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Narodowy Bank Polski

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Why is impact of the COVID pandemic on the primary housing market in Poland still limited?

Joint Vienna Institute, April 2021

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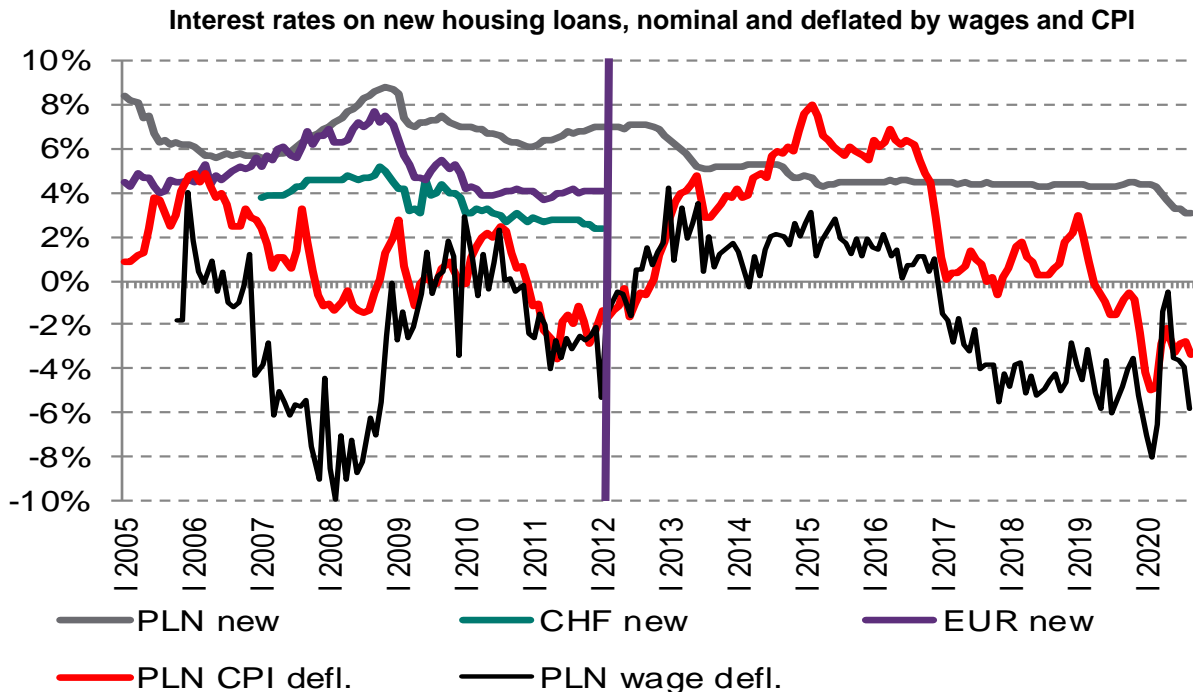


The COVID pandemic that broke out in mid-March 2020 has generated a larger shock to the real economy than the 2007-2009 global financial crisis did. However, the residential real estate market was not hit that much by the pandemic.

- The current situation is different in three main aspects:
 - The government and the central bank reacted very fast to the pandemic. Interest rates were cut to historically low levels and transfers were made to companies, which helped to cushion the negative effect of the pandemic on the real economy.
 - The developer housing market is more mature, developers are well-capitalized and experienced. This situation allows them to use monopolistic competition strategies to restrict supply and keep prices high. Being equipped with the experience with the 2009 bust in demand, developers have started to curb new production already in 2018. The pandemic did not hit them at an all-times high, but rather at a wisely chosen level of production.
 - Buyers on the primary market in the largest city finance the purchase of flats with a significant share of equity. Since 2016 private investors started to purchase housing for rental which generates alternative for owner occupied housing. The evolution of the still small private rental market in the largest cities gives people who want to live there the option to rent instead of buying a flat with a mortgage that needs to be paid back over decades. This process was accelerated by the previous interest rate cuts which made the deposit and mortgage rates to become negative in real terms.

The economic background

The government and the central bank reacted very fast to the pandemic. Interest rates were cut to historically low levels and transfers were made to companies, which helped to cushion the negative effect of the pandemic on the real economy.

