



CENTRAL BANK OF CYPRUS

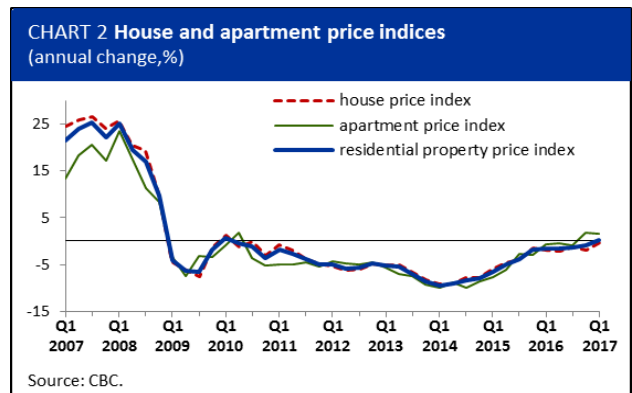
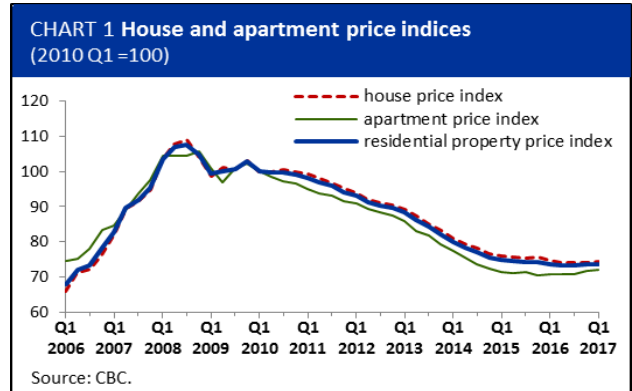
EUROSYSTEM

RESIDENTIAL PROPERTY PRICE INDEX (RPPI)

2017Q1

Residential property prices continued to increase moderately in 2017Q1

- The RPPI (houses and apartments) recorded the third consecutive marginal increase (0,3%) on a quarterly basis in 2017Q1. The continued increases, albeit moderate, confirm the recovery of the real estate market in Cyprus, as also shown by other relevant indicators¹.
- Both house and apartment price indices increased by 0,3% in 2017Q1.
- Residential property prices increased marginally by 0,2% on an annual basis in 2017Q1. This is the first annual increase following seven years of consecutive negative growth. Apartment prices increased on an annual basis for a second consecutive quarter by 1,5%, while house prices decreased by 0,3%, the smallest annual decrease since the end of 2010.
- The stable recovery of Cyprus economy, the fall in unemployment and the gradual restoration of confidence in the market, provide evidence for positive trend in the real estate market.



Overview	2016 Q2	2016 Q3	2016 Q4	2017 Q1
Quarterly index (2010Q1=100)	73,2	73,3	73,5	73,7
Quarterly change	-0,5%	0,1%	0,1%	0,3%
Annual change	-1,7%	-1,3%	-0,9%	0,2%

¹ The reader is reminded that the construction of the CBC RPPI is based on appraisals data and on a statistical method that is widely used in the literature for this purpose, which incorporates to some extent past developments in current results using smoothed regression coefficients (see methodology report:

https://www.centralbank.cy/images/media/pdf/Metodology_EN_latest.pdf). As a result, it is possible that the RPPI may delay in capturing turning points in the market, both with respect to time and to the magnitude of the recovery in the market.

Residential property price indices

The RPPI recorded a moderate increase of 0,3% in 2017Q1 on a quarterly basis. This was the third consecutive quarterly increase, confirming the recovery in the real estate market. Both apartment and house prices increased by 0,3% on a quarterly basis (**Chart 1**).

