



CENTRAL BANK OF CYPRUS

EUROSYSTEM

RESIDENTIAL PROPERTY PRICE INDEX (RPPI)

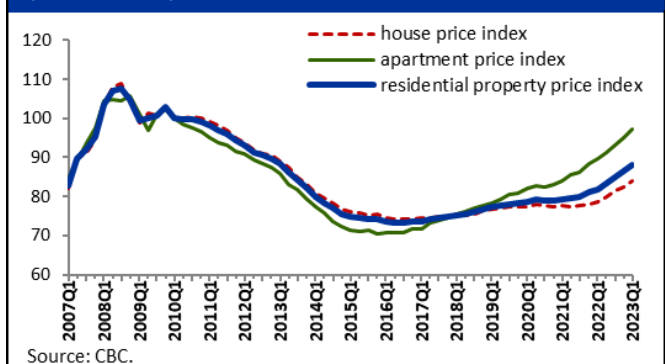
2023 Q1

Residential property prices in Cyprus continued recording significant increases in 2023Q1, particularly in the market of apartments, mainly due to increased demand.

- In 2023Q1, the Residential Property Price Index (RPPI) of the Central Bank of Cyprus (CBC)¹ (apartments and houses) continued recording acceleration, on an annual basis, compared with the respective changes in the preceding quarters (Table 1).
- As reflected in the sales contracts data of the Department of Lands and Surveys (DLS), in 2023Q1 demand in the real estate market recorded an increase on an annual basis. The highest annual increase in the quarter under review has stemmed from foreign buyers, who accounted for about half of all buyers in 2022 and 2023Q1.
- Based on the above, the increase in residential property prices in 2023Q1 seems to be mainly driven by increased demand.
- At the same time, the growth rate of the construction costs seems to be stabilising compared with the 2021-2022 period, in which very high growth rates were recorded.
- The annual increase in RPPI in Limassol and Larnaca registers an acceleration, while in Paphos the rate of increase remains high, despite its decelerating pace.
- Up until 2023Q1, the increase in ECB's base rates and the consequent reduction in mortgage loan demand do not appear to have affected domestic demand for real estate to a substantial extent, as it continues to register growth.

Table 1 Overview	2022 Q2	2022 Q3	2022 Q4	2023 Q1
Residential property price index (2010 Q1=100)	83,2	85,0	86,3	88,1
Quarterly change	1,7%	2,1%	1,6%	2,1%
Annual Change	4,7%	6,3%	6,6%	7,7%
(a) Property price index Houses (2010Q1=100)				
Quarterly change	1,7%	2,0%	1,1%	1,7%
Annual change	3,5%	5,2%	5,6%	6,6%
(b) Property price index Apartments (2010Q1=100)				
Quarterly change	1,5%	2,2%	2,1%	2,3%
Annual change	7,0%	8,0%	7,7%	8,4%

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



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:

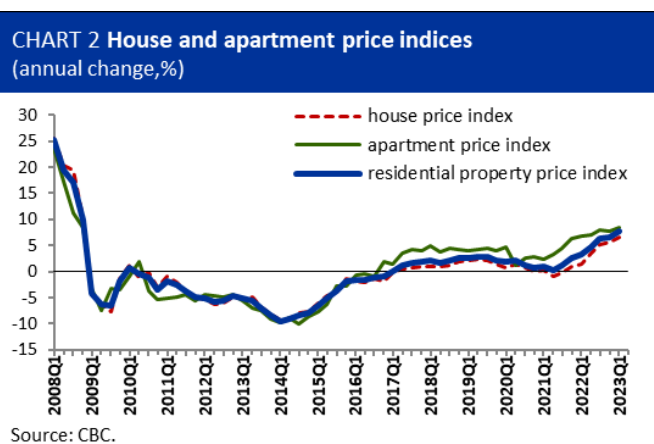
https://www.centralbank.cy/images/media/pdf/Methodology_EN_latest.pdf). Therefore, it is likely that there will be a short lag in fully capturing the pass-through of developments in the Index's turning points, with respect to both time and the magnitude of the change in market course.

