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THE INFLUENCE OF RMB INTERNATIONALIZATION ON THE CHINESE ECONOMY

THEORY AND POLICY

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**THE INFLUENCE OF RMB INTERNATIONALIZATION ON
THE CHINESE ECONOMY: THEORY AND POLICY**

Qiyuan Xu and Fan He



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ACRONYMS

BoP	balance of payments
CNH	offshore RMB market
CNY	onshore RMB market
FDI	foreign direct investment
forex	foreign exchange (market)
FTZ	free trade zone
HKMA	Hong Kong Monetary Authority
IIP	international investment position
IWEP	Institute of World Economics and Politics
ODI	overseas direct investment
PBoC	People's Bank of China
QE	quantitative easing
RMB	renminbi
RFDI	RMB foreign direct investment
RODI	RMB overseas direct investment
RQDII	RMB Qualified Domestic Institutional Investor
RQFII	RMB Qualified Foreign Institutional Investor
SAR	Special Administrative Region

EXECUTIVE SUMMARY

With a balance between radicalism and gradualism, renminbi (RMB) cross-border settlement covers all of the items in China's balance of payments (BoP), including financial accounts, although some of these accounts are still controlled by means of quotas and administrative approval. By the end of the first quarter in 2014, the amount of RMB trade settlement had reached ¥11 trillion since the pilot scheme was launched in July 2009.

RMB cross-border settlement has become increasingly important for monetary authorities in terms of macroeconomic policy frameworks. This is especially the case with the more sophisticated conditions in global monetary markets, which result not only from the non-traditional monetary policies employed by the European Central Bank and the Bank of Japan, but also the ongoing quantitative easing (QE) tapering by the US Federal Reserve and the spillover effects on emerging economies. It is increasingly important to evaluate the potential influence of RMB internationalization on China's macroeconomy.

A framework, which includes monetary supply and demand, was created to analyze the influences of RMB cross-border settlement on China's domestic interest rate, asset price and foreign exchange (forex) reserves. RMB settlement behaves in different ways with the various items in BoP, such as imports, exports, foreign direct investment (FDI), overseas direct investment (ODI), RMB Qualified Foreign Institutional Investor (RQFII), RMB Qualified Domestic Institutional Investor (RQDII) and cross-border loans. It was found that RMB settlement in different items leads to different effects on China's economy.

For RMB export settlement, RMB overseas direct investment (RODI) and RQFII at the initial stage, RMB settlement does not affect China's interest rate and asset price. In addition, more favourable to the People's Bank of China (PBoC), foreign exchange reserves increase less with these reforms; therefore, they should be promoted with priority. However, it is necessary to stress that all settlements should be based on real transactions in order to prevent fake exports.

For RMB import settlement, RODI and RQDII at the initial stage, these pilot schemes exert influences on China's economy through interest rate changes, causing an additional increase of forex reserves. Although other short-term items in the financial account could also impact the interest rate, the items in this group are either based on real business such as trade and investment or on financial transactions at the initial stage on a small scale. Therefore, this group has a relatively moderate influence on the interest rate.

It is important to remember that this negative by-product is a result of the assumption that the PBoC targets exchange

rate stability. If the PBoC sets the exchange rate system to be flexible enough, then such pilot schemes will not cause an increase of forex reserves. It is thus essential to advance exchange rate regime reforms to keep up with the steps of RMB internationalization.

With the progress in RQDII and RQFII, the endorsement of issuing dim sum bonds for capital backflows and with the increase in lending from the offshore to the onshore market, these types of RMB cross-border settlements will not exert pressure on forex reserves; however, they do have an impact on the money market. If the amount of RMB flowing through these items is large enough, the interest rate and asset price will be significantly affected, and could be in conflict with the intended monetary policy. These types of transactions are the most risky to monetary authorities; therefore, they should be cautious regarding these items. In the short term, RMB settlements in these kinds of items should be regulated with quotas. In the medium to the longer term, these items should be opened in a gradual way.

INTRODUCTION

In July 2009, China launched an RMB trade settlement pilot scheme in five cities in the mainland (Shanghai, Guangzhou, Shenzhen, Zhuhai and Dongguan), but in 2009 trade settlement grew more slowly than expected.¹ In June 2010, the pilot was expanded to more provinces and to cover all current account activities, including services and income transactions. Since then, RMB cross-border settlement has surged. By the end of the first quarter of 2014, the amount of RMB trade settlement had reached ¥11 trillion. In 2011, direct investment² was also included in the pilot scheme. At the end of March 2014, RMB investment settlement totalled ¥1 trillion. RMB cross-border settlement covers all transactions in China's BoP, including financial accounts, although some of these accounts are still controlled by means of quotas and administrative approval.

With the remarkable progress of the pilot scheme, RMB cross-border settlement has become increasingly important for monetary authorities in terms of macroeconomic policy frameworks. This is especially the case with more sophisticated conditions in global monetary markets, which result not only from non-traditional monetary policies employed by the European Central Bank and the Bank of Japan, but also the ongoing QE by the US Federal Reserve System and the spillover effects on emerging economies.

1 At the beginning of the pilot scheme, the Shenzhen branch of the PBoC forecast that the amount of trade settlement would be more than ¥30 billion at the end of 2009. However, the outcome was rather depressed, at less than ¥5 billion.

2 This includes overseas and inward direct investment. The outward direct investment pilot was launched in January 2011, and the inward direct investment pilot in September 2011.

In this context, an increasing volume of RMB cross-border settlements will make it more difficult for monetary authorities to avoid the open economy “trilemma.”³ It is therefore of increasing importance to evaluate the potential influence of the RMB internationalization to China’s macroeconomy.

A POLICY REVIEW OF RMB INTERNATIONALIZATION

As early as the beginning of the 2000s, the RMB was used by market players in some neighbouring economies such as Hong Kong, Cambodia, Vietnam and Mongolia. Before the pilot scheme in 2009, RMB internationalization mainly took place in two fields. First, China signed bilateral currency swap agreements with Vietnam, Laos and six other economies during the period from 2003 to early 2009, which, correspondingly, promoted the small-scale, cross-border trade between China and its neighbours. Second, the RMB was permitted limited circulation in Hong Kong; however, the required reserve ratio on deposits at the time was 100 percent, which made money creation impossible. Furthermore, all of the reserves were transferred back to the Shenzhen branch of the PBoC by the clearing bank in Hong Kong (i.e., Bank of China, Hong Kong). Before 2009, RMB internationalization had developed on two fronts. On one hand, there was an accumulation of massive cross-border settlement. According to an investigation by the Department of Statistics in the PBoC, the cross-border RMB flow in 2004 was ¥771.3 billion. On the other hand, the actual stock abroad was negligible. In the same year, the net export of RMB was only ¥9.9 billion (Research Group for RMB Cross-border Flows 2005).

