



CENTRAL BANK OF CYPRUS

EUROSYSTEM

RESIDENTIAL PROPERTY PRICE INDEX (RPPI)

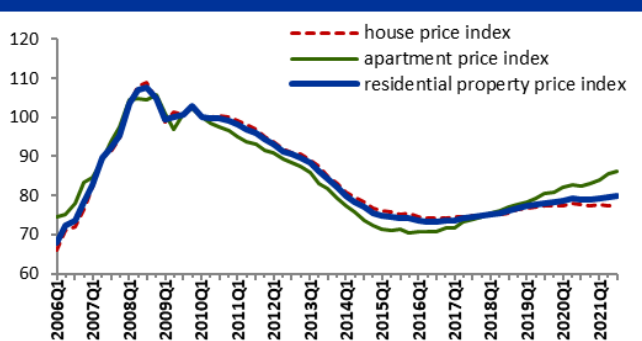
2021 Q3

Continued increase in property prices in 2021Q3, which is mainly supported by the apartments' market.

- The RPPI (apartments and houses)¹ recorded an upward trend in 2021Q3. The increase is mainly supported by the apartments market. Specifically, there was a quarterly increase of 0,5% compared with 0,3% in the 2021Q2, while on an annual basis the index recorded an increase of 1,2% compared with 0,3% in the corresponding quarter of the previous year.
- House prices continue to register a different path this quarter compared to apartment prices, with the former recording reductions in several areas both on a quarterly and an annual basis, in contrast to apartment prices, which record increases. Specifically, house prices decreased on an annual basis by 0,3%, while on a quarterly basis they recorded a small increase of 0,3%, which is mainly due to increases occurring in the districts of Larnaca and Paphos. On the contrary, apartment prices increased by 1% on a quarterly basis and by 4,5% on an annual basis. The continued increase in apartment prices observed this quarter confirms, once again, among other things, the preference of domestic buyers and investors for apartments over houses in most districts in Cyprus.
- The special circumstances in the market, with the state interest rate subsidy on mortgages and the increase in rental prices, led households towards choosing apartments as their first home. The increase in the cost of construction materials continues to contribute to the increase in price levels, as evidenced in all sectors of the construction activity. According to unofficial estimates by real estate market experts, the demand for real estate by foreign investors is also stabilising with, the interest, however, directed towards lower value real estate properties compared to previous years, a development which is related to the termination of CIP.

Overview	2020 Q4	2021 Q1	2021 Q2	2021 Q3
Residential property price index (2010 Q1=100)	78,9	79,3	79,6	80,0
Quarterly change	-0,2%	0,5%	0,3%	0,5%
Annual Change	0,8%	0,9%	0,2%	1,2%
(a) Property price index Houses (2010Q1=100)	77,3	77,5	77,3	77,6
Quarterly change	-0,5%	0,2%	-0,2%	0,3%
Annual change	-0,1%	0,2%	-1,0%	-0,3%
(b) Property price index apartments (2010Q1=100)	83,1	84,1	85,4	86,3
Quarterly change	0,7%	1,2%	1,6%	1,0%
Annual change	2,7%	2,5%	3,3%	4,5%

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):

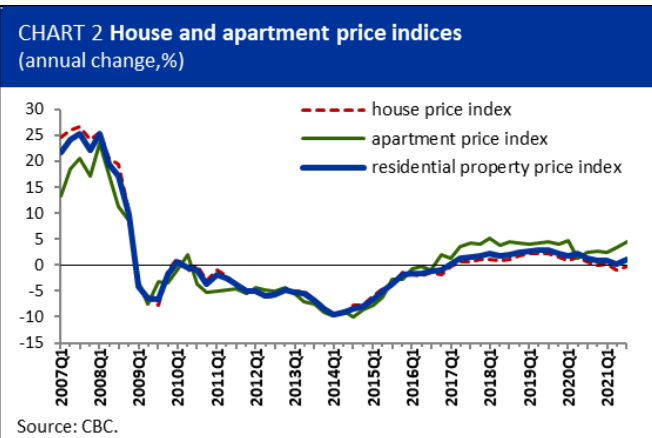
https://www.centralbank.cy/images/media/pdf/Methodology_EN_latest.pdf). Therefore, it is likely that there will be a short lag in capturing turning points in the market with respect to both time and the magnitude of the recovery.

