

Commercial property prices: price indices vs. performance indicators

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Despite the quest for swiftly disseminated indicators, it is of utmost importance to set up a valid and reliable methodological framework first. The various data users make substantially different demands on the index concepts. These, in turn, need to be tailored for the distinctive purposes. The observation of values and prices generally yields different results. The change in market values between two consecutive periods does not necessarily reflect the pure, i.e. quality-adjusted, change in prices. It is rather a mixtum compositum of quality changes due to depreciation and renovation as well as the quality-adjusted change in prices; if quantities remain the same. Let, for example, the population be equal in the two periods under consideration. Due to depreciation the quality of all buildings will be lower on average. *Ceteris paribus*, it follows that in such a situation values decrease although quality-adjusted prices have remained constant.

Investment performance indicators serve the specific purpose to provide a benchmark for investors and fund managers for commercial property investment portfolios. This is a very different purpose than measuring the price changes of commercial property. The on-going discussion on commercial property price indicators has brought to light that different actors in the market have preferences regarding the measurement aim that pole apart. While a substantial share of faction is in line with the well-reasoned tradition of official statistics to measure pure price changes, another part of the interest group has suggested performance indicators being most suitable for tracking the phenomenon at hand. However, it appears that the pros and cons are not fully understood yet. Strictly speaking the two “worlds” of price and performance figures are mutually exclusive. There is no such thing as performance in the realm of prices; vice versa, prices only very indirectly or only partly influence measures such as total return.

This paper provides a simplified model which formally treats prices and performance indicators in a single, unified framework. This will allow a better understanding of the links between the two indicators and, most particularly, the limitations of performance measurement. Assume, for the sake of exposition, that no change occurs in the “quantity” component of commercial property. This means that the same objects can be observed over time. This implies that neither new buildings are constructed nor that old objects are demolished. It should be noted that this by no means rules out the cases of depreciation due to ageing or appreciation in the form of investments in the stock. This setup establishes the basis for what follows.

On the other hand, capital values are influenced by quality change in addition to pure price change. Hence, define the growth of the capital value as the difference between price change and net depreciation. In the long run, the capital consumption should be amortised. Accordingly, the cash flow of an object is linked to its value in the previous period via the income return. What information can be revealed from performance measures? Using capital values introduces quality aspects that, in turn, may lead to a biased measure of pure price change. The total return is frequently used to assess the performance of an investment. Since it assumes the cash flows being reinvested, the total return is sum of the capital growth (capital gains/losses corrected for expenditures and capital receipts) and the income return. Depending on the prevailing circumstances, the total return can overshoot or undershoot the true price development. What makes it even worse is its architecture being a mixture of three independent measures. This will render it very hard for economic analysts – who are used to price indices – to understand. The picture drawn from prices and performance indicators can be fundamentally different. Eventually, this will lead to the wrong conclusions being drawn for policy making. Given the importance of the real estate sector for the economy and financial stability, the stakes at risk are potentially high for experiments.

Empirical results for the German residential property market will exemplify the empirical magnitude of conceptual differences.

Keywords: total return; capital value growth; pure price change; depreciation rate.