

Housing market developments – 4th quarter 2017

Strong house price growth in the Randstad: Average house prices increased the most in the provinces of Flevoland (10.9%) and North Holland (10.3%). The two largest cities, Amsterdam and Rotterdam, show average house price increases of respectively 11.2% and 13.0%.

Transactions keep rising whilst number of homes for sale drops: The annual number of sales increased in four years from 123 thousand to a record of 283 thousand houses. The number of homes for sale continues to decline. The ratio between the number of sales and supply has reached a factor of 0.4 (sales > supply) and in the urban agglomeration 'Randstad' this factor dropped to 0.3.

Housing affordability remains stable: On average, 14.8% of net household income was required to service housing costs, in 2008 this number was 27.0%.

Dutch house price growth third highest in Western Europe

This quarter Calcasa compares housing price developments in the Netherlands with those of other Western European countries. All large EU member states (and Norway and Switzerland) were included in the analysis. The study shows that Dutch house prices have risen by 8.2% over the past year, giving the Netherlands the third highest growth ranking in Western Europe.

The Netherlands is only preceded by Portugal and Ireland, where house prices in 2017 rose by 12.5% and 11.8% respectively. Both countries, together with Italy, Greece and Spain, were hit hardest by the credit crisis, which had an impact on house prices. Of these countries, Portugal and Ireland are the only ones that show house prices that exceed pre-crisis levels.

CALCASA INDEXES 2017 Q4

Calcasa House Price Index (WOX) (1995Q1=100)	295
Calcasa WOX Top 15 Cities Index (1995Q1=100)	343

Residential price change

WOX price change (year-on-year)	8.2%
WOX price change (quarter-on-quarter)	1.6%
WOX price change corrected for inflation (year-on-year)	6.9%

House price forecast

Yearly price change 2018 Q1	8.2%
Quarterly price change 2018 Q1	1.8%

Housing affordability

Affordability index	14.8%
Yearly change in housing affordability	-6.2%
Quarterly change in housing affordability	-1.7%

Transactions

Number of transactions on a yearly basis (x 1,000)	283
Yearly change in the number of transactions	12.4%
Quarterly change in the number of transactions	2.1%

*Housing stock January 1st, 2017, municipal reclassification 2016

Content WOX:

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Table 1

Calcasa key numbers Q4 2017
Source: WOX Monitor Calcasa

Average house price keeps rising

- The WOX (1995 = 100) currently stands at 295 points.
- Average house price: 282 thousand euro.
 - » Q-O-Q price development: +1.6%.
 - » Y-O-Y price development: +8.2%.
- The current Dutch inflation rate is 1.3% (which is the average rate for Q4 2017 according to Statistics Netherlands). In the fourth quarter of 2017, inflation-adjusted house prices rose by 6.9% y-o-y.

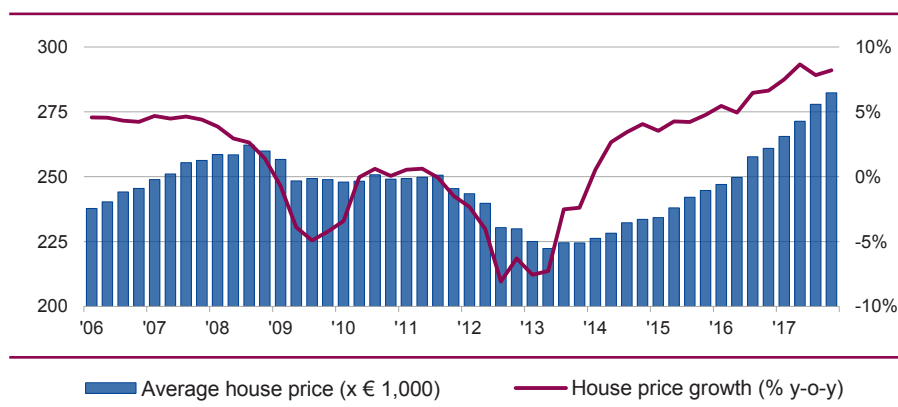


Figure 1

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: 300 thousand euro.
 - » Q-O-Q price development of single-family houses: +1.5%.
 - » Y-O-Y price development of single-family houses: +7.4%.
- Average price for apartments: 237 thousand euro.
 - » Q-O-Q price development of apartments: +1.8%.
 - » Y-O-Y price development of apartments: +10.8%.

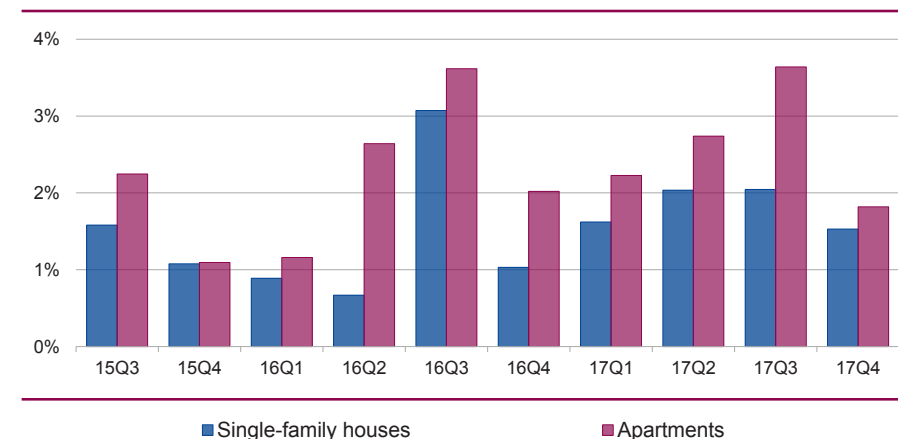


Figure 2

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

Highest price increase for 350-500 thousand euro class

- Based on house price levels, Calcasa has divided the market into five price classes. Homes in the price class 350 to 500 thousand euros performed best with an annual average house price rise of 8.9%.
- The most expensive houses - worth 500k or more - increased the least in value; over the past year these homes increased in value by 7.2%.

Price class (euro)	Price development y-o-y
Less than 150,000	8.1%
150,000 to 250,000	8.3%
250,000 to 350,000	8.0%
350,000 to 500,000	8.9%
More than 500,000	7.2%
All residential properties	8.2%

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 10.8%.
- Apartments built between 1945 and 1979 are most desirable. Their value increased by 11.6% in the past year.

Development (y-o-y)	Construction year				
Housing type	<1944	1945-1979	>1980	>2000	Total
(semi) detached	7.1%	6.9%	6.1%	6.7%	6.8%
Terraced/corner house	8.4%	7.7%	7.4%	7.8%	7.8%
Apartment	10.5%	11.6%	10.2%	10.9%	10.8%
Total	9.1%	8.8%	7.9%	9.1%	8.2%

Forecast house price development in Q1 2018

- Q-O-Q price change: +1.8%.
- Y-O-Y price change: +8.2% (Q1 2017 - Q1 2018).
 - » Y-O-Y price change single-family homes: 7.5%.
 - » Y-O-Y price change apartments: 10.5%.

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: 9.8%
- Eastern part: 6.3%
- Northern part: 4.3%
- Southern part: 7.1%

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

Dutch house price growth third highest in Western Europe

This quarter Calcasa compares housing price developments in the Netherlands with those of other Western European countries. All large EU member states (and Norway and Switzerland) were included in the analysis. The study shows that Dutch house prices have risen by 8.2% over the past year, giving the Netherlands the third highest growth ranking in Western Europe.

