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THE HOUSING MARKET IN PORTUGAL

*AN OVERVIEW OF THE EVOLUTION OF THE MOST RELEVANT
ECONOMIC INDICATORS SINCE 2008*

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AVALIAÇÃO E RELAÇÕES INTERNACIONAIS
Ministério das Finanças

Nova Economics Club is the Economics club at Nova School of Business and Economics. Since 2012, its focus is to create a bridge between the theory learnt in classes with the work performed by economists on a daily basis.

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Information on the data series

The analysis of the Portuguese housing market takes the year 2008 as a reference year for analysis. The underlying reason for this choice is due to the onset of the financial crisis in 2008, which has greatly affected the Portuguese housing market.

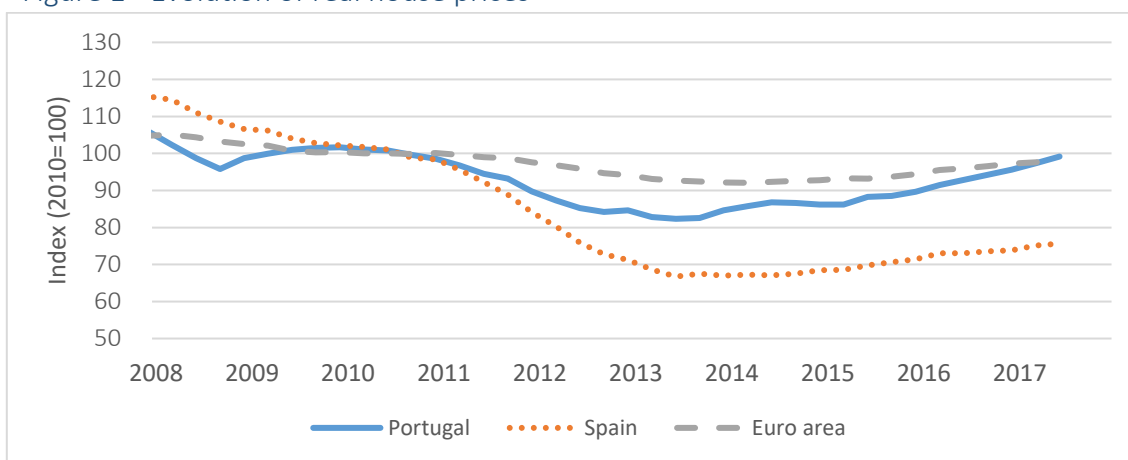
The base year for indices is 2010, because most public data series are calculated indexed to the year 2010.

Please note that the starting year of some data series may not be in line with the reference year 2008. This is due to the limited public data availability. All data series are presented to the most recent data points up to the date of working.

1. Evolution of housing prices in Portugal

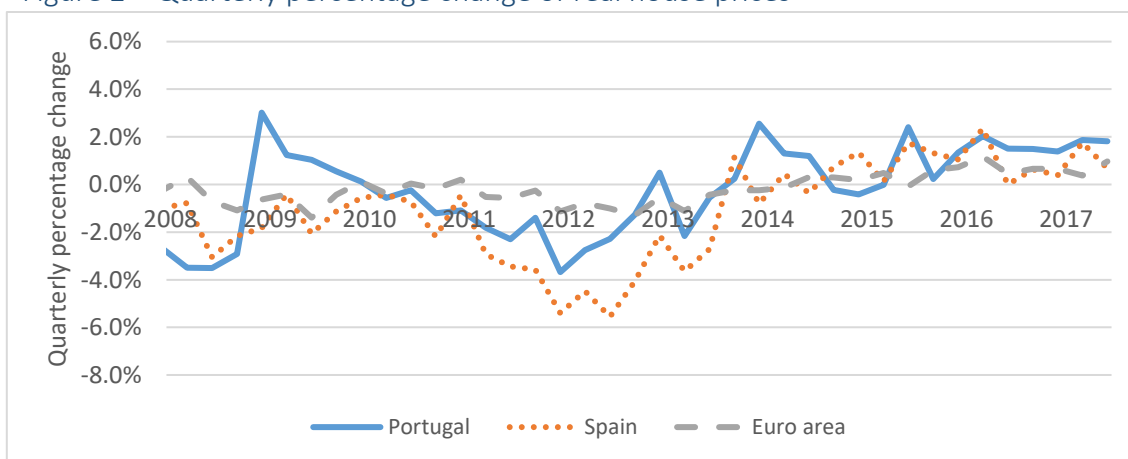
1.1 Housing prices

Figure 1 - Evolution of real house prices



Indicator	Real house prices
Measurement	Index (2010=100), quarterly data available from 1999 to Q3 2017
Source	OECD data. Last update, 16.02.2018. Retrieved from: https://stats.oecd.org/Index.aspx?DataSetCode=HOUSE_PRICES#
Objective	Measure the evolution of the real house prices in Portugal
Observation	Portuguese real house prices have increased since the second half of 2013. This is reverting the downward trend of prices since the beginning of the financial crisis
Interpretation	Prices in Portugal quickly recovered to pre-crisis levels and are now slightly above the European average. In comparison, real house prices in Spain remain substantially below the pre-crisis level of 2008. The adjustment program from 2011 may have contributed to a faster recovery

