Internationalisation of emerging market currencies

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Abstract

This note reviews the internationalisation of emerging market (EM) currencies. It summarises various indicators and discusses some possible drivers, drawing on both historical and recent experience. The potential costs and benefits of an EM currency having international status are briefly discussed.

Keywords: International monetary arrangements and institutions, foreign exchange, international financial markets

JEL classification: F33, F31, G15

[1] Bank for International Settlements.

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1. Introduction

The internationalisation of EM currencies has attracted increasing attention from both policymakers and market participants. Historically, central banks have chosen to hold their own foreign reserves in only a few major advanced economy currencies (Table 1). Although the US dollar's share in official reserves has declined secularly, it remains the dominant reserve currency. The share of the euro, since its inception in 1999, has been relatively stable at around 24%, while that of other currencies has ebbed and flowed. The yen's share increased in the 1970s and 1980s as Japan's share of world output rose; in recent years, however, the Japanese currency's share has fallen. Conversely, sterling's share declined for many years, but has recently gone up to about 4%. The Australian and Canadian dollars have been recognised as new commodity reserve currencies over the past two years, although their shares remain small. The reported share of EM currencies, included under "Other" in the table, has changed little in the past decade. Nonetheless, some large emerging market economies (EMEs) do not report the currency composition of their reserves to the International Monetary Fund (IMF); the coverage of Table 1 is therefore incomplete.

Currency composition of foreign exchange reserves at current exchange rates

As a percentage of allocated reserves[1] Table 1

	1976	1988	1995	2000	2005	2010	2011	2012	2013[2]
US dollar	76.50	54.60	58.96	71.13	66.52	61.84	62.36	61.05	61.44
Japanese yen	2.00	6.90	6.77	6.06	3.96	3.66	3.61	4.08	3.86
Pound sterling	1.80	2.30	2.11	2.75	3.75	3.94	3.83	4.03	3.92
Euro	…	…	…	18.29	23.89	26.00	24.66	24.28	24.16
Deutsche mark	9.00	14.20	15.75	…	…	…	…	…	…
Australian dollar	…	…	…	…	…	…	…	1.47	1.65
Canadian dollar	…	…	…	…	…	…	…	1.50	1.82
Other	10.70	22.10	16.41	1.76	1.89	4.57	5.53	3.60	3.14
Memo: Share of global foreign exchange reserves									
Developing countries	*53.50*	*36.10*	*32.92*	*37.13*	*51.89*	*66.62*	*66.70*	*66.30*	*67.08*

[1] Reserves whose currency composition has been identified. Allocated reserves accounted for 78% of global reserves in 1998 and 54% in 2013. "…" = not available. [2] As of Q3.

Sources: IMF (1984, 1998); IMF, *COFER*; Roger (1993).

Thus, there seems to have been very little official diversification of EMEs' reserve assets into new currencies even though collectively EMEs now account for over 65% of global reserve holdings, up from 37% in 2000. Given the rising share of EMEs in global trade and output as well as internationally traded bonds and equities, this seems odd. What can explain this anomaly? What are the constraints and prospects?

This note tries to answer these questions indirectly by looking at a broader set of indicators of the internationalisation of EM currencies. Even if the US dollar is likely to retain a dominant role, there are grounds for thinking that some EM currencies could acquire the international currency status and replace some of the currencies of advanced economies. The use of EM currencies in global financial

markets is increasing. Some have been used for many years, the South African rand and the Hong Kong and Singapore dollars being cases in point. The newest development concerns the renminbi, which has been rapidly gaining in relative importance in the global currency market in recent years.

2. Definitions and stylised facts

The notion of an international currency broadly signifies the widespread use of a national currency by non-residents in both commercial and financial transactions. The currency performs externally some of the functions of money as a medium of exchange (a vehicle currency), unit of account (a nominal anchor) and store of value (for instance, a reserve currency). However, international currency status is subject to different interpretations and has various dimensions and degrees. A less restrictive definition is a national currency that is used in cross-border transactions to perform some of the functions of money in some regions. A stricter notion would require a national currency to be widely used between non-residents and to thereby fulfil all the functions of money globally. Thus a number of indicators may be needed to gauge the evolution and extent of currency internationalisation.