After the 2008 financial crisis, the blueprint for the RMB trade settlement pilot scheme was jointly published by the State Council and six of its ministries on July 2, 2009. According to Kenen (1983), RMB internationalization developed in the following three areas:

- **Vehicle currency:** The RMB plays this role both through China’s BoP (that is, the transactions related to RMB cross-border settlements) and in RMB offshore markets. In either of these cases, the RMB is traded in various forms. For private actors, it is trading for international trade or finance, while for official actors, it is trading to intervene in the forex market.

- **Store of value:** Private agents hold RMB assets as a portfolio and foreign governments hold RMB assets as forex reserves.
- **The RMB serving as a unit of account:** In this case, for the private sector, the RMB acts as the currency for denominating trade and financial transactions; for monetary authorities and central banks, it acts as the anchor for pegging the local currency.

Progress of RMB Cross-border Settlements

RMB cross-border settlement has been driven by policies that adhere to the principle of gradualism. Generally, this process is based on the following sequence, according to China’s BoP:

1. Trade settlement has to be liberalized before financial settlement.
2. Long-term items come before short-term items in the financial accounting.⁴
3. The items related to capital outflows come before the inflow items.

The progress of RMB cross-border settlements can be summarized as follows.

RMB settlement in the current account, which occurs mainly in trade, is the principal form of RMB cross-border settlement. As mentioned above, trade settlement in RMB was initiated by the pilot scheme launched on July 2, 2009. It was further expanded to the entire current account on June 22, 2010. To the end of 2013, RMB trade settlement accounted for more than ¥10 trillion and, in the first quarter of 2014, the amount of trade settlement in RMB had reached ¥1.65 trillion. In December 2013, a report from SWIFT revealed that the RMB had displaced the euro as the second most used currency in global trade finance, with its share jumping from 1.89 percent in January 2012 to 8.66 percent in October 2013. Similarly, the ratio of RMB used in China’s trade settlement reached 11.7 percent for 2013.

3 In 1962 and 1963, a trilemma (or “impossible trinity”) was introduced by Robert Mundell and Marcus Fleming. It refers to the tradeoffs among the following three goals: a fixed exchange rate, national independence in monetary policy and capital mobility. According to the Mundell-Fleming model of 1962 and 1963, a small, open economy cannot achieve all three of these policy goals at the same time: in pursuing any two of these goals, a nation must forego the third (Obstfeld, Shambaugh and Taylor 2005).

4 For example, direct investment RMB settlement is encouraged more than portfolio items. These will be discussed later.

Table 1: The Policy Progress for RMB Cross-border Settlement

	Debit	Credit	
Current Account			
Goods	Import (2009)	Export (2009)	
Others*	Services, incomes and current transfers (2010)		
Capital and Financial Account			
Direct Investment	ODI (2011)	FDI (2011)	
Portfolio Investment	Panda bonds (2005) RQDII (2006)	Bonds	Dim sum bonds (2007)
			Inter-bank bonds (2011) RQDII (2011)
		Stocks and funds, RQFII (2012)	
Others	Cross-border R-loans (2012)		

Sources: See Annex for the full list of sources.

NOTE: The year shown in brackets indicates when the corresponding pilot scheme was launched.

*RMB settlements in other items were launched earlier in February 2004, but were limited between Hong Kong and the Mainland with some other constraints. The amount of RMB abroad is very negligible as a result (Xu and Liu 2009).

The pilot scheme for RMB settlement in direct investment is an important channel for offshore RMB to flow back to the Mainland. Three policy measures were carried out successively in 2011 in this field. In January 2011, the PBoC published the “Administrative Measures for Pilot RMB Settlement of Overseas Direct Investment.” This measure opened the channel for limited RODI. From January 2011 to March 2014, the amount of RODI has exceeded ¥164 billion. In addition, China’s ODI was ranked third in the world, a solid basis for further development.

In September 2011, China’s Ministry of Commerce released an announcement on the “Issues Concerning RMB Cross-border Direct Investment”; in October 2011, the PBoC announced the “Administrative Measures on the RMB Settlement Business Relating to Foreign Direct Investment.” Both policies opened channels for limited RMB foreign direct investment (RFDI). RFDI reached ¥0.96 trillion in March 2014.⁵

Compared to RODI, the amount of RFDI is much larger. This is due to the fact that the current account captures RMB net exports, and strict regulation has been employed for other items in the financial account. Consequently, RFDI is an important way for offshore RMB to flow back into the Mainland. In 2013, RODI and RFDI accounted for 21.6 percent of the total cross-border direct investment.⁶

In addition to direct investment, RMB flows back into China through the financial account with an increasing quota. These items mainly refer to RMB portfolio investment and lending. In particular, this is also the principal area where monetary authorities are confronted with the contradiction of the trilemma. With the PBoC’s goal to stabilize the RMB exchange rate, the liberalization of short-term items in the financial account will definitely challenge the independence of monetary policy of the PBoC. Most of the disputes on RMB internationalization focus on this issue.

There are two ways for onshore RMB to outflow through portfolio investment. One is through panda bonds, which are the RMB-denominated bonds issued in onshore markets by foreign institutions. The other is RQDII. There has been a significant and persistent expectation of yuan appreciation over most of the last decade, with the rate of RMB bonds always markedly higher onshore than offshore. Consequently, it is unreasonable for foreigners to invest heavily in RMB, or for the Chinese to invest a great amount of RMB abroad. As a result, this kind of business develops relatively slowly. The RQDII accounted for only 5.2 percent of total QDII in 2013.

⁵ This amount is derived from CEIC data (www.ceicdata.com/en/countries/china) and PBoC data (www.pbc.gov.cn/publish/zhengcehuobisi/591/index.html).

⁶ Ibid.

There are two kinds of mechanisms available for offshore yuan to flow back into the Mainland (onshore) through portfolio investment. The first is Chinese institutions' issue of RMB-denominated dim sum bonds in Hong Kong, where the collected proceeds flow back into the onshore market. In fact, foreign institutions can also issue dim sum bonds in Hong Kong, and then invest RMB in the offshore market. However, with the background of a persistent interest gap between RMB and US dollar assets, dim sum bonds have, so far, only been attractive to Chinese institutions. At the same time, foreign institutions have shown much less interest, except that they want to collect RMB offshore and then invest onshore. As a result, 80 percent of the issuers of dim sum bonds are from the Mainland and 95 percent of the funds raised from the dim sum bonds flowed back into the Mainland as well. In other words, dim sum bonds are also a way for the offshore yuan to flow back. During the years before the trade settlement pilot scheme was put into place in 2009, there was little development of the dim sum bond market. From 2007 to 2009, the amount of dim sum bonds issued maintained a level of ¥10 billion annually. When the authorities relaxed regulations, the amount rose to ¥35.7 billion in 2010, and ¥100 billion in 2011. It then stayed above ¥100 billion in 2012 and 2013.

