

# **Roads and the Real Exchange Rate**

**Qingyuan Du**  
Monash University

**Shang-Jin Wei**  
Columbia University

**Peichu Xie**  
Peking University

July 2018

## **Summary**

The real exchange rate is a key relative price that directly affects many other relative prices across countries. The real exchange rate is also often a source of international tensions - witness the intense debate about whether the real exchange rate of the Chinese currency is undervalued. In this paper, we argue that the existing literature on the real exchange rate may have missed some economically important determinants.

In particular, we study the effect of transport infrastructure on the real exchange rate. After presenting a theoretical model that lays out the logic for how the former could affect the RER, we proceed with both cross-country and within-country evidence. One key statistical tool we use is Bayesian Model Averaging (BMA), a relatively demanding way to select robust determinants.

We reach two relatively strong conclusions. First, while the list of robust determinants of the real exchange rate is not long, transport infrastructure belongs to that list. Many other potential determinants proposed in the literature, such as net foreign asset position or terms of trade, turn out to be not robust. Second, in terms of economic significance, the infrastructure

effect follows closely the well-known Balassa-Samuelson effect and is one of the most important explanatory variables for real exchange rate movements, especially in developing countries..