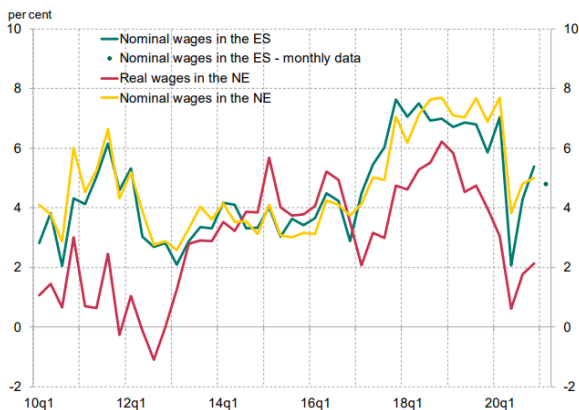


PLN new – interest rate on new mortgages in Polish zloty
 CHF new – interest rate on new mortgages in Swiss franc
 EUR new - interest rate on new mortgages in euro
 PLN CPI defl. – interest rate on new mortgages in Polish zloty deflated with CPI
 PLN wage defl. – interest rate on new mortgages in Polish zloty deflated with average wage growth

I 2012 – end of new mortgages in foreign currency

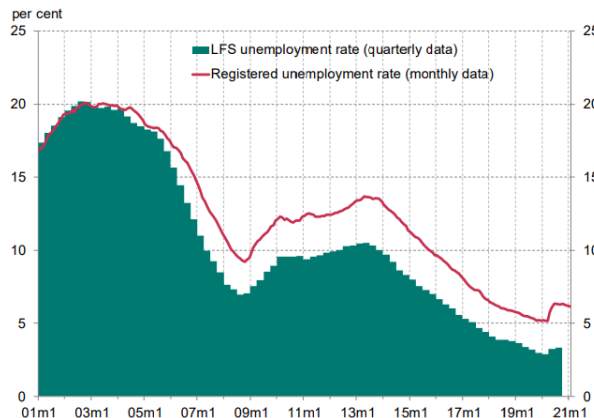
The economic situation in Poland was favorable when the COVID pandemic broke out and remained quite stable

Annual nominal and real wage growth rates in the national economy (NE) and annual nominal wage growth rate in the enterprise sector (ES)



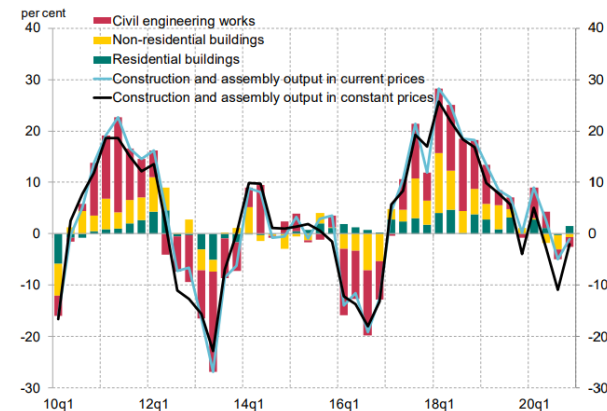
Source: Statistics Poland (GUS) data. Copied from the NBP Inflation Report March 2021

Unemployment rate, seasonally adjusted data



Source: Statistics Poland (GUS) data, NBP calculations. Copied from the NBP Inflation Report March 2021

Construction and assembly output growth by construction objects (y/y)

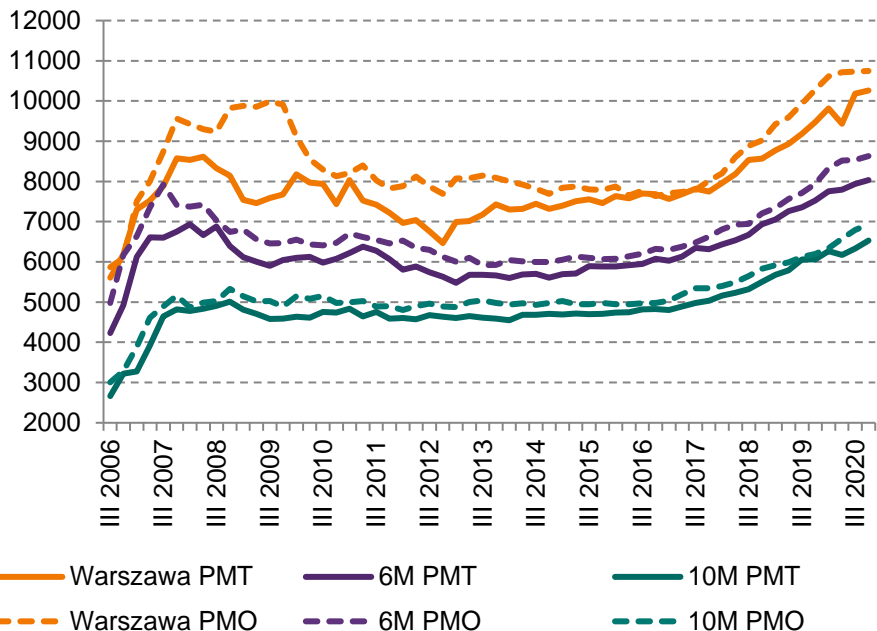


Source: Statistics Poland (GUS) data, NBP calculations. Copied from the NBP Inflation Report March 2021

