

**JOINT RESEARCH PAPER**

**USE OF NATIONAL CURRENCIES  
IN INTERNATIONAL SETTLEMENTS.  
EXPERIENCE OF THE BRICS COUNTRIES**

**Moscow  
RISS  
2017**

### **Authors**

Uallace Moreira Lima (Federal University of Bahia); Marcelo Xavier do Nascimento (Federal University of Pernambuco);

Sergey Karataev, Nikolay Troshin, Pavel Zakharov, Natalya Gribova, Ivan Bazhenov (Russian Institute for Strategic Studies);

Shekhar Hari Kumar, Ila Patnaik (National Institute of Public Finance and Policy);

Liu Dongmin, Xiao Lisheng, Lu Ting, Xiong Aizong, Zhang Chi (Institute of World Economics and Politics, Chinese Academy of Social Sciences);

Ronney Ncwadi (Nelson Mandela Metropolitan University); Jaya Josie (Human Sciences Research Council)

### **Editors**

Sergey Karataev, Nikolay Troshin, Ivan Bazhenov, Jaya Josie

### **Design and Publication**

Oleg Strizhak, Olga Farenkova (Russian Institute for Strategic Studies)

### **Abstract**

Financial crises of the past decades revealed the instability of the modern international monetary system based on a single dominant currency. Increasing the role and turnover of national currencies in international economic transactions and payments would contribute to redressing the existing imbalance. BRICS countries' experience indicates that efficient currency internationalization can be reached by both forming a number of prerequisites and financial and economic policies pursued by the authorities. Strengthening the BRICS countries' collaboration and implementation of joint initiatives should help create favorable conditions for promoting a wider use of their currencies in international settlements.

### **Keywords**

BRICS – Currency internationalization – Emerging markets – International monetary system – International settlements

**The views expressed in this survey are those of the authors and do not necessarily represent the views of the Russian Institute for Strategic Studies.**

**ISBN 978-5-7893-0271-2**

© Russian Institute for Strategic Studies, 2017

All rights reserved. Reproduction is authorised provided the source is acknowledged.

## Contents

Abbreviations and acronyms.....	4
Executive summary .....	7
Introduction .....	10
Chapter 1. Theoretical Aspects of National Currencies' Internationalization...	11
Chapter 2. The Recent Evolution of the Local Currency Payments System of the Brazilian Economy.....	23
Chapter 3. Russia's Deal on Promoting the Regional Status of the Ruble ....	36
Chapter 4. Internationalization of the Indian Rupee .....	57
Chapter 5. The Internationalization of RMB: China's Experience.....	76
Chapter 6. Towards National Currency Usage in International Transaction Settlements: Specific Experiences in BRICS – the Case of South Africa .....	97
Conclusion .....	109

## ABBREVIATIONS AND ACRONYMS

ADR	American Depository Receipt
AED	United Arab Emirates dirham
APAC	Asia-Pacific
ASEAN	Association of Southeast Asian Nations
BCB	Brazilian Central Bank
BIS	Bank for International Settlements
BRIC	Brazil, Russia, India, China
BRICS	Brazil, Russia, India, China, South Africa
BRIS	Brazil, Russia, India, South Africa
BRL	Brazilian Real
BYN	Belarusian Ruble
CIPS	Cross-Border Interbank Payment System
CIS	Commonwealth of Independent States
CISCA	Collective Investment Schemes Control Act (South Africa)
CMA	Common Monetary Area
CME	Chicago Mercantile Exchange
CNAE	National Register of Economical Activities (Brazil)
CNAPS	China National Advanced Payment System
CNY	Chinese Yuan (Renminbi)
COFER	Currency Composition of Official Foreign Exchange Reserves
CRA	Contingent Reserve Arrangement
CSRC	China Securities Regulatory Commission
EAEU	Eurasian Economic Union
EBRD	European Bank for Reconstruction and Development
ECB	External Commercial Borrowings
EM	Emerging Market
EMDE	Emerging Market and Developing Economy
EU	European Union
EUR	Euro
FATF	Financial Action Task Force
FCS	Federal Customs Service (Russia)
FDI	Foreign Direct Investment
FED	US Federal Reserve System
FEMA	Foreign Exchange Management Act (India)
FHC	Fernando Henrique Cardoso, 34th President of Brazil (1995-2003)

---

FOB	Free On Board
FPI	Foreign Portfolio Investment
FX	Foreign Exchange
GBP	Pound Sterling
GDP	Gross Domestic Product
GFC	Global Financial Crisis
HK	Hong Kong Special Administrative Region
HVPS	High Value Payment System (China)
IEI	International Economic Integration
IFC	International Financial Center
IMF	International Monetary Fund
INR	Indian Rupee
IT	Information Technology
ITC	International Trade Centre
JPY	Japanese Yen
KRW	South Korean Won
LCY	Local Currency
LSE	London Stock Exchange
MCAP	Market Capitalization
MERCOSUR	Southern Common Market (Mercado Comun del Sur)
MICEX	Moscow Interbank Currency Exchange
MoF	Ministry of Finance
MP	Monetary Policy
MXN	Mexican Peso
NCM	Common Nomenclature of the MERCOSUR
NDC	National Depository Center (Russia)
NDF	Non-Deliverable Forwards
OTC	Over-The-Counter
PBC	People's Bank of China
QE	Quantitative Easing
RBI	Reserve Bank of India
RFDI	Renminbi Foreign Direct Investment
RMB	Renminbi; see CNY
RODI	Renminbi Overseas Direct Investment
ROW	Rest of the World
RQDII	Renminbi Qualified Domestic Institutional Investor

RQFII	Renminbi Qualified Foreign Institutional Investor
RUB	Russian Ruble
SA	South Africa
SAARC	South Asian Association for Regional Cooperation
SARS	South African Revenue Service
SARB	South African Reserve Bank
SDR	Special Drawing Right
SEBI	Securities and Exchange Board of India
SEZ	Special Economic Zone
SML	Local Currency Payment System (Sistema de Pagamentos em Moeda Local)
SOE	State-Owned Enterprise
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TRY	Turkish Lira
UAE	United Arab Emirates
UK	United Kingdom
US	United States (United States of America)
USD	US Dollar
WDI	World Development Indicator (World Bank)
WTO	World Trade Organization
ZAR	South African Rand

## Executive summary

1. The modern international monetary system based on the US dollar is being strongly criticized for its shortcomings. The US Federal Reserve's monetary policy runs counter to the emerging market and developing economies' monetary policy objectives aimed at controlling exchange rates, lowering inflation and interest rates, and stimulating economic growth and employment. Financial systems in EMDEs frequently suffer the spillover effects of the US monetary policy that provokes capital inflows/outflows. Research in this area resulted in a well-founded academic opinion pointing that risks of sudden USD liquidity drop may be smoothed by a wider use of national currencies in international settlements.

2. Using national currencies in international settlements presumes a long and complicated transition to their internationalization. That means a step-by-step promotion of a national currency as a unit of account, medium of exchange and store of value at the international level. A national currency becomes a unit of account when a foreign contract's price is invoiced in such currency. It serves as a medium of exchange when final settlements are made and as a store of value when non-residents purchase assets denominated in this currency.

3. The internationalization of a currency offers some benefits to the issuing country, but also poses certain risks. As early as in the 1960s, R. Triffin proved that inflation risks are fostering, while a national currency's share in international settlements is growing, thus jeopardizing its exchange rate stability and credibility among the global market participants.

4. To avoid negative consequences emerging in the course of internationalization, it is necessary to meet the following preconditions:

- an issuing country should achieve a significant share in the global economy and international trade (within its region, at least);
- macroeconomic stability should be ensured, thus presuming predictability of the monetary policy, consistently low level of inflation and mild exchange rate fluctuations;
- a country should have a well developed and liquid financial market providing a wide range of FX and stock instruments;
- foreign exchange regulations should be investor-friendly and not restrictive to international settlements in the national currency.

5. Monetary policy objectives and economic conditions in BRICS member states vary significantly as do their strategies and results in promoting the internationalization of their local currencies. In this respect, the Chinese renminbi is ahead of the pack, e.g. in terms of interbank transfers turnover — its global share amounts to 1.68% as of December 2016 (recorded by SWIFT). The "top twenty" of currencies in this rating also include the South African rand (0.38%) and the Russian ruble (0.25%).

The RMB's share is also bigger than of other BRICS currencies in foreign trade turnover — it amounts to approximately 22% of the Chinese foreign trade volume. The Russian ruble follows closely behind (20%) — so that the two currencies are well ahead of the currencies of India, Brazil and South Africa.

6. The current state of internationalization progress by the BRICS currencies is linked both to above-mentioned preconditions and to financial and economic policies pursued by their authorities.

7. China began promoting the RMB internationalization later than the other BRICS countries, but managed to achieve a bigger success. So, the IMF added the RMB to the basket of SDR currencies from October 1, 2016. The pursuit by the government

of China of deliberate monetary policy objectives, with concomitant policy targets and instruments, was the driving force behind the Chinese accomplishments. Following the internationalization of the RMB, China experienced a currency depreciation and faced the conflict between capital account opening and domestic financial stability because of the capital outflow, forcing the country's policymakers to make appropriate adjustments to capital account convertibility and the RMB internationalization.

8. Russia has opted for removing nearly all restrictions on the ruble's transactions with non-residents (both current and capital accounts) by now. However, such measures have not yet proven beneficial for widening its usage at the international level. The Russian experience has shown the limits and constraints of a partial internationalization exacerbated by the underdevelopment of financial market and a country's relatively small share in the world trade and economy. The Russian experience also demonstrates the risks of internationalization for macroeconomic stability caused by increasing vulnerability and exposure to external shocks.

9. The monetary authorities of three other BRICS countries have not yet managed to establish sufficient prerequisites for a wide usage of their respective currencies in international settlements. Despite the formal permission to receive export proceeds in a national currency, the regulators in practice discourage market participants from making such payments. Regulators' viewpoints on the subject are considerably affected by concerns about the US monetary policy's spillovers emanating from possible interest rates hikes and following capital outflows from the developing economies.

10. India's monetary authorities within the current macroeconomic framework focused on facilitating access to the internal FX market for non-residents and on developing the offshore bonds market denominated in Indian rupees. Their intention is to lower the foreign exchange requirements for servicing foreign debt and to promote the development of hedging market. Thereby the preconditions for the gradual expansion of the usage of the Indian rupee in international settlements are being created in the long term.

11. Brazil presents an interesting example in respect to the internationalization of its currency. In 2009 the country was among the initiators and participants of the pioneering regional payment system — Sistema de Pagamentos em Moeda Local — created for settlements using local currencies in the region. At the time SML continues to operate smoothly and effectively in servicing the trade flows between Brazil and Argentina. However, its functioning is constrained by remaining foreign exchange restrictions and incomplete convertibility of the Brazilian real and the Argentine peso. Despite the small share of payments made under the system in relation to the total volume of bilateral trade, both countries keep being committed to using the SML. Moreover, in 2015 Uruguay joined this payment system, thus underscoring the importance of promoting intra-regional trade using national currencies to mitigate the risks of external and macroeconomic shocks emanating from the use of the US dollar.

12. The South Africa's experience has clearly showed that even a relatively developed financial market (the financial assets to GDP ratio of the country exceeds the corresponding variables in all the other BRICS countries and are tantamount to advanced economy levels) does not completely safeguard from the problems inherent for a resource-based economy. Therefore, further diversification of the national economy is needed to ensure macroeconomic stability and enhance national currencies' use in international settlements still more.

13. The BRICS countries' experience presented in this report shows that a balanced development of all necessary and sufficient preconditions have to be in place for a na-

tional currency internationalization to establish the solid basis for its considerable share in international settlements. Nonetheless, even under the current situation of underdeveloped preconditions, the BRICS member states should continue discussing and developing policy targets and instruments in pursuit of widening the use of BRICS national currencies in international settlements for promoting the goal of increasing intra-BRICS trade, investment and economic cooperation. In particular, BRICS governments could consider multilateral policy instruments for removing administrative barriers and fostering financial market development to promote wider use of national BRICS currencies in cross-border settlements within the pre-existing internationalization currency framework in the BRICS countries.

## Introduction

The International Monetary Systems' dependence on the US Federal Reserve's monetary policy has always been a concern for EMDEs. They are wary of the negative spillover effects of the FED's monetary policy that places the US national economic interests above the interests of other countries. After the Asian crisis of 1997, EMDEs raised the issue of extending the use of national currencies to cover a wider spectrum of international settlements. The global financial crisis confirmed their concerns about risks emanating from the US dollar's dominant role in the global economy and financial markets, and induced strong reaction from the international community which resulted in a large number of policy researches aimed at increasing the role and turnover of national currencies in international economic transactions and payments.

With the BRICS countries' significant increase in their share of global GDP and international trade during the 2000s, international financial markets began to take a greater interest in their national currencies. Most of the BRICS countries have recently fully or partially lifted the restrictions on foreign exchange transactions (at least with respect to current account transactions). Moreover, dynamic economic growth allowed the group member-countries to enhance macroeconomic stability and further develop their financial markets.

The need for measures to stabilize the international financial system following the GFC was underscored at the 2nd BRIC Heads of State Summit held in Brasilia (Brazil) in 2010, where the leaders of the group declared "a greater need for a more stable, predictable and diversified international monetary system" and showed their readiness to study the possibilities of international

settlements in their local currencies<sup>1</sup>. The 2010 declaration was given greater urgency in the BRICS Ufa (Russia) Summit Declaration of 2015, in which leaders of the group acknowledged and supported initial expert findings that "the potential for expanding the use" of such settlements in BRICS national currencies was indeed a matter of importance for promoting further economic and financial cooperation among the BRICS member states to mitigate current instability in the international financial system<sup>2</sup>.

This joint research paper prepared by experts and academics from the BRICS member states was undertaken to analyze the experience, and assess the use of BRICS national currencies for international settlements. The First Chapter summarizes the results of theoretical studies on internationalization of national currencies. Chapters 2–6 present expert analysis of the current state of BRICS currencies' adaption to international settlements. The Conclusion summarizes the findings of the research, and proposes further steps for consideration by the BRICS academic community, policy makers and public authorities.

---

<sup>1</sup> 2nd BRIC Summit of Heads of State and Government: Joint Statement. 2010. April 15 // President of Russia: official website. URL: <http://en.kremlin.ru/supplement/524>

<sup>2</sup> VII BRICS Summit. Ufa Declaration // Official website of Russia's presidency in BRICS. 2015. July 9 URL: <http://en.brics2015.ru/load/381158>

# Chapter 1

## Theoretical Aspects of National Currencies' Internationalization

### International Monetary Systems and settlements in national currencies

The modern world economy is characterized by an unparalleled level of financial services markets' development, increase in cross-border investment flows as well as integration of national and regional capital markets. Investors are able to move huge amount of funds swiftly from one country to another in search of the highest returns or "safe havens" for periods of increased turbulence.

Financial globalization is deeply affecting the functioning of national financial systems. International capital flows' fluctuations may have a powerful impact on national markets. They could lead to dramatic increases or decreases in assets values, exchange rates and stock market indices. Rising volume of international transactions creates additional challenges for regulators. It complicates the task of achieving targeted inflation parameters, GDP growth and desired level of interest rates.

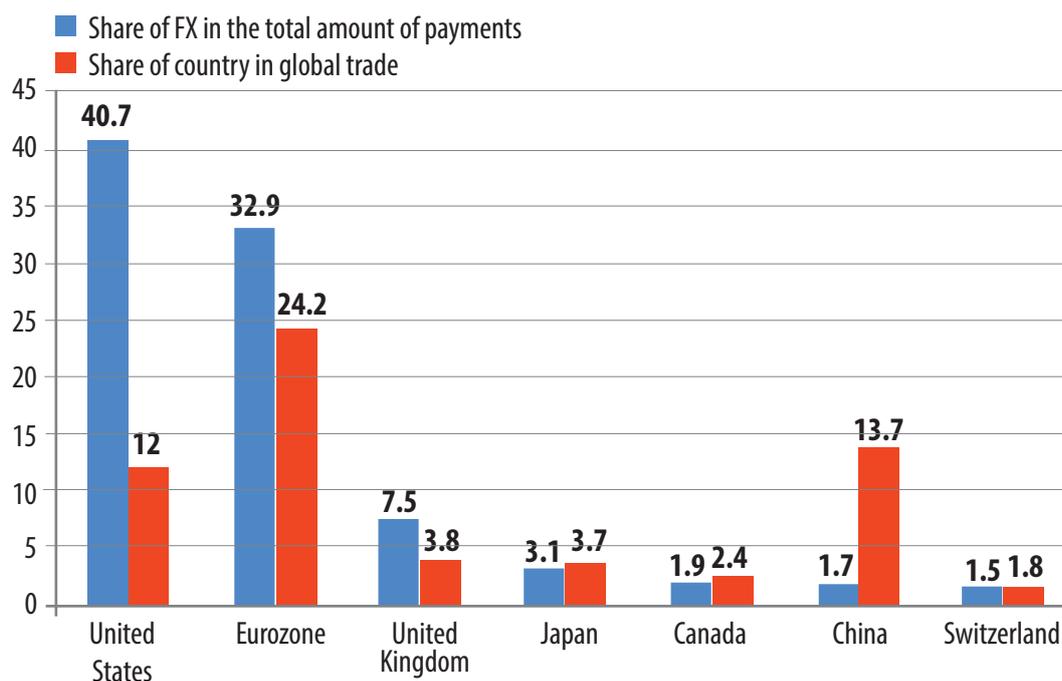
The reasons for drastic changes in capital flows and high volatility in financial markets lie in the fact that the modern global financial system is based on the US dollar serving as the world currency. Most companies use the USD as an intermediate currency for transactions with counterparties from foreign countries. According to SWIFT, 40.7% of international settlements are made in the USD while the United States' share in world trade in goods

and services does not exceed 12% (Figure 1).

The USD serves as a transmission mechanism of the US Federal Reserve's monetary policy on the global economy and financial markets. Thus, heavy reliance on the dollar in international settlements significantly impairs the EMDEs' monetary authorities' ability to counter external shocks and to achieve desirable targets of national monetary policy.

The FED's interventions have led to diverse changes in global capital flows. They were directed to emerging markets as well as developing economies during the periods of easing the United States' monetary policy and provided them with excessive and cheaper liquidity. However, the tightening periods have had the opposite effect and provoked sharp and painful capital outflows resulting in emerging currencies' depreciation, financial fluctuation and economic output decrease. Combating the GFC, the FED resorted to unconventional MP tools dubbed "Quantitative Easing". A number of studies have recently showed that the series of QE's (1-3) have significantly increased the FED's influence on the global financial system (*Gilchrist, Yue, Zakrajsek, 2014*).

In this situation, developing countries are facing the challenge of finding adequate ways to neutralize the negative effects of the global financial cycle (*Rey, 2013*) and its waves of capital inflow-outflow. A natural solution to the problem is through avoiding the excessive dependence on the USD by expanding



**Figure 1.** Shares of countries and currencies in global trade and in the total amount of payments, %  
Source: SWIFT. RMB Tracker, February 2017; WDI, World Bank

the circulation of national currencies in international settlements.

Nakamura (*Nakamura, Ueda, Matsui, 2012*) specified that the value of the USD and EUR fluctuated wildly during the global financial and debt crises in 2008, and shortfalls of liquidity frequently arose. Although the impact from fluctuations in these currencies could not be completely eliminated, the use of a home country currency or more direct transactions in currencies other than the USD and EUR may reduce impacts in the event of similar crises in the future. Furthermore, Nakamura opined that alleviating exchange rate fluctuation risk for emerging countries through a currency's internationalization could contribute to stability of EM's finances and to extension of international finance.

The dominant role of the USD creates problems for the entire global financial system, especially for developing countries. Specifically, it was emphasized in certain studies made by the IMF experts (IMF, 2011). They consider that in a multipolar system the risk

of protracted exchange rate misalignments and persistent global imbalances would likely be reduced due to increasing policy discipline among the core economies.

Even a number of prominent US analysts (*Bergsten, 2009*) are now arguing that the dollar's global dominance is no longer in the national interest of the United States, and they have urged the US government should explore ways of "downsizing" the dollar's international role. They have expressed concerns about how the dollar's international role undermines the US export competitiveness, contributes to the country's payments deficits and increases the country's vulnerability to overseas official dollar holders.

The IMF experts denote that limited role of EM currencies in international transactions stands in sharp contrast to their growing weight in the global economy, which is in itself a source of stress to the functioning of the international monetary system (IMF, 2011). While financial flows continue

**Table 1**

Roles of an international currency

Function of money	Governments	Private sectors
Store of value	International Reserves	Currency substitution and investment
Medium of exchange	Vehicle currency for FX intervention	Invoicing trade and financial transactions
Unit of account	Anchor for local currency pegging	Denominating trade and financial transactions

Source: Based on Chinn and Frankel (2008)

to be dominated by advanced economies, in the longer run, EM currencies show potential to achieve wider international use similar to some advanced economies. For instance, currencies of commodity exporters (e.g., the Russian ruble and the Brazilian real) could play larger regional roles and become part of reserve assets similar to the Australian or Canadian dollar; while the RMB could achieve global use due to the economic size and trade-related centrality of the Chinese economy.

According to the IMF executives, the greater use of multiple currencies has the potential to diversify risks, enable gradual global adjustments, and provide incentives for sustainable policies. It can also help creating a more stable environment for capital flows — thus enhancing systemic stability. This can be achieved by reducing tensions between domestic policies in reserve-issuing countries and the liquidity needs of the global economy (Furusawa, 2017).

## What is currency internationalization?

There is a well-established literature to denote the meaning of a currency internationalization (Eichengreen and Flandreau, 2012). According to Kenen (2011), an international currency is one that is used and held beyond the borders of the issuing country, not merely for transactions with that country's residents

but also, and importantly, for transactions between non-residents.

According to Nakamura's definition, internationalizing does not necessarily mean expanded usage throughout the entire world, but rather usage spanning borders and among countries and regions with strong economic interdependence. As such, the internationalization of a currency does not mean that a currency becomes a key currency.

Chinn and Frankel have developed a framework based on international functions of a currency to determine the level of its internationalization. Table 1 shows the various roles of an international currency in private and official sector.

National currency may be used as a unit of account where a foreign contract's price is denominated in such currency (invoicing currency) or invoice is issued in such currency (account currency). National currency may serve as a medium of exchange if a contract (e.g. dollar-denominated) is paid using a different currency (settlement currency). However, an invoicing currency is more important because settlements (payments) may actually be made in any currency using exchange rate at the payment date. National currency may also act as a store of value when it is used for purchase of assets (primarily securities) denominated in this currency.

According to Kenen (2011), national currency may be recognized as

internationalized when most of the following conditions are met.

1. The government must remove all restrictions on the freedom of any entity, domestic or foreign, to buy or sell its country's currency, whether in the spot or forward market.
2. Domestic firms are able to invoice some, if not all, of their exports in their country's currency, and foreign firms are likewise able to invoice their exports in that country's currency, whether to the country itself or to third countries.
3. Foreign firms, financial institutions, official institutions and individuals are able to hold the country's currency and financial instruments denominated in it, in amounts that they deem useful and prudent.
4. Foreign firms and financial institutions, including official institutions, are able to issue marketable instruments in the country's currency.
5. The issuing country's own financial institutions and non-financial firms are able to issue on foreign markets instruments denominated in their country's own currency.
6. International financial institutions, such as the World Bank and regional development banks, are able to issue debt instruments in a country's market and to use its currency in their financial operations.
7. The currency may be included in the currency baskets of other countries, which they use in making their own exchange rate policies.

It should be noted that implementation of the first paragraph presumes the complete revocation of foreign exchange restrictions. In the case of remaining barriers for capital account transactions, the internationalization may develop mainly by increasing the share of national currency in bilateral trade settlements.

Thus, the use of national currency in international settlements constitutes a section in its internationalization

process and may go on without full implementation of the Kenen conditions. Of course, the more functions a national currency performs in the international level, the higher its attractiveness is as an invoicing currency. However, it may merely act as a settlement currency without necessarily being acclaimed as a reserve currency — i.e. without being widely deposited in international reserves of other countries.

## **Benefits and risks of currency internationalization**

Currency internationalization has not always been seen as a benefit for the issuing country. In a number of cases, financial authorities deliberately limited using their currency abroad (e.g. China before the GFC).

The Western countries have, at times, also tried to discourage the use of the domestic currency internationally because of the perceived costs that may be associated with such use. For example, during the time when the Deutsche Bundesbank and the Swiss National Bank focused their monetary policy strategies on the control of monetary aggregates, there was fear that greater international use of the Deutsche mark or the Swiss franc would render the demand for money less stable and therefore complicate the setting of the appropriate target growth rate for the supply. It may also be argued that international use of the currency could render the exchange rate more volatile and therefore complicates the task of finding the appropriate level of the policy interest rates (*Genberg, 2011*).

However, the USD dominance in foreign trade payments, loans and investments has been recently viewed as a factor of vulnerability that is desirable to be reduced. As a result, many countries set a goal of decreasing dependence on the USD in foreign settlements

and expanding the use of their national currencies.

Now the common view is that the internationalization of a national currency brings important benefits to the issuing country. Eichengreen et al. (2015) explain that internationalization of a national currency would (1) reduce exchange rate risks for the country's enterprises, (2) reduce the need for holding more foreign exchange reserves, (3) promote trade by reducing transaction costs, and (4) improve the competitiveness of the currency-issuing country's finance sectors.

Nakamura (2012) opines that internationalization of a currency offers several merits for the home country in terms of private sector economic activity.

1. Reduces the risk of exchange rate fluctuations in trade. Companies bear less risk of exchange rate fluctuations particularly when trade and settlements are conducted in the currency of the home country.
2. Makes financial institutions more competitive internationally. The competitiveness of financial institutions strengthens when the home country currency is used more widely in financial transactions. Under these circumstances business opportunities are likely to increase. Furthermore, liquidity risk related to raising funds in foreign currencies is alleviated for financial institutions as a country's currency internationalizes.
3. Contributes to the development of the country's financial and capital markets.
4. Internationalized currencies are also advantageous during extraordinary times. The impact of exchange rate fluctuations against key currencies like USD and EUR as well as other major currencies diminishes.

The IMF experts agree that benefits from internationalization include potentially lower transaction costs and reduced exchange rate risk, and the ability to issue

international debt in more competitive terms. But they note that this may also complicate monetary management and strain the domestic financial system's ability to absorb capital flows due to potential for increased volatility and large shifts in portfolio flows (IMF, 2011).

Genberg (2011) argues that the benefit of currency internationalization to the issuing country is the seigniorage gains associated with the additional demand for the physical currency. The benefit to the user includes a relatively high real value of a readily accepted note (e.g. the USD 100 bill), the widespread international acceptance of the currency for transactions, and the relative stability as a store of value. He also notes that full and partial currency internationalization can reduce borrowing costs due to the larger size of the market for debt denominated in a particular currency and to the potential diversification gains.

The establishment and liberalization of domestic markets improve the competitiveness of financial institutions by promoting open and competitive markets, and this strengthens the ability of domestic financial and capital markets to handle expanded capital inflows and outflows anticipated after the currency becomes more international.

Despite the benefits promised by internationalization, central banks of developing countries are wary of lifting restrictions on transactions of non-residents with national currency. This is because the international status of a currency brings not only benefits, but also certain obligations and vulnerabilities (Helleiner, 2013).

Large amount of a national currency begins to circulate abroad as it is being internationalized. As a result, the national financial system is exposed to certain risks, i.e. the central bank will loosen its control over monetary parameters, so that not only demand but also supply of the currency will to some extent be governed by non-residents.

Such allegation regarding the USD was specified by R. Triffin in the early 1960s, when he formulated his famous paradox (The Triffin Dilemma). He noted that the USD stock is limited by the amount of the United States gold reserve. At the same time, the dollar should be emitted in volumes that meet the needs of the global trade.

It is well known that the paradox led to the Bretton Woods system's collapse. Despite the demonetization of gold, the Triffin Dilemma remains relevant even nowadays both for the USD and for any other currency in the process of internationalization. An issuing country must have a balance of payments deficit in order to provide participants of international trade and investments with sufficient stock of a currency. At the same time, a constant and/or growing balance of payments deficit causes increasing inflationary expectations that undermine confidence in the national currency and lead to its depreciation.

Historical experience shows us that the dilemma cannot always be avoided. Successful internationalization of a national currency presumes the existence of certain preconditions.

### **Prerequisites for currency internationalization**

There is an academic consensus that success of a currency internationalization is impossible without the following factors: a currency-issuing country must have a considerable volume of international trade; its share in global trade must be substantial; appropriate infrastructure (a developed banking sector, highly liquid financial markets etc.) must be available for international participants.

Tavlas and Ozeki (1992) and Tavlas (1992) postulate that a currency to gain reserve status must meet the following preconditions. First, there

needs confidence in both the value of its currency and the political stability of the country concerned. And secondly country should maintain the convertibility of its own currency. It should also possess well-developed financial markets; broad, in that they contain a large assortment of financial instruments; deep, in that they have well-developed secondary markets; and free of controls on financial transactions.

The breadth and depth of the national financial market is a necessary benchmark indicator of the ability of a currency to be utilized as an international currency. However, it is not a sufficient condition to achieve this status as other factors play equally important roles as was demonstrated in the final ascension of the Chinese renminbi to international reserve currency status in 2016 after many years of trying.

Nakamura (2012) specifies that there are two main preconditions for a currency to internationalize. One is the development of a country's economic activities, particularly outward trade, to a certain level within the world or a given region. In order for this to happen, economic mutual dependence with the relevant region must increase and cross-border transactions — current account transactions and capital transactions — must expand.

The second precondition is the absence of restrictions or regulations in usage of a country's currency in activities; that is, the liberalization of the currency. Furthermore, in order for a currency to be used by the economic entities of other countries, domestic financial and capital markets must be equipped and open in order for economic entities both within and outside the country to make financial and capital transactions. Specifically, (1) interest rates and financial services must be liberalized; (2) interest rate and exchange rate futures markets must be established; and (3) short-term financial

markets and bond markets must be nurtured.

Genberg (2011) postulates that internationalization of a currency needs some pre-requisites as follows, (1) no restrictions on cross-border transfers of funds, (2) no restrictions on third party use of the currency in contracts and settlements of trade in goods or assets, (3) no restrictions on transactions of assets denominated in the currency in private or official portfolios, (4) existence of a deep and dynamic domestic financial market, (5) a well-respected legal framework for contract enforcement, (6) stable and predictable macro and micro-economic policies.

Cohen (2012) recites four economic determinants for internationalization. First, currencies are more likely to be used internationally if foreigners have confidence in their stable value, a confidence usually cultivated by a record of low and stable inflation as well as a steady external value. Second, international currencies are usually characterized by "exchange convenience" and "capital certainty" because they can be held in liquid financial markets that are broad, deep, resilient and open to foreigners. Third, support by broad transactional networks, stemming from the issuing country's prominent size in the world economy.

Economic inertia is the fourth factor that can sustain the international role of a currency. When a well-established transactional network already exists, the switching of currencies can be economically costly. Cohen argues that inertia may also be a product of conservative and risk-averse behaviour among economic actors when faced with uncertainties involved in choosing an alternative currency.

Such inertia is based on network externalities that can be defined as additional value received by a beneficiary where the total number of such beneficiaries has increased (*Katz and Shapiro, 1985*).

In other words, the more economic agents use this currency in settlements, the more often it will be used by others.

In particular, the USD is more essential compared to other currencies because of the ability to affect significantly more transactions. This can be explained by scale economy due to the huge number of operations performed with the USD. It leads to a reduction in spreads between the quotations for buying and selling the USD as well as reduction in bank transfer fees. As a result, the US currency provides an exporting company with lower transaction costs.

Of course, even if all the prerequisites are met, there is no guarantee that currency internationalization will spontaneously follow. Genberg (2011) notes that economies of scale in the use of an international currency suggest that the world can sustain only a limited number of international currencies.

IMF experts underline that only a few EM currencies, led by the Chinese renminbi, show potential for internationalization on a global scale, albeit many more could achieve some degree of international use. In their opinion, economic size — including trade networks — macroeconomic stability, and policy support are important determinants of currency internationalization (IMF, 2011).

Eichengreen, Hausmann and Panizza (2002 and 2003) advocate the hypothesis known as "original sin", according to which the international monetary system is characterized by asymmetries among the currencies of peripheral and central countries. Most countries are unable to issue debt in local currencies in the international market and also do not produce fountains of long-term financing in domestic markets, so they are constrained to borrowing in major foreign currencies, especially USD. As a result, these countries are characterized by elevated degree of volatility of their financial markets, flows of capitals

and also limited degree of autonomy of their respective monetary policies.

The authors explain the elevated volatility and macroeconomic instability of developing countries by the following factors.

1. Limited capacity of authorities to undertake countercyclical policies.
2. Low capacity of the central bank to carry out one of its basic functions — to act as a lender of last resort (because much liabilities are in USD).
3. Dollar-denominated debt increases the costs of currency depreciations, which, in the event of a currency crisis, may lead to large falls in output. To address this fragility issue, governments are forced to accumulate big foreign reserves to intervene in the foreign exchange market in order to prevent a national currency from moving and/or to enable it to act as debt servicer of last resort in moments of reversion of the economical cycles and capital outflows.

That implies some kind of hierarchy of currencies in the international monetary system. It is hard for any new currency to get fully internationalized, because it has to crowd out some other currency from portfolio of global financial investors. Each successful country raises the bar to others, insofar as the addition of its securities to the global portfolio will reduce the diversification benefits of adding yet another currency (*Eichengreen, Hausmann and Panizza, 2002 and 2003*).

However, many authors oppose such determinism regarding the limitation of the number of currencies in the international financial market. In particular, Genberg (2011) notes growing opportunities for partial internationalization in the present context. Many countries increasingly provide access to their debt markets (e.g. public bonds) for foreign investors, even though these securities are not convertible in the international market

and cannot be traded between third parties.

Empirical observations also indicate that an increasing number of new currencies are entering international financial markets. There is a general growth in the turnover of these markets including through securities denominated in "exotic" currencies.

Summarizing the international studies' experience, we can state that for the wider use of a national currency in international settlements, it is necessary to work in the following fields.

**1. Foreign trade.** The development of payments in national currencies is possible between countries that have a significant amount of mutual trade. This will allow exporters and importers to accumulate foreign exchange when they deal with their foreign counterparties, and then invest it in goods, services and financial instruments of partner countries.

**2. Financial markets.** Companies should be able to purchase/sell a currency quickly and without additional costs to make settlements in such currency. This presumes the existence of highly developed and liquid interbank and forex markets with large numbers of participants and convertible financial instruments. Along with this, it is necessary to develop a deep and liquid stock market that is able to absorb temporarily cash liquidity.

**3. Foreign exchange regulation.** It is important to create a favorable legal and regulatory environment supporting the wider use of a national currency in cross-border transactions as well as to remove restrictions and barriers to foreign exchange transactions. Agreements with other countries are also required to ensure the implementation of relevant financial transactions (payment agreements, swap lines etc.).

**4. Maintenance of macro-economic stability** is perhaps the most important precondition. Stable economic growth, predictable monetary policy, consistently

low inflation expectations and high level of confidence in the national currency provide better opportunities for its wider use in international settlements.

## Factors affecting the choice of settlement currency

The IMF experts opine that speed and shape of progress toward a more multi-currency system will be largely market-driven, but there is also a scope for policy action to facilitate this transition (IMF, 2011). Domestic policies could support the creation of prerequisites for currency internationalization (such as macroeconomic stability and financial markets' depth) and help building of market infrastructure. At the same time, it is necessary to take into account that in addition to macroeconomic conditions, there are also a number of microeconomic factors influencing private corporative choice of an invoicing currency.

It has been presumed under economic theory that exporters prefer their national currency for trade invoicing (so-called Grassmann's law). That can be explained by the exporter's desire to mitigate exchange risks. However, it has been discovered that in the case of floating exchange rates regime, the supplier's currency choice is affected not only by this desire but also by consumers' demand and by prices level ratio between external and internal markets. According to Donnenfeld and Zilcha (1991), it may be more profitable for an exporter to denominate contract price in the currency of importing country — in a case of significant decrease in demand caused by prices increase due to unfavorable changes in the currency exchange rates. The correlation between a choice of invoicing currency and price elasticity of demand was confirmed later in the

works of Bachtetta (2002) and Goldberg (2005).

An important independent result of Goldberg was the conclusion that exporters of similar goods, such as oil or iron ore, will seek to establish the contract price in the same currency as their competitors. That allows them to neutralize more successfully the adverse exchange rate fluctuations resulting in considerable price changes and therefore prevent the risk of reducing demand. As a result, the market price of such goods is denominated mostly in the US dollar. According to the authors, the global commodities exchange trade in these goods plays a significant role. They argue that if the global commodities market's impact on the pricing model will decrease, the use of the USD as invoicing currency will decline too.

Industry influence factor on the choice of invoicing currency is clearly demonstrated by the Australian statistics. For instance, 99.2% of the contracts purchasing iron ore, 99.9% — coal and 88.9% — natural gas supplied from Australia in the fiscal year of 2015/2016 were invoiced in the USD. At the same time, only 29.6% of medicine and pharmaceutical products' exports, 30.1% of general engineering products and 55.4% of road vehicles were denominated in the USD<sup>1</sup>. Thus, the higher variety of supplied goods (e.g. such as products of engineering or pharmaceuticals), the more opportunities for companies to denominate the price in national currency without fear of fluctuations in demand. That is because

<sup>1</sup> See International Trade in Goods and Services, Australia, October 2016 // Australian Bureau of Statistics. URL: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/5368.0Feature%20Article1Oct%202016?opendocument&tabname=Summary&prodno=5368.0&issue=Oct%202016&num=&view=>

different brands of goods are perceived by consumers as independent products.

A similar situation occurs in the case of imports. However, the commodities-dominated orientation of Australian exports leads to the low share of national currency — it does not exceed 15% in the exports compared with more than 31% in the imports.

High exchange rate fluctuations should be named among other factors that determine an entity's choice of currency. Exporters will seek to denominate their contracts in foreign exchange when their national currency is devaluing. It will allow them to receive additional profits in the national currency. At the same time, importers shall be encouraged to invoice a contract price in their national currency in order to reduce costs and prevent a decline in demand as a result of rising prices.

Thus, development of internal competition together with fostering of a highly diversified range of export products help expanding the use of a national currency in international settlements.

## References

1. *Bachetta P., van Wincoop E.* A Theory of the Currency Denomination of International Trade // European Central Bank . Working Paper. 2002. No. 177.
2. *Bergsten C. F.* The Dollar and the Deficits: How Washington Can Prevent the Next Crisis // Foreign Affairs. 2009. Vol. 88. No. 6. P. 20–38.
3. *Chinn M., Frankel J.* Why the Euro Will Rival the Dollar // International Finance. 2008. No. 11(1). P. 49–73.
4. *Cohen B. J.* The Benefits and Costs of an International Currency: Getting the Calculus Right // Open Economies Review. 2012. Vol. 23. No. 1. P. 13–31.
5. *Dixon C.* The New BRICS Bank: Challenging the International Financial Order? // The Global Policy Institute. London Metropolitan University. 2015. No. 28. URL: <http://www.gpilondon.com/wp-content/uploads/PP28-The-New-BRICS-Bank.pdf>
6. *Donnenfeld S., Zilcha I.* Pricing of Exports and Exchange Rate Uncertainty // International Economic Review. 1991. Vol. 32. No. 4. P. 1009–1022.
7. *Eichengreen B., Chitu L., Mehl A.* Stability or Upheaval? The Currency Composition of International Reserves in the Long Run // European Central Bank. Working Paper. 2014. No. 1715. URL: <http://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1715.pdf?485e29e6bbcff9684dfb4cc545b2aefc>
8. *Eichengreen B., Flandreau M.* The Federal Reserve, the Bank of England, and the rise of the dollar as an international currency, 1914–39 // BIS. Working Paper. 2010. No. 328. URL: <http://www.bis.org/publ/work328.pdf>
9. *Eichengreen B., Hausmann R., Panizza U.* Currency mismatches, debt intolerance and original sin: why they are not the same and why it matters // National Bureau of Economic Research. Working Paper. 2003. No. 10036. URL: <http://www.nber.org/papers/w10036.pdf>
10. *Eichengreen B.* Number One Country, Number One Currency? // The World Economy. 2013. Vol. 36(4). P. 363–374.
11. *Eichengreen B., Hausmann R., Panizza U.* Original sin: The Pain, the Mystery and the Road to Redemption. Conference “Currency and Maturity Matchmaking: Redeeming Debt from Original Sin”. Washington, D.C. 2002. November 21–22. URL: <http://www.financialpolicy.org/financedev/hausmann2002.pdf>
12. *Furusawa M.* Strengthening the International Monetary System. IMF Deputy Managing Director Remarks to a Conference on the Future of International Monetary System for Asia. 2017. March 8. URL: <http://www.imf.org/en/News/Articles/2017/03/08/>

SP030817 - Strengthening the International-Monetary-System

13. *Gao H., Yu Y.* Internationalization of the renminbi // Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific // BIS. BIS Papers. 2011. No. 61. P. 105–124. URL: <http://www.bis.org/publ/bppdf/bispap61.pdf>

14. *Genberg H.* Currency internationalisation: analytical and policy issues // Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific // BIS. BIS Papers. 2011. No. 61. P. 221–230. URL: <http://www.bis.org/publ/bppdf/bispap61.pdf>

15. *Gilchrist S., Yue V., Zakrajsek E.* U.S. Monetary Policy and Foreign Bond Yields. IMF 15th Jacques Polak Annual Research Conference. 2014. November 11. URL: <http://www.imf.org/external/np/res/seminars/2014/arc/pdf/gilchrist.pdf>

16. *Gopinath S.* An Internationalised Rupee? // BIS. 2009. URL: <http://www.bis.org/reofficepubl/arpresearch200903.10.pdf>

17. *Helleiner E.* Reluctant Monetary Leaders? // The BRICS and Asia, Currency Internationalization and International Monetary Reform // Asian Development Bank. Working Paper. 2013. No. 6. URL: <http://www.adb.org/sites/default/files/publication/30198/brics-asia-paper-no6.pdf>

18. *Ito T.* A New Financial Order in Asia: Will a RMB bloc emerge? // National Bureau of Economic Research. Working Paper. 2016. No. 22755. URL: <http://www.nber.org/papers/w22755.pdf>

19. *Kenen P.* Currency internationalisation: an overview // Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific // BIS. BIS Papers.

