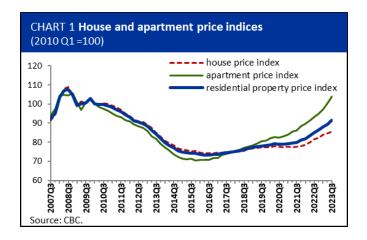
RESIDENTIAL PROPERTY PRICE INDEX (RPPI)

2023 Q3

Residential property prices in Cyprus continued their upward trend in 2023Q3, particularly in the apartments market.

- In 2023Q3, the Residential Property Price Index (RPPI) of the Central Bank of Cyprus (CBC)¹(apartments and houses) continued recording increases, both on an annual and a quarterly basis, compared with the previous quarters (Table 1).
- As reflected in the sales contracts data of the Department of Lands and Surveys (DLS), in 2023Q3 the number of transactions in the real estate market recorded an increase on an annual basis. The increased demand stems from both local buyers (inter alia, for buy-to-let purposes) and foreign buyers, mainly due to the "Strategy for Attracting Businesses for Activities or/and Expansion of their Activities in Cyprus" (headquartering policy) and other investments.
- As far as the construction activity is concerned, the number of residential units, for which building permits have been approved, recorded a decrease for the period January- August 2023 compared with the respective period in 2022. This continued trend appears to be related with the prolonged increases in the construction costs as well as borrowing costs.
- Based on the above, increased demand, in combination with limited supply of new residences in the market, seems to be the main factor contributing to the increase in RPPI in 2023Q3, as was the case in the preceding quarters.
- Up until 2023Q3, the increase in ECB's base rates and the housing lending cost 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 Q4	2023 Q1	2023 Q2	2023 Q3
Residential property price index (2010 Q1=100)	86,3	88,1	89,4	91,4
Quarterly change	1,6%	2,1%	1,5%	2,2%
Annual Change	6,6%	7,7%	7,4%	7,6%
(a) Property price index Houses (2010Q1=100)	82,5	83,9	84,5	85,6
Quarterly change	1,1%	1,7%	0,7%	1,4%
Annual change	5,6%	6,6%	5,6%	4,9%
(b) Property price index Apartments (2010Q1=100)	95,1	97,3	100,3	103,9
Quarterly change	2,1%	2,3%	3,1%	3,6%
Annual change	7,7%	8,4%	10,1%	11,5%



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 2,2% in 2023Q3, compared with the increase of 1,5% in 2023Q2.

Compared with the previous quarter, the increase in the RPPI in 2023Q3 is driven by a 3,6% increase in apartment prices, and by a 1,4% increase in house prices (Chart 1, p. 1, Table 1, p.1).

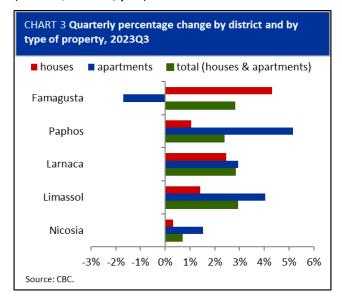
On an annual basis, the RPPI recorded an increase of 7,6% in 2023Q3 compared with 7,4% in 2023Q2. In the quarter under review, apartment prices recorded an annual increase of 11,5%, while house prices increased by 4,9% (Chart 2, Table 1, p.1).



In 2023Q3, increased RPPI is mainly driven by increased demand in the real estate market in combination with the insufficient supply. According to DLS's sales contracts data, demand remains at high levels. The annual increase in sales contracts mainly stems from both foreign buyers due to, among others, the "Strategy for Attracting Businesses for Activities or/and Expansion of their Activities in Cyprus" (headquartering policy) and local demand for real estate. The local demand for real estate does not seem to have been affected to a significant extent up until 2023Q3, despite continuous increases in housing loan rates due to ECB's monetary policy on financing conditions. With the construction cost stabilising in 2023, following significant increases, the increases in residential property prices are mainly driven by increased demand in combination with the restrained supply.