The second way for the RMB to flow back is the RQFII, in which foreign institutions can invest RMB in the Chinese domestic securities market, which includes bonds, stocks and funds. Since the beginning of 2011, 13 foreign institutions have been approved by the PBoC to invest in the domestic inter-bank bond market, which mainly refers to the markets for central bank bills, policy finance bonds and government bonds. In early 2012, RQFII was expanded to include shares and funds. Up until April 30, 2014, the quota of RQFII amounted to ¥215.6 billion.

RMB cross-border lending is a pilot scheme limited within a special area, such as Qianhai in Shenzhen,⁷ Shanghai free trade zone (FTZ) and Tianjin Eco-city. In 2012, the government of Shenzhen published *Ideas on Improving the Supports to Real Economy Development by Financial Service*, in which it presented the idea of RMB cross-border lending between Shenzhen and Hong Kong (Shenzhen government 2012). This was then approved by the central government. In 2013, RMB lending through Qianhai exceeded ¥15 billion. Based on this pilot scheme, Shanghai FTZ published the rules for the implementation of RMB cross-border lending in February 2014, and on February 21, 2014, the first ¥100 million RMB lending was carried out in Shanghai FTZ. In March 2014, there

was another RMB lending milestone in Tianjin Eco-city of ¥50 million.

During the past five years, RMB internationalization has made significant progress in both trade items and financial channels. In turn, it has greatly promoted the role of the RMB as a medium of exchange. According to SWIFT, in January 2014, the RMB ranked the seventh most used currency for payments worldwide (SWIFT 2014).

The Development of the RMB Offshore Market

Based on RMB exports through cross-border settlements, RMB stock accumulated and the RMB offshore market came into being. At present, besides Hong Kong, there are also some other active offshore markets, such as London, Singapore, Taiwan Province of China, Luxembourg and Frankfurt. Until March 2014, the yuan-denominated asset pools in these offshore markets amounted to ¥1.5 trillion, mainly in Hong Kong and largely in the form of RMB deposits and RMB bonds. Indeed, the deposits have the lion's share of the asset pool.

So far, there is a preliminary worldwide RMB network that is composed of three types: the RMB onshore market; the RMB offshore centre; and the RMB offshore hubs (Subacchi and Huang 2012) that correspond to Shanghai, Hong Kong and other offshore markets. Around 70 to 80 percent of RMB settlements come from the settlement between the Mainland and Hong Kong. Hong Kong is a bridge or window for the Mainland to export the yuan to all other RMB offshore hubs. Therefore, Hong Kong plays a central role in the RMB offshore market. The offshore hubs include other international cities that are now making great efforts to build the platforms for RMB clearing transactions. Up until now, RMB offshore markets in Southeast Asia have also included Macau, Malaysia, the Philippines, Cambodia and Laos, and China is in the process of expanding the market to Europe and the Americas. In 2014, four RMB clearing banks were designated in London, Frankfurt, Paris and Luxembourg, which would create conditions favourable to the RMB being used globally.

The RMB as a Unit of Account

For the private sector, the RMB acts as the denominating currency for trade and financial transactions, and for monetary authorities, it acts as the anchor for pegging the local currency.

From the perspective of the private sector, there are no longer any institutional barriers for the RMB to play the role as the denominating currency for trade and financial transactions. An agent is free, in principle, to choose the RMB as the denominating currency, but in practice it is more difficult. Compared with the role of an invoicing currency, the RMB has fallen behind in its role as a denominating currency to some extent (Li 2013). In some

⁷ Qianhai is a small area, 15 km², lying between Shenzhen City and Hong Kong. In 2012, the Shenzhen government made efforts to construct Qianhai as a pilot area for financial reforms, to find a way to lead to positive interactions between the real economy and the financial sector. Following the example of Qianhai, the Shanghai FTZ and Tianjin Eco-city were established.

trade settlements, the RMB is the invoicing currency while it is still denominated in US dollars in contracts. According to the PBoC's data for 2012 and 2013, the RMB was the denominating currency for 50 percent of RMB trade settlements. This is much higher than the limited sample investigated by the Institute of World Economics and Politics' (IWEP's) work team in November 2013.⁸

Bo Li (2013) presents two reasons for the underdevelopment of the RMB as a currency of denomination. At the micro level, the pricing power of China's exporters is rather weak. At the macro level, on the other hand, the openness of China's domestic financial market to foreign agents is still rather limited. Considering these conditions, there is a long way to go to foster the RMB as a denominating currency.

Due to the reasons above, in the private sector, the roles of the RMB as an invoicing currency and a denominating currency are, to a great extent, not consistent with cross-border settlements (He et al. 2011). Consequently, these two roles and the corresponding data should be assessed cautiously.

WHY RMB INTERNATIONALIZATION HAS DEVELOPED AS A MODEL OF "TRADE SETTLEMENT PLUS OFFSHORE MARKET"

From the history of currency internationalization, Jianfeng Yin (2011) describes two models: one is "trade settlement plus offshore market" and the other is "capital account plus multinational enterprises." The latter is more sustainable from a long-run perspective, while the former is more fragile, or even dangerous, as seen with the Japanese yen in the 1980s and 1990s. As discussed earlier, RMB internationalization has, thus far, developed typically in the model of trade settlement plus offshore market. Why does the RMB's behaviour follow this model?

Convertibility is one of the conditions for currency internationalization, which implies the necessity to fully liberalize the capital account. But considering the financial system's fragility in China, a complete liberalization of the capital account could not be applied in China's case (Gao and Yu 2009). With the regulations on the capital account, however, there is a strong motivation for the authorities to promote RMB internationalization. Two problems would then inevitably confront the Chinese government: First,

how can a foreign agent obtain liquidity in RMB with the regulation on China's capital account? Second, where can foreign institutions find opportunities to invest their liquid RMB?

For the first problem, foreign agents could get RMB liquidity from the offshore markets. Jun Ma (2011) has pointed out that it is necessary for the scale of the RMB's asset pool to be large enough so it is possible for the market to determine the proper price for yuan-denominated assets. The threshold is empirically equal to US\$300 billion, which is more than ¥1.8 trillion. But what are the sources for this amount of offshore market RMB (known as CNH)? Ultimately, it should come from the RMB onshore market (known as CNY) through BoP transactions. As a result of the relatively high controls on the capital account, CNY has, so far, mainly been exported through the current account, especially through trade items, and then exchanged into CNH. This is consistent with the data presented above in the section "A Policy Review of RMB Internationalization."

To address the second problem, that of holding RMB assets with a limited accessibility to the onshore market, a recommendation has been made by Daokui Li and Linlin Liu (2008) to promote RMB internationalization through a dual system. That is, to develop the domestic financial market and, at the same time, establish an RMB offshore market (CNH market). Because Hong Kong is a Special Administrative Region (SAR) of China, the risks of Hong Kong's offshore development could be prevented by the collaboration between the central government and Hong Kong SAR. Hence, during the formation of the offshore CNH market, in Hong Kong RMB deposits, dim sum bonds, yuan exchange markets in spot and futures, and even RMB initial public offerings listed on the Hong Kong Stock Exchange, were developed. These financial products denominated in RMB represent a yuan asset pool. And, to a great extent, they provide investment opportunities for foreign agents.