This note looks at four sets of such indicators, which, when combined, should provide a composite proxy for the development of the internationalisation of EM currencies. The first set is based on the international portfolio liabilities of EMEs, which more or less reflect the trend allocation by global investors to EME financial assets. Second is the foreign ownership of domestic currency securities in EMEs, indicating how open the local capital market is to foreign investors. The third set covers foreign exchange turnover in EM currencies and may shed light on their uses by non-residents. The fourth set is trade invoicing in the home currency, suggesting the currency's external role as a medium of exchange and unit of account.

2.1 Portfolio liabilities of EMEs

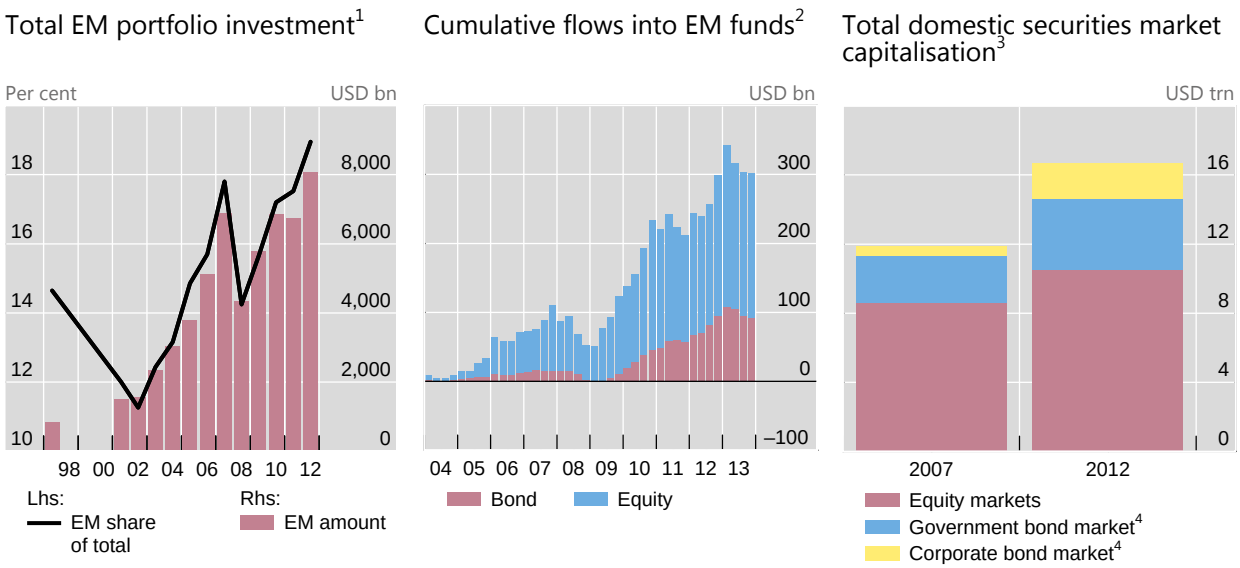
There has been a marked increase in the portfolio liabilities of EMEs to non-residents over the past decade. The share of EME financial assets in the portfolios of global international investors has increased.

According to data captured by the IMF's *Coordinated Portfolio Investment Survey* (CPIS), the estimated total holdings of EMEs financial assets by international investors increased more than fivefold between 2002 and 2012, with their share in world total foreign portfolio liabilities rising from 11% to 18% (Graph 1, left-hand panel). This indicator covers both institutional and retail investors but also includes both local and hard currency securities.

A second indicator, from EPFR, is that the EME assets held by global mutual funds have grown substantially in recent years. The cumulative net investment by mutual funds in EM equities and bonds has risen thirtyfold over the past decade (Graph 1, centre panel). This indicator is more up to date than the CPIS, but for the most part covers only retail investors.

