



CENTRAL BANK OF CYPRUS

EUROSYSTEM

RESIDENTIAL PROPERTY PRICE INDEX (RPPI)

2019 Q2

Residential property prices continued with an upward trend and variations related to the type of property and district

- The RPPI¹ continued with an upward trend both for apartments and houses and recorded a quarterly increase of 0,5% in 2019Q2. The sub-indices for apartments and houses recorded a quarterly increase of 1,1% and 0,3%, respectively.
- The RPPI increased by 2,8% on an annual basis in 2019Q2. All RPPI district sub-indices have recorded annual increases. Both apartment and house prices recorded an annual increase of 4,3% and 2,3%, respectively.
- Despite the moderate increases in the RPPI, the variations in increases according to the type of property (houses and apartments) and by district, appear to be more intense. In fact, significant increases have registered in apartment prices in Larnaca (9,4%) and Limassol (7,2%). These increases appear to be concentrated in the coastal areas and are basically driven by the demand for property by foreigners.

OVERVIEW	2018 Q3	2018 Q4	2019 Q1	2019 Q2
Quarterly Index (2010Q1=100)	76,0	76,7	77,2	77,6
Quarterly change	0,7%	0,9%	0,7%	0,5%
Annual change	2,1%	2,5%	2,7%	2,8%

CHART 1 House and apartment price indices (2010 Q1 =100)



CHART 2 House and apartment price indices (annual change,%)



¹ The CBC RPPI is calculated on the basis of market valuations of real estate prices and a 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) continued its upward trend, recording a quarterly increase of 0,5% in 2019Q2. House and apartment price indices registered a quarterly increase of 0,3% and 1,1%, respectively. (Chart 1)

Residential property prices recorded an increase of 2,8% on an annual basis in 2019Q2. House and apartment prices registered an annual increase of 2,3% and 4,3%, respectively, in 2019Q2 (Chart 2).

In general, apartment prices seem to recover faster than house prices, probably because of two main factors: Firstly, due to the recent increase in demand by foreigners under the Cyprus Investment Programme (CIP)² and the permanent residence permits³ as shown by the significant increase in sales contracts in 2019Q2. Secondly, due to the insufficient supply to cover the demand of the market segment that tends to choose apartments rather than houses (such as students and foreign workers⁴).

It is noted that demand due to the CIP has already begun to decline following the change in the program criteria in May 2019, influencing the future impact of the program on property prices. As noted in the 2018Q2 report, RPPI is mainly affected by the CIP indirectly. This is because luxury homes sales, related with passport acquisition purposes, are not financed by the domestic banking system, which is the source for the RPPI data. Also the majority of these properties are considered as non-market outliers and are therefore excluded from the sample for the construction of the general CBC house price indices.

In 2019Q2, the CBC's house price index recorded a much lower annual fluctuation compared to the corresponding index of the Cyprus Statistical Service (CYSTAT), which recorded a significant annual increase of 8%. The two indices, which are based on two different but widely accepted methodologies⁵, usually lead to similar although not identical results.

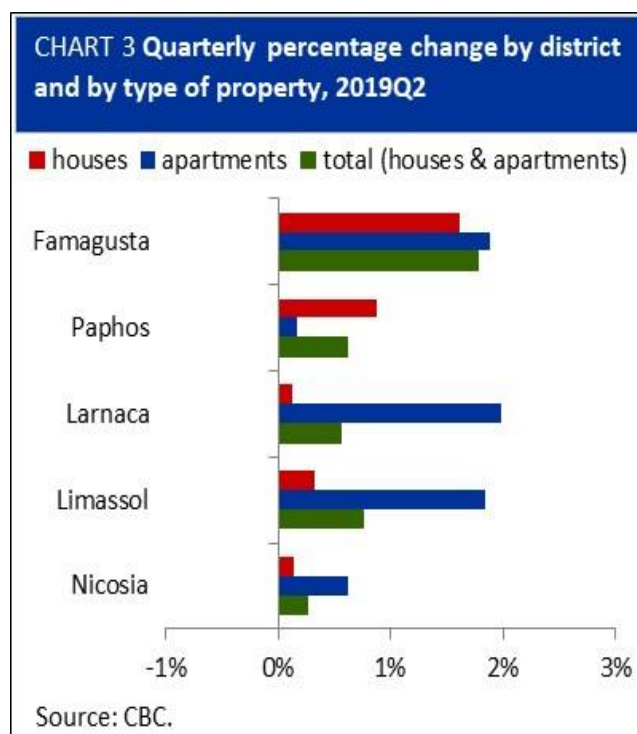
² Through CIP, foreign investors can invest, inter alia, in the real estate market for a minimum of € 2m to acquire Cypriot citizenship.