These two problems, however, are not completely solved through these means. According to data from the Hong Kong Monetary Authority (HKMA),⁹ time deposits rose remarkably compared to demand deposits in 2010. Currently, time deposits account for more than 70 percent of total RMB deposits in Hong Kong. The interest rate for time deposits in the CNH market is rather low compared with the onshore market. But CNH time deposits continue to grow more rapidly than other CNH assets. This demonstrates the lack of opportunities for foreign investors in the CNH market, which diminishes the interest of foreign investors and restricts the development of RMB internationalization.

⁸ In November 2013, the IWEP (at the Chinese Academy of Social Science) made an investigation based on a small sample of six companies in Guangdong Province in south China. The ratio for RMB as the denominating currency for the pioneer electronic enterprise in the investigation was only 15 percent, and this enterprise is famous in China and one of the most competitive producers in exports. However, it is still an investigation with a very small sample, so one should be cautious in comparing it with the PBoC's data.

⁹ This data can be found in CEIC data (www.ceicdata.com/en/countries/china).

Chinese authorities launched pilot schemes for RMB cross-border settlement in capital and financial accounts as a limited reaction to these problems. As shown in Table 1 and discussed above, in 2011, foreign institutions were permitted to invest in the domestic inter-bank bond market, and in the same year, the threshold for issuing dim sum bonds was significantly lowered. Also in 2011, RODI and RFDI were introduced into the pilot scheme, and in 2012, the pilot RMB cross-border lending scheme was launched.

In conclusion, RMB internationalization operates in a model of trade settlement plus offshore market. While the scale of the CNH market is not large when compared to the domestic financial market, the RMB flow in the capital account is large, and the amount of trade settlement is even larger. In fact, they are all growing with a striking velocity. It is apparent that studying the potential impacts of RMB cross-border settlement on China's domestic economy is critically important.

EXISTING LITERATURE ON THE IMPACT OF RMB CROSS-BORDER SETTLEMENTS ON CHINA'S ECONOMY

The Expectation of RMB Appreciation That Accompanies the Inflow of "Hot Money"

In the pilot scheme, a critical condition is the ongoing expectation of RMB appreciation in global financial markets. To promote RMB internationalization further, it is possible for the PBoC to liberalize more of the capital and financial accounts, especially for inflow items in the financial accounts. However, with the background of exchange rate expectations and cross-border interest rate spreads, such liberalization will likely result in a large amount of "hot money"¹⁰ or inflows (Ming Zhang 2011).

Furthermore, in the case where sustained RMB appreciation is no longer expected, the hot-money-dominated RMB cross-border settlements could suddenly stop, which might also cause instability in the CNH market. The investigation by Fan He et al. (2011) has identified CNH deposits as hot money, which carries potential risks. Barry Eichengreen (Wei and Davis 2011) also points out that if the public believes the yuan will continuously appreciate then only the agents who receive payments in RMB have the motivation to participate in RMB internationalization. In this case, the settlement will inevitably be imbalanced.

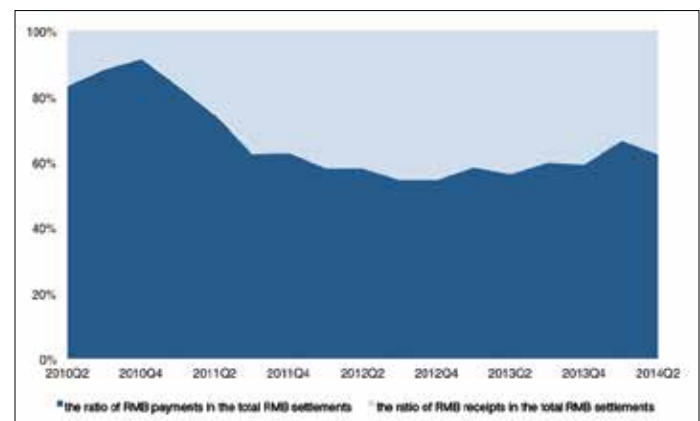
10 Hot money is money that moves at short notice from one financial centre to another in search of the highest short-term interest rates for the purposes of arbitrage, or because its owners are apprehensive of some political intervention in the money market, such as a devaluation. Hot money can influence a country's BoP (*Oxford Dictionary of Finance and Banking*, 214).

The analysis by Peter Garber (2011) argues that with the background of expectation of RMB appreciation, even the RMB settlements based on real businesses have the appearance of speculation and, therefore, can exert an influence on China's economy. Similarly, Bo Li, Wu Ge and Pei Cheng (2013) analyze to what extent the role of expectation of RMB appreciation plays in RMB cross-border settlements. The conclusion is that although the impact coefficient on RMB settlements from the expectation of appreciation is statistically significant, the expectation of appreciation itself is not decisive.

In the beginning of 2013, taking advantage of RMB trade settlements, there were large-scale flows of hot money into China through fake trade invoices, in order to earn profits from the interest rate spreads and exchange rate gap between onshore and offshore markets (Wu and Xu 2014). This indicates that speculation was an important driver for RMB cross-border settlement, at least during that time. Therefore, the RMB trade settlement pilot scheme opened up new avenues for hot money to flow across the border, but also deteriorated the effectiveness of capital account regulations.

Robert McCauley (2011) and Takatoshi Ito (2011) identified the regulations that did remain effective at that time. Yongding Yu (2011) points out that although they were effective to some degree, the RMB trade settlement pilot scheme and the development of the CNH market have also promoted the flow of hot money. There are also lessons from the internationalization of the yen and the development of Tokyo offshore markets that should be considered; therefore, the PBoC should be cautious about the pilot scheme (Yin 2011).

Figure 1: The Ratio of RMB Receipts and Payments in Total RMB Settlements



Source: The ratio for 2010 is calculated from CEIC monthly data, and the ratio since 2011 is from the PBoC's quarterly policy reports for 2011–2014, available at www.pbc.gov.cn/publish/english/982/index.html.

The Acceleration of Forex Reserve Accumulation and the Implications for the PBoC's Monetary Policy

Since 2009, the payment of RMB accounted for more than 60 percent of the total RMB settlements, and in the first quarter of 2014, this ratio reached 66.7 percent, which means in the same quarter, the receipt of RMB accounts for only 33.3 percent of the total settlement (see Figure 1).

On one hand, RMB import settlement decreases the demand of forex in the market, but on the other hand, RMB export settlement also decreases the supply of foreign exchange. However, according to the data above, the former effect is stronger and decisive, which results in an additional net supply of forex in the market. Authorities have to buy more forex in the market to achieve the target of exchange rate stability. As a result, forex reserves increase. Yin (2011) also discovered that China is confronted with additional risks for assets denominated in US dollars with the development of RMB trade settlement.