Foreign portfolio liabilities of and foreign ownership of local government bonds issued by EMEs

Graph 1



[1] Total EM-derived portfolio investment is defined as the total of all reporting countries minus 24 advanced economies. The EME share of the total is defined as total EM-derived portfolio investment as a share of the total minus international organisations. [2] Data up to 30 October 2013. Sums across major economies in each region. Data cover net portfolio flows (adjusted for exchange rate changes) to dedicated funds for individual EMEs and to EM funds for which country or at least regional decomposition is available. [3] Sum of Algeria, Argentina, Brazil, Chile, China, Colombia, the Czech Republic, Hungary, Korea, Malaysia, Mexico, Peru, the Philippines, Poland, Russia, Saudi Arabia, Singapore, South Africa, Thailand and Turkey. [4] Local currency.

Sources: IMF, *Coordinated Portfolio Investment Survey*; EPFR; BIS questionnaire, March 2014; BIS calculations.

2.2 Foreign ownership of local government debt securities in EMEs

The second set of related indicators is the foreign ownership of local currency securities issued by EMEs. According to the survey of central banks conducted for this meeting, the weighted average of foreign ownership between 2007 and 2012 rose from 15% to 20% for equity and from 8% to 17% for local currency government bonds.[2] This suggests that local currency assets in EMEs are more widely held by foreign investors, although differences across markets are substantial. Note that the foreign ownership of EM equity was generally higher than that of EM local currency government bonds.

Moreover, the level of foreign ownership rose at a time when domestic currency markets in the EMEs were expanding. The survey also indicates growing local currency equity and debt securities outstanding in EMEs (Graph 1, right-hand panel). The combined market capitalisation of local currency securities for the EMEs in this sample rose by 40% between 2007 and 2012. This is also true for each of the three instruments: equity, government bonds and corporate bonds. However, this indicator does not cover offshore local currency securities held by non-residents.

[2] See the paper entitled "The transmission of unconventional monetary policy to the emerging markets – An overview" in this volume for details.

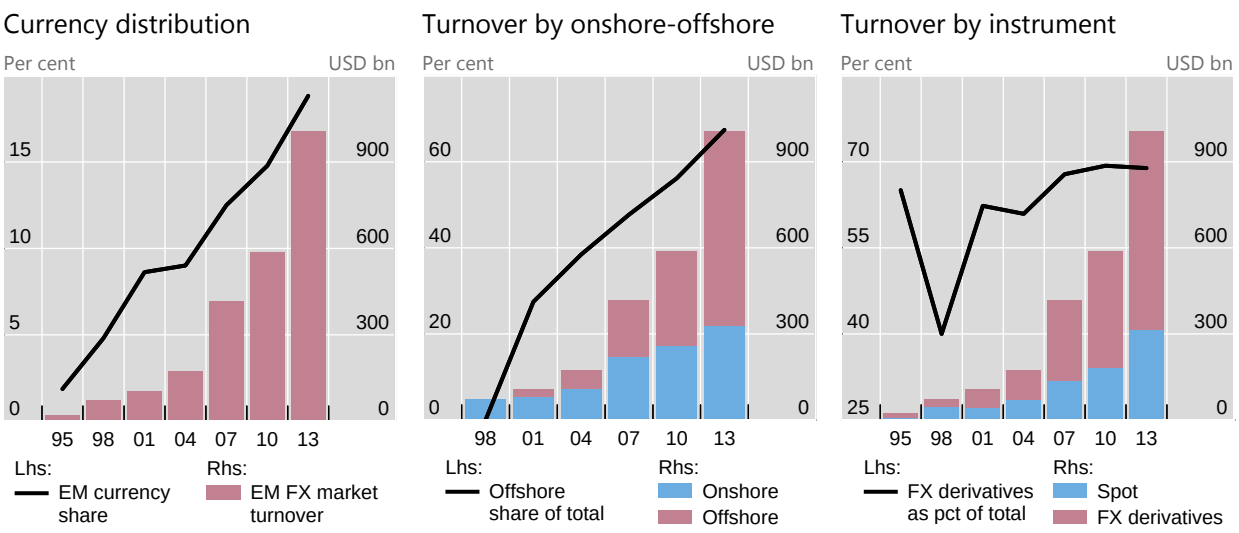
2.3 Foreign exchange turnover in EM currencies

