

Abstract

**How Wicksell Defined the Natural Rate and How Academic Literature
Fragments and Misinterprets It: A Statistical Study**

Mark Biernat

This work aims to identify and clarify the original definition of the natural rate of interest of Knut Wicksell and its application to a modern context by comparing academic literature with Wicksell's original definition. This reexamination is essential because Wicksell's theory is a foundation for monetary theory and policy. The approach in this study is a mixed methodology. It consists of three systematic literature reviews with a statistical and comparative text analysis of those reviews. The first review determined how Wicksell defined the natural rate based on all English translations of primary source documents. The result was three primary definitional categories, with 'the expected yield on newly created capital' as Wicksell's most frequently mentioned definition. The second review compares Wicksell's original definition to its presentation in academic literature and assesses if modern literature has fragmented or misinterpreted his theory. It looks at definitional fragmentation, presentation fragmentation, and citation fragmentation across 167 peer-reviewed academic works. The result was a high percentage of fragmentation in each category. The definitional category with the highest frequency was 'no definition.' The third review analyzes a subset of these academic works. Works that are the most cited and propose new definitional renditions of Wicksell's natural interest rate. This analysis focuses on the 'stable prices' definitional component and the related idea of money neutrality. The result was that these highly cited works substantially revised the essence of Wicksell's definition and overlooked Wicksell's theory on aggregate price movements outside the natural rate framework. The underlying premise of this study is that academic literature presents a fragmented misrepresentation of

Wicksell's definition of natural rate of interest and theory. The evidence supports this. This imprecision has contributed to revising Wicksell's ideas in the history of economic thought. Further, theorists who build models on this revision of Wicksell create potentially less-than-optimal policy compasses, as they miss the rigors and essence of Wicksell's definitional theory. This study's primary limitation is that it analyzes only Wicksell's published and translated English language works. With evidence from the systematic literature reviews and statistical analysis, it is asserted that modern understandings of Wicksell's natural rate are fragmented, misunderstood, and need policy revision.

Keywords: Natural rate of interest, Knut Wicksell, Monetary Policy, Inflation, Deflation