2011. No. 61. P. 9–18. URL: <http://www.bis.org/publ/bppdf/bispap61.pdf>

20. *Lee J.-W.* Will the renminbi emerge as an international reserve currency? // The World Economy. 2014. Vol. 37. P. 42–62.

21. *Maziad S., et al.* Internationalization of Emerging Market Currencies: A Balance between Risks and Rewards // IMF. Staff Discussion Note. 2011. No. SDN/11/17. URL: <http://www.imf.org/external/pubs/ft/sdn/2011/sdn1117.pdf>

22. *Nakamura A., Ueda K., Matsui K.* The Internationalization of Emerging Economy Currencies: Some Thoughts on the Internationalization of the Chinese Renminbi, Brazilian Real, and Russian Ruble // Institute for International Monetary Affairs. International Economic and Financial Review. 2012. No. 2. URL: [http://www.iima.or.jp/Docs/report/2012/no2\\_2012\\_e.pdf](http://www.iima.or.jp/Docs/report/2012/no2_2012_e.pdf)

23. *Ranjan R., Prakash A.* Internationalization of Currency: The case of the Indian Rupee and Chinese Renminbi // Reserve Bank of India Report. RBI Staff Studies. 2010. No. 3. URL: <http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/RRSS180510F.pdf>

24. Renminbi internationalization: Achievements, prospects and challenges / B. J. Eichengreen, M. Kawai (eds.) // Asian Development Bank Institute. Brookings Institution. Tokyo, 2015. URL: <http://www.adb.org/sites/default/files/publication/159835/adbi-renminbi-internationalization-achievements-prospects-challenges.pdf>

25. *Rey H.* Dilemma not Trilemma: The Global Cycle and Monetary Policy Independence // National Bureau of Economic Research. Working Paper. 2016. No. 21162. URL: <http://www.nber.org/papers/w21162.pdf>

26. *Shu C., He D., Cheng X.* One currency, two markets: the renminbi's growing influence in Asia-Pacific // BIS.

Working Paper. 2014. No. 446. URL:  
<http://www.bis.org/publ/work446.pdf>

27. *Tavlas G. S., Ozeki Y.* The Internationalization of Currencies: An Appraisal of the Japanese Yen // IMF. Occasional Paper. 1992. No. 90.

28. *Tavlas G. S.* Vehicle Currencies // The New Palgrave Dictionary of Money and Finance / P. Newman, M. Milgate, J. Eatwell (eds.). L.: Macmillan, 1992. P. 754–757.

29. *Zhou X.* Reform the international monetary system // People's Bank of China. 2009. March 23. URL: <http://www.pbc.gov.cn/english/130724/2842945/index.html>

## Chapter 2

# The Recent Evolution of the Local Currency Payments System of the Brazilian Economy<sup>1</sup>

The purpose of this chapter is to analyze the Brazilian Local Currency Payments System with Argentina, regarding its economic and institutional aspects, and to evaluate the legal aspects of the Brazilian financial system in order to consider possible steps for providing the basis for the integration of the BRICS local currencies.

In the recent years the discussion concerning the international monetary system and the convertibility of currencies has been gathering pace, pointing that deepening of both production and financial globalization makes significant difficulties for developing countries in gaining long-term financing and implementing the monetary policy. Because of inconvertibility their currencies do not carry out the basic functions of the currency in the international monetary system. It should be noticed that there is no international quotation of goods in inconvertible currencies, as well as they do not serve as a currency of denomination for mercantile or financial contracts and reserve assets.

This restraint has stimulated Brazilian policymakers to search mechanisms for the construction of a Local Currency Payments System between Brazil and Argentina, with final cause to reduce the dependence from the main reserve

currency of the world economy. Although there is equal system between Brazil and Uruguay<sup>2</sup>, the available data are scarce, so the registers of the first business are only of 2015, according to Brazilian Central Bank.

The Brazilian export variable was chosen because it reflects simultaneously the preference of the Argentinean importers and of the Brazilian exporters in invoicing their business in real inside the SML. Both start to recognize advantages in transacting without the intermediation of the US currency, and they gradually begin to elect voluntarily the BRL as a currency of bilateral commerce. So, the Brazilian currency stops carrying only its classic functions internally and sketches some properties in the international plan.

### Financial opening of Brazilian economy

Biancareli (2010) analyses the main reforms in the Brazilian National Financial System, pointing to three levels of opening adopted by the Brazilian economy. The first opening level began in the 1990s, under the Collor government and within the first mandate of FHC, when the search started for a process of liberalization of the means and conditions of external debt through the diversification of instruments existed. Within the second mandate of FHC, there was a deepening of the liberalization process in 1999 involving the alterations in the legislation regarding the treatment

<sup>1</sup> Uallace Moreira Lima — Federal University of Bahia; Marcelo Xavier do Nascimento — Federal University of Pernambuco.

<sup>2</sup> The agreement between the Central banks of Brazil and of Uruguay was signed in the end of 2014. Operations began only in 2015. We consider it as a very short historical series, therefore we decided not to include it in this report.

to the foreign investors in the local financial market.

The second opening level was connected with modifications in the legislation referring to possession of external assets, to the transfer of capital and to the internal debt of non-residents. This level included the period from the end of the government of FHC till the first mandate of the Lula's government. The third opening level is associated with the convertibility of the local currency. According to Biancareli (2010), measures for opening of the Brazilian economy were implemented abruptly, in so far as some macroeconomical variables started to present higher level of instability and dependence regarding the international scenery.

For Freitas and Prates (2001), the measures for promoting the financial opening in the 1990s took as main objectives the relaxation of the foreign investors' entering the national financial market and the adaptation of the regulatory landmark of financing. According to the authors, the immediate result of these measures was the liberalization of the portfolio foreign investments both in the domestic and international capital markets, causing a favorable environment for the predominance of the process of speculation to the detriment of the productive investments.

The process of financial opening of the Brazilian economy was associated with the turn of the international liquidity. Thus, the financial liberalization, allied with elevated interest rates, has provided a substantial capital inflow since 1991, which increased of the local reserves.

The liquidity cycle in the world-wide market entered the stage of decline after a crisis in the international market had begun in the 1970s. That was the result of the external sector crisis caused by oil price increase, and the crisis of financing in 1973 — that marked the end of a long cycle of prosperity for the capitalism managed by Bretton Woods' System.

The situation had been getting worse from 1979 with two external shocks which affected not only the Brazilian economy, but all countries that had depended from external capital financing. The first shock was the elevation of the price for the oil barrel, which had raised the prices from USD 12 to USD 30 per barrel in the end of 1978 and beginning of 1980. The second shock was the elevation of the international interest rate, as a consequence of changes in the US' economic policy.

After the successive exchange crises that reached Mexico (1995), Asia (1997) and Russia (1998), the Brazilian exchange regime was changed in 1999, shifting from the regime of fixed exchange to the regime of floating exchange, in order to maintain the increase in the currency value caused by the expressive escape of capitals, besides the significant untenable imbalance of the swinging of payments. This change of exchange regime inaugurated a new phase of the neoliberal economic model in Brazil, where the exports became a variable of extreme importance as a mechanism for external agreement and remuneration of the financial capital. This phase was also marked by the adoption of two new orthodox measures in the economic policy: inflation targeting regime and getting elevated primary surpluses. Both measures set that the control of inflation and is the main objective of the economic policy in Brazil, to the detriment of measures that provide a sustainable long-term economic growth. In fact, the economic tripod — inflation marks, floating exchange and fiscal surplus — can be understood through economic policy which guarantees the remuneration of the financial capital.

The evolution of the investment flow in stock market and foreign direct investment for Brazil confirms the hypothesis presented by Biancareli (2007), according to which during the rising phase of the cycle of international

liquidity investment in stock markets is of the biggest importance for developing countries. During the descending phase it is the foreign direct investment that leads the movement of fall. The fact is that the indicators of the Brazilian economy point to the fact that the Brazilian option of being incorporated in the international market through the predominance of the financial globalization process (capital account) turned to the creation of a much more favorable economic environment for speculative short-term investing and the patrimonial direct investment, thus aggravating the country's position in the international monetary system as peripheral economy with an inconvertible currency.

The strategy adopted by Brazil to reduce this vulnerability is to build a mechanism of payment system using local currencies in its commercial relations with other countries of the South America. It is possible through the strengthening and deepening of the MERCOSUR<sup>3</sup>.

## The Local Currency Payments System

The Local Currency Payments System is a tool inserted along with the set of political measures of incitement to the integration within the MERCOSUR countries. The mechanism allows the economic agents from different countries to invoice the bilateral business in local currencies, thus reducing the costs of transaction associated to the operation exchange and the tax on financial operations.

According to the Central Bank of Brazil, the objectives of the system are: to

<sup>3</sup> All countries of South America participate in MERCOSUR, either as a Member State, or as an Associated State. 1) Member States: Argentina, Brazil, Paraguay, Uruguay (from March 26, 1991) and Venezuela (from August 12, 2012). 2) States in the process of incorporation: Bolivia (from December 7, 2012). Associated states: Chile (from 1996), Peru (from 2003), Colombia, Ecuador (from 2004), Guyana and Surinam (both from 2013).

stimulate the commerce for the reduction of the costs of transaction, to make easy the access of new small- and middle-sized economic agents, as well as to strengthen the local currencies through the realization of regional business without the intermediation of the dollar.

Creating of this system inside Brazil started with the publication of prescriptive acts of the Central Bank, the National Monetary Advice and of the Chamber of Exterior Commerce of the Presidency of the República<sup>4</sup>. However, such acts were preceded by decisions of the Council of the Common Market of MERCOSUR<sup>5</sup>, where the bases of the SML were launched between Brazil and Argentina.

Although the formation of the SML has demanded the convergence of decisions of several persistence, the operation of the system is carried out under an agreement (BCB and BCBRA, 2008) signed between the Brazilian and Argentinean Central banks. The regulation sets that the payments in local currencies are allowed to any type of operation between residents in both countries. However, there is an authorization requirement, so that the Central bank at present restricts the operations in common agreement contented by the monetary flows of import and export of goods and services.

The system does not work totally without the US dollar, nevertheless it transmits to the economic agents engaged the perception of which exchange operation does not exist. It removes the embarrassment of the cost of transaction of the purchase of the currency and the eventual fluctuations that can compromise the income of the operation,

<sup>4</sup> Prescriptive circular of the Central Bank of Brazil No. 3.406/2008, Resolution of the National Monetary Advice No. 3.08/2008 and Resolution of the Chamber of Exterior Commerce 12/2007 respectively.

<sup>5</sup> Decision of the Council of the Market Common (MERCOSUR) No. 38/2006 and 25/2007.

besides dispensing the payment of the tax on financial operations in case of Brazil.

Two important characteristics of the Local Currency Payments System are distinctive: the voluntary character of joining the system and the position of an economic agent inside the commercial relationship between Brazil and Argentina. Being a volunteer to transact under the SML, the economic agent needs incentives to feel attracted. To a large extent, the abolition of the exchange operation removes barriers and stimulates the entry of agents, earlier repelled by high operational costs. In general, operating inside the system approaches to the internal commerce, stimulates the competition and induces the efficiency of the economic agents.

Every external commercial relationship has the stage of commercial agreement, boarding and the liquidation by means of the payment. The traditional mechanisms of commercial liberalization include both tariff and non-tariff barriers (for stages of commercial agreement and board). It does not predict changes in the rate of a currency that will be used for the turnover and liquidation (in general — the USD).

The Local Currency Payments System operates exactly at the stage of the turnover and liquidation, substituting the turnover in foreign currency for the local currencies of the wrapped countries. Incentives for the economic agents, as mentioned above, are the abolition of the exchange cost and the possibility to effectuate the operational calculation in a familiar currency, knowing in advance the value of the bill that will be received. By the side of the importer, according to the rules of the system, the paid value will not be known in advance, since it depends on the Tax SML for the day of making the operation. Nevertheless, these exchange rates use the local currencies without the straight intermediation of

the conventional exchange in the perception of the importing agent.

## Evolution of the SML in data

The Table 1 presents a synthesis of the Brazilian exports to Argentina during the last six years. The first more general observation is that the total value of exports in dollars had been raising till 2011 and then decreasing, with reaching the same landing of the beginning of the series. On the other side, the volume of exports under the SML (in Brazilian currency) grew along the years, despite being relatively stagnant from 2012. Still so, the exports invoiced in BRL increased more than five times, in a tendency different from the total exports invoiced in USD.

It can seem fearful to compare the same variable in completely different monetary unities, in special because the SML is a new instrument of voluntary use. Nevertheless, after conversion to US dollars by the annual average exchange rate, it is extracted a near value in BRL that makes possible the comparison between the two forms of exportation.

With the values adjusted to the same monetary unity it is seen that despite of the accented devaluation of the real, that reduces the quotient in dollars, the share of the exports under SML has reached little more than 6%. In fact, this may look negligible, but, if compared with the quantity of operations of export contracted from 2009, it becomes clear that there was a significant growth of the voluntary use of the SML. In accordance with the Central Bank of Brazil, the growth was tenfold, reaching the mark of almost eleven thousand operations in 2015.

After six years of effective functioning the SML between Brazil and Argentina results achieved make clear that there is a growing interest of the economic

**Table 1**  
Exports to Argentina

Year	Value exported, USD (A)	Value exported under SML, BRL	Exchange rate, BRL/USD	Value exported under SML, USD (B)	B/A, %
2009	12,784,699,502	451,061,104.78	1.74	259,170,940.46	2.0
2010	18,522,520,610	1,252,700,533.25	1.67	752,191,997.87	4.1
2011	22,709,344,431	1,623,201,038.91	1.88	865,661,052.16	3.8
2012	17,997,706,375	2,277,897,217.86	2.04	1,115,031,189.91	6.2
2013	19,615,414,342	2,581,447,704.82	2.34	1,102,240,693.77	5.6
2014	14,281,998,035	2,313,261,335.97	2.66	871,088,016.26	6.1
2015	12,800,015,447	2,504,490,534.16	3.90	641,486,228.72	5.0

Source: Ministry of Development, Industry and Foreign Trade; Central Bank of Brazil

Note: The exchange rate used is an annual medium calculated by Central Bank of Brazil

agents wrapped in carrying out external transactions without the intermediation of the dollar. How the turnover is made with national currencies under the SML, it is worth observing with attention to the evolution of value in BRL, because this value, being converted in dollar, serves only to estimate the SML share in the total exports.

The opposite takes place when we observe the Brazilian imports with origin in Argentina. Though there had been more than nine-time growth during six presented years, the biggest imported value hasn't reached BRL 40 million and USD 9 million when converted. The same

thing goes for the share in total imports by Brazil, which does not reach 1%.

The discrepancy between the dynamic bilateral of commerce between Brazil and Argentina under the SML reflects, first of all, the preferences of the economic agents, that can be caused by a set of reasons concerning the each country's internal order. The lack of interest of the Argentinean exporters in invoicing in their local currency and keeping on negotiating in the US currency, though it is not the object of the current analysis, can be a sign of low internationalization of the Peso. Besides, such an asymmetry can mean that the SML works well only for one of the countries. That might be reduced

**Table 2**  
Imports from Argentina

Year	Value imported, USD (A)	Value imported under SML, BRL	Exchange rate, BRL/USD	Value imported under SML, USD (B)	B/A, %
2009	10,955,256,800	4,296,941.53	1.74	2,468,939.05	0.023
2010	14,434,593,883	8,998,129.07	1.67	5,402,983.71	0.037
2011	16,906,351,476	8,736,895.69	1.88	4,659,429.20	0.028
2012	16,444,158,185	17,245,299.73	2.04	8,441,578.02	0.051
2013	16,462,685,523	10,525,643.55	2.34	4,494,296.99	0.027
2014	14,142,927,904	5,033,622.97	2.66	1,895,474.83	0.013
2015	10,284,589,084	37,573,226.81	3.90	9,623,796.63	0.094

Source: Ministry of Development, Industry and Foreign Trade; Central Bank of Brazil

Note: The exchange rate used is an annual medium calculated by Central Bank of Brazil

**Table 3**  
Twenty principal goods exported to Argentina in 2015

NCM	Goods	Value in USD (FOB)
87032310	Vehicles; with only spark-ignition internal combustion reciprocating piston engine, cylinder capacity	1,699,472,906
87032210	Vehicles; with only spark-ignition internal combustion reciprocating piston engine, cylinder capacity	705,061,215
87042210	Vehicles; compression-ignition internal combustion piston engine (diesel or semi-diesel), for transport	305,948,970
87012000	Tractors; road, for semi-trailers	285,784,532
26011210	Iron ores and concentrates; agglomerated (excluding roasted iron pyrites)	214,469,174
87082999	Vehicles; parts and accessories, of bodies, other than safety seat belts	211,825,702
87043190	Vehicles; spark-ignition internal combustion piston engine, for transport of goods (of a g.v.w. not exceeding 5t)	205,826,452
84073490	Engines; reciprocating piston engine, of a kind used for the propulsion of vehicles of chapter 87, of a cylinder capacity exceeding 1000cc	198,081,154
87085080	Vehicle parts; drive-axles with differential, whether or not provided with other transmission components, and non-driving axles; parts thereof	192,830,872
87042190	Vehicles; compression-ignition internal combustion piston engine(diesel or semi-diesel), for transport	181,504,093
87089990	Vehicle parts and accessories; n.e.c. in heading No. 8708	161,167,572
87060010	Chassis; fitted with engines, for the motor vehicles of heading No. 8701 to 8705	153,672,563
26011100	Iron ores and concentrates; non-agglomerated	134,797,017
40112090	Rubber; new pneumatic tyres, of a kind used on buses or lorries	133,579,090
28182010	Aluminium oxide; other than artificial corundum	130,045,787
87083090	Vehicle parts; brakes, servo-brakes and parts thereof	114,317,652
87032100	Vehicles; with only spark-ignition internal combustion reciprocating piston engine,cylinder capacity	111,053,346
39012029	Ethylene polymers; in primary forms, polyethylene having a specific gravity of 0.94 or more	102,612,249
87084080	Vehicle parts; gear boxes and parts thereof	93,167,775
87088000	Vehicle parts; suspension systems and parts thereof (including shock-absorbers)	91,229,752
<b>Total</b>		<b>5,426,448,173</b>
<b>Total exports to Argentina</b>		<b>12,800,015,447</b>

by more effective policy providing different incentives for using the system.

In the Table 3 and Table 4 twenty main goods exported to Argentina in 2015 are listed, both in USD (Table 3) and under the SML (Table 4). The separation of the activities follows the CNAE standards with regard to the SML and NCM to the exports in dollar. Although the classifications differ from the qualitative observation of the subsectors, it is possible to identify the exporting activities that follow certain standards.

The group of activities presented in the Table 3 corresponds to 42% of the Brazilian exports to Argentina. It shows that the most dynamic group of exports is the automotive industry (code 87), which holds more than 30% of the total volume presented in the Table, being followed to the distance by the mining and chemical products (Codes 26 and 28).

The list of Brazilian exports under SML presented in the Table 4 still shows a predominance of the automotive industry (code 29), where only nine goods holds 28% of all the exports invoiced in BRL and more than 50% of the used sample. On the other side there is a reasonable diversification in many products like the sector of metallurgy (code 24), which production is most exported under the SML.

Eleven remaining sectors of the selected list add up nearly 40% of the local sales in Argentina with foodstuffs, paved, material to office, glass and wholesale commerce. These data contrasts with the Table 3, in which the goods connected with the motor sector occupy almost the whole list (in dollars).

The existence of the SML reveals a subtle alteration in the list of twenty main products exported from Brazil to Argentina. The predominance of the automotive industry sector and associated sectors is incontestable, although its weight inside the SML is relatively less. The appearance of other sectors with greater distinction in the SML can

indicate that there is a positive answer to advantages from invoicing business in BRL, and that there are exporting sectors in Brazil interested in transacting without the mediation of the dollar exchange.

## The national financial system after 2003

The changes of the 1980s in the national financial system and in the Brazilian economy deepened the participation of foreign capitals in the home market, along with changes in the Federal Constitution<sup>6</sup>. After the beginning of Real Plan in 1994 the currency board was adopted, aiming at fighting against inflation and creating conditions for the captivation of external financing. The fixed exchange rate put the new national currency in equality with the US dollar. This added to the commercial opening and intensified the trade balance deficit<sup>7</sup>. The Fernando Henrique Cardoso government tried to counterbalance this imbalance through a passive monetary politics executed to adjust the Swinging of Payments on the Capital account. The elevated interest rates of the public titles linked to the dollar attracted significant volumes of capitals for short-term investment.

Lack of control over the inflation in the 1980s and beginning of the 1990s made difficult for the national currency to carry out its basic functions, and when the context of restriction of the balance of payments was given it was a need for external emblems to balance the internal environment. Within this period there was no discussion, more or less initiative,

<sup>6</sup> The Correction to the Constitution number 40/2003 moved several legal restrictions of the national financial system.

<sup>7</sup> Between 1995 and 1999 the balance of that of the Commercial Swinging was negative, a period in which the government supported an exchange politics of equality with the US dollar. The surplus began in the next year strongly influenced by the devaluation of the real in 1999.

**Table 4**  
Twenty principal goods exported to Argentina in 2015 under the SML

CNAE code	Goods	Value in BRL	Value in USD
2422901	Production of carbon steel flat rolled products	179,213,201.68	45,952,102.99
2949299	Manufacture of other parts and accessories for motor vehicles not elsewhere classified	138,388,603.22	35,388,603.22
2910701	Manufacture of cart, vans and buses	117,871,466.96	30,223,453.07
2942500	Manufacture of parts and accessories for the systems of running and transmission of motor vehicles	96,189,530.76	24,663,982.25
2422901	Production of flat-rolled carbon steel, whether or not coated	79,025,765.52	20,263,016.80
2949201	Manufacture of benches and upholstery for motor vehicles	69,147,111.98	17,730,028.71
2063100	Manufacture of cosmetics, perfumery and toilet preparations	68,182,002.51	17,482,564.75
2211100	Manufacture of tires and inner tubes	65,677,109.85	16,840,284.58
8211300	Combined office and administrative support services	59,381,983.54	15,226,149.63
2949299	Manufacture of other parts and accessories for motor vehicles not elsewhere classified	51,915,966.20	13,311,786.21
2942500	Manufacture of parts and accessories for the systems of running and transmission of motor vehicles	48,173,893.14	12,352,280.29
2311700	Manufacture of flat glass and security glass	43,534,154.12	11,162,603.62
1533500	Manufacture of synthetic leather footwear	38,673,607.36	9,916,309.58
2949299	Manufacture of other parts and accessories for motor vehicles not elsewhere classified	31,427,863.35	8,058,426.50
1531901	Manufacture of leather footwear	31,081,668.37	7,969,658.56
2311700	Manufacture of flat glass and security glass	30,566,479.01	7,837,558.72
1531901	Manufacture of leather footwear	29,874,766.70	7,660,196.59
4530702	Manufacture of tires and inner tubes	29,147,946.69	7,473,832.48
1020102	Manufacture of preserved fish, crustaceans and molluscs	27,636,372.18	7,086,249.28
2941700	Manufacture of parts and accessories for motor vehicles	26,625,892.91	6,827,152.03
<b>Total</b>		<b>1,261,362,335.37</b>	<b>323,426,239.84</b>
<b>Total exported to Argentina under the SML</b>		<b>2,329,925,757.49</b>	<b>597,416,860.89</b>

concerning using Brazilian currency in the turnover of the international commerce, mainly because the Brazilian economy had suffered in the previous decade with elevated inflation rates and successive plans of monetary stabilization that did not work.

The external imbalance produced by the economic management of the FHC government became an impetus to force the adoption of measures for attraction and maintenance of foreign emblems through high interest and restriction of the internal demand. Only in 2007, under the Squid government, it was allowed to receive the export revenues in reals<sup>8</sup>. The use of the Brazilian currency was stimulated also by the Resolution 3844/2010 that allowed financial transfers for the outside in any currency, and by the circular 3691/2103 that allowed the liquidation of promises abroad with national currency.

The participation of enterprises and foreign institutions in the Brazilian market was enlarged with the permission to have accounts in reals under Circular Letter No. 3691/2013 of the Brazilian Central Bank, but only for foreign exchange operations<sup>9</sup>. In the same sense, the law 11.803/2008 authorised the Central Bank of Brazil to maintain counts of deposit in reals of property of foreign Central Banks, foreign institutions and enterprises that work with compensation, liquidation and custody in the international market. In case of the foreign Central banks, the Resolution 4.202/2013 determined that the counts in Brazilian currency could be opened and maintained exclusively in the name of foreign Central Banks with which the Central Bank of Brazil had celebrated contracts of swap of local currency.

For the aims of this report, weight of the BRICS countries' currencies is

<sup>8</sup> Resolution No. 12/2007 of Chamber of exterior commerce of the Ministry of Industry Development and exterior Commerce.

<sup>9</sup> We did not obtain an answer from the Central Bank of Brazil on the data available.

not significant in the total amount of the Brazilian reserves held in foreign currencies. The USD still represents 83% of the reserves<sup>10</sup>. That suggests that only a small part of business is in currencies of the developing countries. Nevertheless, the Resolution 3844/2010 allows financial transfers for the outside in any currency, in other words, there is a legal authorization for the remittance of currencies without distinction<sup>11</sup>. Such a prescriptive act can open space for circulation of the currencies of the BRICS among the countries. In case of real, its use for promises liquidation abroad is allowed by the Circular 3691/2103 (articles 6 and 8). So, the Brazilian legislation allows so much the possession of bank accounts for foreign official institutions and enterprises, both for exchange operations, and interbank transfers in any currency.

The activity of foreign financial institutions in the Brazilian market depends on authorization from the Central Bank of Brazil and from the Federal Executive Power (law 4.595/1964). Non-financial enterprises in Brazil need to ask for authorization the Ministry of Industry Development and Exterior Commerce to establish branches or agencies, if they want to operate in the country. Meantime, there is an instrument called Brazilian Depository Receipt that allows the foreign enterprises to operate in the Brazilian market with local currency (BM&F Bovespa, 2011).

The issuance of marketable securities is authorized only to companies that constitute the capital in national currency (article 5 of Law 6.404/1976) and submit to the regulation of the National Monetary Council and the Brazilian Securities and Exchange Commission. Thus, there

<sup>10</sup> In December 2015, the structure of reserves was as follows: US dollar — 83%, euro — 4.6%, Canadian dollar — 4.3% in euro, pound sterling — 3%, Australian dollar — 2.7%, yen — 1.8% and gold — 0.7%.

<sup>11</sup> Currencies of China and of South Africa are traded at the Stock Exchange of São Paulo.

is a restriction for foreign financial companies and institutions wishing to operate in the Brazilian securities market.

In the case of Brazilian companies, they may trade in the United States through American Depositary Receipts, which are securities issued by the US Securities and Exchange Commission of the United States. According to consultancy Economática, which tracks the actions of 28 Brazilian companies traded at the Stock Exchange of New York, in 2016 the value of transactions was equal to the half of the turnover volume of the Stock Exchange of Sao Paulo, and 10 Brazilian enterprises have business volume above the average of the actions of the US enterprises (Economática, 2016).

The Brazilian multinationals in conditions of giving out marketable papers abroad can be analyzed by their degree of internationalization<sup>12</sup>. In accordance with a study of the Dom Cabral Foundation (2016), which measures and monitors the internationalization of the Brazilian multinational enterprises, from a sample of 63 enterprises, 49 they act out of Brazil with own unities (the remainder — through franchises). Within the used sample, nearly 10 multinationals obtain more than 50% of receipts beyond Brazil. Another important fact is a geographical distribution of the branches: they are presented in almost all continents and, for the aims of this study, there are branches of Brazilian multinationals in all BRICS countries.

## Final considerations

The brief exhibition of the data concerning SML agreement between Brazil and Argentina shows that the system works by means of encouraging in the financial sphere of the operation of

export and import. It is clear that there is a mismatch in the use of the system for the economic agents of two countries. Perhaps it is only a reflection of the size of the internal economies, which is reflected to be the total exported. Meantime, as soon as the stimuli policies are equivalent, after six years of operation the low turnover value in Peso also can expose a situation in which the local currency is not much accepted for international operations, even inside a robust institutional outline as it is the MERCOSUR.

The appearance of eleven different sectors in the exports under the SML indicates that the incentives in Brazil were effective in the direction of encouraging new economic agents. The change in the group of goods exported under the SML (Table 4) also is an indicator of changes in the perception on the Brazilian currency, which assumes to some extent the function of unity of account for the regional commerce.

The experience of the Local Currency Payment System as a public policy is restricted by abolishing the transaction cost of the exchange operation and the wrapped taxation. There is no special treatment for the stage of shipment or customs, which continues similar to exporting in US dollars. The mapping of this stage and the identification of some item susceptible to the abolition would bring probably an additional stimulus to the adhesion to the system.

The discrepancy between exports and imports inside the SML produces an imbalance of the SML's balance of payments. In the case open to question, there is a great imbalance in favor of Brazil in every year of the series. That depends on the incentives for economic agents; that may require specific policies of encouraging. Opposite case, with the system only bringing benefits to a side the interest of the country in unfavorable situation of the agreement can be short.

From the data shown in the Table 4, it is worth to plan a policy plan to stimulate

<sup>12</sup> The Foundation Dom Cabral uses the rate of internationalization of the UNCTAD. It is calculated according to the next form: (total assets outside / total income + number of employees outside / total of employees)/3.

those sectors that use the SML like road of alternative export, by undertaking the more accurate analysis of the profile of such economic agents and the reasons that led them to opting for the SML, besides those already known ones. Also for those more powerful sectors within the SML, just like the motor one, it is worth thinking about policies to drive more still the use of the system.

The experience of a Local Currency Payments System already existent and reasonably consolidated was related briefly. The mechanisms for construction and management respond to the peculiarities of the MERCOSUR, however they can become a model of stimulus to the regionalism. Besides, it induces the reduction of the dependence regarding the dollar, which is in the root of the imbalances of the swinging of payments of the most of the developing countries.

At the time the dollar remains the main currency of international negotiation, and a reference unity for intermediating the exchange with non-convertible currencies. There are attempts of reducing this dependence through mechanisms that put the non-convertible local currencies in face one of other one. A good example is the SML between Brazil and Argentina, which works well and volume of business grows. However, this one does not do without the US dollar as a calculated parameter. The exchange rate of the SML is obtained from the relation of the respective currencies of Brazil and Argentina with the US dollar. So, that does not protect the tax SML from eventual abrupt exchange oscillations. On the contrary, it will be going to reflect them in the local currencies, and the economic agents do not realize the effect pass-through for the tax SML.

The construction of an alternative system of payments, in a first observation, passes by the substitution for another currency or commodity. Thus, in the XXth century the gold standard was initially replaced by a dollar-gold one,

and then — by dollar as the main reference currency. Herewith, there were always doubts on the question which one could be the main reference point, accompanied with efforts to create an appropriate payment system.

To give support to the BRICS claims for comparing the influence of the US currency without repeating the mistakes of this system, it is necessary: to reduce the volatility of the exchange rates between the currencies wrapped in order to avoid speculative positions and establish a collective action of the Central banks for avoiding exchange war between the countries. The choice of just one currency is not in the core of the political objectives of the BRICS, so the main idea is: to stimulate the use of the local currency circulating freely, building an exchange rate that reflects the combination to historical average of the commercial transactions between the countries, the GDP, the degree of internationalization of the currency and the productivity of the factors. Initially, the dollar would be still a parameter of comparison, subsequently substituted by the local currencies themselves. The strongest savings and the most present currencies in other markets would have his most valued currencies and vice-versa.

The internationalization of the BRICS-currencies depends on the liquidity and on the degree of opening of BRICS' financial markets: depth, elasticity and elevated volume of the wholesale markets, confidence in the financial power of the markets and standards regulatórios aligned. These agreements suffered more deep alterations (BCB's Resolution 3844/2010 (it allows financial transfers for the outside in any currency and Circular Letter 3691/2103 that allows the liquidation of promises abroad with national currency) in the internal and political stimulus legislation to the use of the local currency (in case of Brazil) in other markets, besides the reciprocity

of these last ones to accept business in real.

The experience of the SML between Brazil and Argentina demonstrates that there is already some degree of internationalization of the real and adhesion of Brazilian enterprises in invoicing in the Brazilian currency, since there is a policy set that stimulates the participation the system. The Brazilian multinationals operating abroad, under more several forms, also are an evidence of the internationalization of the production and penetration in the foreign financial markets (in the case of the Stock Exchange of New York). It is risked to answer these enterprises they would be disposed in substituting the BRL at the receiving of his bills, at last they operate in several markets with different currencies. Meantime, it is reasonable to believe that when a stimulus is in the form of public politics, mainly what withdraws the unpredictability of the exchange relation in the current system, the adhesion will take place in the similar form to the SML Brazil-Argentina.

The foreign enterprises that act in Brazil, under the local laws, have been demonstrating interest in invoicing in BRL, just like the motor enterprises (all foreigners multinationals) which use transacting under SML. Nevertheless, while joining the Brazilian market such enterprises become national in accordance with the legislation in force and since the treatment was already reported to the foreign enterprises with thirst abroad the same thing is not, though it could dispose of counts near the Central Bank of Brazil in BRL for exchange operations and remit any currency for the outside.

## References

1. ADR's brasileiros movimentam US\$ 1 bilhão em média por dia nos USA — As ADR's equivalem a mais de 50% da Bovespa — 10 ADR's têm movimento maior nos USA em comparação com o Mercado local // ECONOMÁTICA. 2016. October 4. URL: <http://economica.com/estudos/data/20161004a.pdf>
2. *Biancareli A.* A abertura financeira no Brasil: um balanço crítico // Sistema financeiro e desenvolvimento no Brasil: do Plano Real à crise financeira / Org. L. C. Marcolino, R. Carneiro. São Paulo: Publisher Brasil e Editora Gráfica Atitude, 2010. P. 55–88.
3. *Biancareli A.* Integração, ciclos e finanças domésticas: o Brasil na globalização financeira: Tese de Doutorado. IE/Unicamp, 2007.
4. Brazilian Depositary Receipts (BDRs) // BM&F Bovespa. 2011. URL: [http://www.bmfbovespa.com.br/pt-br/servicos/download/BDR\\_Patrocinados\\_Portugues.pdf](http://www.bmfbovespa.com.br/pt-br/servicos/download/BDR_Patrocinados_Portugues.pdf)
5. *Carneiro R.* Globalização e inconvertibilidade monetária // IE/Unicamp. Texto para Discussão. 2006. No. 120. URL: <http://www.eco.unicamp.br/docprod/downarq.php?id=1750&tp=a>
6. *Carvalho C. E., Vidotto C. A.* Abertura do Setor Bancário ao Capital Estrangeiro nos Anos 1990: os objetivos e o discurso do governo e dos banqueiros // Nova Economia. 2007. Vol. 17. No. 3. P. 395–425. URL: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0103-63512007000300002](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-63512007000300002)
7. Convênio do Sistema de Pagamentos em Moeda Local entre a República Argentina e a República Federativa do Brasil // Banco Central Do Brasil. 2008. September 8. URL: <http://www.bcb.gov.br/rex/sml/convenio-sml-pt.pdf>
8. *Eichengreen B., Hausmann R., Panizza U.* Currency mismatches, debt intolerance and original sin: why they

are not the same and why it matters // National Bureau of Economic Research. Working Paper. 2003. No. 10036. URL: <http://www.nber.org/papers/w10036.pdf>

9. *Eichengreen B., Hausmann R., Panizza U.* Original sin: The Pain, the Mystery and the Road to Redemption. Conference “Currency and Maturity Matchmaking: Redeeming Debt from Original Sin”. Washington, D.C. 2002. November 21–22. URL: <http://www.financialpolicy.org/financedev/hausmann2002.pdf>

10. *Filgueiras L.* História do Plano Real. São Paulo: Boitempo, 2000.

11. *Freitas M.C.P., Prates D.M.* A abertura financeira no governo FHC: impactos e conseqüências // Economia e Sociedade. 2001. Vol. 17. P. 81–111.

12. Ranking de Multinacionais brasileiras 2015 // Fundação Dom Cabral. 2016. URL: [http://www.fdc.org.br/blogespacodialogo/Documents/2015/ranking\\_fdc\\_multinacionais\\_brasileiras2015.pdf](http://www.fdc.org.br/blogespacodialogo/Documents/2015/ranking_fdc_multinacionais_brasileiras2015.pdf)

13. SML — Sistema de Pagamentos em Moeda Local // Banco Central Do Brasil. 2016. URL: <http://www.bcb.gov.br/pt-br/#!/n/sml>

## Chapter 3

### Russia's Deal on Promoting the Regional Status of the Ruble<sup>1</sup>

In the 1990s-2000s Russian ruble has evolved from almost inconvertible unit into a currency with no restrictions on both current and capital account convertibility in terms of national legislation. This process (along with the results achieved) is represented here with regard to changes in foreign exchange regulation, using the ruble in foreign trade, and developing both the FX and financial markets.

#### Foreign exchange regulation

In Russia partial current account convertibility of the ruble was guaranteed as early as in the mid of 1990s. Even the first edition of the act on Foreign Exchange Regulation and Foreign Exchange Control dated October 9, 1992 stipulated the removal of restrictions on using the Russian currency for current payments and transfers for residents. In June 1996 after Russia accessed to Article VIII of the IMF's Articles of Agreement this regime was extended to non-residents as well.

At the height of the 1998 crisis, the Russian government strengthened foreign exchange control. However, as financial stability grew most of the restrictions introduced in 1998–99 were either eased or cancelled.

Resumption of economic growth and substantial improvement of the payments balance in the early 2000s gave rise to further liberalization of foreign

exchange regulation and transition to a full convertibility of the ruble including capital transactions. This aim was set in President Vladimir Putin's Address to the Federal Assembly in May 2003<sup>2</sup>.

New revision of the Federal Law on Foreign Exchange Regulation and Control passed in December 2003 (dated December 10, 2003, No. 173-FZ) proclaimed free exercise of foreign exchange transactions between residents and non-residents. Restrictive administrative measures could only be imposed on certain transactions associated with capital flows and only in cases stipulated explicitly by the law. Almost all restrictions were supposed to be removed from January 1, 2007. However, this process was subsequently modified.

In the Address to the Federal Assembly on May 10, 2006 President Vladimir Putin noted the progress made by the Government in promoting a full convertibility of the ruble and recommended to accelerate this process with removing all remaining restrictions from July 1, 2006<sup>3</sup>. Since the mid-2006, the requirement of the Bank of Russia obliging to reserve funds while performing foreign exchange capital transactions was abolished. Moreover, the Federal Law on Foreign Exchange Regulation and Control (No. 131-FZ dated July

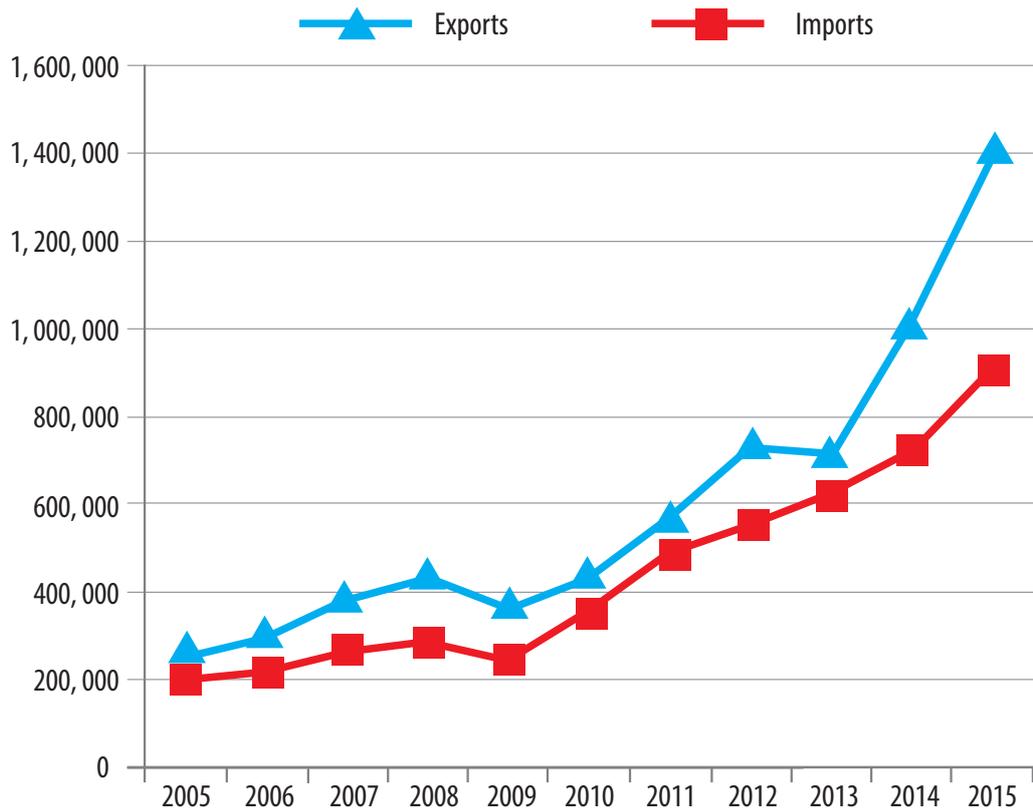
---

<sup>2</sup> Annual Address to the Federal Assembly of the Russian Federation // President of Russia: official website. 2003. May 16. URL: <http://en.kremlin.ru/events/president/transcripts/21998>

<sup>3</sup> Annual Address to the Federal Assembly of the Russian Federation // President of Russia: official website. 2006. May 10. URL: <http://en.kremlin.ru/events/president/transcripts/23577>

---

<sup>1</sup> Sergey Karataev, Nikolay Troshin, Nataliya Gribova, Pavel Zakharov, Ivan Bazhenov — Russian Institute for Strategic Studies.