1. Changes in the residential property price index (RPPI)

The RPPI (houses and apartments) recorded a quarterly increase of 2,1% in 2023Q1, compared with 1,6% in 2022Q4.

Compared with the previous quarter, the increase in the RPPI is driven by a 2,3% increase in apartment prices, and by a 1,7% increase in house prices (Table 1, Chart 1, p. 1).

On an annual basis, the RPPI recorded an increase of 7,7% in 2023Q1 compared with 6,6% in 2022Q4. In the quarter under review, apartment prices recorded an annual increase of 8,4%, while house prices increased by 6,6% (Table 1, p.1, Chart 2).

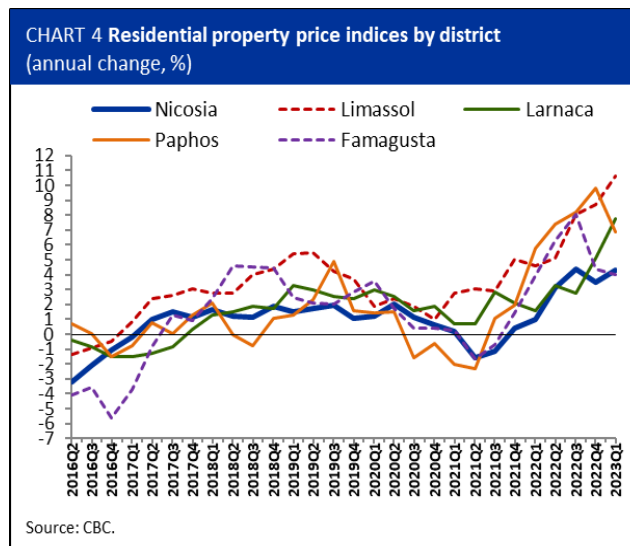
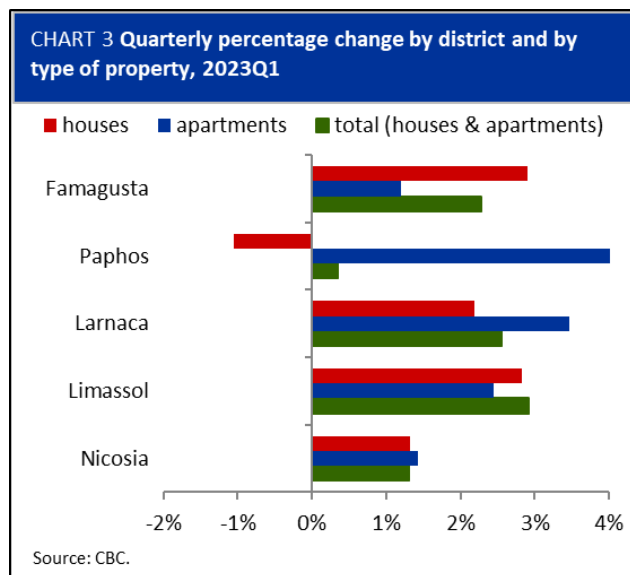


Demand in the real estate market in Cyprus, as well as residential property prices, continued registering an upward trend in 2023Q1. While in 2022 residential property prices appeared to be driven mainly by increases in the construction cost, in 2023Q1 the increases are governed mainly by increased demand, as suggested by DLS’s sales contracts data. According to market participants (real estate agents, valuers), the aforementioned demand for real estate seems to be governed by structural factors, i.e. buyers do not buy properties for speculative purposes, but instead use them as their main residence or for project developments. In addition, according to the same market sources, the investors’ investment horizon for project developments is at least 2-3 years, since these developments concern infrastructure projects, such as universities, schools, healthcare, etc. Furthermore,

despite the rise in mortgage rates as a result of ECB’s monetary policy, the total demand for real estate until 2023Q1 does not seem to have been affected to a significant extent.

