 49 people



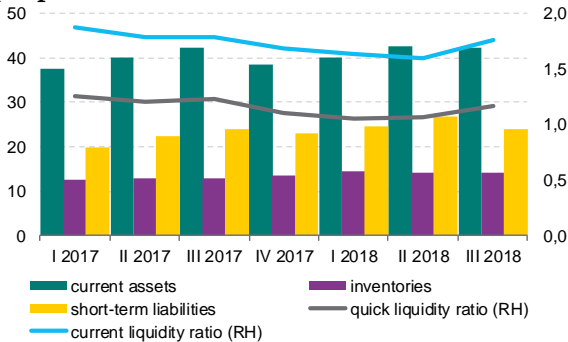
Source: NBP based on GUS (F01)

Figure 151 Profitability of manufacturers of construction materials manufacturers employing from 9 to 49 people



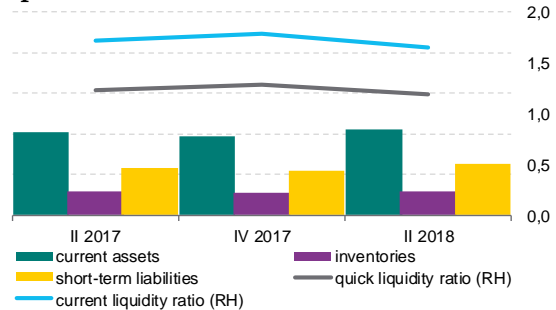
Source: NBP based on GUS (F01)

Figure 152 Liquidity ratios of manufacturers of construction materials employing over 49 people



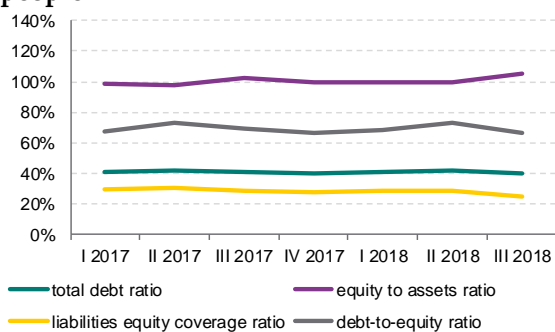
Source: NBP based on financial statements

Figure 153 Liquidity ratios of manufacturers of construction materials employing from 9 to 49 people



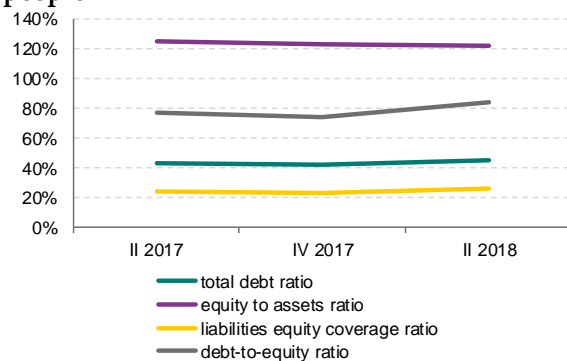
Source: NBP based on GUS (F01)

Figure 154 Debt ratios and indicators of securing liabilities of manufacturers of construction materials employing over 49 people



Source: NBP based on GUS (F01)

Figure 155 Debt ratios and indicators of securing liabilities of manufacturers of construction materials employing from 9 to 49 people



Source: NBP based on GUS (F01)

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