The same conclusion could be drawn from the international investment position (IIP). If foreign institutions hold more RMB assets, it means the PBoC will bear, correspondingly, more RMB liability, and at the same time, the assets on the PBoC's balance sheet will expand by a corresponding amount in forex (Zhang Bin 2011). This is the mechanism of additional increase of forex reserves owned by the PBoC. According to the estimate by Zhang Ming (2011), the imbalance of RMB trade settlement contributed an increase of US\$40.8 billion to China's forex reserves in the first quarter of 2011.

Moreover, when the monetary authority is obliged to buy more forex, it produces an additional monetary base at the same time. Such operations could potentially threaten the independence of the PBoC's monetary policy. Ping Chen and Xue Wang (2012) point out that it is necessary for the government to make the tradeoff between the dependence of monetary policy and the stability of the exchange rate, in the context of RMB internationalization and the liberalization of the capital account. It seems that there is a third choice for the PBoC; that is, it can carry out monetary sterilization with tools such as the central bank's bill or required reserve ratio. In this case, the PBoC can achieve the above two targets at the same time. But whether it is reasonable depends on the cost of the policy. Zhang Bin (2011) gives an answer for the third choice: because the yield rates on RMB liabilities are always higher than forex, especially the US dollar, the third choice of monetary

sterilization will definitely incur a financial loss on the PBoC's balance sheet.¹¹

RMB OUTFLOW TRANSACTIONS AND THEIR EFFECT ON CHINA'S ECONOMY

We will analyze how a specific item's RMB settlement exerts its influence on the economy. First, a benchmark is needed to compare with, which, in this case, is that the PBoC will intervene in the forex market in order to achieve stability in the RMB.

RMB Import Settlements

As illustrated above, RMB import settlement is the main channel for RMB outflow. Now we look at what the impact is for China when its imports are paid by the yuan instead of US dollars, given that other conditions are unchanged.

Benchmark case (B.1) basic assumptions:

- All international trade conducted by domestic Chinese companies is settled in US dollars.
- There is a trade surplus for China, and correspondingly there is an oversupply (US\$10 billion) of forex in the market.¹²
- In order to maintain the stability of the RMB exchange rate, the PBoC buys all of the US\$10 billion and, at the same time, produces a monetary base of ¥65 billion in the market (with the assumption that US\$1 equals ¥6.5). This allows the foreign exchange market in China to achieve equilibrium.¹³

Comparison case (C.1):

- Other conditions are unchanged — that is, the same trade surplus as in case B.1 and the same target for the PBoC — while China's importers use the RMB instead of US dollars to pay the amount of US\$2 billion (¥13 billion) following the changes of the RMB import settlement pilot scheme.

11 For example, in October 2014, the yield rate for one-year US Treasury bills was below 0.1 percent, while the yield rate for PBoC's one-year central bank bill was more than 3.5 percent. Actually, the monetary sterilization policy is mainly operated by increasing the required reserve ratio, with China's commercial banks suffering the cost correspondingly. The primary level for the annual lending rate in China is six percent.

12 It is also assumed that the US dollar is the only choice as foreign exchange in the world.

13 As mentioned above, the monetary authorities could carry out monetary sterilization tools. But, for cost reasons also mentioned above, the case is analyzed without sterilization. Consequently, in this study, the more monetary base produced by PBoC also means the more pressures for PBoC to carry out the sterilization and, hence, the potential costs.

- In the benchmark case, there was a US\$10 billion oversupply, while in the comparison case, there is an additional US\$2 billion decrease in US dollar demand in this market,¹⁴ which means the oversupply of US dollars is US\$10 billion plus US\$2 billion, without changes in the supply side in the forex market.
- To achieve the same target of exchange rate stability, the monetary authorities will have to buy all US\$12 billion, and at the same time inject ¥78 billion ($12 \times 6.5 = 78$) as the monetary base.
- With the payment to imports, there is a ¥13 billion outflow from the onshore market. Finally, it means that the monetary base increases by ¥65 billion ($78 - 13 = 65$).

With the money multiplier at a stable rate, from the above it can be concluded that RMB import settlements do not change the money supply. From the perspective of currency demand, the demand for RMB as an invoicing currency will increase in C.1, while it is the contrary for US dollar demand. Therefore, according to B.1, in the case of C.1, the money supply will not change, but the demand for yuan will increase in accordance with the real economy. As a result, the equilibrium interest rate will increase compared with B.1.¹⁵

In addition, from the view of the PBoC's balance sheet, there will be an increase of US\$2 billion for its forex reserves. This is an additional increase of forex reserves for the PBoC compared with B.1. This is summarized in Table 2.

Table 2: The Influence of RMB Import Settlement

	Benchmark Case B.1	Comparison Case C.1	Conclusions
Money supply (monetary base)	+ ¥65 billion	+ ¥ 65 billion	Money supply remains the same, but a modest increase in money demand. The equilibrium interest rate is higher in C.1.
Money demand	M_d	M_d+	
Balance sheet of the PBoC	+US\$10 billion (forex reserves)	+US\$12 billion (forex reserves)	In C.1, an additional increase of US\$2 billion in forex reserves.

Source: Author.

Note: M_d represents monetary demand in the benchmark case.

14 Since importers use ¥13 billion instead of US\$2 billion to pay, they do not need to buy US dollars in the forex market.

15 It is assumed that the domestic financial market is rather small compared with the global financial market. This is, so far, an appropriate assumption for China.

RODI

Benchmark case (B.2) basic assumptions:

- In this case, the amount of ODI is US\$2 billion, and is all assumed to be settled in US dollars.
- There is also an oversupply (US\$10 billion) of forex in the market, the same assumption as in B.1.
- In order to maintain the stability of the RMB exchange rate, the PBoC buys all of the US\$10 billion, and at the same time, produces a monetary base of ¥65 billion in the market (with the same assumption that US\$1 equals ¥6.5). The forex market in China therefore achieves equilibrium.

Comparison case (C.2):

- Through the RODI pilot scheme, domestic enterprises will invest ¥13 billion abroad.
- Based on the assumptions listed in B.2, there is a resulting oversupply of US\$12 billion in the forex market.
- To achieve the same target of exchange rate stability, the monetary authorities have to buy all the US\$12 billion, while at the same time injecting ¥78 billion ($12 \times 6.5 = 78$) as a monetary base.
- Considering the payment to ODI, ¥13 billion flows out from the Mainland. Ultimately, this means the monetary base increases by ¥65 billion ($78 - 13 = 65$), and the forex reserves of the PBoC increase by US\$12 billion.

From the above, the mechanism of RODI's influence is just a duplication of the RMB import settlement. Therefore, Table 2 could also be applied to this case.

RQDII

The case for RQDII is a little more complicated. Before the pilot scheme of RQDII, there was already a pilot scheme for QDII, with a rather limited quota, which is settled in US dollars. At the beginning of the pilot for RQDII, there was a similar framework compared with RMB import settlement and RODI. Table 2 would also apply in this case.

However, when RQDII expands rapidly, the benchmark for a QDII in dollars is no longer appropriate. In this situation, the benchmark case assumptions should be as follows:

Benchmark case (B.3):

- There is QDII in US dollars, but the amount is small enough to be regarded as zero.