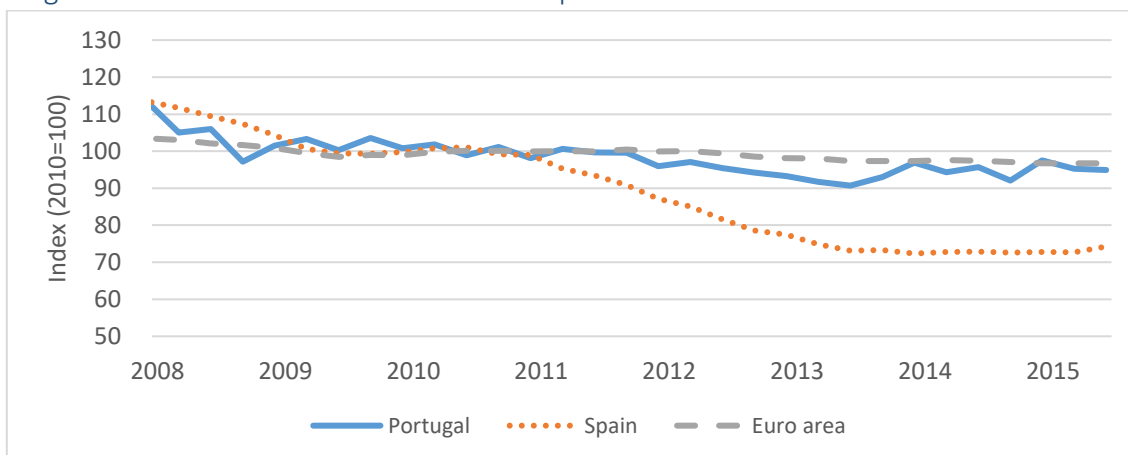
Figure 2 – Quarterly percentage change of real house prices



Indicator	Quarterly percentage change of real house prices
Measurement	Index (2010=100), quarterly data available from 1999 to Q3 2017
Source	OECD data. Last update, 16.02.2018. Retrieved from: https://stats.oecd.org/Index.aspx?DataSetCode=HOUSE_PRICES#

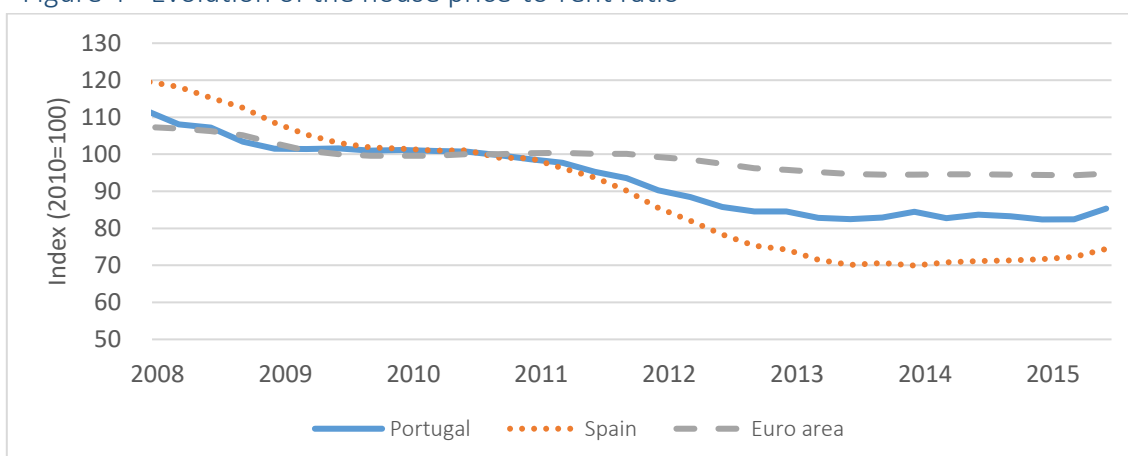
Objective	Measure the quarterly percentage change of real house prices
Observation	The change in real house prices was very pronounced during the years following the financial crisis
Interpretation	The sharp changes in the Portuguese real house prices after the crisis reflect the vulnerability, but also the quick recovery of the Portuguese housing market

Figure 3 - Evolution of the nominal house price-to-income ratio



Indicator	Nominal house price-to-income ratio
Measurement	Index (2010=100), quarterly data available from 1999 to Q2 2015
Source	OECD data. Last update, 16.02.2018. Retrieved from: https://data.oecd.org/hha/housing.htm
Objective	A measurement of the affordability of housing
Observation	After the crisis in 2008, the ratio had gradually been declining below European average, but it has converged back to the European average in recent years
Interpretation	The lowest point after financial crisis was reached in 2013. Because the price-to-income ratio has fallen dramatically from pre-crisis levels, housing in Portugal has become relatively affordable