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House price development in 2017 for Western Europe

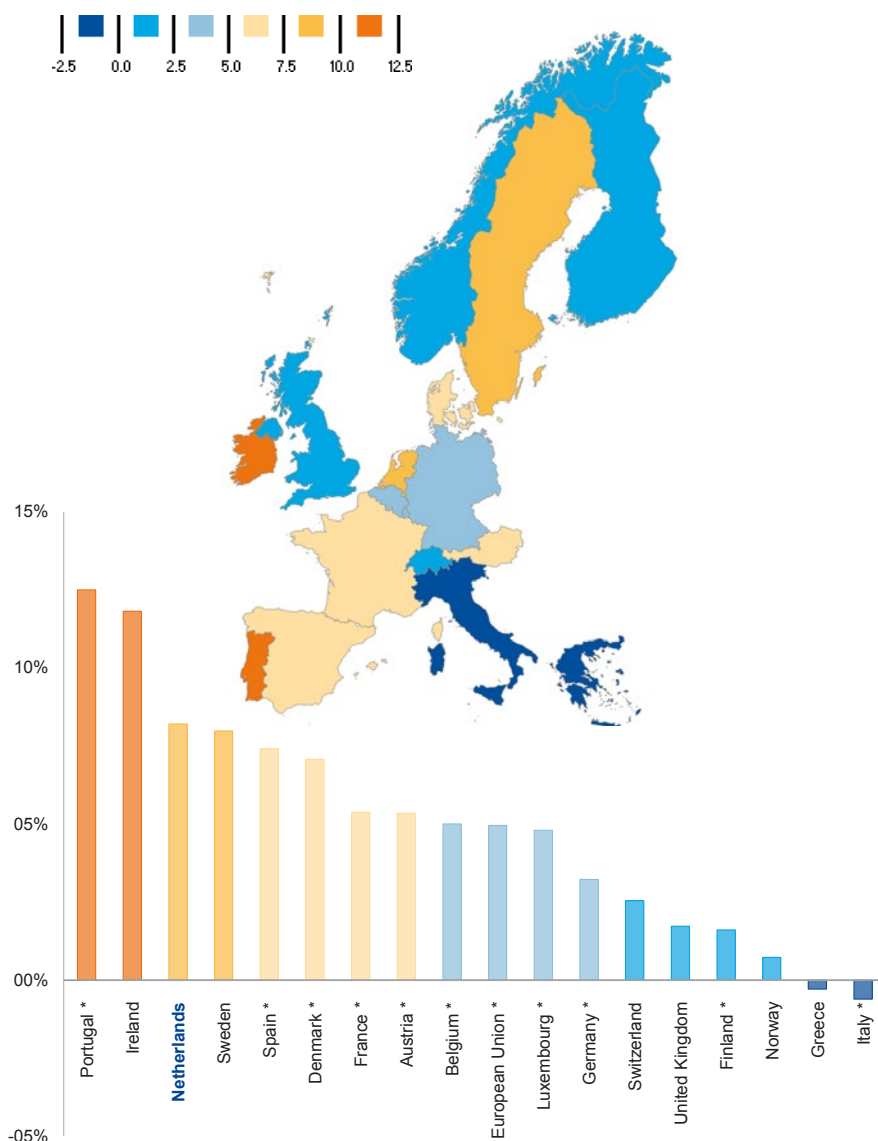


Figure 3

House price development in 2017 for the Netherlands and Western Europe (not adjusted for inflation)

*countries where the last quarter has been estimated

Source: Bank of Greece, Statistics Germany, Statistics Norway, Statistics Sweden, Calcasa, CSO, Eurostat, Hometrack and IAZI

The Netherlands amongst strongest EU risers over the past three years

Figure 4 shows the annual price development for the Netherlands and the EU countries. In comparison with the average house price development in the European Union, the Netherlands has been doing significantly better over the last three years.

Over the past three years the average house price in the Netherlands rose by 20.9%. Only Ireland, Portugal and Sweden showed bigger price increases, with rises of 29.8%, 29.1% and 29.1% respectively (see table 3).

Yearly price development in the Netherlands and the EU

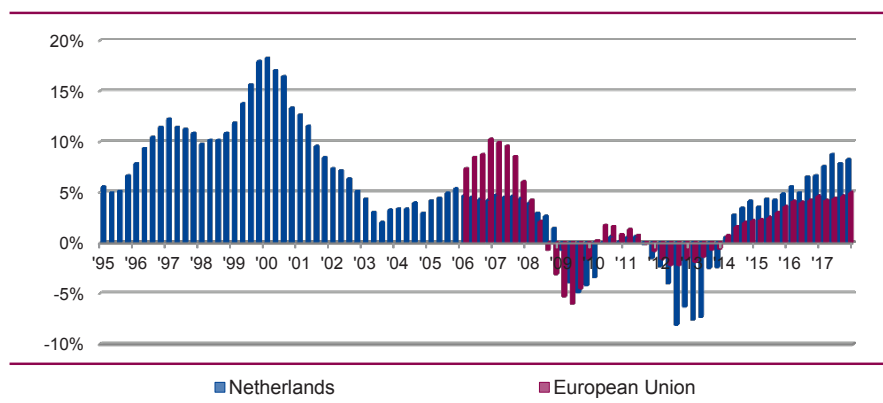


Figure 4

Yearly price development in the Netherlands and the European Union
Source: Calcasa, Eurostat

Area	1 year	3 years	5 years
Ireland	11.8%	29.8%	63.9%
Sweden	8.0%	29.1%	45.6%
Portugal *	12.5%	29.1%	33.6%
Netherlands	8.2%	20.9%	22.8%
Austria *	5.3%	20.4%	30.0%
Denmark *	7.1%	19.4%	28.5%
Germany *	3.2%	17.2%	22.9%
Luxembourg *	4.8%	17.2%	25.9%
Spain *	7.4%	16.6%	9.5%
Norway	0.7%	15.9%	23.9%
European Union *	5.0%	13.7%	15.6%
United Kingdom	1.7%	9.7%	20.1%
Belgium *	5.0%	8.0%	9.7%
France *	5.4%	6.5%	1.8%
Switzerland	2.5%	6.3%	12.9%
Finland *	1.6%	2.4%	1.1%
Italy *	-0.6%	-2.9%	-12.9%
Greece	-0.3%	-6.5%	-20.7%

Table 3

Price changes in the Netherlands and Western Europe (not adjusted for inflation)
*countries where the last quarter has been estimated
Source: Bank of Greece, Statistics Germany, Statistics Norway, Statistics Sweden, Calcasa, CSO, Eurostat, Hometrack and IAZI

Dutch house price index in top segment Western Europe

The graphs below show the house price index of the Netherlands as well as the index of other Western European countries, grouped by geographical location. Thanks to the price growth of the Dutch housing market in the past three years, the Dutch index is ranked in the top segment in each instance, depicted in all of the graphs.

Nominal house price index The Netherlands and surrounding countries

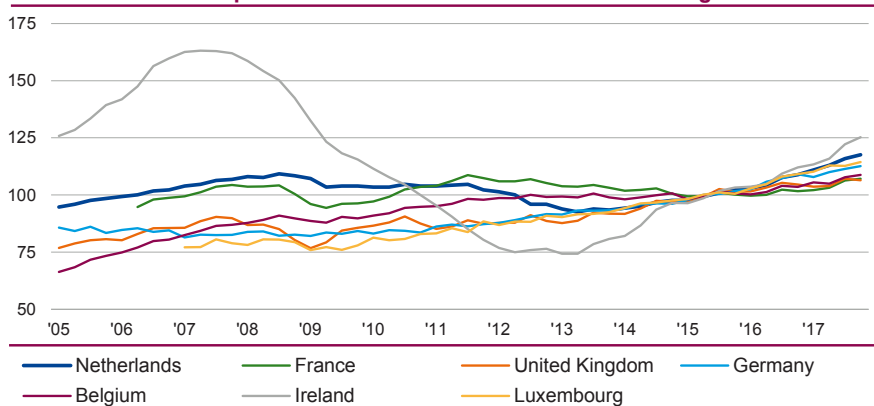


Figure 5

Nominal house price index The Netherlands and surrounding countries (2015=100) (not adjusted for inflation)
Source: Statistics Germany, Calcasa, CSO, Eurostat, Hometrack

Nominal house price index The Netherlands and Scandinavia

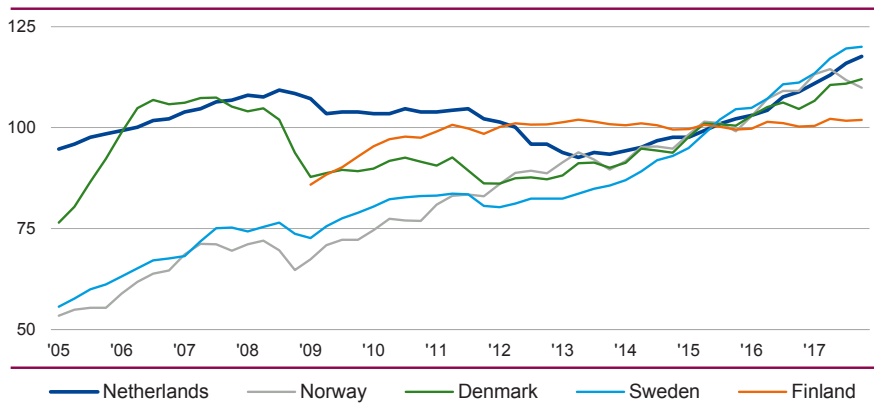


Figure 6

Nominal house price index The Netherlands and Scandinavia (2015=100) (not adjusted for inflation)
Source: Statistics Norway, Statistics Sweden, Calcasa, Eurostat