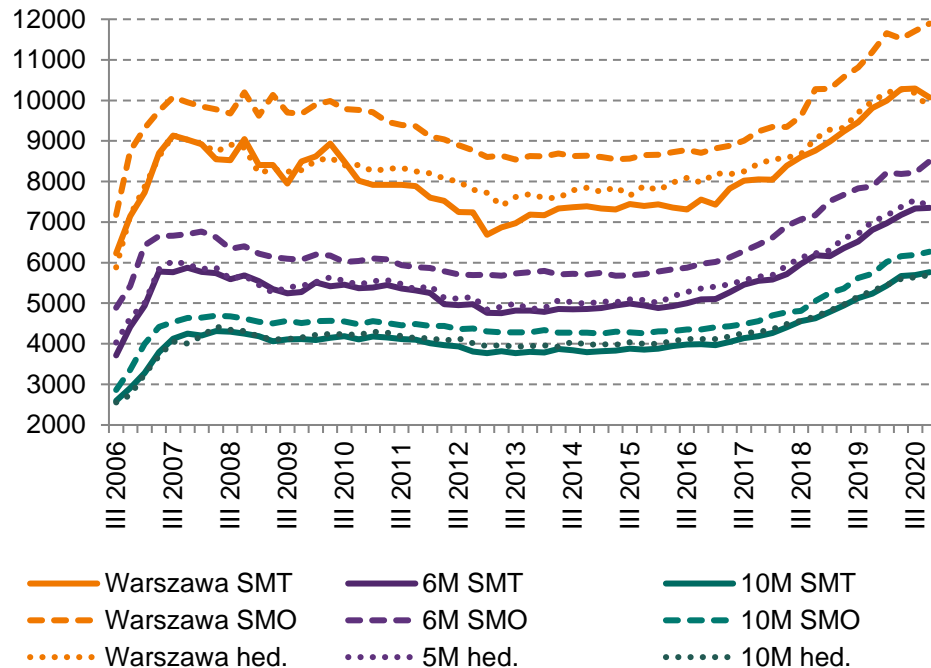
The evolution of the housing market

The prices of flats in the primary market increased, but in the fourth quarter their dynamics slowed down somewhat, also visible in the offer prices. We observe similar phenomena in the secondary market.

Average offer (O) and transaction (T) prices of housing in primary markets (PM) (PLN/m²)

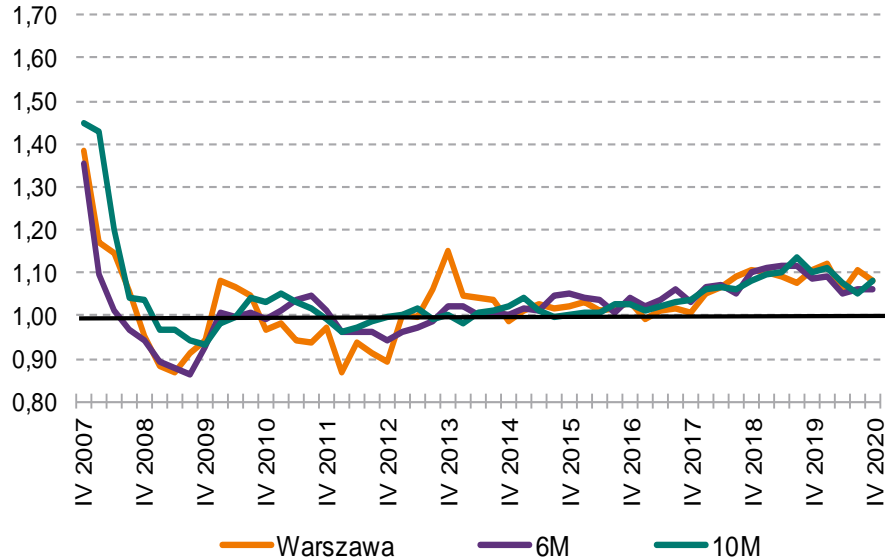


Average offer (O), transaction (T) and hedonic (hed.) prices of housing in secondary markets (SM) (existing stock) (PLN/m²)