2. Price changes by district

In 2023Q1, the RPPI recorded quarterly increases in all districts. Specifically, RPPI in Nicosia increased by 1,3%, in Limassol by 2,9%, in Larnaca by 2,6%, in Paphos by 0,3% and in Famagusta by 2,3% (Table 5, p. 6, Chart 3).



With regard to the annual changes in the price indices of individual districts, the RPPI recorded increases in all districts for a sixth consecutive quarter. Specifically, in Nicosia residential property prices increased by 4,3%, in Limassol by 10,6%, in

Larnaca by 7,7%, in Paphos by 6,8% and in Famagusta by 4% (Chart 4, p.2, Table 4, p.7). The relatively high rate of increase that has been registered in the districts of Limassol, Larnaca and Paphos might be related to the demand from foreigners due to the headquartering policy. On the contrary, the rate of increase of residential property prices in the district of Famagusta registers a deceleration over the last two quarters.

On a quarterly basis, house prices recorded increases in all districts, except Paphos. In particular, house prices increased in Nicosia by 1,3%, in Limassol by 2,8%, in Larnaca by 2,2%, and in Famagusta by 2,9%, while in Paphos they have decreased by 1,1%. On an annual basis, house prices recorded an increase in all districts. Specifically, house prices in Nicosia, Limassol, Larnaca, Paphos and Famagusta increased by 4,2%, 9,4%, 5,8%, 5,7% and 5%, respectively.

Apartment prices increased in all districts on a quarterly basis. In particular, apartment prices increased in Nicosia by 1,4%, in Limassol by 2,4%, in Larnaca by 3,5%, in Paphos by 4,3% and in Famagusta by 1,2%. On an annual basis, apartment prices recorded an increase in all districts for a seventh consecutive quarter. Specifically, in 2023Q1 apartment prices increased in Nicosia by 4,4%, in Limassol by 10,4%, in Larnaca by 12,3%, in Paphos by 10,3% and in Famagusta by 2,4%, compared with the respective quarter in 2022.

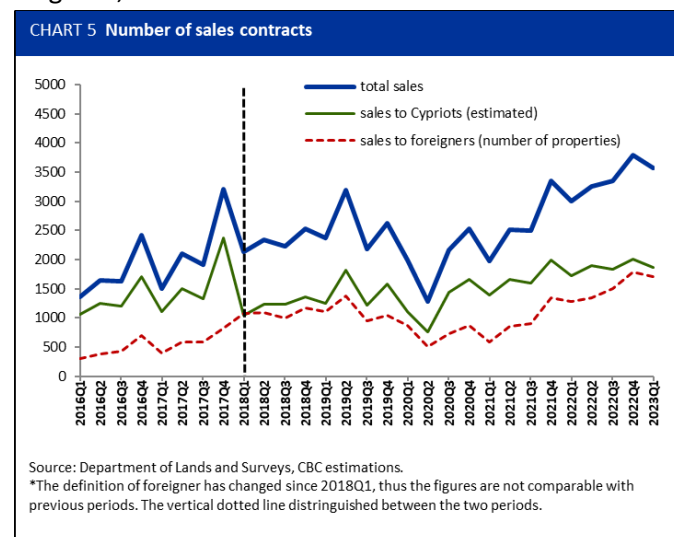
3. Other market indicators

The upward dynamics of demand and prices, on one hand, and the limited supply, on the other hand, are reflected in various indicators of the real estate sector in 2023Q1. In addition, a correction in construction cost is observed.

According to the latest data published by the DLS, in 2023Q1, the number of sale contracts continued to register an increase of 18,8% on an annual basis (3.574 compared with 3.009) reflecting the increased

demand for real estate (Chart 5). In particular, in the quarter under review, the number of properties sold to foreign buyers registered an increase of 33,6% on an annual basis (1.706 compared with 1.277, Chart 5), mainly to non-EU residents, while the number of properties sold to local buyers has increased by 7,9% on an annual basis (1.868 compared with 1.732, Chart 5).