- There is also an oversupply (US\$10 billion) of US dollars in the forex market, the same as was assumed in B.1.
- The PBoC buys all of the US\$10 billion, and at the same time, produces a monetary base of ¥65 billion in the market. Now, the forex market in China has achieved equilibrium.

Comparison case (C.3):

- The pilot scheme of RQDII, or more accurately the sizeable progress of RQDII, saw domestic enterprises launching RQDII investments of ¥5 billion abroad.
- Because the capital outflows are in the form of RMB, there is no shock to the forex market in China. The PBoC will intervene in the market as usual, as in the benchmark case B.3.
- The monetary base will decrease by ¥5 billion as a result of the outflow of ¥5 billion, and the forex reserves of PBoC will increase by US\$10 billion.

The conclusions that can be drawn by comparing benchmark cases B.3 and C.3 are shown in Table 3.

Table 3: The Influence of Remarkable Growth in RQDII

	Benchmark Case B.3	Comparison Case C.3	Conclusions
Money supply (monetary base)	+ ¥ 65 billion	+ ¥60 billion (65-5=60)	A decrease in money supply accompanied by a higher equilibrium interest rate, and a weaker money demand.
Money demand	M_d	M_d-	
Balance sheet of the PBoC	+US\$10 billion (forex reserves)	+US\$10 billion (forex reserves)	No changes.

Source: Author.

Note: M_d represents monetary demand in the benchmark case.

RMB INFLOW TRANSACTIONS AND THEIR EFFECT ON CHINA'S ECONOMY

RMB Export Settlement

Benchmark case (B.4) basic assumptions:

- All of the international trade by domestic companies in China is settled in US dollars.
- There is a trade surplus for China and, correspondingly, there is an oversupply (US\$10 billion) of forex.
- The PBoC buys all of the US\$10 billion and, at the same time, produces a monetary base of ¥65 billion in

the market. The forex market in China now achieves equilibrium.

Comparison case (C.4):

- Other things remaining the same: the RMB export settlement pilot scheme and enterprises receive export payments in yuan instead of US dollars, with an amount of US\$2 billion dollars or ¥13 billion.
- There is now a corresponding oversupply of US\$8 billion (10-2=8) in the forex market.
- The monetary authorities have to buy the US\$8 billion and, at the same time, inject ¥52 billion (8*6.5=52) as a monetary base.
- With the receipt of export payments from foreign importers, there will be ¥13 billion flowing back to Mainland China. This means that the monetary base increases by ¥65 billion (13+52=65).

From the perspective of money supply, the outcomes in B.4 and C.4 are the same. From the perspective of money demand, RMB export settlement will not change the domestic demand for RMB as the invoicing currency. However, in the case of C.4, the increase of forex reserves for PBoC will be less than in case B.4 by US\$2 billion. These cases are summarized in Table 4.

Table 4: The Influence of RMB Export Settlement

	Benchmark Case B.4	Comparison Case C.4	Conclusions
Money supply (monetary base)	+ ¥65 billion	+ ¥65 billion	No change.
Money demand	M_d	M_d	
PBoC balance sheet	+US\$10 billion (forex reserves)	+US\$8 billion (forex reserves)	A smaller increase of forex reserves in C.4.

Source: Author.

Note: M_d represents monetary demand in the benchmark case.

RFDI

The analysis for RFDI is the same as in RMB exports, except for different multiplier effects corresponding to export and FDI. Consequently, the increase in output will promote the demand for money in the domestic market, no matter which currency is chosen for settlement. That is, it does not matter if the FDI is in US dollars or in RMB, the investment multiplier is the same. Therefore, the conclusions are exactly the same as shown in the last column of Table 4. This is also the case for export.

RMB PROCEEDS FROM DIM SUM BONDS FLOWING BACK TO THE MAINLAND

There could be two options for a benchmark case:

- domestic enterprises issue bonds denominated in US dollars, and the capital then flows back to the Mainland in US dollars; and
- domestic enterprises issue RMB bonds in the onshore market.

However, after considering the following reasons, the latter was chosen as the benchmark case:

- with the long-term anticipation of RMB appreciation, dim sum bonds could not be a substitution for issuing bonds denominated in US dollars; and
- with a positive interest spread between dim sum bonds and bonds denominated in US dollars, dim sum bonds cannot be a substitution for the latter.

Benchmark case (B.5):

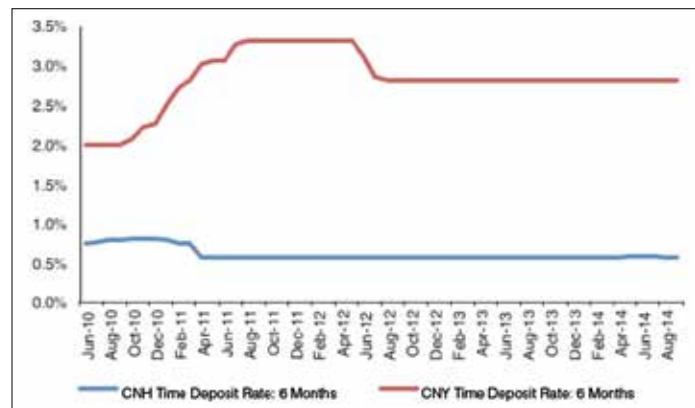
- Domestic enterprises issue RMB bonds in the onshore market to raise ¥1 billion, and there is no impact on money supply.
- The assumption is that all of the international transactions are settled in US dollars.
- There is an oversupply of US\$10 billion in the forex market.
- The PBoC buys all of the US\$10 billion and, at the same time, produces a monetary base of ¥65 billion in the market. The forex market in China now reaches equilibrium.

Comparison case (C.5):

- Domestic enterprises are approved to issue ¥1 billion of dim sum bonds in the offshore market. Capital of ¥1 billion then flows back to the onshore market. There is no shock to the forex market.
- The PBoC intervenes in the forex market as it does in B.5 above, and results in the same increase of forex reserves as in B.5, resulting in an increase of money supply of ¥66 billion ($65+1=66$).
- From the perspective of money supply, the increase in C.5 is more than B.5. From the angle of money demand, at the time that ¥1 billion is flowing back into the onshore market, the demand is not changed. However, due to the following two reasons, the equilibrium interest rate will decrease:

- an additional increase of money supply in C.5 as compared to B.5; and
- the interest rate of CNH is significantly lower when compared with CNY, and the backflow of CNH will pull down the equilibrium interest rate if it is large enough. With the decrease in the interest rate in the CNY market, the asset price will rise, which will stimulate the RMB demand due to speculation. The economy will then come to a new stable state.

Figure 2: The Gap between CNH and CNY Time Deposit Rate



Sources: HKMA and the PBoC.