Changes in the residential property price index (RPPI)

The RPPI (houses and apartments) recorded a quarterly increase of 0,5% in 2021Q3, compared with 0,3% in 2021Q2.

The increase in the RPPI is mainly due to the 1% increase in apartment prices, compared with the previous quarter, while house prices increased by 0,3% during the same period (Chart 1, p. 1).

On an annual basis, a 1,2% increase is recorded in RPPI in 2021Q3 compared to 0,3% in 2021Q2. During the quarter under review, apartment prices recorded an annual increase of 4,5%, while house prices decreased by 0,3% (Chart 2).

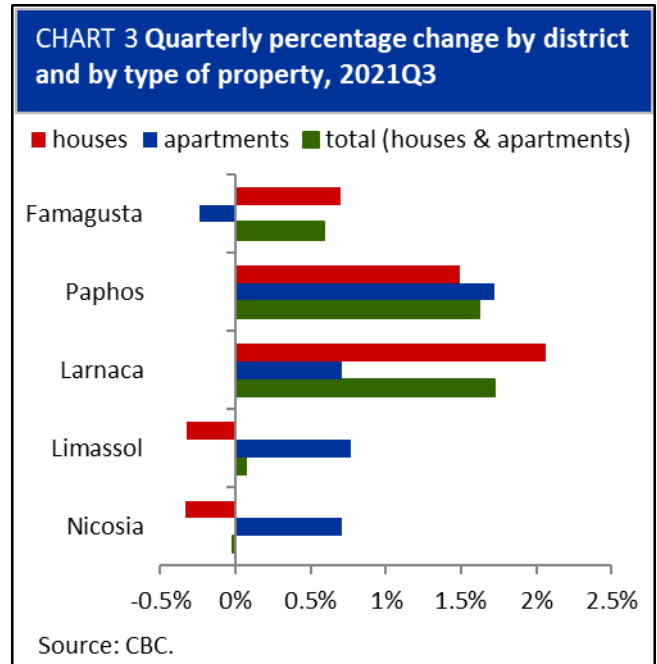


Demand from the domestic market, both for investment purposes as well as for acquiring a first home, leads to a significant increase in the market, especially in terms of apartments and small houses. According to unofficial estimates by real estate market experts, the majority of transactions in the real estate market concern apartments and small new houses from buyers who want to utilise the state interest rate subsidy scheme for mortgages and also the low bank mortgage rates.

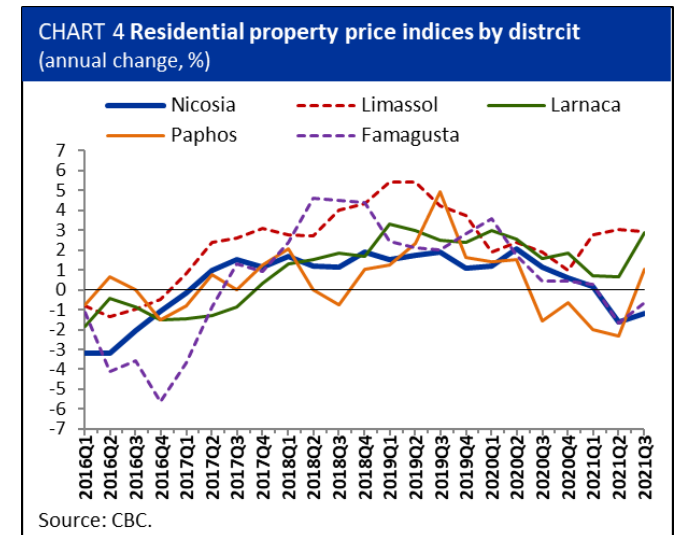
Price changes by district

In 2021Q3, the RPPI recorded increases on a quarterly basis in all districts except Nicosia, in which it remained stable. Specifically, RPPI in Limassol increased by 0,1%, in Larnaca by 1,7%, in Paphos by 1,6% and in Famagusta by 0,6% (Chart 3).

