



CENTRAL BANK OF CYPRUS

EUROSYSTEM

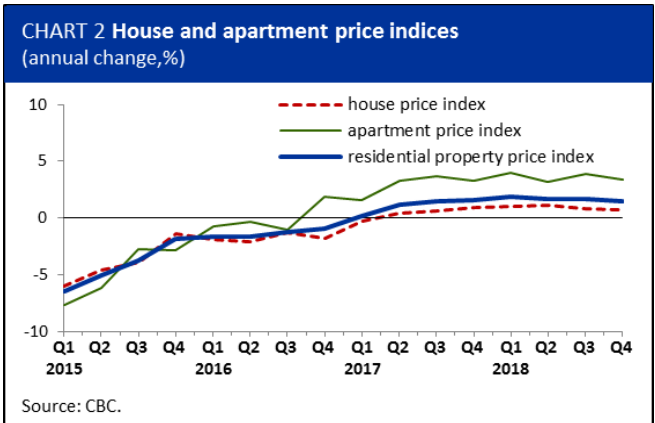
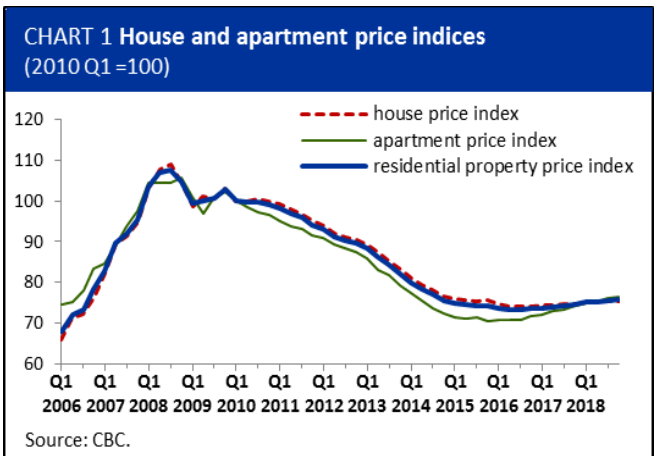
RESIDENTIAL PROPERTY PRICE INDEX (RPPI)

2018 Q4

Moderate increases in residential property prices

- The RPPI¹ (houses and apartments) continued its gradual upward trend recording a 0,2% quarterly increase in 2018Q4. The RPPI sub-indices for Nicosia, Limassol and Paphos recorded an increase, while a marginal decrease was recorded for Larnaca and Famagusta. The apartment and house price index recorded a quarterly increase of 0,4% and 0,1%, respectively.
- The RPPI increased by 1,5% on an annual basis in 2018Q4. All RPPI district sub-indices have recorded annual increases except in Paphos, where prices remained stable. The largest annual increase in house prices was recorded in Famagusta (2,5%) while in Paphos a decrease was recorded for the third consecutive quarter. The largest increase in apartment prices was recorded in Limassol (7,5%).
- The increase in the demand for houses and apartments continued to push overall real estate prices up. However, the increased supply of real estate property by Banks, resulting from acquisition of property from restructurings of mortgaged non performing exposures (NPEs), contains the property price index of specific categories of properties. All indicators show that the real estate sector will continue to grow in 2019.

OVERVIEW	2018 Q1	2018 Q2	2018 Q3	2018 Q4
Quarterly Index (2010Q1=100)	75,0	75,3	75,6%	75,7%
Quarterly change	0,6%	0,3%	0,3%	0,2%
Annual change	1,8%	1,7%	1,6%	1,5%



¹ The CBC RPPI is calculated on the basis of market valuations of real estate prices and the statistical methodology widely used in the international literature. It takes partial account of developments in previous quarters through smoothed regression coefficients (see relevant methodology:

https://www.centralbank.cy/images/media/pdf/Methodology_EN_latest.pdf). Therefore, it is likely that there will be a short lag in capturing turning points in the market with respect to both time and the magnitude of the recovery.