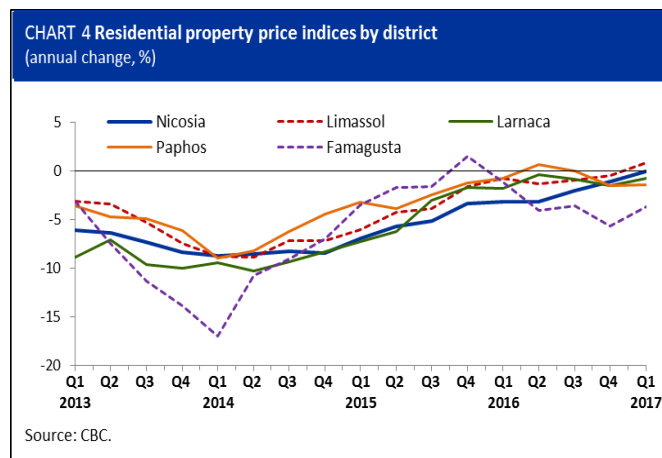
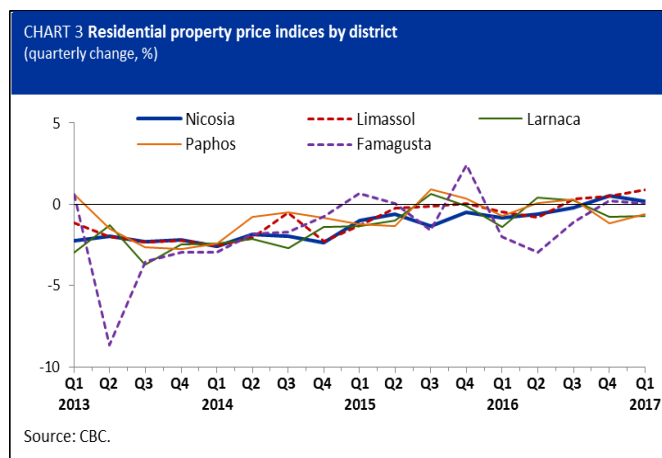
The RPPI increased by 0,2% in 2017Q1 on an annual basis, following seven years of consecutive declines. Apartment prices increased(1,5%) on an annual basis for the second consecutive quarter, while house prices recorded the smallest annual decline(0,3%) since the end of 2010 (**Chart 2**).

Price changes by district

Residential property prices registered quarterly increases for the third consecutive quarter in Nicosia (0,2%), Limassol (0,9%) and Famagusta (0,1%). In contrast, residential property prices in Larnaca and Paphos continued to decrease on a quarterly basis by 0,7% and 0,6%, respectively (**Chart 3**). As regards annual changes in residential property prices by district, Limassol recorded an increase of 0,9%, the first since 2010Q3. In contrast, residential property prices decreased on an annual basis in all other districts. The largest decrease was recorded in Famagusta (3,7%) and the smallest in Nicosia (0,1%). Residential property prices also decreased in Larnaca by 0,8% and in Paphos by 1,4% (**Chart 4**). It is worth noting that the aforementioned decreases are decelerating. Thus, provided the recovery in the real estate sector continues, we expect these price changes to turn positive in the near future.

Apartment prices recorded a quarterly increase of 1,4% in Limassol and stabilised in Larnaca and Famagusta. In contrast, apartment prices decreased by 1,5% and 0,1% in the districts of Paphos and Nicosia, respectively. It is worth noting that during the last four quarters for Larnaca and three quarters for Limassol and Famagusta, apartment prices either increased or registered nil growth.

As regards house prices, moderate quarterly increases of 0,3% and 0,7% and 0,2% were recorded in the districts of Nicosia, Limassol and Famagusta, respectively. In contrast, house prices recorded quarterly decrease of 0,9% in Larnaca, while they stabilised in Paphos.



Apartment prices recorded increases on an annual basis in Nicosia (0,2%), Limassol (2,1%) and Larnaca (3%) in 2017Q1. In Paphos and Famagusta, however, apartment prices decreased by 3,1% and 2,6%, respectively.

House prices increased on an annual basis in Limassol and Paphos by 0,5% and 0,3%, respectively. In contrast, house prices decreased in Nicosia, Larnaca and Famagusta by 0,2%, 2,5% and 3,1%, respectively.

Comparison with other residential property price indices

In **Chart 5** we present the results of all three residential property price indices which are available for Cyprus, namely the CBC RPPI index, the Cyprus

Statistical Service (Cystat)² house price index and the RICS³ residential property index. The CBC and RICS indices recorded quarterly increases in 2017Q1, while the Cystat index decreased. It is worth noting, however, that the Cystat index exhibits seasonality in the quarterly changes. The annual changes in the aforementioned indices is depicted in **Chart 6**, where all indices exhibit increases. Based on the above, it is evident that residential property prices in Cyprus have not only stabilised, but -have increased, albeit moderately.

