

Housing market developments – 3rd quarter 2018

Strong house price growth in the Randstad

Average house prices increased in the provinces of Flevoland and South Holland with 13.7% and 11.9% year on year. The two largest cities, Amsterdam and Rotterdam, show average house price increases of respectively 13.2% and 15.9%. Rotterdam is currently registering the fastest growth of all the municipalities in the Netherlands.

Transactions keep rising whilst number of homes for sale drops

The annual number of sales increased in five years from 123 thousand to 269 thousand houses. The number of homes for sale continues to decline. The ratio between the number of sales and supply has reached a factor 0.4 (sales > supply) and in the urban agglomeration 'Randstad' this factor dropped to 0.3.

Housing affordability remains stable

On average, 15.8% of net household income was required to service housing costs, in 2008 this number was 27.0%.

CALCASA INDEXES 2018 Q3

Calcasa House Price Index (WOX) (1995Q1=100)	319
Calcasa WOX Top 15 Cities Index (1995Q1=100)	376
Residential price change	
WOX price change (year-on-year)	9.9%
WOX price change (quarter-on-quarter)	2.9%
WOX price change corrected for inflation (year-on-year)	7.9%
House price forecast	
Yearly price change 2018 Q3	10.3%
Quarterly price change 2018 Q3	2.0%
Housing affordability	
Affordability index	15.8%
Yearly change in housing affordability	-5.9%
Quarterly change in housing affordability	-1.7%
Transactions	
Number of transactions on a yearly basis (x 1,000)	269
Yearly change in the number of transactions	-2.9%
Quarterly change in the number of transactions	-1.8%

*Housing stock January 1st, 2018, municipal reclassification 2017

Content WOX:

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Table 1

Calcasa key numbers Q3 2018
Source: WOX Monitor Calcasa

Average house price keeps rising

- The WOX (1995 = 100) currently stands at 319 points.
- Average house price: 305 thousand euro.
 - » Q-O-Q price development: +2.9%.
 - » Y-O-Y price development: +9.9%.
- The current Dutch inflation rate is 2.0% (which is the average rate for Q3 2018 according to Statistics Netherlands). In the third quarter of 2018, inflation-adjusted house prices rose by 7.9% y-o-y.

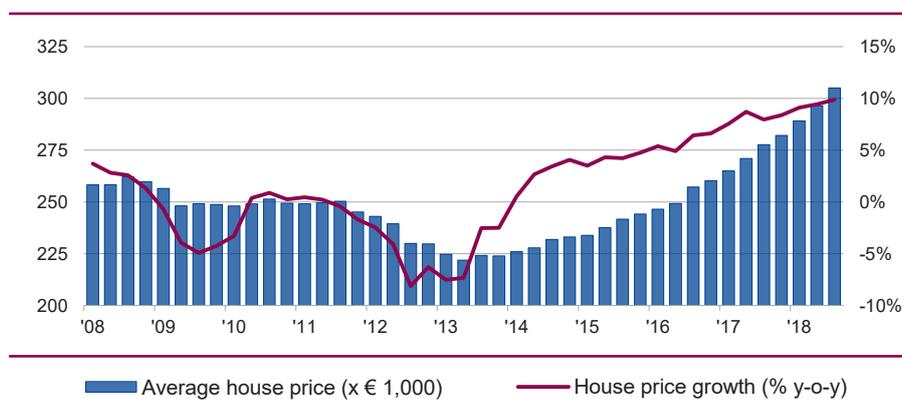


Figure 1

Average house price (x EUR1,000) and yearly price change per quarter in the Netherlands.
Source: WOX Monitor Calcasa

- Average price of a single-family house: 320 thousand euro.
 - » Q-O-Q price development of single-family houses: +2.5%.
 - » Y-O-Y price development of single-family houses: +8.5%.
- Average price for apartments: 266 thousand euro.
 - » Q-O-Q price development of apartments: +4.0%.
 - » Y-O-Y price development of apartments: +14.3%.

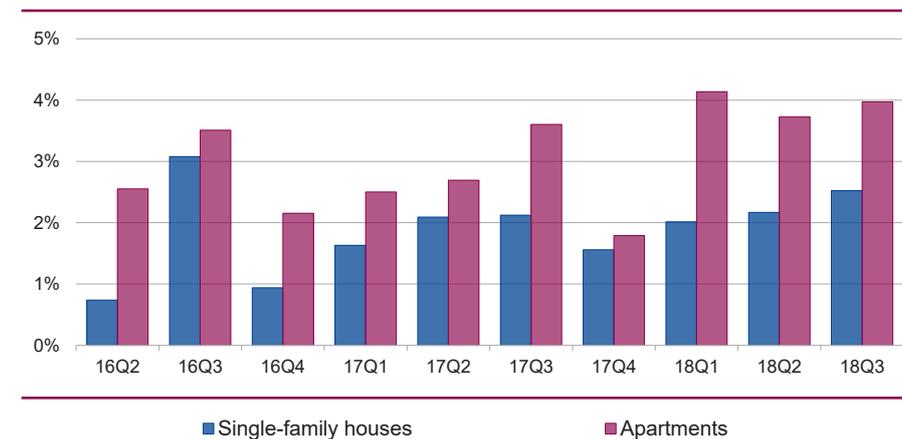


Figure 2

Q-O-Q price change per housing type in the Netherlands.
Source: WOX Monitor Calcasa

Highest price increase for less than 150,000 euro class

- Based on house price levels, Calcasa has divided the market into five price classes. Homes in the price class less than 150 thousand euros performed best with an annual average house price rise of 11.2%.
- The most expensive houses - worth 500k or more - increased the least in value; over the past year these homes increased in value by 9.5%.

Price class (euro)	Price development y-o-y
Less than 150,000	11.2%
150,000 to 250,000	9.8%
250,000 to 350,000	9.9%
350,000 to 500,000	9.5%
More than 500,000	9.5%
All residential properties	9.9%

Older apartments show biggest price increase

- Again, the value of apartments saw the biggest price growth in the past year; their average price rose by 14.3%.
- Apartments built between 1945 and 1979 are registering the fastest growth. Their value increased by 16.4% in the past year.

Development (y-o-y)	Construction year				Total
	<1944	1945-1979	>1980	>2000	
(semi) detached	8.4%	8.0%	7.3%	6.6%	7.8%
Terraced/corner house	8.7%	8.8%	9.1%	9.2%	8.9%
Apartment	13.9%	16.4%	13.0%	13.2%	14.3%
Total	11.0%	11.1%	9.9%	10.4%	9.9%

Forecast house price development in Q4 2018

- Q-O-Q price change: +2.0%.
- Y-O-Y price change: +10.3% (Q4 2017 - Q4 2018).
 - » Y-O-Y price change single-family homes: 9.4%.
 - » Y-O-Y price change apartments: 13.3%.

Calcasa publishes region-specific house price forecasts for four specific areas of the Netherlands, reflecting the diversity and variety displayed across the region.

- Western part: 12.2%
- Eastern part: 7.9%
- Northern part: 8.2%
- Southern part: 8.1%

Table 2a

Netherlands - price development per price class and transaction distribution over the last year.

Source: Calcasa

Table 2b

Netherlands - annual price development per construction year and housing type.