On an annual basis, the RPPI by district recorded increases in Limassol, Larnaca and Paphos and decreases in all other districts. Specifically, in Limassol



residential property prices increased by 2,9%, in Larnaca by 2,9% and in Paphos by 1%. In contrast, residential property prices in Nicosia declined by 1,2% and in Famagusta by 0,7% (Chart 4).



On a quarterly basis, house prices increased in all districts, except in Nicosia and Limassol. In particular, residential property prices in Larnaca, Paphos and Famagusta, increased by 2,1%, 1,5% and 0,7%, respectively. On the other hand, house prices fell by 0,3% in both Nicosia and Limassol. On an annual basis, house prices fell in all districts except in Limassol and Larnaca, recording a 2% and 2,1% increase, respectively. In particular, house prices in Nicosia decreased by 3%, in Paphos by 0,2% and in Famagusta by 2,6%. Apartment prices recorded quarterly increases

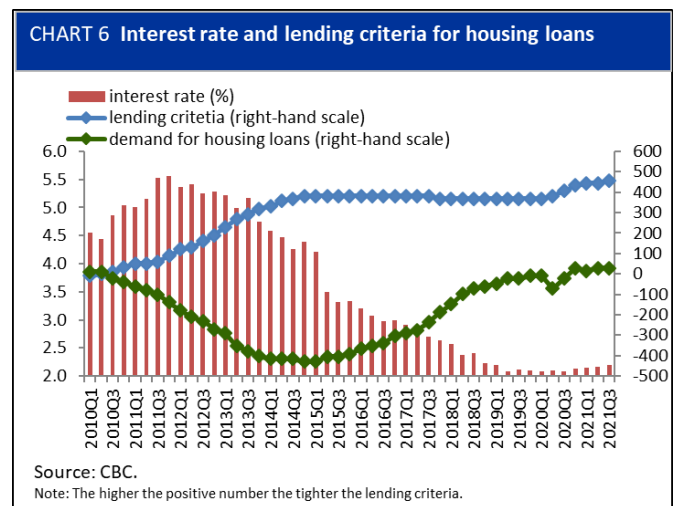
in all districts, with the exception of Famagusta², where a decrease of 0,2% was recorded. In particular, apartment prices in Nicosia increased by 0,7%, in Limassol by 0,8%, in Larnaca by 0,7% and in Paphos by 1,7%. On an annual basis, apartment prices recorded an increase in all districts. Indicatively, in Nicosia, apartment prices increased by 2,4%, in Limassol by 3,9%, in Larnaca by 5,5%, in Paphos by 3,6% and in Famagusta by 4,9%. It is noted that apartment prices in Paphos increased following four consecutive quarters of decreases.

The continuing increase in residential property prices is mainly driven by domestic demand which continues to record significant activity. At the same time, according to unofficial estimates by real estate market experts, external demand is stabilising, although remaining at low levels, while mostly relating to lower value real estate properties compared to the recent past. The increased demand from foreign investors, as mentioned in the previous bulletin, may in part be due to the promotion by the state of international headquartering for high-tech companies, which involves investors moving their headquarters to Cyprus, as well as to the plan for permanent residence in Cyprus.

Other market indicators

The increasing interest of local buyers in real estate and the support they provide to the market as well as the modest increase in the activity of foreign investors in the market, are verified by various real estate and economic indicators, such as sales contracts.