RQFII

The analysis of the impact of RQFII is similar to RQDII. When the pilot scheme of RQFII is small enough, it is to some extent a substitution for QFII. This case resembles RMB export settlement. Table 5 could be applied to this case. As for another case with a much greater expansion of RQFII relative to QFII, it is summarized in Table 6, which is similar to Table 5.

Table 5: Issuing Dim Sum Bonds and then RMB Flows Back

	Benchmark Case B.5	Comparing Case C.5	Conclusions
Money supply (monetary base)	+ ¥65 billion	+ ¥66 billion ($65+1=66$)	An additional increase of money supply, a lower equilibrium interest rate, higher asset prices, stronger speculation motivation.
Money demand	M_d	M_d+	
Balance sheet of the PBoC	+ US\$10 billion (forex reserves)	+ US\$10 billion (forex reserves)	No changes.

Source: Author.

Note: M_d represents monetary demand in the benchmark case.

Table 6: The Influence of a Marked Increase in RQFII

	Benchmark Case B.6	Comparison Case C.6	Conclusions
Money supply (monetary base)	+ ¥65 billion	+ ¥70 billion (65+5=70)	An additional increase in money supply, accompanied with a lower equilibrium interest rate, and a stronger money demand.
Money demand	M_d	M_d+	
Balance sheet of the PBoC	+ US\$10 billion (forex reserves)	+ US\$10 billion (forex reserves)	No changes.

Source: Author.

Notes: The amount of QFII in B.6 is 0, and the amount for RQFII is ¥5 billion. M_d represents monetary demand in the benchmark case.

RMB Lending from the Offshore to Onshore Market

Since there is an interest rate spread between the onshore and the offshore market, domestic companies would prefer to borrow RMB loans from the offshore market if this is permitted. The benchmark case is domestic enterprises borrowing RMB from the onshore market, and the comparison case is borrowing RMB from the offshore market. The framework for analysis is similar to the case of dim sum bonds. Table 5 could also be applied to this case.

All of the analyses in the sections above would have the same conclusions as in Table 7.

Table 7: Summary of Impacts Based on Specific Pilot Items in the BoP

	RMB Outflows		RMB Backflows	
	Imports: RODI RQDII at beginning		RQDII with marked increase	Exports: RFDI RQFII at beginning
Interest rate and asset price	Interest rate moderate changes↑	money supply↓ equilibrium interest rate↑ asset prices ↓ money demand↓	No changes.	money supply ↑ equilibrium interest rate ↓ asset prices ↑ speculation motivation ↑
Forex reserves	An additional increase.	No changes.	Small increase.	No changes.

Source: Author.

CONCLUSION

The PBoC's policy framework to deal with the trilemma assumes that the PBoC's target is to maintain a stable exchange rate, liberalize the RMB cross-border settlement items in BoP and maintain monetary policy as an effective macro policy with the least cost.

With regard to liberalizing RMB cross-border settlement items, some RMB settlement transactions in the BoP can mean different things to the PBoC. For instance, a high volume of RQDII and RMB lending can deteriorate the monetary policy's effectiveness. While RMB imports, RODI and RQDII in low volumes will not directly affect the monetary policy environment, it will incur more forex reserves and increase the cost of the monetary policy. According to the analysis based on the various scenarios,

and the summary in Table 7, all the items can be divided into three groups.

The first group, RMB export settlement, RFDI and RQFII, at the initial stage acts as a substitution to traditional QFII. As shown in Table 7, these pilot schemes will not affect interest rates and asset prices. In addition, forex reserves will increase less with these reforms, which is more favourable to the PBoC. Therefore, RMB export settlement, RFDI and RQFII at the initial stage should be encouraged. However, it is necessary to stress that all settlements should be based on real transactions. That is, the pilot schemes of the above three items — RMB export settlements, traditional RFDI and the limited size of RQFII — should be promoted with priority, but in order to prevent fake export invoices, authentic verification is also important.

The second group, RMB import settlement, RODI and RQDII, at the initial stage can be seen as a substitution to

the traditional QDII. These pilot schemes exert influences on China's economy through interest rate changes, and cause an increase in forex reserves. Although other short-term items in the financial account could impact the interest rate, these items are either based on real businesses such as trade and investment, or based on financial transactions at the initial stage on a small scale. Therefore, the second group has a relatively moderate influence on the interest rate.

What is important to remember is that this negative by-product results from the assumption that the PBoC targets exchange rate stability. If the PBoC is permitted to employ a more flexible exchange rate system, then these pilot schemes will not cause an increase of forex reserves. Therefore, it is essential to advance exchange rate regime reforms to increase the flexibility of the yuan's exchange rate. Conversely, if the PBoC insists on the exchange rate stability target, then it is inevitable for these pilot schemes to accelerate the accumulation of forex reserves. In this case, the monetary authorities should be considering the risks and costs resulting from the increasing reserves.

Third, with substantial progress in RQDII and RQFII, with the endorsement of issuing dim sum bonds for capital backflows, and with the increase in lending from offshore to the onshore market, this kind of RMB cross-border settlement will not exert pressure on forex reserves. But, as discussed earlier, it does have an impact on the money market. With a high volume of RQDII, money supply will decrease, then the equilibrium interest rate will rise, and asset prices will decline. For the rest of the items, money supply will increase, causing asset prices to go up and the speculation motivation of money demand will rise. Due to interest rate spreads and the anticipation of yuan appreciation, the latter case will prevail, if the pilot schemes are carried out at the same time and with the same effort. Therefore, if the amount of RMB flowing back through these items is large enough, the financial market will be affected, and there would be a conflict with the intended monetary policy.

The last group of items — RMB import settlement, and the large quantities of RODI and RQDII — have the highest risk to monetary authorities; thus, the authorities should be cautious about these items. In the short-term, RMB settlements of these kind of items should be regulated with quotas. In the medium to longer term, these items should be opened in a gradual way.

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ANNEX: SOURCES FOR TABLE 1

Sources are listed by table cell.

Import (2009) and Export (2009): On July 2, 2009, China launched an RMB trade settlement pilot scheme between Hong Kong and five cities on the Mainland. This pilot scheme is based on a policy published by the State Council and its six ministries, the Administrative Measures on Pilot Projects for RMB Cross-Border Trade Settlement.¹⁶

Services, incomes and current transfers (2010): On June 22, 2010, the State Council and its six ministries published a follow-up to the 2009 pilot scheme, the Notice on Issues of Expanding Pilot Programs for RMB Cross-Border Trade Settlement.¹⁷ In this notice, the pilot expanded to all items in current account.

ODI (2011): Three policy measures were carried out in 2011 in this field. In 2014, the PBoC published the Administrative Rules for the Pilot Program of Settlement for RMB-denominated Overseas Direct Investment. This measure opened the channel for limited RODI. See www.pbc.gov.cn/publish/english/964/2012/20120802083924784926441/20120802083924784926441.html.