Source: Calcasa

Strong house price growth in the Randstad

- Average house prices increased the most in the province of Flevoland, with an annual increase of 13.7% in value.
- Especially apartments in Utrecht and South-Holland are in demand, with values going up by 16.8% and 16.0% respectively.
- The lowest price increase was measured for houses in the provinces of Groningen (5.4%) and Friesland (6.2%).

Q3 2018	Average price	Average price	Price change (year-on-year)
	single-family houses	apartments	
Groningen	219,000	201,000	5.4%
Friesland	218,000	182,000	6.2%
Drenthe	241,000	193,000	7.5%
Overijssel	253,000	175,000	7.4%
Flevoland	266,000	248,000	13.7%
Gelderland	308,000	206,000	8.1%
Utrecht	441,000	291,000	11.1%
North-Holland	417,000	395,000	11.5%
South-Holland	357,000	237,000	11.9%
Zeeland	224,000	205,000	6.3%
North-Brabant	321,000	229,000	8.7%
Limburg	243,000	174,000	6.7%
The Netherlands	320,000	266,000	9.9%

Table 3

Average price and y-o-y price development on province level
Source: WOX Monitor Calcasa

Flevoland fastest growing region

- The largest annual price increase of 13.7% is measured for houses in the NUTS III region of Flevoland. In this region the value of single-family homes rose by 13.9% and the value of apartments by 12.6%.
- Second-largest annual price increase is seen in the NUTS III region The Hague with an annual growth rate of 13.7%, here the value of single-family homes rose by 10.5% and the value of apartments by 16.4%.
- The NUTS III regions with the smallest price increases are North-Friesland (5.0%) and Overig Groningen (5.3%).
- In 11 of the 40 NUTS III regions the annual increase for houses prices is more than 10%.

Housing affordability increases slightly

On average, 15.8% of net household income was required to service housing costs in the third quarter of 2018, compared to mid-2008 when housing costs represented 27.0% of net income.

- Q-O-Q change in net housing costs: +1.7%.
- Y-O-Y change in net housing costs: +5.9%.



Figure 3

Housing affordability index* (in % of household income) in the Netherlands.
Source: WOX Monitor Calcasa

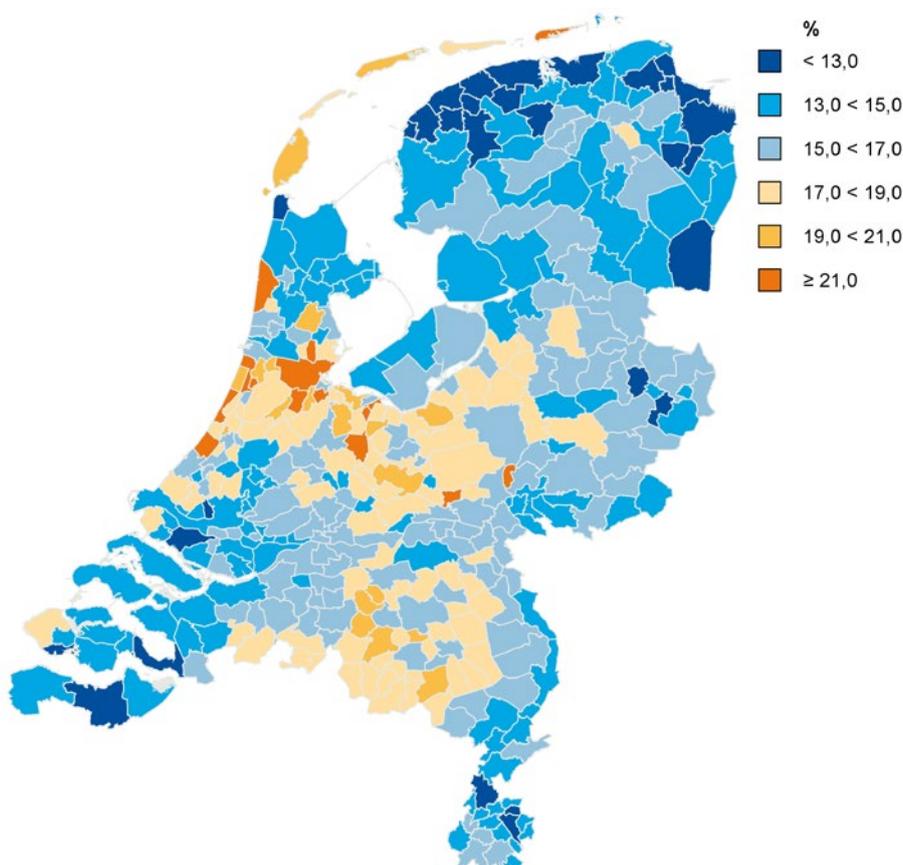


Figure 4

Affordability index per municipality (in %).
Source: WOX Monitor Calcasa

*The index measures the affordability of Dutch owner-occupied houses. It is calculated taking into account net housing costs, current average mortgage costs (current interest rate, maintenance costs, local taxes and fiscal treatment).

Number of sales stay strong

The annual number of transactions has decreased. 269 thousand residential properties were sold during the past year.

- Y-O-Y development, number of annual sales: -2.9%.
- Q-O-Q development, number of annual sales: -1.8%.

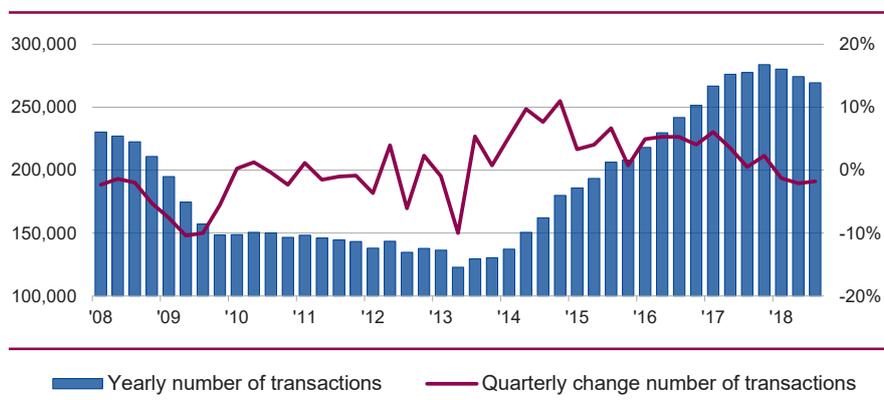


Figure 5

Number of annual sales* and y-o-y change in number of sales in the Netherlands.
Source: Statistics Netherlands, Land Registry, adaptation by Calcasa

* Calcasa shows the number of housing sales on an annual basis for a reliable picture of the long term trend (corrected for seasonal effects).

Strongest rise in detached house sales

- Detached houses were most popular with an increase in sales last year of 1.5%, also corner houses were sold more.
- The decrease of the amount of transactions for apartments is the lowest this quarter with -7.8% (Y-O-Y). This is partly caused by a shrinking supply of apartments.