The third set of indicators is the volume of trading in EM currencies and its geographical pattern, as increased holdings of EM currency assets by global investors call for greater hedging. Also, liquidity and tradability (both onshore and offshore) are important attributes of an international currency. The Triennial Central Bank Survey of foreign exchange bears out the growing internationalisation of EM currencies over the past decade.

First, the trading volume of EM currencies increased tenfold between 1995 and 2013. In addition, the share of EM currencies in the global aggregate of foreign exchange turnover rose from below 2% in 1995 to above 16% by 2013 (Graph 2, left-hand panel). Moreover, the offshore share in the overall trading volume of EM currencies doubled, from 30% in 2001 to 60% in 2013, suggesting that most of the EM currency trading involved non-residents (Graph 2, centre panel).

Foreign exchange turnover in EM currencies[1]

Daily averages in April — Graph 2



[1] Adjusted for local and cross-border inter-dealer double-counting (ie "net-net" basis).

Sources: Triennial Central Bank Survey; BIS calculations.

Much of this rise in EM currency trading has been driven by increased demand for foreign exchange derivatives (Graph 2, right-hand panel). In addition to hedging, the demand for foreign exchange derivatives could relate to positioning. Currency markets are usually the first port of call for global investors venturing into EMEs. Derivatives markets – often offshore – offer the market depth that global investors demand to consider investing in EM currencies. The share of foreign exchange derivatives in total EM over-the-counter currency turnover rose from 60% in 2001 to 70% in 2013.

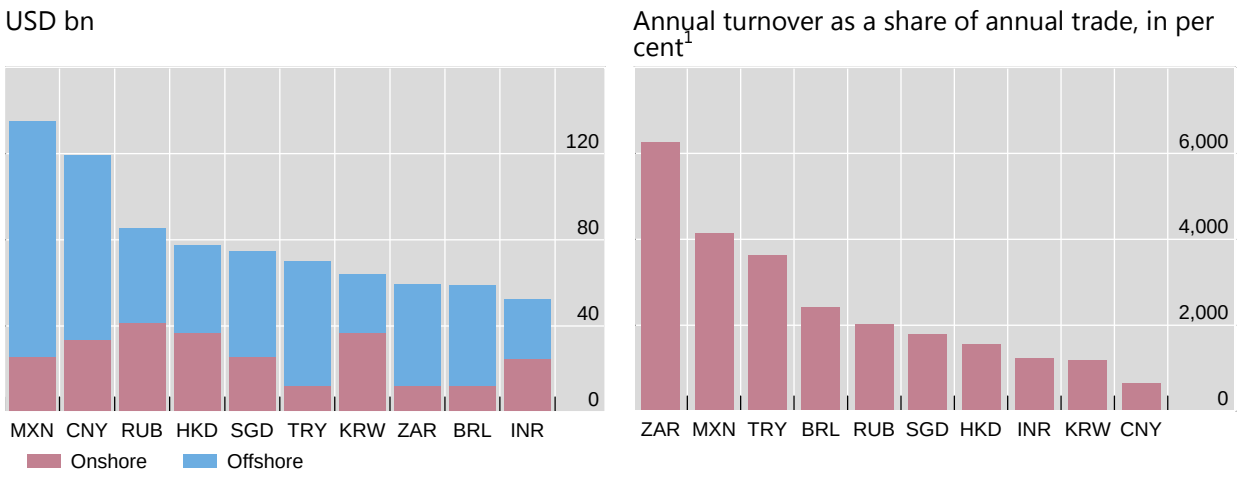
Finally, the left-hand panel of Graph 3 shows the 10 most traded EM currencies. In most cases, the offshore share of their turnover is 60% or more. The top three EM currencies in terms of total daily turnover are the Mexican peso, Chinese renminbi and Russian rouble. However, once we adjust for merchandise exports and imports, the rankings change dramatically. Beyond commercial transactions and long-term