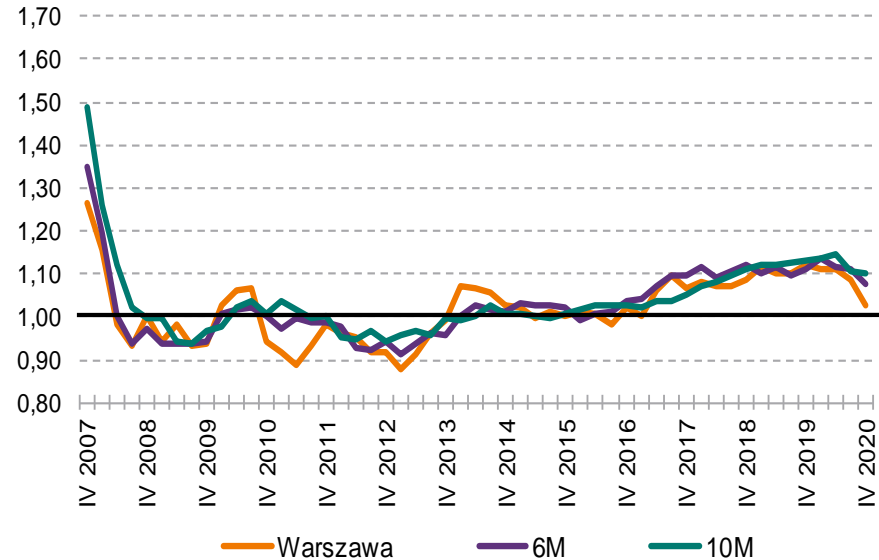


These tendencies are visible in the dynamics of the y/y indicators

YoY dynamics of the average transaction price per m2 of housing in primary markets

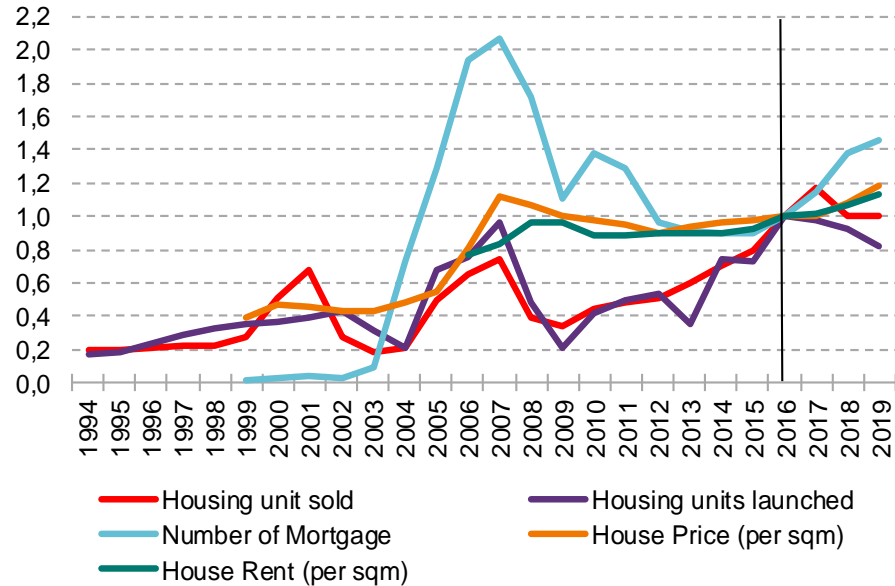


YoY dynamics of the average transaction price per m2 of housing in secondary markets