Transaction development y-o-y

Housing type	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3
Detached	21.9%	22.7%	12.2%	4.1%	1.5%
Semi-detached	19.7%	16.8%	6.0%	-0.5%	-2.7%
Corner house	15.4%	15.6%	7.5%	2.1%	0.1%
Terraced house	14.2%	12.6%	5.6%	0.5%	-1.4%
Apartment	10.4%	6.3%	-0.1%	-5.2%	-7.8%
Total	14.8%	12.8%	5.0%	-0.7%	-2.9%

Table 4

Y-o-y transaction development by period and property type
Source: WOX Monitor Calcasa

Sales in expensive price class increased by 23%

- The sale of homes in the price range 350 to 500 thousand euros increased by 17.2% in the past year, whilst homes above 500 thousand euros increased by 22.6%.
- Especially in the east (30.7%) and in the north (40.6%) of the Netherlands more expensive homes (>500 thousand euros) were sold.
- In the western part of the Netherlands the highest increase in sales was measured for houses above 500 thousand euros (19.1%).
- The lowest price segment (75 to 150 thousand euros) decreased the most in the western part of the Netherlands by 36.6%.

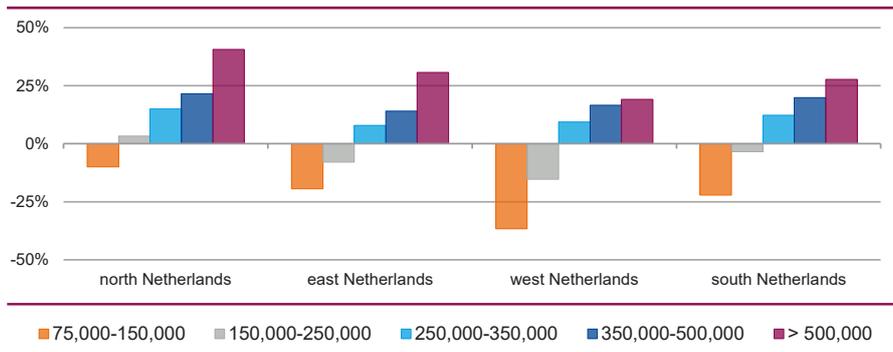


Figure 6

Growth (%) of share of housing sales per price class in North, East, West and South Netherlands in Q3 2018 compared to Q3 2017.

Source: WOX Monitor Calcasa

38% of housing sales within 150 to 250 thousand euros

- In the past year 38% of housing sales were within the price class of 150 to 250 thousand euros.
- The percentage of transactions in the price class 75 to 150 thousand euros decreased in four years time from 28% to 14%.
- The price segment 350 to 500 thousand euros increased in four years time from 7% to 14%.

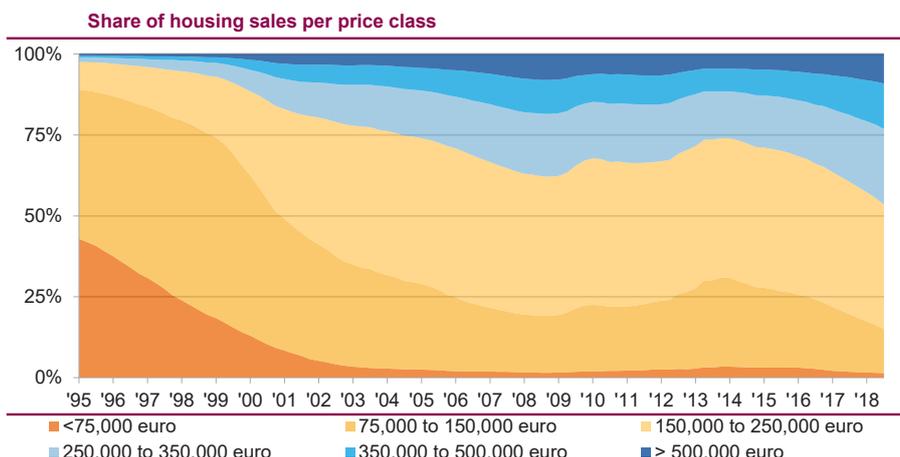


Figure 7

Share of housing sales per price class

Source: WOX Monitor Calcasa

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Groot-Amsterdam highest market liquidity

- In the NUTS III region Groot-Amsterdam 7.4% of the housing supply was sold during the past year. The regions of The Hague and Groot-Rijnmond follow with 7.3% and 7.1% respectively.
- The NUTS III region IJmond had the lowest market liquidity: 5.1%.

NUTS III region	Percentage of housing supply sold last year		
	NUTS III region	Percentage of housing supply sold last year	
Groot-Amsterdam	7.4%	IJmond	5.1%
's-Gravenhage	7.3%	Delfzijl en omgeving	5.2%
Groot-Rijnmond	7.1%	Midden-Limburg	5.2%
Overig Groningen	7.0%	Noord-Limburg	5.3%
Zuidwest-Drenthe	6.8%	Twente	5.4%
Overig Zeeland	6.8%	Achterhoek	5.4%
Agglomeratie Haarlem	6.5%	Zuid-Limburg	5.4%
Het Gooi en Vechtstreek	6.5%	Leiden en Bollenstreek	5.5%
Zuidoost-Drenthe	6.4%	Oost-Groningen	5.6%
Arnhem/Nijmegen	6.4%	Delft en Westland	5.7%

Table 5

Top 10 NUTS III regions with highest and lowest percentage of housing supply sold last year
Source: WOX Monitor Calcasa

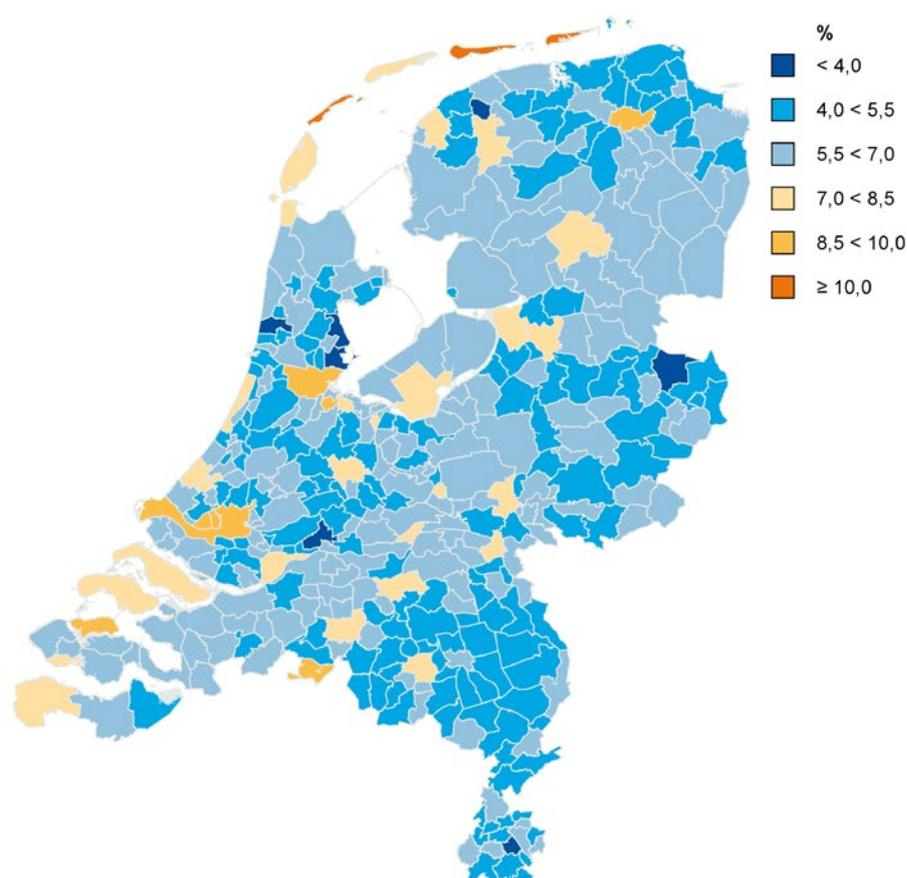


Figure 8

Market liquidity: sold homes as percentage of total number of owner occupied housing stock for previous year per municipality
Source: WOX Monitor Calcasa