**Figure 1.** Volumes of cross-border ruble payments with Belarus, Kazakhstan, Kyrgyzstan and Tajikistan, bn rubles

Source: Interstate Bank; authors' calculations

26, 2006) was amended to remove the power previously granted to the Russian Government and the Bank of Russia, to restrict foreign exchange transactions.

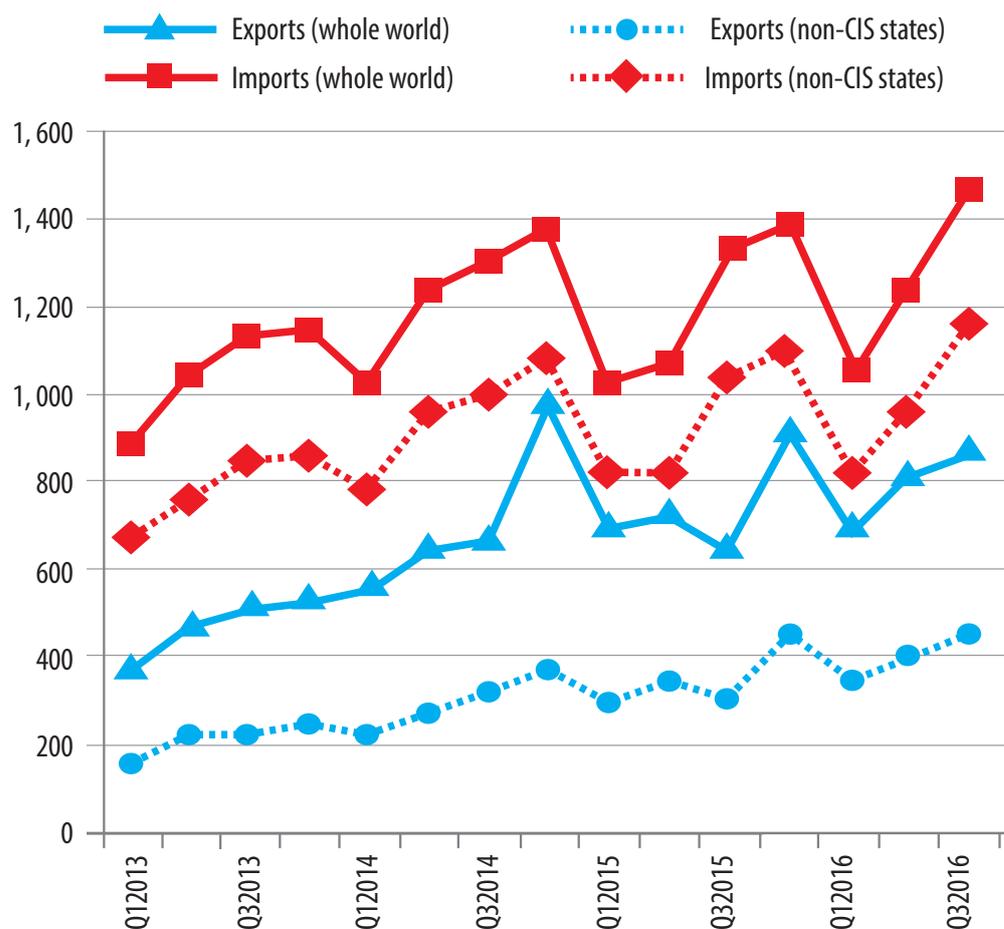
Since that moment, the ruble can be officially regarded as fully convertible. Non-residents were entitled to carry out any transactions with the Russian currency without limitations: open accounts, perform cross-border transfers, purchase securities etc.

Still the Russian legislation (particularly, bylaws) contains a number of provisions, mostly in the field of foreign exchange control, significantly hindering the ruble global turnover. Thus, the rule of export proceeds' compulsory repatriation is still in force (i.e. crediting these proceeds to an authorized bank's account within the territory of the Russian Federation), which also applies to ruble revenues. The requirement for making

a transaction certificate remains intact in case of the transaction occurred between Russian resident and non-resident<sup>4</sup>.

These requirements are not only burdensome for business but also work discouraging on using the Russian currency in international transactions. Moreover, such requirements run contrary to the goal of internalization of the ruble by inducing ruble inflows back into Russia.

<sup>4</sup> Currently, a transaction certificate (deal passport) is needed only if the amount of obligations under the agreement is equal to or exceeds the equivalent of USD 50,000. In May 2017 the Ministry of finance representatives announced the cancellation of transaction certificates that could be probably put into force in several months. See Minfin: pasporta sdelok s nerezidentami otmenyat // Vesti Ekonomika. 2017. May 11. URL: <http://www.vestifinance.ru/articles/85249>



**Figure 2.** Volumes of cross-border payments in rubles with the whole world and non-CIS countries, bn rubles

Source: Bank of Russia; authors' calculations

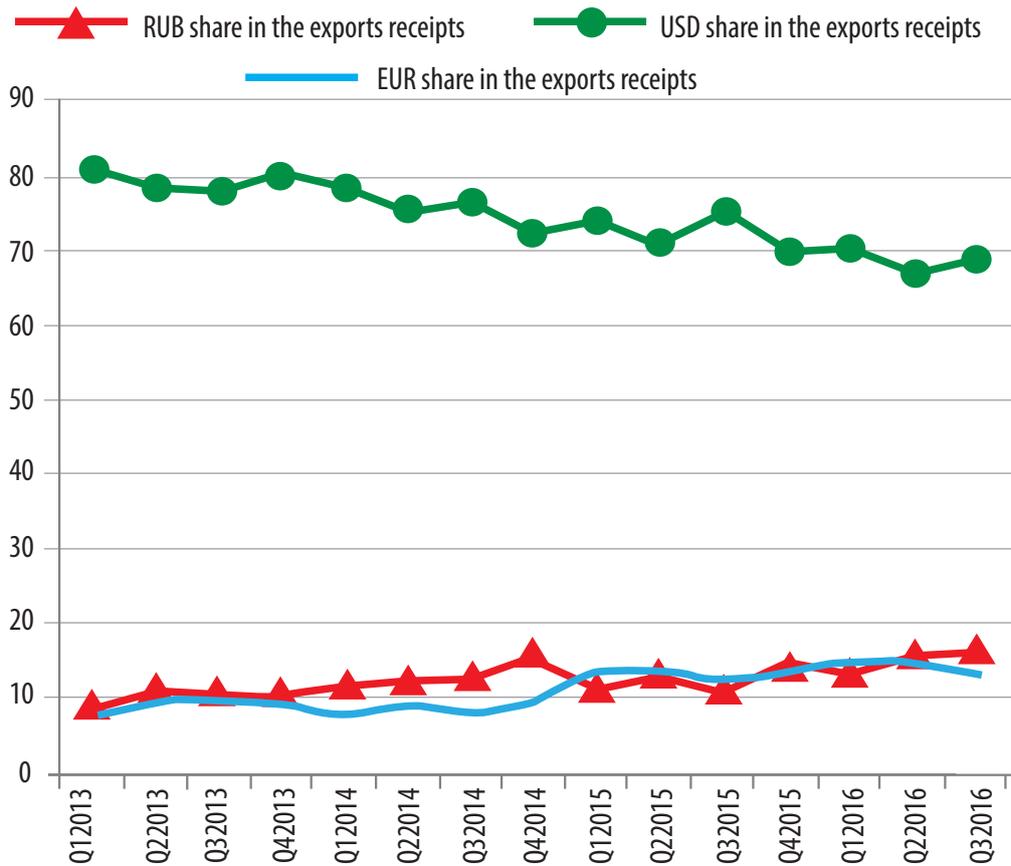
## Using the ruble in foreign trade in goods and services

Liberalization of foreign exchange regulation and removal of restrictions on capital flow led to growth of cross-border transactions in rubles. Primarily, the Russian currency began to regain position in the post-Soviet countries. National companies started to accept payments in rubles for their supplies to the CIS states more willingly. For example, according to the Interstate Bank's data collected from the central banks of Belarus, Kazakhstan, Kyrgyzstan and Tajikistan, the volume of ruble payments for Russian goods in the period from 2005 to 2008 grew from 247.5

billion rubles to 445.2 billion rubles, or by 80% (Figure 1).

The volume of ruble payments for the goods imported to Russia from these countries also increased, but in a lesser degree. Demand of the CIS states for freely convertible currency to form their international reserves determined their opting for the US dollar as a means of payment for their goods. Nevertheless, the volumes of ruble capital transfers, received by companies of the four-abovementioned countries grew from 204.3 billion rubles in 2005 to 292.2 billion rubles in 2008 or by 43%.

In 2009 the world economy crisis froze ruble transactions growth, but it resumed subsequently. In 2015, the volume of ruble payments for the Russian exports



**Figure 3.** Currency structure of the Russian exports receipts, %  
Source: Bank of Russia; authors' calculations

reached 1,417.8 billion rubles, while payments for imports reached 909.5 billion rubles. The Bank of Russia data generally confirms these dynamics, though the data on capital transfers for the goods imported by Russia still diverge in some cases. In particular, it concerns the crisis year of 2009, when the volume of ruble transfers increased, while national central banks documented its decrease, according to the Russian regulator.

The Bank of Russia has recently started to disclose data on currency structure of foreign trade in goods and services. The Figure 2 highlights quarterly data on the ruble, US dollar and euro share in exports receipts and imports payments, starting from Q1 2013<sup>5</sup>. Together with data from

the balance of payments concerning absolute values of trade volume, this affords to assess (with more or less accuracy) the ruble payments volume not only in the trade with the CIS countries, but also with the whole world.

The share of ruble receipts for the exports from Russia amounted to 1.9 trillion rubles in 2013, 37.4% of which represented Belarus, Kazakhstan, Kyrgyzstan and Tajikistan, while payments for imports amounted to 4.2 trillion rubles (the share of Belarus, Kazakhstan, Kyrgyzstan and Tajikistan was 14.3%). Therefore, unlike settlements with the CIS countries, settlements with non-CIS states show preponderance of ruble payments for the imports over ruble receipts for the exports, resulting in the development of external ruble market. In 2015, ruble receipts for the Russian

<sup>5</sup> See Currency Composition of Settlements for Goods and Services // Bank of Russia. URL: <http://www.cbr.ru/statistics/?PrtId=svs>

exports increased almost to 3 trillion rubles, while payments for imports increased to 4.8 trillion rubles. Along with it, the share of the abovementioned four countries grew insignificantly to 40.9% and 15.4% respectively. This was basically caused by stagnation (and even cut-down) of ruble settlements with other CIS states — mainly with Ukraine.

However, the deterioration of political situation did not actually affect the volume of ruble settlements with non-CIS states (Figure 2). Despite the anti-Russian economic sanctions imposed by the United States and their allies, the volume of ruble settlements with non-CIS states continued its growth almost at such rate as it was with Belarus, Kazakhstan, Kyrgyzstan and Tajikistan. Only for the first 9 months of 2016, the volume of receipts for the Russian exports to non-CIS states amounted to 1.24 trillion rubles, and payments for the imports — 2.91 trillion rubles, thus showing a growth of 27.6% and 9.8% respectively as compared to the same period in 2015.

At the same time, absolute values do not provide a broad picture of using the ruble in international settlements. For more precise assessment of its place and role in the total flow of cross-border receipts and payments of Russian companies, we should address the Russian foreign trade currency structure.

According to official statistics, the ruble share in receipts for the exports of goods and services from Russia is relatively low, amounting to 10–15% of the total receipts volume<sup>6</sup>. The main body of foreign exchange earnings is formed by the US dollar. The share of euro in receipts for the exports is comparable to the share of the ruble, though Euro-area countries account for 40% of the Russian exports at least (Figure 3).

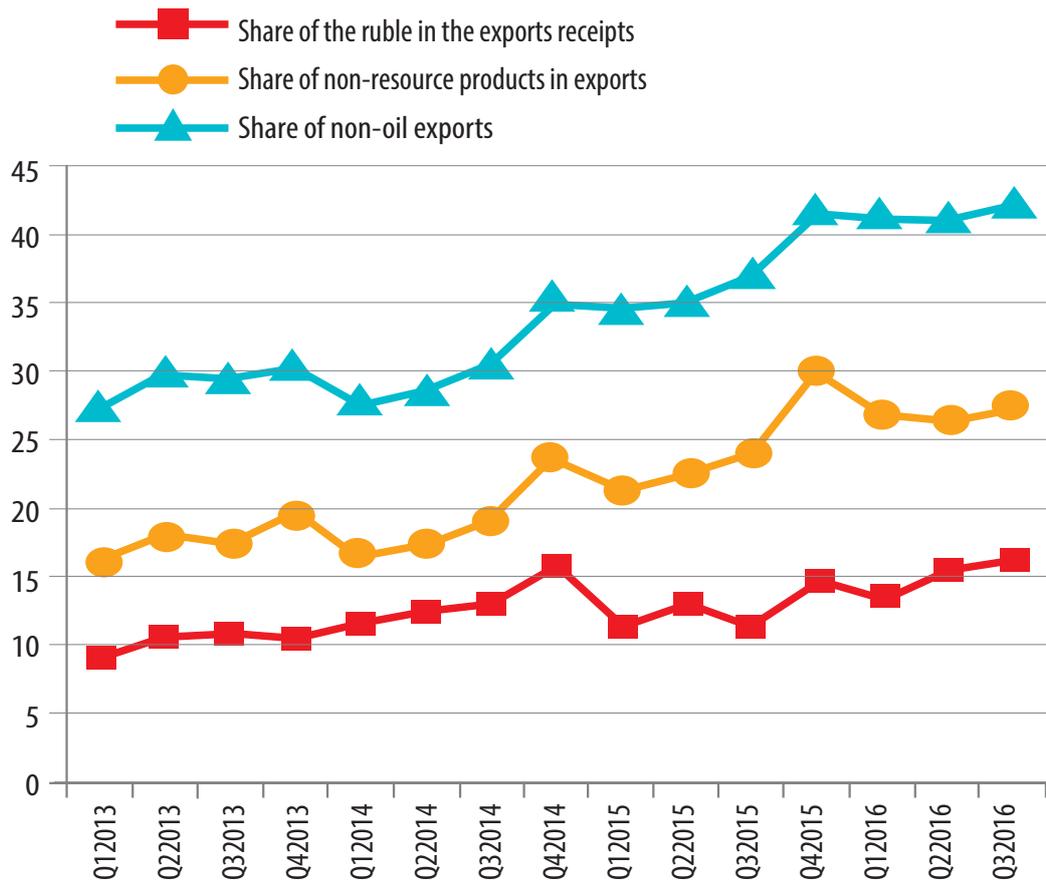
Such receipts structure is attributed to resource-based nature of the Russian

exports. In particular, in 2013 the share of oil and other energy and fuel recourses amounted to over 70% of the total value of the Russian exports. Together with ferrous and nonferrous metals, as well as gold the share of raw materials increases up to 82%. Prices for most of these goods are set mainly in the US dollars. As a result, the share of the US dollar in the receipts for the Russian exports in the same year of 2013 amounted to 79.6%. Relatively large share of the ruble in the settlements with the CIS states as compared to non-CIS states can be also attributed to reliance of the foreign exchange structure of the exports receipts on its commodity structure. In 2013 export of energy and fuel recourses to non-CIS states amounted to 74.5%, raw materials in whole — 85.7% from the total value of the exports<sup>7</sup>. 84.2% of the exports were settled in the US dollars, while rubles amounted only to 5.5%. However, in the trade with the CIS states the share of oil as well as other raw materials in whole was significantly less (47% and 59.5% respectively)<sup>8</sup>. As a result, the US dollar accounts for only 44.4% of the total value of receipts for the exports to the CIS states. The share of the ruble in the exports settlements is amounting to 47%.

Thus, there is a clear direct correlation between the share of raw materials (primarily, oil) in the Russian exports and the share of the US dollar in the receipts. It does not however mean that the share of the ruble in the receipts for the exports would grow automatically with the decrease of the share of energy and fuel recourses in the Russian exports structure. This notably appears from its movements in recent times. While the raw materials share in the Russian exports in the first three quarters of 2013 decreased by 10.5 pp (oil and gas — even 14.5%).

<sup>7</sup> See Exports commodity structure for January 2013 — December 2013 // Federal customs service. URL: <http://stat.customs.ru/apex/f?p=201:7:2854010855712102::NO>

<sup>8</sup> Ibid.



**Figure 4.** Share of the ruble and non-resource products in the Russian exports, %  
Source: Bank of Russia; FCS; authors' calculations

The share of the ruble grew only by 7.2 pp (Figure 4).

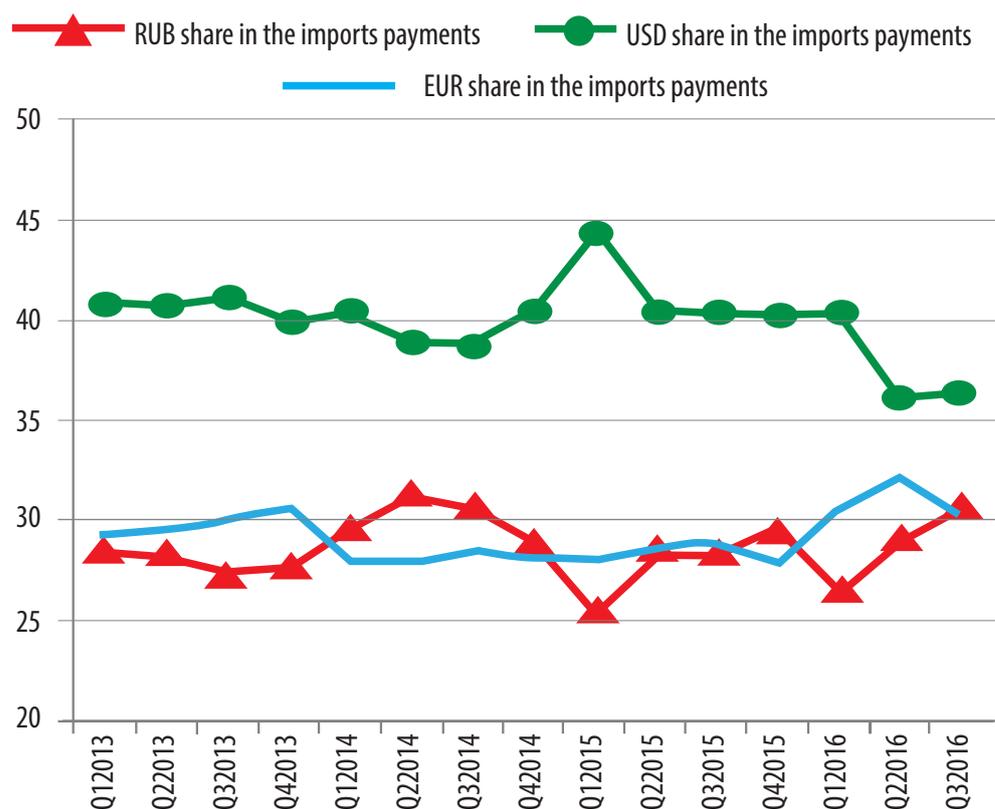
Thus, the ruble has the potential for expansion of its usage in the export settlements. Its share may be increased without reference to the export of raw materials, let alone the export of oil and gas, but this will imply promotion of those industries that offer wider product differentiation<sup>9</sup>. International experience shows that the share of national currency (e.g. in the receipts for the export of pharmaceutical products) can reach 70% to 80%.

Unlike the exports, the Russian imports are more differentiated and

therefore its share is significantly less, though the US dollar still remains the leading foreign exchange for settlements. Settlements in rubles amount to at least 25% of the total value of payments for imported goods and services, while the share of euro being slightly higher (Figure 5). As was the case of the exports settlements, the share of the ruble is higher in the settlements for the goods imported from the CIS states and the EAEU states. Here it exceeds 60%. Nevertheless, the share of the ruble in the settlements of imports from the EU is also high. It amounts to 26% of payments on average.

However, unlike the exports receipts, the imports transfers do not expose a clear tendency of growth of the ruble transactions share. In trade with non-CIS states as well as with the CIS states,

<sup>9</sup> The differentiation will be higher, where the goods of different sellers on the market are less perfect substitutes. The differentiation is based on the experience-based preferences of consumers who consider different brands as different goods.



**Figure 5.** Foreign exchange structure of payments for the Russian imports, %  
Source: Bank of Russia; authors' calculations

the share of the ruble in the imports transfers remains stable in general. This can indicate weakness of market positions of the Russian importers impelled to use foreign exchange as well as insufficient attractiveness of the ruble.

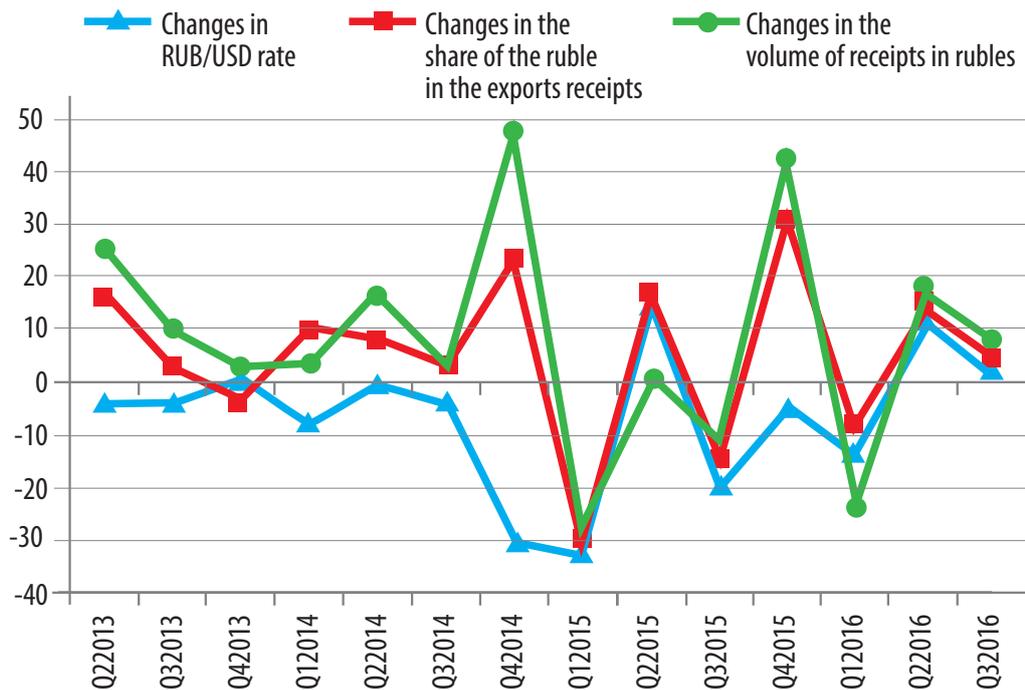
Strengthening the ruble could contribute to it significantly. Its depreciation leads to reduction of the volume and the share of the ruble in foreign trade. This applies both to the exports receipts (Figure 6) and to the imports transfers (Figure 7).

The first quarter of 2015 is representative in this regard. Exchange rate of the ruble to the US dollar fell sharply by 32% compared to the previous quarter. This resulted in reduction of the exports receipts volume by 27.9% and its share in the total amount of receipts by 29.6%. The same fluctuations emerged in the volume and share of the ruble in the imports transfers. Moreover, in the latter case foreign

suppliers had begun being reluctant to use the ruble in settlements ever earlier — once the tendency of its reduction had come into view.

This process could be in some way affected by tensions in relationships between Russia and the West countries in the aftermath of the Ukrainian crisis and subsequent economic sanctions imposed by the United States and their allies in relation to some Russian top companies and banks. However, once the ruble started to strengthen, its share in foreign settlements and volumes of transactions were on the rise. New significant depreciation of the ruble in Q1 2016 once again caused reduction of the ruble volume and share in both the exports and imports settlements.

Such dependence can be considered as one more symptom of weakness of Russian companies in the internal market mentioned above. In foreign markets,



**Figure 6.** Movements of the RUB to USD rate, volume and share of the ruble in the exports receipts from Russia, %

Source: Bank of Russia; authors' calculations

national exporters making contracts in US dollars with the growth of its exchange rate are able to get additional profit in rubles. On the contrary, in the internal market, setting prices on imported goods in US dollars in these circumstances leads to cost growth and profit reduction. Hence, investment capacity of Russian producers also declines.

The use of the ruble in settlements with the BRICS countries is inferior to those positions that the Russian currency generally occupies in the foreign trade of the country (Figure 8, Figure 9). Though the share of raw materials in the Russian exports to the BRICS countries is insignificantly less than that in total exports of Russia, the US dollar is dominant in bilateral settlements between the BRICS states. It accounts for more than 80% of mutual trade. For the first 9 months of 2016, only 7.6% of the Russian exports to the BRICS countries and 3.5% of the imports were settled in rubles, while the value of the ruble in trade

within the BRICS amounted to 7% and 3.5% respectively.

However, it is worth mentioning that the value of the ruble in the Russian exports receipts within the BRICS increases faster than those with other countries. While the share of the ruble in settlements with non-CIS countries grew by 5.4 pp including the EU countries by 6.8 pp, its share in payments from the BRICS states increased by 8 pp. The largest growth accounted for the share of the ruble in receipts from India: from 1.1% in 2013 to 14.8% in 2015. However, it began to decline in 2016. The share of the ruble in receipts for the Russian exports to China grew from 1.5% in January–September 2015 to 6.7% in January–September 2016.

On the other hand, the value of the ruble in transfers for the imports from the BRICS countries fell insignificantly. It was due to increase of the use of other BRICS countries' currencies in settlements, primarily the Chinese renminbi. While in Q1 2013 its share amounted only to 2.1% of the Russian imports transfers from China,

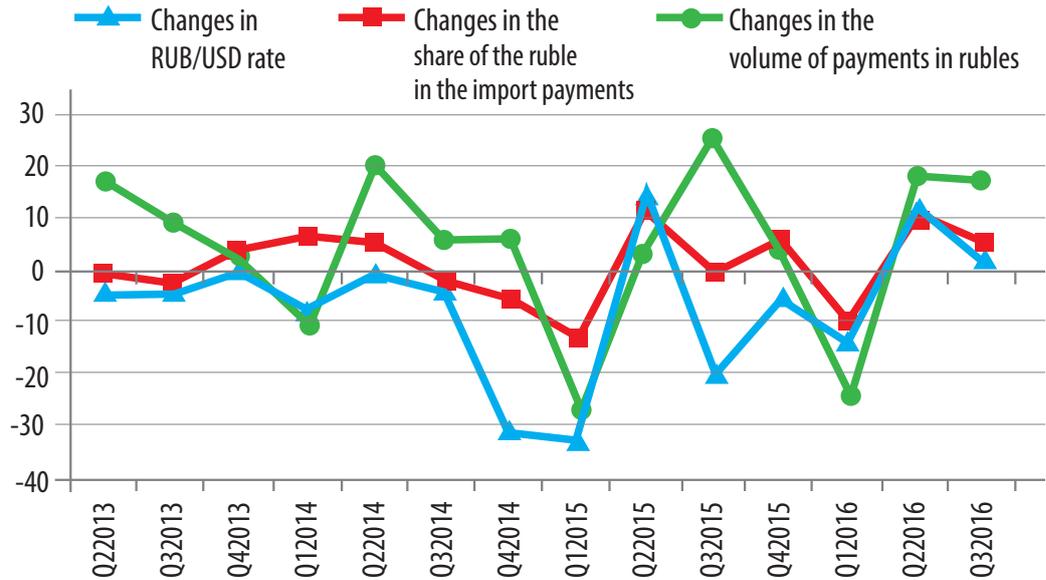


Figure 7. Movements of the RUB to USD rate, volume and share of the ruble in the import payments, %

Source: Bank of Russia; authors' calculations

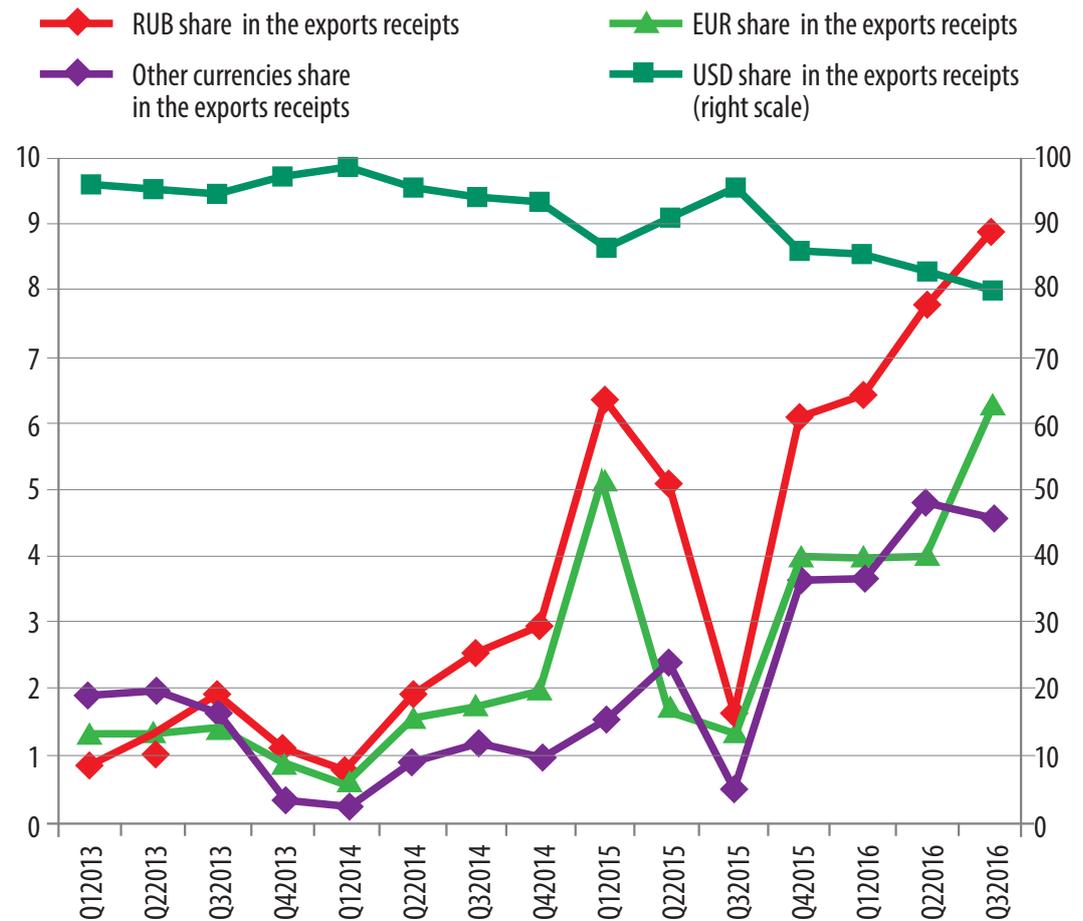
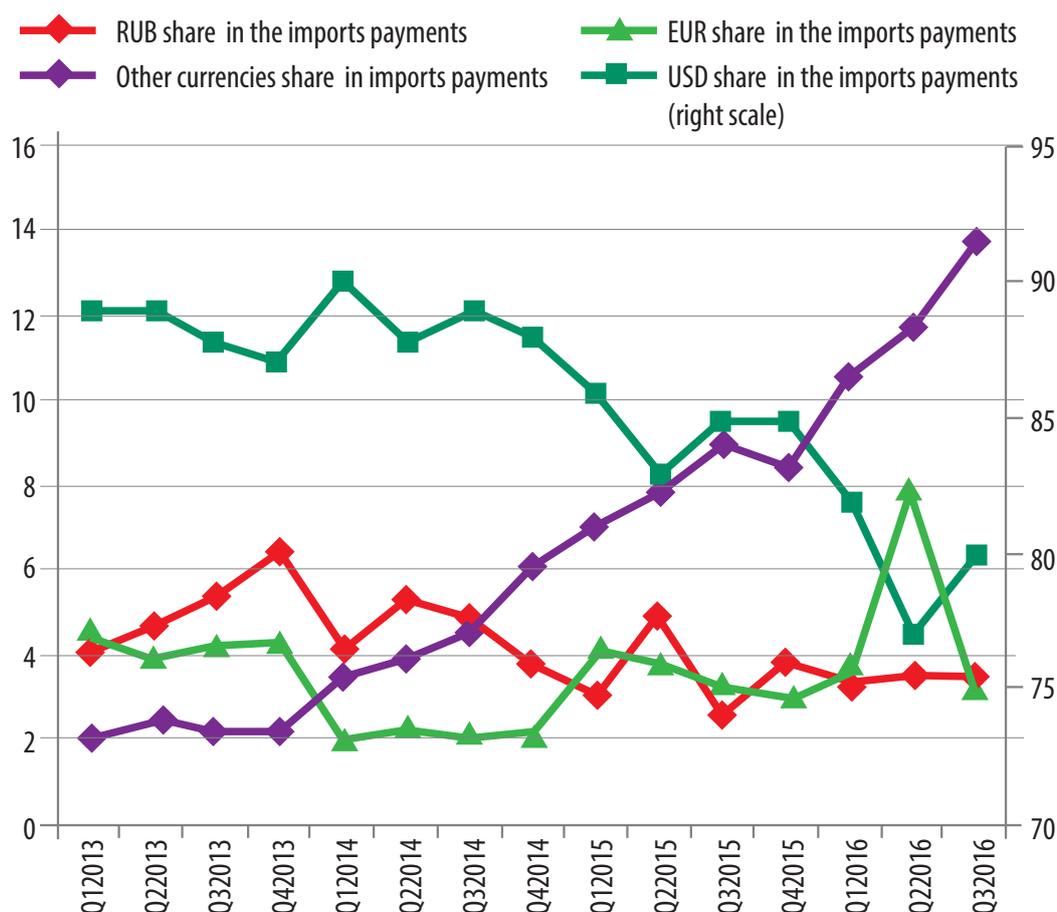


Figure 8. Foreign exchange structure of exports from Russia to other BRICS countries, %

Source: Bank of Russia; authors' calculations



**Figure 9.** Foreign exchange structure of the Russian imports from other BRICS, %  
 Source: Bank of Russia; authors' calculations

it grew to 15.8% of the total amount of transfers to China in Q3 2016<sup>10</sup>. Thus, the mutual trade of the BRICS countries assumes a rule, under which the exporter specifies the transaction currency. While seeking to mitigate foreign exchange risk, the exporter usually decides in favour of the national currency.

Apart from bilateral trade, the ruble is used by third countries for settlements among each other, which in general reflects a high level of internationalization of the Russian currency. According to the statistics of the Interstate Bank since 2005, the largest use of the ruble is fixed in the settlements between Belarus and Kazakhstan as well as between Kyrgyzstan and Tajikistan. In general, the share of the

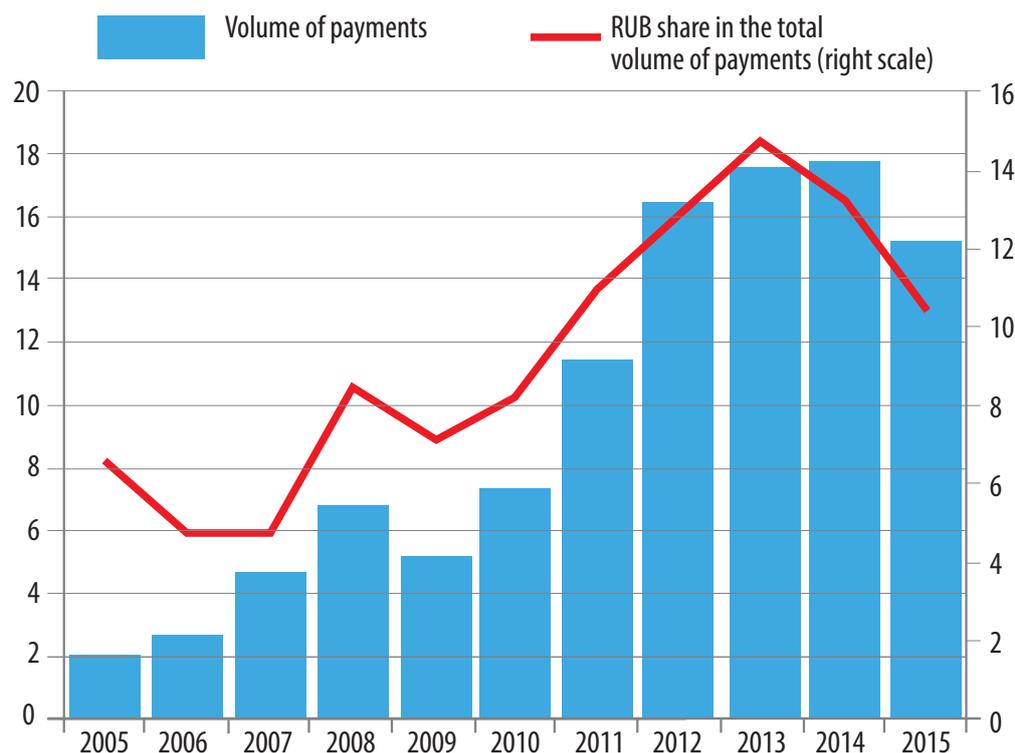
ruble in the mutual trade between these four countries in 2015 accounted for 10.5% of all payments (Figure 10). The largest amount (14.8%) was reached in 2013. However, significant depreciation in the subsequent years led to reduction of its use and therefore of its share in settlements<sup>11</sup>.

## Development of trade in the RUB on FX markets

An important condition for using the ruble in international settlements is the presence of a developed FX market. Such market allows quickly and with minimal costs buying or converting rubles into

<sup>10</sup> The Bank of Russia does not separate a share of the Chinese renminbi in its statistics. "Other currencies" column was taken as a reference data.

<sup>11</sup> See Payments providing mutual trade turnover // Interstate Bank. URL: [http://www.isbnk.info/analytics\\_payments.html](http://www.isbnk.info/analytics_payments.html)



**Figure 10.** Use of the ruble in mutual trade of Belarus, Kazakhstan, Kyrgyzstan and Tajikistan: volume (bn rubles) and share of the ruble (%)  
 Source: Interstate Bank; authors' calculations

any other currency. Currently, Russia has a sufficiently large and liquid FX market (both the internal and external one) with a well-formed institutional structure and modern trade technologies.

The internal FX market in Russia developed primarily as an exchange. Moscow Interbank Currency Exchange (Moscow Exchange since 2012) was established in January 1992 on which trades were effected in auction mode until 1998. Unified rates were established for all participants during the auction. In 1997, MICEX proposed to the banks a system of electronic lot trading allowed to conclude transactions during the entire operational day at the current exchange rates.

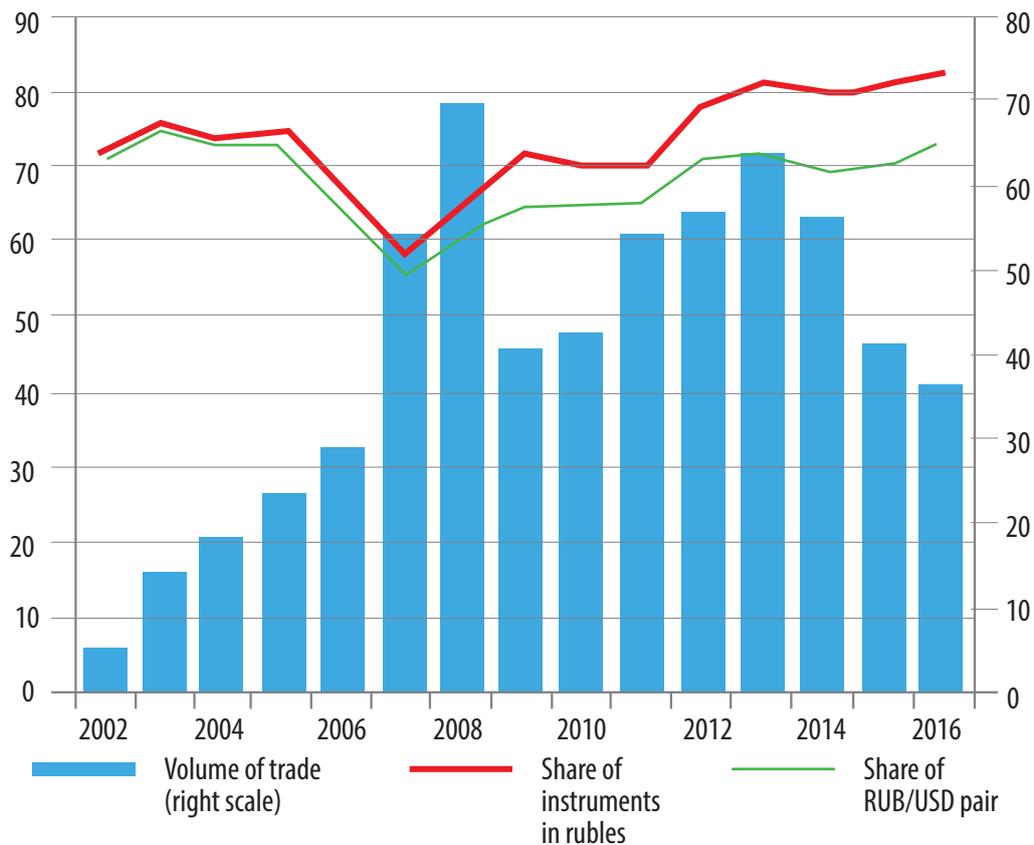
Since July 1992, the Bank of Russia uses the results of exchange trades to determine the official exchange rate of the ruble against the US dollar. For that purpose, a weighted average of 11:30 Moscow time is

used for the USD/RUB currency pair with calculations "tomorrow".