Nominal house price index The Netherlands and Mediterranean countries

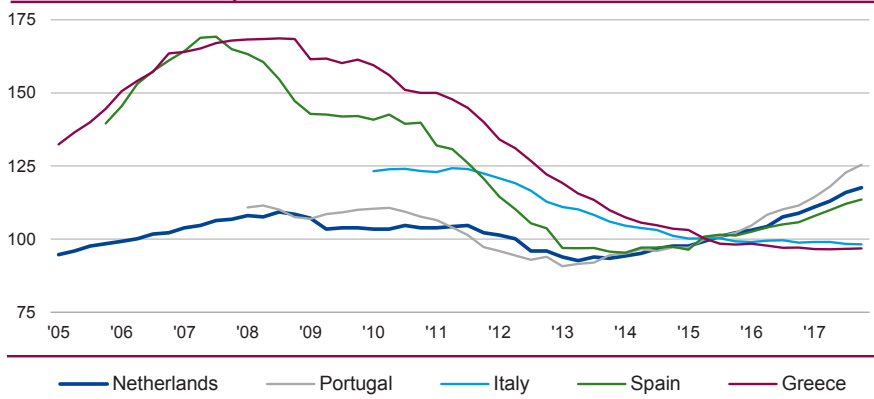


Figure 7

Nominal house price index The Netherlands and Mediterranean countries (2015=100) (not adjusted for inflation)
Bron: Bank of Greece, Calcasa, Eurostat

Strong house price growth in the Randstad

- Average house prices increased the most in the province of Flevoland, with an annual increase of 10.9% in value. Runner-up is the province of North-Holland, where house prices increased by 10.3%.
- Especially apartments in South-Holland and North-Holland are in demand, with values going up by 12.0% and 11.1% respectively.
- The lowest price increase was measured for houses in the provinces of Groningen (3.7%) and Zeeland (4.1%).

Q4 2017	Average price	Average price	Price change
	single-family houses	apartments	(year-on-year)
Groningen	207,000	187,000	3.7%
Friesland	205,000	163,000	4.5%
Drenthe	228,000	173,000	5.7%
Overijssel	237,000	161,000	4.9%
Flevoland	240,000	225,000	10.9%
Gelderland	292,000	190,000	7.7%
Utrecht	410,000	256,000	8.6%
North-Holland	386,000	351,000	10.3%
South-Holland	332,000	210,000	10.0%
Zeeland	214,000	183,000	4.1%
North-Brabant	303,000	209,000	7.1%
Limburg	230,000	159,000	5.4%
The Netherlands	300,000	237,000	8.2%

Table 4

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

13% house price growth in the Leiden region

- The largest annual price increase of 12.6% is measured for houses in the NUTS III Leiden region. The value of single-family homes rose by 13.1% and the value of apartments by 11.1%.
- Second-largest annual price increase is seen in the NUTS III region IJmond with an annual growth rate of 12.4%, the value of single-family homes rose by 12.7% and the value of apartments by 11.0%.
- The NUTS III regions with the smallest price increases are North-Overijssel (3.0%) and East-Groningen (3.0%).
- In 28 of the 40 NUTS III regions the annual increase for houses prices is more than 5%.

Housing affordability increases slightly

On average, 14.8% of net household income was required to service housing costs in the fourth quarter of 2017, 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: +6.2%.

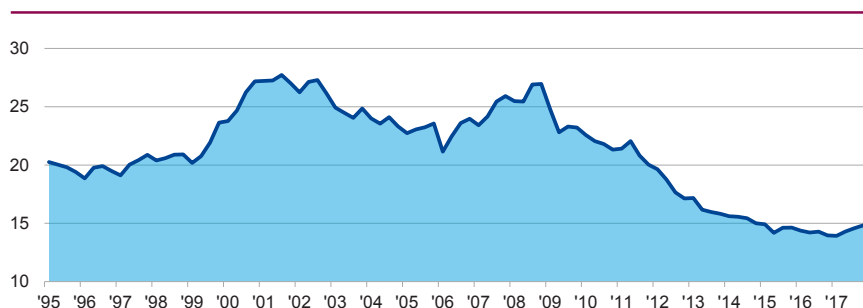


Figure 8

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

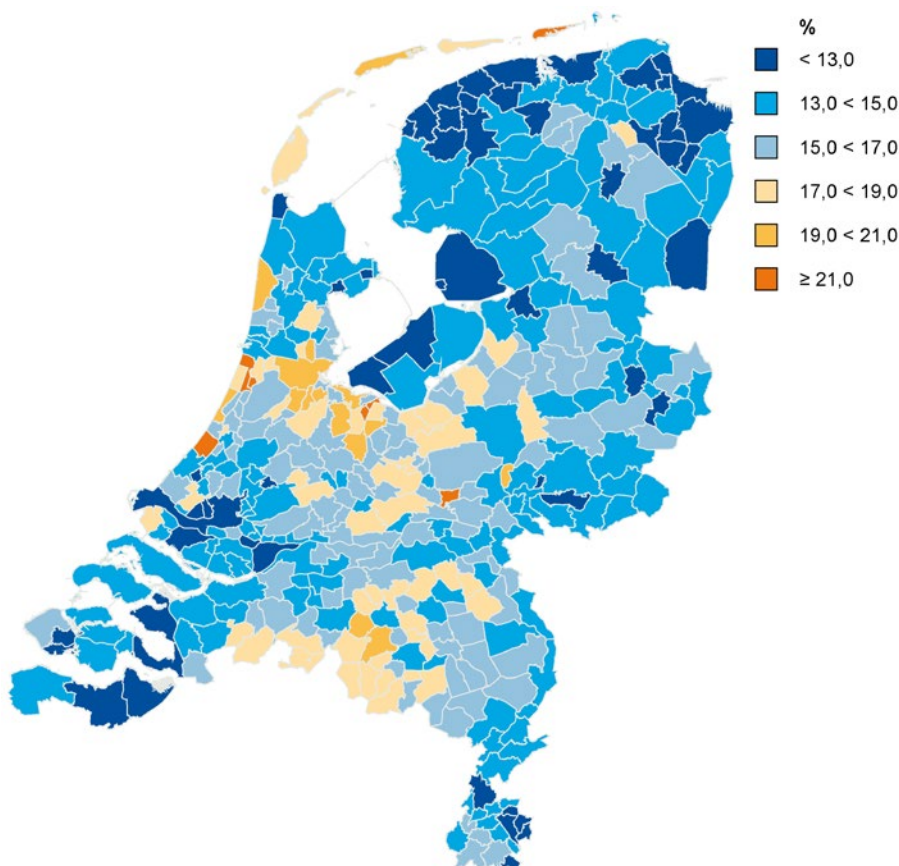


Figure 9

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 increased, with a total of 283 thousand residential properties sold during the past year.

- Y-O-Y development, number of annual sales: +12.4%.
- Q-O-Q development, number of annual sales: +2.1%.

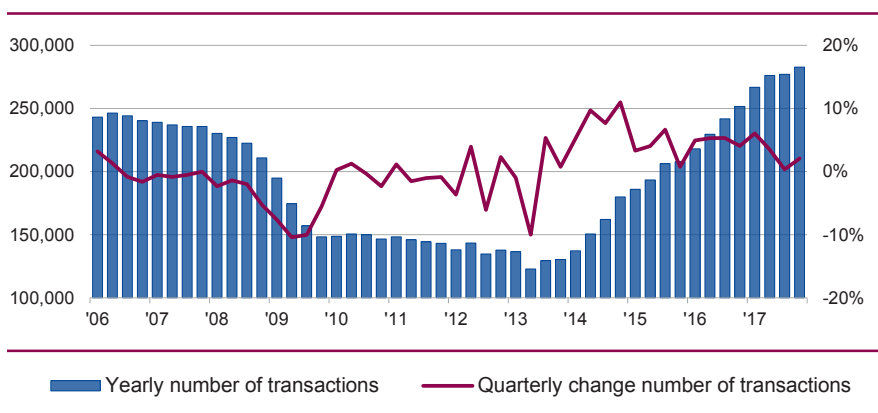


Figure 10

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

- Sales increased for all types of housing in the past year, as shown in the table below. Detached houses were most popular with an increase in sales last year of 22.3%.
- The increase of the amount of transactions for apartments is the lowest this quarter with 5.4% (Y-O-Y).

