## **Preface**

The Chinese government is trying to internationalize the renminbi (RMB). But what are the real reasons for doing it? Will it succeed? What are the factors working in its favor? What are the impediments? What are the implications for the rest of the world?

In this book, I explain how the problem with the international monetary system since the demise of the Bretton Woods system and the recent global financial crisis prompted China to seek independence from the dollar standard. One way is to make the RMB a widely accepted currency internationally. China, however, is in an awkward position. On the one hand, it is the second largest economy and the largest trading nation in the world, and it will likely become the largest economy before long. This works in favor of the internationalization of the RMB. On the other hand, China is still an emerging economy, meaning that its financial and legal institutions are still immature compared with the more advanced system in the West. Yet, China does not want to fully integrate its financial system with the West any time soon. As currency internationalization requires the currency to be largely convertible in the capital account, this factor works against the internationalization of the RMB. Thus, China tries to internationalize its currency in its own unique way, i.e., by adopting the "one currency, two markets" approach, which entails establishing a global offshore RMB market. Through this strategy, China sets up a firewall between the onshore and offshore markets, allowing full convertibility of RMB in the offshore market but partial convertibility in the onshore market. Behind this approach are a number of policy measures. Among all the policy measures, I shall highlight financial market liberalization, capital account opening and the offshore RMB centers, especially Hong Kong. In telling my story, I shall invoke economic theories to support my arguments and

empirical facts to support my theory. Based on my theory, I conclude that China's economic size, its commitment to sufficiently free capital mobility, the development of a deep, broad, and liquid financial market, and people's confidence on the RMB are the four key factors for the success of RMB internationalization. China has economic size, but it needs to work on the other three factors. It is not at all clear whether and when China would achieve the degree of capital mobility and financial market development sufficient to make the RMB a significant international currency on a par with, say, the euro, not to mention the USD. Moreover, it seems unlikely that a country without a contestable democracy, independent judiciary, and a truly free press to constrain the government can secure the confidence of the world in its currency. Thus, my conjecture is that, in the intermediate term, the RMB can only be a distant third payment currency (behind the USD and the euro). In the longer run, because of China's large GDP and continuing reforms and opening, and the world's central banks' demand for safe assets for foreign exchange reserves, the world may become a multi-reserve-currency system, with the USD, euro, and RMB being the three main reserve currencies. However, the road for the RMB to get there may be quite long and uncertain.

## LITERATURE REVIEW

Many outstanding books directly or indirectly related to RMB internationalization have been written. For example, Eichengreen (2011) gives a historical account and interpretation of the rise and fall of the USD and conjectures concerning the future of the international monetary system (IMS). He thinks that it is more likely for the RMB to become a regional currency than a global currency as it is hard for China to give up exchange rate stability and capital controls entirely. He argues that to give up those things China has to let go of its development model, the pillars of which are financial repression and a stable exchange rate. He argues that the dominance of the USD will continue in the foreseeable future unless the United States causes

self-inflicted injuries to its own financial system, such as a dollar crash caused by the budget deficit running out of control. However, even if there is no dollar crash, the dominance of the USD will weaken with the rise of the Chinese RMB and currencies of other developing countries such as the Indian rupee. He conjectures that the future will be one with multiple international currencies, and that the USD will have to compete for business in order to maintain its dominant position.

Eichengreen and Kawai (2015) is a valuable and informative edited volume about RMB internationalization consisting of multiple articles discussing a wide range of topics concerning the internationalization of the RMB. Its strength is its broad coverage and the expertise of the authors. However, because it is written by many authors dwelling on many topics, it does not have a consistent theme.

Overholt, Ma, and Law (2016) is a well-researched, comprehensive, and informative book about RMB internationalization with a consistent theme. They project an optimistic view about the future of RMB internationalization. One distinguishing feature of the book is the emphasis of the importance of the development of the onshore bond market in China, which I think is interesting. It is worth reading for anyone who cares about RMB internationalization.

Cheung, Chow, and Qin (2017) is an insightful book about the RMB. It focuses more on the RMB exchange rate than its internationalization, though it devotes two chapters on RMB internationalization, encompassing topics as wide as the offshore market, the measures taken by the Chinese government to promote the use of RMB overseas, and the latest developments. It is quite an informative source.