In 2002, the average daily volume of transactions in the internal FX market was 5.6 billion US dollars. Only 72% accounted for transactions with the ruble (Figure 11). Moreover, the main instrument of trade in the interbank market was the RUB/USD pair amounted to 71.2% of the total volume of the FX market or 99% of the volume of trade in the ruble segment<sup>12</sup>.

Completion of the liberalization of foreign exchange regulation gave a new burst of the development of the internal market. In 2007, the average daily turnover increased by 88% in comparison with 2006 and amounted to 54.2 billion US dollars. In July 2008, the market recorded

<sup>12</sup> See Main indicators of the Russian Federation's foreign exchange market turnover (by methodology of the Bank of Russia) // Bank of Russia. URL: <http://www.cbr.ru/statistics/?PrtId=finr>



**Figure 11.** Internal FX market in Russia: volume (bn US dollars) and structure (%)  
 Source: Bank of Russia; authors' calculations

a maximum trade volume of 84.1 billion US dollars per day. Trade in rubles for other currencies beside the US dollar also intensified. As a result, the share of the RUB/USD pair slightly decreased to 96.2% of the total volume of transactions with the ruble in 2007 as well as to 94.6% in 2008<sup>13</sup>.

In 2009, the global financial crisis caused a decrease in the daily turnover in the Russian internal FX market to 40.2 billion US dollars. In 2013, the average daily trade volumes began to grow again and amounted to 63.6 billion US dollars, as the consequences of the crisis were

overcome<sup>14</sup>. Against this background, the Russian currency continued its internationalization. The share of transactions with the ruble in the total volume of currency transactions increased to 81%. The share of the RUB/USD pair (to 88.7% in 2013) continued to decrease due to expansion of transactions with other currencies.

However, in 2014, the positive development of the FX market stalled due to the influence of a number of external and internal factors. As a result, in 2016, the total turnover of trade in the Russian internal FX market fell to 37 billion US dollars per day, and the share of the RUB/USD pair in the ruble segment rose to 89.1% (73% of the total market volume). At the same time, the share of transactions

<sup>13</sup> See Main indicators of the Russian Federation's foreign exchange market turnover (by methodology of the Bank of Russia) // Bank of Russia. URL: <http://www.cbr.ru/statistics/?PrtId=finr>

<sup>14</sup> Ibid.

with the ruble slightly increased and amounted to 82% of total turnover.

Serious changes underwent the correlation between the exchange and interbank foreign exchange markets. The increased stability and strength of Russian banks led to the fact that the role of exchange trade in the ruble segment declined significantly. According to experts, in April 2008, over 80% of conversion transactions with the ruble were effected between commercial banks in the OTC market (*Mishina*, 2016). The global financial crisis facilitated a partial return of transactions to the exchange. After the introduction of economic sanctions in 2014, this trend has only intensified.

On the one hand, many foreign companies cut their limits on Russian banks or completely stopped working with Russian clients. In late 2014 — early 2015, in conditions of high volatility of the ruble exchange rate, a number of foreign trading systems even stopped trading in ruble. At the same time, Moscow Exchange traded in normal mode, which facilitated the movement of transactions with the Russian currency to the organized market. The growth of exchange trade is also promoted by the policy of the Moscow Exchange aimed at providing foreign banks' clients with direct access to trading (Direct Market Access).

In general, the exchange turnover increased from 96 trillion rubles in 2009 to 330 trillion rubles in 2016, i.e. it grew more than 3 times for the specified period. At the same time, the average daily trading volume exceeded 1.3 trillion rubles in 2016. Thus, Moscow Exchange accounted for 53% of the Russian internal FX market<sup>15</sup>.

Currently, Moscow Exchange allows making transactions for rubles with eight currencies: US dollar, euro, pound

sterling, Kazakh tenge, Belarusian ruble, Hong Kong dollar and Ukrainian hryvnia. However, the main turnover falls on the RUB/USD pair the share of which amounts to 84.4% of the exchange trading in 2016. Another 13.1% accounted for the RUB/EUR pair<sup>16</sup>. Thus, the share of all other instruments does not exceed 3%, which, of course, limits the possibility of a wider use of the ruble in international settlements.

The maturity of the Russian FX market was evidenced by the decision taken in July 2016 by the Emerging Markets Traders Association and Chicago Mercantile Exchange to use the fixing of Moscow Exchange for settlements on futures and forward contracts for the Russian currency instead of its own reference rate (*Fox*, 2016). Thus, the participants of the global financial market demonstrated increased confidence in the mechanism for determining the ruble exchange rate formed as a result of changes in the policy of the Bank of Russia related to the refusal to maintain the FX band and the transfer of the ruble into free float mode.

Trade in ruble futures on the Chicago Mercantile Exchange began in April 1998. However, it has been ceased already in October 1998, because of the crisis. Only in 2003, CME began to quote ruble futures again. The growth of foreign investors' interest in the Russian currency was facilitated by an increase in global oil prices and further liberalization of foreign exchange regulation in Russia. Since 2006, the ability to perform transactions with ruble-denominated instruments was provided by trading systems such as LavaFX Interbank (New York, the United States) and ICAP EBS (London, the United Kingdom). The ruble is regularly quoted by large international banks. Through Clearstream and Euroclear systems, the possibility to settle in rubles

<sup>15</sup> Moscow Exchange Group Markets Statistics: Monthly trading volumes // Moscow Exchange. URL: <http://moex.com/s867>

<sup>16</sup> Ibid.

**Table 1**

Average daily volume of trade in the ruble abroad, USD million

	2013		2014		2015		2016	
	April	October	April	October	April	October	April	October
United Kingdom	34,400	23,200	28,700	27,500	18,900	13,400	17,700	20,100
United States	n/a	n/a	n/a	n/a	n/a	n/a	3,756	4,227
Japan	890	380	220	70	80	130	160	230

Source: Monetary committees of London, Tokyo and New York

Note: Regarding the United Kingdom and the United States — the volume of trade in the RUB/USD pair; regarding Japan — against all currencies

was received by international participants of the Russian securities market.

According to the surveys held every six months by London Foreign Exchange Joint Standing Committee, the volume of transactions with the Russian ruble in the UK demonstrated a constant increase. For 6 years (from April 2008 to April 2013) it has grown from 10.1 billion US dollars to 34.4 billion US dollars, or in 2.4 times. The ruble's share in the total volume of FX transactions in the London market increased from 0.6% to 1.4%<sup>17</sup>. Transactions with the ruble are also fixed by the Bank of Japan, which includes them in its semi-annual surveys of the FX market. The volume of transactions with the ruble in Tokyo is significantly lower than in London, but even here, it also showed rapid growth reaching a peak in April 2013 (890 million US dollars in comparison with 10–20 million US dollars in 2009–10). However, the reduction followed next (Table 1).

This dynamic is mainly due to the impact of external factors on the market (internal factors play a secondary role). Leading factor among them is the world financial cycle and a closely related cycle of the United States Monetary Policy. Thus, in the period 2008–13 there was a progressive easing the US Federal

Reserve's MP known as Quantitative Easing, which contributed to the flow of capital from USD instruments to EMDE instruments including those denominated in rubles. During the same period, the real exchange rate of the Russian currency was strengthened due to high oil prices, which together resulted in an increase in the ruble's turnover in external markets, particularly in the UK.

However, in 2013, after the announcement of the beginning of the tightening the United States MP, there was a massive outflow of capital from EMDEs and depreciation of many currencies (this process is well-known as taper tantrum). As a result, there was a decrease in the volume of FX trades, as it is calculated in US dollars. This trend was further intensified in the following year. The outlined strengthening of the US dollar led to a decline in prices for commodities denominated in this currency (oil, gas, gold, metals etc.) that form the basis of exports of many developing countries. As a result, their currencies continued to decline. The collapse in oil prices at the end of 2014 led to a depreciation of the ruble by more than 40%.

An additional negative factor for the ruble was the introduction of economic and financial sanctions against Russia by the United States and its Western allies. Fearing the huge penalties easily enforced by the US authorities not only in respect of their own, but also foreign

<sup>17</sup> The London Foreign Exchange Joint Standing Committee turnover surveys // Bank of England. URL: <http://www.bankofengland.co.uk/markets/Pages/forex/FXjsc/default.aspx>

companies for their possible violation of the sanctions, many foreign banks and financial institutions have decided to minimize transactions with the ruble.

According to Russian experts, the share of the offshore transactions with the ruble fell in April 2015 to 9% of the total volume of the ruble market compared to 20% in October 2014 (*Mishina*, 2016). However, in 2016, there was an interest in the Russian ruble again. It is noteworthy that since April 2016 the Monetary Committee of New York began to publish data on transactions with the ruble, which was not previously allocated to a separate column in the committee surveys<sup>18</sup>.

The beginning of the restoration of interest in the Russian currency on global markets is also reflected in the recovery of growth in the volume of trade in instruments denominated in the ruble. In October 2016, the volume increased by 13.6% in London and by 12.5% in New York compared with April 2016<sup>19</sup>. The largest increase in average daily volumes of ruble trade was demonstrated by the Tokyo FX market, where it accounted for 43.8%<sup>20</sup>.

Thus, the total volume of average daily turnover in the ruble market reached 62.6 billion US dollars in October 2016<sup>21</sup>. More than 60% of this sum fall on the internal Russian market (Figure 12). About a third of transactions with instruments denominated in the ruble, are made in

<sup>18</sup> See FX Volume Survey // Federal Reserve Bank of New York: the Foreign Exchange Committee. URL: <http://www.newyork-fed.org/fxc/volumesurvey/data.html>

<sup>19</sup> See The London Foreign Exchange Joint Standing Committee turnover surveys // Bank of England. URL: <http://www.bankofengland.co.uk/markets/Pages/forex/FXjsc/default.aspx>; FX Volume Survey // Federal Reserve Bank of New York: the Foreign Exchange Committee. URL: <http://www.newyorkfed.org/fxc/volumesurvey/data.html>

<sup>20</sup> See Tokyo Foreign Exchange Market Committee. URL: [http://www.fxcomtky.com/index\\_e.html](http://www.fxcomtky.com/index_e.html)

<sup>21</sup> Includes a certain dual account for transactions between residents and non-residents.

London. The role of the US market, not to mention the Asian market, is not yet great, which can hamper the progress of the ruble in foreign trade with APAC countries.

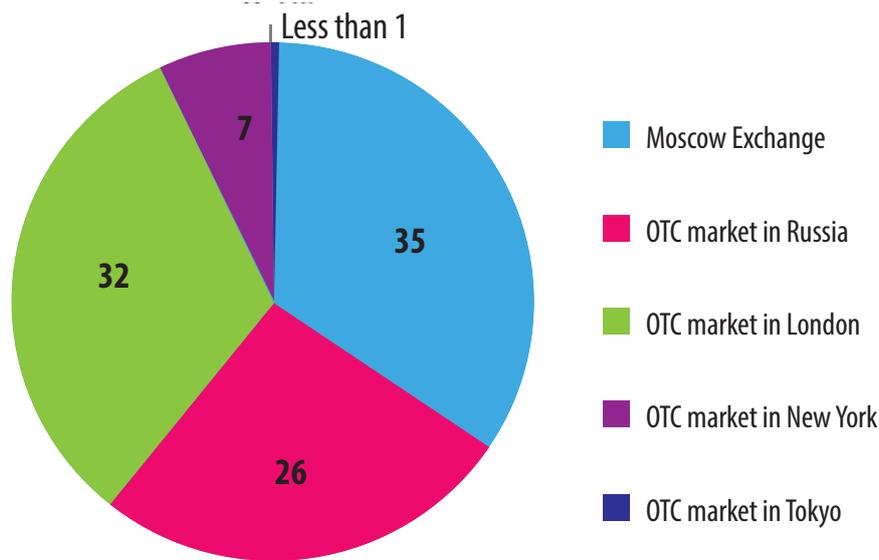
Attention is also drawn to the relatively low share of the ruble in the total volume of FX transactions in external markets (0.4% in the US, 1% in the UK). Another constraining factor for the use of the ruble in international settlements is the absence of direct quotations for most currencies.

Thus, the markets of the EAEU countries usually use the US dollar or euro as an intermediary when performing conversion operations with the ruble, which significantly increases the cost of transactions. Only in Belarus, trades in the BYN/RUB pair have a relatively high level of liquidity, and its volume has stabilized at 15% of the total turnover of foreign currency in the Republic.

A similar situation takes place in the BRICS countries. Direct quotes for the ruble are applied only to the Chinese renminbi. Trade in this pair on the interbank market of China began in November 2010, but its turnover still does not correspond to the scale of mutual trade between the countries. According to the official representative of the State Administration of Foreign Exchange, Wang Chunying, the volume of trading of the RMB to the RUB amounted to 1.8 billion US dollars in 2016 or less than 3% of the total turnover between Russia and China (TASS, 2017). On average, the daily volume of ruble trade in the Chinese trading system slightly exceeded 7 million US dollars.

## Development of the financial market

Wide use of the ruble in international settlements is impossible without a developed market of financial instruments



**Figure 12.** Structure of global market of transactions made in the ruble, %  
 Source: Bank of Russia; Monetary Committees of London, New York and Tokyo

denominated in rubles and open access to the market by foreign investors.

Back in 1996–98, foreign investors were granted limited access to transactions with Russian government securities. After the final stage of liberalization of foreign exchange regulation in 2007, non-residents were able to purchase state and corporate securities freely on the internal market. However, their activity in the public debt market was relatively small. As of January 1, 2012 non-residents' investments in the Federal Bonds amounted to only 107 billion rubles (less than 4% of their total volume)<sup>22</sup>.

In an effort to further attract investors, the Bank of Russia decided to remove infrastructure barriers and allowed to make OTC transactions with the Federal Bonds through Euroclear and Clearstream from the beginning of 2012. However, it did not cause much enthusiasm among foreign investors. Growth of non-residents' investments in the Federal Bonds started only in Summer 2012, when it was decided that these

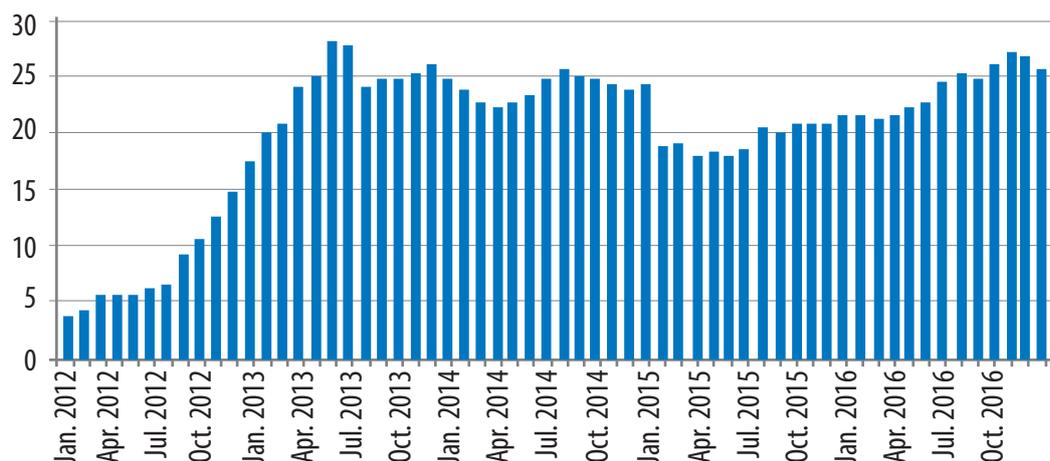
institutions may open custodian accounts at the National Depository Center.

In fact, the opening of a Euroclear custodian account with the NDC took place only on December 27, 2012 and Clearstream's account was opened in February 2013. However, this delay did not affect the growing inflow of investments, due to which the share of non-residents in the Federal Bonds market reached its maximum of 28.1% of the nominal value of outstanding bonds in May 2013 (Figure 13). Further, the share of non-residents declined slightly and stabilized at approximately 24%.

Foreign holders of Russian government bonds reacted on the Ukrainian crisis with a small sale resulted in the share of non-residents in the Federal Bonds market dropped to 22.2% in March 2014. Nevertheless, it regained the former level again.

The introduction of economic sanctions against Russia led to new sales on the Federal Bonds market in July 2014. Restraining measures regarding the access for Russian companies and banks to foreign financial markets caused foreign investors to fear that Russia will not be able to maintain loans received given the upcoming repayments to them

<sup>22</sup> See Non-residents' holdings of Russian internal government debt (OFZ) and non-residents' market share // Bank of Russia. URL: [http://www.cbr.ru/ analytics/print.aspx?file=fin\\_stab/table\\_ofz.htm](http://www.cbr.ru/ analytics/print.aspx?file=fin_stab/table_ofz.htm)



**Figure 13.** Share of the Federal Loan Bonds held by foreign investors, %  
Source: Bank of Russia; authors' calculations

of significant amounts of external debt. However, in December 2014, the panic that arose in the market was quickly stopped by the actions of the Bank of Russia. As a result, no serious decrease in the volume of investments and the share of non-residents in the Federal Bonds market occurred.

A sharp decrease in their share (by 5.5 pp to 18.7%) in January 2015 is due to an increase in the volume of internal public debt. The Government of the Russian Federation was forced to replace to domestic sources of financing the external ones that were inaccessible because of sanctions.

At the same time, the country's authorities refused in principle to use measures to restrict the export of capital. Stating the hopelessness of that path, the Russian President Vladimir Putin noted during a Vladivostok's meeting with investors on February 2, 2017 that he "did not go so far as to limit the export of capital; such proposals were made in the last year and the year before last; we did not do it and we are not going to do it"<sup>23</sup>.

This approach helped to quickly restore the positive attitude of foreign investors to

the Russian market. Already in July 2015, their share in the Federal Bonds market exceeded 20%. By the end of 2016, it almost returned to the pre-crisis level (25%). It should be noted that the volume of the Federal Bonds market increased by 1.5 times during this period (from 3,661 billion rubles as of December 1, 2013 to 5,492 billion rubles as of December 1, 2016). In absolute terms, the share of non-residents increased from 911 billion rubles to 1,408 billion rubles or by 54.6%<sup>24</sup>.

Despite the current economic sanctions, non-residents continue to view the Federal Bonds as an attractive asset that allows receiving a higher yield than offered in Western markets taking into account the forecasted decline in inflation.

The Russian monetary authorities express a certain "concern on the significant presence of non-residents" in the Federal Bonds market. A massive exit of foreign investors from Russian bonds market could lead to the market collapse. However, according to representatives of the Ministry of Finance, the situation still does not require any intervention. At the same time, the Ministry emphasized again

<sup>23</sup> Meeting with potential investors in Far Eastern Federal District // President of Russia: official website. 2016. September 2. URL: <http://en.kremlin.ru/events/president/news/52798>

<sup>24</sup> See Non-residents' holdings of Russian internal government debt (OFZ) and non-residents' market share // Bank of Russia. URL: [http://www.cbr.ru/analytcs/print.aspx?file=fin\\_stab/table\\_ofz.htm](http://www.cbr.ru/analytcs/print.aspx?file=fin_stab/table_ofz.htm)

"there is no question of any measures of prohibition or restrictions" (Vestifinance, 2017).

Ruble-denominated bonds of Russian companies cause less interest for foreign investors. Despite of the fact that starting from January 30, 2014 Euroclear and Clearstream started providing services to non-residents on settlements in the internal market of corporate bonds, their share in the turnover on the secondary market of Moscow Exchange remained at the level of 19%, as in 2013. In absolute terms, it even decreased due to a decline in trading volume from 6.7 trillion rubles in 2013 to 4.7 trillion rubles in 2014<sup>25</sup>. Such low activity of non-residents in the corporate debt market denominated in rubles is mainly due to the low number of instruments qualified for investment purposes, which is generally a typical situation for most developing countries.

The participation of non-residents in the Russian stock market has always been relatively significant. In 2012, their share in the total trading volume on Moscow Exchange was 37%. Nevertheless, the management of the exchange continued to pursue a policy of removing infrastructure restrictions on foreign investors' access.

In 2013, Moscow Exchange introduced a more usual trading mode for non-residents with settlements for the second day, which did not imply the need to pre-reserve funds for 100%. In addition, foreign banks registered on the exchange were entitled to open direct access to trading for their clients. Most of them used this opportunity (Mishina, 2016). As a result, in 2013, the volume of trading of foreign investors in Moscow Exchange

increased by 39%, and their share in the total trading volume increased to 40%<sup>26</sup>.

Since July 1, 2014, Euroclear and Clearstream were authorized to settle transactions with equities of Russian companies, which contributed to the further expansion of non-residents' access to this market. To a certain extent, this decision neutralized the negative consequences for foreign investors from the imposition of economic sanctions against Russia. In 2014, the volume of net sales amounted to only 17.4 billion US dollars, and their share in the total turnover of Moscow Exchange's stock market even increased to 46% (Mesropyan, 2017).

In 2015, the share of non-residents in turnover in the secondary market of equities decreased to 44%. This does not mean that they began to sell Russian assets. According to Moscow Exchange's experts, in 2015, non-residents increased their positions in Russian securities. Their net purchases amounted to 51.9 billion rubles.

However, facilitating the access of foreign investors to the Russian stock market did not lead to an increase in the volume of trade on Moscow Exchange. In 2013, the turnover in secondary trading fell by 25.8% compared to 2012, and reached 8.6 trillion rubles. In 2015, the decline in activity on the stock market resumed. After an increase of 18.6% in 2014, the volume of secondary trades decreased by 8.8% to 9.4 trillion rubles in 2015, and remained approximately at the same level in 2016<sup>27</sup>. The low liquidity level of the Russian securities market is closely related to a small number of instruments that are traded on the internal stock market (Mishina, 2011). In January 2016, only 252 companies

<sup>26</sup> See 2013 annual report // Moscow Exchange. URL: <http://www.moex.com/ru/Report/2013/>

<sup>27</sup> See Moscow Exchange Group Markets Statistics: Monthly trading volumes // Moscow Exchange. URL: <http://moex.com/s867>

<sup>25</sup> See Annual reports and reports on related-party transactions // Moscow Exchange. URL: <http://moex.com/s1346>

were listed in Moscow Exchange. Their number dropped to 245 by January 2017, which was 10 companies more than in January 2009.

Moreover, Russian companies have low free float. It can be confirmed indirectly by the relatively low listing requirements on Moscow Exchange. It has to be a free float of only 10% in order to be included in the quotation list of the first (higher) level. Where it falls below 4%, the equity is transferred to the second-level list. In fact, the median value of the free float for the equities of 96 companies traded on Moscow Exchange is 21% (authors' calculations)<sup>28</sup>. For comparison, London Stock Exchange has raised the requirements for a free float from 15% to 25% since January 1, 2012.

The level of internationalization achieved by the Russian currency by the mid-2000s led to the appearance of internationally traded debt obligations denominated in rubles. The first was the Russian Bank of Development (currently, SME Bank) issued ruble-denominated credit linked notes for 2.5 billion rubles in March 2005. In 2006, such debt instruments were issued by eight Russian banks and companies for 45.4 billion rubles (*Gubeidullina*, 2007).

By the end of 2011, 84 issues of ruble-denominated Eurobonds and credit linked notes were registered for a total of 350 billion rubles. However, more than 80% of this market is accounted for by the securities issued by Russian companies and banks (*Kondratov*, 2012).

International and national development institutions (World Bank, EBRD, European Investment Bank, Nordic Investment Bank, KfW) were the most active in the issue of ruble-denominated Eurobonds among non-residents. These institutions used them both to fund their operations in Russia and to develop a new segment of the market. By 2011, they

organized about 30 issues of Eurobonds amounted to 50 billion rubles.

Another group comprised international (JP Morgan Chase Bank) and major regional banks (ABN Amro, Rabobank, Danske Bank) that issued such Eurobonds primarily for their clients interested in placing their accumulated rubles.

A definite milestone in the development of the offshore market of ruble-denominated bonds was the access to it by the Russian Government that attracted two tranches of 90 billion rubles for a period of 7 years at an average rate of 7.5% in 2011. The current yield was even slightly lower than in the internal market. However, despite the promise of Finance Minister A.V. Kudrin, there was no further issues, apparently, in order not to create competition with the Federal Bond market.

The crisis in relations with the Western countries led to a sharp increase in the risks associated with investing in ruble-denominated assets, which was reflected in high interest rates for the Russian currency. FX risk also showed a significant increase. It took time for market participants to adapt to the new policy of the Bank of Russia announced in November 2014 that it waived targeting the exchange rate of the ruble and switched targeting the inflation instead. As a result, the issue of offshore ruble-denominated bonds almost ceased.

Strengthening the ruble by the end of 2016 by almost 17% on the background of a relative recovery in oil prices contributed to a revival of interest both to the Russian currency and to the ruble-denominated bonds.

The volume of primary placements in the internal debt market exceeded 5 trillion rubles in 2016 (*Finam*, 2017). At the same time, the issue volume of corporate bonds almost doubled and amounted to 3.9 trillion rubles. The offshore market also revived. In September 2016, Russian Railways placed ruble-denominated Eurobonds amounted to 15 billion rubles

<sup>28</sup> See Data for free-float index // Moscow Exchange. URL: <http://moex.com/ru/listing/free-float.aspx>

for a period of 7 years with coupon payment of 9.2%. The company informed its readiness to continue borrowing in rubles on the international market in 2017 (Rusbonds, 2017). A number of other Russian companies and banks announced similar plans. At the same time, the difference in interest rates may become a certain deterrent to the revival of the offshore market of ruble-denominated bonds.

## Summary

We may summarize that the Russian ruble has a quite high scale of internationalization. A share of the ruble in the total volume of payments on national foreign trade in goods and services with other countries is comparable to the level of Chinese renminbi: it amounted to 23% for Q3 2016, while the share of the RMB dropped to 22% after the achieved maximum (26%).

The ruble is also used in mutual settlements of Belarus, Kazakhstan, Kyrgyzstan and Tajikistan. At least 10% of that trade is currently carried out in the Russian currency. Moreover, the Russian ruble is a part of the Belorussian National Bank's international reserves.

To a certain extent, the Russian ruble is already acting as an international currency in Eurasian region. And there is a potential for its further internationalization.

1. Russian economy has adapted to low energy prices and demonstrates sustainable recovery. The Bank of Russia showed an efficient policy when waived targeting the exchange rate of the ruble and switched targeting the inflation instead.
2. There are no restrictions on transactions with the Russian currency (opening of accounts, cross-border transfers, trade in securities etc.)
3. Expansion of settlements in rubles is facilitated by the increase of

non-resource products' share in Russian exports<sup>29</sup>.

4. Russia has a sufficiently large and liquid FX market (both the internal and external one) with a well-formed institutional structure and modern trade technologies. Foreign companies are allowed to invest their rubles' liquidity in a large number of financial instruments.

## References

1. *Fox M.* CME set to replace Ruble reference rate to Moscow Exchange // LeapRate. 2016. July 6. URL: <http://www.leaprate.com/news/cme-set-to-replace-ruble-reference-rate-to-moscow-exchange/>

2. Gosupravlenie KNR: situaciya na mirovom rynke ne otrazitsya na valyutnom sotrudnichestve s RF // TASS news agency. 2017. January 30. URL: <http://tass.ru/mezhdunarodnaya-panorama/3981175>

3. *Gubeidullina G.* Modnie rubli // Vedomosti. 2007. May 23. URL: <http://www.vedomosti.ru/library/articles/2007/05/23/modnye-rubli>

4. *Kondratov D.* Stanovlenie rossijskogo rublya kak mazhdunarodnoj valyuti // Ekonomicheskij zhurnal VSHE. 2012. No. 3. P. 367–403. URL: [http://ej.hse.ru/data/2013/02/28/1307112581/16\\_03\\_05.pdf](http://ej.hse.ru/data/2013/02/28/1307112581/16_03_05.pdf)

5. *Mesropyan M.* Dolya inostrannih investorov na rossijskom finansovom rynke ne sokraschaetsya // Vedomosti. 2016. March 22. URL: <http://www.vedomosti.ru/finance/articles/2016/03/22/634550-inostrannihinvestorov>

6. Minfin nashel riski v vysokoj dole inostrancev // Vesti Ekonomika. 2017.

<sup>29</sup> According to Russian Export Center, non-resource products' share has increased in the total exports amount by more than 11 per cent over the past year (34.3% in 2015; and 38.2% in 2016, respectively).

February 22. URL: <http://www.vestifinance.ru/articles/81737>

7. *Mishina V.* Rublevoe “importozameschenie” vmesto “dollarizacii” // INP RAN. 2016. March 31. URL: [http://ecfor.ru/wp-content/uploads/2016/03/Rubl-i-EAES\\_statya\\_022616\\_Mishina.pdf](http://ecfor.ru/wp-content/uploads/2016/03/Rubl-i-EAES_statya_022616_Mishina.pdf)

8. *Mishina V.* Stanet li ruble valiutoj mezhdunarodnikh raschetov? // Bankovskoe delo. 2011. No. 1. P. 76–81. URL: [http://www.mbka.ru/price/bank.delo\\_012010.pdf](http://www.mbka.ru/price/bank.delo_012010.pdf)

9. OFZ — bezuslovnij favorit goda, no potencial ne ischerpan // Finam. 2017. January 18. URL: <http://bonds.finam.ru/comments/item/bk-region-ofz-bezuslovniiy-favorit-goda-no-potencial-ne-ischerpan/>

10. RZD interesni rublevie evrobondi, v 2017 g. mogut vipustit vechnie obligacii // RusBonds. 2017. January 18. URL: <http://www.rusbonds.ru/nwsinf.asp?id=4452651>

## Chapter 4

# Internationalization of the Indian Rupee<sup>1</sup>

The GFG, for a variety of complex reasons, prompted emerging markets to reconsider the role of their currencies as global alternatives to the "big four" currencies (US dollar, euro, British pound and Japanese yen).

China's policy pivot prompted policy makers in India to consider the possibility of internationalizing the Indian rupee. The Reserve Bank of India commissioned two studies in 2010 and 2011 (*Ranjan and Prakash*, 2010; *Gopinath*, 2011) to examine the issues surrounding the internationalization of the INR. Both studies recommended a cautious approach towards currency internationalization given the size of the Indian GDP, lower presence in global trade and partial capital account convertibility. They also add that while the rupee is a natural contender for transitioning into a global currency, policymakers should start by increasing the role of the INR in its local region where the renminbi has taken a lead over the rupee. In spite of an early interest in pursuing a policy of currency internationalization, both the Indian government<sup>2</sup> and the RBI<sup>3</sup> do not consider it to be a priority in the short to medium term.

<sup>1</sup> Shekhar Hari Kumar, Ila Patnaik — National Institute of Public Finance and Policy.

<sup>2</sup> See Internationalisation of Rupee // Business Standard. 2016. May 7. URL: [http://www.business-standard.com/article/government-press-release/internationalisation-of-rupee-116050601065\\_1.html](http://www.business-standard.com/article/government-press-release/internationalisation-of-rupee-116050601065_1.html)

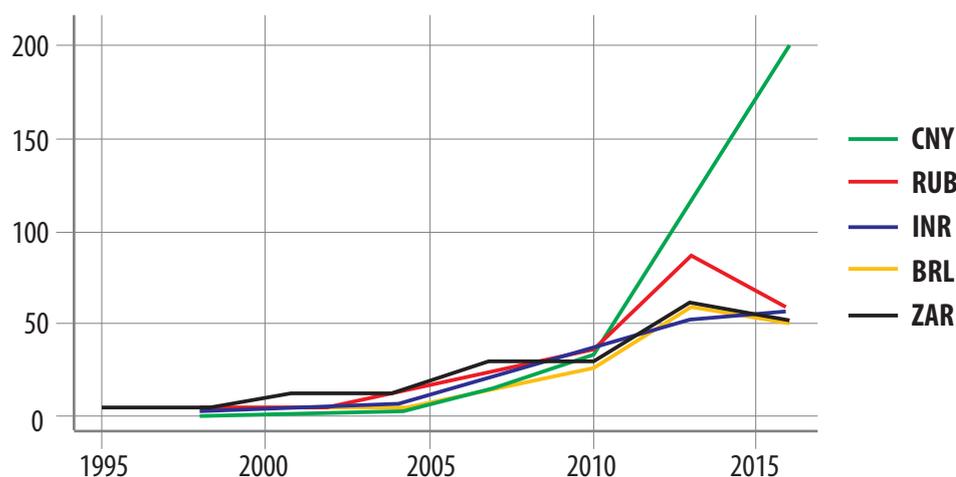
<sup>3</sup> See Raghuram Rajan says no "big bang jump" for Rupee onto world stage // The Economic Times. 2015. December 1. URL: <http://economictimes.indiatimes.com/markets/forex/raghuram-rajansays-no-big-bang-jump-for-rupee-onto-world-stage/articleshow/49998048.cms>

## Rise of rupee trading

We shift gears and look at market outcomes to get a sense of what drives growth of currency markets and how internationalized is the rupee compared to the BRICS currencies. For purposes of cross-country comparison we use the BIS measure.

The triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity published by BIS is currently the most comprehensive source of information on trading in foreign exchange markets (BIS, 2010, 2013, 2016). The survey provides consistent comparison on the size and structure of FX and OTC derivatives markets, and has been conducted every 3 years since 1995. In the latest edition of the survey, data was collated for 53 currencies, encompassing instruments such as spot transactions, outright forwards, foreign exchange and currency swaps and options. Central banks collect data from various banks and other dealers within their jurisdictions, which is reported to BIS and used to calculate global aggregates. For the first time since 2001, global FX trading declined between two consecutive surveys. Global FX turnover fell to USD 5.1 trillion per day in April 2016, from USD 5.4 trillion in April 2013. However, trading in EM currencies grew over this period with the renminbi gaining market share (*Moore et al.*, 2016). The "big four" currencies maintained their market shares and remain the only currencies which account for more than 10% in market share of all trades<sup>4</sup>.

<sup>4</sup> As of 2016; USD: 88%, EUR: 31%, JPY: 22%, GBP: 13% is on the other side of all the reported currency trades.



**Figure 1.** Average daily turnover in BRICS currencies since 1995, USD bn  
Source: BIS triennial survey 2016, Table D11.3. All instruments, net-net basis

As per the BIS, the INR is ranked 20th by average daily turnover, across all FX instruments in April 2016. There has been a 20X increase in the average daily turnover since 2001 in the INR (Figure 1).

Figure 1 shows that trading in BRICS currencies grew on average at 20% every year between 2001–10. During this period the levels of trading in the BRICS currencies were also comparable with average daily turnover averaging between USD 20–50 billion. After 2010, trading in the renminbi grows rapidly as China starts pursuing a policy of Internationalization. The Brazilian real, South African rand and Russian ruble grew faster than the INR after 2010 but they pare their gains after the taper tantrum of 2013. As of April 2016, the sum of the average daily turnover in the BRIS currencies is roughly equal to the daily turnover in the renminbi.

Ma and Villar (2014) use foreign exchange turnover as one of the proxies for identifying the extent of Internationalization of a currency, because it helps shed light on the currency's use by non-residents. Therefore, as a currency internationalizes, we can expect to see greater trading to take place in offshore financial centers. By this metric India ranks 6th or 7th amongst comparable EM currencies depending

on whether we consider Hong Kong an extension of the Chinese onshore market (Table 1). Only the RUB has more onshore trading than the INR and this probably reflects the effect of economic sanctions altering the location of trading. As a comparison, INR's onshore share has been consistent at 41–44% between 2013–16 whereas the RUB's onshore share increased from 47–56% in the same period.

If we compare the change in onshore shares between 2013 to 2016 (Table 2), there is substantial heterogeneity in our sample of EM currencies. TRY, KRW, MXN and CNY have become more internationalized over 2013–16 whereas ZAR, INR, RUB and BRL have gained onshore trading shares. The INR is ranked 6th amongst peers by this proxy of currency Internationalization as well.

## NDF markets in the INR

Non-Deliverable Forwards differ from outright forward contracts where the counterparties enter into a binding contract for a physical exchange of funds. NDF contracts while similar in nature, impose no such restriction, allowing counterparties to settle profits or losses on a notional amount without any physical

**Table 1**

Location of currency trading by EM currency, %

Location	INR	TRY	ZAR	RUB	MXN	KRW	BRL	CNY
Brazil	0	0	0	0	1	0	25	0
China	0	0	0	0	0	0	0	22
Hong Kong SAR	8	1	1	0	1	16	2	31
India	44	0	0	0	0	0	0	0
Korea	0	0	0	0	0	38	0	0
Mexico	0				16	0	0	0
Russia		0	0	56	0		0	0
Singapore	24	2	2	0	1	21	0	17
South Africa	0	0	24	0	0			0
Turkey	0	13	0	0				0
United Kingdom	13	61	44	29	29	13	21	16
United States	8	15	19	8	43	9	45	9
ROW	3	9	10	7	9	3	6	5
<b>Total</b>	<b>100</b>							

Source: BIS triennial survey, 2016

**Table 2**

Change in percentage of onshore trading since 2013, %

Currency	2013	2016	Change
INR	41	44	7.32
TRY	19	13	-31.58
ZAR	23	24	4.35
RUB	48	56	16.67
MXN	20	16	-20.00
KRW	53	38	-28.30
BRL	20	25	25.00
CNY (Including HK)	57	53	-7.02

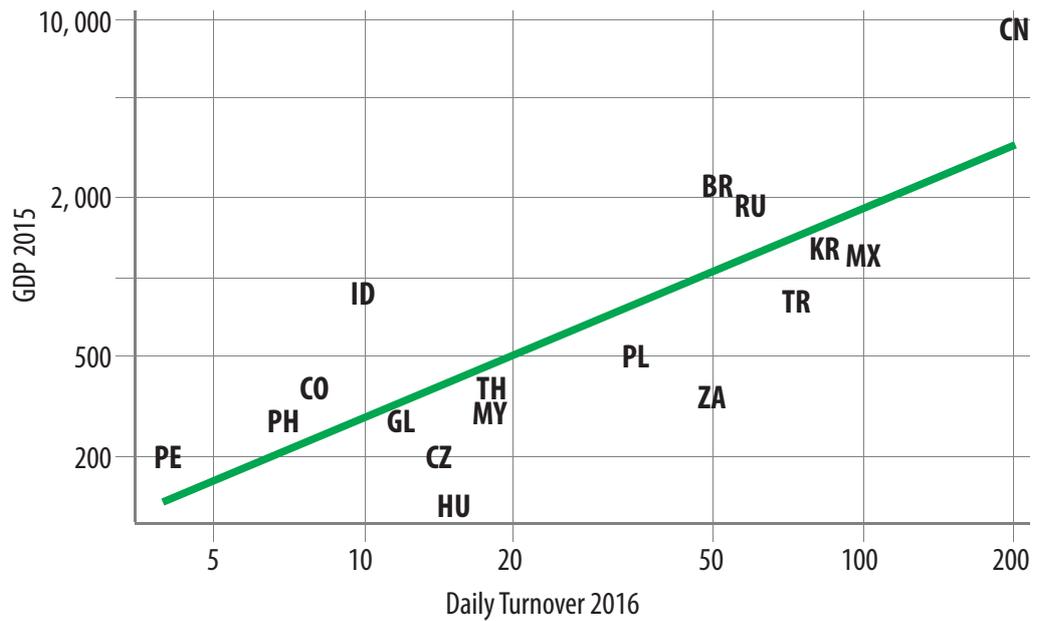
Source: Authors' calculations

exchange of funds. These contracts are usually cash settled, denominated in USD, and traded on currencies which are not readily available to trade globally. EM currencies, characterized by partial capital account convertibility, form a bulk of NDF markets mainly because participants engaged in trade and capital flows with these countries face barriers in access to domestic foreign exchange markets.

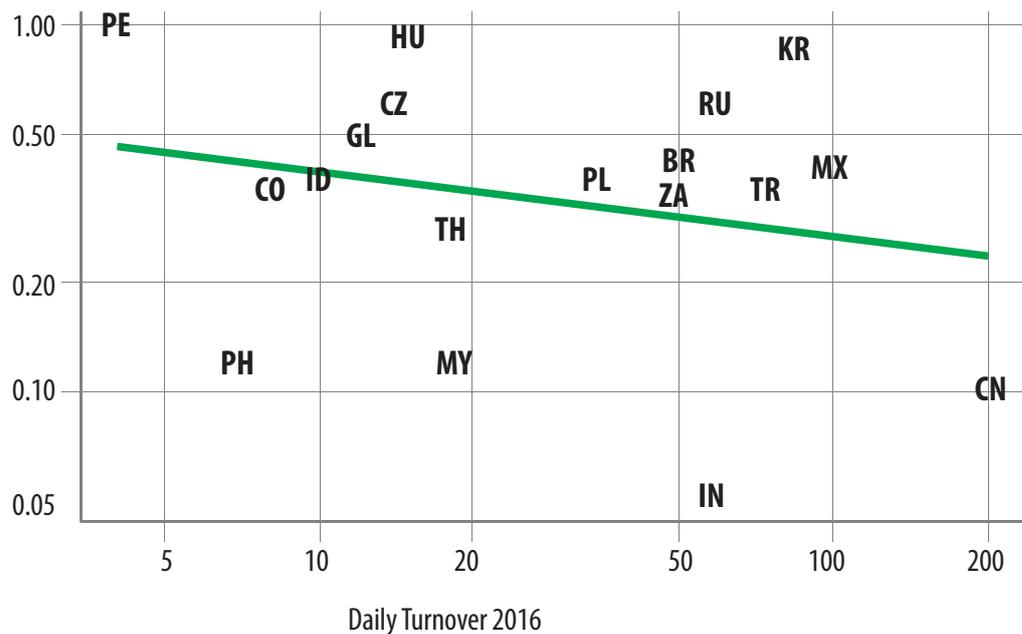
In 2013, the estimated average daily turnover of NDF markets was USD 127 billion, accounting for 19% of all outright forwards contracts traded globally (BIS,

2013). This figure has grown by 5.3% in dollar terms to 134 billion in 2016 (BIS, 2016). Four BRICS currencies (excluding South Africa) contributed 36% to this turnover in 2016, down from 42% in 2013. The decline has mainly been on account of China's decreasing share (approximately 40% decline) of NDF markets, with their offshore NDF markets being replaced with offshore, deliverable forwards owing to renminbi's internationalization in the recent years.