Residential property price indices

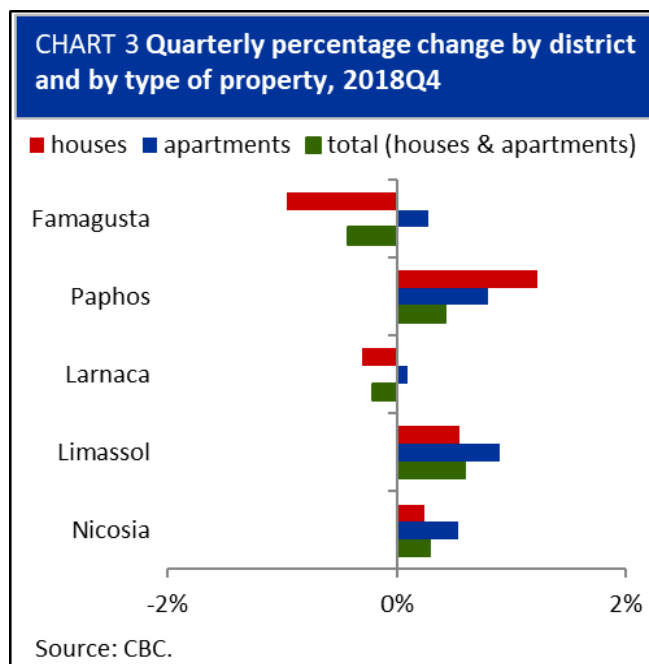
The RPPI (houses and apartments) continues its moderate recovery for the tenth consecutive quarter, recording a quarterly increase of 0,2% in 2018Q4. House and apartment price indices registered a quarterly increase of 0,1% and 0,4%, respectively (**Chart 1**).

Residential property prices recorded an increase of 1,5% on an annual basis in 2018Q4. House and apartment prices registered an annual increase of 0,7% and 3,3%, respectively, in 2018Q4 (**Chart 2**).

Throughout 2018 the real estate sector recorded positive growth, driven by increased demand for real estate, foreign investment and new domestic lending. Apartment prices as shown in **Chart 2** recover faster than house prices. Specifically, apartment prices in Cyprus registered a cumulative increase of 8,7% in 2018Q4 since the historically low level of 2015Q4, and are now 31,6% below their historically high level. House prices in 2018Q4 recorded an overall increase of 1,6% since the historically low level of 2016Q4, and remain 30% below their historically highest level of 2008Q3.

Despite the significant recovery of GDP in Cyprus and the increase in demand, real estate prices are rising moderately, with the exception of areas such as Limassol, which are increasingly affected by external factors. As previously mentioned, these external factors include the construction of the marina, the decision to set up a casino as well as the demand for real estate related to the Cyprus Investment Programme. Negative pressures on property prices occur due to the increase in supply of real estate as a result of the sales of property by credits acquiring companies (CACs) and banks or owners in the context of restructuring or settlement of mortgaged non-performing exposures.

Developments in the second half of 2018 indicate the need for a partial revision of the Index in order to continue to best represent the market. Indices of similar nature are also periodically revised. The previous revision of the CBC RPPI took place in 2015 (Residential Property Price Index 2015Q1 report, CBC). The new revision will take place in the next RPPI report and will cover data as of 2018 for comparison and transparency purposes. More specifically, the developments that lead to a partial revision of the Index involve the sale of Central Cooperative Bank's operations to the Hellenic Bank and the development and operation of the Cyprus Asset Management Company (KEDIPES), as well as changes in the



regulatory framework governing the management of non-performing loans in July 2018. Further to these developments and the practical implications of the market changes due to the Co-op developments in the compilation of the Index, there has been, among other things, a significant increase in the number of valuations of real estate properties, mainly for the purpose of speeding up of the settlement of NPEs. This increases the possibility that in a number of cases the estimated value of the property does not reflect market prices, therefore these observations should be excluded from the construction of the Index. Under the existing methodology, valuations reflect the open market value in accordance with international valuation standards. These standards are set by both the Royal Institute of Chartered Surveyors (RICS) and the European Group of Valuers' Associations (TEGOVA). Provisionally, the course of the revised RPPI in 2018 does not appear to be significantly different from the existing calculation of the Index. A more detailed analysis will be presented in the 2019Q1 report.

Prices changes by district

On a quarterly basis, residential property prices increased in the districts of Limassol, Paphos and Nicosia while they recorded a marginal decrease in Larnaca and Famagusta. Specifically, residential property prices increased by 0,6% in Limassol, 0,4% in Paphos, and 0,3% in Nicosia, while there was a small reduction of 0,2% and 0,4% in Larnaca and Famagusta, respectively (**Chart 3**). As regards annual changes in the

RPPI by district, positive annual change were recorded in all districts except Paphos. In Famagusta there was a 3,7% annual increase, 3,4% in Limassol, 1% in Nicosia, 9% in Larnaca while in Paphos prices remained stable (Chart 4).