Market liquidity: number of sales surpassed supply

- The annual ratio of houses for sale vs. sold has decreased to 0.4. This is an improvement compared to last year when this ratio was still 0.5.
- The annual number of houses sold: 269 thousand.
 - » Y-O-Y development: -2.9%
- Homes for sale in Q3 2018: 101 thousand
 - » Y-O-Y development: -29.0%
- The market liquidity is best in the municipality of Groningen with a factor of 0.13.
- In the municipality of Oldambt the market liquidity is highest (worst) with a factor of 0.95, followed by the municipality of Veendam with a factor of 0.84.

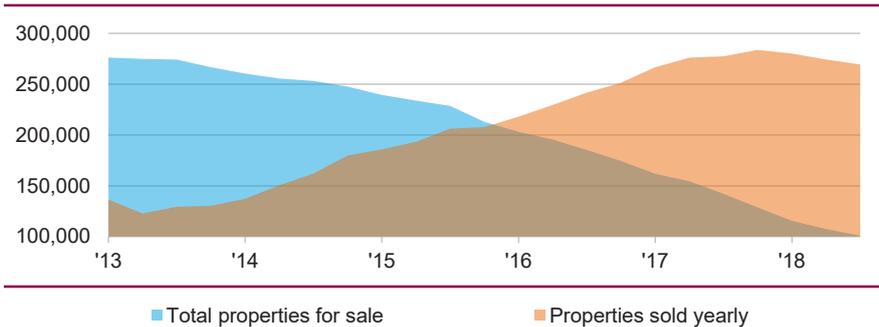


Figure 9a

Annual number of properties for sale versus number of properties sold over the period 2013-2018 in the Netherlands. Source: Multiple real estate agents, adaptation Calcasa

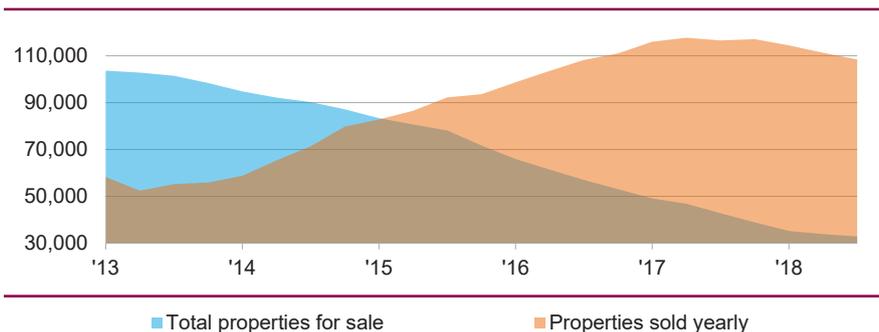


Figure 9b

Annual number of properties for sale versus number of properties sold over the period 2013-2018 in the Randstad. Source: Multiple real estate agents, adaptation Calcasa

- The relationship between the supply of owner-occupied housing and total owner-occupied housing stock is also a component of market liquidity. The percentage of the total owner-occupied housing stock that sold last year is 6.3% for the Netherlands.
 - o The percentage of family homes sold previous year: 5.9%.
 - o The percentage of apartments sold previous year: 7.4%.
- The share of owner occupied housing stock which was sold last year is highest in the city of Groningen with 9.7%.
- In the municipality of Edam-Volendam only 3.3% of the existing stock of owner-occupied homes has changed owners.

