

Chapter 2

ACCOUNTING FOR HOUSING IN A CPI

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ABSTRACT

Stephen Cecchetti, a former Executive Vice President and Director of Research at the U.S. Federal Reserve Bank of New York, argues in the lead quotation that the treatment of owner occupied housing (OOH) in a nation's CPI "is a very big deal." Judged by the household expenditure budget share of shelter for virtually every nation, Cecchetti is surely right. Yet, this is a measurement area where the development of harmonized official practices has been an elusive objective. The differing treatments of OOH in national CPIs undermine efforts to understand the inflation and economic growth experiences of nations.

In section 2, we provide an overview of the four main approaches in current use for dealing with housing in a CPI: (1) the rental equivalence, (2) user cost, (3) acquisitions and (4) payments approaches. A fifth approach proposed by Diewert (2006a) -- our preferred approach -- is also discussed: the opportunity cost approach, which incorporates elements of both the rental equivalence and the user cost approaches. Three of these approaches -- the rental equivalence, user cost and opportunity cost approaches -- aim to price the use (i.e., the consumption) of housing services as this occurs, month by month, over time. These three approaches can be derived from the same theoretical foundations: a model that has origins in the economics and accounting literatures on business investment. Section 3 outlines these foundations, and the user cost is defined and related to depreciation and both general and asset class specific inflation rate parameters. All dwellings are unique in some ways, including their locations. Measurement challenges that arise with unique assets are discussed in section 4. In section 5, we suggest methods for dealing with complications due to the bundled land and structure components of residential properties.

Verbrugge (2006), Garner and Verbrugge (2008), and Gordon and Gothem (2004) raise some seemingly fundamental, and very different, concerns about the user cost and rental equivalence approaches. These concerns are considered in section 6. For issues fraught with nation specific details where international agreement is needed, the way forward is often to focus on broad stroke differences among the various conceptual approaches in hopes that agreement on details will follow once the conceptual differences are clarified. However, the section 6 materials suggest that, for OOH, the way forward may involve looking more carefully at application specific details. Section 7 concludes.