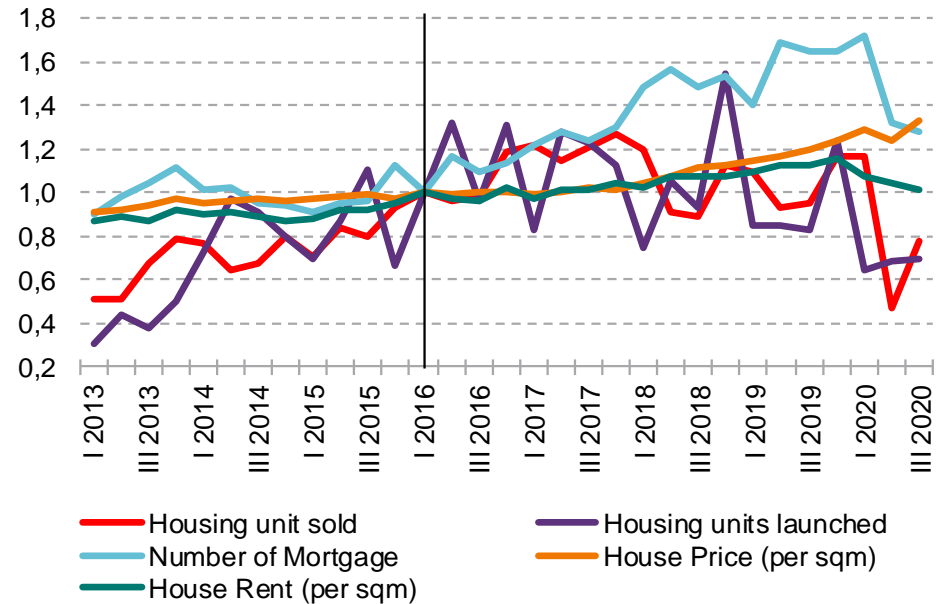


Cycles on the residential real estate market in Warsaw

Cycles on the residential real estate market in Warsaw, annual data (2016=100)

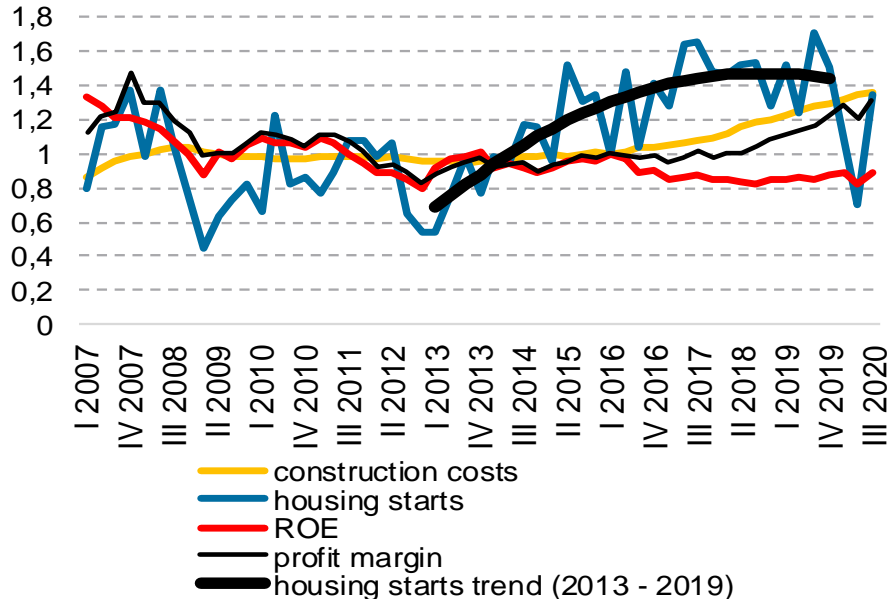


Cycles on the residential real estate market in Warsaw, the most recent quarters (I 2016=100)



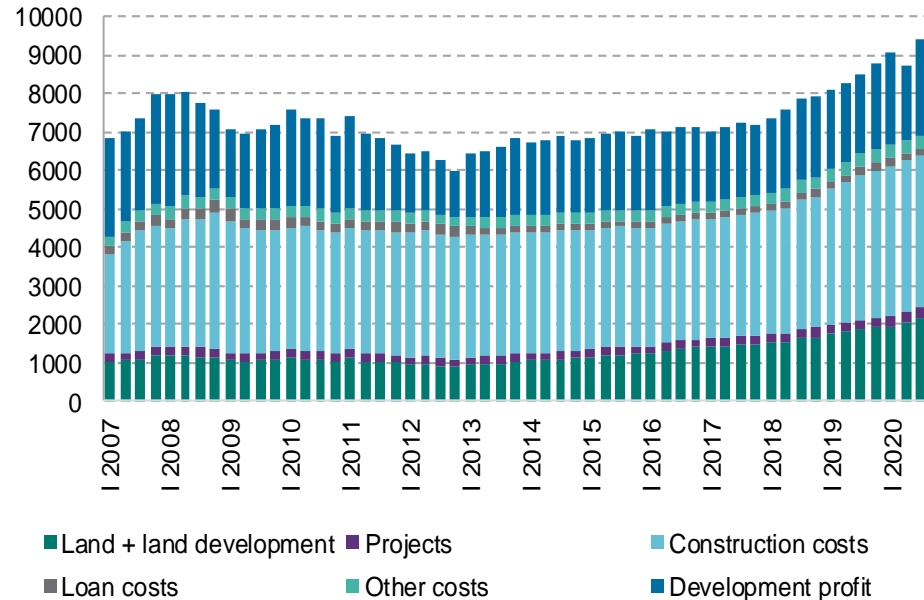
Housing construction and price structure