India's turnover in the NDF market was reported to be at USD 16.5 billion in 2016, up 16.7% from 2013 in FX adjusted



**Figure 2.** Drivers of FX market turnover in EM currencies (USD bn): GDP (USD bn)  
Source: BIS triennial survey (2016), Table D11.3; WDI



**Figure 3.** Drivers of FX market turnover in EM currencies (USD bn): Openness  
Source: BIS triennial survey (2016); Fernandez et al. (2015)

terms (BIS, 2016). The INR/USD NDF instrument trades exclusively in offshore markets, forming approximately 60% of all turnover in INR offshore markets. Comparison with the onshore currency derivatives market's average daily tur-

nover of USD 17 billion underscores the growing demand for the rupee abroad. The highly liquid offshore NDF market is a symptom of growing international interest in a currency that is not fully convertible. Cut-off from access to the

domestic INR markets, participants compensate for their forex risk by trading heavily in the offshore NDF markets. Historical empirical evidence seems to suggest that the onshore-offshore forward premium gap for the INR was always lower than the RMB (*Hutchison et al.*, 2012), suggesting greater financial integration in INR markets as compared to the RMB (*Ma and McCauley*, 2013). This may be changing as China internationalists the RMB and allows for greater participation of non-residents in an offshore deliverable forward market (*McCauley and Shu*, 2016).

### What determines forex market turnover?

Forex market turnover is a function of EM fundamentals like size of the economy, share in global trade, financial depth and capital account openness (*Eichengreen and Kawai*, 2015). He and Yu (2016) find that share of a country in world trade has a clear positive effect on the turnover of its currency in FX markets, but the effect of capital flows appears insignificant. They also find that share of currency trade is significantly associated with the financial depth measured by size of stock market size to GDP. He and Yu (2016) take the full sample of BIS reporting currencies while conducting their analysis. We restrict our sample to the 19 largest EMs<sup>5</sup> in the BIS reporting group and look at correlations between forex market size and various fundamentals. This exercise pins down which fundamentals are important for growth in EM forex market turnover. Moreover, it helps us evaluate whether forex market turnover is higher or lower compared to the level predicted by the country fundamental.

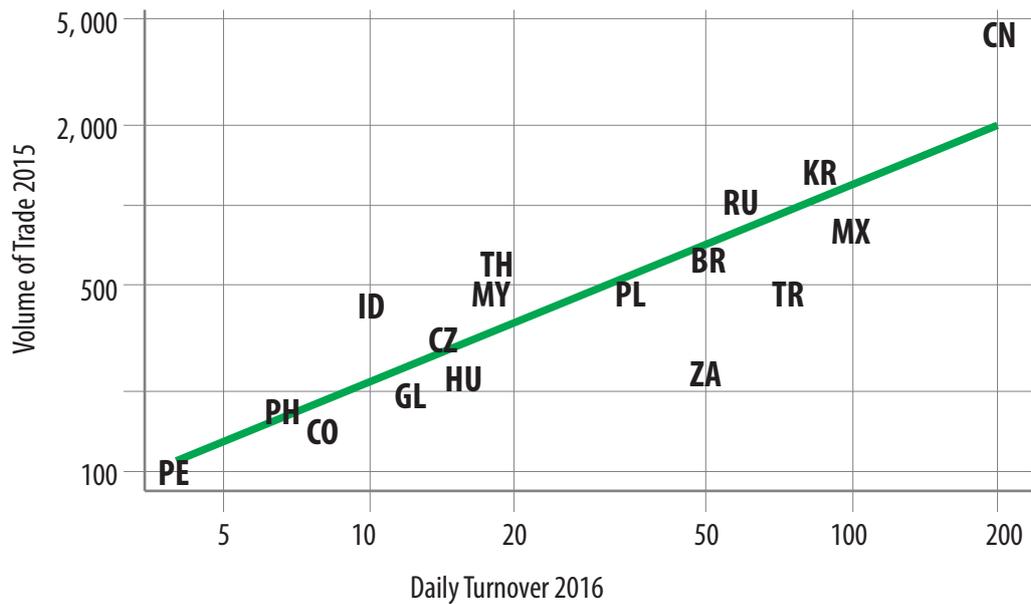
Figure 2 shows the relationship between level of real GDP and forex market turnover. The correlation bet-

ween these two variables is positive and significant. By this metric, INR, BRL, RUB and RMB have smaller forex market turnover than predicted by their GDP level. We look at the relationship between level of capital account openness as proxied by the Fernandez et al. (2015) measure and forex market turnover in Figure 3. The Fernandez et al. (2015) measure is rescaled from 0 to 1 with zero meaning a completely closed capital account and one meaning a completely open capital account. The correlation between forex market turnover and capital account openness is negative and insignificant. This is primarily because INR and RMB are large EM currencies who are significantly in spite of being fairly closed capital account economies. However, the negative and insignificant correlation is opposite to what is predicted by the literature.

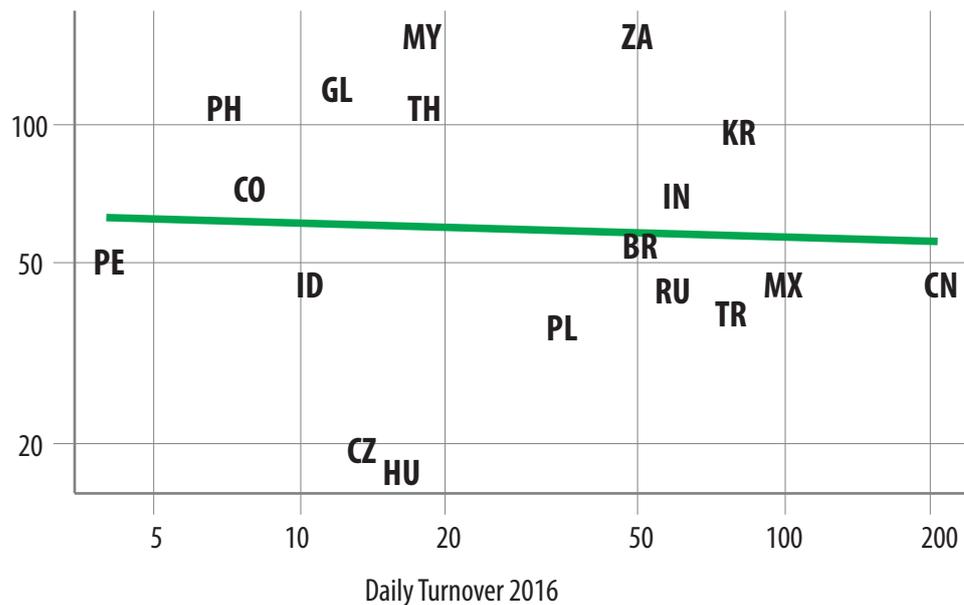
Figure 4 evaluates the relationship between volume of trade proxied by the value of imports and exports from the WDI and forex market turnover. The relationship between these variables is positive and significant. By this metric, the BRL and ZAR have larger forex market sizes as predicted by their volume of trade whereas the INR, RUB and RMB have smaller forex markets. We finally evaluate the relationship between financial depth as proxied by market capitalization to GDP to forex market turnover in Figure 5. We find a negative and insignificant correlation between these two variables, similar to capital account openness.

This parsimonious correlation exercise tells us that level of GDP and volume of trade are the most important fundamentals driving EM forex market turnover. This is a little different to advanced countries where financial depth and capital account openness are significant factors determining forex market turnover. This is most likely due to the fact that a majority of EM currency demand comes through current account

<sup>5</sup> See Appendix for the list of countries.



**Figure 4.** Drivers of FX market turnover in EM currencies (USD bn): Trade turnover (USD bn)  
Source: BIS triennial survey (2016), Table D11.3; WDI



**Figure 5.** Drivers of FX market turnover in EM currencies (USD bn): size of financial market (MCAP to GDP, %)  
Source: BIS triennial survey (2016), Table D11.3; WDI

linkages rather than financial account linkages given the presence of capital controls in large EMs. The presence of capital controls seems to dampen currency demand in the case of INR

and RMB, as forex market turnover is lower than what is predicted by level of GDP and volume of trade. This is also indication that these currencies have additional room to grow as international

currencies once there is greater capital account liberalization (*Ma and Villar, 2014*).

## Role of INR as international currency

### A. Official sector

We switch gears and evaluate the internationalization of the rupee in terms of its roles as an international currency in the tradition of Chinn and Frankel (2008) and Ito (2016). We first look at the role of the INR as an international currency in the official sector. According to the IMF Currency Composition of Official Foreign Exchange Reserves, as of Q2 2016, around 93% of all forex reserves are denominated in the "big-four" currencies. The BRICS currencies are part of claims in other currencies which at best amount to 3% of global reserve holding. As part of the inclusion of the RMB in the Standard Drawing Rights, COFER will report breakdown of RMB reserves from April 2017<sup>6</sup>.

To supplement the COFER, the IMF conducted an ad-hoc survey of 130 member countries on their holding of currencies in official foreign currency assets (IMF, 2015). The country level information was classified but the IMF released summary information regarding the global distribution of reserve assets along with their associated magnitudes. Table 3 shows that 6 countries claimed that they use INR in their official sector assets as of 2014. Only the BRL has lower reserve asset penetration than the INR. There is a clear difference between the RMB and the BRIS currencies. BRIS

countries are used as reserve currencies in their economic area of influence whereas the RMB had much wider usage in reserve assets.

Table 4 shows the magnitude of reserve assets holding in various currencies. By this metric the INR is ranked second last amongst all major currencies. The volume of INR held as reserve assets has increased from 2013 to 2014 to around a billion dollars. There is some anecdotal evidence that Indian rupee is accepted in Singapore, Malaysia, Indonesia, Hong Kong, Sri Lanka and the UK. The Central Bank of Nepal, Nepal Rastra Bank, also holds Government of India Treasury Bills (*Ranjan 2010*). The INR is also a historical outlier, given the fact that INR was legal tender in Qatar, Bahrain, UAE, Kuwait, Oman and Malaysia till the mid 1960's (*Ranjan and Prakash, 2010*).

Another mode of official sector currency internationalization goes through bilateral swap lines. After the GFC, use of swap lines between central banks has become a popular mode for sharing dollar funding (liquidity) risk as well as currency internationalization. The RBI has utilized the swap line channel to mitigate dollar funding risks rather than build bilateral ties to internationalize the rupee. Table 5 shows bilateral swap arrangements entered into by the RBI. The RBI has four swap lines of note, out of which 3 are active. The swap line with the Bank of Japan is now inactive. Out of the 4 swap lines, the swap line with the Central bank of UAE is the only one denominated in local currency<sup>7</sup>. All the other swap lines have a dollar transaction leg.

<sup>6</sup> See Chinese Renminbi to be Identified in the IMF's Currency Composition of Foreign Exchange Reserves // IMF. Press Release No. 16/90. 2016. March 4. URL: <http://www.imf.org/en/News/Articles/2015/09/14/01/49/pr1690> or Separate Identification of the Chinese Renminbi in the COFER survey // IMF. Staff Report. 2016. March. URL: <http://www.imf.org/external/np/pp/eng/2016/021816.pdf>

<sup>7</sup> See RBI and Central Bank of UAE sign MoU to consider Currency Swap Agreement // Reserve Bank of India. 2016. February 12. URL: [http://www.rbi.org.in/Scripts/BS\\_PressReleaseDisplay.aspx?prid=36229](http://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=36229)

**Table 3**  
Role of INR in international reserves, distribution

	2013	2014
Total Currency Holdings	130	130
US dollar	127	127
Pound sterling	108	109
Euro	109	108
Japanese yen	87	88
Canadian dollar	84	85
Australian dollar	79	78
Swiss franc	73	69
Swedish krona	45	48
Norwegian krone	45	40
Chinese renminbi	27	38
New Zealand dollar	27	29
Singapore dollar	16	18
South Africa rand	11	12
Russian ruble	5	8
Indian rupee	4	6
Brazilian real	5	5
Other currencies	81	80

Source: IMF Survey on the Holdings of Currencies in Official Foreign Currency Assets, 2015

## B. Use of INR by private actors

Currency substitution and investment India has a liberalized framework for foreign portfolio investment since the notification of the Foreign Institutional Investor framework<sup>8</sup> in 1995. The Indian securities regulator, Securities and Exchange Board of India liberalized the foreign investment framework recently in July 2014<sup>9</sup>. Over 1000 new foreign investors registered with SEBI during the period from June 2014 to August 2015, marking a 12% increase in the number of investors registered with SEBI. On average, 19–20% of Indian equities are held by foreign investors<sup>10</sup>. Foreign portfolio investment in debt is subject to limits. There is total cap of USD 84 billion for FPI-debt with

a sub limit of USD 33 billion for sovereign debt and USD 51 billion for corporate debt. Prior to 2016, most of the FPI-debt limit for sovereign debt was fully utilized with some room in the corporate bond segment. Given the changing stance of global monetary policy, there has been a sell-off in EM bonds and current utilization of the FPI-debt stands at 67% for both sovereign and corporate segment<sup>11</sup>. The INR is actively used for currency substitution and investment.

## Rupee-denominated bonds

Liberalization of the external commercial borrowings framework in 2015<sup>12</sup> and 2016 allowed Indian corporates to issue INR-denominated bonds overseas.

<sup>8</sup> See Foreign Institutional Investors Regulations // Securities and Exchange Board of India. 1995. URL: <http://www.sebi.gov.in/acts/fiiregu2009.pdf>

<sup>9</sup> See Foreign Portfolio Investors Regulations // Securities and Exchange Board of India. 2014. URL: [http://www.sebi.gov.in/cms/sebi\\_data/attach-docs/1389083605384.pdf](http://www.sebi.gov.in/cms/sebi_data/attach-docs/1389083605384.pdf)

<sup>10</sup> Market capitalization of Indian equities: USD 1.5 trillion, FPI-Equity: USD 300 billion.

<sup>11</sup> See Debt Utilisation Status // National Securities Depository Ltd. URL: <http://www.fpi.nsdl.co.in/Reports/ReportDetail.aspx?RepID=1> (for the latest number)

<sup>12</sup> See External Commercial Borrowings (ECB) Policy - Issuance of Rupee denominated bonds overseas // Reserve Bank of India. 2015. September 29. URL: <http://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10049>

**Table 4**  
Role of INR in international reserves, magnitude

	2013		2014	
	Amount, USD million	Per cent of total	Amount, USD million	Per cent of total
<b>Total Holdings in Currencies</b>	<b>6,779,830.42</b>	<b>100.00</b>	<b>6,738,534.06</b>	<b>100.00</b>
SDR Basket Currencies	6,276,718.91	92.58	6,214,838.24	92.23
US dollar	4,158,921.34	61.34	4,290,575.54	63.67
Euro	1,603,466.98	23.65	1,417,328.09	4.03
Pound sterling	287,966.45	4.25	274,564.80	4.07
Japanese yen	226,364.14	3.34	232,369.81	3.45
<b>Non-SDR Basket Currencies</b>	<b>503,111.51</b>	<b>7.42</b>	<b>523,695.81</b>	<b>7.77</b>
Australian dollar	151,026.62	2.23	142,451.37	2.11
Canadian dollar	133,863.09	1.97	133,869.60	1.99
Chinese renminbi	45,358.87	0.67	74,611.87	1.11
Swiss franc	16,077.82	0.24	15,365.62	0.23
New Zealand dollar	16,805.46	0.25	15,213.97	0.23
Swedish krona	13,819.59	0.20	13,224.57	0.20
Norwegian krone	13,956.93	0.21	12,050.16	0.18
Singapore dollar	4,388.19	0.06	3,912.38	0.06
Brazilian real	3,416.08	0.05	3,335.65	0.05
South Africa rand	2,687.69	0.04	3,140.54	0.05
Indian rupee	495.23	0.01	1,000.11	0.01
Russian ruble	360.81	0.01	355.97	0.01
Other currencies	100,891.13	1.49	105,164.00	1.56

Source: IMF Survey on the Holdings of Currencies in Official Foreign Currency Assets, 2015

These bonds are commonly referred to as "Masala bonds". The rupee-denominated bond is an attempt to shield issuers from currency risk and instead transfer the risk to investors buying these bonds. The currency risk is borne by the investor and hence, during repayment of bond coupon and maturity amount, if rupee depreciates, RBI will realize a marginal saving. Many commentators have pointed out the issuance of rupee-denominated bonds overseas is a major step in internationalizing the INR. As of November 2016, there are 13 active Masala bonds listed in LSE, raising USD 2 billion. Out of these 13 bonds, 10 Masala bonds have been raised by multilateral organizations and remaining 3 by Indian corporates. Both multilateral organizations and corporates have raised

a billion dollars each (LSE, 2016). The uptake of Masala bonds is also low as a percentage outstanding international debt securities issued by Indian national entities.

### Invoicing and settlement of trade in INR

Currency invoicing in trade is an important first step for any national currency to become an international currency. Local currency invoicing of trade in the rupee is less than 2.5% of total trade as of the last release of currency invoicing data by the RBI<sup>13</sup> in 2014.

<sup>13</sup> See Foreign Trade Statistics // Reserve Bank of India. 2014. August 06. URL: [http://rbi.org.in/Scripts/BS\\_PressRele-aseDisplay.aspx?prid=31788](http://rbi.org.in/Scripts/BS_PressRele-aseDisplay.aspx?prid=31788)

**Table 5**  
RBI swap lines

Counterparty	Last renewal	Size, USD bn	Objective
Bank of Japan	2014-01-01	50	Mitigation of US dollar funding risk
SAARC countries	2016-02-01	2	Mitigation of US dollar funding risk
Central Bank of UAE	2016-02-01	-	Bilateral swap line, management of INR/AED mismatch
BRICS (Contingent Reserve Arrangement)	2015-07-01	18	Mitigation of US dollar funding risk

Source: RBI (2014)

**Table 6**  
Invoicing of exports, %

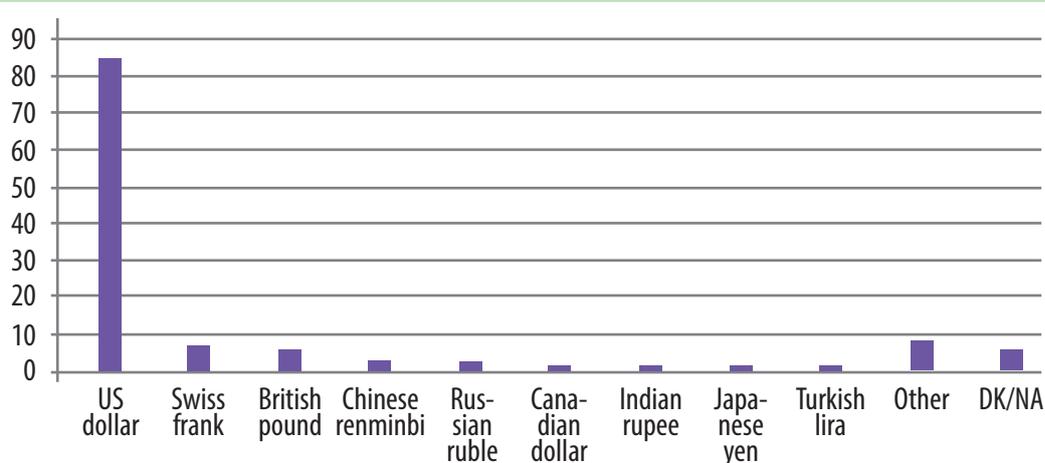
Currency	2008-09	2009-10	2010-11	2011-12	2012-13
Pounds sterling	2.77	2.81	2.47	2.31	2.31
US dollar	84.06	84.75	86.41	87.01	88.41
Japanese yen	0.48	0.35	0.22	0.26	0.15
Euro	10.85	10.13	8.88	8.14	6.97
All other Currencies	1.84	1.96	2.02	2.28	2.16

Source: RBI (2014)

**Table 7**  
Invoicing of imports, %

Currency	2008-09	2009-10	2010-11	2011-12	2012-13
Pounds sterling	0.89	0.66	0.71	0.5	0.42
US dollar	86.06	83.91	85.38	88.67	86.06
Japanese yen	2.3	1.98	1.73	1.41	1.47
Euro	9.82	12.61	11.13	8.29	9.44
All other Currencies	0.93	0.84	1.05	1.13	2.61

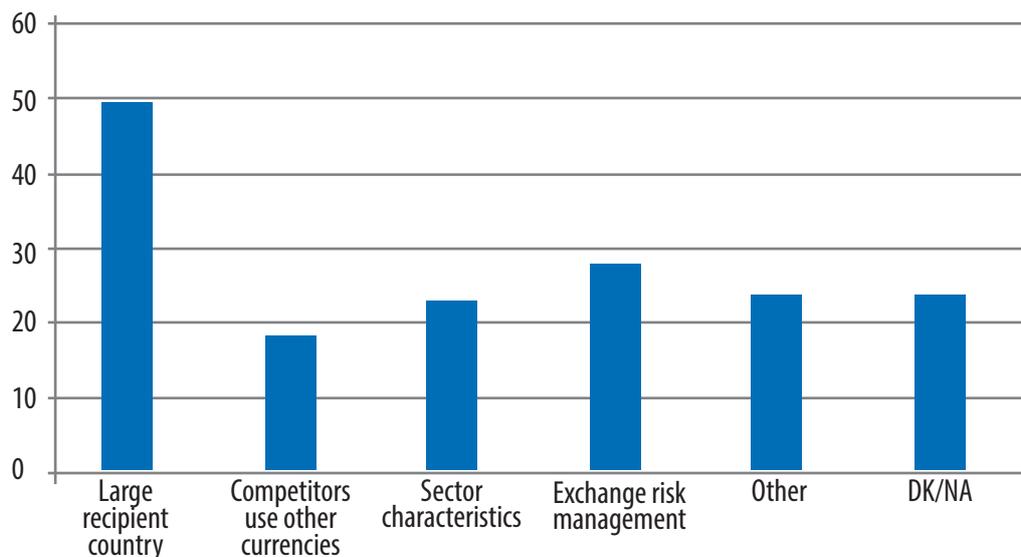
Source: RBI (2014)



**66** | **Figure 6.** Indirect evidence of rupee invoicing, %

Source: Langedijk S., et al. (2016)

Note: DK/NA denotes "Dont'know/No answer"



**Figure 7.** Factors driving utilisation of LCY in invoicing, %

Source: Langedijk S. et al. (2016)

Note: DK/NA denotes "Don't know/No answer"

Most of the trade invoicing in India goes through USD and EUR (Table 6).

This structure of invoicing is a reflection of the transaction costs faced by external trade partners and local traders in invoicing trade in local currency. Around 22% of all Chinese trade is now settled using the RMB<sup>14</sup>, which is down from a high of 26% prior to the RMB's devaluation.

Goldberg and Tille (2008) and Ito and Chinn (2014) argue that hedging costs are a primary driver after "size" of a country in explaining local currency use in invoicing. This assertion is backed by recent survey evidence from European traders (*Langedijk et al.*, 2016). The survey finds that only a small number of firms invoice in currencies (Figure 6) outside the "big four" and the levels of local currency invoicing of trade in RMB and INR are similar for European firms. Moreover, hedging costs are the primary determinants of local currency use after size of recipient country (Figure 7).

In spite of this facility being proposed in 2012, it has not been notified by the

RBI. As of the writing of this paper, only Bhutan and Nepal have access to direct invoicing and settlement of their trade in rupees. For all other countries, as per the last notification issued by the RBI<sup>15</sup>, trade from and to India may be invoiced in "freely convertible currencies" or rupees. Amongst the BRICS currencies, only the South African rand is considered a freely convertible currency by the RBI. This limits the invoicing and settlement possibilities of trade partners who do not have freely convertible currencies. Bilateral trade deals provide a work-around and allow for limited local currency settlement. President Putin and Prime Minister Modi announced a push towards bilateral settlements in the ruble and rupee during President Putin's visit in December 2014. After initial excitement surrounding this arrangement limited bilateral banking presence, small volume of trade between both countries, limitations in availability of hedging instruments and continued depreciation of the INR/RUB currency

<sup>14</sup> China: Renminbi stalls on road to being a global currency // Financial Times. 2016. December 11. URL: <http://www.ft.com/content/e480fd92-bc6a-11e6-8b45-b8b81dd5d080>

<sup>15</sup> See Notification FEMA 14(R)/2016-RB // Reserve Bank of India. 2016. May 02. URL: <http://rbidocs.rbi.org.in/rdocs/notification/PDFs/FNT14RBBC96EA1D8574325AF4314261D E5133A.PDF>

pair against the dollar<sup>16</sup> have effectively put a stop to bilateral settlement<sup>17</sup>.

According to (non-publicly available data) SWIFT<sup>18</sup>, in April 2016 80% of trade to India was settled in USD. This followed by 7.2% in INR, 6.3% in EUR with the remaining 6.5% split over all other currencies. This percentage share indicates approximately USD 50–70 billion of trade settled in rupees. However, the INR does not make the top 20 international settlement currency list (according to SWIFT) indicating that there is a great potential in improving settlement of trade using the INR.

The INR is more actively used by private actors than the official sector. The bulk of INR's international utilization comes from the usage of INR in currency substitution and investment activity by private actors. Table 8 summarizes INR's role as international currency across both official and private sectors and we can see that it has a negligible role as an international currency.

## Looking ahead

Internationalization of rupee will facilitate greater degree of integration of Indian economy with rest of the

world in terms of foreign trade and international capital flows. Key benefits of internationalization of rupee include savings on foreign exchange transactions for Indian residents, reduced foreign exchange exposure for Indian corporate, reduction in dependence on foreign exchange reserves for balance of payment stability etc. One of the important drivers for internationalization of a currency is the countries share in global merchandise and commercial services trade. India's percentage share in the global trade is still on the lower side and it limits the pricing ability of domestic businesses in Indian rupee. Moreover, the share of Indian rupee in the global foreign exchange market turnover at present is also very low. Internationalization of Indian currency would also require full capital account convertibility. As a policy, we have followed a gradual and cautious approach in opening up the capital account. The capital account is being progressively liberalized in accordance with the evolving macro-economic conditions and requirements of the Indian industries, individuals and financial sectors<sup>19</sup>.

It is more likely that Indian policymakers will choose a gradual move towards internationalization in the medium term. As of writing this paper India only satisfies the size of GDP and political stability pre-conditions for currency internationalization.

Restrictions on currency convertibility, both on the current and capital account hamper growth of INR as a global currency. The framework for exchange controls in India comes from the Foreign Exchange Management Act, which was passed in December 1999 and enacted in 2000. FEMA categorizes transactions into current account and

<sup>16</sup> See Russia and India move to settle in own currencies // Russia Beyond. 2015. November 19. URL: [http://www.rbth.com/economics/finance/2015/11/18/rusia-and-india-move-to-settle-in-own-currencies\\_541991](http://www.rbth.com/economics/finance/2015/11/18/rusia-and-india-move-to-settle-in-own-currencies_541991)

<sup>17</sup> Given evolving global macroeconomic conditions and expectations of US dollar appreciation, India's foreign trade policy for 2015–20 does not mention any explicit incentive for LCY invoicing and settlement. MoF note F.No.20/15/2012 — BO.II was proposed at a time when the rupee was relatively stronger compared to the current macroeconomic situation. See Foreign Trade Policy [1st April, 2015 – 31st March, 2020] // Government of India. URL: <http://dgft.gov.in/exim/2000/ftp2015-20E.pdf>

<sup>18</sup> See Rapoza K. Sorry British Pound, India Prefers Chinese Yuan In Trade Deals // Forbes. 2016. May 27. URL: <http://www.forbes.com/sites/kenrapoza/2016/05/27/india-increasingly-using-chinese-yuan-in-trade-deals/>

<sup>19</sup> See Internationalisation of Rupee // Business Standard. 2016. May 7. URL: [http://www.business-standard.com/article/government-press-release/internationalisation-of-rupee-116050601065\\_1.html](http://www.business-standard.com/article/government-press-release/internationalisation-of-rupee-116050601065_1.html)

**Table 8**

Roles of INR as an international currency

Function of money	Governments	Private actors
Store of value	International Reserves	Currency substitution and investment
	Negligible	FPI framework
Medium of exchange	Vehicle currency for FX intervention	Invoicing trade and financial transactions
	None	Negligible
Unit of account	Anchor for local currency pegging	Denominating trade and financial transactions
	None	Negligible

capital account transactions and has specific rules and restrictions for across classes of individuals and investors; based on residence, size of transaction, instruments used, tenor of instrument and vehicle currency. For the purposes of India's ascension to the WTO, the rupee is a fully convertible currency on the current account. However, as we described in the previous section, simple transactions like realization of payments for exports and imports cannot be in rupees unless its specifically approved. Current account transactions exceeding USD 250,000 for individuals<sup>20</sup> require RBI approval. Rupee accounts cannot be held abroad<sup>21</sup> and therefore overseas cash settlement in rupee is not currently possible. The documentary requirements along with delays in approvals dis-incentivize

<sup>20</sup> See Master Direction - Liberalised Remittance Scheme (LRS) // Reserve Bank of India. 2016. January 1. URL: <http://rbi.org.in/Scripts/NotificationUser.aspx?Id=10192>

<sup>21</sup> Rupee Drawing arrangements exist with Gulf countries, Hong Kong, Singapore, Malaysia and other FATF compliant countries. These accounts can be used for channeling cross-border inward remittances into India primarily on private account up to INR 1,500,000 per transaction. These accounts cannot be used for trade settlement, even though in theory they may be utilised to do so. See Master Direction - Opening and Maintenance of Rupee/Foreign Currency Vostro Accounts of Non-resident Exchange Houses) // Reserve Bank of India. 2016. January 1. URL: [http://www.rbi.org.in/Scripts/BS\\_ViewMasDirections.aspx?id=10205](http://www.rbi.org.in/Scripts/BS_ViewMasDirections.aspx?id=10205)

both residents and non-residents from using the rupee for current account transactions.

As far as the capital account is concerned there is a large framework of controls split by residency, instrument, transaction size and investor category. The power to regulate capital account transactions currently vests with the RBI. This power has been conferred on it by Section 6(3) (b) of FEMA. A general overview of the framework is as follows (*Patnaik and Shah, 2012; Sengupta, 2016*):

- Outward flows by firms: Outbound FDI by a firm is capped at a multiple of its net worth;
- Foreign Banks: RBI restricts the growth of foreign banks by permitting all foreign banks, put together, to open 20 branches a year;
- Foreign borrowing by firms: Maturity of loan, amount, interest rate, end-use and the sector to which the debtor firm belongs, are prescribed. The aggregate borrowing by all firms in a year is subject to a ceiling;
- Debt investment by foreign portfolio investors: The aggregate investment by all foreign investors is subject to one ceiling for government bonds, and another for corporate bonds;
- Equity investments by foreign portfolio investors: Only registered "foreign

portfolio investors" are permitted to buy shares in India. Their investments are subject to sectoral and firm level ceilings;

- FDI: Foreign ownership in certain sectors (e.g. telecom, insurance, banking) is capped at various levels.

The FEMA reform process in terms of both current and capital account transactions has tended to drift towards greater openness. Current account outflow restrictions on individuals have been eased in 4 incremental steps<sup>22</sup> between 2004–15 with the limits being increased from USD 25,000 to USD 250,000 over the 11 year period<sup>23</sup>. In terms of foreign portfolio investment, India moved to a unified portfolio investment framework for institutional investors, nonresident individuals and venture capital funds in 2014<sup>24</sup>. Recent developments in the FPI framework for investment in rupee-denominated bonds and the external commercial borrowing framework for foreign borrowing by firms gives us some insight about the current state of the capital account reform process.

The introduction of the FPI<sup>25</sup> framework marked a structural change in regulation of inward portfolio flows. This allowed for rationalization of documentary requirements, merging of investor categories, clarifications on tax treatment and a reduction in processing time for foreign investor

<sup>22</sup> These limits were partially reversed during the taper tantrum.

<sup>23</sup> See Master Direction — Liberalised Remittance Scheme (LRS) // Reserve Bank of India. 2016. January 1. URL: <http://rbi.org.in/Scripts/NotificationUser.aspx?Id=10192>

<sup>24</sup> See Frequently Asked Questions (FAQs): SEBI Foreign Portfolio Investors Regulations, 2014 // Securities and Exchange Board of India. URL: [http://www.sebi.gov.in/cms/sebi\\_data/attachdocs/1467282054952.pdf](http://www.sebi.gov.in/cms/sebi_data/attachdocs/1467282054952.pdf)

<sup>25</sup> See Foreign Portfolio Investors Regulations // Securities and Exchange Board of India. 2014. URL: [http://www.sebi.gov.in/cms/sebi\\_data/attachdocs/1389083605384.pdf](http://www.sebi.gov.in/cms/sebi_data/attachdocs/1389083605384.pdf)

registration<sup>26</sup>. This was followed a year later by announcement of a medium term framework<sup>27</sup> for investment in onshore rupee-denominated government securities. The key announcement was that limits for FPI investment in the Central Government securities<sup>28</sup> will be increased in phases to reach 5% of the outstanding stock by March 2018 along with limit enhancements announced every March and September. This announcement along with the introduction of the FPI framework was made to provide foreign investors a more predictable investment regime in rupee-denominated assets. This marks the first instance of the RBI committing to a glide-path or a medium term plan for capital account liberalization similar to PBC's announcements regarding the renminbi. The ECB framework also saw large scale changes in 2015 with the introduction of offshore rupee trade credit<sup>29</sup> and offshore rupee-denominated bonds<sup>30</sup> in September. These changes are an integral part of internationalizing the rupee and allow for deepening of rupee liquidity in offshore centers. This was

<sup>26</sup> See Gupta R. India: Foreign Portfolio Investment In India: SEBI Creates A New Class Of Investors // Mondaq. 2014. 3 September. URL: <http://www.mondaq.com/india/x/338010/Commodities+Derivatives+Stock+Exchanges/Foreign+Portfolio+Investment+In+India+SEBI+Creates+A+New+Class+Of+Investors>

<sup>27</sup> See Investment by Foreign Portfolio Investors (FPI) in Government Securities // Reserve Bank of India. 2015. October 6. URL: <http://www.rbi.org.in/scripts/NotificationUser.aspx?Id=10059>

<sup>28</sup> Additionally, a separate limit for investment by all FPIs in the State Development Loans was also announced, to be increased in phases to reach 2% of the outstanding stock by March 2018.

<sup>29</sup> See Trade Credit Policy — Rupee (INR) Denominated trade credit // Reserve Bank of India. 2015. September 10. URL: <http://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10023>

<sup>30</sup> See External Commercial Borrowings (ECB) Policy — Issuance of Rupee denominated bonds overseas // Reserve Bank of India. 2015. September 29. URL: <http://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10049>

followed by a rationalization of the ECB framework in November 2015<sup>31</sup> with the introduction of a unified framework for rupee-denominated debt for Indian firms encompassing both onshore and offshore issuances, across a range of instruments including trade credit, loans and bonds. Around one-fifth of Indian corporate financing needs are met by foreign currency borrowing. Almost all trade credit is denominated in foreign currency. Permitting international banks and capital markets to raise rupee debt marks a small but important step in solving the problem of "original sin" faced by firms and the government (*Hausmann and Panizza, 2003*).

In this context, it is important to highlight the role of hedging markets. The presence of hedging markets allows for internationalization of a currency as both a vehicle for invoicing trade as well as financial portfolio diversification. In India's case exchange traded currency derivatives were introduced in 2008 but foreigners were not allowed to participate on exchanges till June 2014. Their participation is also limited by detailed documentation requirements to show a demonstrable exposure along with restrictive margin requirements on exchanges. There are position limits of USD 15 million on exchange traded derivatives and foreigners can only hedge up to their underlying exposure in the over the counter markets. This problem is accentuated by restrictions on types of products, lack of overlap between Indian trading hours and global trading times and regulatory risk (Standing Council on International Competitiveness of the Indian Financial System, 2015).

The existence of such large NDF markets for the INR should be of concern for domestic policymakers. The first rea-

son is a simple revenue loss argument. IGIDR Finance Research Group (2016) estimates that based on the trade volumes in these markets, Indian financial firms are potentially losing out on revenues worth USD 500 billion annually. The second argument is from the perspective of market regulators and efficient exchange rate management. The ineffectiveness of a host of capital controls mounted by the RBI for its currency defence during the "taper tantrum" period of 2013 is well-documented (*Tayal, Rajat, 2013*). Denied access to the domestic markets, the participants shifted to the offshore NDF markets which are subject to limited scrutiny by the domestic regulators. This had possible spillover effects on the domestic rates. Additionally, the RBI had to resort to abandoning its monetary policy objectives in wake of the sharp depreciation, raising domestic interest rates by 400 bps in a period of muted growth. Lastly, fragmented markets face more dispersed price discovery. Divergence of rates in offshore NDF markets and the onshore currency markets can be frequently observed and stresses the importance of a single market for efficient price discovery (*Hutchison et al., 2012*).

Dealing with offshore NDF markets has to be central to any policy deliberation for the development of INR hedging markets. India can learn significantly from the experience of the China and Russia — two BRICS countries which have charted divergent paths towards internationalization of their currencies. The Russian ruble was made fully convertible in mid-2006. Subsequently, the offshore NDF markets for ruble shifted to onshore currency markets. Currently, the ruble NDF has the smallest share out of the BRICS currencies in the global NDF market. China on the other hand, has charted a completely different route. Chinese authorities, while administering strict capital controls, have permitted a pool

<sup>31</sup> Track III in the revised ECB framework, See External Commercial Borrowings (ECB) Policy — Revised framework // Reserve Bank of India. 2015. November 30. URL: <http://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10153>

of offshore renminbi instruments that can be freely traded and delivered. The result has been a thriving market for offshore deliverable forwards which has eclipsed the renminbi NDF market. The leakiness of these capital controls were exposed during the renminbi depreciation in August 2015. The volume of renminbi NDF trading almost quadrupled on August 11, 2015. Similar revivals were seen in the ruble NDF markets following events of political uncertainty and credit constraints in Russia (*McCauley and Shu, 2016*).

Increasing access to onshore hedging markets for foreigners and allowing access to offshore markets to residents is an easy first step towards improving INR currency risk management. Standing Council on International Competitiveness of the Indian Financial System (2015) offshore NDF markets. Improvement in INR risk management is likely to increase the utilization of the INR as a trade currency. The government can continue its policy efforts in promoting use of the INR as trade invoicing currency, especially for South-South trade and subsequently look at a gradual extension of offshore INR settlement (deposits) and trade credit. The RBI however, is taking a calibrated approach<sup>32</sup> to rupee internationalization and does not mention any changes in local currency invoicing and settlement for 2016–17; its policy focus is on slowly improving hedging markets and increasing use of INR as a currency for raising debt from foreign counterparties. RBI's reluctance to allow for LCY invoicing and settlement is understandable for two reasons. First, India's trade exposure to nonconvertible currency trade partners is less than 10% excluding China and oil producing countries. Second, there is a lack of risk management facilities

<sup>32</sup> See Annual Report. Financial Markets and Foreign Exchange Management // Reserve Bank of India. 2016. August 29. URL: <http://www.rbi.org.in/scripts/AnnualReportPublications.aspx?Id=1178>

in partially convertible currencies and there are associated country risks in dealing with banks from these countries in making bilateral currency markets<sup>33</sup>. This is unlikely to change soon given the reversals in capital account liberalization in the emerging world after the taper tantrum in 2013 (*Gallagher, 2014*). The BRICS agenda needs to focus on decentralized risk management at firm level, both financial and non-financial, if it wants to move towards LCY settlement of trade amongst its member countries along with initiatives like the CRA.

There is no consensus in India about capital account convertibility and it is difficult to judge whether India will follow the Russian or the Chinese model of currency internationalization as there have been proposals for both greater capital account convertibility<sup>34</sup> and financial centers similar to Hong Kong<sup>35</sup>. Indian policymakers demonstrated a preference for a mix of both strategies, liberalization and setting up an international financial center, but there has been very little synergy between both efforts<sup>36</sup>.

As of the writing of this paper the share of INR in global currency turnover is just 1% whereas India contributes almost 3% to global GDP. We anticipate a slow internationalization of the INR, given the current path of exchange control and capital account liberalization continues until 2018. Given China's experience with

<sup>33</sup> See Iyer P.V. Why BRICS trade in local currency doesn't work for India // The Indian Express. 2015. July 13. URL: <http://indianexpress.com/article/explained/why-brics-trade-in-local-currency-doesnt-work-for-india-2/>

<sup>34</sup> See Committee on Fuller Capital Account Convertibility, 2006.

