



CENTRAL BANK OF CYPRUS

EUROSYSTEM

RESIDENTIAL PROPERTY PRICE INDEX (RPPI)

2022 Q3

The acceleration in residential property price increases continues in 2022Q3, mainly due to increased construction cost.

- The Residential Property Price Index (RPPI) of the Central Bank of Cyprus (CBC)¹ (apartments and houses) continued its upward path in 2022Q3, registering a quarterly increase of 2,1% compared with 1,7% in the previous quarter, while on an annual basis the index recorded an increase of 6,3% compared with 4,7% in the previous quarter.
- The main factor behind the acceleration in residential property price increases remains the increased construction cost, while the increase in the demand for real estate has also contributed towards this path. For a second consecutive quarter, the increase in RPPI is observed in all districts, both in apartment and house prices.
- The transactions of real estate over the first nine months of 2022 register accelerating increases, which is attributed to the annual increases in the demand from both local and foreign investors, as recorded in the sales contracts data of the Department of Lands and Surveys. The increase in sales contracts of foreign investors is mainly attributed to the Strategy for Attracting Businesses for Activities or/and Expansion of their Activities in Cyprus (International Headquartering). According to data from the Ministry of Energy, Commerce and Industry, more than a thousand foreign companies have registered in Cyprus in the context of International Headquartering in 2022.
- Inflationary pressures, which have a significant impact on the construction cost, continue in 2022Q3 but so far do not seem to have affected demand to a significant degree. The increase in the cost of borrowing, due to the increase of ECB's basic interest rate, seems to have affected negatively the demand for housing loans in 2023Q3, which in turn may affect construction activity in the future.

Table 1 Overview	2021 Q4	2022 Q1	2022 Q2	2022 Q3
Residential property price index (2010 Q1=100)	81,0	81,9	83,2	85,0
Quarterly change	1,3%	1,1%	1,7%	2,1%
Annual Change	2,6%	3,2%	4,7%	6,3%
(a) Property price index Houses (2010Q1=100)				
	78,1	78,7	80,0	81,6
Quarterly change	0,7%	0,7%	1,7%	2,0%
Annual change	1,0%	1,5%	3,5%	5,2%
(b) Property price index Apartments (2010Q1=100)				
	88,3	89,8	91,1	93,2
Quarterly change	2,4%	1,7%	1,5%	2,2%
Annual change	6,3%	6,8%	7,0%	8,0%

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



Source: CBC.

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 fully capturing the pass-through of developments in the Index's turning points, with respect to both time and the magnitude of the change in market course.

Changes in the residential property price index (RPPI)

The RPPI (houses and apartments) recorded a quarterly increase of 2,1% in 2022Q3, compared with 1,7% in 2022Q2.

The increase in the RPPI is driven by 2,2% increase in apartment prices, compared with the previous quarter, and by 2% increase in house prices in the same period (Table 1, Chart 1, p. 1).

On an annual basis, RPPI recorded an accelerated increase of 6,3% in 2022Q3 compared with 4,7% in 2022Q2. During the quarter under review, apartment prices recorded an annual increase of 8%, while house prices increased by 5,2% (Table 1, p.1, Chart 2).

