BMEP

Boletim Mensal de Economia Portuguesa

N.º 08 | agosto 2018

Gabinete de Estratégia e Estudos
Ministério da Economia

GPEARI
Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais
Ministério das Finanças

Ficha Técnica

Título: Boletim Mensal de Economia Portuguesa

Data: agosto de 2018

Elaborado com informação disponível até ao dia 30 de agosto.

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ISSN: 1747-9082

(Esta publicação respeita as regras do Acordo Ortográfico da Língua Portuguesa)

Em Análise

Portuguese housing market developments

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1. Introduction

In the aftermath of the financial crisis, recent discussions are occurring at European level within Member States, the ECB and the European Commission, focusing on the possible emerging risks, including housing prices increases. Nevertheless, this is also a topic of monitoring under the Macroeconomic Imbalances Procedure. Despite the fact that in the 2018 Country Report for Portugal, the European Commission considered that "the risks linked to renewed dynamism in the housing sector appeared to be contained currently", it stated that "it would warrant closer monitoring if the current rapid pace of real house price growth is sustained over the medium term".

With the aim to better understand what is happening on housing market in the last 20 years, this work focus on the developments related to households and explore both demand and supply side of the equation, exploring different sources to assess the possibility of a bubble.

2. Literature Review

Housing is a major component of wealth and economic theory argues that household's wealth is a key driver of aggregate consumption, thus making house prices' fluctuations a key driver of household's consumption decisions (Campbell et al., 2007). Simultaneously, not only most housing acquisitions and construction activities are financed through credit, as housing is an asset that can be used as collateral in a loan, thus making the banking sector of a country extremely exposed to developments in the housing market. Therefore, the real estate market is a crucial connection point between the financial system and the non-financial private sector (Banco de Portugal, 2018), which justifies the need to monitor this market thoroughly.

Determinants of housing demand include changes in household's disposable income, accumulation of net financial wealth, credit availability and average level of interest rates, features of the tax system (e.g. tax incentives for mortgage financing and home ownership, rent controls), demographics, tourism flows, etc. As to the supply side, credit availability also plays a great part, adding to the current cost of land and construction and investments in the improvement of the current housing stock (Lourenço and Rodrigues, 2017 and Nan Geng, 2018).

The housing market can roughly be divided into two sectors: residential and commercial housing. While risks in residential real estate markets are much better researched, the commercial part of the market is much less documented.

The surveillance of the housing market poses as an important tool, because this market is important for the understanding of not only economic fluctuations, but also the origin of financial crisis (Philiponnet and Turrini, 2017). In fact, experience indicates that housing prices when not sustainable and far from their long-term equilibrium levels are followed by adjustments that impact macroeconomic and financial stability (Nan Geng, 2018). Sudden and large developments in this market can introduce the need for large corrections, which, in turn, can lead to macro stability risks, being therefore a potential source of imbalances. This is a particularly complex process, since there are several channels of transmission of house prices to real economy, namely through household balance sheets, the financial sector, the construction sector, etc. (European Commission, 2017). This fact makes it extremely more difficult to closely monitor this market and guarantee stabilization in all fields.

[1] NovaSBE. Trabalho realizado no âmbito de um estágio de Verão no GPEARI. As opiniões expressas no artigo são da responsabilidade da autora podendo não coincidir com as da instituição. Todos os erros e omissões são da responsabilidade da autora.

Booms and busts are nothing but long-term deviations from real estate price trends (Agnello and Schuknecht, 2011). Booms are generally accompanied by fast credit growth and increases in leverage. Then, when the bust comes, debt overhang and deleveraging spirals are a major threat for financial and macroeconomic stability (Crowe et al., 2013). Agnello and Schuknecht (2011) found that short-term interest rates, local and global money/credit and the incidence of mortgage market deregulation are some of the main factors that strongly affect the probability of experiencing booms and busts.

It has been noted that rapid price increases do not automatically imply the existence of a bubble. What determines it is whether expectation of large future price increases are sustaining the market, and whether these expectations are large enough to generate anxieties among potential homebuyers, and whether these expectations are reliable enough and if people have enough confidence on them to actually act. (Case and Shiller, 2003).