capital movements, the renminbi is now the least traded among the aforementioned top 10 EM currencies, in part because of very light short-term and high-frequency cross-border financial flows (Graph 3, right-hand panel).

Thus, the EM currencies have been traded more actively, with a greater share offshore and more in the form of foreign exchange derivatives. This fact supports the idea that some EM currencies might have been gaining a greater international status.

FX turnover in EM currencies

Daily averages in April 2013 — Graph 3



BRL = Brazilian real; CNY = Chinese yuan; HKD = Hong Kong dollar; INR = Indian rupee; KRW = Korean won; MXN = Mexican peso; RUB = Russian rouble; SGD = Singapore dollar; TRY = Turkish lira; ZAR = South African rand.

[1] Daily FX turnover averages times 250 divided by total trade in 2013 (WEO forecast).

Sources: IMF, *World Economic Outlook*; Triennial Central Bank Survey; BIS calculations.

2.4 Trade currency invoicing

The fourth indicator is trade invoicing in the home currency. Exporters could choose to invoice their trade in the producer currency, or destination currency, or simply a third vehicle currency. This choice depends, among others, on market share, industry, exchange rate regime and inertia. Ito and Chinn (2014) estimate that the home currency invoicing share of exports in the Asia-Pacific region has on average fallen from 15% to 10% in recent years, in contrast to a renminbi invoicing share that has risen to 15% from practically nothing a few years ago (see Section 5.2).

In sum, the evolving role of EM currencies in the global market has been shaped by a combination of structural and cyclical factors. The structural factors could be both financial and real. Cycles can be defined in terms of many different variables (Moore et al (2013)). While cyclical swings affecting these four indicators are bound to be sizeable at times, the trend rise in the weight of the EM currencies in the global financial and currency markets over the past decade is unmistakable.

3. Drivers of internationalisation of EM currencies

What drives the internationalisation of a currency? The demand for a currency by non-residents tends to rise with the size of the issuing economy, its trade, its financial market and its wealth. The quality of its institutions also matters. Beyond these "fundamentals", the exchange networks are also important, for the currency to function internationally as a medium of exchange, unit of account and store of value. Finally, offshore markets and public sector asset managers could be catalysts in the internationalisation of EM currencies.

3.1 Economic size and market development

National currencies that have achieved international status are issued by countries that are relatively large and wealthy, account for a considerable share of world trade and have relatively large financial markets. Table 2 provides the profiles of such economies. The United States, Japan and euro area countries rank amongst the top places on at least two of the indicators. Other advanced economies with currencies that have achieved international status also rank highly on all three indicators (eg the United Kingdom and Canada).

World's top 10 economies in terms of GDP, trade and government debt[1]

2013 Table 2

Share of world GDP		Share of world trade		Share of world general government gross debt[2]	
Country	Share	Country	Share	Country	Share
United States	22.8	United States	11.0	United States	30.3
China	12.2	China	10.0	Japan	20.6
Japan	6.8	Germany	7.7	Germany	5.0
Germany	4.9	Japan	3.9	Italy	4.8
France	3.7	United Kingdom	3.5	France	4.5
United Kingdom	3.4	France	3.3	United Kingdom	4.1
Brazil	3.0	Korea	2.9	China	3.6
Russia	2.9	Netherlands	2.8	Canada	2.7
Italy	2.8	Hong Kong SAR	2.7	Brazil	2.5
Canada	2.5	Italy	2.6	Spain	2.2

[1] WEO forecasts. [2] World general government gross debt is calculated as the sum of US dollar-denominated debt for 168 economies.

