

# Residential property price indices using asking prices: the case of Cyprus \*

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## ABSTRACT

This paper uses micro data on property advertisements published in widely circulated newspapers and online to construct residential price indices for Cyprus. The sample covers the period from 2000Q1 to 2018Q2 and contains information on various property characteristics (e.g. property type, size, location). A regression model is estimated using rolling samples of 12, 20 and 40 quarters. We obtain six sub-aggregate price indices, i.e. for houses and flats located in the districts of Nicosia, Limassol, and in the remaining districts. Using the six sub-aggregate indices, we construct five aggregate price indices, i.e. for (i) houses, (ii) flats, (iii) Nicosia district, (iv) Limassol district, and (v) other districts, as well as an overall property price index for Cyprus. The estimated price indices are juxtaposed with other available property price indices in Cyprus, namely the indices published by the Central Bank, Eurostat, and the Royal Institution of Chartered Surveyors, as well as with a number of macroeconomic indicators relating to the property market. The indices constructed in this paper tend to be associated with slightly larger quarterly percentage changes (higher growth and smaller contraction) compared to similar indices over common periods. The resulting indices are significantly correlated with the corresponding property price indices published by other organisations, and their agreement in the direction of quarterly changes is high. The estimated indices are found to contain leading information vis-à-vis other property price indices, particularly in the case of flats and the district of Limassol. Also, the estimated indices are highly correlated with many key macroeconomic variables, with the results suggesting that the former may lead developments in some macroeconomic series. The properties of the proposed indices together with their timely nature in terms of data availability could make them a useful tool for monitoring the evolution of property prices as well as macroeconomic developments in Cyprus. The estimation of sub-aggregate indices provides information on the key drivers (types, districts) of fluctuations in the domestic property market. As the proposed indices are model-based, the statistical significance of quarterly changes can be computed and confidence intervals can be constructed around these changes to provide an informed depiction of property price fluctuations.

Keywords: residential property prices, price index, rolling window regression

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