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Property Price Index

Theory and Practice

 Springer

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Preface

Fluctuations in property prices have substantial impacts on economic activities. In Japan, a sharp rise in property prices during the latter half of the 1980s and its subsequent decline in the early 1990s led to a decade-long stagnation of the Japanese economy dubbed as the “lost decade.” Many countries had similar experiences with this kind of problem- for example, Sweden’s economic crisis in the 1990s and more recently, a rapid rise in housing prices and its reversal in the United States triggered a global fiscal crisis.

More generally, throughout their histories, most advanced nations have experienced abrupt increases and subsequent decreases in asset prices, especially housing prices. These fluctuations have had substantial impact on the financial system, often leading to a stagnation of economic activity. Reinhart and Rogoff (2008) conducted an exhaustive, long-term, comparative time series analysis of economic data from numerous countries which made it clear that the incidence of various economic phenomena is a common factor underlying banking crises.

In light of this, it was pointed out that the “information gap”, which existed between policy-making authorities and the property and financial markets, was a problem.

In such circumstances, the development of appropriate indexes that allow one to capture changes in property prices with precision is extremely important, not only for policy makers but also for market participants who are looking for the time when housing prices hit bottom.

Recent research has focused on methods for compiling appropriate property price indexes. The location, maintenance and the characteristics of each house are different from each other in varying degrees, so there are no two houses that are identical in terms of quality. Even if the location and basic structure are the same at two periods of time, the building ages over time and renovations and extensions mean that the houses are not identical across time. In other words, it is very difficult to apply the usual matching methodology (where the prices of exactly the same item are compared over time) to the construction of constant quality property price indexes. Thus most countries do not have official property price indexes.

In 2009, the IMF proposed that the G20 countries construct official quality adjusted property price indexes in order to fill in this “information gap” and the proposal was adopted. However, as indicated above, the construction of constant quality property price indexes is one of the most difficult tasks for national statistical agencies. In order to address these measurement problems, Eurostat published the *Handbook of Residential Property Price Indices* in 2012 and the *Commercial Property Price Indicators* in 2017. The authors of the present volume played a significant role in the writing of both of these volumes.

This book consists of 3 parts with 8 chapters.

The first part of this volume addresses the following topics: (i) a discussion of the policy uses of Property Price Indices (Chap. 1); (ii) a presentation of the basic theory of property price indexes (Chap. 2) and (iii) an illustration of the characteristics of each estimation method using numerical examples (Chap. 3).

The second part summarizes the academic research results presented in a series of papers written during the time when the Japanese Official Property Price Index was constructed. Chapter 4 discusses the construction of a residential property price index and Chap. 5 discusses the construction of a commercial property price index in the System of National Accounts.

The third part of this volume presents conceptual frameworks for the measurement of housing services in a Consumer Price Index (CPI) (Chap. 6). Chapters 7 and 8 discuss specific measurement issues related to the estimation of housing services in a CPI (Chap. 7) and in the System of National Accounts (Chap. 8). We proposed a new method of calculation of a CPI in the case of Japan.

Each paper has had some influence on international discussions surrounding the construction of Official Property Price Indexes. Each of the Chapters was originally presented at an international conference. Professor Shimizu used these presented papers as the basis for a revised paper which appears in this volume.

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