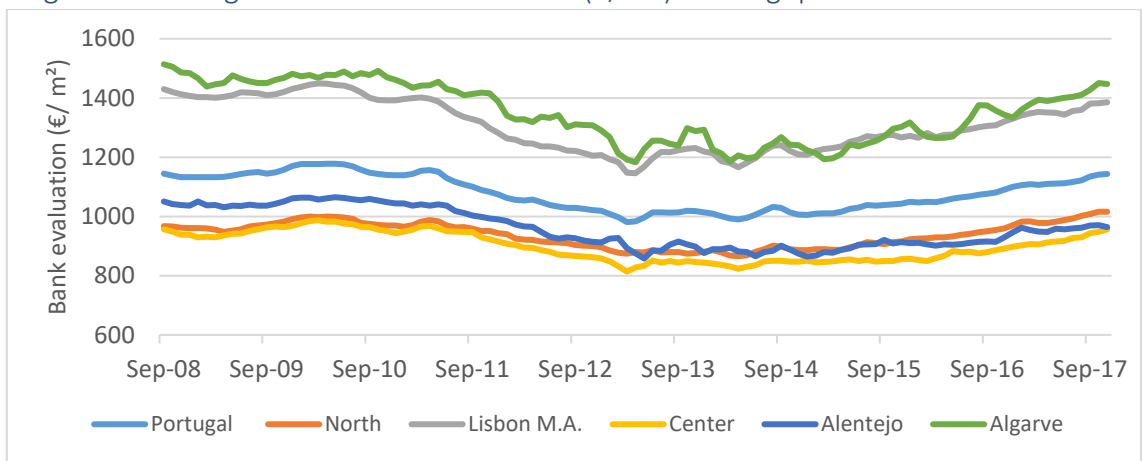
Figure 4 - Evolution of the house price-to-rent ratio



Indicator	House price-to-rent ratio
Measurement	Index (2010=100), quarterly data available from 1999 to Q2 2015

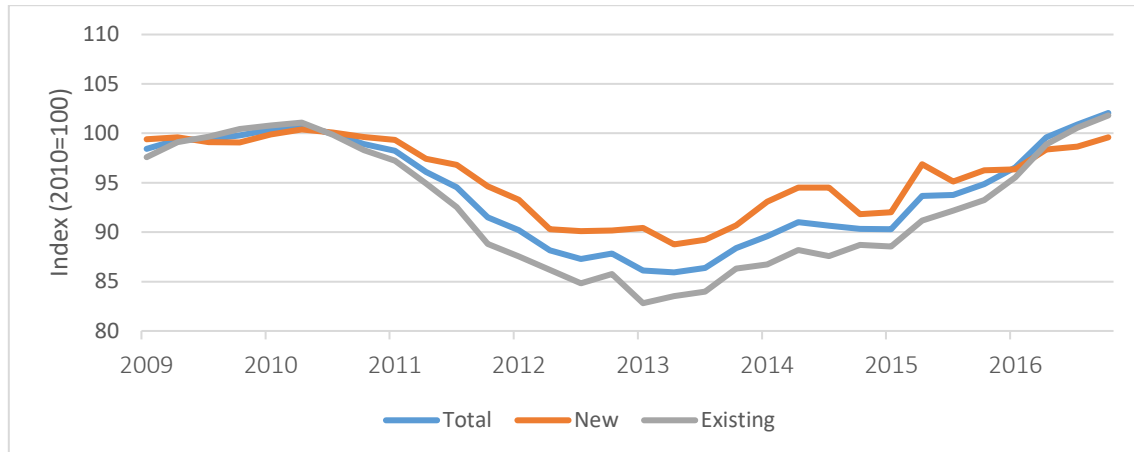
Source	OECD data. Last update, 16.02.2018. Retrieved from: https://data.oecd.org/hha/housing.htm
Objective	The nominal house price-to-rent price ratio provides a measurement about whether or not it is more profitable to buy or rent property (profitability of house ownership).
Observation	The ratio has continuously fallen since the beginning of the financial crisis. Yet, the ratio has not returned to its pre-crisis levels
Interpretation	The crisis and reforms in the housing market led to a relatively larger increase of rental prices to housing prices. Hence, owning a house became relatively more attractive to tenants