Transaction development y-o-y

Housing type	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4
Detached	24.0%	27.5%	28.4%	21.8%	22.3%
Semi-detached	20.4%	25.0%	24.1%	19.6%	16.7%
Corner house	15.9%	20.1%	19.3%	15.3%	15.5%
Terraced house	20.0%	21.3%	19.1%	14.1%	12.4%
Apartment	23.0%	21.1%	16.9%	10.0%	5.4%
Total	21.1%	22.4%	20.3%	14.6%	12.4%

Table 5

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

Sales in expensive price class increased by 38%

- The sale of homes in the price range 350 to 500 thousand euros increased by 38.3% in the past year, whilst homes above 500 thousand euros increased by 38.1%.
- Especially in the east (61.8%) and in the south (52.3%) 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 worth between 350 to 500 thousand euros (31.2%).
- The lowest price segment (75 to 150 thousand euros) decreased the most in the western part of the Netherlands by 18.5%.

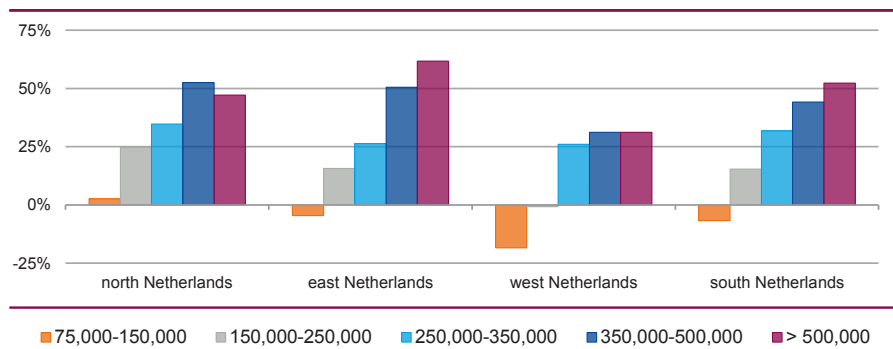


Figure 11

Growth (%) of share of housing sales per price class in North, East, West and South Netherlands in Q4 2017 compared to Q4 2016.

Source: WOX Monitor Calcasa

41% of housing sales within 150 to 250 thousand euros

- In the past year 41% 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 17%.
- The price segment 350 to 500 thousand euros increased in four years time from 7% to 12%.

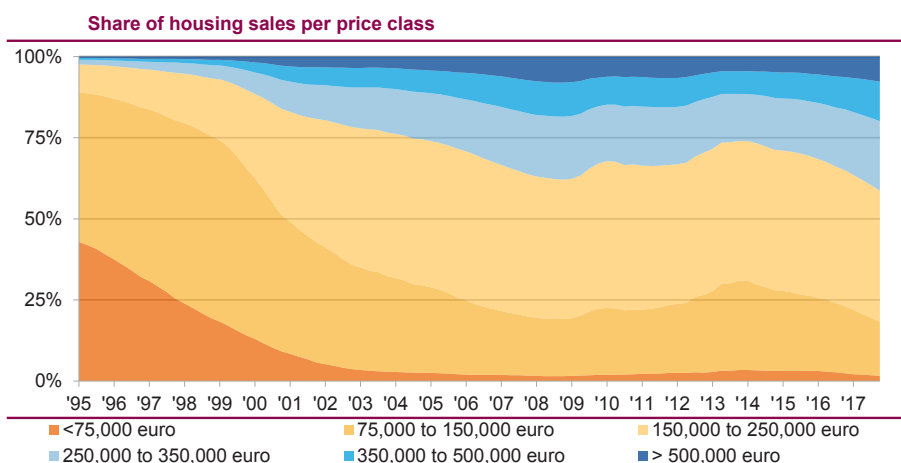


Figure 12

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 8.2% of the housing supply was sold during the past year. The regions of The Hague and Groot-Rijnmond follow with 8.1% and 7.4% respectively.
- The NUTS III regions Delfzijl en omgeving and Midden-Limburg had the lowest market liquidity: 5.2%.

NUTS III region	Percentage of housing supply sold last year	NUTS III region	Percentage of housing supply sold last year
Groot-Amsterdam	8.2%	Delfzijl en omgeving	5.2%
's-Gravenhage	8.1%	Midden-Limburg	5.2%
Groot-Rijnmond	7.4%	Oost-Groningen	5.3%
Overig Groningen	7.3%	Noord-Limburg	5.6%
Het Gooi en Vechtstreek	7.2%	Zuid-Limburg	5.6%
Arnhem/Nijmegen	6.9%	Twente	5.7%
Haarlem	6.9%	Achterhoek	5.7%
Utrecht	6.7%	IJmond	5.8%
Flevoland	6.7%	Alkmaar en omgeving	6.1%
Noord-Friesland	6.5%	Zaanstreek	6.1%

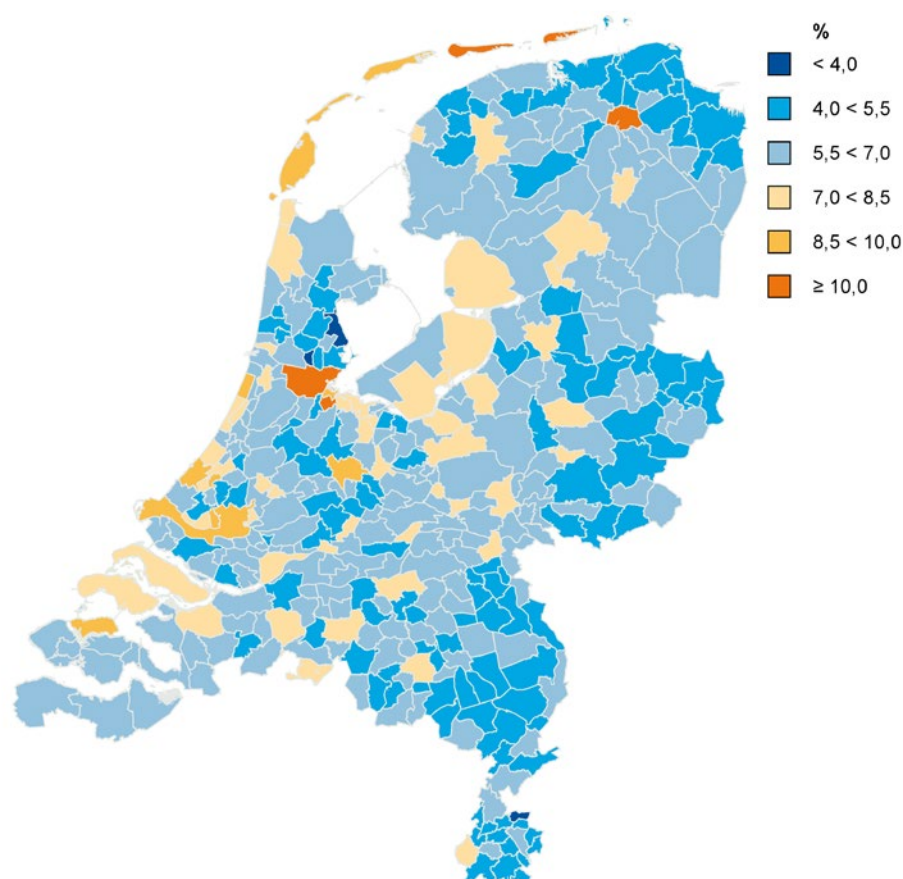


Table 6

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

Figure 13

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 0.7.
- The annual number of houses sold: 283 thousand.
 - » Y-O-Y development: 12.4%
- Homes for sale in Q4 2017: 125 thousand
 - » Y-O-Y development: -30.7%
- The market liquidity is best in the municipality of Groningen with a factor of 0.16.
- In the municipality of Oldambt the market liquidity is highest (worst) with a factor of 1.29, followed by the municipality of Veendam with a factor of 1.27.