Housing starts in 7 largest cities and trend for 2013 - 2019, (I 2016 = 1)



Source: NBP, CSO, Sekocenbud

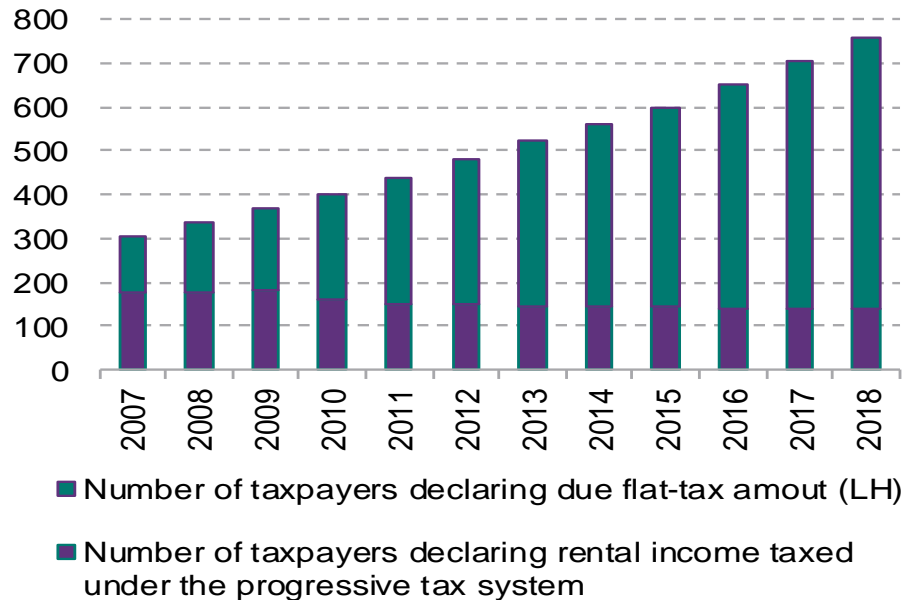
Estimated structure of price per m2 of housing usable area in Warsaw (PLN/m2)



Source: NBP based on Sekocenbud, JLL/REAS

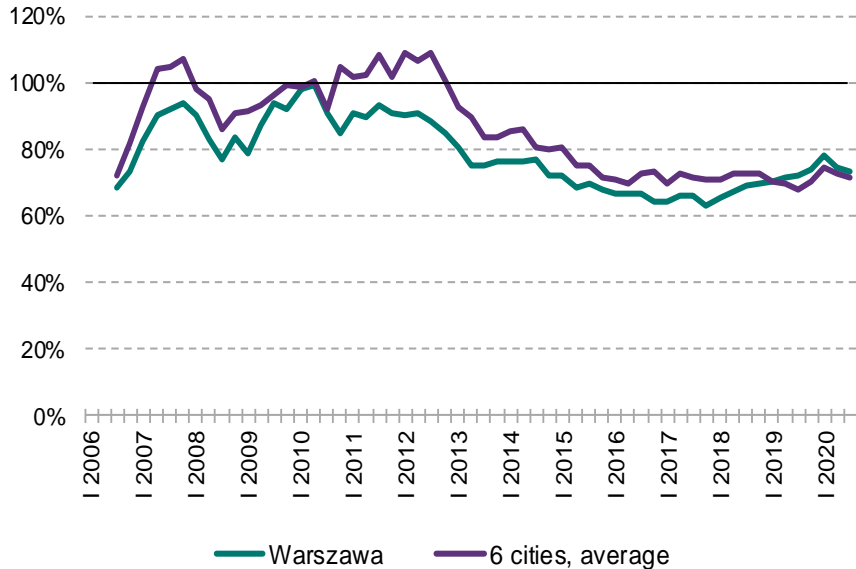
Fast-growing economies, which largely rely on services that are generated in the largest cities require a significant amount of affordable housing, with a focus on rental housing