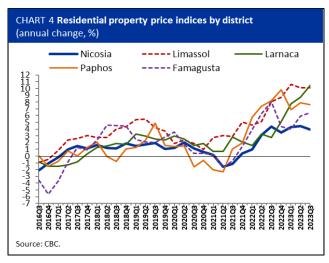
2. Price changes by district

In 2023Q3, residential property prices recorded quarterly increases in all districts for a third consecutive quarter. Specifically, RPPI in Nicosia increased by 0,7%, in Limassol by 2,9%, in Larnaca by 2,8%, in Paphos by 2,4% and in Famagusta by 2,8% (Chart 3, Table 5, p. 7).



Regarding the annual changes in the price indices of individual districts, RPPI recorded increases in all districts. Specifically, in Nicosia residential property prices increased by 3,9%, in Limassol by 10,1%, in Larnaca by 10,5%, in Paphos by 7,6% and in Famagusta by 6,4% (Chart 4, Table 4, p.7).

The relatively high rate of increase in residential prices that has been registered in coastal cities appears to be related to the demand from foreigners mainly due to the headquartering policy.



On a quarterly basis, **house prices** recorded increases in all districts. In particular, house prices increased in Nicosia by 0,3%, in Limassol by 1,4%, in Larnaca by 2,5%, in Paphos by 1,1%, and in Famagusta by 4,3%. On an annual basis, house prices recorded an increase in all districts too. Specifically, house prices in Nicosia, Limassol, Larnaca, Paphos and Famagusta increased by 3,8%, 5,1%, 8,3%, 3,1% and 9,5%, respectively.

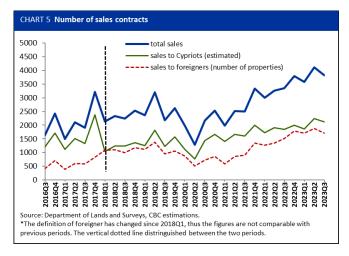
Apartment prices increased in all districts on a quarterly basis except in Famagusta where a decrease was recorded. In particular, apartment prices increased in Nicosia by 1,5%, in Limassol by 4,0%, in Larnaca by 2,9%, in Paphos by 5,2% and in Famagusta apartment prices decreased by 1,7%. On an annual basis, apartment prices recorded an increase in all districts except in Famagusta. Specifically, in 2023Q3 apartment prices increased in Nicosia by 4,6%, in Limassol by 14,9%, in Larnaca by 13,4%, in Paphos by 18,5% while in Famagusta apartment prices recorded a decrease of 1,8%, compared with the respective quarter in 2022. It is noted that among all districts, Famagusta has the smallest available number of observations for apartments, and therefore this specific index exhibits a greater variability.

3. Other market indicators

The upward dynamics of demand along with the limited supply of residential properties in the market are reflected in various real estate indicators in 2023Q3. Furthermore, a continuous correction in construction cost is observed after the significant increases that preceded.

According to the data published by the DLS, in 2023Q3, sales contracts recorded an increase of 14,4% on an annual basis (3.830 compared with 3.347 in 2022Q3) reflecting the increased demand for real estate (Chart 5). The aforementioned increase in the sales contracts stems from both foreign and local buyers, while local buyers continue to account for the market's largest share. In particular, in the quarter under review, the number of properties sold to

foreign buyers registered an increase of 13,7% on an annual basis (1.712 compared with 1.506 in 2022Q3, Chart 5), while the number of properties sold to local buyers increased by 15% on an annual basis (2.118 compared with 1.841 in 2022Q3, Chart 5). This increase in sales contracts to foreign buyers can be mainly attributed to the headquartering policy, which attracts foreign professionals from countries such as Israel, Ukraine, United Kingdom, Lebanon and Belarus, while the corresponding increase in local buyers is attributed to buy-to-let investments, among other things.