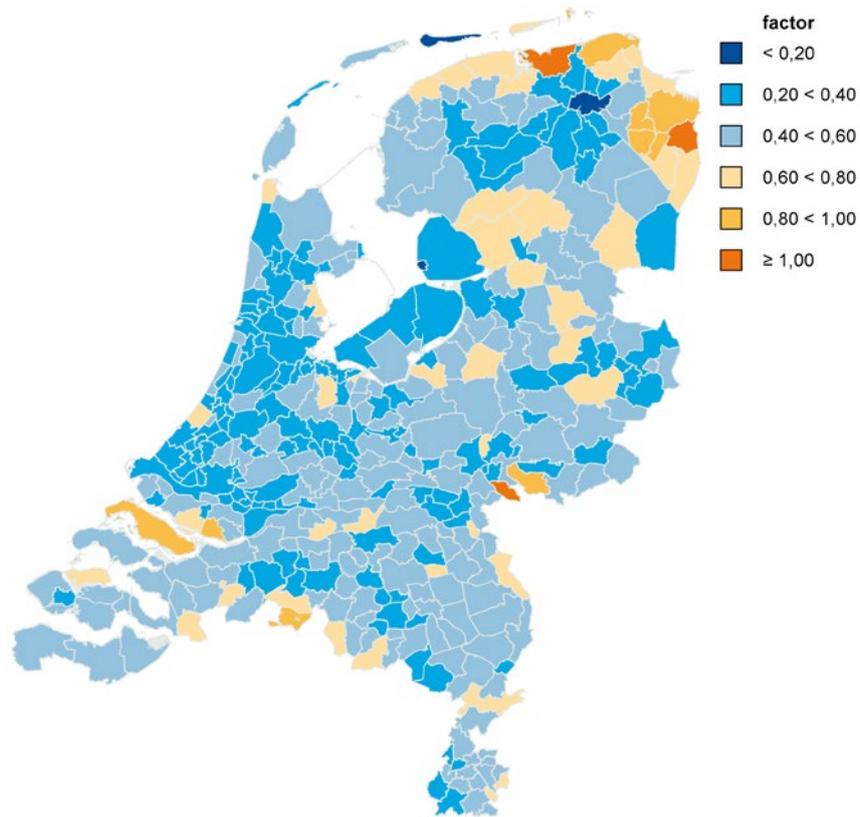


Figure 10

Supply/Sales ratio all properties per municipality

Source: WOX Monitor Calcasa

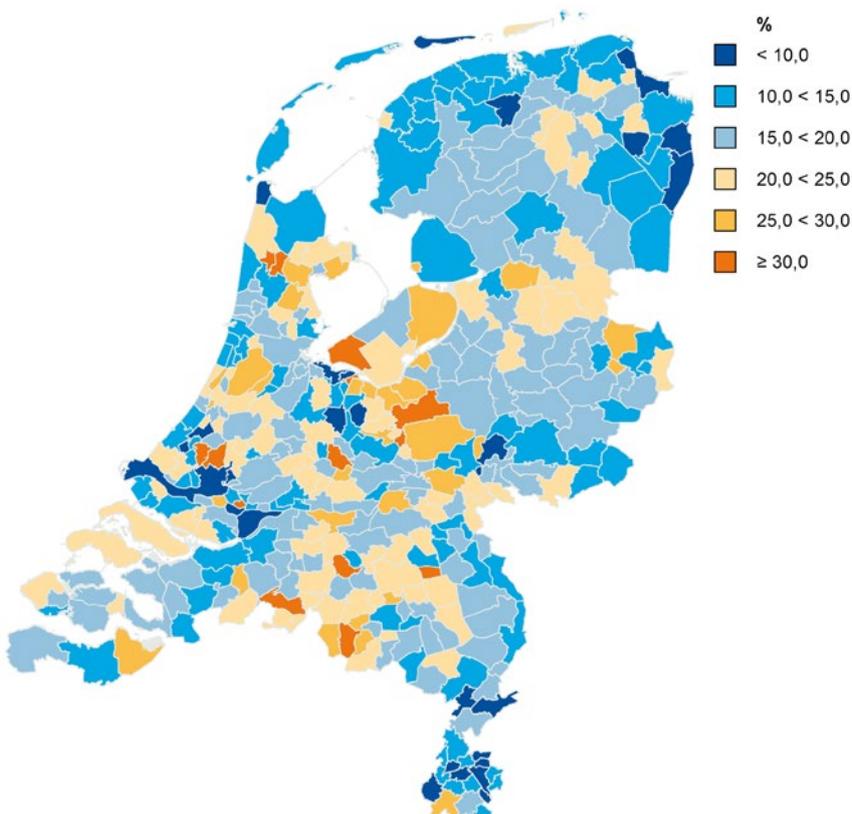


Figure 11

Percentage of properties with energy label A per municipality

Source: WOX Monitor Calcasa

Mortgage approvals keep rising

Approximately 354 thousand mortgages were approved last year.

- Y-O-Y development, number of annual mortgages: +3.3%.
- Q-O-Q development, number of annual mortgages: +0.5%.



Figure 12

Number of mortgages
Source: Statistics Netherlands, Land Registry and adaptation Calcasa

Number of foreclosures through auction decreases

Over the last four quarters, 856 foreclosures have been registered by the land registry.

- o Y-O-Y development amount of annual foreclosures: -36.9%.
- o Q-O-Q development amount of annual foreclosures: -8.1%.
- The share of foreclosure sales versus total sales is 0.3%.
- The highest share of foreclosure sales to total sales is 1.2% in the municipality of Roerdalen.
- 153 municipalities had no foreclosure sales in the past year. The largest municipality without foreclosure sales is Stichtse Vecht.

Note that many foreclosed properties will be sold via the public market and not via auction. The reason is that proceeds of a sale of a home through a forced auction can be up to 40 percent less compared to a sale via the public market.

Due to the increase in the number of foreclosures after the crisis, the NHG has come up with stricter regulations allowing banks to only sell homes via auction if the selling price is less than 5% below market value. This is to avoid big losses.

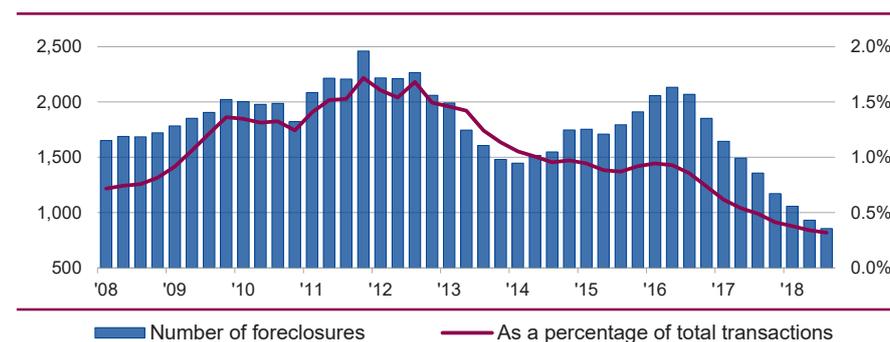


Figure 13

Number of yearly foreclosures and amount of foreclosures as a % of the total number of transactions in the Netherlands.
Source: Statistics Netherlands, Land Registry and adaptation Calcasa

More newly built homes sold in 2017

- In 2017 the total amount of sales for newly built homes was 37 thousand. This is an increase of 7.8% compared to 2016.
- During the third quarter of 2017 seven thousand newly built homes came on the market. 76% of them were sold in the same quarter.

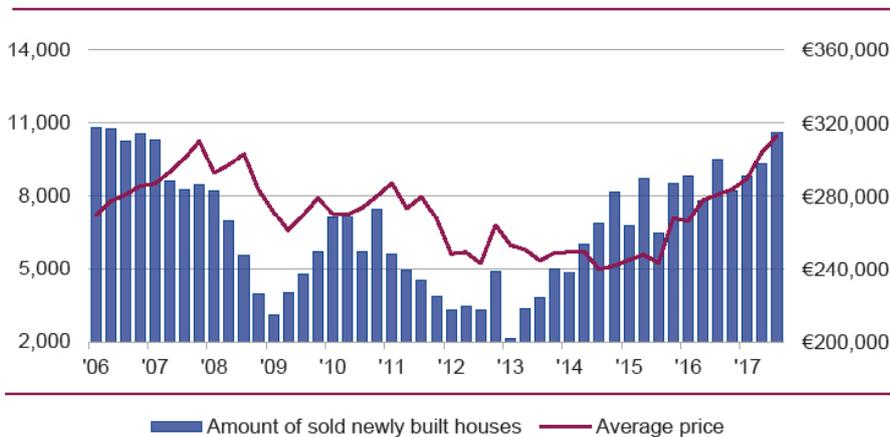


Figure 14

Average sales price for newly built houses per quarter in the Netherlands compared to the quarterly amount of newly built houses sold.

Source: NEPROM, adaptation Calcasa

Amount of households in arrears decreased

- Since 2015 the number of homeowners with payment problems decreased with 29%.
- Currently there are 80 thousand homeowners who have difficulty paying their mortgage: this is a decrease of 7.0% compared to a year ago.

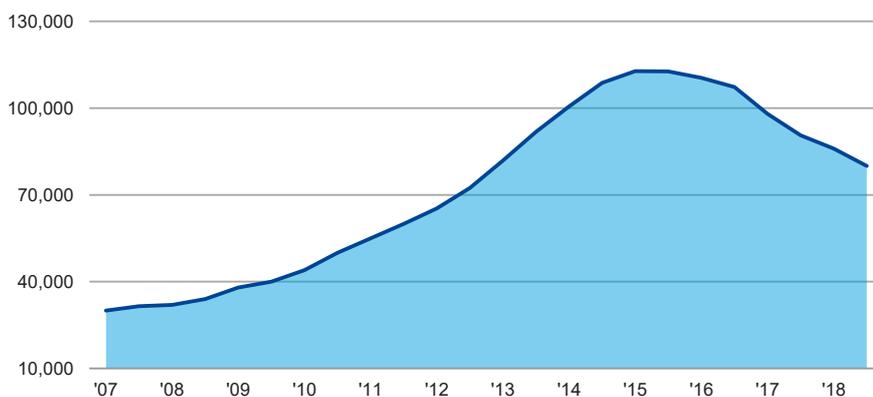


Figure 15

Number of borrowers with mortgage payment arrears

Source: BKR, adaptation Calcasa

Industrial rental prices increase by 9% in 3 years time

The average office rental price increased by 1.9% y-o-y in 3Q2018

The Calcasa PropertyNL OPI (Office Price Index) showed a value of 93 (4Q2001=100) for the third quarter of 2018. The average office rental value is now EUR125 per square meter.

