# Is the Chinese Renminbi Undervalued? 

Japanese Economy in Transition

The IMF provides data on the market exchange rates and the PPP (Purchasing Power Parity) of currencies of major countries. Confirm the following results before answering to the questions on Page 3.

1. Retrieve annual data for 1980-2022 on China and Japan from the "Domestic Currency per U.S. Dollar, End of Period" of https://data.imf.org/regular.aspx?key=61545850
2. Retrieve annual data for 1980-2022 on China and Japan from the "implied PPP conversion rate" of https://www.imf.org/external/datamapper/PPPEX@WEO/OEMDC/CHN/JPN
3. Draw the graphs of the market rate and the PPP of the Chinese Renminbi like Graph 1.
4. Draw the graphs of the market rate and the PPP of the Japanese Yen like Graph 2.

Graph 1: Renminbi, China


Graph 2: Yen, Japan


## Questions

1. Create the PPP of Yen/Renminbi by dividing the PPP of 1 U denominated in Yen by the PPP of $1 \mathrm{U} \$$ denominated in Renminbi.
2. Create the market exchange rate of one Renminbi with Yen by dividing the market price of $1 \cup \$$ denominated in Yen by the market price of $1 \cup \$$ denominated in Renminbi.
3. Draw Graph 3 to show the PPP and the market rate of Yen/Renminbi for 1980-2022 with appropriate notation
4. Submit Graph 3 with your own interpretation on the overvaluation or under-valuation of the Chinese Renminbi to the Japanese Yen. Is the Chinese Renminbi overvalued relative to the Japanese Yen?