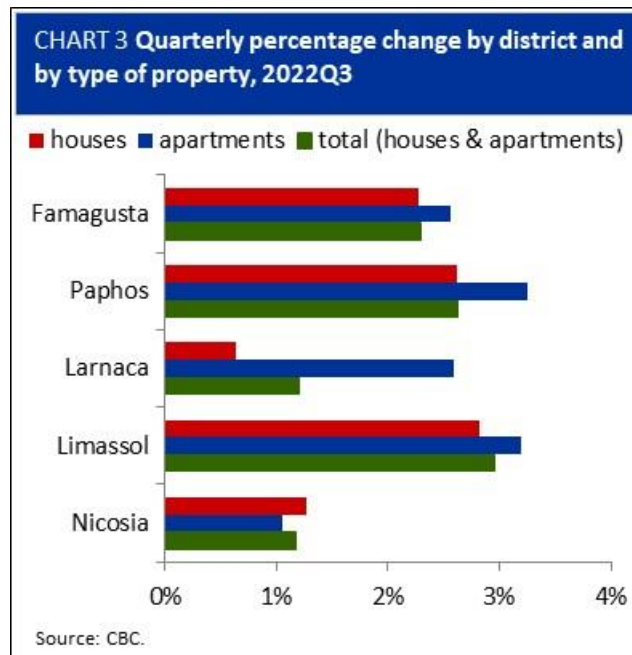


Despite the high uncertainty due to geopolitical developments, the real estate market seems resilient, as the acceleration in residential property prices continued in 2023Q3. As in previous quarters, the increase in residential property prices is mainly due to the increase in construction costs, which is reflected both in the prices of apartment and houses. This is also driven by the increase in demand by both foreign and local investors, as reflected in the DLS data. The small increase in interest rates on loans that occurred in 2022Q3 has not affected deposit rates hitherto, thus real estate remains an attractive option for buy-to-let investors. It is noted that the demand for properties for rental purposes recorded increases due to the ongoing descent of foreigners to Cyprus looking for accommodation, in the context of international headquartering. The companies attracted in the context of international headquartering are mainly active in the financial services, shipping, technology, information and communication sectors and are

mainly concentrated in Limassol and Paphos, while increased activity has recently been observed in Larnaca as well.

Price changes by district

In 2022Q3, the RPPI recorded quarterly increases in all districts. Specifically, RPPI in Nicosia increased by 1,2%, in Limassol by 3%, in Larnaca by 1,2%, in Paphos by 2,6% and in Famagusta by 2,3% (Chart 3, Table 4, p. 6).



As far as annual changes in the price indices of individual districts are concerned, the RPPI recorded increases in all districts. Specifically, in Nicosia residential property prices increased by 4,4%, in Limassol by 8%, in Larnaca by 2,8%, in Paphos by 8,2% and in Famagusta by 8% (Chart 4, p.3, Table 4, p.6). On an annual basis, an acceleration was registered in the growth rate of apartment and house prices in all districts except Larnaca.

On a quarterly basis, house prices recorded increases in all districts. In particular, house prices increased in Nicosia by 1,3%, in Limassol by 2,8%, in Larnaca by 0,6%, in Paphos by 2,6% and in Famagusta by 2,3%. On an annual basis, house prices also recorded an increase in all districts. House prices in Nicosia, Limassol, Larnaca, Paphos and Famagusta increased by 4,1%, 6,7%, 1,1%, 7,4% and 6,5%, respectively.

Apartment prices increased in all districts on a quarterly basis. In particular, apartment prices increased in Nicosia by 1,1%, in Limassol by 3,2%, in Larnaca by 2,6%, in Paphos by 3,3% and in Famagusta by 2,6%. The rise in apartment prices in all districts has been recorded on an annual basis as well. Specifically, in Nicosia apartment prices increased by 4,9%, in Limassol by 9%, in Larnaca by 7,2%, in Paphos by 11,9% and in Famagusta by 12,9%.

The significant increases in apartment prices that have been recorded in Paphos and Famagusta can be attributed to the delayed recovery of the real estate sector in these districts relative to the other districts.

Other market indicators

The dynamics in the real estate market in 2022Q3, such as, the increased demand from buyers, the rising construction cost and prices, as well as the limited supply, are reflected in various indicators of the real estate sector.

According to the latest data published by the Department of Lands and Surveys (DLS), in 2022Q3, the number of sale contracts continued to increase, with a rate of 33,8% on an annual basis (3.347 compared with 2.502) reflecting the increased demand for real estate. In addition, in the quarter under review, demand from foreign buyers recorded an annual increase of 67,3% (1.506 compared with 900), resulting from an annual increase of 32% in transactions from European Union (EU) residents and 104,1% increase in transactions from third country (non-EU) residents (**Chart 5**). Overall, in the first nine months of the year the number of sales contracts increased by 37,2% compared with 28,6% in the previous year. The increase from local buyers reached 17,4% while from foreign investors there was a remarkable increase of 76,7%. According to information from market participants, local buyers are mainly interested in older properties that are ready for delivery or even second hand properties that are likely to be bought at a lower price and be renovated.