³ Foreign investors can acquire a permanent residence permit in Cyprus by, inter alia, investing at least €300,000 in a home purchase.

⁴ Indicatively, foreign students increased during the period 2014 - 2017 by 132% compared to an estimated increase of 0,8% in the total population during the same period. Unofficial information from higher education

institutions indicates that large increases in students continued in 2018 - 2019. Foreign workers also increased by 28,4% during Q1 2015 - Q2 2019.

⁵ CYSTAT methodology: <https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-RA-12-022>
CBC Methodology: https://www.centralbank.cy/images/media/pdf_el/Methodology_GR_.pdf



utilises a smoothing method, in which the regression coefficients of the last four quarters are averaged.

Price changes by district

On a quarterly basis, residential property prices increased in all districts for the first time since data is available. Specifically, residential property prices increased by 1,8 % in Famagusta, 0,8% in Limassol, 0,6% in Larnaca and Paphos and 0,3% in Nicosia, while there was a small reduction of 0,4% in Famagusta (Chart 3). As regards annual changes in the RPPI by district, an increase was recorded in all districts (5,4% in Limassol, 3,0 in Larnaca, 2,3% in Paphos, 2,1% in Famagusta, 1,7% in Nicosia and 1,3% in Paphos) (Chart 4).

House prices in Famagusta, Paphos, Limassol, Larnaca and Nicosia registered quarterly increases of 1,6%, 0,9%, 0,3% and 0,1%, respectively. On an annual basis, house prices recorded an increase in all districts of the order of 4,5% in Limassol, 1,8%, in Paphos, 1,7% in Nicosia, 1,3% in Famagusta, and 1,2% in Larnaca.

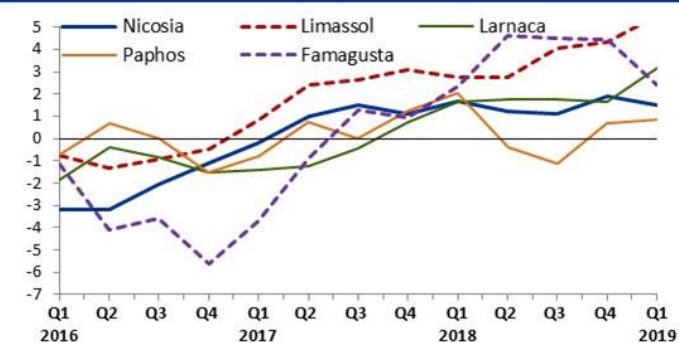
Apartment prices registered quarterly increases in Larnaca by 2,0%, in Famagusta by 1,9%, in Limassol by 1,8%, in Nicosia by 0,6% and in Paphos by 0,2%. On an annual basis, apartment prices recorded increases in all districts for the fifth consecutive quarter. The largest increase was registered in Larnaca (9,4%) and Limassol (7,2%) followed by 5,3% in Famagusta, 2,2% in Paphos and 1,9% in Nicosia.

The increased pressures on apartment prices in all districts, with the exception of Nicosia, are due to foreign demand and, to a large extent, the activity related to the CIP and the permanent residence permit. In contrast, the modest increases observed in Nicosia are driven by domestic demand.