Number of people (in thousands) that pay taxes on rental income



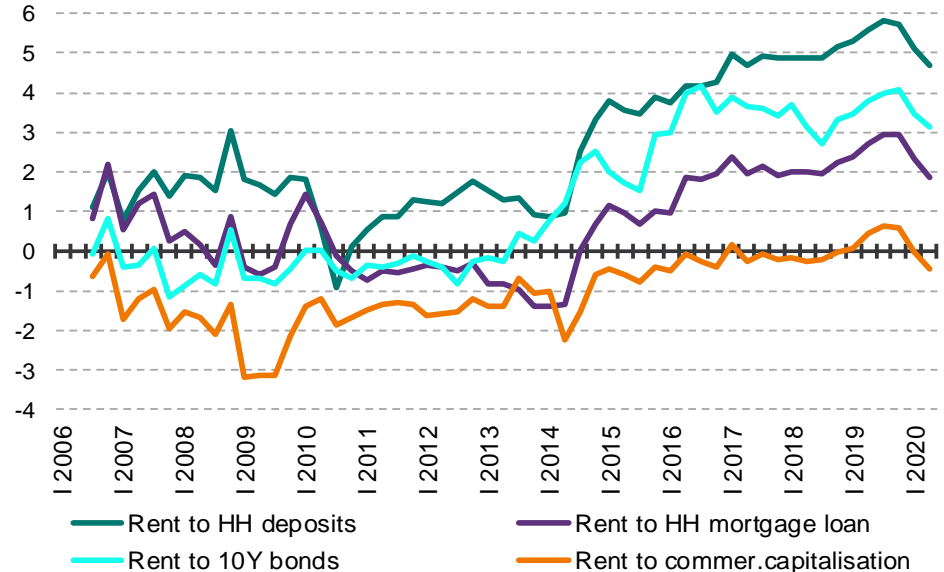
Since around 2015 investing in rental housing gives a higher rate of return than government bonds or interest rates on deposits, and a similar one to that achieved by investing in commercial property, and the investor can easily pay back a mortgage.

Relative cost of ownership with a 25 years mortgage versus renting a flat (50 m2)



Source: NBP

The difference in the yield of investment in rental housing in comparison to other investment forms

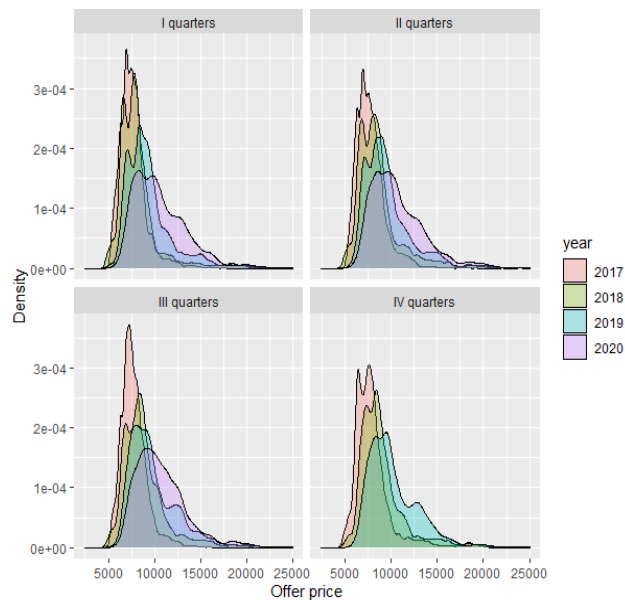


Source: NBP

The price setting decisions of developers amid the COVID pandemic

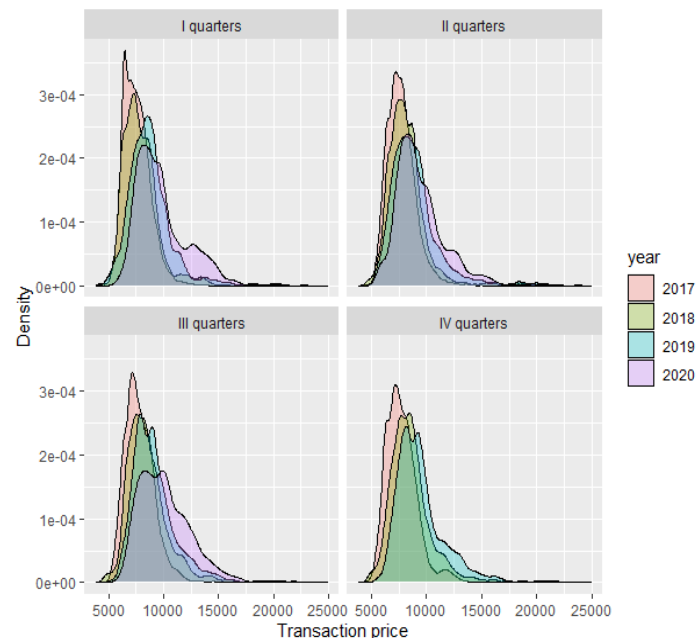
Density charts are increasingly flat in the following quarters, which results from greater price differentiation in the primary market.

