

# **Excess Labour Supply, Structural Change and Real Exchange Rate**

**Jiandong Ju**

Tsinghua University

**Justin Yifu Lin**

Peking University

**Qing Liu**

Tsinghua University

**Kang Shi**

The Chinese University of Hong Kong

August 2021

## **Summary**

Since China joined the World Trade Organization in 2001, the Chinese economy has grown rapidly, especially the tradable goods sector. However, the Chinese real exchange rate did not exhibit a persistent and stable appreciation until 2005. This is a puzzling fact that is inconsistent with theories. This paper documents several stylized facts during the economic transition and argues that two features of the Chinese economy may help explain the puzzling real exchange rate pattern for the Chinese economy: i) the faster total factor productivity (TFP) growth in the export sector compared with the import sector; ii) excess supply of unskilled labour.

We construct a small open economy model with an H-O trade structure. We show that, due to heterogeneous skilled labour intensity in export and import sectors, faster TFP growth in the

export sector over that in the import sector will lead to a decline of return to capital and a rise of the skilled wage. Therefore, the decrease of return to capital and the persistent low unskilled wage, which is caused by an excess supply of unskilled labour, inhibits the rise in the relative price of non-tradable goods to tradable goods and the appreciation of the real exchange rate. Furthermore, we develop a dynamic small open economy model with multiple tradable goods sectors. We show that the model does fairly well in explaining the Chinese real exchange rate and other stylized facts in the economic transition.

This paper is motivated by China's experience and intends to explain the dynamics of the Chinese real exchange rate. Our theory, however, may also be applied to other fast-growing developing countries. Using cross-country data, we find evidence that considerable migration from rural to urban areas and the uneven growth between export and import sectors depress real exchange rate appreciation in developing countries.