<sup>35</sup> See Setting up of IFSC Banking Units (IBUs) // Reserve Bank of India. 2015. April 1. URL: <http://rbi.org.in/Scripts/NotificationUser.aspx?Id=9636> (for notified legal framework).

<sup>36</sup> See Nair A. RBI Governor suggests single regulator for GIFT City // The Indian Express. 2017. January 12. URL: <http://indianexpress.com/article/business/business-others/rbi-governor-suggests-single-regulator-for-gift-city/>

Hong Kong, an international financial center in Gandhinagar is likely accelerate the process of INR internationalization and financial sector reform. The RBI will continue to remain cautious and is unlikely to shift from its "wait and watch" approach before committing to the next phase of INR internationalization reforms. We do not expect any "big bang" changes before the next policy cycle begins in 2020. Given recent changes in regulatory frameworks, we also anticipate a clear medium to long term plan articulated by the RBI in conjunction the Ministry of Finance, if and when they decide to pursue rupee internationalization.

## References

1. *Dixon C.* The New BRICS Bank: Challenging the International Financial Order? // The Global Policy Institute. London Metropolitan University. 2015. No. 28. URL: <http://www.gpilondon.com/wp-content/uploads/PP28-The-New-BRICS-Bank.pdf>
2. Features and trends of NDF markets for Emerging Economy Currencies: A study of the Indian Rupee // IGIDR Finance Research Group. 2016. March. URL: <http://www.ifrogs.org/POLICY/ndfReport.html>
3. *Fernandez A., et al.* Capital Control Measures: A New Dataset / A. Fernandez, M. W. Klein, A. Rebucci, M. Schindler, M. Uribe // National Bureau of Economic Research. Working Paper. 2015. No. 20970. URL: <http://www.nber.org/papers/w20970.pdf>
4. *Gallagher K. P.* Ruling capital: Emerging markets and the reregulation of cross-border finance. Cornell University Press, 2014.
5. *Gao H., Yu Y.* Internationalization of the renminbi // Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific // BIS. BIS Papers. 2011. No. 61. P. 105–124. URL: <http://www.bis.org/publ/bppdf/bispap61.pdf>
6. *Goldberg L. S., Tille C.* Vehicle currency use in international trade // Journal of International Economics. 2008. No. 76(2). P. 177–192.
7. *Hausmann R., Panizza U.* On the determinants of Original Sin: an empirical investigation // Journal of International Money and Finance. 2003. No. 22(7). P. 957–990.
8. *Hutchison M. M., Pasricha G. K., Singh N.* Effectiveness of capital controls in India: Evidence from the offshore NDF market // IMF Economic Review. 2012. No. 60 (3). P. 395–438.
9. *Ito H., Chinn M.* The Rise of the “Redback” and the People’s Republic of China’s Capital Account Liberalization: An Empirical Analysis of the Determinants of Invoicing Currencies // Asian Development Bank Institute. Working Paper. 2014. No. 473. URL: <http://www.adb.org/sites/default/files/publication/156328/adbi-wp473.pdf>
10. *Ito T.* A New Financial Order in Asia: Will a RMB bloc emerge? // National Bureau of Economic Research. Working Paper. 2016. No. 22755. URL: <http://www.nber.org/papers/w22755.pdf>
11. *Langedijk S., Karagiannis S., Evangelia P.* Invoicing Currencies in International Trade — Drivers and Obstacles to the Use of the Euro // Joint Research Centre. Scientific and Technical Research Report. 2016. URL: <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC96913/lbna27754enn.pdf>
12. *Ma G., McCauley R. N.* Is China or India more financially open? // Journal of International Money and Finance. 2013. No. 39. P. 6–27.
13. *Ma G., Villar A.* Internationalisation of emerging market currencies // The transmission of unconventional monetary policy to the emerging markets // BIS.

BIS Papers. 2014. No. 78. P. 71–87. URL: <http://www.bis.org/publ/bppdf/bispap78.pdf>

14. Masala Bond List // London Stock Exchange. 2016. URL: <http://www.lseg.com/masala>

15. *McCauley R. N., Shu C.* Non-deliverable forwards: impact of currency internationalisation and derivatives reform // BIS. BIS Quarterly Review. 2016. December. URL: [http://www.bis.org/publ/qtrpdf/r\\_qt1612h.pdf](http://www.bis.org/publ/qtrpdf/r_qt1612h.pdf)

16. *Moore M., Schrimpf A., Sushko V.* Downsized FX markets: causes and implications // BIS. BIS Quarterly Review. 2016. December. URL: [http://www.bis.org/publ/qtrpdf/r\\_qt1612e.pdf](http://www.bis.org/publ/qtrpdf/r_qt1612e.pdf)

17. *Patnaik I., Shah A.* Did the Indian Capital Controls Work as a Tool of Macroeconomic Policy? // IMF Economic Review. 2012. No. 60(3). P. 439–464.

18. *Ranjan R., Prakash A.* Internationalization of Currency: The case of the Indian Rupee and Chinese Renminbi // Reserve Bank of India Report. RBI Staff Studies. 2010. No. 3. URL: <http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/RRSS180510F.pdf>

19. Renminbi internationalization: Achievements, prospects and challenges / B. J. Eichengreen, M. Kawai (eds.) // Asian Development Bank Institute. Brookings Institution. Tokyo, 2015. URL: <http://www.adb.org/sites/default/files/publication/159835/adbi-renminbi-internationalization-achievements-prospects-challenges.pdf>

20. Report of the Committee on Fuller Capital Account Convertibility // Reserve Bank of India. 2006. July 31. URL: <http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/72250.pdf>

21. Report of the Standing Council on International Competitiveness of the Indian Financial Sector // Ministry of Finance. 2015. Vol. 1. URL: <http://finmin.nic.in/reports/Standing%20Council%20Report%20IFS.pdf>

22. *Sengupta R.* The impossible trinity: Where does India stand? // International Trade and International Finance / M. Roy, S. Sinha Roy (eds.). Springer India, 2016. P. 511–523.

23. *Shu C., He D., Cheng X.* One currency, two markets: the renminbi's growing influence in Asia-Pacific // BIS. Working Paper. 2014. No. 446. URL: <http://www.bis.org/publ/work446.pdf>

24. Survey on the holdings of currencies in official foreign currency assets // IMF. 2015. URL: <http://www.imf.org/~media/Images/IMF/Data/080415.ashx>

25. *Tayal R.* Impact of restrictions on currency derivatives on market quality // IGIDR Finance Research Group. 2013. October. URL: [http://ifrogs.org/PDF/201309\\_restrictionsOnCurrencyDerivatives.pdf](http://ifrogs.org/PDF/201309_restrictionsOnCurrencyDerivatives.pdf)

26. Triennial Central Bank Survey. Foreign exchange and derivatives market activity in April 2010. Preliminary results // BIS. 2010. URL: <http://www.bis.org/publ/rpfx10.pdf>

27. Triennial Central Bank Survey of foreign exchange and derivatives market activity in 2013 // BIS. 2013. URL: <http://www.bis.org/publ/rpfx13.htm>

28. Triennial Central Bank Survey of foreign exchange and OTC derivatives markets in 2016 // BIS. 2016. URL: <http://www.bis.org/publ/rpfx16.htm>

## Appendix

### List of countries

Country Code	Country
IN	India
BR	Brazil
CN	China
RU	Russia
KR	South Korea
PE	Peru
CZ	Czech Republic
HU	Hungary
CL	Chile
ID	Indonesia
TH	Thailand
MY	Malaysia
CO	Colombia
MX	Mexico
TR	Turkey
ZA	South Africa
PL	Poland
PH	Philippines

## Chapter 5

# The Internationalization of RMB: China's Experience<sup>1</sup>

The Chinese government has begun to gradually promote RMB internationalization since the GFC. The pressing need for the reform of the international monetary system, the steady growth of the Chinese economy, the government's support and the RMB appreciation expectation over the past several years have worked together to propel RMB internationalization. In October 2016, RMB was officially included into the SDR currency basket by the International Monetary Fund, highlighting global recognition of the achievements of RMB internationalization over the past years.

Between 2009 and 2016, RMB internationalization made remarkable progress. In summary, the achievements include following aspects.

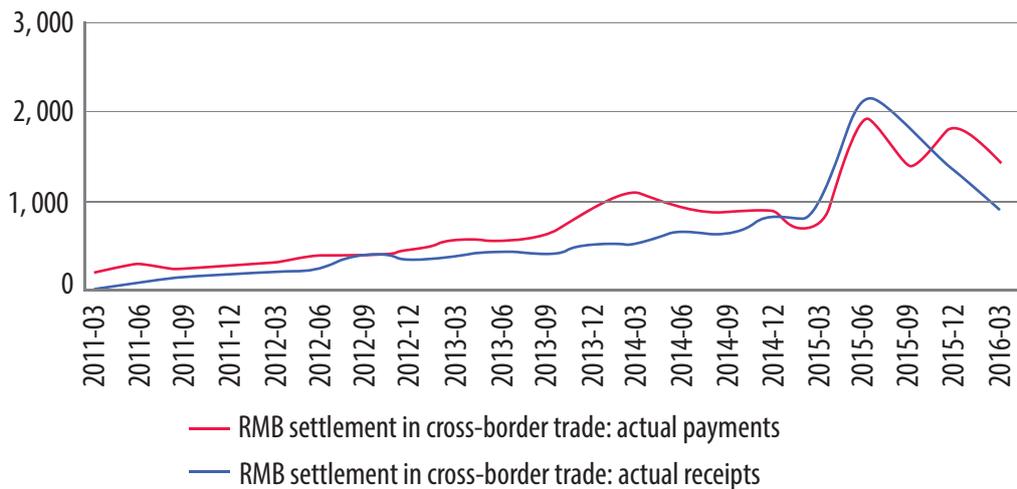
### Encouraging enterprises to use RMB settlement in cross-border trade and investment

Pilot program on RMB settlement in trade in goods started in December 2008. In June 2010, People's Bank of China, Ministry of Finance, Ministry of Commerce, General Administration of Customs, State Administration of Taxation and China Banking Regulatory Commission jointly issued "Notice on issues concerning the expansion of

pilot program on RMB settlement in cross-border trade", extending the pilot regions from Shanghai and four cities of Guangdong to more than 20 provinces and municipalities including Beijing, Tianjin, Jiangsu, Zhejiang and Fujian. Then, in August 2011, the six government departments jointly issued "Notice on enlarging regions for RMB settlement in cross-border trade", extending the pilot regions to the whole country. It is noteworthy that, instead of putting forward the idea of RMB internationalization, the aim for the central government to advance this pilot program at that time was to help enterprises avoid exchange rate risk and reduce exchange loss. It showed that, during that period, the Chinese government was very cautious about RMB internationalization.

For the purpose of further expanding the use of RMB in cross-border trade and investment and regulating the banks and overseas investors in carrying out settlement for RMB-denominated foreign direct investment, the People's Bank of China had formulated "Administrative Rules on Settlement of RMB-denominated Foreign Direct Investment" on October 14, 2011. This means that overseas investors and the banks can carry out settlement for RMB-denominated foreign direct investment according to the new administrative rules, effectively expanding the cross-border use of RMB and substantially facilitating trade and investment while advancing the progress of RMB internationalization. On June 14, 2012,

<sup>1</sup> Liu Dongmin, Xiao Lisheng, Lu Ting, Xiong Aizong, Zhang Chi — Institute of World Economics and Politics, Chinese Academy of Social Sciences.



**Figure 1.** Cross-border flow of RMB fund, bn yuan  
Source: Wind Database

for the purpose of implementing "Administrative Rules on Settlement of RMB-denominated Foreign Direct Investment", facilitating RMB-denominated foreign direct investment by overseas investors and regulating the banks and financial institutions in carrying out settlement for RMB-denominated foreign direct investment, the People's Bank of China issued "Notice on Specifying Operating Rules on Settlement of RMB-denominated Foreign Direct Investment".

In addition, the People's Bank of China also made joint efforts with other related departments to adopt a series of supportive measures to facilitate the use RMB in cross-border settlement. On July 1, 2009, the People's Bank of China, Ministry of Finance, Ministry of Commerce, General Administration of Customs, State Administration of Taxation and China Banking Regulatory Commission jointly issued "Administrative Rules for the Pilot Program on RMB Settlement of Cross-Border Trade" to regulate the behaviors of pilot enterprises and commercial banks and prevent related business risks so as to promote trade facilitation and ensure smooth implementation of the pilot program on RMB settlement in cross-border trade. To implement

"Administrative Rules on Pilot Program of RMB Settlement of Cross-border Trade Transactions", the People's Bank of China and the State Administration of Foreign Exchange had issued in July 2009 respectively "Regulations for Implementing the Administrative Rules on Pilot Program of RMB Settlement of Cross-border Trade Transactions" and "Notice on related issues concerning the declaration and statistics on international receipts and payments in RMB settlement of cross-border trade transactions", so as to facilitate implementation and progress of the use of RMB in cross-border settlement.

RMB cross-border settlement has been accelerating as China's international trade and direct investment keep growing. Currently, RMB cross-border settlement has been expanded to all regions in the country, with no geographic restrictions in overseas markets. According to statistics from People's Bank of China, RMB cross-border settlement has covered more than 210 foreign countries and regions.

RMB cross-border settlement under current account has developed rapidly (Figure 1).

The absolute size of RMB settlement in cross-border trade has soared from 3.6 billion yuan in the first quarter of 2009

to 1.3 trillion yuan in the third quarter of 2016. Due to impact of the European debt crisis, the growth of RMB settlement in cross-border trade had stopped between the second half of 2011 and early 2012 but rebounded rapidly between 2012 and 2013. In March, 2014, after the daily range of RMB exchange rate fluctuation was enlarged from 1% to 2%, the size of RMB settlement in cross-border trade began to fluctuate vehemently. Since the "August 11" foreign exchange rate reform in 2015, the growth of RMB settlement in cross-border trade has decelerated significantly. As a key base of intermediary trade for domestic enterprises to take part in the global trade, Hong Kong has played a major role in RMB settlement in cross-border trade. Between the fourth quarter of 2009 and the first quarter of 2015, about 80% of RMB settlements in cross-border trade are done through Hong Kong.

In terms of capital account, the amount of actual receipts and payments had both increased year by year before the "August 11" foreign exchange rate reform in 2015. After that, the actual receipts of RMB settlement in cross-border trade

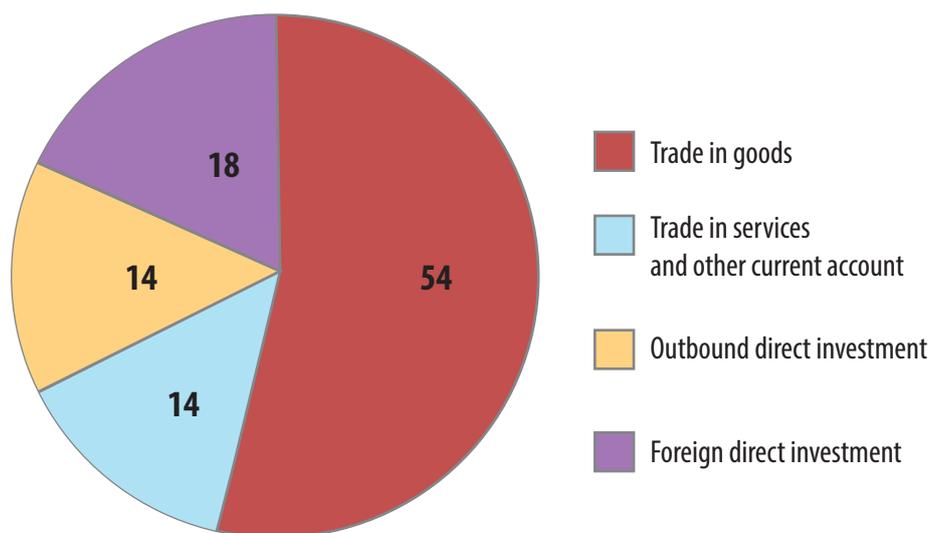
had begun to decline while the actual payments had fluctuated.

The aggregate amount of RMB settlement in cross-border trade has reached 6.47 trillion yuan in the first ten months of 2016 among which trade in goods, standing at 3.46 trillion yuan, accounted for 54% of the total; foreign direct investment, 1.15 trillion yuan, 18%; trade in service and other current accounts, 931.6 billion yuan, 14%; outbound direct investment, 921.1 billion yuan, 14% (Figure 2).

To support implementation of RMB cross-border settlement, China's banks have set up RMB clearing mechanism in 21 countries and regions by the end of September, 2016, covering Southeast Asia, West Europe, Middle East, North America, South America and Oceania.

### Currency swap and direct currency trading with RMB

The purpose for People's Bank of China to sign currency swap agreements with overseas monetary authorities is not only to maintain regional financial stability but, more importantly, to facilitate development of bilateral trade



**Figure 2.** Cross-border flow of RMB settlement in the first 10 months of 2016, %  
Source: People's Bank of China

and investment. The amount of money for currency swap can be used to support local enterprises' trade and investment so as to promote use of the two sides' currencies in bilateral trade and investment, which will help not only lower the exchange risk that the fluctuation of the dollar will cause in the bilateral international economic activities between both sides of currency swap but also reduce exchange cost to boost bilateral trade and investment.

Since the GFC, China has kept promoting currency cooperation and signing and renewing bilateral currency swap agreements with overseas central banks or monetary authorities. China has so far signed bilateral currency swap agreements with central banks or monetary authorities from 36 countries and regions including Hong Kong, Malaysia, Belarus, Indonesia and South Korea. By the end of 2016, the amount of money that those currency swap agreements actually involved has exceeded 3.1 trillion yuan (Table 1).

In terms of the currency swap agreements that are currently effective, most countries and regions that have signed currency swap agreements with People's Bank of China come from Asia and Pacific area. But in recent years, the number of such countries from Europe, Africa and Latin America also increased gradually. China has signed currency swap agreements with other BRICS countries such as Brazil (expired), Russia and South Africa, creating favorable conditions for further promotion of use of their own currencies among BRICS countries.

Direct currency trading between RMB and foreign currencies represents another major step forward during the course of RMB internationalization that helps increasing RMB settlement in bilateral trade and investment and raises the international status of RMB. Meanwhile, direct currency trading with RMB can avoid the cost of denominating with

the third party currency and reduce the exchange cost of transaction to facilitate bilateral trade, investment and financial cooperation.

Direct currency trading has been developed between RMB and 21 non-US dollar currencies. Since the establishment of the Bretton Woods system, the US dollar has played a central role in the international monetary system as the most important global currency for trade, investment and reserve. Therefore, in the beginning, direct currency trading was developed only between RMB and the US dollar on the back of which indirect currency trade had then been developed between RMB and other currencies. However, the use of US dollar as the medium of exchange both adds to the cost and inconvenience of currency trading between RMB and other foreign currencies and increases the exchange risk for both sides. Therefore, as RMB internationalization presses ahead and foreign economic and trade relations keep growing, it is urgent to establish a direct currency trading mechanism between RMB and other currencies. Hence, since 2010 China Foreign Exchange Trade System has first opened direct currency trading between RMB and Malaysian ringgit and then developed direct currency trading between RMB and 21 non-US dollar currencies including Russian ruble, Japanese yen, Australian dollar, New Zealand dollar, pound, euro, Singapore dollar, Swiss franc, South African rand, Korean won, UAE dirham, Saudi riyal, Canada dollar (Table 2).

### **Construction of off-shore RMB financial centers**

Construction of offshore RMB markets is proceeding apace. Offshore RMB markets develop rapidly. Hong Kong has become the most important RMB offshore center in the world and RMB

**Table 1**

Bilateral local currency swap agreements signed between People's Bank of China and other central banks or monetary authorities

The other party of Swap	Signing time	Swap size	Term
Hong Kong	2009.1.20 2011.11.22 (renewed) 2014.11.22 (renewed)	200 bn yuan/ 227 bn HK dollar 400 bn yuan/490 bn HK dollar (renewed) 400 bn yuan / 505 bn HK dollar (renewed)	3 yrs
Malaysia	2009.2.8 2012.2.8 (renewed) 2015.4.17 (renewed)	80 bn yuan / 40 bn Malaysian ringgit 180 bn yuan/ 90 bn Malaysian ringgit (renewed) 180 bn yuan / 90 bn Malaysian ringgit (renewed)	3 yrs 3 yrs
Belarus	2009.3.11 2015.5.10 (renewed)	20 bn yuan / 8 trn Belarusian ruble 7 bn yuan /16 trn Belarusian ruble (renewed)	3 yrs
Indonesia	2009.3.23 2013.10.1 (renewed)	100 bn yuan/ 175 trn Indonesian rupiah 100 bn yuan/175 trn Indonesian rupiah (renewed)	3 yrs
Argentina	2009.4.2 2014.7.18 (renewed)	70 bn yuan/38 bn Argentine peso 70 bn yuan / 90 bn Argentine peso (renewed)	3 yrs
South Korea	2009.4.20 2011.10.26 (renewed) 2014.10.11 (renewed)	180 bn yuan / 38 trn South Korean won 360 bn yuan/64 trn South Korean won (renewed) 360 bn yuan / 64 trn South Korean won (renewed)	3 yrs
Iceland	2010.6.9 2013.9.11 (renewed)	3.5 bn yuan/66 bn Icelandic krona 3.5 bn yuan / 66 bn Icelandic krona (renewed)	3 yrs
Singapore	2010.7.23 2013.3.7 (renewed) 2016.3.7 (renewed)	150 bn yuan/30 Singapore dollar 300 bn yuan / 60 bn Singapore dollar (renewed) 300 bn yuan/60 bn Singapore dollar (renewed)	3 yrs
New Zealand	2011.4.18 2014.4.25 (renewed)	25 bn yuan/5 bn New Zealand dollar 25 bn yuan/5 bn New Zealand dollar (renewed)	3 yrs
Uzbekistan (expired)	2011.4.19	0.7 bn yuan / 167 bn Uzbekistan som	3 yrs
Mongolia	2011.5.6 2012.3.20 (supplemental) 2014.8.21 (renewed)	5 bn yuan/1 trn Mongolian tugrik 10 bn yuan / 2 trn Mongolian tugrik (expanded) 15 bn yuan/4.5 trn Mongolian tugrik (renewed)	3 yrs
Kazakhstan	2011.6.13 2014.12.14 (renewed)	7 bn yuan/150 bn Kazakhstani Tenge 7 bn yuan/200 bn Kazakhstani Tenge (renewed)	3 yrs
Thailand	2011.12.22 2014.12.22 (renewed)	70 bn yuan/320 bn Thailand baht 70 bn yuan/370 bn Thailand baht (renewed)	3 yrs

Table 1 (*The completion*)

Pakistan	2011.12.23 2014.12.23 (renewed)	10 bn yuan/140 bn Pakistani rupee 10 bn yuan/165 bn Pakistani rupee (renewed)	3 yrs
UAE	2012.1.17 2015.12.14 (renewed)	35 bn yuan/20 bn UAE dirham 35 bn yuan/20 bn UAE dirham (renewed)	3 yrs
Turkey	2012.2.21 2015.9.26 (renewed)	10 bn yuan/3 bn Turkish lira 12 bn yuan/5 bn Turkish lira (renewed)	3 yrs
Australia	2012.3.22 2015.3.30 (renewed)	200 bn yuan/30 bn Australian dollar 200 bn yuan/40 bn Australian dollar (renewed)	3 yrs
Ukraine	2012.6.26 2015.5.15 (renewed)	15 bn yuan/19 bn Ukrainian hryvna 15 bn yuan / 54 bn Ukrainian hryvna (renewed)	3 yrs
Brazil (expired)	2013.3.26	190 bn yuan/60 bn Brazilian real	3 yrs
UK	2013.6.22 2015.10.20 (renewed)	200 bn yuan/20 bn GB pound 350 bn yuan/35 bn GB pound (renewed)	3 yrs

Source: People's Bank of China

**Table 2**

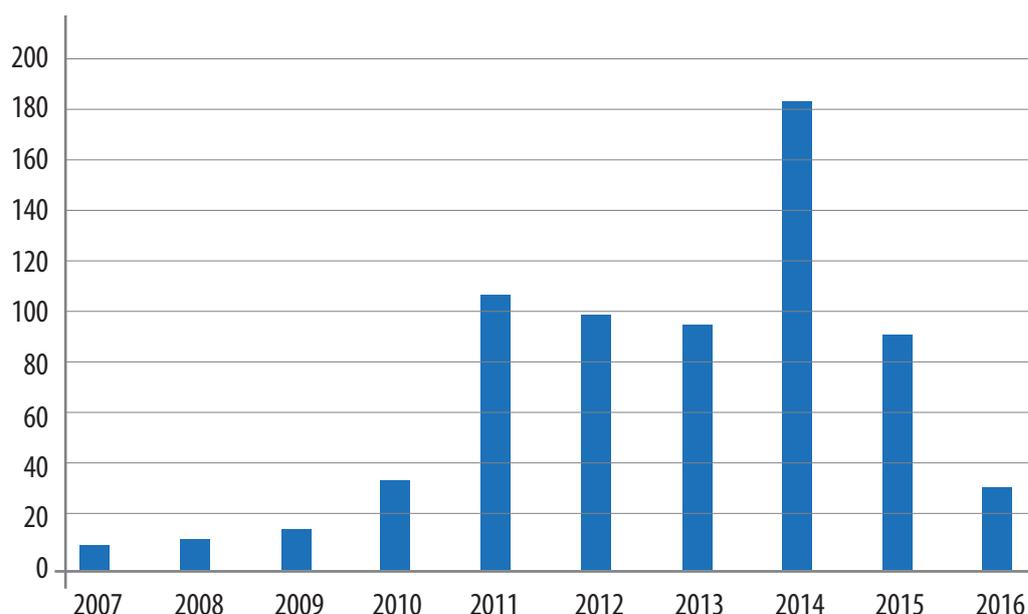
Direct trading between China and non-US-dollar currencies

Time	Direct trading currency	Time	Direct trading currency
2010.8.19	Ringgit (Malaysia)	2016.9.23	Dhram (UAE)
2010.11.22	Ruble (Russia)	2016.9.23	Riyal (Saudi Arabia)
2012.5.29	Yen (Japan)	2016.11.11	Canada dollar (Canada)
2013.4.9	Australian dollar (Australia)	2016.12.9	Swedish krona (Sweden)
2014.3.18	New Zealand dollar (New Zealand)	2016.12.9	Norwegian krone (Norway)
2014.6.18	GB pound (UK)	2016.12.9	Turkish lira (Turkey)
2014.9.29	Euro (Euro zone)	2016.12.9	Mexican peso (Mexico)
2014.10.27	Singapore dollar (Singapore)	2016.12.9	Hungarian forint (Hungary)
2015.11.9	Swiss franc (Switzerland)	2016.12.9	Danish krone (Denmark)
2016.6.17	Rand (South Africa)	2016.12.9	Polish zloty (Poland)
2016.6.24	Won (South Korea)		

Source: China Foreign Exchange Trade System

business is booming in Singapore, Taipei, London, Luxembourg, Paris and Frankfurt. RMB clearing banks can be found in major financial trading market in Asia, Europe, America, Africa and Oceania. In October 2015, People Bank of China set up CIPS, a key infrastructure for RMB internationalization, to facilitate RMB cross-border and offshore business for domestic and foreign financial institutions. The amount of RMB deposits

in Hong Kong had increased from less than 100 billion yuan in July 2010 to 662.5 billion yuan in October 2016. This is a result of the cooperation between People's Bank of China and Hong Kong Monetary Authority to substantially expand the scope for RMB business in Hong Kong by adopting a series of supportive policies. However, like RMB settlement in cross-border trade, the growth of RMB deposits in Hong Kong



**Figure 3.** Issuance of Dim Sum bonds, bn yuan  
Source: Wind Database (by December 5, 2016)

had once turned negative between the second half of 2011 and early 2012. After the "August 11" foreign exchange reform in 2015, RMB deposits in Hong Kong witnessed massive negative growth. It is noteworthy that among RMB deposits in Hong Kong, the proportion of term deposits climbed from 30% in 2009 to about 83% in 2016, indicating that RMB deposits in Hong Kong originate from the outflow of fund from cross-border trade settlement and have inadequate financial investment instruments.

RMB cross-border business under capital account has been making breakthroughs. There are more and more channels for inward RMB cross-border flow including RMB Qualified Foreign Institutional Investor, RMB foreign direct investment, the entry of three types of foreign institutions into the interbank bond market, RMB cross-border loans and Shanghai-Hong Kong Stock Connect. Channels for outward RMB cross-border flow under capital account mainly include RMB Qualified Domestic Institutional Investor, RMB Overseas Direct Investment and enterprises' RMB loans to overseas subsidiary companies

among which RFDI and RQFII are the main channels for inward flow of overseas RMB under capital account. In the third quarter of 2016, China's RMB settlement in cross-border direct investment amounted to 1.8 trillion yuan among which RODI and RFDI accounted for 830 billion and 1.004 trillion yuan respectively. By now, the Chinese mainland has approved an aggregate RQFII quota of 329.8 billion yuan for 6 countries and regions. China Securities Regulatory Commission will further deepen reform of the RQFII mechanism to break the quota limit of 1 billion dollar and facilitate inward and outward flow of capital.

Fundamentally speaking, to achieve full RMB internationalization, China must realize financial liberalization and full convertibility of capital account. But the reform of financial liberalization must be carried out step by step. To promote RMB internationalization under the condition of incomplete convertibility of capital account, it is very important to develop offshore RMB financial markets because such offshore markets are needed to provide non-residents holding RMB

a platform for RMB-denominated trade, investment and settlement. And offshore markets should be properly separated from onshore markets. By now, RMB offshore financial centers have been set up in Hong Kong, Taiwan, Singapore, London, Frankfurt, Paris, Luxembourg and Toronto to provide RMB investment products in offshore markets through Dim Sum bonds, RQFII, cross-border loans, Shanghai-Hong Kong Stock Connect program and Shenzhen-Hong Kong Stock Connect program. During this process, China expands convertibility of capital account in an orderly and prudential approach.

### A. Dim Sum bonds

Dim Sum bonds refer to offshore bonds issued in Hong Kong by domestic financial institutions and enterprises. China Development Bank issued the first offshore RMB bond in Hong Kong in June 2007, ushering in a new chapter in the development of Dim Sum bond market. After the initial phase of development, Dim Sum bond market witnessed a period of explosive growth between 2010 and 2014. In 2014, issuance of Dim Sum bonds in Hong Kong totaled 183.1 billion yuan, up 89% year-on-year, of which 90% were financial bond and corporate bond and more than 75% 1–3 year short-term bonds.

After years of stable growth, Dim Sum bonds face new challenges against the pressure of RMB devaluation. Issuance of Dim Sum bonds plummeted between 2015 and 2016. The total Dim Sum issuance volume was 91.7 billion yuan in 2015, roughly half of that in 2014. It declined further in 2016. By December 5, the total Dim Sum issuance volume has reached only 32.7 billion yuan in 2016, basically as much as that in 2010. This fact shows that changing expectation on the foreign exchange rate of RMB is the major

driving force behind the fluctuation of the Dim Sum issuance volume (Figure 3).

Dim Sum bonds issued in Hong Kong face three key challenges. The first is lack of liquidity and a secondary market. Because of its limited market size, Dim Sum bond market is short of market-makers. According to data from the bond quotation website of the Central Money markets Unit with the Hong Kong Monetary Authority, all RMB-denominated bonds are not actively traded except the national bonds issued by China's Ministry of Finance, which is traded in the OTC market.

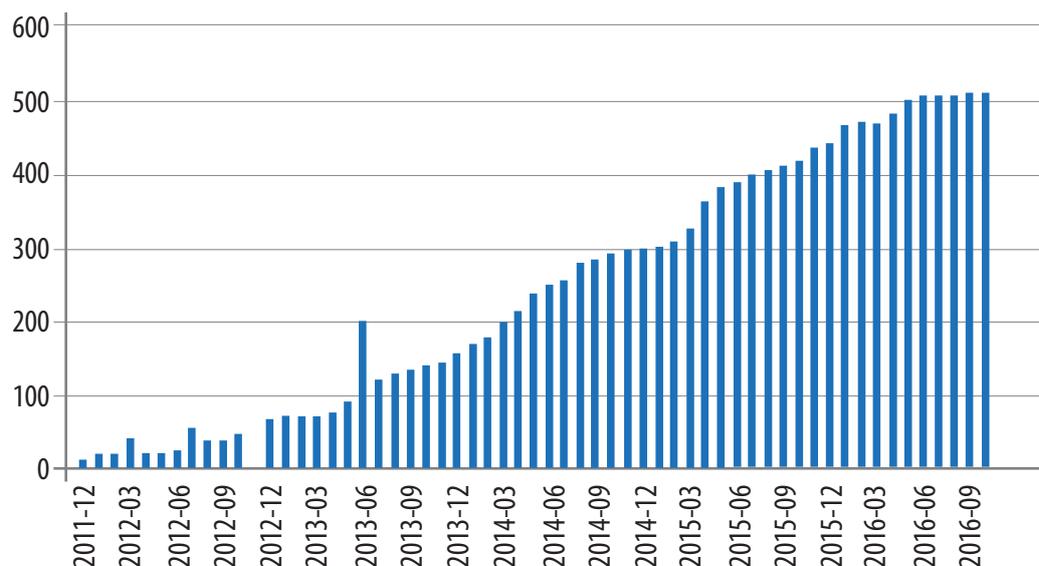
The second challenge is lack of bond ratings and short maturity, and investors usually prefer to hold short-term bonds. Under these circumstances, offshore RMB-denominated bonds do not have a yield curve of RMB for reference and Hong Kong financial market cannot provide RMB bonds with high liquidity and reasonable duration structure.

The third is that bond issuance is affected by the exchange rate of RMB. As long as the current devaluation expectation exists, investors' enthusiasm can hardly return. Inclusion of RMB into SDR and gradually more convertibility under capital account will add to the difficulties of keeping exchange rate stable and thus Dim Sum bond market might shrink further.

### B. RQFII

RQFII refers to RMB Qualified Foreign Institutional Investors. Through RQFII mechanism, overseas institutions can make use of RMB fund raised in offshore markets to invest in China's domestic capital market. On August 17, 2011, then Vice Premier Li Keqiang said at a forum in Hong Kong that RMB Qualified Foreign Institutional Investors will be allowed to invest in the domestic securities market with a starting quota of 20 billion yuan (Figure 4).

Since then, qualified foreign institutional investors have gradually acce-



**Figure 4.** RQFII investment, bn yuan

Source: Wind Database

lerated their participation in the domestic securities market under RQFII mechanism. In recent years, as RMB internationalization moves ahead and restrictions on asset allocation are gradually removed, investment through RQFII has increased steadily. RQFII invested 4,599.2 billion yuan in 2015, on average 383.2 billion yuan per month, while having opened 942 accounts in China's A-share market by the end of 2015. In 2016, RQFII basically continued the momentum of steady growth of the previous year, investing 4,947.9 billion yuan in the first ten months and having opened 1,067 accounts in the A-share market by the end of October.

During the two-day China-US Strategic and Economic Dialogue in June 2016, Yi Gang, deputy governor of People's Bank of China, indicated that China would provide the US with RQFII quota of 250 billion yuan (USD 38 billion). This is the first time that China has provided the US with such a quota, a milestone for RMB internationalization and RQFII mechanism.

Research shows that most quota of RQFII are used by institutional investors from Hong Kong. There are mainly two

explanations. One is that Hong Kong funds tend to allocate most of their assets in Asia Pacific areas and have high demand for domestic RQFII while funds from UK, France and Germany prefer to global asset allocation and have relatively few demand for the domestic stock market. The other is that investors from other regions can hardly understand complex regulatory measures over RQFII. According to the approval process of RQFII, China Securities Regulatory Commission is responsible for approving the qualification of RQFII and the State Administration of Foreign Exchange will approve the total quota for a certain region and specific quota for each financial institution. For overseas investors, each RQFII business will face restrictions over institutional qualification, approval of quota and structure of products. Since Hong Kong banks and investors have done more businesses related to the domestic market, they are able to interpret such regulations in a more flexible way. If the RQFII mechanism is to be further expanded, it is necessary to further streamline its regulatory and approval system.

### C. Cross-border RMB Loans

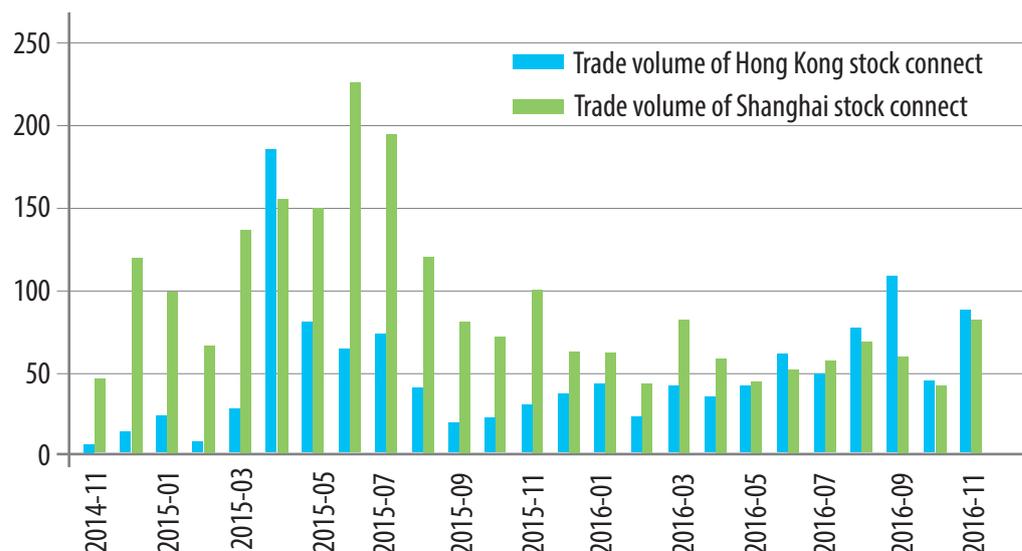
Cross-border RMB loans is one of the measures that the Chinese government has taken to enable overseas financial institutions to channel overseas RMB back into the domestic market, ensuring use of RMB as a settlement currency to meet real trade and investment demand. In January 2013, Qianhai has become the first region in China to provide cross-border RMB loans, marking a new milestone in RMB internationalization. With construction of Qianhai being accelerated, the scope and procedure of RMB settlement in cross-border trade has been gradually expanded and optimized and the size of cross-border RMB loans has grown rapidly in Qianhai. By the end of March, 2015, the registered volume of cross-border RMB loans in Qianhai had reached 91.1 billion yuan with 22.8 billion yuan having been withdrawn. The two figures in 2013 were 14.8 billion yuan and 3.36 billion yuan respectively. By now, more than 30 central SOEs and industrial leaders including China Everbright International, China General Nuclear Power Group, China Resources (Holdings), China Shipbuilding Industry Company, the S.F Express Company, Industrial Bank Financial Leasing Company, China Poly Group, China Gezhouba Group, HSAE, Guangxi Nonferrous Metals Group, Shenzhen MTC, Shenzhen Tianyuan Dic Information Technology Company, Longgang City Investment&Development, Baoan Construction Investment Group, and China Aerospace Science and Industry Corp have entered Qianhai to engage in cross-border loan business for the support of low-cost capital. Based on the pilot program of cross-border RMB loans in Qianhai, the Chinese government has since extended such pilot programs to Xiamen, Quanzhou Experimental Area

of Comprehensive Financial Reform and Fujian (Pilot) Free Trade Zone.

In December 2014, Qianhai Financial Holdings and 6 financial institutions from Shenzhen and Hong Kong arranged the first cross-border RMB syndicated loan in Qianhai, marking the debut and pricing of "Qianhai Concept" and cross-border RMB syndicated loan in Hong Kong interbank market, another milestone in cross-border RMB loans. Now, enterprises in Qianhai can not only raise funds from Hong Kong banks through overseas loans under domestic guarantee and direct loans but also obtain cross-border financing through syndicated loans. The arrangement of cross-border financing can significantly cut loan interest rates for enterprises. RMB loans that enterprises obtained from overseas financial institutions are priced according to market interest rates in Hong Kong the level of which is about 10% below the benchmark interest rates set by the central bank in the domestic market. And such loans have opened a channel of overseas financing for enterprises, especially large enterprises.

In comparison with registered volume, the actual amount of loans that have been withdrawn are yet to be increased. In fact, as overseas RMB interest rates climb, the cost of cross-border RMB financing has also risen to shrink the price advantage of cross-border RMB loans.

In addition, the target clients of cross-border loans in Qianhai are enterprises registered in Qianhai most of which are newly set up and have only limited size and credit. Hong Kong banks usually can provide loans to them only with guarantee from domestic banks. Hence, it is more than often that only enterprises with high qualifications can obtain loans while small and medium-sized enterprises have little access to low-cost loans. In principle, it takes only two work weeks to get loans registered and granted. But the actual procedure for enterprises to withdraw loans is much more time-consuming.



**Figure 5.** Trade volume of Shanghai-Hong Kong Stock Connect, bn yuan  
Source: Wind Database

That Hong Kong banks have strict requirements over the usage, cost and term of loans also, to a certain extent, adds to the cost of guarantee and thus the cost of loans for enterprises. Besides the price factor, business insiders pointed out that another reason why the amount of funds withdrawn from cross-border loans in Qianhai is limited is the sources of capital are relatively monotonic — they are provided only by banks in Hong Kong.