Figure 5 - Average value of bank evaluation (€/ m²) of living quarters



Indicator	Average value of bank evaluation (€/ m ²) of living quarters by Geographic localization (NUTS - 2013)
Measurement	Euros per square meter, monthly data from Sep 2008 to Nov 2017
Source	Instituto Nacional de Estatística (INE). Last update, 16.02.2018. Retrieved from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_indicadores&indOcorrCod=0003971&contexto=bd&selTab=tab2
Objective	Compare the average value in € per square meter across different regions in Portugal
Observation	The average values across regions declined in the subsequent years of the crisis, but have started to rise since 2012
Interpretation	The average value of bank evaluation is highest in Algarve and Lisbon's metropolitan area. It suggests that the touristic areas Algarve and Lisbon, the economic centres of Portugal, continue to have higher price levels in the future

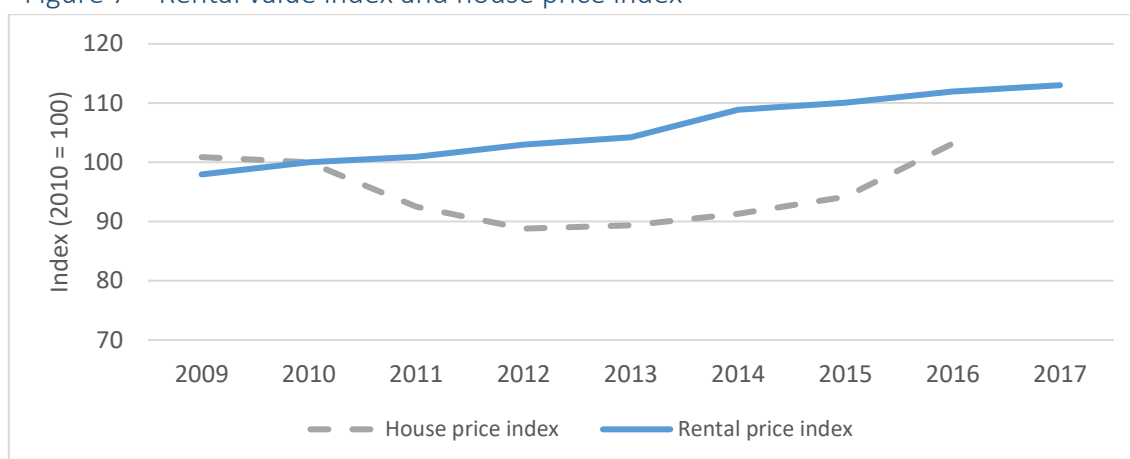
Figure 6 - Housing price index by category of housing unit



Indicator	Housing price index, HPI (Base - 2010) by category of housing unit
Measurement	Index (2010=100), quarterly data available from Q1 2009 to Q4 2017
Source	Instituto Nacional de Estatística (INE). Last update, 16.02.2018. Retrieved from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_indicadores&indOcorrCod=0007837&contexto=bd&selTab=tab2
Objective	Measure the evolution of prices for different housing categories
Observation	The price increases across different housing units differ. Prices between the new and existing housing units diverged after the crisis, but prices for existing housing units sharply increased since 2013
Interpretation	The sharp price increase in existing housing units is a main driver of the most recent hike in housing prices. This may indicate that existing housing units have strongly benefited from the new market environment

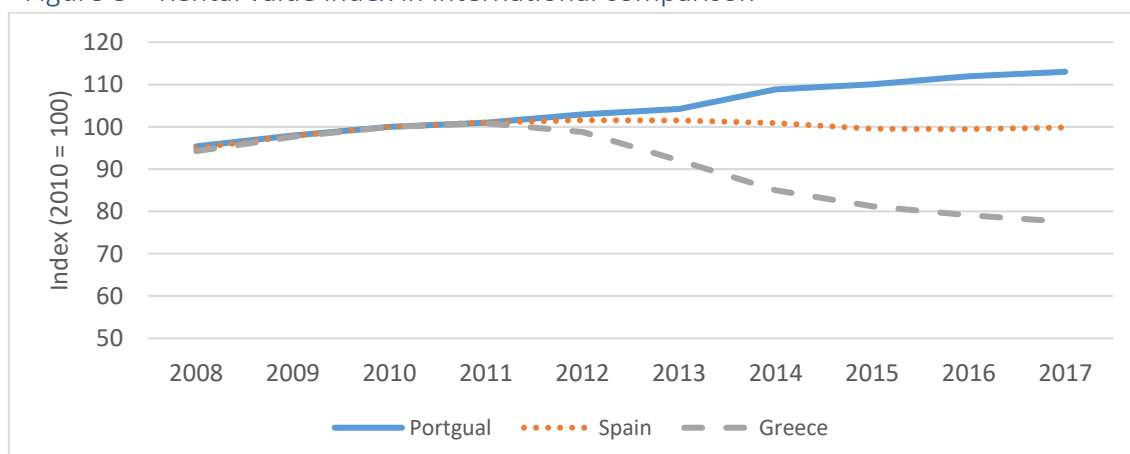
1.2 Rental and non-rental housing prices