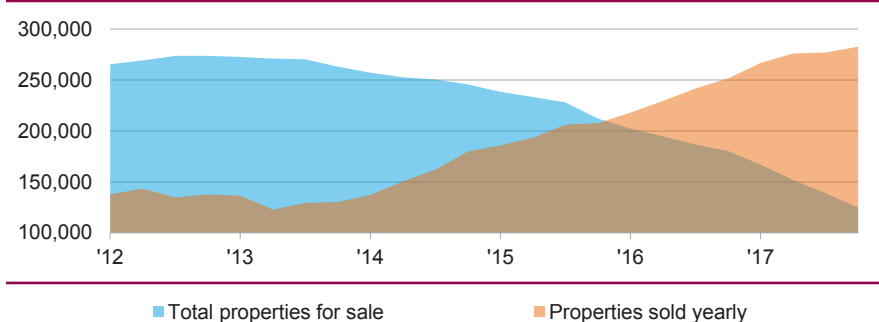


Figure 14a

Annual number of properties for sale versus number of properties sold over the period 2012-2017 in the Netherlands. Source: Multiple real estate agents, adaptation Calcasa

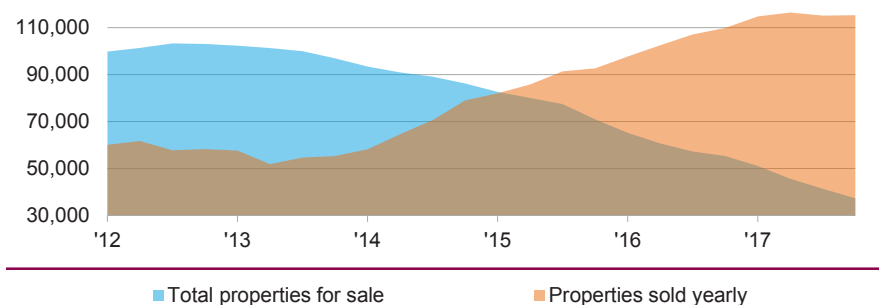


Figure 14b

Annual number of properties for sale versus number of properties sold over the period 2012-2017 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 6.6% for the Netherlands.
 - o The percentage of family homes sold previous year: 6.1%.
 - o The percentage of apartments sold previous year: 8.0%.
- The share of owner occupied housing stock which was sold last year is highest in the city of Amsterdam with 10.7%.
- In the municipality of Edam-Volendam only 3.2% of the existing stock of owner-occupied homes has changed owners.

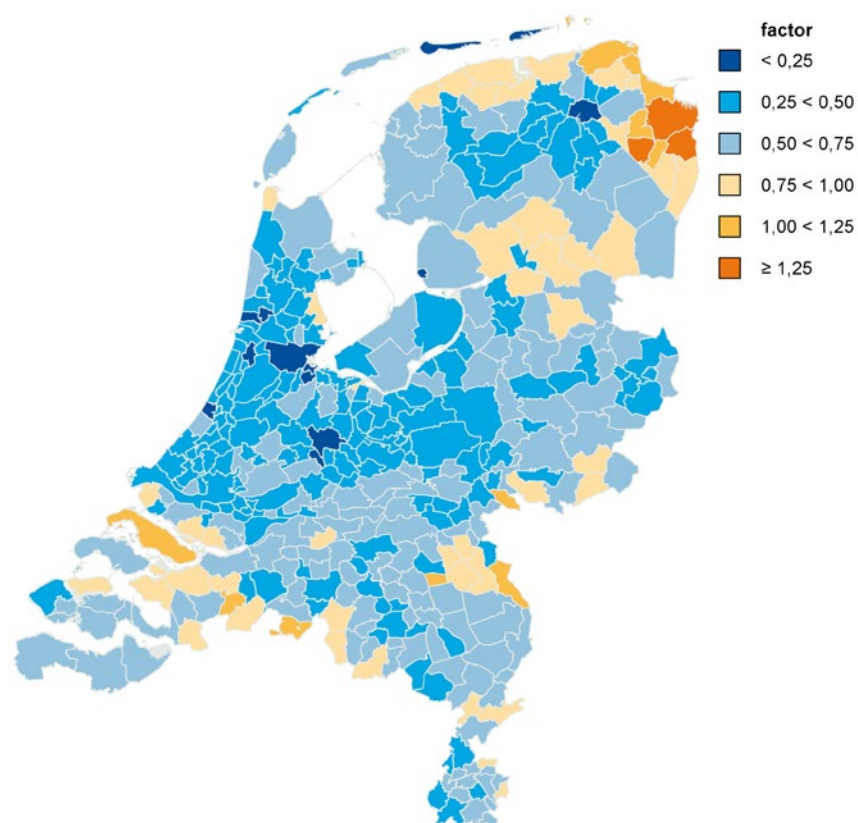


Figure 15

Supply/Sales ratio all properties per municipality

Source: WOX Monitor Calcasa

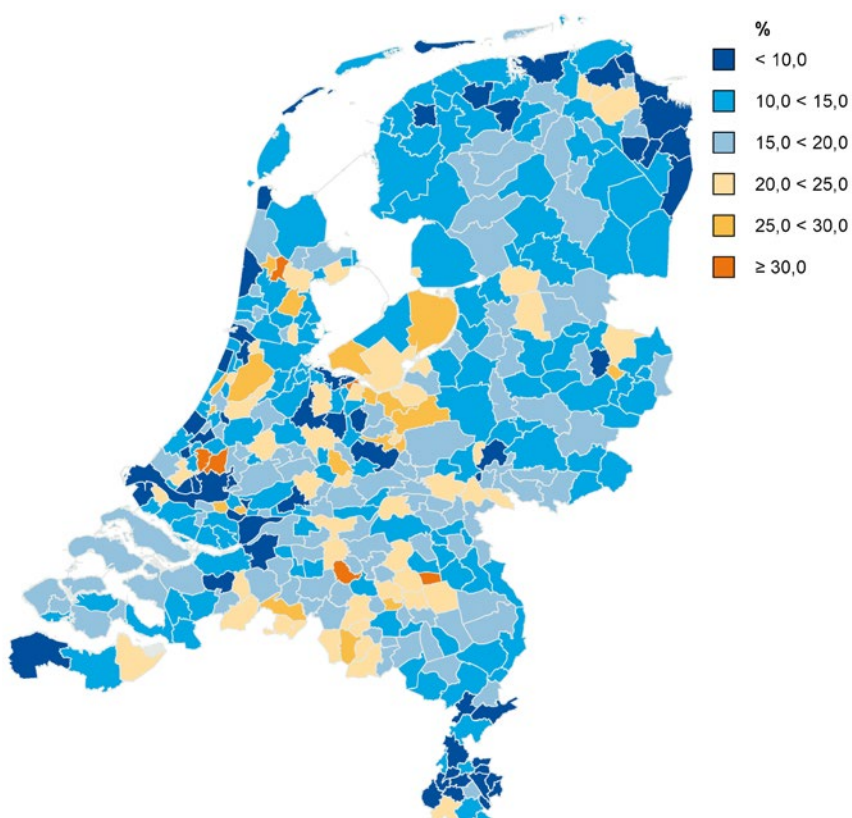


Figure 16

Percentage of properties with energy label A per municipality

Source: WOX Monitor Calcasa

Mortgage approvals keep rising

Approximately 353 thousand mortgages were approved last year.

- Y-O-Y development, number of annual mortgages: +14.9%.
- Q-O-Q development, number of annual mortgages: +2.9%.

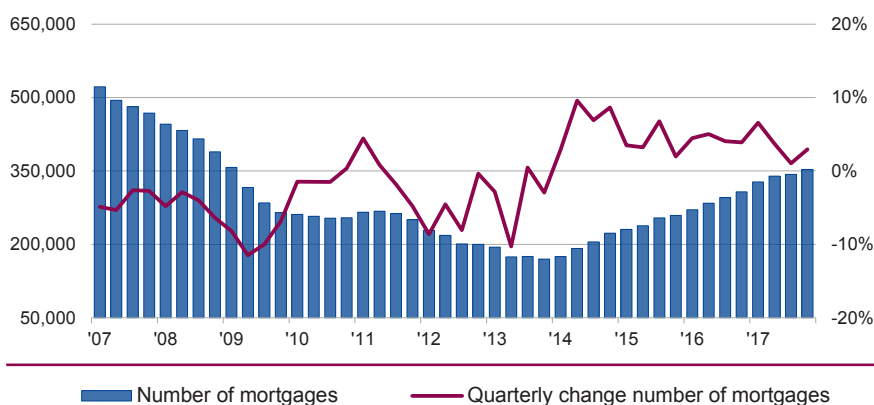


Figure 17

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

Number of foreclosures through auction decreases

Over the last four quarters, 1,172 foreclosures have been registered by the land registry.