According to Case and Schiller (2003), the tendency to view housing as an investment is in the foundation of a housing bubble, that happens due to perspectives on future price increases, rather than for the actual need for or pleasure taken from actually occupying a home. ().

2.1. Portuguese Housing Developments

The currently improving of economic outlook together with favourable credit conditions, highly associated with low interest rates, are at the origin of some concern regarding house prices and its deviations from fundamentals.

House prices in many advanced economies have shown strong upward trends in their housing prices during recent decades (Geng, 2018). The same is being verified in most EU Member States, whose prices have recovered and corrected sharply as part of the financial crisis. Valuation gaps have strongly reduced in most Member States and house prices remain, in general, well below their pre-crisis peaks (European Commission, 2018). However, if these trends are sustained, such dynamics could lead to house price over-valuation. Recent developments require attention to the potential destabilization that great swings in house prices can cause and to the accelerating role the credit market can play (European Commission, 2017).

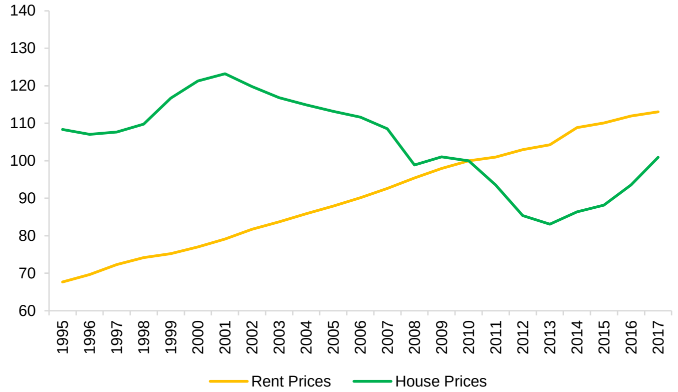
Mediterranean countries suffered quite late urbanization and industrialization processes, leading to an overall preference for home-ownership (Serra, 2002). In Portugal, residential housing is the biggest real asset of households, which in turn is mainly financed by credit. This explains the great exposition of the Portuguese banking sector to residential housing market developments (Banco de Portugal, 2018).

Portuguese housing prices' behaviour did not differ much from the one registered in its European peers. House prices have in fact been increasing lately, but are still registered below the pre-crisis levels. However, Lourenço and Rodrigues (2017) have observed that the probability of positive house price growth in Portugal is quite high, considering current projections of the Portuguese economy. Their results revealed that the Portuguese housing prices growth is mostly impacted by economic growth and interest rates, being the latter especially important in the period between 2011 and 2017, since they reached extremely low, when not negative, values.