Distributions of average housing offer prices in the primary market (PLN/m²)



Source: NBP

Distributions of average housing transaction prices in the primary market (PLN/m²)



Source: NBP

What happened on the demand side?

A simple demand, supply and price model (I)

Regression results of the housing demand, housing supply and transaction price equations

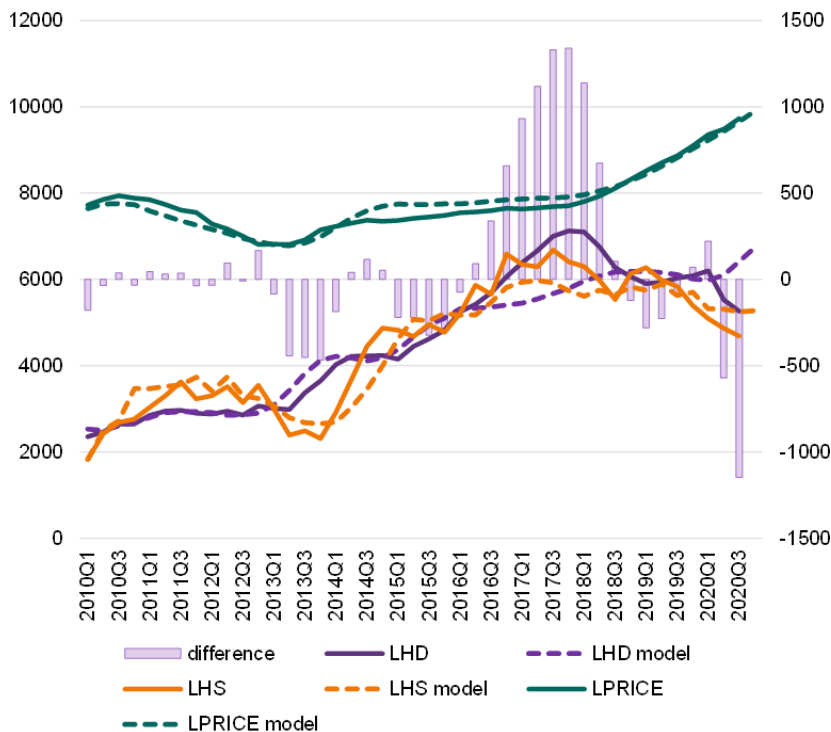
	LHD _t	LHS _t	D(LP _t)
LP _t	-1.452 *** (0.341)		
D(LP _{t-4})		4.660 *** (1.606)	
Intrate _t	-22.514 *** (3.767)		
Intrate _{t-4}		-20.215 *** (2.528)	
LIncome _t	1.818 *** (0.233)		
D(LCC _{t-1})			0.631 *** (0.132)
D(LCC _{t-4})		-8.723 ** (3.418)	
D(LHS _{t-2})		0.464 *** (0.045)	
LHS _{t-1} - LHD _{t-1}			-0.063 *** (0.013)
C	6.956 ** (3.309)	5.613 *** (0.431)	-0.0001 (0.002)
Adj. R ²	0.94	0.93	0.58

We estimate this model on quarterly data from 2010 to 2020, to obtain the determinants of fundamental housing demand.

Symbols: L - logarithms, (t-i) - lagged variables, D – first differences.

Newey-West standard errors HAC in brackets, ***, **, * significant at: 1%, 5% or 10%.

A simple demand, supply and price model (II)



Estimated and factual housing demand, housing supply and transaction prices in Warsaw (L axis) and the difference between factual and estimated demand (R axis).

Source: own calculations.

Conclusions

- We conclude that the COVID pandemic has a limited negative impact on the primary housing market and rental market in Warsaw. Two important factors were the significant monetary and fiscal intervention, which helped to mitigate the impact of the pandemic on the real economy.
- Some of the changes, such as the decrease in new construction could be already observed in 2018, which was a pre-cautious reaction of developers to the rising construction costs that were driven by the construction boom in the whole economy. Developers in Warsaw used monopolistic price setting strategies to maximize profits before the pandemic broke out. Developers decreased the number of dwellings production and were able to keep rising prices.
- We approximate the investment demand with a simple model of the primary market. Our results show that the fundamental housing demand remain stable, but investment demand decreased. It seems that the uncertainty about the demand in the rental market soon discourages investors, even though the factual economic conditions are rather fine and interest rates are historically low. In the case of OOH buyers, the negative effects are smaller and will most likely be spread over time. The latter were affected by the fact that the banks curbed lending and use tighter loan granting criteria. However, the pandemic is still not over and therefore our results should be taken with caution.

We protect the value of money