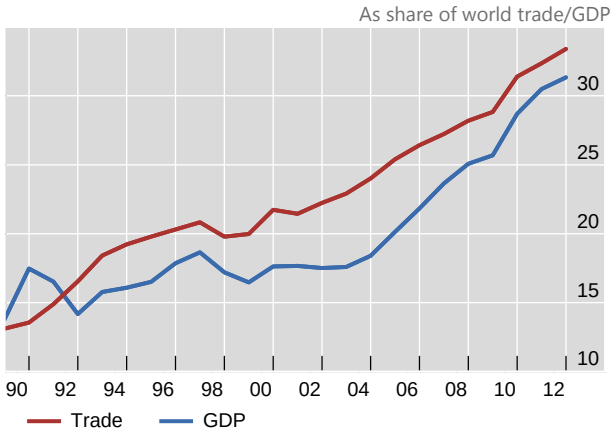
Sources: IMF, World Economic Outlook, October 2013; BIS calculations.

But in recent years, a handful of EMEs have also been registered by some of these indicators. The strong position of China and the rise of Brazil and Korea are particularly noteworthy. Furthermore, the aggregate weight of EMEs in the global economy and global trade has doubled. Over the past two decades, the aggregate EME share of both world GDP and world trade has risen, from 15% in 1992 to 30% in 2012 (Graph 4, left-hand panel).

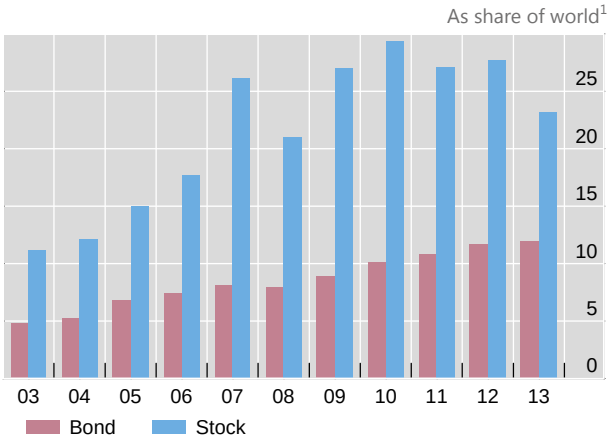
The development of domestic financial markets is important to any effort to promote the international use of a national currency. The right-hand panel of Graph 4 suggests that EM financial markets have grown in importance, even if their current size is not commensurate with their countries' trade and economic weight. The share of EM debt in the world total more than doubled between 2003 and 2013, from 5% to 12%, while EMEs' share of global equity market capitalisation rose from 12% to around 25% in the same period. As noted earlier, the presence of foreign players in expanding local currency securities markets has also increased in recent years. This has contributed to market depth and the inclusion of EM currencies in foreign investors' portfolios.

Economic and market weight of EMEs[1] Graph 4

Aggregated EM trade and GDP



EM domestic debt securities outstanding[2] and stock market capitalisation



[1] Covering 23 emerging market economies. [2] By residence. [3] Sum of amount outstanding of total debt securities for 25 advanced economies and domestic debt securities for 23 emerging market economies.

Sources: IMF, *Direction of Trade Statistics* and *World Economic Outlook*; Bloomberg; BIS.

3.2 Financial and real economy network effects

Exchange network effects complement economic and market "fundamentals" as drivers of a currency's international status. Such networks are often the sources of positive externalities. First, network effects on the real side of the economy work mainly through closer regional trade integration. Examples are the ASEAN+3 mechanism and the intra-Asian supply chain. Such network effects that operate through trade integration and specialisation can complement and amplify the growing weight of EMEs in the global economy and trade. A greater role for EMEs in that regard can boost the potential demand for their national currencies by non-residents, especially in a regional context.