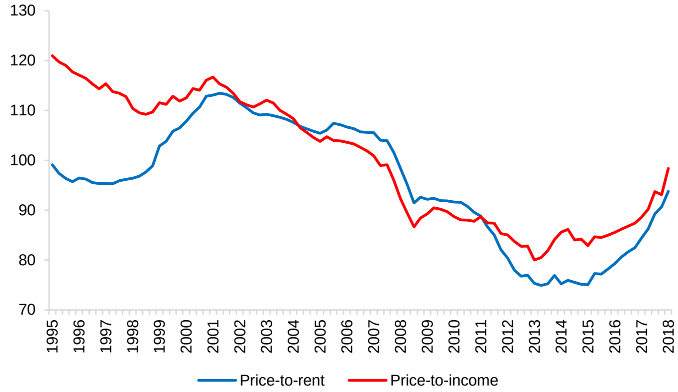
3. Descriptive Analysis

3.1. Housing Prices

Graph 1 – Rent Prices and Real House Prices



Graph 2 - Price-to-rent and price-to-income ratios



Source: OECD

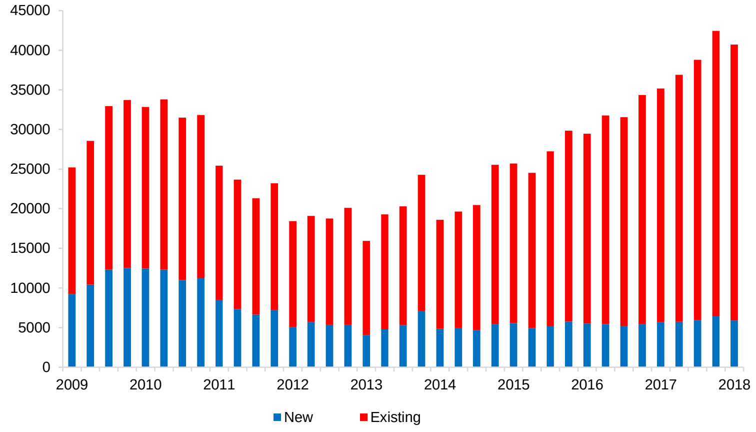
Looking for the last 20 years, we can see that in the period after the adoption of the euro, housing prices consistently declined until 2013, recovering in the last 4 years and standing at 100.9 in 2017, a value close to the one registered ten years ago, in the peak of the crisis. Rent prices, on the other hand, have been steadily increasing since 1995. Developments in the functioning of the rental market and the increasing accessibility to the latter, aligned with a preferences shift, are probably the reasons that made a part of the population choose rentals rather than home-ownership, pressuring the prices to go up. The price-to-rent ratio[2] has been steadily increasing but it has not reached the pre-crisis levels, which could indicate a preferences' shift from house ownership to rent. On the other hand, the price-to-income ratio[3] has been decreasing since around 2001 but recently started to invert its trend, showing that households are now less comfortable with current housing prices, with a value similar to the registered in the peak of the crisis.

[2] Price-to-rent ratio translates in the relation between the actual price of a house and the annualized rents. This indicator enables us to understand how attractive home-ownership is in contrast with renting. At the same time, this indicator could be used as tool to investment in real state decisions.

[3] Price-to-income is an indicator used to measure affordability.

3.2 Demand

Graph 3 - Number of transactions of housing units

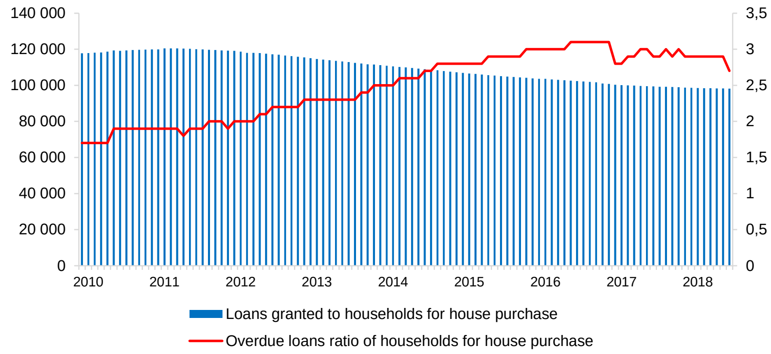


Source: Statistics Portugal.

The number of transactions of housing units (Graph 3) gives us an idea of how the demand for housing is evolving and thus assess how quickly the supply side is adjusting and the financial sector responding.

The absolute number of transactions has been, on average, increasing since around 2013, showing significantly higher values in 2018 than in 2009. The number of transactions of existing houses has remained relatively constant, which means that this strong increase in transactions is mostly related to already existing housing units.

Graph 4 - Loans granted to households and overdue loans ratio of households for house purchase

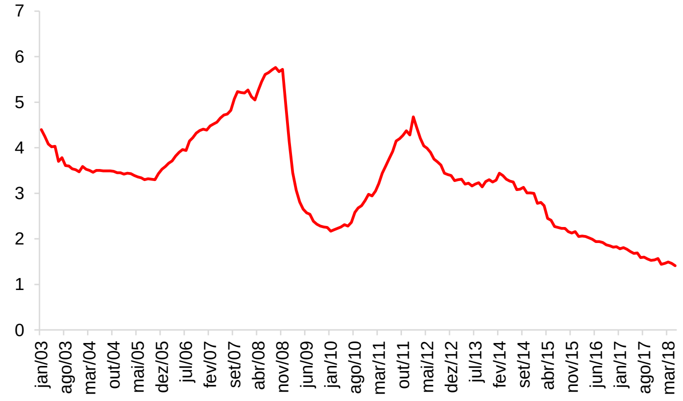


Source: Bank of Portugal

As expected, the housing market relies a lot on the financial sector. Both supply and demand of housing depend a lot on credit conditions. With that in mind, it is very important to assess the availability of loans and credit for housing, and, at the same time, evaluate how stable is the financial sector – in this case, represented by the ratio of overdue loans.