The increase in sales contracts to foreign buyers can be mainly attributed to the headquartering policy², which attracts foreign professionals from countries such as Russia, Israel, Ukraine, United Kingdom, Lebanon and Belarus.



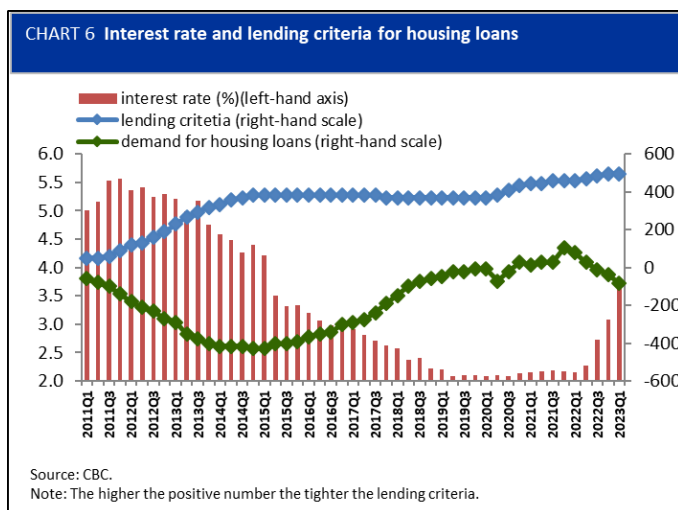
As expected, the rise in ECB base rates has led to an increase in the mortgage-loan interest rates, increasing the borrowing cost for both existing and potentially new customers of domestic financial institutions. On one hand, this has affected the demand for new housing loans, but on the other hand, it does not appear to have affected total demand for real estate in 2023Q1 to a significant extent. According to CBC's *Monetary and Financial Statistics publication*³, new loans for the purchase of housing in 2023Q1 decreased by 44,2% on an annual basis (€244,3 million in 2023Q1 compared with €437,0 million in 2022Q1). According to the same source, the interest rate on new housing loans⁴ in

² According to the latest data, in 2022 more than 9.000 employees have come to the island, while family members amount to 8.000. A total of 1.600 foreign companies have joined the business facilitation unit and 12.500 employees have obtained residence permits (data from the Ministry of Finance, January 2023).

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

⁴ Floating rate and up to one year fixed.

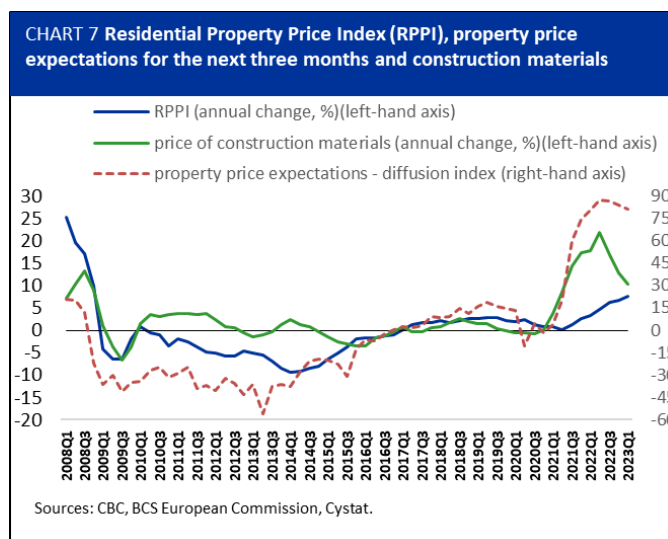
2023Q1 continued to increase, averaging at 3,74%, compared with 3,07% in 2022Q4 and 2,15% one year before i.e. in 2022Q1 (**Chart 6**). According to the Bank Lending Survey⁵, lending criteria have tightened compared with the previous quarter, while the same survey confirms the decrease in demand for loans (**Chart 6**).