The reader is reminded that the construction of the CBC RPPI is based on appraisals data, and that the regression coefficients are smoothed (see footnote 1). It is generally accepted in the literature (e.g. Diaz, 1998, Geltner et al., 2003, Netzell, 2012 and Fu, 2003) that these two reasons can possibly cause delay in capturing the turning point of property prices. Therefore, we expect the RPPI to exhibit larger increases in the future, should the recovery of the sector continues.

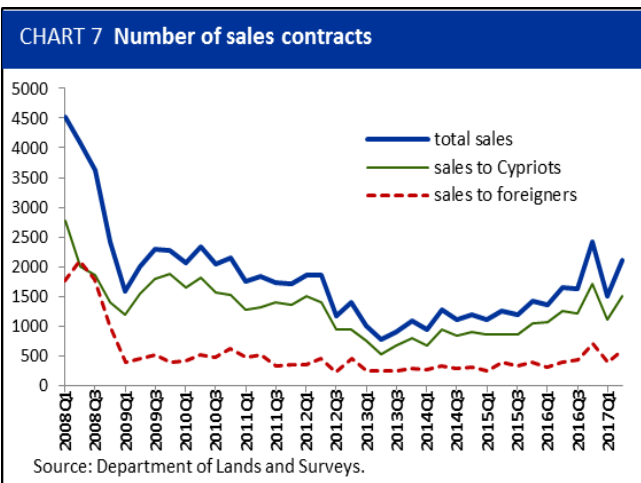
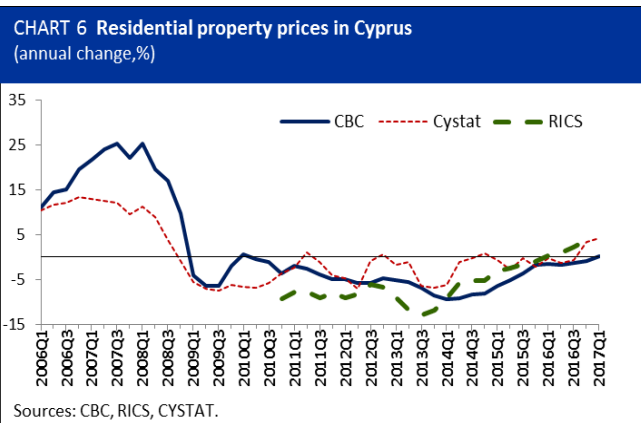
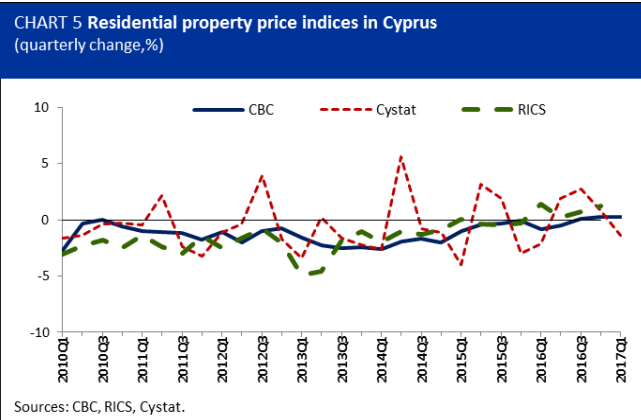
Other market indicators

The recovery in the real estate sector is also evident in other relevant indicators.

Specifically, construction activity in Cyprus has exhibited robust recovery. According to the index of production in construction, which is published by Cystat, construction increased by 36,7% on an annual basis in 2017Q1. This was, historically, the highest increase since the index began to be compiled, and is due to a base effect. In addition, local sales of cement increased by 36,5% in the same period, however, the level of sales is similar to the level of 2012. The number of authorised building permits, which are considered as a leading indicator for future construction activity, recorded an annual increase of 13,4% in 2017Q1, reflecting increases in both residential (14,5%) and non-residential permits (25%).

Further to the recovery in construction activity, demand for properties increased on an annual basis for the eighth consecutive quarter. According to data published by the Department of Lands and Surveys, the total number of sales contracts (locals and foreigners) recorded an annual increase of 10,1% and 28% in 2017Q1 and 2017Q2, respectively (**Chart 7**).