As regards the increase in sales contracts of foreign buyers, this is mainly attributed, inter-alia, to the international headquartering, which, based on market data, attracted approximately about one thousand foreign companies. These companies originate mainly

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

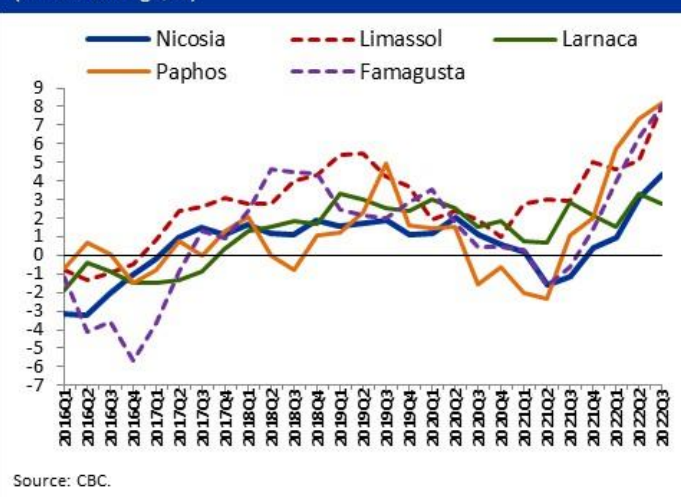
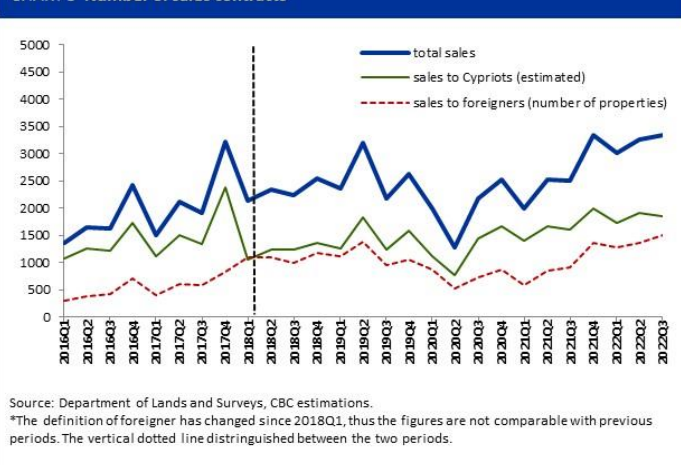


CHART 5 Number of sales contracts



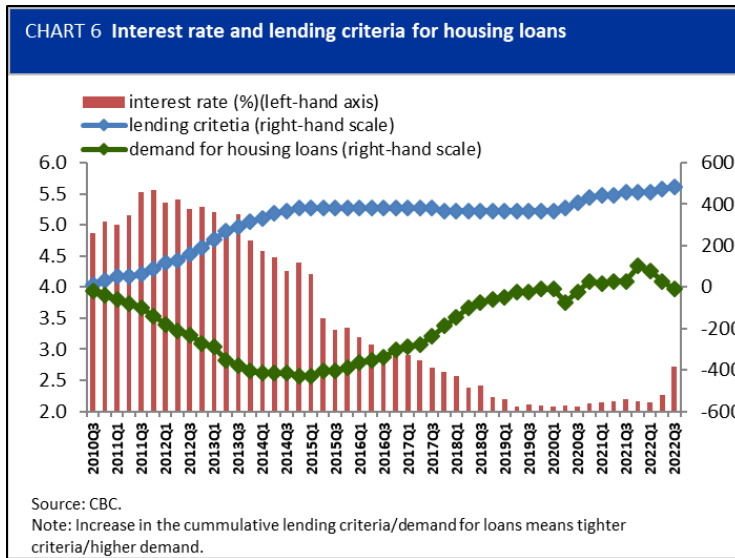
from the United Kingdom, Lebanon, Russia, Israel and Belarus.

Also, the war in Ukraine continues to create demand in the real estate market from entrepreneurs and investors from Russia and Ukraine, who are looking for alternative location for their headquarters abroad, choosing Cyprus due to the favorable investment environment, the aforementioned tax facilities and the existing trade relations with the two countries.

At the same time, inflationary pressures and the subsequent rise in ECB base rates seem to have negatively affected the demand for new housing loans. According to CBC's *Monetary and Financial Statistics*², new loans for the purchase of housing in 2022Q3 decreased by 12,3% and 6,7% on an annual

