

Inflation Indexation and Zero Lower Bound*

Daeha Cho[†]

Hanyang University

Eunseong Ma[‡]

Yonsei University

July 2024

Abstract

This study quantitatively assesses both the aggregate and disaggregate effects of inflation-indexed loan contracts using a heterogeneous agent New Keynesian (HANK) model with an occasionally binding zero lower bound (ZLB). Substituting real for nominal government bonds reduces the volatility of output and inflation and decreases the frequency of ZLB events. Real loans sever the link between real interest rates and inflation, preventing a rise in real interest rates at the ZLB. Accordingly, ZLB events become less costly, weakening precautionary savings against aggregate risk. This leads to higher average nominal rates and a reduced frequency of ZLB occurrences, further reducing aggregate volatility. Although inflation indexation improves aggregate welfare, at the disaggregate level, the wealthy lose while the poor gain. Inflation indexation outperforms suggested policies aimed at providing more room for monetary policy, such as increasing the inflation target and implementing an asymmetric Taylor rule.

Key Words: Zero lower bound, HANK model, Inflation indexation, Welfare

JEL Classification: D31, E31, E32, E52

*We would like to thank Byoungchan Lee, Joonseok Oh, and participants at the 2024 KER International Conference and Yonsei Macroeconomics Workshop for their valuable comments and suggestions.

[†]College of Economics and Finance, Hanyang University, Republic of Korea. e-mail: daeha@hanyang.ac.kr.

[‡]School of Economics, Yonsei University, Republic of Korea. e-mail: masilver@yonsei.ac.kr