The average retail rental price decreased by 6.1% y-o-y in 3Q2018

The Calcasa PropertyNL RPI (Retail Price Index) showed a value of 96 (4Q2001=100) for the third quarter of 2018. Compared to the third quarter of 2017, this is a decrease of 6.1%. The average retail rental value is now EUR147 per square meter.

The average industrial rental price increased by 0.4% y-o-y in 3Q2018

The Calcasa PropertyNL IPI (Industrial Price Index) showed a value of 99 (4Q2001=100) for the third quarter of 2018, an increase of 0.4% compared to the third quarter of 2017. The average industrial rental value is now EUR59 per square meter.

The three real estate indices are based entirely on actual transactions and not on appraisals from professionals. The actual situation for the rental income may even be grimmer: in the actual rents any incentives given by the owner are not included.



Figure 16

Development of Calcasa commercial real estate indexes (Q4 2001 = 100)
Source: Calcasa

Netherlands	Index (Q4 2001=100)	Average rent per m2	Y-O-Y price change	Three year price change
Offices (OPI)	93	€ 125	1.9%	2.5%
Retail (RPI)	96	€ 147	-6.1%	-6.7%
Industrial (IPI)	99	€ 59	0.4%	8.8%

Table 6

Development of rental values of commercial real estate in the Netherlands
Source: Calcasa, PropertyNL

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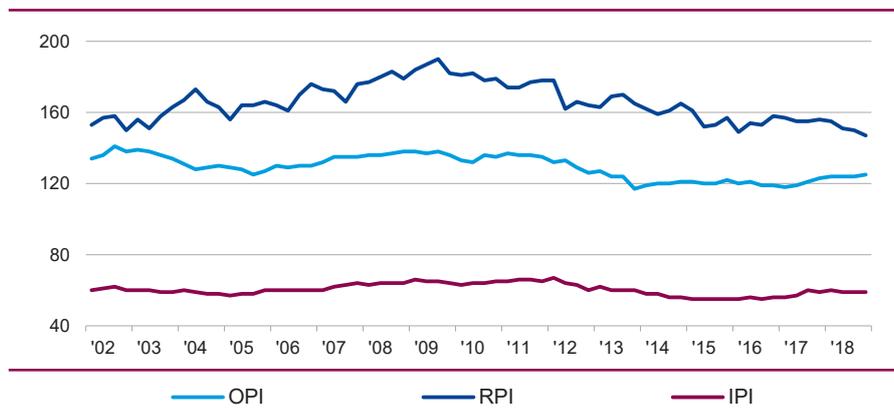


Figure 17

Development of Calcasa commercial real estate indexes (2001Q4 = 100)
Source: Calcasa, PropertyNL

Commercial real estate index: A scientifically justified methodology

Calcasa calculates price developments for commercial real estate by using realized rental transactions which have been gathered and checked by the research department of PropertyNL. Calcasa translates the rental transactions to determine a value for the entire stock of commercial real estate, using a hedonic modeling technique. A revaluation of the entire stock takes place each quarter and hence a more accurate and robust index is formed, capturing the developments in the commercial real estate market.

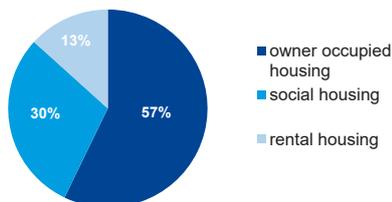
With the application of the hedonic method, it is essential that objects and their location are documented precisely, using the characteristics that influence the price. Hence, when using a hedonic index model, a range of object characteristics are taken into account, e.g. living area and year of construction.

It is equally important that multiple variables are included in the model, which describe the location of the object; an example of such variables would be distance to important amenities like city centers, airports, train stations and motorways. Using this methodology, Calcasa produces a quarterly index for the office market (with minimal space of 200 square meters), which is published in PropertyNL and the Calcasa WOX quarterly bulletin.

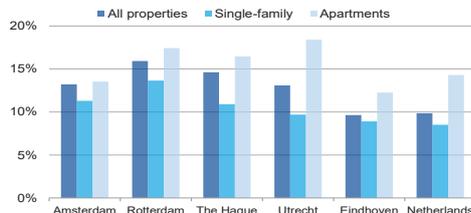
Dutch Housing Market Summary

	Largest cities	All properties	Single-family	Apartments	Owner occupied	Rental	Total population	Total households	Annual sales	Current supply
Amsterdam	428,000	100,000	328,000	30%	70%	844,950	462,330	12,211		
Rotterdam	310,000	111,000	199,000	35%	64%	634,660	319,780	9,420		
The Hague	255,000	75,000	181,000	42%	56%	524,880	257,190	8,849		
Utrecht	151,000	77,000	74,000	45%	53%	343,040	176,590	5,605		
Groningen	101,000	40,000	62,000	38%	61%	202,640	122,280	3,744		
Eindhoven	108,000	74,000	34,000	45%	53%	226,870	116,320	3,792		
Provinces										
Groningen	277,000	197,000	80,000	54%	45%	583,580	291,320	9,744	4,338	
Friesland	296,000	257,000	39,000	61%	37%	646,870	289,340	11,038	4,836	
Drenthe	219,000	193,000	27,000	65%	34%	491,790	215,130	9,083	3,881	
Overijssel	497,000	413,000	84,000	59%	39%	1,147,690	495,380	17,119	6,748	
Flevoland	164,000	137,000	27,000	64%	35%	407,820	168,680	6,653	2,030	
Gelderland	888,000	720,000	168,000	59%	39%	2,047,900	906,480	31,826	12,975	
Utrecht	554,000	379,000	175,000	57%	41%	1,284,500	579,180	19,636	6,277	
North-Holland	1,307,000	744,000	563,000	50%	49%	2,809,480	1,341,500	42,821	13,572	
South-Holland	1,667,000	916,000	750,000	51%	48%	3,650,220	1,685,400	56,520	18,087	
Zeeland	184,000	157,000	27,000	65%	34%	381,570	172,920	7,846	3,595	
North-Brabant	1,104,000	893,000	212,000	61%	38%	2,512,530	1,122,800	40,531	17,024	
Limburg	527,000	423,000	104,000	59%	40%	1,117,550	525,940	16,612	7,555	
Netherlands	7,686,000	5,425,000	2,261,000	56%	43%	17,081,510	7,794,080	269,429	100,919	