- o Y-O-Y development amount of annual foreclosures: -36.7%.
- o Q-O-Q development amount of annual foreclosures: -13.6%.
- The share of foreclosure sales versus total sales is 0.4%.
- The highest share of foreclosure sales to total sales is 2.0% in the municipality of Heerlen.
- The lowest share of foreclosure sales (0.0%) is registered in the municipality of Katwijk.

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.

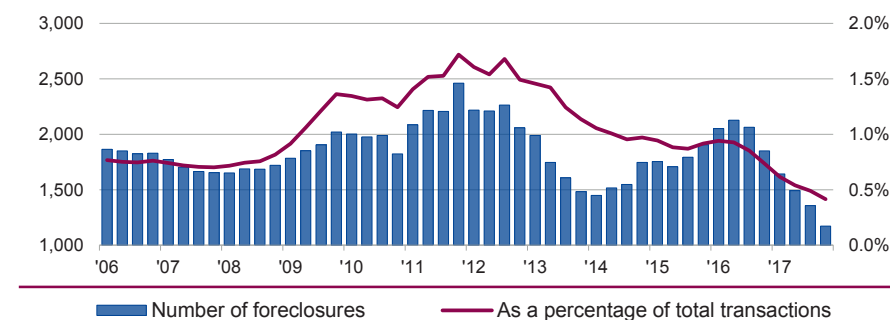


Figure 18

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.

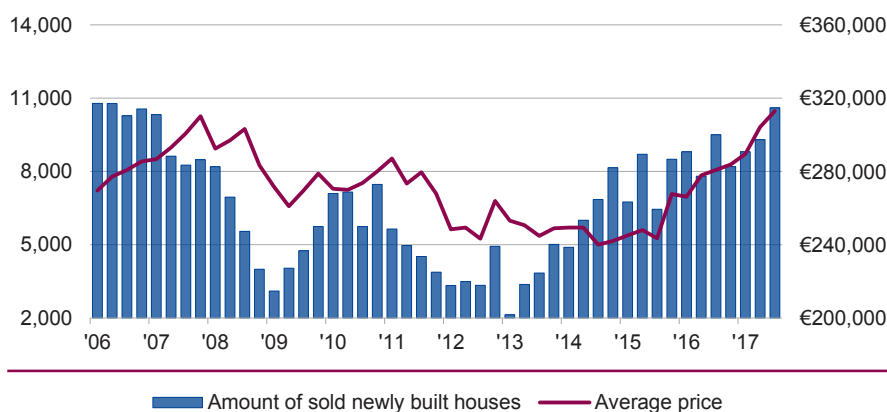


Figure 19

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 2007 the number of homeowners with payment problems has increased with 202%.
- Currently there are 91 thousand homeowners who have difficulty paying their mortgage: this is a decrease of 15.6% compared to Q3 2016.

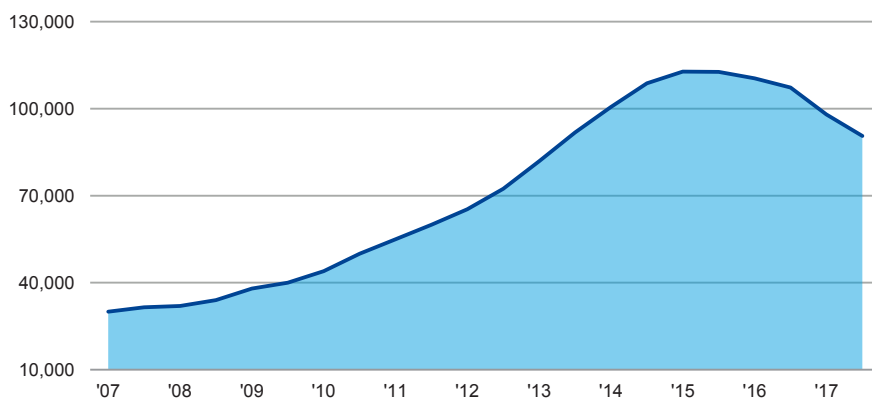


Figure 20

Number of borrowers with mortgage payment arrears

Source: BKR, adaptation Calcasa

Office rental values increase by 5.5%

The average office rental price increased by 5.5% y-o-y in 4Q2017

The Calcasa PropertyNL OPI (Office Price Index) showed a value of 93 (4Q2001=100) for the fourth quarter of 2017. The average office rental value is now EUR125 per square meter.

The average retail rental price decreased by 0.9% y-o-y in 4Q2017

The Calcasa PropertyNL RPI (Retail Price Index) showed a value of 101 (4Q2001=100) for the fourth quarter of 2017. Compared to the fourth quarter of 2016, this is a decrease of 0.9%. The average retail rental value is now EUR156 per square meter.

The average industrial rental price increased by 5.4% y-o-y in 4Q2017

The Calcasa PropertyNL IPI (Industrial Price Index) showed a value of 99 (4Q2001=100) for the fourth quarter of 2017, an increase of 5.4% compared to the fourth quarter of 2016. The average industrial rental value is now EUR60 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.

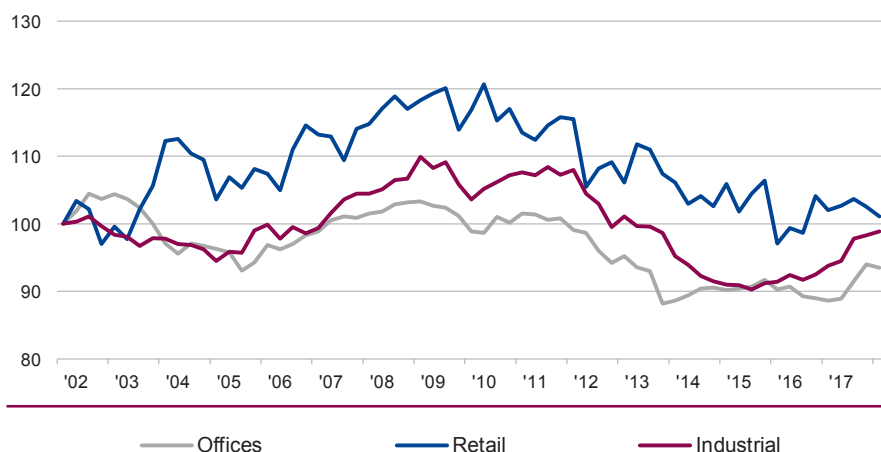


Figure 21

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	5.5%	3.6%
Retail (RPI)	101	€ 156	-0.9%	-4.5%
Industrial (IPI)	99	€ 60	5.4%	8.7%

Table 7

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

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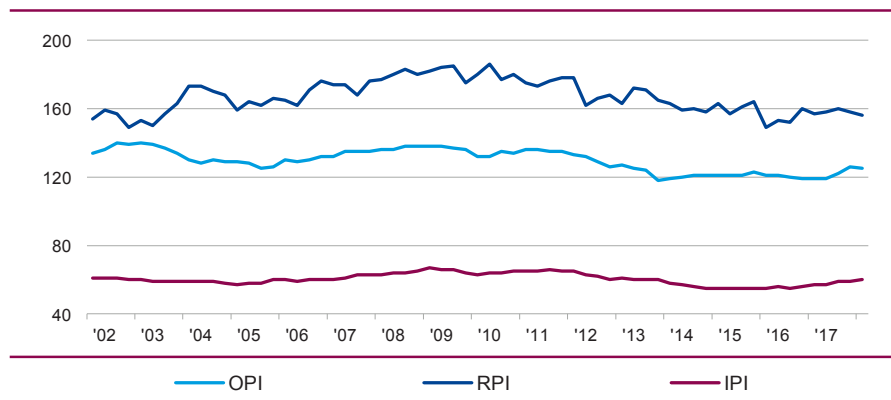


Figure 22

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.

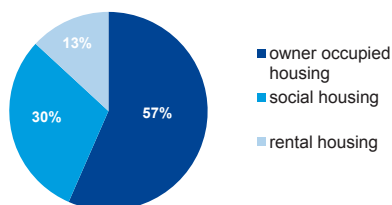
With the application of the hedonic method, it is essential that objects and their location are documented precisely, using the characteristics that influence the price. Hence, when using a hedonic index model, a range of object characteristics are taken into account, e.g. living area and year of construction.

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.