#### **D. Shanghai-Hong Kong Stock Connect**

Shanghai-Hong Kong Stock Connect program refers to the scheme that Shanghai Stock Exchange and the Stock Exchange of Hong Kong permit investors from both sides to trade designated shares on the other market using their local clearing houses (or brokers). It is an investment channel that connects stock markets in Shanghai and Hong Kong. On April 10, 2014, China Securities Regulatory Commission officially approved the pilot stock connect program. The CSRC noted that the total quota for Shanghai-Hong Kong Stock Connect program is 550 billion yuan and the capital account

balance of each individual investor participating the program should be no less than 500,000 yuan.

Shanghai-Hong Kong Stock Connect program includes two parts: the part of Shanghai stock connect refers to that investors can trade designated shares listed on Shanghai Stock Exchange by using Hong Kong dealers and the stock trading service company set up by the Stock Exchange of Hong Kong; the part of Hong Kong stock connect refers to that investors can trade designated shares listed on the Stock Exchange of Hong Kong by using domestic securities firms and the stock trading service company set up by Shanghai Stock Exchange.

As a major innovation of the two-way opening-up of China's capital market, "Shanghai-Hong Kong Stock Connect" has achieved maximum market effect with minimum institutional cost. The design of the principle of locality and close-ended settlement in the program has allowed investors from both sides to invest in the other market while using, to the maximum extent, laws, rules and trade habits in their own market. This marks the first step of two-way opening-up of China's capital market under the

condition of regulatory transparency and risk control (Figure 5).

By November 2016, Shanghai-Hong Kong Stock Connect has had an aggregate trade volume of 3,565.751 billion yuan among which Hong Kong stock connect contributed 1,263.908 billion yuan and Shanghai stock connect 2,301.843 billion yuan. A review of the achievement of "Shanghai-Hong Kong Stock Connect" shows that, though the overall trade volume is not as large as expected, the program has operated smoothly, standing the test of the volatile fluctuation in the A-share market while providing a replicable sample for other programs such as Shenzhen-Hong Kong Stock Connect and Shanghai-London Stock Connect.

### **E. Shenzhen-Hong Kong Stock Connect**

Shenzhen-Hong Kong Stock Connect refers to the technology connect built between Shenzhen Stock Exchange and the Stock Exchange of Hong Kong that enable domestic and Hong Kong investors to trade designated shares on the other market by using local securities firms or dealers. On December 5, 2016, Shenzhen-Hong Kong Stock Connect was officially launched. It has replicated the successful experience of the pilot Shanghai-Hong Kong Stock Connect and served as another connectivity mechanism between the domestic stock exchange and that in Hong Kong. The launch of Shenzhen-Hong Kong Stock Connect is another major and meaningful step forward in boosting inter-connectivity between the domestic financial market and that of Hong Kong.

According to official statement, Shenzhen Stock Exchange announced on November 25 altogether 417 shares under Shenzhen-Hong Kong Stock Connect program including 100 from Hong Seng Composite Largecap Index, 193 from Hong Seng Composite Midcap Index,

95 from Hong Seng Composite Smallcap Index and 29 A+H shares beyond these indexes. These shares accounted for 87% of the total market valuation of the Stock Exchange of Hong Kong and 91% of the average daily trade volume. On the same day, the Stock Exchange of Hong Kong announced 881 shares under Shenzhen-Hong Kong Stock Connect program including 267 from the Main Board of Shenzhen Stock Exchange, 411 from the Small and Medium Enterprise Board and 203 from the Growth Enterprise Board, altogether accounting for 71% of the total market valuation of Shenzhen's A-Share market and 66% of the average daily trade volume.

Till the end of October 2016, more than 1,860 companies have been listed in Shenzhen Stock Exchange with a total market valuation of about 23 trillion yuan. By now, the trade volume has reached 64 trillion yuan, ranking high among all stock exchanges around the world. And the collective characteristic of listed companies in Shenzhen Stock Exchange is innovation and growth.

In retrospect, on the opening day of Shanghai-Hong Kong Stock Connect, investors' great interest to buy shares at Shanghai stock market contrasts sharply with their lack of interest about buying shares at Hong Kong Stock market. The former indicated that the attraction of the A-share market was far bigger than the Hong Kong stock market at that time and a leveraged bull had just started. Two years later, against the background of mounting depreciation pressure on RMB, it is hard to tell where the A-share market will go and if the old success can be repeated.

## Opening-up of interbank market and issuance of Panda bond

By analyzing the opening-up of interbank market, we can clearly see cooperation between RMB internationalization and opening-up of capital account.

China's interbank market is composed of bond market (including securitization products), paper market, foreign exchange market and interbank loan market. For RMB internationalization, bond market is the most important one. Hence, the interbank market discussed below is mainly about bond market. During the course of RMB internationalization, a key problem has arisen as more and more RMB flew into overseas markets and were held by non-residents that is how to provide non-residents with ample RMB investment channels. International experience indicates that the most important investment channel for an international currency is the capital market of the issuing country including the bond market and the stock market. In terms of promoting RMB internationalization, opening-up of China's interbank market is to provide non-residents with investment channel to RMB-denominated bonds.

For currency internationalization, the more important value of opening-up of interbank market is to promote the currency to become an international reserve currency. One of the key symbols of successful currency internationalization is that the currency has become an international reserve currency as the US dollar, euro and pound did. Most international reserve currencies will not be saved in the form of cash but exist in the form of bonds denominated with these currencies. And these bonds have three characteristics: First, they have high credit rating and low default risk; Second,

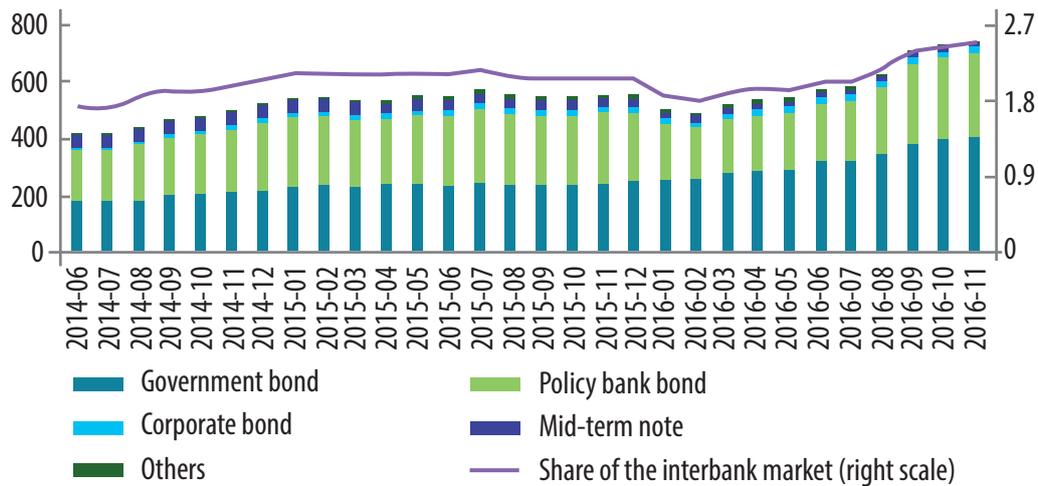
they have better return on investment than cash; Third, they boasts high liquidity and can be easily converted into cash. Bonds with these three characteristics will become global safe assets and thus investment targets for many countries as international reserves. From a long-term perspective, opening-up of China's interbank market is also the process to promote RMB-denominated bonds to become global safe assets and thus make RMB an international reserve currency.

### A. Policies to promote opening-up of the interbank bond market

China began to open the domestic bond market to overseas institutions in August 2010 when People's Bank of China adopted a pilot policy to allow foreign central banks or monetary authorities, overseas clearing banks for RMB business, and overseas participating banks for RMB settlement of cross-border trade to invest in the interbank bond market with RMB funds. The scope of investors has since been gradually expanded.

Between 2011 and 2012, China Securities Regulatory Commission and People's Bank of China have released new rules to allow QFII/RQFII to enter the interbank market but the approval procedure remains time-consuming. In March, 2013, after issuing "Notice on issues concerning investment in the interbank bond market by qualified foreign institutional investors", People's Bank of China began to accelerate approval of the entry of QFII/RQFII into the interbank market.

In June 2015, People's Bank of China allowed overseas clearing banks for RMB business and overseas participating banks for RMB settlement of cross-border trade to invest in repo. In July 2015, People's Bank of China loosened rules on investment in the interbank bond market by three types of sovereign institutions including foreign



**Figure 6.** Bonds held by overseas institutions (bn yuan) and their market share (%)  
Source: People's Bank of China

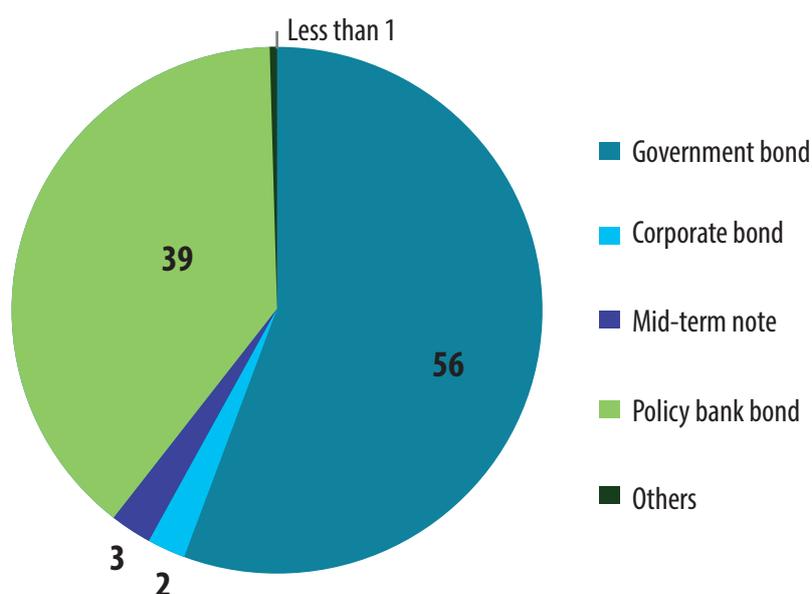
central banks or monetary authorities, international financial organization and sovereign wealth funds by abolishing ex-ante approval of access and quota and expanding the scope of investment to include cash bond, bond repurchase, securities lending, bond forward, interest rate swap and forward rate agreement.

Since the beginning of 2016, People's Bank of China has considerably accelerated opening-up of the interbank bond market in terms of expanding the scope of investors and investment products. In February 2016, China extended access to the interbank bond market to more foreign institutional investors including overseas commercial banks, insurance companies, securities firms, fund management companies and other asset management agencies. It also clarified the entry procedure and regulatory measures for foreign central banks and similar institutions, restating that overseas institutional investors are subject to registration management; quota approval is abolished; foreign central banks and similar institutions do not need authorization or approval for outward remittances of funds related to their securities and foreign exchange investment. In April, China's central bank issued the procedure for foreign

central banks and similar institutions to enter the interbank bond market and foreign exchange market, including more opening-up in terms of investment quota, investment products and free remittance of funds. By October 2016, 207 foreign commercial banks, non-bank financial institutions, investment managers of financial institutions and other institutional investors have entered China's interbank bond market.

## B. Transactions of foreign institutional investors in the interbank market

As China accelerated the pace of RMB internationalization and opened up its interbank market, the number of foreign investors in China's interbank market has increased rapidly since 2010. By analyzing statistics from People's Bank of China, we find that the open interest held by foreign institutions and their trade volume are growing amid fluctuation. In terms of the type of bonds, foreign institutional investors mainly hold rate securities among which government bonds and policy bank bonds accounted for more than 90%. In terms of trade volume, foreign investors have taken an increasingly big share of the interbank



**Figure 7.** The composition of bonds held by foreign investors in the interbank market (by November 2016), %

Source: People's Bank of China

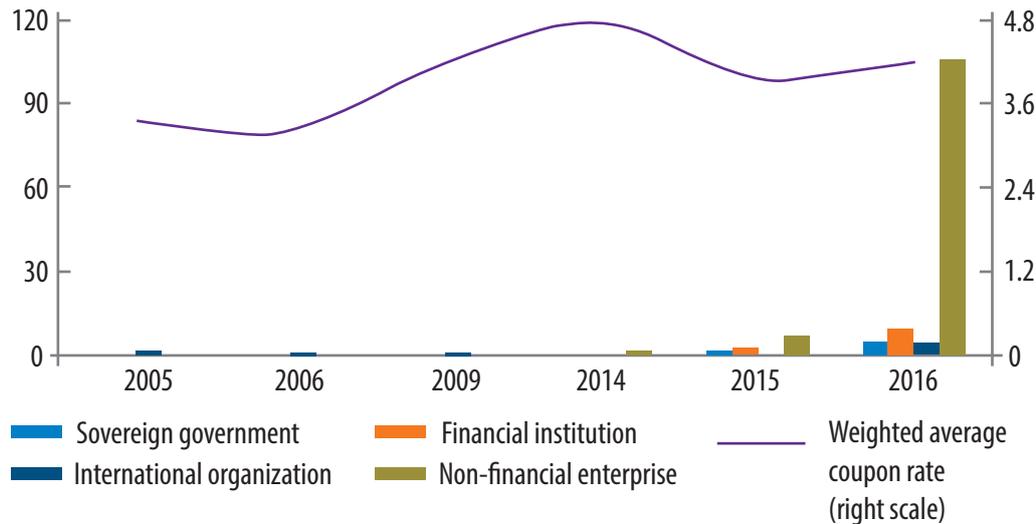
market with their open interest reaching 747.128 billion yuan, about 2.5% of the total depository trust in the market. In terms of spot trading of bonds, the transaction volume has increased year by year while the volume of buy is rising amid fluctuation and the volume of sell remains flat. The following figure clearly shows that there is an obvious rise in the total trading volume by foreign institutions in the interbank bond market (Figure 6).

According to statistics from People's Bank of China, by the end of November 2016, 56% of all the bonds held by foreign institutions are government bonds, 39% policy bank bonds (among which bonds issued by China Development Bank, Agricultural Development Bank of China and Export-Import Bank of China accounted for 21%, 10% and 8% respectively), 3% and 2% medium-term notes and corporate bonds, and the total of government bonds they held has reached 168.3 billion yuan. A research report by China International Capital Corporation Limited shows that the low

proportion of credit bonds held by foreign institutions is related to their strict risk control over cross-border investment. Since the credibility of domestic credit rating agencies is not well accepted in the international market, most foreign institutions only invest in sovereign rating products. As the composition of foreign institutional investors became more diversified in recent years, the amount of corporate bonds and medium-term notes they held went up too. The amount of corporate bonds they held increased from 6.987 billion yuan at the end of 2013 to 15.899 billion yuan by the end of November 2016 while that of medium-term notes soared from zero to 18.862 billion yuan (Figure 7).

### C. Issuance of Panda Bond

Panda Bond refers to RMB-denominated foreign bonds that foreign institutions issued in China. China began the pilot program of panda bonds in October 2005 when International Finance Corporation and Asian Development Bank had issued RMB-denominated

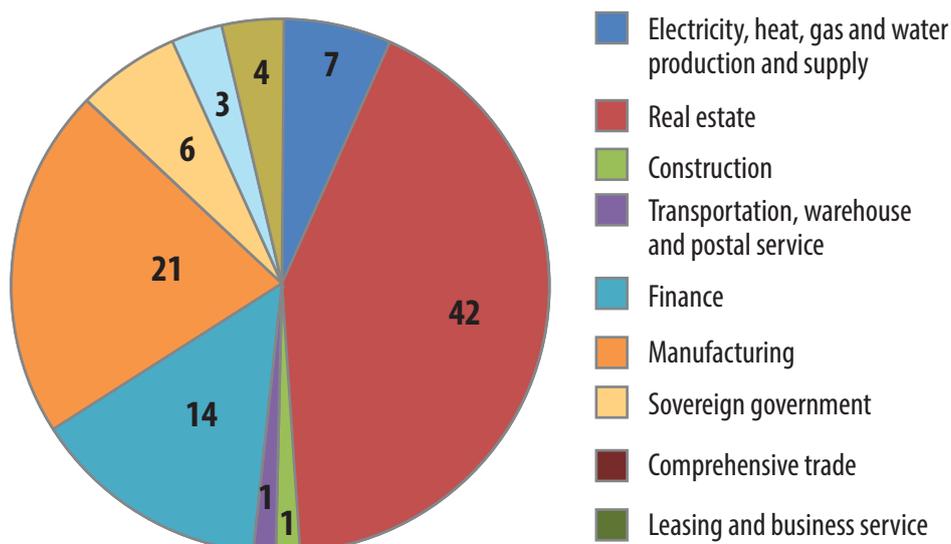


**Figure 8.** Statistics on the size of issuance of Panda bonds between 2005 and November 2016 (bn yuan) and weighted average coupon rate (%)  
Source: Wind Database

bonds worth of 1.13 billion yuan and 1 billion yuan respectively to set a precedent for foreign institutions to issue panda bonds in this country. However, because of regulatory restrictions over issuance approval and usage of fund, the panda bond market developed slowly in following years. Between 2005 and 2014, the total issuance of the panda bond market was only 6 billion yuan.

As RMB internationalization accelerated, regulatory policies have been changed to boost development of the panda bond market. The scope of issuers has been expanded; cross-border use of funds raised from bond issuance and funds for paying interest and principal are allowed for foreign institutions and rules on cross-border RMB settlement has been made clear; a domestic-international dual rating system has been adopted; use of accounting and auditing methods which are in accordance with domestic accounting standards and approved by China's Ministry of Finance has been allowed. In March, 2014, Germany's Daimler AG successfully issued one-year Private Publication Notes in the interbank market to become the first foreign non-financial corporate that

has issued debt financing instruments in China's interbank market. In 2015, the National Development and Reform Commission, the Ministry of Foreign Affairs and the Ministry of Commerce jointly issued "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road", stressing that "We will support the efforts of governments of the countries along the Belt and Road and their companies and financial institutions with good credit-rating to issue Renminbi bonds in China". In September, 2015, HSBC and Bank of China (Hong Kong) successfully issued the first panda bond in the domestic interbank bond market. In December 2015, the government of South Korea issued the first sovereign panda bond worth 3 billion yuan to become the first foreign government allowed to issue RMB-denominated bonds in China. Driven by both policy support and declining interest rates, the panda bond market has expanded rapidly as both the scope of issuers and the size of bond issuance have been enlarged. The issuance of panda bonds totaled 13 billion yuan in 2015 and has soared



**Figure 9.** The industrial distribution (issuance) of Panda bonds, %  
Source: Wind Database

to 124.82 billion yuan in the first 11 months of 2016.

By the end of November in 2016, altogether 36 foreign enterprises, international organizations and sovereign governments have issued 79 panda bonds through public or private publication in the interbank bond market and the exchange bond market, including commercial paper, medium-term note, private publication note, commercial bank bond, international institutional bond, corporate bond and private bond. Panda bonds have gradually developed into a new channel of diversified financing for foreign institutions (Figure 8).

In terms of the industrial distribution of the issuers of panda bonds, the issuers have covered 9 major industries including real estate sector, construction, transportation, warehouse and postal service, finance and manufacturing. Among them, real estate sector, manufacturing and finance rank among the largest issuers while the number of their issuance accounted for 34%, 20% and 19% of the total and the size of their issuance 42%, 21% and 14% of the total respectively (Figure 9).

More efforts are needed to explore how to attract more countries and foreign

institutions to issue bonds in the panda bond market, diversify the structure of issuers and promote use of RMB settlement in cross-border trade.

### Construction of RMB Settlement System for Cross-border Transaction

A settlement system for cross-border payment is infrastructure construction for internationalization of a currency. China's original RMB settlement for cross-border payment relied mainly on the two channels of clearing banks for RMB business in Hong Kong and Macao and domestic agency banks both of which would settle accounts by using China National Advanced Payment System, a system consisting of High Value Payment System and Bulk Electronic Payment System. Overseas banks will open RMB settlement accounts in agency banks or clearing banks and transmit cross-border payment information via SWIFT. Due to factors such as the time lapse for running the system and translation of code, the original channel for RMB cross-border settlement is not very efficient. Besides,

CNAPS cannot separate domestic interbank payment from cross-border RMB payment settlement to ensure the safety of the system.

Since it launched pilot cross-border RMB business in 2009, China has already done cross-border RMB payment business with 174 countries. The amount of RMB settlement in cross-border trade has soared from less than 200 billion yuan in 2010 to 4.4 trillion yuan in the first ten months of 2016, making it impossible to fully meet the need for development of RMB business with CNAPS. It is necessary to integrate the existing RMB payment clearing channel and resources and enhance infrastructure construction for the financial system. To ensure safety, stability and efficiency of RMB cross-border payment settlement, People's Bank of China has begun to establish Cross-Border Interbank Payment System in 2012 in line with "Principles for Financial Infrastructure". The CIPS (Phase I) was officially put into operation on October 8, 2015<sup>2</sup>.

The main functions of CIPS (Phase I) include providing settlement for RMB cross-border payment by domestic and foreign institutions and supporting RMB cross-border settlement, cross-border direct investment, cross-border financing and personal remittance in the financial market. CIPS can provide participants with highly efficient cross-border, cross-time-zone, cross-currency payment settlement via its connection with HVPS.

CIPS (Phase I) has raised efficiency of settlement in following aspects: First, CIPS processes client remittances and remittances by financial institutions in real-time gross settlement with liquidity

<sup>2</sup> Construction of CIPS is carried out in two phases, and CIPS (Phase I) provides real-time gross settlement for cross-border trade settlement, cross-border direct investment and other cross-border RMB settlement. CIPS (Phase II) will provide mixed settlement that is more liquidity-saving to comprehensively support RMB cross-border and offshore settlement.

support from HVPS and interbank lending. Second, CIPS provide domestic direct participants with special line access that allows them to have one-point access, concentrate settlement and shorten path of settlement. Third, by adopting the internationally-recognized ISO20022 standard for financial services messaging and using the unified and standardized Chinese Commercial Code, CIPS has taken into full consideration the need of code switching with the current SWIFT code to support transmission in both Chinese and English so as to raise the speed of code-switching. Fourth, the operation period of CIPS has been extended from 9:00 to 20:00 to meet the need of the development of RMB business in multiple time zones.

## Summary

RMB internationalization faces many challenges today as the country has not yet achieved full capital account convertibility and RMB depreciation expectation is rising. Strengthening cooperation among BRICS countries to promote internationalization of their currencies is not only of vital importance for RMB internationalization but also a major step to propel diversified development of the international monetary system.

Between 2009 and 2016, RMB internationalization has achieved remarkable progress but its foundation for development is not solid. According to statistics from SWIFT, RMB has become the fifth largest global payment currency, ranking only behind dollar, euro, pound and yen and boasting a market share of 4%. According to a survey by Bank for International Settlement, the proportion of RMB in global transaction volume has increased from 0.1% in 2004 to 4% in 2016 while its ranking rose from the 35th to the 8th. Clearly, RMB has assumed a crucial role in the international monetary system. But one of the key driving forces to promote RMB

internationalization under the condition of incomplete convertibility of capital account is the spread of foreign exchange rates and interest rates between domestic and overseas markets. As the exchange rate of RMB approaches the equilibrium level, the spread of foreign exchange rates between domestic and overseas markets gradually disappeared. And the expansion of the daily range of RMB exchange rate fluctuation has further diminished the room for exchange rate arbitrage between domestic and overseas markets. Before RMB internationalization has an inherent driving force, it is unavoidable that the process will suffer short-term turbulence and even setbacks.

After the "August 11" foreign exchange rate reform in 2015, RMB internationalization has been in the doldrums for a while. The average growth rate of RMB settlement in cross-border trade was 55% between 2010 and 2014 while that of RMB deposits in Hong Kong reached 120%. Nevertheless, between the "August 11" foreign exchange reform and October 2016, the monthly total of RMB cross-border settlement declined from 775 billion yuan to 360 billion, on average down 30% per month over the same period last year. Meanwhile, the amount of RMB deposits in Hong Kong dropped from 1 trillion yuan to 662.5 billion yuan, on average down 25% per month over the same period last year. The new issuance of dim sum bonds in 2016 was 46.9 billion yuan and its growth rate declined by 50%. There are mainly three reasons why RMB internationalization was in the doldrums.

First, expansion of the daily range of RMB exchange rate fluctuation and the change of expectation over RMB appreciation narrowed cross-border exchange rate arbitrage space. Between September 2012 and March 2014, RMB central parity was fixed relatively lower than onshore and offshore spot rates and onshore spot rate was also relatively lower than offshore spot rate, indicating strong expectation over RMB appreciation.

In March 2014, the daily range of RMB exchange rate fluctuation enlarged to 2% in both directions. Since then, RMB appreciation expectation has plummeted. After the "August 11" foreign exchange reform, onshore spot rate began to be higher than offshore exchange rate and RMB depreciation expectation emerged. Within just a year, RMB appreciation expectation was replaced by strong devaluation expectation, and a large part of RMB internationalization business based on cross-border arbitrage also declined.

Though the proportion of RMB settlement in cross-border trade keeps rising, RMB settlement does not necessarily mean that the trade is RMB-denominated. When the exchange rate of RMB turned from appreciation to depreciation, many domestic importers who had used RMB for settlement would be required by their foreign counterparts to pay in US dollar while domestic exporters were required by foreign counterparts to allow payment in RMB. Besides, when offshore RMB is cheaper, many domestic exporters incline to use US dollar for settlement in offshore markets and then recycle RMB back into the domestic market. Historical data shows that the accumulation of offshore RMB deposits in Hong Kong is largely a result of RMB cross-border arbitrage. As RMB appreciation expectation is gone and two-way fluctuation of RMB exchange rate widens, there will be less such arbitrage and hence less offshore RMB deposits in Hong Kong.

Second, the cyclical rise of US dollar will reduce the attractiveness of RMB while both domestic and overseas players will tend to hold more US dollars. In 2015, the third quarter statistics showed that the proportion of banks buying foreign exchange to their total foreign receipts declined to 43% while their selling foreign exchange accounted for 67% of their total foreign payment. This indicates that enterprises were more willing to hold

US dollars. On one hand, because the US dollar is on the track of appreciation and overseas exporters prefer settlement in US dollar, Chinese enterprises and importers need to buy foreign exchange from banks for payment and the proportion of bank selling foreign exchange to their foreign payment has thus significantly increased. On the other hand, because of the relative depreciation of offshore RMB in Hong Kong against onshore RMB, it pays for enterprises to buy foreign exchange in the Chinese mainland. As a result, the purchase of foreign exchange by enterprises has increased while their sale of foreign exchange to banks declined.

Third, as the RMB financing cost gap between overseas and domestic markets narrows, dim sum bonds become less attractive to domestic enterprises. In the international monetary system, RMB is still a risk currency. In their currency arbitrage strategies, investors tend to use Japanese yen or US dollar as the financing currency and choose Australian dollar or emerging market currencies as the investment currency. As a high-yield risk currency, RMB is more than often an investment currency. When expectation on RMB appreciation is strong, investors who hold dim sum bonds can obtain not only interest income but also the potential benefit of appreciation. When expectation on RMB depreciation prevails, investors who hold dim sum bonds will require higher interest income to make up for the potential exchange rate loss in the future. Hence, the interest rate of dim sum bonds will rise with the depreciation expectation.

Liquidity in China's monetary market was quite tight in 2013 and many enterprises inclined to issue dim sum bonds in the offshore market. Because of RMB appreciation expectation at that time and relatively higher domestic interest rates, these enterprises were enthusiastic about issuance of dim sum bonds. But as RMB depreciation expectation prevails and domestic short-term interest rates

remain low, onshore and offshore RMB interest rates have gradually converged and domestic enterprises lost their interest in bond issuance in Hong Kong. The issuance of dim sum bonds in 2016 was only 46.9 billion yuan, down by 50%. If RMB depreciation expectation persists, the market of dim sum bonds will continue to shrink.

RMB internationalization has entered a new development phase. In a long-term view, China's huge economic development potential and room for market-oriented reforms as well as the need of a diversified monetary system to support global financial stability would be the fundamental driving forces behind RMB internationalization. However, in the short term, RMB internationalization faces many challenges and needs to adjust its development mode. Whether market players will use and hold RMB is determined by whether they can obtain benefit or lower risk. The recent trend of market change keeps reducing the marginal benefit of holding RMB. On one hand, there is limited room for RMB appreciation in the short term as China's economic growth is slowing down, import and export becomes balanced, and RMB exchange rate has basically reached an equilibrium level. On the other hand, there is an about-turn in global liquidity and RMB liquidity and the divergence between China's monetary policy and the US monetary policy will widen in the future. As a result, the narrowed interest rate gap between China and the US and the rise of US dollar will keep reducing the attraction of RMB. Moreover, since processing trade still accounts for a large share of China's trade and domestic exporters generally don't have much pricing power, it is difficult to further increase the ratio of RMB-denominated trade. In terms of channels for capital flow, official development aids or investments may, to a certain extent, unleash RMB liquidity. But domestic financial institutions' lack

of international competitiveness and experience in managing exchange risks has limited their role in promoting RMB internationalization. All evidences show that RMB internationalization has entered a new phase of stable development. China needs to gradually upgrade industrial and trade structure of its real economy in the future to raise the potential of RMB internationalization. Also, during the course to realize full convertibility of capital account, China needs to maintain ample prudential regulatory tools to prevent excessive cross-border capital flow.

## References

1. *Cermeno J. S.* Blockchain in financial services: Regulatory landscape and future challenges for its commercial application // BBVA Research. Working paper. 2016. No. 16/20. URL: [http://www.bbvarsearch.com/wp-content/uploads/2016/12/WP\\_16-20.pdf](http://www.bbvarsearch.com/wp-content/uploads/2016/12/WP_16-20.pdf)
2. Digital Currency // BIS. Committee on Payments and Market Infrastructures. 2015. URL: <http://www.bis.org/cpmi/publ/d137.pdf>
3. *Gao H., Yu Y.* Internationalization of the renminbi // Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific // BIS. BIS Papers. 2011. No. 61. P. 105–124. URL: <http://www.bis.org/publ/bppdf/bispap61.pdf>
4. *He D., Habermeier K., et al.* Virtual Currencies and Beyond: Initial Considerations // IMF. Staff Discussion Note. 2016. No. SDN/16/03. URL: <http://www.imf.org/external/pubs/ft/sdn/2016/sdn1603.pdf>
5. *Lagarde C.* Fintech — A Brave New World for the Financial Sector? // IMF. IMFBlog. 2017. March 21. URL: <http://blogs.imf.org/2017/03/21/fintech-a-brave-new-world-for-the-financial-sector/>
6. *Liu D., Gao H., Xu Q., Li Y., Song S.* The ‘Belt and Road’ Initiative and the London Market – the Next Steps in Renminbi Internationalization. Part 1: The View from Beijing // Chatham House. Research Paper. 2017. January. URL: <http://www.chathamhouse.org/sites/files/chathamhouse/publications/research/2017-01-17-belt-road-renminbi-internationalization-liu-gao-xu-li-song.pdf>
7. *Liu D.* Internationalization of China’s Bonds Markets, Development of Offshore RMB Center and Provision of Global Safe Assets // Enter the Dragon: China in the International Financial System / D. Lombardi, H. Wang (eds.) // CIGI Press. 2016. P. 259–290.
8. *Liu D.* Offshore issuance of China’s Local Government Bond // Zhongguo Jinrong (China Finance). 2016. No. 17. P. 76–77.
9. *Song S., Liu D.* The EIB’s NonCredit Business for Small and Medium Enterprises and Its Implication for the AIIB // Yinhangjia (The Chinese Bankers). 2016. No. 10. P. 108–111.
10. The future of financial infrastructure. An ambitious look at how blockchain can reshape financial services // World Economic Forum. An Industry Project of the Financial Services Community. 2016. August. URL: [http://www3.weforum.org/docs/WEF\\_The\\_future\\_of\\_financial\\_infrastructure.pdf](http://www3.weforum.org/docs/WEF_The_future_of_financial_infrastructure.pdf)
11. *Thorsten K., Jeremy K.* Blockchain Technology — What’s in Store for Canada’s Economy and Financial Markets? // C.D. Howe Institute. Commentary. 2017. No. 468. URL: [http://www.cdhowe.org/sites/default/files/attachments/research\\_papers/mixed/Commentary\\_468\\_0.pdf](http://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/Commentary_468_0.pdf)
12. *Wu Y.* Analysis of the currency swap approach of the RMB internationalization // Shanghai Jinrong (Shanghai Finance). 2013. No. 4. P. 32–36.

## Chapter 6

# Towards National Currency Usage in International Transaction Settlements: Specific Experiences in BRICS - the Case of South Africa<sup>1</sup>

### The case for SA financial control

South African Reserve Bank exercises financial control in the country (Table 1). Foreign firms, financial institutions, official institutions and individuals can hold rand and rand-denominated instruments in amounts they deem useful and prudent. There are no restrictions on foreigners for holding South African rand and rand-denominated instruments. The section on capital transactions in Table 1 outlines the requirements for foreigners to hold South African rand and rand-denominated instruments. The desire to hold rand and rand-denominated financial instruments stems from the need to access a store of value as a function of the rand (*Tavlas, 1992*). If this were the case the rand could assume international reserve currency status for those who hold these instruments as a store of value. The breadth and depth of the national financial market is a necessary benchmark indicator of the ability of a currency to be utilized as a reserve currency. However, it is not a sufficient condition to achieve this status as other factors play an equally important role as was demonstrated in the final ascension of the Chinese renminbi to international reserve currency status in 2016 after many years of trying.

Any foreign entity wishing to list instruments on the Johannesburg Stock

Exchange requires prior approval of the official Financial Surveillance Department. Any Authorised Dealer wishing to facilitate transactions of the nature outlined above, requires the approval of the Financial Surveillance Department and will have to comply with the specific reporting requirements prior to approval being granted.

Institutional investors may not transfer rand offshore. In order for an institutional investor to participate in rand-denominated instrument issued offshore, the rand value would have to be converted to a foreign currency, and the equivalent foreign currency value has to be reconverted back to rand in an offshore market to purchase the desired instrument. The initial conversion of rand to foreign currency for the purchase of rand-denominated instruments issued offshore could be hedged locally but the subsequent conversion back to rand to purchase rand-denominated instruments issued offshore poses a price risk and may be hedged either in foreign market or on the JSE by utilising approved foreign-referenced derivative products traded in rand and issued by the JSE<sup>2</sup>.

All financial institutions should ensure that their investments are in compliance with the Financial Services Boards requirements and regulations. Institutional investors are permitted to invest in rand-denominated products

<sup>1</sup> Ronney Ncwadi — Nelson Mandela Metropolitan University; Jaya Josie — Human Sciences Research Council.

<sup>2</sup> See Corporates // South African Reserve Bank. URL: <http://www.resbank.co.za/RegulationAndSupervision/FinancialSurveillanceAndExchangeControl/FAQs/Pages/Corporates.aspx>

**Table 1**  
South African Reserve Bank Summary of Financial Controls

Legal Basis		Exchange Control Regulations 1961 (with amendments)
Exchange rate agreement		Floating Exchange rate
Exchange control	Residents	A South African resident over the age of 18 years is entitled to special discretionary allowance within an overall limit of ZAR 1 million per calendar year. The special Discretionary allowance can also be used for purposes of investment
	Resident accounts	A natural person can open a foreign currency account for permissible purposes
	Non-Residents	Any income earned on investments can be transferred abroad
	Non-Resident Accounts	Foreign firms can open rand accounts
	Bank Notes	All forex brought from abroad must be exchanged for rand within 30 days of arrival
	Export-Import transactions	Transactions settled by an Authorised dealer, usually bank supported by an invoice and customs clearance certification for goods received. Advance payments possible on the strength of an invoice but SARS (Customs) documentation also required if goods exceed ZAR 50,000
Capital Transactions	Residents	Residents can invest up to ZAR 1,000,000 abroad without SARB approval. Outward capital investment of ZAR 1–10 million per calendar year requires clearance from the SARB and SARS (tax). Funds and collective investment schemes cannot invest more than 25% of their portfolios outside of South Africa. An additional 5% allowance of their total retail is granted for foreign currency denominated African securities. Corporates can invest up to ZAR 1 billion per annum. Any investments > ZAR 1 billion per annum require SARB approval. Also at least 10% of the targets voting rights must be acquired
	Non-Residents	Non-residents may freely invest in South Africa, provided that suitable documentary evidence is viewed by the bank concerned, in order to ensure that such transactions are concluded at arm's length, at fair market related prices and are financed in an approved manner*. (ii) Such financing must be in the form of the introduction of foreign currency or rand from a Non-Resident account (i.e. a rand account opened by a non-resident at a South African bank). (iii) Any income earned on the investment may be transferred abroad. (iv) Should a non-resident disinvest from this country, the local sale or redemption proceeds of non-resident owned assets in South Africa would be regarded as freely transferable. (SARB, 2016)
	Resident Loans	Residents can borrow from abroad with conditions**. Can issue loans outside of the CMA provided they are not reinvested or reintroduced as loans in the CMA
	Non-Resident outward loans	Local Subsidiaries of foreign companies can only give parent companies loans in lieu of dividends or profits and under SARB approval

Table 1 (*The completion*)

Liquidity	Spot Transaction	Good
	Forward transaction	Good (1–6 months)

Source: IMF (2014); BIS (2016); SARB (2017)

Note: \* Foreign firms can hold financial instruments provided their schemes are registered with Collective Investment Schemes SA. A foreign investment fund which is so registered may be marketed publicly in South Africa. In order to qualify for South African registration, a foreign fund must have an investment policy which is consistent with the requirements set out under Cisca (Norton Rose Fulbright 2016).

\*\* The term of the loan must be at least one month. (ii) The interest rate in respect of third party foreign denominated loans may not exceed base lending rate plus 2% and in respect of shareholders' loans the base lending rate of the country of denomination. (iii) Interest rate in respect of rand denominated loans may not exceed prime lending rate plus 3% on third party loans or the base rate, in the case of shareholders' loans. (iv) In respect of trade finance facility loans, interest payments of up to prime plus 10%, which includes shipping and confirming fees, handling costs, administration fees, bank charges, commissions and raising fees (all-in costs) will be approved. (v) The loan funds to be introduced may not be sourced from a South African resident's foreign capital allowance, foreign earnings retained abroad, funds for which amnesty had been granted and/or foreign inheritances. (vi) There may not be any direct/indirect South African interest in the foreign lender. (vii) The loan funds may not be invested in Sinking Funds. (viii) No upfront payment of commitment fees, raising fees and/or any other administration fees are payable by the borrower (SARB).

issued abroad, or foreign currency denominated instruments issued by local entities as part of their foreign portfolio investment allowances on a condition that the requirements of the financial services board are met as is the case with respect to investments in any other financial product<sup>3</sup>.

It should be noted that compliance with the foreign exposure limits on foreign portfolio investment does not preclude an institution from also having to comply with any relevant prudential regulations as administered by the Financial Services Board<sup>4</sup>.

Foreign assets, for exchange control purposes, are defined as the sum of foreign-currency denominated assets and rand-denominated foreign assets acquired indirectly through investment with another domestic institution. To

ensure the consistent classification of foreign exposure, institutions are required to report their assets on a look-through basis.

Non-residents may freely invest in South Africa, provided that suitable documentary evidence is viewed by the bank concerned, in order to ensure that such transactions are concluded at arm's length, at fair market-related prices and are financed in an approved manner. (ii) Such financing must be in the form of the introduction of foreign currency or rand from a Non-Resident account (i.e. a rand account opened by a non-resident at a South African bank). (iii) Any income earned on the investment may be transferred abroad. (iv) Should a non-resident disinvest from this country, the local sale or redemption proceeds of non-resident owned assets in South Africa would be regarded as freely transferable<sup>5</sup>.

<sup>3</sup> See Guidelines: South African Institutional Investors // South African Reserve Bank. 2016. August 10. URL: <http://www.resbank.co.za/RegulationAndSupervision/FinancialSurveillanceAndExchangeControl/Guidelines/Guidelines%20and%20public%20awareness/Guidelines%20South%20African%20Institutional%20Investors.pdf>

<sup>4</sup> Ibid.

<sup>5</sup> See Inward listings by foreign entities on South African exchanges // South African Reserve Bank. Exchange control manual. 2016. URL: <http://www.resbank.co.za/RegulationAndSupervision/FinancialSurveillanceAndExchangeControl/EXCMan/Section%20W/Section%20W.pdf>

**Table 2**  
Banks authorised to deal in foreign currency in SA

ABSA Bank Limited	Investec Bank Limited
Albaraka Bank Limited	Habib Overseas Bank Limited
Bank of Baroda	JP Morgan Chase Bank (Johannesburg Branch)
Bank of China Johannesburg Branch	Nedbank Limited
Bank of India	Mercantile Bank Limited
Bank of Taiwan South Africa Branch	Société Générale
Bidvest Bank Limited	Standard Chartered Bank — Johannesburg Branch
BNP Paribas SA – South Africa Branch	State Bank of India
Canara Bank	The South African Bank of Athens Limited
China Construction Bank, Johannesburg Branch	Sasfin Bank Limited
Citibank, N.A., South Africa	Standard Chartered Bank — Johannesburg Branch
Deutsche Bank AG, Johannesburg Branch	State Bank of India
FirstRand Bank Limited	The Standard Bank of South Africa Limited

Source: SARB (2016)

## The case for SA foreign currency management

The forex governing authority in SA is the National Treasury under the Minister of Finance and any designated office in the Treasury. The exchange controls regulate and restrict the outflow and inflow of capital in South Africa. All forex transactions are subject to these regulations, whether you are traveling, emigrating, immigrating, investing, returning to South Africa, importing or exporting goods and services (Norton Rose Fulbright, 2017). The policy applies to the Non-Resident Area being any countries falling outside of the CMA (Swaziland, Namibia, Lesotho).