Housing stock



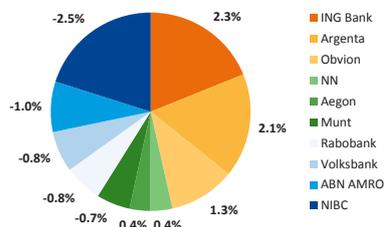
Y-O-Y price development largest cities



Mortgage developments

Annual numbers 2Q18	Amount	Change
Sales with NHG	27,600	-5.8%
Execution sales with losses	291	-44.6%
Households in arrears	80,000	-11.7%
Sold mortgages	354,216	3.3%
Total mortgage amount (x 1,000,000,000)	701.0	1.3%

Top mortgage lenders: increase/decrease market share



Macro-economic figures

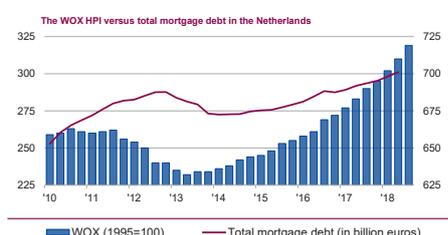
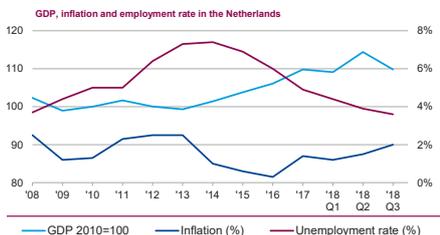


Table 7

Key figures for the Dutch housing market
Source: Statistics Netherlands, Land Registry

Figures 18 & 19

Source figure left: Statistics Netherlands
Source figure right: Calcasa

Table 8 & Figure 20

Source table left: Statistics Netherlands, NHG, BKR, Land Registry
Source figure right: Calcasa, IG&H

Figures 21 & 22

Source figure left: DNB, Statistics Netherlands
Source figure right: Calcasa, Statistics Netherlands

Appendices

Provinces	Detached houses	Semi-detached	Corner houses	Terraced houses	All single-family dwellings
Groningen	254,000	212,000	189,000	191,000	219,000
Friesland	282,000	208,000	174,000	162,000	218,000
Drenthe	317,000	224,000	187,000	173,000	241,000
Overijssel	372,000	244,000	221,000	209,000	253,000
Flevoland	430,000	311,000	237,000	224,000	266,000
Gelderland	435,000	303,000	254,000	232,000	308,000
Utrecht	738,000	510,000	371,000	346,000	441,000
North-Holland	572,000	475,000	362,000	333,000	417,000
South-Holland	559,000	427,000	327,000	304,000	357,000
Zeeland	302,000	209,000	183,000	175,000	224,000
North-Brabant	465,000	320,000	275,000	254,000	321,000
Limburg	347,000	227,000	210,000	202,000	243,000
Netherlands	418,000	315,000	281,000	268,000	320,000

Table 9

Average house price for single-family dwellings, per property type and per province in the Netherlands (in euros).
Source: Calcasa

Provinces	Porch flat	Gallery flat	Maison-nette	Up/downstairs apartment	All apartments
Groningen	186,000	169,000	182,000	196,000	201,000
Friesland	187,000	150,000	174,000	171,000	182,000
Drenthe	183,000	160,000	165,000	199,000	193,000
Overijssel	169,000	162,000	182,000	182,000	175,000
Flevoland	231,000	189,000	203,000	205,000	248,000
Gelderland	203,000	178,000	199,000	221,000	206,000
Utrecht	267,000	231,000	281,000	291,000	291,000
North-Holland	296,000	266,000	346,000	397,000	395,000
South-Holland	209,000	201,000	242,000	243,000	237,000
Zeeland	220,000	216,000	182,000	192,000	205,000
North-Brabant	230,000	200,000	224,000	237,000	229,000
Limburg	176,000	152,000	176,000	184,000	174,000
Netherlands	224,000	207,000	253,000	287,000	266,000

Table 10

Average house price for apartments, per property type and per province in the Netherlands (in euros).
Source: Calcasa

Municipalities	Highest	Municipalities	Lowest
	property values (x 1,000)		property values (x 1,000)
Bloemendaal	843	Delfzijl	160
Wassenaar	666	Oldambt	168
Heemstede	624	Heerlen	177
Gooise Meren	517	Veendam	177
De Bilt	499	Terneuzen	178
Wijdmeren	484	Kerkrade	179
Amsterdam	473	Leeuwarden	180
Zeist	469	Brunssum	180
Bergen (NH.)	467	Franekeradeel	183
Amstelveen	464	Dongeradeel	187

Table 11

Top 10 highest and lowest property values, per municipality containing over 5,000 owner-occupied dwellings.
Source: Calcasa

Municipalities	Highest	Municipalities	Lowest
	annual price development		annual price development
Rotterdam	15.9%	Hoogezand-Sappemeer	3.9%
's-Gravenhage	14.6%	Zuidhorn	3.9%
Almere	14.2%	Dongeradeel	4.1%
Rijswijk	14.1%	Achtkarspelen	4.2%
Lelystad	13.8%	Tytsjerksteradiel	4.3%
Bergen (NH.)	13.7%	Franekeradeel	4.3%
Noordoostpolder	13.3%	Dantumadiel	4.5%
Amsterdam	13.2%	Leek	4.6%
Utrecht	13.1%	Haren	5.0%
Schiedam	13.0%	Reimerswaal	5.2%

Table 12

Top 10 highest and lowest price developments, per municipality with over 5,000 owner-occupied dwellings.
Source: Calcasa