Figure 7 – Rental value index and house price index



Indicator	Rental value index and house price index
Measurement	Index (2010 = 100), yearly data available from 2009 to 2017
Source	European Commission (Eurostat) and European Central bank calculations based on Eurostat data. Last update, 16.02.2018. Retrieved from: https://sdw.ecb.europa.eu/quickview.do;jsessionid=CDDBE93713241C2A0D5F7BB532D00B4B?SERIES_KEY=122.ICP.M.PT.N.041000.4.I.NX
Objective	Compare the change in rent prices with the change in house prices
Observation	The house price index shows a sharp decrease between 2010 and 2014, whereas the rental value index grew steadily between 2009 and 2016
Interpretation	The house prices have shown to be more volatile during the economic downturn and the reforms in the housing market may have contributed to an increase in the rental prices

Figure 8 – Rental value index in international comparison

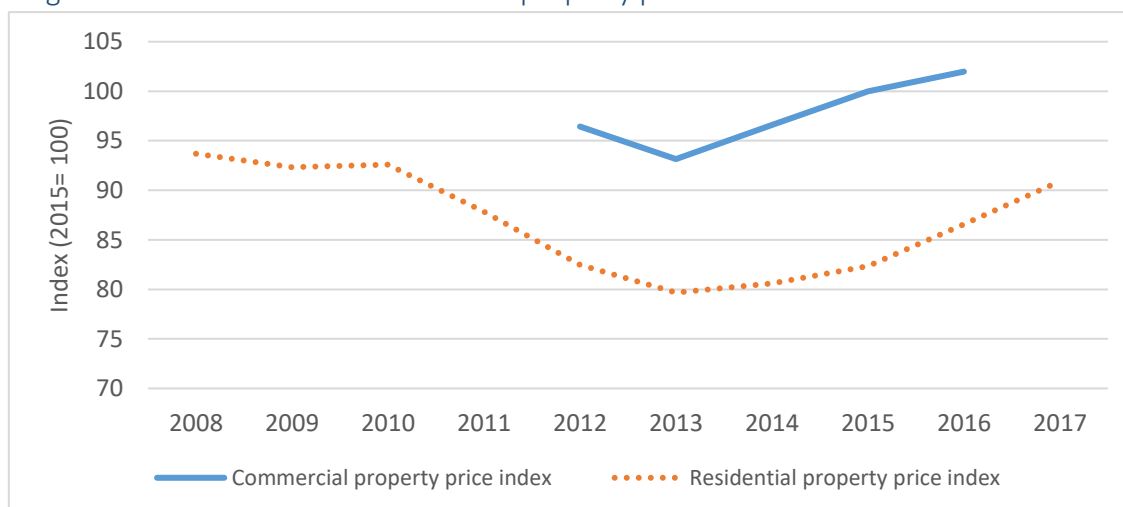


Indicator	Rental value index in international comparison
Measurement	Index (2010 = 100), yearly data available from 1999 to 2017
Source	European Commission (Eurostat) and European Central Bank calculations based on Eurostat data. Last update, 16.02.2018.

	Retrieved from: http://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=122.ICP.M.ES.N.041000.4.INX
Objective	Compare the change in rental prices between similar countries
Observation	The rent prices in Greece decreased after the economic crisis, whereas the rent prices in Spain and Portugal were not affected by the economic crisis
Interpretation	Rental prices in Portugal and Spain seem to be more resilient to economic shocks than in Greece