Exchange controls can take many forms, but their immediate aim is to restrict the buying and selling of a national currency or to preserve foreign currency reserves. Controls might include a ban on the conversion of proceeds of certain assets or by certain categories of person, an obligation to surrender foreign

exchange proceeds to the central or local bank, authorization requirements, quantitative limits or indirect methods. Exchange controls are most commonly imposed because of concerns about outward flows, but controls can also be imposed to restrict inward flows for e.g. an influx of funds that could hurt the economy.

In South Africa, foreign currency is handled by what the Central Bank has designated as Authorised dealers and Authorised dealers with limited authority. Authorised dealers are banks and those with limited authority handle travelling and tourism arrangements. As such the bulk of trading is done by the banks. Most forex trading takes place in the banking sector. Most Authorised dealers are banks, and that it is where forex trading takes place. Below is a list of Authorised Dealers (Table 2).

There is a limited number of Banks that offer direct ZAR/RUB and ZAR/BRL currency pairs. The Table 3 is in general agreement with the notion that real and ruble are the least traded currencies

**Table 3**

Direct currency pair for top 5 forex Banks

Bank	Ruble	Rupee	Real	Renminbi
ABSA		●		●
Standard	●	●		●
Nedbank		●		●
FNB		●		●
Capitec				
Bidvest		●	●	●

● — Represents where currencies are traded directly. The ruble and real are traded via a vehicle currency predominantly the US dollar.

among the BRIC in South Africa. These are the offerings of the top 5 local banks in South Africa as far as their forex trade is concerned.

The explanations of why there are few ZAR/RUB and ZAR/BRL direct trades lie in the calculation the rand foreign currency basket and in sphere of trade in general. The trade weights utilised to calculate the rand foreign currency basket attest to the size of ruble trade that takes place because of trade between South Africa and Russia. The diagram below refers. The Russian ruble is not included in the rand currency basket. This might explain why there is weak ruble trade on South African Markets. China, Brazil and India represent 12.46%, 1.37% and 2.01% of the index respectively. These currencies are traded without the aid of a vehicle currency in South African Markets.

This diagram illustrates the biggest trading partners for South Africa. China, India, and Brazil are significant in the weighting of the currency index, whereas Russia is not included (Figure 1).

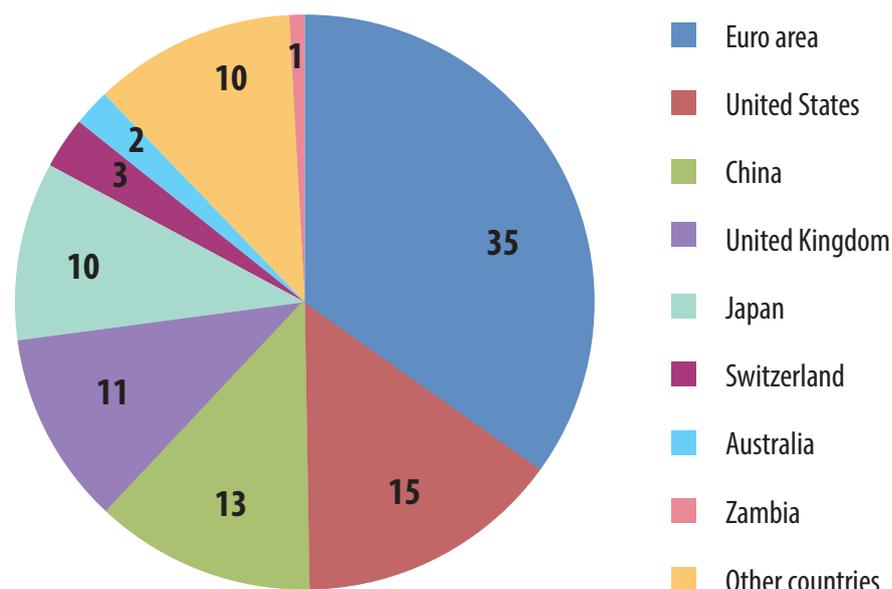
The succeeding diagram illustrates a snapshot of rand exchange with BRICS countries for the month of April 2016 (Figure 2). China holds the bulk of the volume, with 79% of rand trade within the BRICS. India and Brazil have 15% and 6% of rand trade respectively in the month. Russia only has 0.6% of rand trade in the

BRICS for the month of April 2016. This might explain why Banks do not trade real and ruble without a currency vehicle (US dollar).

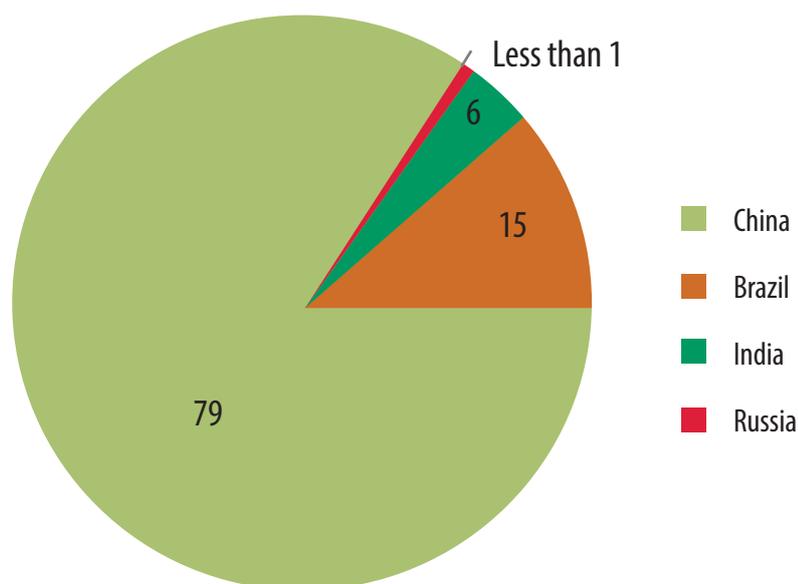
## Rand as a reserve currency

Being able to invoice South African exports in rand to export partners and third parties constitutes making the rand a reserve currency. A cursory look at the requirements for this and the level of currency restrictions on rand trade shows that as a currency it might not have sufficient credentials to be a reserve currency anytime soon.

The confidence in the stability of a currency is obviously a necessary qualification. If a currency in question is quite unstable and tends to fluctuate substantially, it will not work as a store of value. It will also be avoided to use a currency as a unit of account and a medium of exchange in trade and financial transactions due to a significant risk of exchange rate changes. Moreover, once a currency becomes a dominant vehicle currency in foreign exchange markets, the currency will be used as a major international currency due to economies of scale. Specifically, the larger the volume of transactions is in foreign



**Figure 1.** SA main trade partners: share of total trade, %  
Source: Authors' calculations based on SARB data (2016)



**Figure 2.** Average daily rand traded turnover for BRICS economies as of April 2016, %  
Source: BIS triennial survey (2016)

exchange markets, the lower the cost of transactions.

While the world is moving towards integrated financial markets, some restrictions on foreign exchange and capital accounts transactions persist. These restrictions include:

1. Some economies prohibit cross-border trade settlement in their own currency. For example, 3 currencies

used in cross-border settlements include the Hong Kong dollar, Singapore dollar, and Thai baht.

2. Many economies have some restrictions on foreign exchange or capital transfer, although the level of the strength of the constraints differ by country.
3. Some economies uphold the real demand principle for foreign exchange

hedging in the domestic market and require documentary evidence of underlying transactions.

4. Some economies control the foreign exchange positions of the authorized banks and financial institutions (ASEAN, 2010).

South Africa has good macro-prudential policies. The Reserve Bank and treasury are perceived to be independent (Bravura, 2017). Cross-border settlement transactions in South African rand is not prohibited; however, the SARB prefers to have such transactions settled in US dollars instead. There is a level of restriction on foreign exchange and capital transfer as Table 1 illustrates. In addition, the relative small volumes of South African rand used in international trade and other transaction limit its viability as an international reserve currency, and, in fact, presents an important reason for the rand to become part of a BRICS currency and/or payment mechanism for trade and/or other international transactions.

### **Bilateral trade transactions between South Africa and BRICS economies**

South Africa has a large economy in Africa and joining BRICS boosted its geopolitical significance. South Africa is endowed with abundant minerals and natural resources and some sectors are well developed unlike other African countries, these sectors include energy, transport sectors, financial sectors and etc. South Africa's endowment of natural resources and mineral resource complements BRICS countries such as Brazil's specialisation in agriculture and raw materials, Russia as a major player specialising in agriculture and raw materials, Russia's position as a role player in the commodity market, India's services exporting economy and China's

recognition as a world's factory (Galvao, 2013).

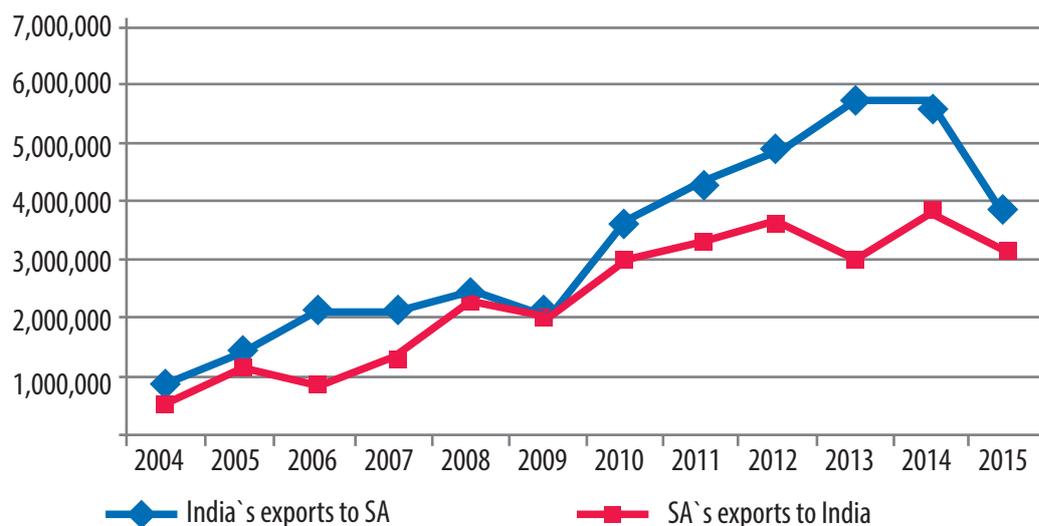
South Africa and India share a strong bilateral relationship and the main objective is to expand and diversify trade and economic relations (Lucey and Makokera, 2015). India and China emerged as South Africa's most important trading partners in BRICS (Onyikwena, Taiwo and Uneze, 2014).

The strong trade ties between South Africa and India are linked to its historical and cultural ties. These two countries had a long relationship during South Africa's liberation struggle. India was the first to enact trade sanctions against the apartheid government in 1946 and established a complete embargo on South Africa. India actively worked for the AFRICA Fund to help sustain the struggle through support to the frontline states (High Commission of India, 2016).

In 1993, at the opening of a cultural centre and consulate in Johannesburg formal relations between South Africa and India was restored. Joint Ministerial commission was established by India and South Africa in 1994 in order to identify areas of mutual beneficial cooperation. Three agreements on custom cooperation, science and technology and visa free travel for diplomatic passport holders were signed during the commission seven session that was held in 2008 in Pretoria (High Commission of India, 2016).

Bilateral engagements between South Africa and India have been extended in many ways. In 2010, memorandum of understanding on cooperation in the fields of agriculture, air services, and diplomatic academics was signed. President Zuma's visit to India in 2010 led to the recovery of negotiations on preferential trade area between India and Southern African Customs Union (Sidiropoulos, 2011).

The bilateral trade between South Africa and India shows that during the GFC, the value of SA trade with India dipped and has recovered in the



**Figure 3.** Values of South Africa's exports to India and India's export to South Africa, US dollars  
Source: ITC calculations based on UN COMTRADE statistics

post-crisis period (Figure 3). Notably, South Africa's exports (goods) to India recovered even though India's exports (goods) to South Africa were reaching SA's exports to India.

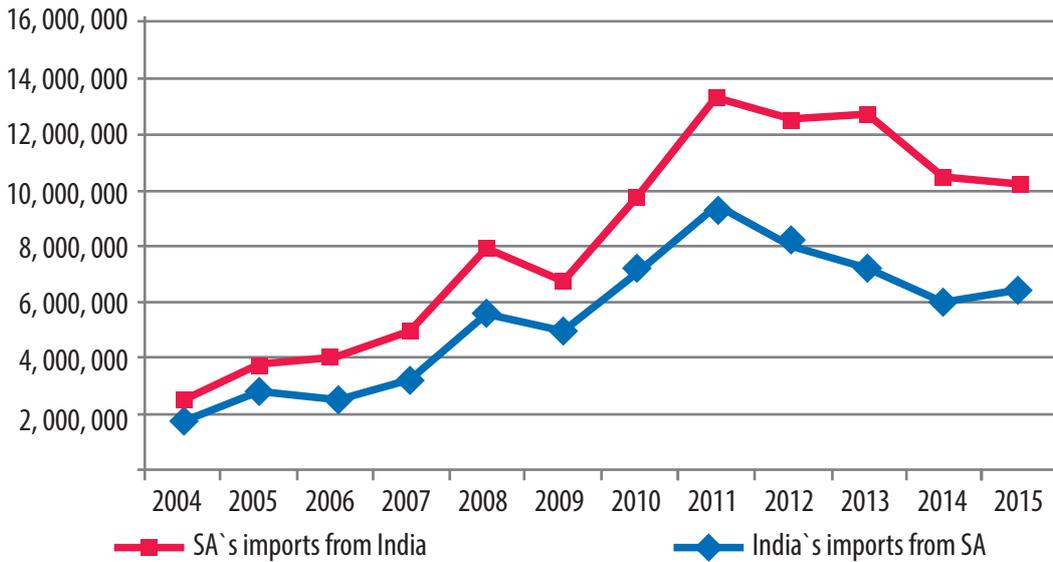
In the past India has been SA's most important export destination, as India's strong demand for gold as a major product (Alves, 2009). China overtook India as a result of its strong demand for primary resources connected to the expansion of the Chinese economy and South Africa's exports to China grew progressively since the late 2000s.

Between 2013 and 2014, the Export-Import Bank of India reported that South Africa had a share of 3.5% as an export destination of pharmaceuticals (Exim, 2014). A major growth area is pharmaceuticals. In 2013/2014 the Export-Import Bank of India reported that South Africa had a share of 3.5% as an export destination for pharmaceuticals. Nineteen Major Indian investors in South Africa include Tata (automobiles, IT, hospitality and ferrochrome products); the United Breweries Group (breweries, hotels); Mahindra (automobiles); a number of pharmaceutical companies (including

Ranbaxy and CIPLA); and IT companies. There is also Indian investment in South Africa's mining sector (Ministry of External Affairs, 2013).

Below Figure 4 shows the values of South African imports from India and India's imports from South Africa. Since 2004 India's exports from South Africa were below 4 million US dollars and in 2008, imports started to increase. The increase was largely due to South Africa's rapidly growing demand for its pharmaceutical products and decrease in 2009 due to the global financial crisis (Onyikwena, Taiwo and Uneze, 2014). The balance of trade between South Africa and India is largely in favour of India with Indian exports to South Africa much higher.

Bilateral trade between South Africa and India increased by 135% between 2007/08 and 2011/12 and Indian companies have invested USD 328.25 million in South Africa for the period of 2008–12 (Campbell, 2013). In 2016, South Africa and India signed the memorandum of understanding and the focus areas include the establishment of innovation in the area of science and



**Figure 4.** Values of South Africa imports from India and India's imports from South Africa, US dollars

Source: ITC calculations based on UN COMTRADE statistics, 2016

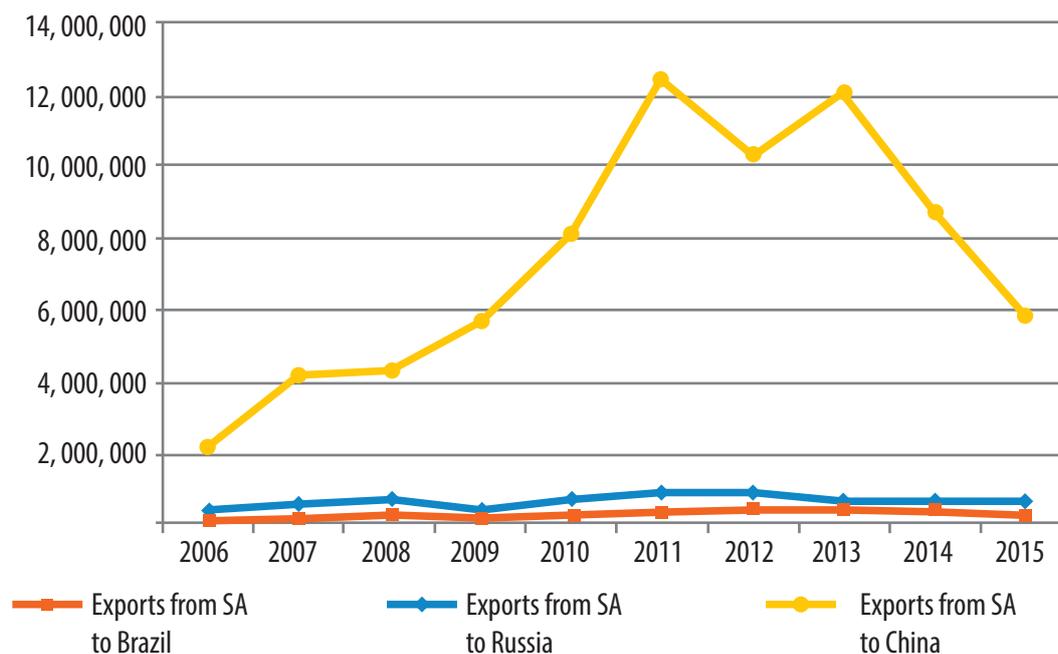
technology, tourism and program of cultural cooperation (Kilian, 2016).

President Zuma and Prime Minister Modi discussed the historical relations that the two countries share as well as the mutual struggle against colonialism and oppression which has served to forge a strong bond that is further underpinned by a shared worldview (Ministry of External Affairs, 2016). President Zuma and Prime Minister Modi expressed satisfaction with the current status of bilateral relations. However they emphasised that there is still scope for the further strengthening and deepening of relations in the political, economic, scientific and socio-cultural spheres and it was agreed that frequent and sustained contact between South Africa and India in mutually identified areas will serve to maintain the momentum of the bilateral relationship (Ministry of External Affairs, 2016).

In the discussion, it was mentioned that there is a need to intensify collaboration in the sectors such as defense, energy, agro-processing, human resource development, infrastructure development, science plus technology and innovation. President

Zuma and Prime Minister Modi (2016) further reflected on the huge potential to increase bilateral trade and to expand investment and agreed that both countries should examine obstacles to the promotion of mutual trade and investment. The leaders underlined the importance of strengthening cooperation between business entities of South Africa and India. They identified focus areas for deeper cooperation including manufacturing, mines and minerals, information technology, renewable energy, pharmaceuticals, tourism and financial services. Both leaders invited private sectors to invest in both countries. According to Kilian (2016), President Zuma indicated that both countries set a target of advancing bilateral trade to 18 billion US dollars by 2018. These targets can be achieved if private sector commitments increase while the government focuses on resolving barriers and address constraints related to infrastructure and trade.

Data from the Indian government and the African Development Bank show that bilateral trade between India and Africa rose from 1 billion US dollars in 1995 to



**Figure 5.** Export from South Africa to Brazil, Russia and China, US dollars  
 Source: ITC calculations based on UN COMTRADE statistics 2016

USD 75 billion in 2015. From 2010 to 2015, Nigeria was India's largest trading partner in Africa with 1.6 billion US dollars export-import volume, followed by South Africa with 1.1 billion US dollars, while Kenya came third and Mozambique fourth (Rao and Kuwonu, 2016). A tight bilateral trade relationship between India and South Africa is visible on the continent with Tata Africa Holding being a highly recognizable Indian company in Johannesburg (Rao and Kuwonu, 2016). Its vehicles, including trucks, semi-trucks and public transportation buses, branded with its red-and-white logos, are common on African roads.

Modi (2016) argued that more than 150 Indian companies were currently operating in South Africa, and both countries had to look at techniques to expand this trade basket.

In 2015, trade between India and South Africa reached ZAR 95 billion and trade with India represented 4.9% of South African imports and 4.1% of exports. South Africa's trade statistics also showed that India's exports to South

Africa increased from ZAR 29 billion in 2011 to ZAR 54 billion in 2015, while South Africa's exports to India increased from ZAR 24 billion in 2011 to ZAR 41 billion in 2015 (Kilian, 2016).

South Africa is pleased with this positive relationship with India as both countries benefit from this bilateral trade. Both countries value the importance of their bilateral relationship and multilateral engagements through the BRICS engagements. To improve trade relationships between South and India challenges that impede the ease of doing business that are faced in both countries must first be addressed.

In general the major export partners of South Africa are China, United States, European economy, India, Zimbabwe, Namibia, Botswana, Mozambique (Workman, 2017). Figure 5 shows that despite the debilitating effects of the the financial crisis on international trade among BRICS economies, South Africa's trade with China remained relatively high. During the global financial crisis in 2008 export growth for South Africa with

China fell slightly and rose again in 2010. However for the rest of BRICS countries export growth with South Africa has been falling since 2012 until 2015.

Measuring the degree of BRICS multi-lateral international economic integration however, requires a more nuanced network systems approach than a linear bilateral measure of indicators that do not show how integrated the group is as a whole. Kali and Reyes (2007) have developed an IEI systems approach to examine the extent of global integration of a multilateral network. The approach may be applied to the BRICS as it measures *the network density ratio* of all possible links and relationships that are in the group, and reveals the proportion of multilateral relationships relative to bilateral relationships.

Ideally, in a globalized network, the share of multilateral relations relative to bilateral ones should be higher than in a balkanized network. In other words, the sum of the whole of intra-BRICS IEI should be greater than the sum of its parts. The extent of multilateralism can be seen through the property of network transitivity, sometimes called clustering, and measures the probability that 'the partner of my partner is also my partner'. The measure provides insight into what is referred to as the "neighborhood" structure of the network. Transitivity in the network means the presence of a heightened number of complex relationships and subnetworks each of which is connected to the others in the system as a whole. The measure uses trade statistics to show the structure and evolution of global trade for the number of actual and potential trading partners. It can also show the structure of regional trading, and the influence of individual countries and groups in a multilateral network. The HSRC BRICS Research Centre is currently adapting the Kali and Reyes (2007) IEI model for application to BRICS multilateral trade and economic relationships. The idea is to develop a

measure that can be used to assess the degree of intra-BRICS international economic integration.

## References

1. *Alves P.* India and South Africa: Shifting priorities // South African Journal of International Affairs. 2009. Vol. 14. P. 86–109.
2. Annual Report on Exchange Arrangements and Exchange Restrictions // IMF. 2014. September.
3. Asset management in South Africa. Ten things to know // Norton Rose Fulbright. 2014. September 8. URL: <http://www.nortonrosefulbright.com/files/asset-management-ten-things-to-know-120505.pdf>
4. Forex rates in South Africa // Bidvest Bank Limited. URL: <http://www.bidvestbank.co.za/business-banking/forex-services/retail-foreign-exchange-rates.aspx>
5. *Galvão M.* Brazil, Russia, India and China: brand BRIC brings change. 2013.
6. *Genberg H.* Currency internationalization: analytical and policy issues // Hong Kong Institute for Monetary Research Working Paper. 2009. No. 31.
7. India-Africa: South-South Trade and Investment for Development // Confederation of Indian Industry & World Trade Organisation. 2013.
8. India-South Africa Joint Statement during the visit of Prime Minister to South Africa (July 08, 2016) // Ministry of External Affairs. Government of India. 2016. July 08. URL: [http://www.mea.gov.in/bilateral-docu-ments.htm?dtl/27001/IndiaSouth\\_Africa\\_Joint\\_Statement\\_during\\_the\\_visit\\_of\\_Prime\\_Minister\\_to\\_South\\_Africa\\_July\\_08\\_2016](http://www.mea.gov.in/bilateral-docu-ments.htm?dtl/27001/IndiaSouth_Africa_Joint_Statement_during_the_visit_of_Prime_Minister_to_South_Africa_July_08_2016)
9. India South Africa Relations // High Commission of India. 2016. February.

URL: <http://www.hcisouthafrica.in/hc.php?id=India-SA>

10. Inward Listings // Bravura. URL: <http://www.bravura.net/service/inward-listings/>

11. *Jianhua G., Zongxin Q., Chao Z., Jiarui Z.* The Effect of Changes in the U.S. Monetary Policy on China's Capital Market Stability and Trade between China and Korea // *International Monetary Review*. 2016. Vol. 3. No. 2. P. 14–51.

12. *Kali R., Reyes J.* The Architecture of Globalization: A Network Approach to International Economic Integration // *Journal of International Business Studies*. 2007. Vol. 38. No. 4. P. 595–620.

13. *Kilian A.* South Africa, India boast 'enormous' bilateral trade, investment potential — Zuma // *Engineering News*. 2016. July 8. URL: [http://www.engineeringnews.co.za/article/south-africa-india-boast-enormous-bilateral-trade-investment-potential-zuma-2016-07-08/rep\\_id:4136](http://www.engineeringnews.co.za/article/south-africa-india-boast-enormous-bilateral-trade-investment-potential-zuma-2016-07-08/rep_id:4136)

14. *Lucey A., Makokera C. G.* Deepening South Africa–India private-sector relations // *Institute for Security studies*. ISS Paper. 2015. No. 284.

15. *Onyekwena C., Taiwo O., Uneze E.* South Africa in BRICS: a Bilateral Trade Analysis // *South African Institute of International Affairs*. 2014. Occasional paper. No. 181.

16. *Rao P., Kuwonu F.* India, Africa rekindle trade ties // *Africa Renewal*. 2016. November. URL: <http://www.un.org/africarenewal/magazine/august-2016/india-africa-rekindle-trade-ties>

17. *Sidiropoulos E.* India and South Africa as partners for development in Africa? // *Chatham House*. Briefing Paper. 2011. March.

18. *Tavlas G. S.* Vehicle Currencies // *The New Palgrave Dictionary of Money and Finance* / P. Newman, M. Milgate,

J. Eatwell (eds.). L.: Macmillan, 1992. P. 754–757.

19. *Tavlas G. S., Ozeki Y.* The Internationalization of Currencies: An Appraisal of the Japanese Yen // *IMF. Occasional Paper*. 1992. No. 90.

20. *Workman D.* Top South African Trading Partners // *World's Top Exports*. URL: <http://www.worldstopexports.com/top-south-african-import-partners/>

## Appendix

### Weights for Rand Currency Basket

Country/Area	Revised weight
Euro area	34.82
United States	14.88
China	12.49
United Kingdom	10.71
Japan	10.12
Switzerland	2.83
Australia	2.04
Sweden	1.99
India	2.01
Republic of Korea	1.96
China, Hong Kong SAR	1.48
Singapore	1.40
Brazil	1.37
Israel	1.11
Zambia	0.80
Canada	-
<b>Total</b>	<b>100</b>

## Conclusion

BRICS experience shows that as economic development of its member countries progressed, prerequisites for their local currencies' internationalization were being formed. The GFC once again revealed the instability of a monetary system based on the US dollar and caused an interest in wider usage of BRICS national currencies for this purpose as its member countries (except for South Africa)<sup>1</sup> entered the top ten of the world's largest economies with a total GDP exceeding one trillion US dollars.

However, this idea didn't gain substantial support, as the share of the BRICS countries in world trade has increased at a slower pace, compared with high growth rates demonstrated by national economies. China is the only BRICS country in the top ten in terms of exports (1st place with 2.3 trillion US dollars or 14.02% in 2015). By the end of 2015, Russia took 15th place (2.11%), India — 19th place (1.62%), Brazil — 24th place (1.17%) and South Africa — 37th place (0.5%)<sup>2</sup>. In this context, monetary authorities of several BRICS countries preferred to encourage their national exporters for receiving revenue denominated mainly in US dollars or euros. This intention was also based on a predominance of resource-based commodity exports priced primarily in US dollars.

Hence, a demand for the currencies of most BRICS countries on international markets was relatively insignificant. Moreover, only Russia and South Africa

lifted restrictions on capital transactions by non-residents. However, as can be seen through the experience of South Africa (which has the most developed stock market among the BRICS countries), investment demand alone does not suffice for ensuring significant use of a national currency in international settlements.

In summary, the BRICS countries experience allows us to contend that only a well-balanced economic development ensuring an equal implementation of all the prerequisites necessary for an internationalization of national currencies, will provide a solid basis for a substantial increase in their use in international settlements. At the same time, a requirement of meeting the set of preconditions does not preclude governments from implementing of a more active policy aimed both at creation of such conditions and removal of existing administrative barriers that impede a wider use of national currencies in cross-border settlements.

However, practical steps in this direction primarily depend on the interest of BRICS monetary authorities in promoting their currencies on the global market. More work is required to convince politicians and policy makers that it is a useful goal to pursue. Nonetheless, the only way BRICS nations can challenge the existing international monetary order is through coordination. The BRICS financial regulatory bodies and central banks could be tasked to gauge the feasibility of policy coordination and build consensus towards this goal.

The authors of the study consider that following steps could be taken initially on this issue. Firstly, it seems appropriate to focus joint efforts on pro-

<sup>1</sup> Back then, South Africa was the largest economy in Africa competing for this place with Nigeria.

<sup>2</sup> See UN Comtrade Database // United Nations Statistics Division. URL: <http://comtrade.un.org/data>

viding companies engaged in foreign trade from BRICS countries with the same, or lower transaction (compliance) costs, guarantees of settlement and risk management that they currently have in utilizing the dollar, euro or yen. To achieve this goal it will be necessary to encourage trading directly in BRICS currencies that will significantly contribute to lowering costs. At the time direct trading is available only for "RUB/CNY" and "CNY/RND" currency pairs. However, it could be further enriched in the near future with currency pairs characterized by significant volumes of bilateral trade. This step has to be augmented with creation and use of hedging instruments in BRICS currency pairs which might allow to reduce risk management costs. During the first stage leading public banks of BRICS countries may function as market makers on currency pairs to provide necessary liquidity.

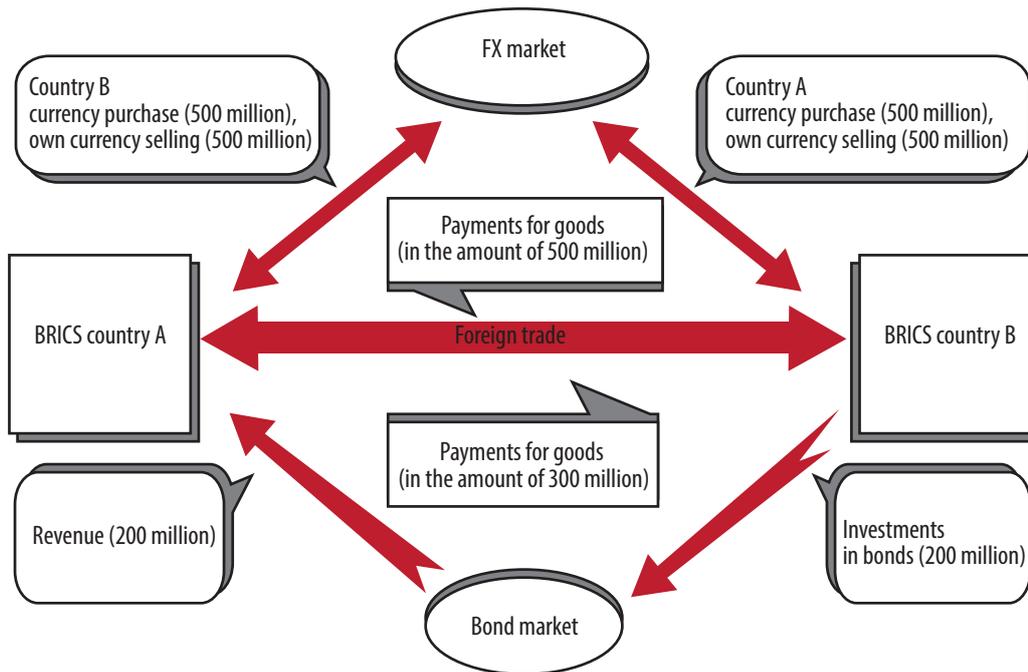
Widening of Swap Agreements is also of significant interest for foreign exchange. Though the BRICS countries have established a Contingent Reserve Arrangement, this arrangement aims to maintain financial stability by providing short-term liquidity support when member countries face international payment pressure. Meanwhile, the currency swap under this arrangement is one between US dollar and local currencies of BRICS, not one among the BRICS currencies. Currently, there are few local currency swap agreements in force (between Russia and China, China and the South Africa). This could be the occasion to ensure greater stability to BRICS FX markets. For instance, central banks may utilize swap agreements to anchor expectations in this fledgling market and limit worries of liquidity risk.

Another avenue of cooperation could be the development of bond markets. BRICS have relied heavily on banks (such as China and Russia) or international capital (such as India and Brazil) for boosting economic growth while the

bond markets of their local currencies are all less developed. Though China and Russia boast huge foreign exchange reserves, most of these reserves are invested in the sovereign bonds of the western developed countries. This led to currency and maturity mismatching in national financial systems. If efforts can be made to develop the bond markets of their local currencies and enhance the investment and financing functions of these markets, BRICS will significantly reduce their excessive dependence not only on banks or international capital for financing but also on dollar assets for outbound financial investment.

The development of local currencies bond markets contributes both to BRICS economic advancement and the internationalization of their currencies. If there are high-capacity bond markets, non-residents will be confident of opportunity for unrestricted placing their funds in BRICS currencies. This will additionally heighten the interest for making settlements in these currencies. Furthermore, this would meet collateral criteria required for a currency to function as a store of value for other countries. Strengthening BRICS local bond markets also will spur cross-border investments made in local currencies. This might redress foreign trade imbalances (at least in part) among BRICS countries. The principles of such mechanism are presented in Figure 1.

Joint efforts to provide interconnected development of BRICS bond markets growth would require coordinated capital account liberalization amongst the BRICS countries. This involves, first and foremost, countries having substantial trade surplus with other partners and consequently enjoying the opportunity to accumulate substantial surplus on currency balances. The majority of BRICS countries have an experience of issuing such bonds (Indian "masala bonds", Chinese "dim sum bonds", etc.) on Western markets or in Japan (South Africa). It seems appropriate to attract



**Figure 1.** BRICS internal interaction scheme.

Note: currency exchange rates are conditionally assumed at 1:1

Alternative bond placement options:

- A company from country A places bonds denominated in the country A currency on the country A market. Investors from country B (financial institutions, primarily) are allowed to acquire them;
- A company from country A places bonds denominated in the country A currency on the country B market. Investors from country B (institutional investors, primarily) are allowed to acquire them. The revenue received can be freely repatriated to the country A;
- A company from country A places bonds denominated in the country B currency on the country B market. The revenue received can be freely repatriated to the country A

their emissions to BRICS stock exchanges. This would increase competitive ability of national investment banks responsible for placement of securities.

Along with that, investors from the BRICS countries (institutional investors, first of all) should have an opportunity to buy bonds that are being traded in any other BRICS country. What is more, foreign companies should be allowed to place bonds denominated in BRICS currencies in the internal BRICS markets. At the time China only provides non-residents with such an opportunity (so-called "panda bonds").

For investors, the attraction of local-currency bond markets is determined by multiple factors. Among them, the

risk and yield of bonds is a fundamental factor. In this regard, the rating of credit rating agencies will directly define both whether the bond issuance would be successful, and the cost of bond financing. International credit rating agencies' activity causes fair criticism from developing countries. There are many examples of politically driven decisions concerned with their credit rating assessments. However, it is these ratings that foreign investors take into account, and this can hardly be changed in the near future even if the BRICS joint rating agency is launched. Within this framework, the use of guarantee-based mechanism looks promising, as it contributes to upgrade ratings of the

BRICS companies' bonds. In this regard, it is worth learning from the experience of the European Investment Bank and its subsidiary European Investment Fund. It also could be advisable for the BRICS countries to set up investment funds with local currencies (operated by the New Development Bank, for instance), with their investment direction and business mode designed according to the actual demand of each BRICS country.

Such practices are already being developed, marking a moving-off in the specified direction. In June 2017 BRICS Ministers of Finance agreed to set up a common sovereign bond Fund totaling USD 10 billion in order to support the BRICS debt markets. This was confirmed at the ninth BRICS Summit held in September: in the Xiamen Declaration leaders of the BRICS countries agreed "to promote the development of BRICS Local Currency Bond Markets and jointly establish a BRICS Local Currency Bond Fund, as a means of contribution to the capital sustainability of financing in BRICS countries..."<sup>3</sup>.

The development of an exchange market and the building of a common BRICS bond market will require widening of cross-border interbank connections. Within this framework it would be beneficial for the BRICS countries to strengthen interbank market cooperation through setting an efficient BRICS cross-border clearing settlement system (probably, establishing a special company modeled after Euroclear) and improving compatibility among national accounting and auditing standards as well as related laws and regulations through consultation.

Launching of a Commodity Exchange or some type of an e-trading platform for trade in goods and derivatives of various kinds can be one more instrument

contributing to enhancing LCY use in settlements in the BRICS countries. Within BRICS, China and India are major importers of raw materials while Russia and Brazil are major exporters of raw materials. This fact could help connect supply and demand among BRICS countries. Consequently, raw material trade could be mediated by setting market prices denominated in local currencies. With appreciable quantity of foreign investors trading on the exchange, this will lead to internationalization of contracts denominated in local currencies.

It is also important to study the views of entities engaged in foreign economic affairs for a further promotion of the BRICS currencies on the global market. Such studies have been carried out by certain ASEAN and EU countries. These surveys help to identify factors affecting a choice of the invoicing and payment currency and contribute to revealing the remaining administrative barriers and other issues that companies may face when using national currencies in their settlements. Data obtained from the aforementioned studies assists to clarify practical steps proposed in this study. For instance, it allows to determine both the FX and financial market instruments which business may need.

Along with the above-mentioned fields of cooperation shared by all study authors a number of particular proposals were also made by individual research participants.

## Brazil

Brazilian experts advocate for creating an intra-BRICS joint payment system based on the SML principles. Companies integrated to supply chains within BRICS could be first to drive a pilot implementation of this system.

Granting to companies the right to use a currency which is most suitable for them (including US dollar) is regarded as an essential condition for putting this

<sup>3</sup> See BRICS Leaders Xiamen Declaration // BRICS 2017 China. 2017. September 4. URL: [http://brics2017.org/English/Documents/Summit/201709/t20170908\\_2021.html](http://brics2017.org/English/Documents/Summit/201709/t20170908_2021.html)

initiative into practice. Further widening the practice of using national currencies in international settlements is associated with providing users of the payment system with additional incentives from government, including tax benefits.

## Russia

Experts from the Russian Institute for Strategic Studies propose to reach a common understanding within the BRICS on an issue whether the currency of exporter or importer will be accepted as an invoicing currency. When that issue is solved it will greatly simplify a development of instruments aimed at encouraging settlements in national currencies.

Using the importer's currency has certain benefits but also creates additional risks. First of all, it requires ensuring effective absorption of a national currency amount that remains abroad. Otherwise its massive exchange may have a destabilizing effect on the FX market and lead to a multiple depreciation.

Within this framework, the most suitable principle is that the price of foreign trade contracts should be established in the exporter's currency. Risks of accumulating local currency balances in this case are mitigated to a certain extent as the volume of exports limits the demand for foreign exchange. Taking into account dependence of export revenues from extractive industries (Brazil, Russia, South Africa), one more necessary condition for a large-scale shift of the BRICS countries to settlements in their national currencies is exports diversification.

## India

Experts from National Institute of Public Finance and Policy, New Delhi, take the view that it may not be feasible to enhance LCY use on a large scale due to

the lack of capital account convertibility of BRICS currencies in the coming years.

Therefore as a first step, BRICS countries could follow the Hong Kong example and pilot such a scheme as a financial special economic zone or international financial center where capital controls are relaxed. The SEZ/IFC based approach seems to be the best way to proceed as it allows countries to move towards capital account openness at their own pace while permitting quick market development with limited downside risk. Joint development of financial SEZs/IFCs for the purposes of currency internationalization in the BRICS countries also provides an opportunity to additionally pilot a unified regulatory framework that could be matched to global standards to enable firms to easily adopt the new LCY settlement and risk management.

## China

Experts from the Institute of World Economics and Politics, the Chinese Academy of Social Sciences are of opinion that establishing the BRICS cross-border interbank payment system on the basis of Blockchain technology might be a key step of BRICS cross-border financial infrastructural construction. Such infrastructure would not only significantly improve the efficiency of cross-border interbank payment among the BRICS countries but also exert a fundamental impact on the international monetary and financial system.

Given that Blockchain is safe, transparent, distributed and tamper resistant, the trust model between financial systems would no longer rely on intermediation and many banks will establish "decentralized" ties and realize real-time digital transactions. The removal of the intermediary link of the third-party financial institution means cross-border

payment will no longer depend on such systems as SWIFT and CHIPS.

## South Africa

Experts from Nelson Mandela Metropolitan University and The BRICS Research Center, Human Sciences Research Council agree that exploring the feasibility of a common payment mechanism in and amongst the BRICS countries is important. This will not only start a long way to consolidating intra-BRICS trade and investment relations, but also promote a more balanced multilateral trade, investment and international financial regime from which other emerging and developing economies may benefit.

As a long-run objective adopting a BRICS single currency could be regarded. This would take integration a step further towards much closer economic alliance. Consequently, it demands extensive preparations — economic and legal convergence. In that regard this research could be seen as a starting point for a multilateral project which will draw upon expertise from various fronts including political, legal, central banks, financial and other relevant institutions.