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

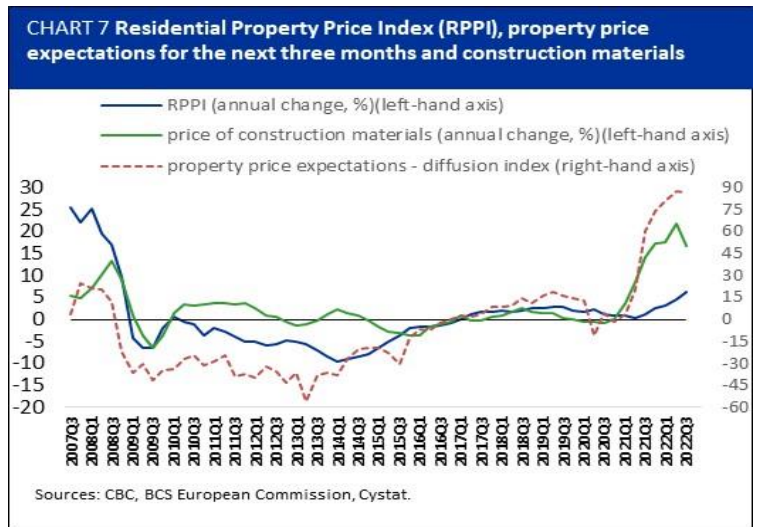
and on quarterly basis, respectively (€238,8 million in 2022Q3 compared with €273 million in 2021Q3 and €256,1 million in 2022Q2). According to the same source, the interest rate on new housing loans³ in 2022Q3 continued to increase, averaging at 2,72%, compared with 2,27% in 2022Q2 (**Chart 6**). Further increases in mortgage rates are expected in the future (given the ECB rate hike). According to the Bank Lending Survey, lending criteria tightened compared with the previous quarter⁴.



According to data from the Statistical Service of Cyprus (Cystat), for the period January - September 2022, the number of residential units for which building permits have been approved, which is a leading indicator of construction activity, registered an annual decrease of 7,3%. According to data from the Business and Consumer Surveys (BCS) of the European Commission, the index of construction activity in the previous three months registered less negative levels in 2022Q3, reaching -13,1 compared with -23,5 in the previous quarter.

The price index of construction materials, published by CYSTAT, recorded an increase for the eighth consecutive quarter (**Chart 7**). In 2022Q3, the prices of construction materials recorded an annual increase of 16,8%.

According to Business and Consumer Surveys (BCS) of the European Commission, in 2022Q3, property prices are expected to continue their upward trend (**Chart 7**). In particular, property price expectations for



the next three months averaged at high positive levels (86,9) in 2022Q3, although it registered a small quarterly decrease for the first time after eight months. As a result of the reduced construction activity, as noted in the previous paragraph, the index of expectations for employment in the real estate sector in the next three months fluctuated at negative levels in 2022Q3 (-2,6) compared with -1 in 2022Q2 and positive levels (3,6) in 2021Q3.

Conclusion

The main reasons behind the acceleration in the increase of house prices in 2022Q3 were the increased construction cost and the increase in demand in the real estate market. For the second consecutive quarter, RPPI increased in all districts both in apartments and houses. Inflationary pressures and increases in ECB base rates do not appear to have, hitherto, affected the real estate market to a substantial extent. However, they are expected to affect households’ disposal income and likely lead to a further reduction in the demand for housing loans, thereby reducing demand from local investors. The increase in sales contracts to foreign investors is mainly attributed to the international headquartering policy, under which a significant number of foreign companies was registered in Cyprus during 2022.

³ Floating rate and up to one year fixed.

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

TABLE 2 Residential property price indices by type and by district

(annual and quarterly data, 2010Q1 = 100)

Year*	Quarter	Residences by type			Residences by district					Residential property price index
		Apartments	Houses	N/sia	L/sol	L/ca	Paphos	F/sta		
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	-	73,4	74,6	74,9	77,4	67,4	75,3	67,2	74,3	
2018	-	76,6	75,6	76,0	80,1	68,5	75,7	69,9	75,8	
2019	-	78,8	77,1	77,2	83,8	70,4	77,6	71,5	77,8	
2020	-	82,6	77,6	78,1	85,3	72,0	77,8	72,6	79,0	
2021	-	85,9	77,6	77,7	88,2	73,1	77,5	72,5	80,0	
2022	Q1	89,8	78,7	78,6	90,8	73,7	80,9	75,7	81,9	
	Q2	91,1	80,0	79,8	92,6	74,9	82,3	75,9	83,2	
	Q3	93,2	81,6	80,7	95,3	75,8	84,5	77,6	85,0	

Source: CBC.

*The annual index is calculated as the average of the four quarters of each year.