1.3 Residential and commercial housing prices

Figure 9 – Residential and commercial property price index

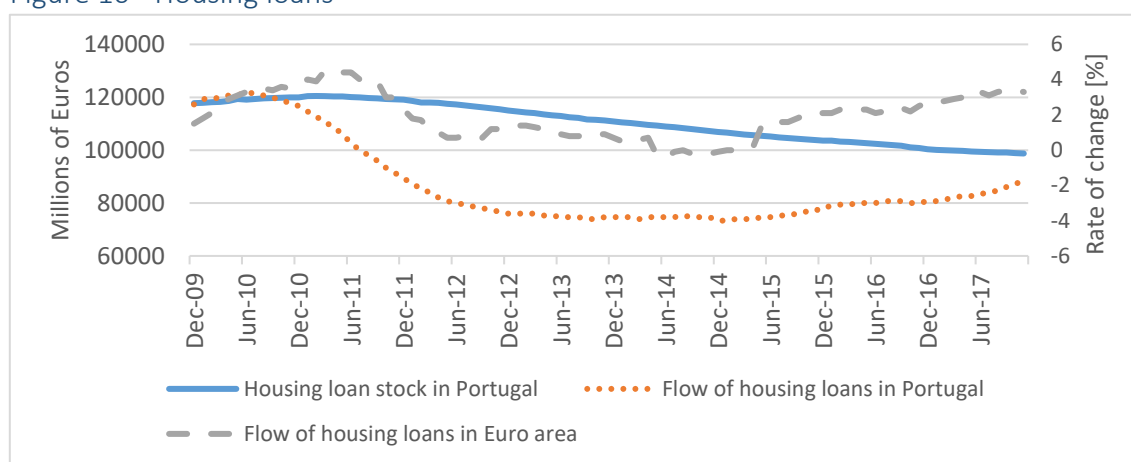


Indicator	Commercial and Residential property price index
Measurement	Index (2015 = 100); yearly data available from 2008 to 2017 (no data between 2008 and 2012 for Commercial property prices)
Source	<i>Commercial property price index</i> - European Commission (Eurostat) and European Central Bank calculations based on Eurostat data. Last update, 16.02.2018. Retrieved from: http://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=129.RPP.H.PT.N.TD.00.5.00 <i>Residential property price index</i> - Instituto Nacional de Estatística (INE). Last update, 16.02.2018. Retrieved from: https://www.ine.pt/xportal/xmain?xpgid=ine_main&xpid=INE
Objective	Comparison of commercial property prices with residential property prices
Observation	Both the commercial property prices and the residential property prices decreased during the economic crisis, but prices have been recovering since 2013
Interpretation	Prices of commercial and residential property follow the general dynamics in the housing market

2. Key markets to determine housing prices in Portugal

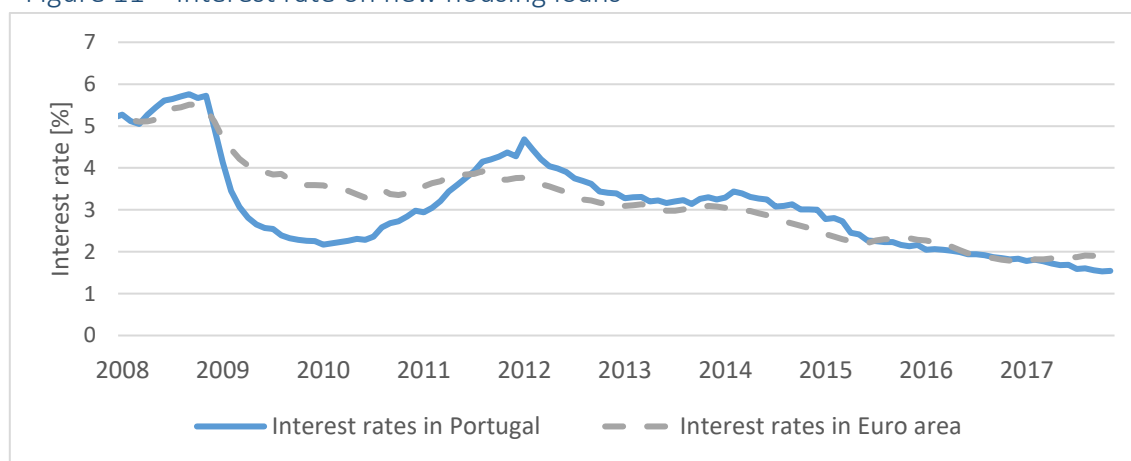
2.1 Financial market

Figure 10 - Housing loans



Indicator	Housing loans
Measurement	Stock in millions of Euros; flow in percentage (annualized growth rate), monthly data available from Dec 2009 to Nov 2017
Source	Banco de Portugal (BP), statistics on "Banking loans and deposits" and "Loans granted by the financial sector". Last update, 16.02.2018. Retrieved from: https://www.bportugal.pt/EstatisticasWeb/(S(zx2lgr45ox1p2n554fzccbq2))/SeriesCronologicas.aspx
Objective	Capture any signs of improvement or deterioration in the evolution of housing loans (both in terms of stock and flows)
Observation	The housing loan stock and the flow of the housing loan stock in the Euro areas and in Portugal have been declining since the financial crisis
Interpretation	The housing loan stock has gradually decreased, but it seems that the housing loan stock has started to stabilize itself. Because of the crisis, the total stock of housing loans has decreased