According to the most recent data published by the Department of Lands and Surveys (DLS), sales contracts for real estate for the first nine months of 2021 have recorded an annual increase of 15,2% (although from a low base as a result of the measures adopted due to the pandemic in 2020). Specifically, demand from local buyers increased by 10,9% and from foreign buyers by 23,6% (Chart 5). The measures promoted by the state regarding the "international headquartering", as well as the program for obtaining a permanent residence permit in Cyprus contributed to the increase in demand from foreign investors. It is worth mentioning that property transactions in the first nine months of 2021 in the district of Nicosia have increased by 37,9%



compared to the respective period in 2019, which was a peak year for transactions. It is possible that the increased transactions in Nicosia are held at lower prices, which could result to price decreases, particularly for houses, as evidenced by the by-district RPPI.

According to the CBC’s *Monetary and Financial Statistics*³, pure new housing loans in the first nine months of 2021 increased by 69,8% compared with the corresponding period of 2020 (€793,2 million compared with €518,2 million in the first nine months of 2020). According to the same statistics, the interest rate of new housing loans⁴ in 2021Q3 averaged at 2,19% compared with 2,08% in 2020Q4 and has remained at historically low levels (Chart 6). The same Chart confirms the aforementioned continued

² For the quarter under review, the apartment price index for Famagusta was calculated as the average of the price change based on the hedonic regression and the simple average.

³ <https://www.centralbank.cy/el/publications/monetary-and-financial-statistics>.

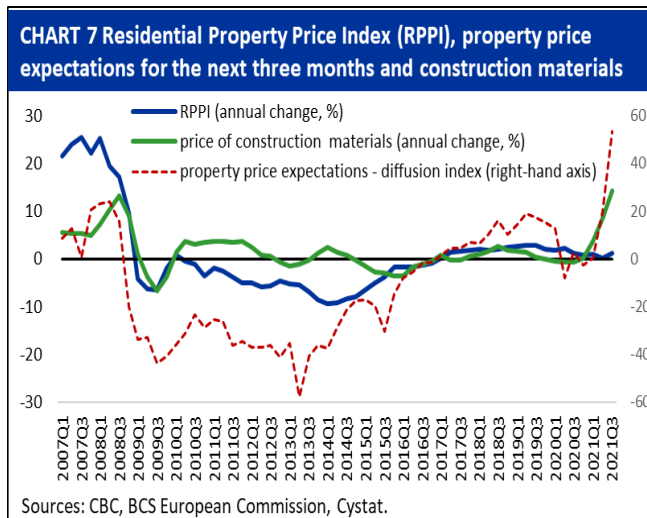
⁴ Floating rate and up to one year fixed.

increase in demand for housing loans, as recorded by the October 2021⁵ Bank Lending Survey, which shows that demand for housing loans remained stable in 2021Q3, despite the fact that the lending criteria became stricter compared with 2021Q2.

According to CYPSTAT, the number of authorised building permits for residential properties, which is a leading indicator to construction activity, recorded an increase of 14,3% in the first eight months of 2021 compared with the same period in 2020. During the period under review, an increase in the value per square meter of the licensed dwellings was observed. Indicatively, the value per square meter of the licensed houses increased by 4,5% in the first eight months of 2021, compared with an increase of 9,5% in the same period in 2020. On the other hand, the average area per residential property licensed in the first eight months of 2021 was reduced to 169 sq.m. relative to 189 sq.m. in the same period of 2020. The above mentioned data indicate a marker shift in preferences towards smaller dwellings.

The economic activity in the construction sector affected by the termination of the CIP, the pandemic and, recently, the price increases of construction materials. Specifically, the price index of construction materials, published by CYPSTAT, recorded increases in the last four quarters (**Chart 7**). Prices of construction materials in 2021Q3 recorded an annual increase of 14,3%, which was the highest since 2008Q4. Thus, cost dynamics, that are independent from demand dynamics, are playing an important role in determining the level of RPPI. Whether this increase has a negative effect on demand and therefore, an adverse impact on prices, is something that will become clear in the upcoming quarters.