FDI (2011): In September 2011, China's Ministry of Commerce released Announcement No. 87 of 2013 on Issues Concerning Cross-border RMB Direct Investment; in October, the PBOC announced the Administrative Rules on Settlement of RMB-denominated FDI. Both policies opened the channels for limited RFDI. For the September announcement, see <http://english.mofcom.gov.cn/article/policyrelease/aaa/201312/20131200436266.shtml>; for the October announcement, see www.pbc.gov.cn/publish/english/964/2012/20120802090325941855153/20120802090325941855153_.html.

¹⁶ See the website of PBoC in English: www.pbc.gov.cn/publish/english/955/2011/20110218091131085949915/20110218091131085949915_.html or in Chinese www.pbc.gov.cn/publish/goutongjiaoliu/524/2009/20090729210701133916723/20090729210701133916723_.html.

¹⁷ See the website of PBoC in Chinese: www.pbc.gov.cn/publish/goutongjiaoliu/524/2010/20100713155048804883951/20100713155048804883951_.html.

Panda bonds (2005): In October 2005, the International Financial Company and the Asia Development Bank approved the issuance of RMB bonds in China.¹⁸ Then finance minister Jin Renqing named these bonds as “panda bonds.” Thus far, how to get permission to issue panda bonds has not yet been supported by a formal document.

RQDII (2006): In September 2006, the PBoC raised an RQDII fund and invested abroad, which was reported and reviewed by *Shanghai Securities Daily* on February 13, 2007. Access to RQDII has still not been supported by a formal document.

Dim sum bonds (2007): In June 2007, the PBoC and the National Development and Reform Commission approved China’s domestic financial institutes to issue RMB bonds in Hong Kong. At the beginning, these RMB bonds were characterized as small scale, which is why they are called “dim sum bonds.” In February 2011, all the enterprises in the global market qualified as potential RMB bonds issuers in Hong Kong. Dim sum bonds have become larger since then.

Inter-bank bonds, RQFII (2011): Since the beginning of 2011, 13 foreign institutions have been approved by the PBoC to invest in the domestic inter-bank bond market, which mainly refers to the markets for central bank bills, policy finance bonds and government bonds. In early 2012, RQFII was expanded to include shares and funds.

Stocks and funds, RQFII (2012): In early 2012, RQFII was expanded to include shares and funds.

Cross-border R-loans (2012): In 2012, the government of Shenzhen published “Ideas on Improving the Supports to Real Economy Development by Financial Service” in which it presented the idea of RMB cross-border lending between Shenzhen and Hong Kong.¹⁹ It was then approved by the central government.

18 Reported by *Financial Times* as “ADB Issues Landmark Renminbi Bond” at www.ft.com/intl/cms/s/0/5ca536cc-db7a-11df-ae99-00144feabdc0.html?siteedition=uk.

19 See www.sz.gov.cn/stztgs/sztztgs/qyfw/tztc/yhzchz/cy/201410/t20141008_2591068.htm.

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The Risk of OTC Derivatives: Canadian Lessons for Europe and the G20

CIGI Papers No. 57
Chiara Oldani

Over-the-counter (OTC) derivatives played an important role in the buildup of systemic risk in financial markets before 2007 and in spreading volatility throughout global financial markets during the crisis. In recognition of the financial and economic benefits of derivatives products, the Group of Twenty (G20) moved to regulate the use of OTC derivatives. Attention has been drawn to the detrimental effects of the United States and the European Union to coordinate OTC reform, but this overlooks an important aspect of the post-crisis process: the exemption of non-financial operators from OTC derivative regulatory requirements.



From "Taoguang Tanghui" to "Yousuo Zuowei": China's Engagement in Financial Minilateralism

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Through minilateral efforts, the Chinese government seeks to use financial minilateralism to stimulate reform of global financial institutions, provide financial public goods for its regional neighbours and fellow developing countries, as well as directly promote China's economic and political interests. This paper examines China's minilateral diplomacy in the financial area and explores possible international reaction to China's new activism and the domestic political dynamics in China.



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CIGI Papers No. 55
Malcolm D. Knight

The measures regulators have largely agreed on for a strengthened and internationally harmonized financial regulatory regime, which were endorsed at the 2014 G20 leaders' summit in Brisbane, are a major step toward achieving a robust and less crisis-prone global financial system. There are, however, a number of specific measures that need to receive closer attention in order for the G20 leaders to declare their reform program a success. This paper discusses what policy makers and regulators should focus on in 2015 and why closer international cooperation in implementing regulatory reforms will be essential for success.



The State-owned Enterprises Issue in China's Prospective Trade Negotiations

CIGI Papers No. 48
Hejing Chen and John Whalley

Chinese state-owned enterprises (SOEs) are likely to be key elements in China's trade negotiations over the next few years. This paper examines some key sub-issues regarding SOEs for these trade discussions and proposes strategies to focus debate and outline possible approaches to accommodation, rather than definitively resolve the issues.



The Trade in Services Agreement: Plurilateral Progress or Game-Changing Gamble?

CIGI Papers No. 53
Patricia M. Goff

Trade analysis in the current moment is understandably focused on mega-regional negotiations, but plurilateral talks also deserve our attention. Plurilateral negotiations leading to a Trade in Services Agreement (TiSA) is the focus of this paper. Barriers to trade in services are distinct and their removal consequential; thus inviting careful consideration and, ideally, public debate. This paper seeks to illuminate developments in negotiations toward the plurilateral TiSA. Just as it has become commonplace to ask whether regional agreements advance economic and political agendas, so is it useful to explore the promise and peril of plurilateral agreements such as TiSA.



The Environmental Risk Disclosure Regime: Navigating Complexity in Global Financial Markets

CIGI Papers No. 47
Jason Thistlethwaite

In recent years, a plurality of different governance initiatives has emerged that have the potential to reduce environmental risk within the financial sector by incentivizing investments in sustainable economic activity capable of long-term value creation. Unfortunately, environmental risk disclosure has yet to be assessed as a field of governance activity. This paper addresses this gap by describing environmental risk disclosure as a "regime complex" that is defined by a field of fragmented but related governance initiatives that lacks an overarching hierarchy.

ABOUT CIGI

The Centre for International Governance Innovation is an independent, non-partisan think tank on international governance. Led by experienced practitioners and distinguished academics, CIGI supports research, forms networks, advances policy debate and generates ideas for multilateral governance improvements. Conducting an active agenda of research, events and publications, CIGI's interdisciplinary work includes collaboration with policy, business and academic communities around the world.

CIGI's current research programs focus on three themes: the global economy; global security & politics; and international law.

CIGI was founded in 2001 by Jim Balsillie, then co-CEO of Research In Motion (BlackBerry), and collaborates with and gratefully acknowledges support from a number of strategic partners, in particular the Government of Canada and the Government of Ontario.

Le CIGI a été fondé en 2001 par Jim Balsillie, qui était alors co-chef de la direction de Research In Motion (BlackBerry). Il collabore avec de nombreux partenaires stratégiques et exprime sa reconnaissance du soutien reçu de ceux-ci, notamment de l'appui reçu du gouvernement du Canada et de celui du gouvernement de l'Ontario.

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