House prices in Paphos, Limassol and Nicosia registered quarterly increases of 1,2%, 0,6% and 0,2%, respectively. In Famagusta and Larnaca they registered decreases of 1% and 0,3% respectively. On an annual basis, house prices recorded an increase in all districts for the third consecutive quarter, with the exception of Paphos where a small decrease of 0,2% was registered. In Famagusta house prices increased by 2,5%, in Limassol by 1,9%, in Nicosia by 0,8% and in Larnaca by 0,1%.

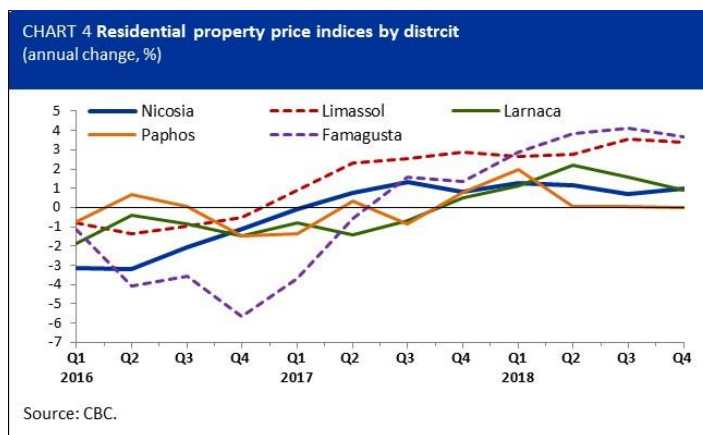
Apartment prices registered quarterly increases in all districts for the second consecutive quarter; in Limassol by 0,9%, in Paphos by 0,8%, in Nicosia by 0,5%, in Famagusta by 0,3% and in Larnaca by 0,1%. On an annual basis, apartment prices also recorded increases in all districts for the third consecutive quarter. The largest increase was registered in Limassol (7,5%) and Famagusta (7,3%). Apartment prices recorded an annual increase of 3,8% in Paphos, 3% in Larnaca and 1,5% in Nicosia.

Other market indicators

The recovery of the real estate sector in 2018 was driven by the increased demand for real estate, foreign investment and new domestic lending.

The increased demand for properties is reflected in the data published by the Department of Lands and Surveys (DLS), which indicate that the total number of sales contracts recorded an annual increase of 5,8% in 2018 and 11,1% in 2019Q1 (Chart 5). The annual decrease recorded in the sales contracts in 2018Q4 is due to the fact that in the corresponding quarter of 2017 a large number of sales contracts was filed to avoid the imminent introduction of VAT on land. In 2019Q1 demand for real estate increased from both locals and foreigners (16,7% and 5,8%, respectively, on an annual basis).

According to the data published by Cystat, construction activity (category buildings) recorded an increase of 14,2% in 2018Q4. Despite the consecutive



annual increases of production in construction, the level of the index is still lower than the historically high levels recorded before the crisis. According to the *European Commission's Business and Consumer Surveys (BCS)* 44,6% of the participants responded that they face no restrictions regarding the building activity of their company, 26,4% replied that insufficient demand is restricting their building activity and 18,2% that they face financial constraints.

According to the CBC's *Monetary and Financial Statistics*², the interest rate for housing loans³ averaged

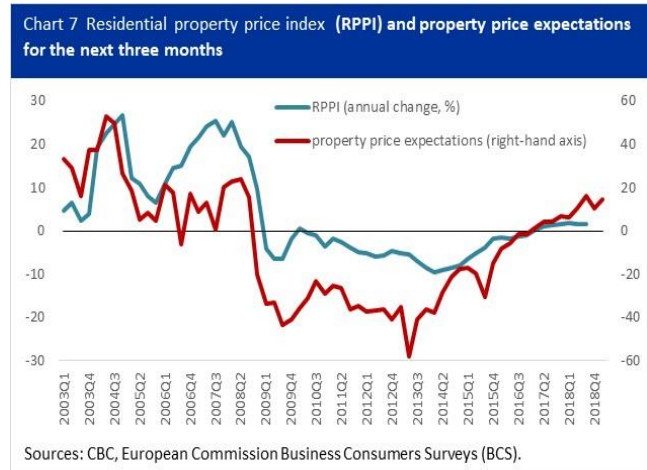
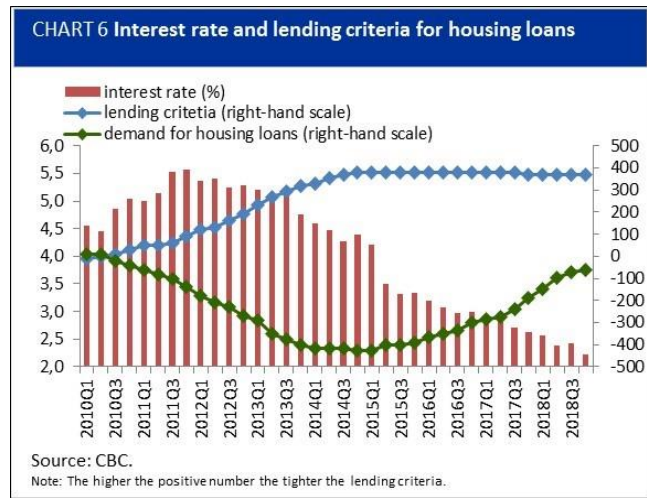
² <https://www.centralbank.cy/el/publications/monetary-and-financial-statistics>