Prasad (2017b) is a well-written and comprehensive book on RMB internationalization that focuses exclusively on RMB internationalization, with a lot of details about the history, the policies, and the latest developments. Prasad points out the rapid rise of the use of the RMB internationally, but he also cautions that the

currency started from a very low base, and that China is still a developing country with a relatively immature financial system and a rather closed capital account. He emphasizes that the RMB will fail to be a safe-haven currency as long as China lacks a set of credible checks and balances to discipline its government so as to give foreigners confidence about the currency. He thus concludes that the degree of RMB internationalization will only be moderate in the foreseeable future, with the RMB comprising no more than 10 percent of total foreign reserves of the world (as of the end of June 2019, the shares for the USD and euro are 61.6 percent and 20.3 percent respectively).

Subacchi (2017) is an informative book about RMB internationalization. The author points out that although China is the second largest economy and the largest trading economy, its currency is a "dwarf currency," and this is one of the motivations for the Chinese to internationalize the RMB. However, China is still under financial repression, and its currency is still not convertible in the capital account. So, China has to adopt an unconventional approach. Subacchi points out that the main "RMB strategy" of China is to build offshore RMB centers, especially the one in Hong Kong, in order to facilitate capital account opening and to encourage RMB trade settlement so as to allow the RMB to flow outside China and create the market thickness of the RMB outside China.

Eichengreen, Mehl, and Chitu (2018) explores the more general topic of how global currencies work instead of focusing on RMB internationalization. The authors propose a "new view" to replace the "traditional view" about the extent to which the leading reserve currency dominated the market. The traditional view argues that the leading currency all but monopolized the market as network externalities and first-mover advantage led to a "winner takes all" situation. This is due to the high liquidity and low transaction cost of keeping, buying, and selling the assets denominated in the leading currency. The new view, however, argues that the force of network externalities is not strong enough to lead to a "lock-in effect" and

"winner takes all" effect for the leading currency. Instead, several reserve currencies can coexist so as to realize the benefits of diversification. The theoretical basis of the new view is built on a literature on technology standards that focuses on open systems, in which users of a particular technology or system can interact with those using other technologies or systems. The technical barriers between different systems can be circumvented by "gateway technologies" that enable users to overcome incompatibilities between systems and integrate competing systems into an extended network. The implication of the new view is that "The twenty-first-century Triffin Dilemma [of the USD] can be resolved through the development of other national sources of international liquidity." The euro and the RMB are two obvious candidates. Consequently, the book seems to support a somewhat optimistic view about the prospects of RMB internationalization.

However, none of the books above has devoted enough space to rigorously explaining economic theories to the general reader and applying them to analyze the issues related to RMB internationalization. By contrast, in this book, I base my arguments on economic theory that is accessible to readers who only have some basic knowledge of economics but no deep knowledge of international macroeconomics and finance. For example, I explain in simple economic language the theories of the "open-economy trilemma," coalescing effect, thick market externalities, uncovered interest parity, and the sequence of liberalization, and apply them to the real world. A second distinguishing feature of this book from the previous literature is that, instead of just qualitatively assessing the prospects of RMB internationalization, I carry out rigorous quantitative assessments. Making use of a proprietary data set from SWIFT, I carry out an econometric study to estimate the determinants of a currency's share in total international payments and use it to predict the future payment share of the RMB, an indicator of the degree of internationalization of the currency. I find that financial development and capital account openness are much more important than the GDP

of China in determining the payment share of its currency. My model predicts that it is possible that, by 2030, RMB can rank a distant third (behind the USD and the euro) in the global ranking of payment currencies, but this is possible only if China greatly speeds up its financial development and capital account opening in the next decade. I believe my quantitative assessment is more convincing than any qualitative one in making the point that China's economic size alone cannot make the RMB an international currency. The third distinguishing feature of this book is that I argue that there is a positive feedback effect (or synergy) between capital account liberalization and domestic financial sector reform. This argument provides the rationale for using the internationalization of RMB to force domestic financial sector reform. This is the idea of daobi (倒逼), which I believe is (silently) advocated by some quarters in the Chinese government. I argue that daobi is one important motivation of internationalizing the RMB. For this reason, the sequence of liberalization in China should not strictly follow that of conventional wisdom, namely financial market liberalization should take place before capital account liberalization. Instead, the two liberalization initiatives should proceed interactively in tandem. Finally, my book differs from the previous literature by providing a detailed coverage of the offshore RMB market in Hong Kong and the new international payment system of China (Cross-Border Interbank Payment System, CIPS), complete with a mathematical model that explains the relationship between economic variables in the onshore and offshore markets, such as the interest rates and exchange rates.

I have inserted a few "boxes" in the book to carry more technical/theoretical materials or case studies. They are intended for readers who are interested in the details. For general readers, the boxes can be skipped without missing the main storyline of the book.