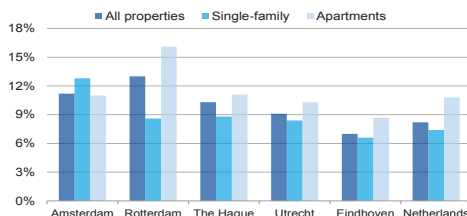
Dutch Housing Market Summary

Largest cities	All properties	Single-family	Apartments	Owner occupied	Rental	Total population	Total households	Annual sales	Current supply
Amsterdam	424,000	100,000	325,000	29%	70%	833,620	456,460	13,166	
Rotterdam	311,000	112,000	199,000	35%	63%	629,610	318,220	9,927	
The Hague	253,000	73,000	180,000	42%	55%	519,990	255,780	9,671	
Utrecht	149,000	75,000	74,000	45%	53%	338,970	174,760	5,959	
Groningen	99,000	39,000	60,000	38%	61%	200,950	121,160	3,880	
Eindhoven	107,000	74,000	33,000	46%	53%	224,760	114,610	3,902	
Provinces									
Groningen	275,000	196,000	79,000	55%	44%	583,720	290,290	9,802	5,581
Friesland	296,000	256,000	39,000	61%	38%	646,040	287,250	11,448	6,254
Drenthe	219,000	192,000	26,000	65%	34%	488,630	213,000	9,121	5,383
Overijssel	494,000	411,000	83,000	60%	39%	1,144,280	490,680	17,895	8,532
Flevoland	163,000	136,000	27,000	64%	35%	404,070	166,700	7,014	2,669
Gelderland	886,000	720,000	166,000	59%	39%	2,035,350	895,700	33,670	16,503
Utrecht	548,000	374,000	174,000	57%	41%	1,273,610	572,960	20,985	6,980
North-Holland	1,300,000	741,000	559,000	50%	49%	2,784,850	1,327,940	45,821	14,988
South-Holland	1,657,000	912,000	745,000	51%	48%	3,622,300	1,671,420	60,275	22,155
Zeeland	184,000	157,000	27,000	65%	34%	381,250	171,900	7,658	4,637
North-Brabant	1,096,000	887,000	209,000	61%	38%	2,498,750	1,111,510	41,923	21,671
Limburg	525,000	421,000	104,000	59%	39%	1,116,260	521,440	17,141	9,599
Netherlands	7,641,000	5,396,000	2,245,000	56%	43%	16,979,120	7,720,790	282,753	124,953

Housing stock



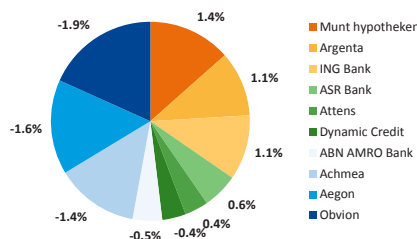
Y-O-Y price development largest cities



Mortgage developments

Annual numbers 4Q17	Amount	Change
Sales with NHG	26,400	-3.3%
Execution sales with losses	456	-42.9%
Households in arrears	90,600	-15.6%
Sold mortgages	353,132	14.9%
Total mortgage amount (x 1,000,000,000)	670.8	0.8%

Top mortgage lenders: increase/decrease market share



Macro-economic figures

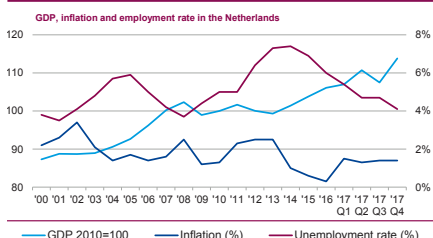


Table 8

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

Figures 23 & 24

Source figure left: Statistics Netherlands
Source figure right: Calcasa

Table 9 & Figure 25

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

Figures 26 & 27

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	242,000	202,000	180,000	182,000	207,000
Friesland	267,000	197,000	166,000	154,000	205,000
Drenthe	300,000	213,000	177,000	164,000	228,000
Overijssel	350,000	231,000	209,000	197,000	237,000
Flevoland	391,000	284,000	216,000	204,000	240,000
Gelderland	410,000	285,000	239,000	219,000	292,000
Utrecht	692,000	478,000	347,000	324,000	410,000
North-Holland	539,000	446,000	338,000	311,000	386,000
South-Holland	522,000	399,000	305,000	283,000	332,000
Zeeland	292,000	203,000	177,000	170,000	214,000
North-Brabant	442,000	304,000	261,000	242,000	303,000
Limburg	331,000	217,000	200,000	193,000	230,000
Netherlands	395,000	297,000	265,000	252,000	300,000

Table 10

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	169,000	162,000	167,000	180,000	187,000
Friesland	161,000	143,000	160,000	155,000	163,000
Drenthe	162,000	151,000	151,000	183,000	173,000
Overijssel	151,000	156,000	168,000	168,000	161,000
Flevoland	207,000	177,000	180,000	186,000	225,000
Gelderland	184,000	171,000	184,000	205,000	190,000
Utrecht	237,000	213,000	252,000	261,000	256,000
North-Holland	261,000	251,000	316,000	373,000	351,000
South-Holland	184,000	185,000	218,000	216,000	210,000
Zeeland	195,000	212,000	162,000	173,000	183,000
North-Brabant	207,000	189,000	206,000	217,000	209,000
Limburg	159,000	145,000	162,000	169,000	159,000
Netherlands	199,000	194,000	230,000	265,000	237,000

Table 11

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	797	Delfzijl	152
Wassenaar	622	Oldambt	160
Heemstede	584	Heerlen	168
Gooise Meren	481	Veendam	168
De Bilt	465	Leeuwarden	170
Wijdemeeren	449	Terneuzen	171
Zeist	438	Kerkrade	172
Utrechtse Heuvelrug	430	Brunssum	172
Amsterdam	429	Franekeadeel	174
Bergen (NH.)	427	Dongeradeel	179

Municipalities	Highest	Municipalities	Lowest
	annual price development		annual price development
Leiden	13.0%	Hoogezand-Sappemeer	2.0%
Rotterdam	13.0%	Hardenberg	2.1%
Kaag en Braassem	12.9%	Dalfsen	2.3%
Lisse	12.7%	Steenwijkerland	2.3%
Edam-Volendam	12.6%	Leek	2.7%
Oegstgeest	12.5%	Zwartewaterland	2.8%
Castricum	12.5%	Oldambt	3.0%
Voorschoten	12.5%	Stadskanaal	3.1%
Velsen	12.5%	Delfzijl	3.2%
Leiderdorp	12.4%	Raalte	3.3%

Table 12

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

Table 13

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

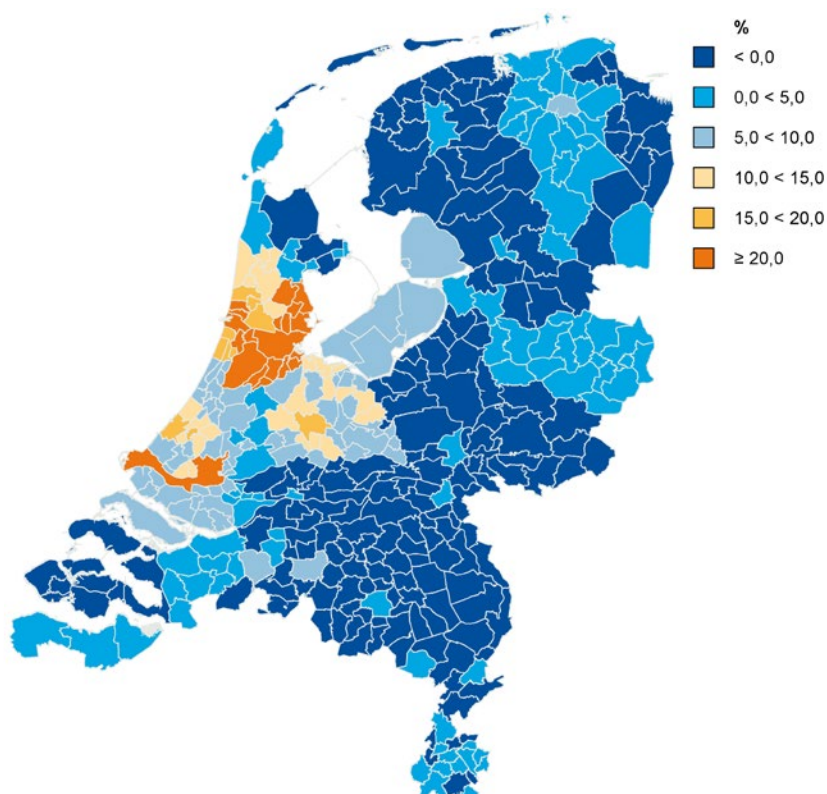


Figure 28

The price development of all houses per municipality in 2017Q4 compared to 2008Q3
Source: Calcasa