³ Floating rate and up to one year fixed

2,2% in 2018Q4, which was the lowest since data are available (**Chart 6**). According to the CBC’s *Bank Lending Survey*⁴, the demand for housing loans by households continued to increase in 2018Q4. According to the *CBC Monetary and Financial Statistics*, new housing loans have slightly increased to €219 million in 2019Q1 compared with 2018Q1. In addition, the acquisition of CCB by Hellenic Bank and the operation of KEDIPES helped to reduce the levels of NPEs in the banking system, although they still remain in the economy. It is expected that the sale of loans to CACS and the operation of the Estia scheme will help to further reduce their levels in the banking system.

According to BCS, property prices in the coming quarters are expected to continue the upward trend. Property price expectations in the next three months averaged at 10,3 in 2018Q4 compared with 6,9 in 2017Q4. Comparing the index of property price expectations in the next three months (BCS) with the RPPI (**Chart 7**), a high correlation between the two series is observed. Specifically, for the period 2003 - 2018 the correlation coefficient of the two series is estimated at 0,77. Hence, according to the index of property price expectations, property prices are expected to increase further in the next quarter. At the same time, the index of employment expectations in the next three months in the construction sector reached an average of 8,9 in 2018Q4, compared with 0,2 in the corresponding period of 2017.

In conclusion, house prices in Cyprus continued to increase in 2018Q4. Although the price level is still below pre-crisis levels, the need to closely monitor developments in at least some specific areas is imperative.



⁴<https://www.centralbank.cy/el/publications/surveys/bank-lending-survey>

TABLE 1 Residential property price indices by type and by district
(annual and quarterly data, 2010Q1 = 100)

Year*	Quarter	<u>Residences by type</u>		<u>Residences by district</u>					Residential property price index
		Apartments	Houses	N/sia	L/sol	L/ca	Paphos	F/sta	
2006	-	77,7	71,4	74,7	69,0	71,2	85,6	68,4	73,0
2007	-	91,2	89,5	88,8	84,3	90,7	92,7	90,3	89,9
2008	-	104,8	106,1	104,7	103,3	103,2	101,1	106,5	105,7
2009	-	100,2	100,9	100,5	96,9	101,3	103,0	104,4	100,7
2010	-	98,2	100,1	99,9	99,0	99,5	100,3	99,5	99,6
2011	-	93,3	97,2	98,6	94,4	94,9	95,4	94,4	96,3
2012	-	89,0	91,8	94,4	90,8	87,3	87,5	87,9	91,2
2013	-	82,5	86,1	87,8	86,5	79,5	83,3	80,0	85,2
2014	-	74,7	78,8	80,3	79,5	72,1	77,4	71,1	77,8
2015	-	71,0	75,6	76,0	76,4	68,7	75,3	70,1	74,4
2016	-	71,0	74,3	74,2	75,7	67,9	75,1	67,6	73,4
2017	-	73,1	74,6	74,8	77,3	67,6	74,9	67,3	74,2
2018	Q1	74,8	75,1	75,4	78,6	68,0	75,6	68,8	75,0
	Q2	75,3	75,3	75,5	79,2	68,6	75,4	69,6	75,3
	Q3	76,3	75,3	75,5	80,3	68,8	74,8	70,5	75,6
	Q4	76,5	75,4	75,7	80,7	68,7	75,1	70,2	75,7

Source: CBC.

*The annual data for the years between 2006 and 2017 are calculated as the average of the four quarters of each respective year.