TABLE 3 Apartment and house price indices by district

(annual and quarterly, 2010Q1 = 100)

Year*	Quarter	Apartments					Houses				
		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	97,0	97,1	100,1	99,4	100,4	101,4	100,1
2011	-	99,0	91,8	88,7	82,7	83,1	98,5	95,1	96,8	99,1	97,2
2012	-	95,2	88,3	82,2	76,9	76,8	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	-	77,0	78,6	61,8	64,2	57,4	73,9	76,9	69,5	80,2	69,4
2018	-	78,9	84,6	63,5	67,6	59,5	74,6	78,4	70,1	79,8	72,4
2019	-	80,3	90,8	69,0	69,5	61,7	75,9	81,3	70,9	81,3	73,8
2020	-	82,2	96,3	71,9	70,0	62,0	76,4	81,5	72,0	80,9	75,7
2021	-	84,0	100,2	75,7	71,7	65,2	74,9	83,6	72,4	79,7	74,5
2022	Q1	86,1	104,9	76,8	76,9	69,5	75,4	84,7	72,7	82,6	77,1
	Q2	87,5	105,7	79,5	77,7	71,2	76,3	86,7	73,5	84,1	76,9
	Q3	88,4	109,1	81,5	80,2	73,0	77,3	89,1	74,0	86,3	78,6

Source: CBC.

*The annual index is calculated as the average of the four quarters of each year.

Table 4 Residential property price indices by type and by district
(y-o-y, %)

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	
2010	-	-2,0	-0,8	-0,6	2,1	-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	-8,1	-8,2	-6,9	-5,3
2013	-	-7,3	-6,2	-7,0	-4,8	-8,9	-4,8	-8,9	-6,5
2014	-	-9,4	-8,5	-8,5	-8,0	-9,3	-7,0	-11,2	-8,8
2015	-	-4,9	-4,0	-5,3	-4,0	-4,6	-2,7	-1,4	-4,3
2016	-	-0,1	-1,8	-2,4	-0,9	-1,2	-0,4	-3,6	-1,4
2017	-	3,3	0,5	0,9	2,2	-0,8	0,3	-0,6	1,2
2018	-	4,4	1,2	1,5	3,5	1,6	0,6	4,0	2,1
2019	-	4,2	2,0	1,6	4,7	2,8	2,5	2,3	2,6
2020	-	3,5	0,7	1,2	1,8	2,2	0,2	1,5	1,5
2021	-	4,1	0,0	-0,5	3,4	1,6	-0,4	-0,2	1,2
2022	Q1	6,8	1,5	1,0	4,6	1,6	5,7	3,9	3,2
	Q2	7,0	3,5	3,1	5,1	3,3	7,4	6,3	4,7
	Q3	8,0	5,2	4,4	8,0	2,8	8,2	8,0	6,3

Source: CBC.

*The annual index is calculated as the average of the four quarters of each year.

Table 5 Apartment and house price indices by district
(q-o-q, %)

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
2020	Q1	0,8	1,3	1,5	4,4	0,4	0,2	-1,0	1,8	-0,6	0,6
2020	Q2	0,9	2,1	0,4	-1,7	-0,6	1,2	1,0	0,0	1,5	0,5
2020	Q3	0,3	-0,6	1,3	-2,2	-0,3	-0,8	0,4	-1,0	-1,6	0,0
2020	Q4	0,6	0,7	2,2	-1,3	1,0	-1,0	-0,4	-0,1	0,0	0,0
2021	Q1	0,5	1,1	1,9	2,2	3,0	-0,4	1,6	0,3	-1,5	-0,6
2021	Q2	0,5	1,2	0,6	0,9	1,1	-1,3	1,0	-0,1	-0,2	-2,7
2021	Q3	0,7	0,8	0,7	1,7	-0,2	-0,3	-0,3	2,1	1,5	0,7
2021	Q4	0,8	3,4	0,3	4,5	3,4	1,4	0,7	-0,5	-0,6	2,3
2022	Q1	1,3	1,4	0,8	2,7	3,9	0,1	0,6	-0,2	3,3	2,1
2022	Q2	1,6	0,8	3,5	1,0	2,5	1,2	2,3	1,1	1,9	-0,4
2022	Q3	1,1	3,2	2,6	3,3	2,6	1,3	2,8	0,6	2,6	2,3

Πηγή: KTK.

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, National Bank of Greece, Astro Bank, Cyprus Development Bank, Société Générale, RCB Bank and Eurobank) and the Cyprus Asset Management Company in standardised form, through an online data submission platform. It is noted that data from other credit acquiring companies are currently not collected.

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 https://www.centralbank.cy/images/media/pdf/Methodology_EN_latest.pdf

The current report is available at <https://www.centralbank.cy/en/publications/residential-property-price-indices>