According to Business and Consumer Surveys (BCS) in 2021Q3, the real estate sector continues to register increases (**Chart 7**). Property price expectations for the next three months averaged 53,27 in 2021Q3, which is the highest level since 2002 when data are available,



compared with 2,67 in 2020Q3. Respectively high expectations for increases in property prices existed only in 2004 during the period of Cyprus' accession to the European Union. In addition, the index of employment expectations for the next three months in the construction sector continued to increase since the previous quarter and reached 3,03 after three consecutive quarters with negative sign.

In conclusion, the residential property price index in Cyprus continues to record an upward trend, which is driven by apartments prices. The fact that price hikes in basic building materials push property prices higher, makes constant market monitoring necessary so as to assess any possible impact on demand. Any impact on demand will adjust the RPPI growth dynamics irrespective of the various other issues encountered, such as the epidemiological developments and pressures from the existing effort to sell real estate from the portfolios of banks and credit acquiring companies.

⁵ <https://www.centralbank.cy/en/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	-	73,4	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	Q1	84,1	77,5	77,9	86,8	72,5	76,5	72,9	79,3	
	Q2	85,4	77,3	77,3	88,1	72,6	76,8	71,4	79,6	
	Q3	86,3	77,6	77,3	88,2	73,8	78,1	71,9	80,0	

Source: CBC.

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

TABLE 2 Apartment and house price indices by district

(annual and quarterly, 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	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	Q1	83,2	98,1	75,0	69,8	64,2	75,5	83,0	71,8	79,4	75,3
	Q2	83,7	99,3	75,5	70,4	64,9	74,5	83,8	71,7	79,2	73,3
	Q3	84,3	100,1	76,0	71,6	64,7	74,3	83,6	73,2	80,4	73,8

Source: CBC.

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

Table 3 Residential property price indices by type and by district
(y-o-y, %)

Year*	Quarter	Residences by type		Residences by district					Residential property price index
		Apartments	Houses	N/sia	L/sol	L/ca	Paphos	F/sta	
2007	-	17,4	25,3	18,9	22,1	27,3	8,3	32,1	23,3
2008	-	14,8	18,6	17,9	22,5	13,8	9,1	17,9	17,6
2009	-	-4,4	-4,9	-4,0	-6,2	-1,9	1,8	-1,9	-4,7
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	Q1	2,5	0,2	0,2	2,8	0,7	-2,0	0,3	0,9
	Q2	3,3	-1,0	-1,6	3,0	0,7	-2,3	-1,7	0,3
	Q3	4,5	-0,3	-1,2	2,9	2,9	1,0	-0,7	1,2

Source: CBC.

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

Table 4 Apartment and house price indices by district
(q-o-q, %)

Year	Quarter	N/sia	L/sol	L/ca	Paphos	F/sta	N/sia	L/sol	L/ca	Paphos	F/sta
2018	Q1	0,8	1,5	-0,4	3,6	0,7	0,5	0,2	-0,6	0,3	1,7
2018	Q2	0,1	1,9	2,1	-0,2	3,2	0,1	0,3	0,3	-0,2	1,9
2018	Q3	0,5	2,9	2,7	-0,2	3,4	0,1	1,3	0,6	-1,7	0,5
2018	Q4	0,8	1,3	0,6	0,5	1,1	0,9	1,2	0,1	2,6	-0,7
2019	Q1	-0,1	1,1	3,8	1,7	-1,1	0,5	1,6	0,4	0,1	-0,3
2019	Q2	0,6	1,8	2,0	0,2	1,9	0,1	0,3	0,1	0,9	1,6
2019	Q3	0,7	2,4	1,7	2,9	0,5	0,4	0,1	0,1	0,6	1,0
2019	Q4	0,3	2,1	-0,2	-3,0	-0,5	0,1	0,4	0,3	-0,9	1,0
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

Source: CBC.

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.

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>