TABLE 2 Apartment and house price indices by district
(annual and quarterly data, 2010Q1 = 100)

Year*	Quarter	<u>Flats</u>					<u>Houses</u>				
		N/sia	L/sol	L/ca	Paphos	F/sta	N/sia	L/sol	L/ca	Paphos	F/sta
2010	-	99,3	97,8	97,1	100,1	99,4	100,1	99,4	100,4	101,4	100,1
2011	-	99,0	91,8	88,7	98,5	95,1	98,5	95,1	96,8	99,1	97,2
2012	-	95,2	88,3	82,2	94,1	91,5	94,1	91,5	88,7	90,7	89,7
2013	-	89,0	82,8	71,7	71,7	71,8	87,3	87,5	82,1	86,7	81,4
2014	-	81,5	74,9	63,8	67,2	64,1	79,8	81,1	74,7	80,7	72,3
2015	-	76,6	74,0	61,0	64,2	60,3	75,8	77,2	71,9	79,3	71,8
2016	-	75,0	74,6	61,3	66,0	57,8	73,9	76,1	70,8	78,9	69,4
2017	-	76,8	78,5	62,3	64,5	57,9	79,9	76,9	69,6	79,8	69,5
2018	Q1	78,1	81,9	61,7	67,3	57,6	74,2	77,5	70,2	79,7	71,7
	Q2	78,2	83,1	63,0	67,2	59,4	74,3	77,8	70,5	79,9	72,1
	Q3	78,3	85,5	64,4	67,6	61,2	74,2	78,3	70,4	78,5	72,8
	Q4	78,7	86,3	64,5	68,1	61,4	74,4	78,8	70,2	79,5	72,1

Source: CBC.

*The annual data for the years between 2010 and 2017 are calculated as the average of the four quarters of each respective year.

Notes:

The residential property price index and other residential property price indices and sub-indices presented in the current report are produced by the Real Estate Unit at the Central Bank of Cyprus (CBC).

Data from 2006 to 2009 were collected retrospectively from a number of credit institutions. From 2010 onwards, the data have been collected by the CBC from the member banks of the Association of Cyprus Banks (Bank of Cyprus, Hellenic Bank, Alpha Bank, Emporiki Bank, National Bank of Greece, Piraeus Bank, USB Bank, Cyprus Development Bank, Société Générale and Eurobank) and the Cooperative Central Bank in standardised form, through an online data submission platform.

The partnered credit institutions receive the relevant information from more than 90 independent property surveyor offices in relation to mortgage lending. The data received are representative of the Cyprus residential property market, covering the whole of the government-controlled territory of the Republic of Cyprus (Nicosia, Limassol, Larnaca, Paphos and Famagusta districts) and they refer to all types of residential property (houses and apartments).

All the estimated indices have been rebased so that the first quarter of 2010 equals 100. The aggregate Residential Property Price Index (RPPI) is calculated as the weighted sum of the two indices by type (house and apartment price indices).

Change in the weighting method to calculate the aggregate indices: In 2015Q1, the weighting method changed and the aggregate houses and flats indices are now calculated by using as weights the summation of the value of the properties in the sample of the last four quarters. This weighting method is applied in the historical series as well. In this way a more representative allocation between houses and apartments in the Cypriot housing market is provided. In previous reports, the indices used to be aggregated using the number of observations (valuations) of the last four quarters. Similarly, the aggregate RPPI is calculated using as weights for the residential property price indices by district the summation of the value of the properties in each respective district. This change in the weighting method was suggested by the IMF as part of an evaluation exercise of the RPPI. The evaluation was carried out in the context of the possible use of the indices for updating the property values of the General Valuation (1 January 2013) undertaken by the Department of Lands and Surveys.

As a result of the change in the weighting method, the CBC RPPI for both the historical (2006-2009) and the new series (2010 onwards) has been revised. In the new series the aggregated flats and houses indices, and the residential property price indices by district have also been revised. It is worth noting that the change in the weighting method has not affected significantly either the level of the indices or their growth rates.

The hedonic methodology is used for the construction of the indices. In case the number of observations per quarter in a particular district is not enough to implement the hedonic method, the simple average method is used. Further details about the methodology and other relevant information are available on the CBC's website, at http://www.centralbank.gov.cy/media/pdf/Methodology_EN.pdf

The current report is available at http://www.centralbank.gov.cy/ngcontent.cfm?a_id=11836&lang=en