As we can see in Graph 4, in Portugal, the absolute value of loans granted to household registered an overall negative trend since 2010, stabilizing around the value of M€ 98000 in between 2017 and 2018. The overdue loans ratio has been slowly increasing until 2017 but inverted its trend during 2018, showing positive signs regarding the financial sector stability.

Graph 5 - Interest Rates on new loans to MU households – housing



Source: Bank of Portugal

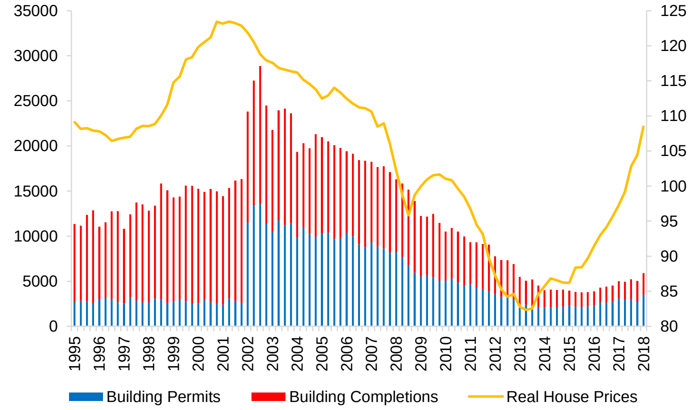
Low interest rates are expected to drive borrowing costs down and demand up, leading to subsequent increase in house prices. Recently, interest rates in Portugal have reached quite low values. This leads to the expectation that the amount of loans will eventually increase, which will foster price increases even more.

Right after the financial crisis, there was a steep decline in the interest rates for new housing loans, followed by a recovery to 2005 levels until 2012 (around 4%). Since then, interest rates steadily decreased, reaching the lowest value of the time span analysed in May of 2018 (1.41%).

3.3 Supply

How housing supply reacts to demand is one of the causes of price swings. In Portugal, there was a positive trend since 1995 and a sharp increase both in building permits and completions in 2002 (Graph 6). After that, supply kept on decreasing until recent years, stabilizing between 2014 and 2016 and registering a slow increase, reaching values similar to 2013 and historically low.

Graph 6 - Building Permits and Completions and Real House Prices



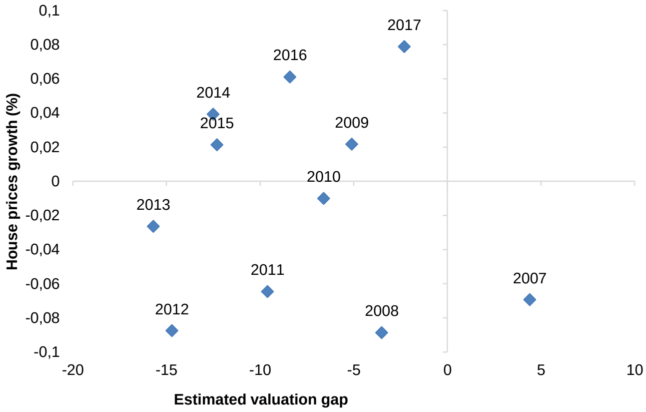
Source: Bank of Portugal and OECD

3.4. Valuation Estimates

This indicator is calculated based on the price-to-rent and price-to-income ratios and a statistical model for fundamental drivers of house prices. This allows for a more global analysis of the prices' behaviour and understanding of how far they are from what supply and demand justifies[4].

