Extended Abstract

What quality is and how it can be controlled is maybe the most famous and debated issue in the real estate literature. Over the last few decades, it has generated a profusion of articles and literature surveys, so many that an attempt to realize a literature review of literature reviews could even be considered. As properties are heterogenous (and will stay heterogenous), a good knowledge of their quality level is a fundamental point to ensure qualified information about the various stakeholders and to reinforce the market efficiency. Moreover, given the new developments in sustainable buildings, environmental, social and governance criteria, the Building Information Model (BIM), the Geographical Information System (GIS), and artificial intelligence, the field of real estate quality studies is far from extinction. Quality is not dead. However, it remains difficult for scholars to offer completely new perspectives or to reinvestigate older ones in a new manner because of the huge number of publications on that topic.
With this article, we propose a new approach on a delimited point, the way to deal with location quality when estimating hedonic indexes. Here also, the literature about hedonic price and hedonic index—that is, the way to give quality a price—is vast. Numerous points have been discussed, such as the functional form of the models and the difficulties that arise when considering a great number of variables (cf. Chau and Chin (2003) for a review). Even when the scope is restricted to the location quality, the extent of articles is significant, with almost one literature review for each variable (Heyman et al. (2018) for accessibility, Ottensmann et al. (2008) for distance to employment, Aladwan and Ahamad (2019) for GIS variables, etc.). Location can be controlled extensively and explicitly with zip codes and surrounding amenities variables and/or implicitly with spatial models (SAR, SEM, etc.) aiming at capturing the spillover effects. Here, the idea is always to estimate a direct relation between objective location elements and price.

However, there is another methodological possibility, based on the marketing literature. It consists of inserting between objective elements and price a market stakeholders' judgment on those objective elements to explain price. This measure requires preference collection through surveys addressed to real estate professionals (investors, asset managers, property managers, appraisers, brokers, etc.) and a grid structure developed with semi-directed interviews. It is based on 1) revealing the quality of the location as perceived by the market and 2) incorporating those preferences in pricing equations.

By reducing the number of variables in hedonic regressions, down to one variable that incorporates all relevant information on location quality, it makes it possible to construct indices for narrower markets and to apply an imputation index rather than a time dummy index. It also makes possible analysis of the evolutions of the marginal price of location and the average transacted quality level, as well as estimation of the specific index according to various quality segments. During downturn, flight to centrality can be easily observed with this synthetic and operational indicator.

In an empirical perspective, for the case study of the Parisian office market, the following results have been established. Compared to the naïve approaches, as for the classical hedonic index, the perceived location control indexes do not underestimate the rise of price. They exhibit the same trend and volatility level compared to their hedonic equivalents (time dummy or imputation). Their ability to detect the market turning point seems slightly better: detection 1 year earlier than the equivalent imputation index; and possible differentiation of the turning point date according to the quality segment. By noting that the marginal price of location in Paris has risen faster than the index, it was also possible to establish that the best-perceived locations largely outperform the poorer. This result suggests that the most central locations remain very attractive to investors, and probably even more so than before, even in the context of increasing remote work.