Larnaca seems to be following the trend observed in Limassol where annual increases in apartment prices are significantly higher than in other areas in Cyprus. Specifically, in the last two quarters, Larnaca's apartment prices have registered greater increases than Limassol. The strong upward trend in prices, which was also analysed in the previous report, affects the coastal areas of both Limassol and Larnaca. According to the CBC statistical data for the preparation of the Index, these increases in prices registered only in specific tourist areas and appear to be driven mainly by demand from foreigners.

Other market indicators

CHART 4 Residential property price indices by district (annual change, %)



Source: CBC.

CHART 5 Interest rate and lending criteria for housing loans



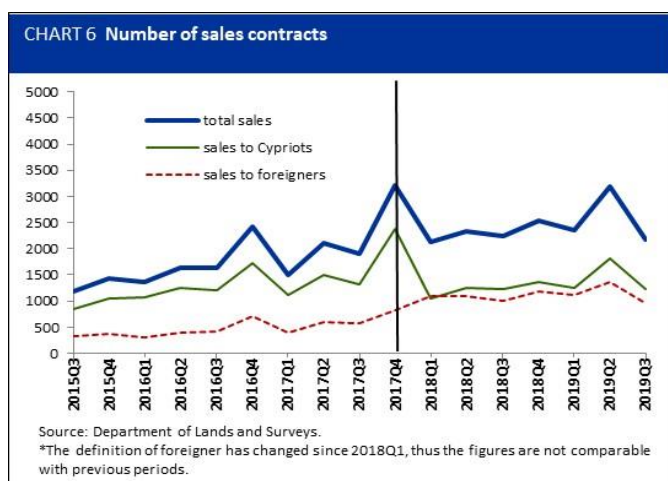
Source: CBC.

Note: The higher the positive number the tighter the lending criteria.

The increases in residential property prices that was registered in 2019Q2 is in line with other real estate and economic indicators.

According to data published by the Statistical Service of Cyprus (CYSTAT), the construction activity (category buildings) recorded an annual increase of 24,8% in 2019Q2. Despite the consecutive annual increases of the index of production in construction, the level of the index is still lower than the historically high levels recorded before the financial crisis.

The ongoing recovery of the construction sector is supported also by the reduction in unemployment in the sector. According to CYSTAT, unemployment in construction continued to decrease reaching an average of 1.295 in 2019Q3 compared with 1.847 in 2018Q3.



According to the CBC's *Monetary and Financial Statistics*⁶, the interest rate for housing loans⁷ registered a marginal decrease and averaged 2,08% in 2019Q2, compared with 2,20% in 2019Q1, registering another historically low level (**Chart 5**). According to the CBC's *Bank Lending Survey*⁸, the demand for housing loans by households continued to increase (**Chart 5**) in 2019Q1. According to the *CBC Monetary and Financial Statistics*, new housing loans have slightly increased to €231 million in 2019Q3, compared with €187 million 2018Q3.

Authorised building permits for all types of real estate, which are considered to be a leading indicator of building activity, recorded a considerable annual increase of 10,6% in the first nine months of the year. The number of building permits for residential properties was 3.748, corresponding to an increase of 14,4% compared with the first nine months of 2018.

According to Business Consumer Surveys (BCS), property prices in the coming quarters are expected to continue the upward trend. Property price expectations

in the next three months averaged at 17,3 in 2019Q3, compared with 16,1 in 2018Q3. At the same time, the index of employment expectations in the next three months in the construction sector reached an average of 11,2 in 2019Q3, compared with 13,1 and 2,5 in the corresponding period of 2018 and 2017, respectively.

It is noteworthy, however, that according to the Department of Lands and Surveys (DLS), sales contracts for real estate, after a significant increase in 2019Q2, recorded an annual decrease of 2,7% in 2019Q3 (**Chart 6**). Demand for real estate by domestic buyers remained at about the same level but demand from foreign buyers has registered an annual decrease of 5,1%, mainly due to the strict criteria applied in the Cyprus Investment Program since May 2019.