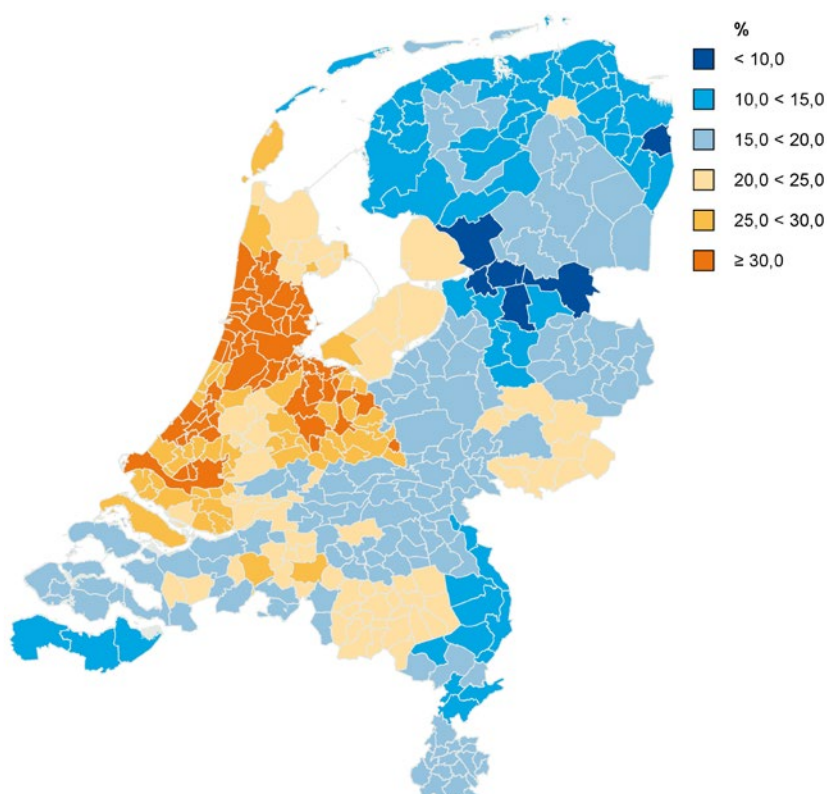
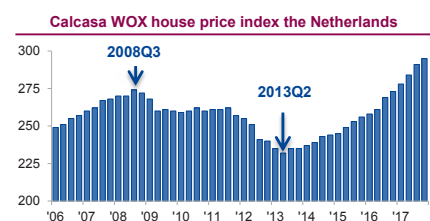


Figure 29

The price development of all houses per municipality in 2017Q4 compared to 2013Q2
Source: Calcasa



Visit calcasa.co.uk for more information

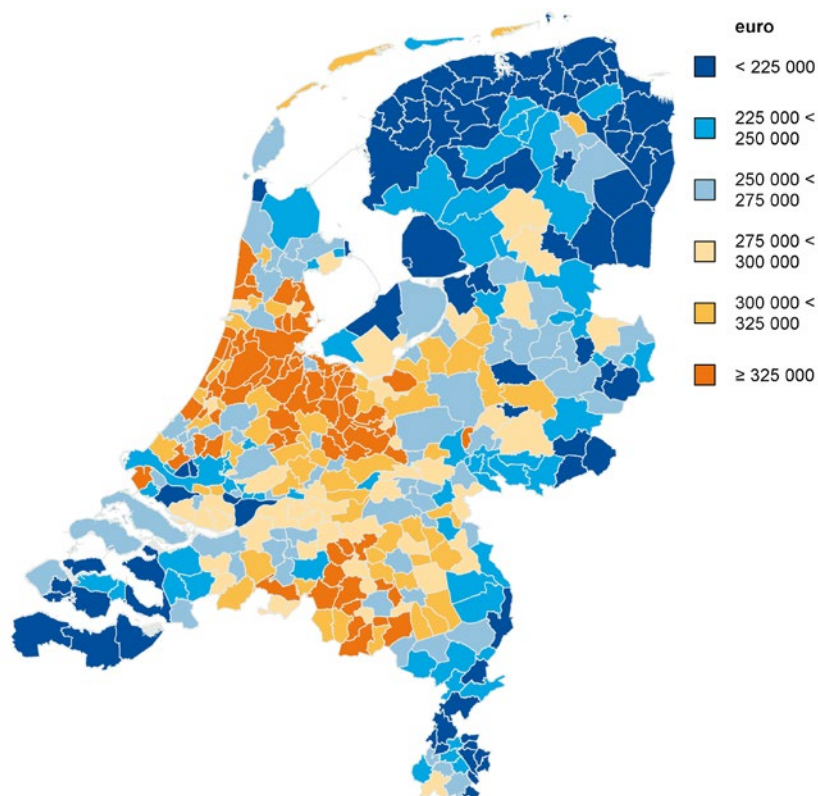


Figure 30

Average house price per municipality (EUR).
Source: Calcasa

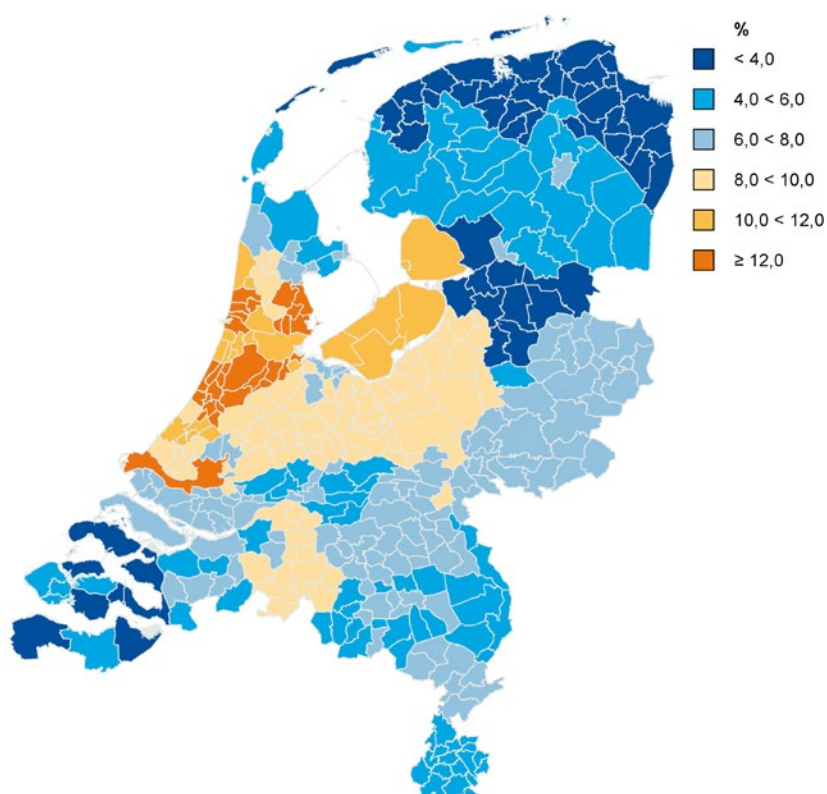
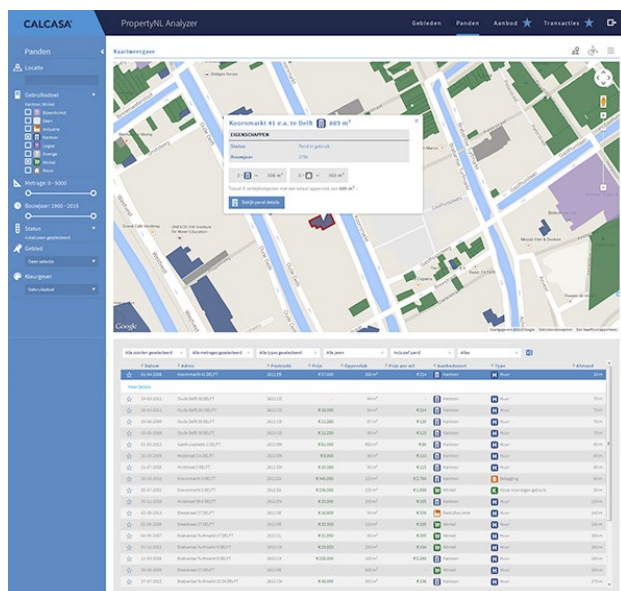


Figure 31

Year-on-year price change per municipality (%).
Source: Calcasa

Analyzing the commercial real estate market is possible through the Calcsa 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@Calcsa.nl



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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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