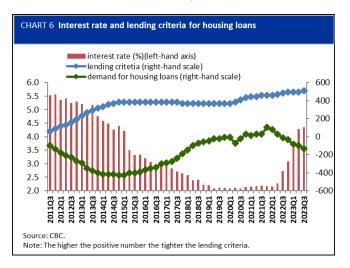
As expected, ECB's tightening monetary policy has led to an increase in the mortgage-loan rates, increasing the borrowing cost for both existing and potentially new customers of domestic financial institutions. This has affected the demand for new housing loans. According to CBC's Monetary and Financial Statistics publication², new housing loans for the period of January - September 2023 significantly decreased by 20% on an annual basis (€746,2 million compared with €932,4 in the respective period of 2022). In addition, according to the same source, the mortgage-loan rate³ in 2023Q3, averaged at 4,4%, compared with 4,3% in 2023Q2 and 2,7% in the respective period of 2022 (Chart 6, p.4). Moreover, according to CBC's Bank Lending Survey⁴, lending criteria have tightened compared with the previous quarter, while the same survey confirms the continued decrease in demand for loans

 $^{^{2}\,\}underline{\text{https://www.centralbank.cy/el/publications/monetary-and-financial-statistics}}$

³ Floating rate and up to one year fixed.

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

(**Chart 6**). Despite this, the aforementioned developments do not appear to have affected the overall real estate demand up until 2023Q3.

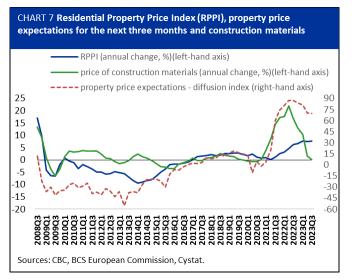


According to the latest available data published by the Statistical Service of Cyprus (CYSTAT), the number of residential units for which building permits have been approved, which is a leading indicator of construction activity, recorded a decrease of 7,4%, down from 3.900 in January – September 2022 to 3.610 in the corresponding period of 2023. The number of units for which building permits have been approved recorded decreases, on an annual basis, since the first quarter of 2022, indicating the contained supply, which is expected to be sustained in the future due to the increase in the construction cost and in the cost of financing of residential buildings.

Specifically, according to data from the *Business and Consumer Surveys (BCS)* of the European Commission, the **index of construction activity** for the previous 3 months stands at more negative levels in 2023Q3 (-6,4%) compared with 2023Q2 (-1,8%), indicating the contained supply of real estate in the market.

The **price index of construction materials**, published by CYSTAT, records consecutive decreases on a monthly basis during the past seven months, up until September 2023, following the international trend of price decreases in the main construction materials, albeit with a relative time lag. On an annual basis, since 2022Q2, decelerating increases in the price index of construction materials are recorded, reaching

0,2% in 2023Q3 (**Chart 7**). The trend of the aforementioned index points towards a further stabilisation in the prices of the construction materials in the near future or even decreases from the previously recorded high levels as a result of the geopolitical developments.



According to the BCS of the European Commission, in 2023Q3, the consensus estimate among survey participants is that property prices will continue to increase in the next three months (Chart 7). Specifically, property price expectations for the next three months averaged at 69,7 in 2023Q3, recording for a fifth consecutive quarter a decrease compared with the historically high levels attained in 2022Q2. It appears that the majority of the survey participants expect that the property prices will continue to increase, as opposed to the remaining participants that expect either stabilisation or decrease, even though the percentage of the former has been reduced compared to previous quarters. In addition, in conjunction with the trend of the construction sector that has been analysed above, a minor decrease is expected in the employment prospects in the construction sector over the next few months. In particular, the employment expectations in the real estate sector for the next three months has slightly decreased reaching -2,8 on average, in 2023Q3.