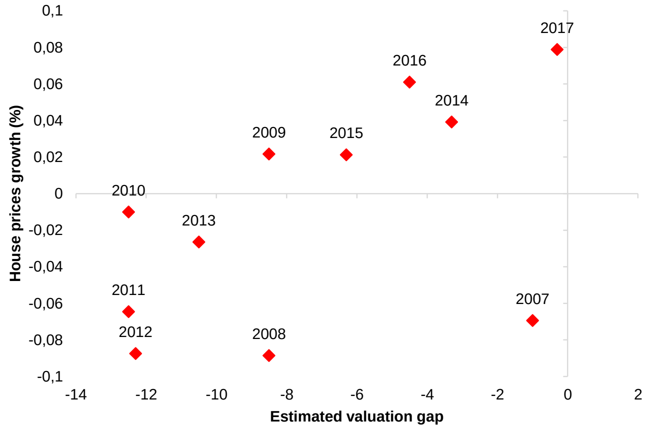
[4] For more detailed information see Philiponnet & Turrini (2017).

Graph 7 - Estimates of the over/undervaluation of residential property prices: Average valuation measures



Source: ECB Statistical Data Warehouse

Graph 8 - Estimates of the over/undervaluation of residential property prices: Model-based valuation measures (residual - Bayesian static equation)



Source: ECB Statistical Data Warehouse

The last estimate, recorded in 2017, is fairly close to the value 0, according to both methods meaning that the market prices are close from being totally justified by their fundamentals. Despite the visible differences between the two methods, the pattern shown is rather similar.

According to the average valuation measure, Portugal has been registering undervalued values since 2009, with 2007 being the only year where there was overvaluation and the prices were being corrected downward. In the following year, there was undervaluation, which was still decreasing. The same happened until 2014, with exception of 2009. From 2014 onwards, housing prices in Portugal were considered to be undervalued, but recovering. In 2017, Portugal was still recovering from undervalued values, registering a positive growth of housing prices and a negative value of the valuation estimate.

Looking at the model-based valuation measure, the pattern is rather similar. In 2007, prices in Portugal were undervalued and still decreasing, having undervalued even more until 2013, with exception of 2009. After that, the paradigm changed and, even though prices were still undervalued, the positive house price growth has been responsible for their recovery. In 2017, valuation gap is getting closer to 0, showing that exact recovery.

4. Conclusion

In the European context, the improving economic outlook aligned with low interest rates has made some concern arise regarding the stability of the housing market.

The Portuguese case poses different types of signals, some more alarming than others. We can see a general price increase and favourable interest rates, along with increasing number of transactions, and the same is verified in the price-to-income and price-to-rent ratios. On the other hand, supply is not keeping up at the same pace, and the number of loans still has not showed the effects of this increasing demand and low interest rates.

The overall valuation gaps calculated by the European Central Bank do not show any overvaluation in the Portuguese housing market. This may change given the increasing trends shown in some of the indicators analysed above.

5. References

Agnello, L., & Schuknecht, L. (2011). Booms and busts in housing markets: Determinants and implications. *Journal of Housing Economics*, *20*(3), 171-190.

Banco de Portugal (2018). Relatório de Estabilidade Financeira: Junho 2018, 45-62

Campbell, J. Y., & Cocco, J. F. (2007). How do house prices affect consumption? Evidence from micro data. *Journal of monetary Economics*, *54*(3), 591-621.

Case, K. E., & Shiller, R. J. (2003). Is there a bubble in the housing market?. *Brookings papers on economic activity*, *2003*(2), 299-342.

Crowe, C., Dell'Ariccia, G., Igan, D., & Rabanal, P. (2013). How to deal with real estate booms: Lessons from country experiences. *Journal of Financial Stability*, *9*(3), 300-319.

European Commission (2017). European Semester Thematic Factsheet – Housing Market Developments

Geng, N. (2018). *Fundamental Drivers of House Prices in Advanced Economies*. IMF Working Paper, Forthcoming.

Lourenço, R. F., & Rodrigues, P. M. (2017). House prices in Portugal-what happened since the crisis?.

Philiponnet, N., & Turrini, A. (2017). *Assessing house price developments in the EU* (No. 048). Directorate General Economic and Financial Affairs (DG ECFIN), European Commission.

Serra, N. (2002), Estado, Território e Estratégias de Habitação, Quarteto: Coimbra.