²http://www.mof.gov.cy/mof/cystat/statistics.nsf/economy_finance_15main_en/economy_finance_15main_en?OpenForm&sub=5&sel=2



The number of sales contracts by domestic residents registered an annual increase of 20% in 2017Q2, while sales to foreigners increased by 53,7% (**Chart 7**).

According to the CBC's *Monetary and Financial Statistics*, the interest rate for housing loans⁴ was on average 2,9% in 2017Q1 compared with 3,1% in 2016Q1 and 4,2% in 2015Q1 (**Chart 8**). These low interest rates provide incentives to potential buyers who meet the lending criteria of the banks. Demand

³ <http://www.rics.org/cy/knowledge/market-analysis/rics-cyprus-property-price-index/>

⁴ Floating rate and up to one year fixed.

for housing loans from households according to the CBC’s *Bank Lending Survey* increased in 2017Q1 and 2017Q2. At the same time, the lending criteria for housing loans remained unchanged (**Chart 8**).

The prospects for the real estate market continue to be favourable according to the European Commission’s Business and Consumer Survey. Specifically, the index of employment expectations in the construction sector reached an average of 3,4 and 9,8 in 2017Q1 and 2017Q2, respectively, which are the highest levels of the index since 2008. In addition, the index of expectations for real estate prices was, on average, 1,5 and 3,9 in 2017Q1 and 2017Q2, respectively. The developments in the above mentioned indices indicate an ongoing recovery in the Cyprus real estate sector.

References:

Diaz, J. and M. Wolverton (1998) “A longitudinal examination of the appraisal smoothing hypothesis”, *Real Estate Economics*, 26(2): 349-358.

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Netzell, O. (2012) “Building and real estate economics”, *Royal Institute of Technology*, Stockholm.

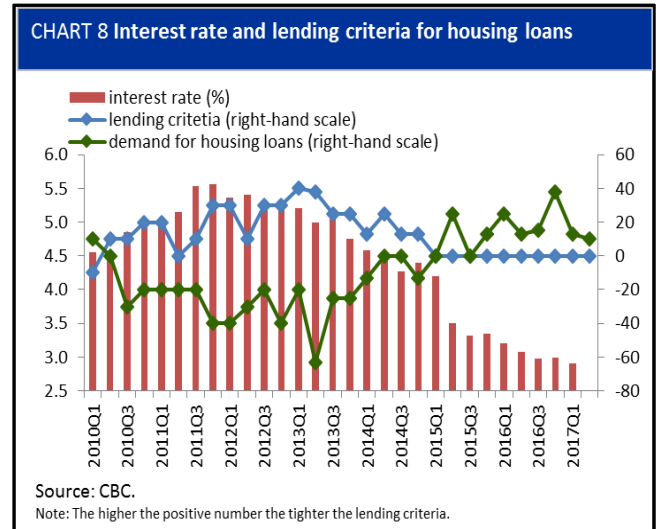


Table 1 Residential property price indices by type and by district

(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	Q1	70,8	74,6	74,5	75,9	67,8	75,1	69,4	73,6
	Q2	70,7	74,2	74,1	75,3	68,1	75,2	67,4	73,2
	Q3	70,8	74,2	73,9	75,6	68,2	75,4	66,7	73,3
	Q4	71,7	74,2	74,3	75,9	67,7	74,5	66,8	73,5
2017	Q1	71,9	74,4	74,5	76,6	67,2	74,1	66,9	73,7

Source: CBC.

*The annual data for the years between 2006 and 2015 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>Flats</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	Q1	75,1	75,0	60,5	66,4	59,0	74,3	76,2	71,1	78,5	71,1
	Q2	75,0	73,8	61,1	65,8	57,3	73,7	75,8	71,0	79,0	69,1
	Q3	74,7	74,0	61,2	66,9	57,4	73,7	76,1	71,4	79,4	68,5
	Q4	75,3	75,5	62,3	65,2	57,4	73,9	76,1	69,9	78,8	68,9
2017	Q1	75,3	76,6	62,3	64,3	57,4	74,1	76,6	69,3	78,8	69,0

Source: CBC.

*The annual data for the years between 2006 and 2014 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