The contained supply of new properties is reflected in the index of production in construction (buildings category), as published by the Statistical Service of Cyprus (CYSTAT). Following six quarters of consecutive annual decreases, the aforementioned index registers an annual increase of 5,5% in 2023Q1.

Regarding the number of residential units for which building permits have been approved, which is a leading indicator of construction activity, a decrease of 6% has been recorded in 2023Q1. This is the fifth consecutive quarter that a decline in the number of units for which building permits have been approved is recorded, indicating the contained supply, which is expected to be sustained in the future. According to data from the Business and Consumer Surveys (BCS) of the European Commission, the index of construction activity in the previous three months, despite the fact that it stands at less negative levels in 2023Q1 (-7,7) compared with the previous two quarters (-12,9 and -15,3), it still remains at negative levels.

The price index of construction materials, published by CYSTAT, records a small decrease on a monthly basis in March 2023, possibly following the international trend of price decreases in the main construction materials, albeit with a relative time lag. As a result, the decelerating increases on an annual basis that the aforementioned index registers (10,3% in 2023Q1) are expected to at least stabilise, in the near future (**Chart 7**).



According to the BCS of the European Commission, in 2023Q1, the consensus estimate among survey participants is that property prices will continue to increase (**Chart 7**). Specifically, property price expectations for the next three months averaged at 80,8 in 2023Q1, recording for a third consecutive quarter a small decrease compared with the historically high levels attained in 2022Q2. The index of expectations for employment in the real estate sector in the next three months suggests that employment is not expected to change substantially, since the index reached -0,9, i.e. marginally negative.

4. Conclusion

In 2023Q1, real estate prices continued to trend upward at an accelerated rate, as a result of the significantly elevated demand for real estate, reflected in the increased, on an annual basis, sales over the aforementioned period. The demand for real estate stems from both local and foreign buyers. The contribution of construction cost in real estate price

⁵<https://www.centralbank.cy/el/publications/surveys/banklending-survey>

increases in 2023Q1 is limited, with the prices of construction materials recording small decreases, on a quarterly basis, but still remaining at high levels compared with the pre-pandemic levels. The consequent increase in domestic mortgage-loan interest rates due to the increase in ECB base rates, under the single monetary policy in the euro area, resulted in decreased mortgage-loan demand in 2023Q1 on an annual basis. However, the overall demand for real estate has not been affected yet to a significant extent, partly due to the increase in demand from foreign buyers.

TABLE 2 Residential property price indices by type and by district

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	-	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	-	92,3	80,7	80,0	94,1	75,5	83,5	76,6	84,1	
2023	Q1	97,3	83,9	82,0	100,5	79,3	86,5	78,8	88,1	

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	<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	-	84,0	100,2	75,7	71,7	65,2	74,9	83,6	72,4	79,7	74,5
2022	-	87,6	108,2	80,3	79,0	71,0	76,6	87,7	73,9	85,3	77,8
2023	Q1	89,9	115,8	86,3	84,8	71,2	78,5	92,7	76,9	87,3	81,0

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
(year on year 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	
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	-	7,4	3,9	3,0	6,6	3,2	7,8	5,7	5,2
2023	Q1	8,4	6,6	4,3	10,6	7,7	6,8	4,0	7,7

Source: CBC.

*The annual figures are calculated as the annual change of the average of the four quarters of each year.

Table 5 Apartment and house price indices by district
(quarter on quarter change, %)

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
2022	Q4	0,2	3,6	2,3	1,4	-3,7	0,3	1,2	1,7	2,2	0,1
2023	Q1	1,4	2,4	3,5	4,3	1,2	1,3	2,8	2,2	-1,1	2,9

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 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>