4. Conclusion

During 2023Q3, residential prices continued their upward trend, mainly as a result of the increased demand for real estate, stemming from both local and foreign buyers. With the domestic demand remaining

CENTRAL BANK OF CYPRUS

EUROSYSTEM

CBC Residential Property Price Index - 2023Q3

at high levels, despite the increase in mortgage rates and the consequent decrease in the mortgage-loans, and with the demand from foreigners recording significant increases due to the headquartering policy, the number of sales contracts continued recording increases. With the prices of construction materials stabilising at the high levels recorded due to the geopolitical developments and the decrease in new residential buildings for which building permits have been approved, the increases in residential prices mostly reflect the significant increased demand in combination with the contained supply of residential buildings.

TABLE 2 Residential property price indices by type and by district Residences by type **Residences by district** Residential property Year* Quarter **Apartments** Houses N/sia L/sol L/ca **Paphos** F/sta price index 99,0 99,5 2010 100,1 99,9 100,3 99,5 99,6 98,2 2011 93,3 97,2 98,6 94,4 94,9 95,4 94,4 96,3 2012 89,0 90,8 87,3 87,9 91,2 91,8 94,4 87,5 2013 82,5 86,1 87,8 86,5 79,5 83,3 80,0 85,2 77,4 2014 74,7 78,8 80,3 79,5 72,1 71,1 77,8 2015 75,6 76,4 70,1 71,0 76,0 68,7 75,3 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 77,1 83,8 70,4 77,8 78,8 77,2 77,6 71,5 2020 82,6 77,6 78,1 85,3 72,0 72,6 79,0 77,8 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 78,8 88,1 86,5 Q2 100,3 84,5 83,3 101,9 81,5 88,8 80,4 89,4

83,9

104,9

83,8

90,9

82,6

91,4

Source: CBC.

Q3

85,6

103,9

TABLE 3 Apartment and house price indices by district (annual and quarterly, 2010Q1 = 100)

				Apartmo	<u>ents</u>				<u>Houses</u>		
Year*	Quarter	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
	Q2	91,1	120,5	89,8	90,3	72,9	79,9	92,3	78,2	88,1	82,5
	Q3	92,5	125,3	92,5	95,0	71,7	80,2	93,6	80,1	89,0	86,1

Source: CBC.

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

^{*}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, %)

		Residences b		Residences by district					
Year*	Quarter	Apartments	Houses	N/sia	L/sol	L/ca	Paphos	F/sta	property price index
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
	Q2	10,1	5,6	4,4	10,1	8,7	7,9	5,9	7,4
Source: C	Q3	11,5	4,9	3,9	10,1	10,5	7,6	6,4	7,6

Source: CBC

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

<u>Apartments</u>							<u>Houses</u>				
Year	Quarter	N/sia	L/sol	L/ca	Paphos	F/sta	N/sia	L/sol	L/ca	Paphos	F/sta
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
2023	Q2	1,4	4,0	4,1	6,5	2,5	1,8	-0,4	1,7	0,9	1,9
2023	Q3	1,5	4,0	2,9	5,2	-1,7	0,3	1,4	2,5	1,1	4,3
Source: CBC.											

7

^{*}The annual figures are calculated as the annual change of the average of the four quarters of each 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, National Bank of Greece, Astro Bank, Cyprus Development Bank, Société Générale, Ancoria 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 property surveyors in relation to mortgage lending, loan restructures and property revaluations. The valuations come from more than 100 property survey offices all over Cyprus, contributing in the impartiality of the indices. 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. 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 observations of the last four quarters in each respective district. This change in the weighting method was suggested by the IMF as part of an evaluation exercise of the RPPI, in the context of the implementation of the Memorandum of Understanding. 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 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.

Furthermore, in 2019Q1 the indices have been revised from 2017Q1 onwards, due to the removal of certain observations from the sample. These observations have been examined and assessed to not reflect the open market value. In this way the consistency in the construction of the indices is ensured, according to the international standards. The aforementioned changes did not altered significantly the indices or particularly 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

For further information or/and clarifications please contact the Real Estate Unit of CBC at RealEstate@centralbank.cy.