Figure 11 – Interest rate on new housing loans

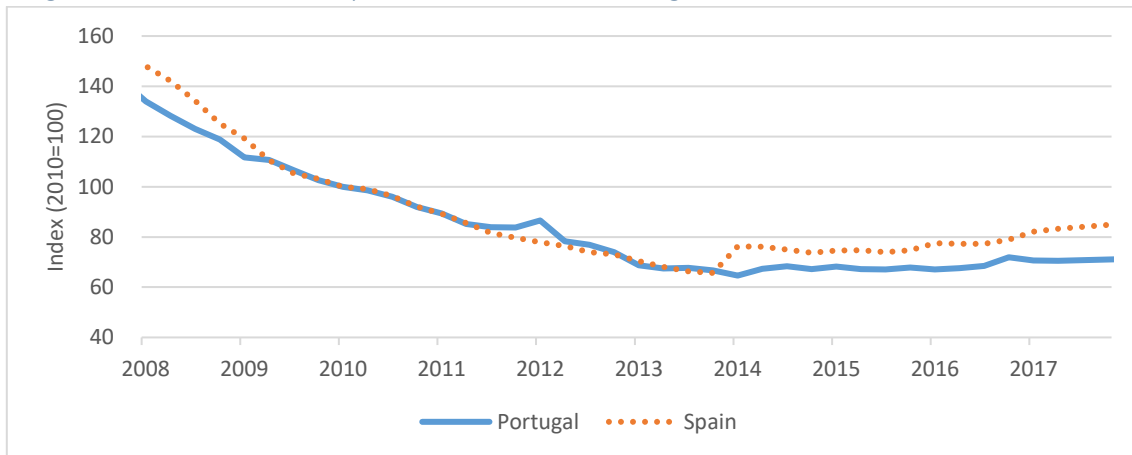


Indicator	Interest rates on new loans to MU households
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Measurement	Interest rate in percent; monthly data available from Jan 2003 to Nov 2017
Source	Banco de Portugal (BP), statistics. Last update, 16.02.2018. Retrieved from: https://www.bportugal.pt/EstatisticasWeb/(S(zx2lgr45ox1p2n554fzcbbq2))/SeriesCronologicas.aspx
Objective	Measure the interest rate on new housing loans
Observation	The interest rates on new housing loans dropped sharply after the crisis before they started to increase again. In 2012, interest rates peaked again and have been gradually declining afterwards
Interpretation	The last peak in 2012 can be explained by the European debt crisis. Whereas the recent decline in interest rates on new housing loans can largely be attributed to the low interest environment and the open market operations pursued by the European Central Bank

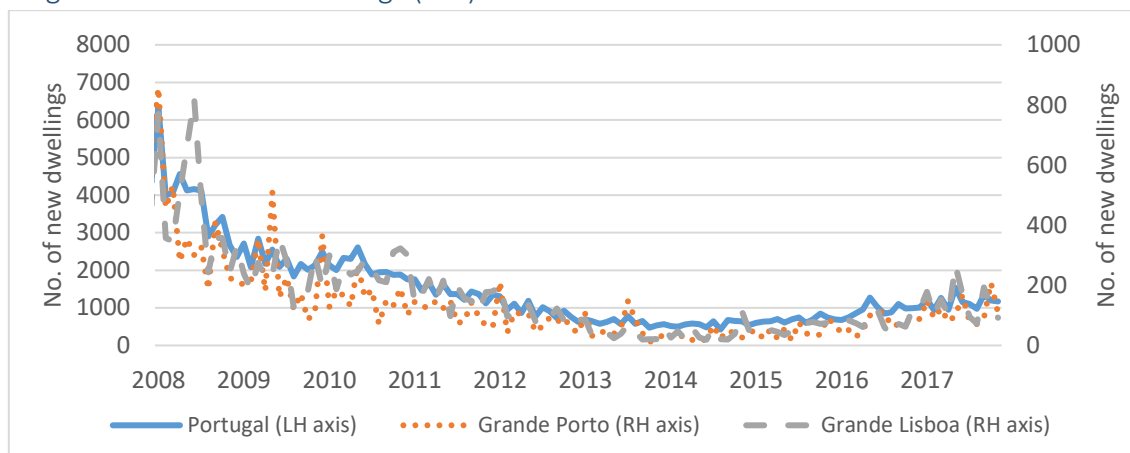
2.2 Construction market

Figure 12 – Gross fixed capital formation in housing



Indicator	Gross fixed capital formation in housing
Measurement	Index (2010=100); quarterly data available from Q1 1999 to Q4 2019
Source	ECB Data Warehouse. Last update, 16.02.2018. Retrieved from: http://sdw.ecb.europa.eu/browse.do?node=9689360
Objective	Identify investment activities in the housing market
Observation	Gross fixed capital formation in Portugal and Spain has been declining after the financial crisis and has not reached the pre-crisis level
Interpretation	The gross fixed capital formation in Portugal is currently still far below pre-crisis levels, which may be attributed to the burst of the housing bubble