In conclusion, the RPPI in Cyprus continued with an upward trend, following the recovery of various macroeconomic indicators and the wider economy. However, the wider range of increases among specific areas are associated with risks that require close monitoring. For example, the ongoing decrease in the demand for real estate for CIP purposes may reduce or push real estate prices down in specific areas. At the same time, the disposal of real estate property held by banks and Credit Acquiring Companies is a process that should also be monitored, due to its potential impact on prices. Finally, other external factors, such as Brexit may impact the real estate market and should be taken into consideration.

⁶ <https://www.centralbank.cy/el/publications/monetary-and-financial-statistics>

⁷ Floating rate and up to one year fixed.

⁸ <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	
2019	Q1	78,4	76,7	76,8	82,9	69,9	77,0	70,2	77,2	
	Q2	79,3	77,0	77,0	83,6	70,3	77,5	71,4	77,6	

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>Apartments</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
2019	Q1	79,6	88,0	67,4	68,9	60,8	75,6	81,0	70,7	80,7	72,4
	Q2	80,0	89,6	68,8	68,9	61,9	75,7	81,2	70,8	81,4	73,6

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.

TABLE 3 Residential property price indices by type and by districts
(annual change, %)

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	
2007	-	17,4	25,4	18,9	22,2	27,4	8,3	32,0	23,2
2008	-	14,9	18,5	17,9	22,5	13,8	9,1	17,9	17,6
2009	-	-4,4	-4,9	-4,0	-6,2	-1,8	1,9	-2,0	-4,7
2010	-	-2,0	-0,8	-0,6	2,2	-1,8	-2,6	-4,7	-1,1
2011	-	-5,0	-2,9	-1,3	-4,6	-4,6	-4,9	-5,1	-3,3
2012	-	-4,6	-5,6	-4,3	-3,8	-8,0	-8,3	-6,9	-5,3
2013	-	-7,3	-6,2	-7,0	-4,7	-8,9	-4,8	-9,0	-6,6
2014	-	-9,5	-8,5	-8,5	-8,1	-9,3	-7,1	-11,1	-8,7
2015	-	-5,0	-4,1	-5,4	-3,9	-4,7	-2,7	-1,4	-4,4
2016	-	0,0	-1,7	-2,4	-0,9	-1,2	-0,3	-3,6	-1,3
2017	-	3,4	0,4	0,9	2,2	-0,7	0,3	-0,6	1,2
2018	-	4,4	1,3	1,5	3,5	1,6	0,5	4,0	2,0
2019	Q1	2,3	1,5	1,1	3,5	2,0	1,7	0,4	1,8
	Q2	1,1	0,4	0,3	0,8	0,6	0,6	1,7	0,5

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

Year*	Quarter	<u>Apartments</u>					<u>Houses</u>				
		N/sia	L/sol	L/ca	Paphos	F/sta	N/sia	L/sol	L/ca	Paphos	F/sta
2011	-	-0,3	-6,1	-8,7	-14,7	-14,4	-1,6	-4,3	-3,6	-2,3	-2,9
2012	-	-3,8	-3,8	-7,3	-7,0	-7,6	-4,5	-3,8	-8,4	-8,5	-7,7
2013	-	-6,5	-6,2	-12,8	-6,8	-6,5	-7,2	-4,4	-7,4	-4,4	-9,3
2014	-	-8,4	-9,5	-11,0	-6,3	-10,7	-8,6	-7,3	-9,0	-6,9	-11,2
2015	-	-6,0	-1,2	-4,4	-4,5	-5,9	-5,0	-4,8	-3,7	-1,7	-0,7
2016	-	-2,1	0,8	0,5	2,8	-4,1	-2,5	-1,4	-1,5	-0,5	-3,3
2017	-	2,7	5,4	1,5	-2,7	-0,7	0,0	1,1	-1,8	1,6	0,0
2018	-	2,5	7,6	2,1	5,3	3,7	0,9	2,0	0,9	-0,5	4,3
2019	Q1	0,9	4,0	6,1	1,9	2,2	1,3	3,3	0,9	1,1	0,0
	Q2	0,5	1,8	2,1	0,0	1,8	0,1	0,2	0,1	0,9	1,7

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.

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