Exercise

EE432 Monetary Theory and Policy

B.E. International Program

Faculty of Economics, Thammasat University

Semester 1/2022

Instruction:

1. Please submit your **(i) written answers in MS word document format,** and **(ii) printout of charts and descriptive statistics of downloaded data prepared by MS excel.** The required data below are available from Fred database via https://fred.stlouisfed.org/.
2. To place your answers, please **put your name and student ID** at the upper right corner of the first page of your exercise report and ***directly hand-in to exam invigilators at the exam room*** on **15 December 2022.**
3. All of these questions are taken from *Cecchetti and Schoenholtz (2021)* ***Money, banking, and financial markets*** *Textbook.*
4. Exercise is worth 10 %

Question 1: The Impact of Targeted Asset Purchase on Yields

1) Access the impact of targeted asset purchase by plotting since 2003 on a monthly basis the Federal Reserve's holding of mortgage-backed security (FRED code: WSHOMCB) and (on the right scale) the average yield on 30-year fixed-rate mortgage (FRED code: MORTGAGE30US).
2) Discuss how these purchases might support both the housing market and the banking system.

Question 2: The Evidence of Effective Lower Bound in Japan

1) Examine the real interest rate in Japan, plotting since 2000 on a monthly basis the Japanese nominal interest rate, using 3-month interbank rates as proxy (FRED code: IR3TIB01JPM156N), the inflation rate based on the percentage from a year ago of Japan's consumer price index (FRED code: JPNCPIALLMINMEI), and an estimate of the real interest rate based on the difference between these two indicators.
2) Comment on the lengthy period of positive real rates since 2000 and the role of deflation in determining the real rate. Discuss the risks that deflation poses in an economy with the nominal interest rate at the effective lower bound.