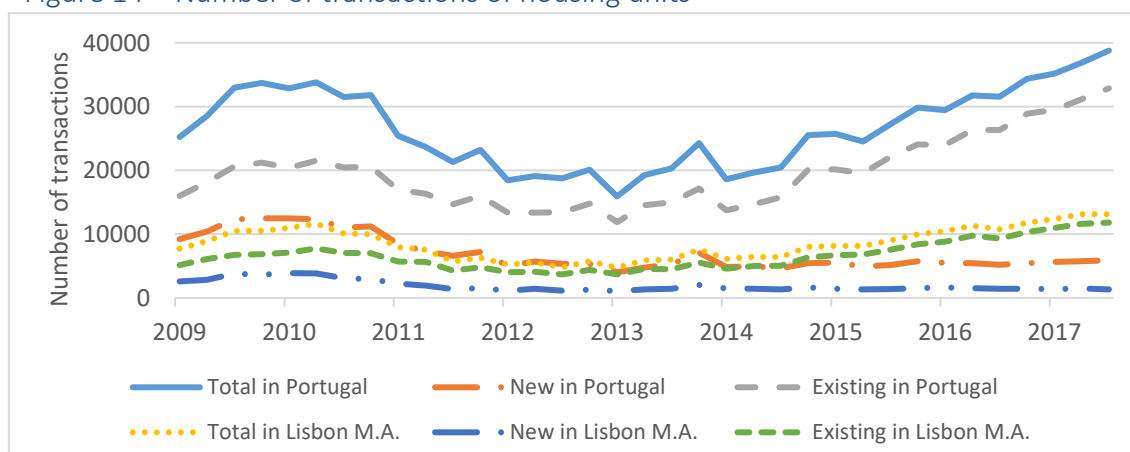
Figure 13 –Licensed dwellings (No.) in new constructions



Indicator	Licensed dwellings (No.) in new constructions for family housing by Geographic localization (NUTS - 2002) and Dwelling typology
Measurement	Units; monthly data available from Jan 2007 to Nov 2017
Source	Instituto Nacional de Estatística (INE). Last update, 16.02.2018. Retrieved from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_indicadores&indOcorrCod=0001372&contexto=bd&selTab=tab2&xlang=en
Objective	Track the new dwellings, which represent an important part of construction market
Observation	The new licensed dwellings have declined since 2007, but started to increase slightly since 2016
Interpretation	The slight increase in licensed dwellings in new construction since 2016 reflects the recovery of construction activities in the housing market. The trend of new dwellings in Lisbon and Porto are in line with the overall Portuguese trend

2.3 Space market

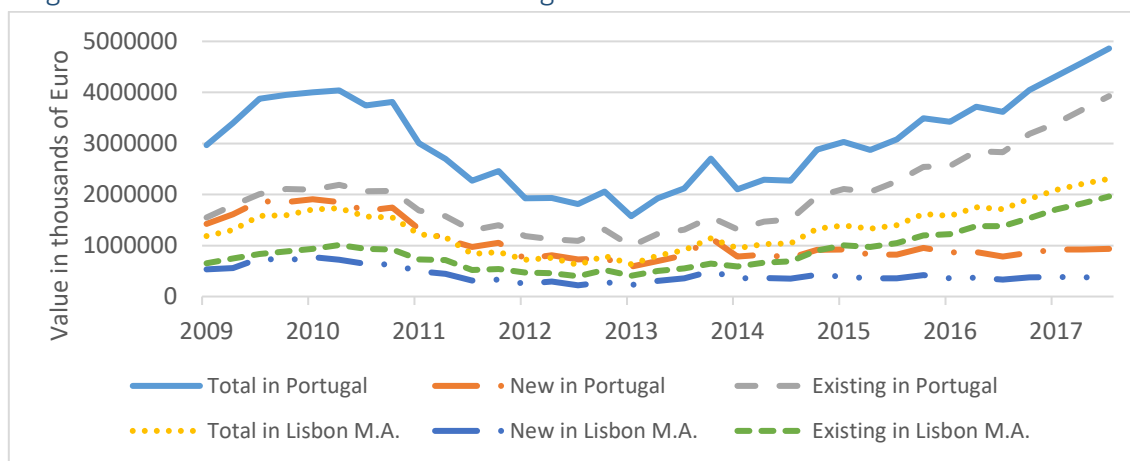
Figure 14 – Number of transactions of housing units



Indicator	Transactions (No.) of housing units by Geographic localization (NUTS - 2013) and category of housing unit
Measurement	Units; quarterly data available from Q1 2009 to Q3 2017
Source	Instituto Nacional de Estatística (INE). Last update, 16.02.2018.

	Retrieved from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_base_dados
Objective	Measure the level of transaction activity in the housing market
Observation	After a decline in the total number of transactions, the overall level of transaction has increased in recent years
Interpretation	Through the structural reforms in the housing market and the improvement in the economic environment, the transactions of existing housing units in the housing market seem to have been stimulated. The dynamics are mainly driven by existing housing units in Portugal

Figure 15 – Transactions value of housing units in Euro



Indicator	Transactions (€) of housing units by Geographic localization (NUTS - 2013) and category of housing unit
Measurement	Measured in thousands of Euro; quarterly data available from Q1 2009 to Q3 2017
Source	Instituto Nacional de Estatística (INE). Last update, 16.02.2018. Retrieved from: https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_base_dados
Objective	Measure the total value of transaction activity in the housing market
Observation	There has been a sharp increase in transaction value during the last years
Interpretation	The value of transactions is exceeding pre-crisis levels and is mainly driven by existing housing units in Portugal. It indicates that existing housing units have been revalued substantially and increased in value