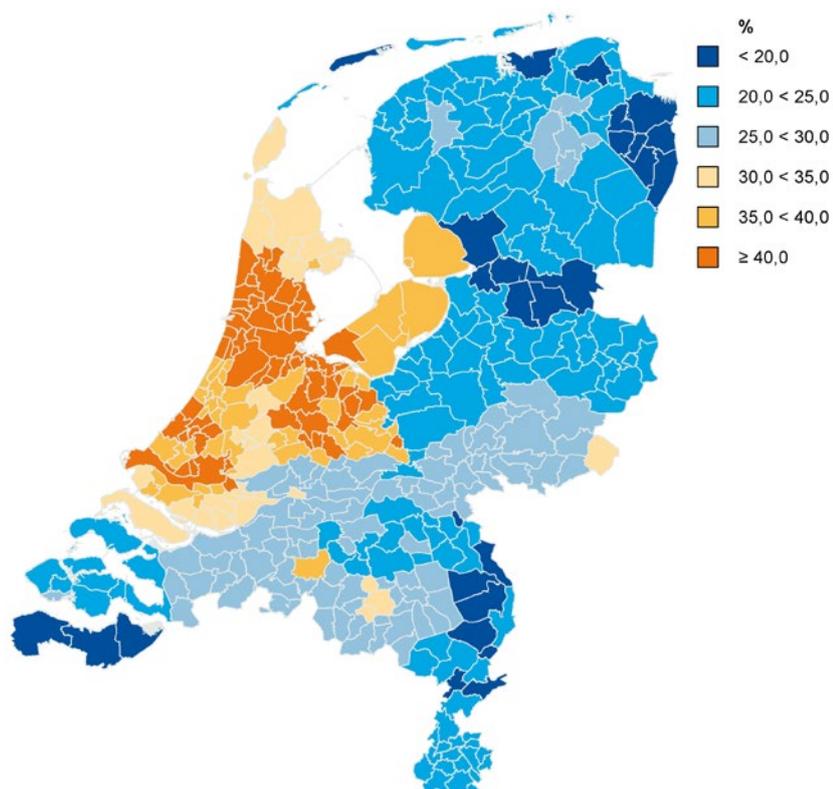
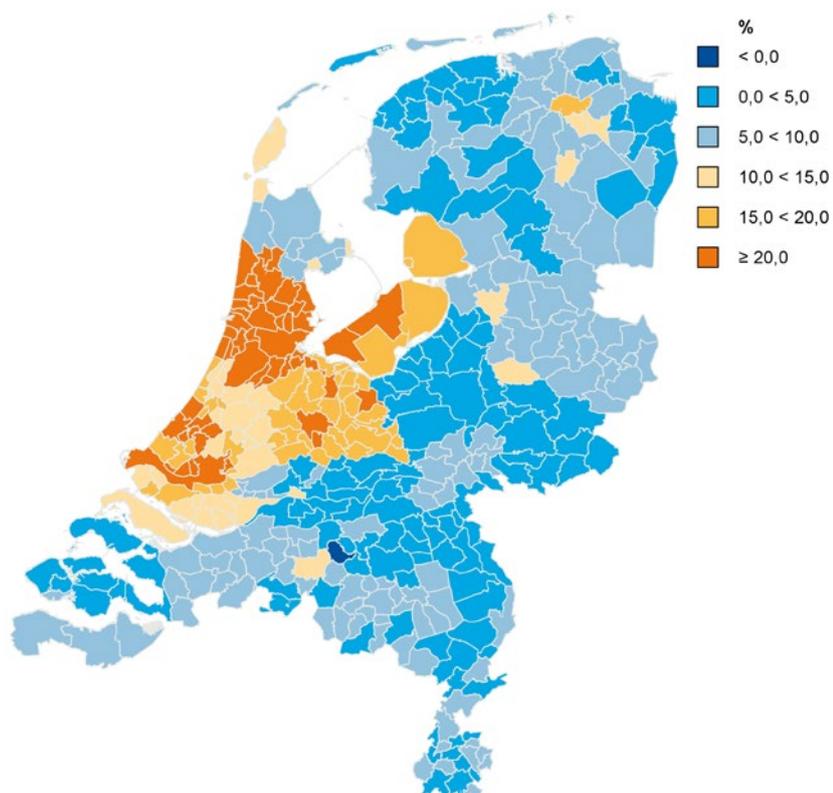
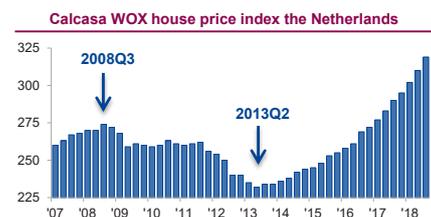


Figure 23

The price development of all houses per municipality in 2018Q3 compared to 2008Q3
Source: Calcasa

Figure 24

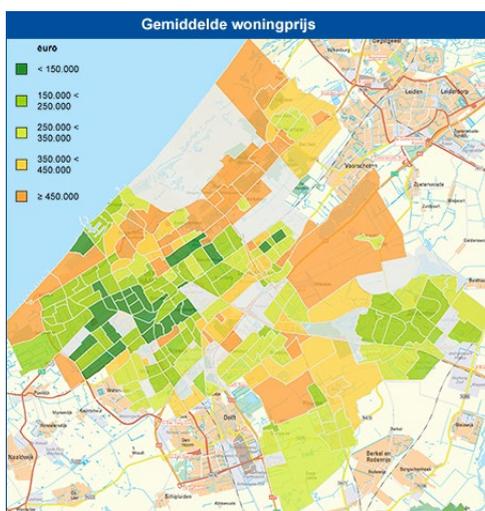
The price development of all houses per municipality in 2018Q3 compared to 2013Q2
Source: Calcasa



Visit calcasa.co.uk for more information

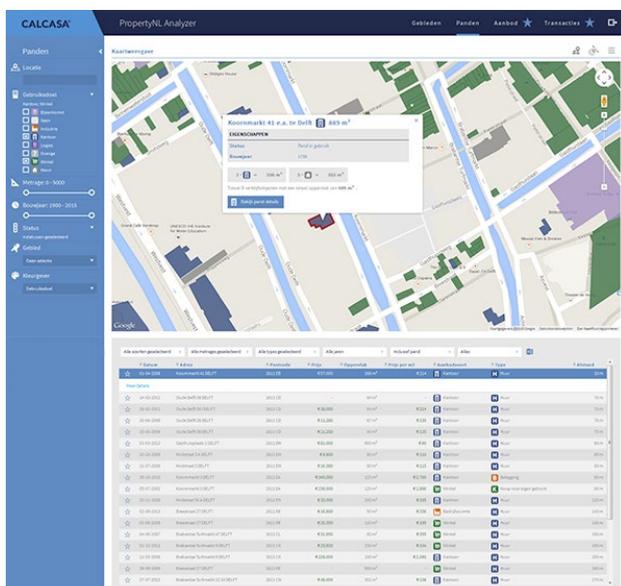
The WOX Monitor: All housing market data for every neighborhood

More information on price developments in various regional levels (neighborhood, municipality, province) is available via the WOX monitor.



Calcasa PropertyNL Analyzer

Analyzing the commercial real estate market is possible through the Calcasa PropertyNL Analyzer (“CPA”). CPA is an online application with information that is easily accessible for the office, retail and industrial markets. This tool increases the transparency in the property market. For more information contact Mr. Rogier van der Hijden: Rogier@Calcasa.nl



About Calcasa

Calcasa is an independent technology company specializing in the statistical analysis and valuation of real estate. The Calcasa Automated Valuation Model (AVM) for valuation of individual homes is unique due to its high coverage and accuracy. It is internationally recognized by the three major rating agencies and regulators. Mortgage lenders, investors, intermediaries, validation institutes, housing corporations, consumer organizations, real estate companies, broker organizations, government agencies and regulators rely daily on the solutions Calcasa. www.calcasa.co.uk

Calcasa WOX: A reliable house price index

Calcasa WOX is demonstrably the most reliable house price index in the Netherlands. Every quarter, Calcasa calculates a reliable house price index for each province, municipality, borough and neighborhood in the Netherlands. The house price index is calculated using the national data on transactions starting from 1993 and additional house and location characteristics from the database. The source data is screened for integrity, such that non-representative data is omitted for the index calculation. The developed methodology takes into account any over or under representation of sold properties, compared to the existing housing stock in that area. Unlike most house price indices, the Calcasa WOX does not simply calculate the coincidental development of sales for a specific area; rather it calculates the development of prices of the total housing stock.

European AVM Alliance (EAA)

Calcasa is a founding member of the EEA which was launched as a pan-European initiative at the end of 2012. The mission is to promote and standardize the usage of AVM's resulting in a consistent approach to automated valuations in Europe. Other members include Hometrack (UK), Eiendomsverdi (Norway), Värderingsdata (Sweden), CRIF (Italy), Tinsa (Spain), On-Geo (Germany) and On-Geo (Austria).

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