In the currency market, one such positive externality of exchange networks stems from the convenience of using the currency that is already being widely used and held by other economic agents. An intensively used currency can therefore more easily extend its use in international transactions. Section 2 has already documented the growing liquidity of EM currencies in global trade over the past decade.

The liquidity in financial markets involves similar externalities. Liquid financial markets can promote the international status of an EM currency by attracting more foreign investors into EM local currency markets and furthering the use of the country's currency by non-residents. Investors are more inclined to engage in trading in markets where they are confident that their demand or supply will be matched. The right-hand panel of Graph 4 suggests that the weight of the EMEs in global financial market capitalisation is rising, despite occasional marked fluctuations. This should help improve financial market depth and liquidity in EMEs.

Better cross-border clearing infrastructure and the expansion of cross-border banking may also strengthen the real and financial network effects in trade, currency and securities markets, thus facilitating the international use of a currency. In this light, the recent overseas expansion of Chinese banks into international financial centres and some EMEs, such as South Africa and Brazil, may support the development of a nascent offshore market for the renminbi.

3.3 Offshore markets

Establishing an offshore market in a national currency is often the first stage towards its gaining acceptance among global market players, so that the market can play a special role. Although offshore trading volumes of EM currencies have risen rapidly over the past decade, the markets are still not deep enough to be considered on a par with those for the major international currencies.

Evidence suggests that most offshore trading of EM currencies is between non-residents and that a main driver is the holdings of assets denominated in EM currencies (Rime and Schrimpf (2013)). These holdings may relate to both hedging and currency positioning. In addition, the growth of offshore markets may be linked to the growth of the onshore market because banks and firms, both domestic and global, will arbitrage between markets. Increasing the access of non-resident participants to the onshore market is likely to require a more open financial system and convertibility of the national currency in the current and capital accounts.

3.4 Foreign reserve and wealth diversification

Could policy actions in EMEs help enhance the international role of the national currency? As discussed in the introduction, EMEs have built up sizeable official foreign reserves. But they hold only a small part of those reserves in each other's currencies. Several EMEs have enjoyed a long-lasting boom in commodity prices and have accumulated large current account surpluses. Yet commodity currencies have so far played only a negligible role in international reserve diversification.

Sovereign wealth funds are another group of potential investors that to date have carried out limited investing activity in EM currencies. Sovereign funds may have greater risk appetite and a longer investment horizon than central banks, and may be willing to build up sizeable portfolios of EM assets. A shift in their portfolios away from developed country assets to EM assets might also be a catalyst for greater demand by the private sector of EM currencies.

To explore the issue of diversification, Table 3 presents indicators of bilateral exchange rate correlations. As the table shows, many EM and commodity currencies are more volatile than the established major reserve currencies vis-à-vis the US dollar. This is even more so in times of market stress. The only exception is the

renminbi: this might be because its exchange rate has not been market-determined. If currencies are highly and positively correlated, the gains from risk diversification may be limited. The broad pattern of exchange rates correlations shown in Table 3 is that they are far from perfect, suggesting possible gains from currency diversification. The dollar exchange rate of all EM currencies is positively correlated with the euro/dollar exchange rate, so that holding EM currencies might not provide more diversification of dollar risks than holding the euro does. But their exchange rates tend to be negatively correlated with the yen/dollar exchange rate.

Volatility and correlation of monthly average exchange rate movements[1] Table 3

	Standard deviation of % changes against USD	Correlation between % change against US dollar with	
		% change of EUR/USD	% change of JPY/USD
Australian dollar	3.37	0.65	0.01
Pound sterling	2.35	0.71	0.09
Euro	2.43	na	0.22
Japanese yen	2.38	0.22	na
Brazilian real	3.67	0.42	–0.22
Chinese renminbi	0.38	0.31	0.14
Korean won	2.73	0.60	–0.09
Mexican peso	2.73	0.41	–0.34
South African rand	3.96	0.49	–0.06

[1] Percentage change of monthly average exchange rate in the period 2004–13.

Sources: National data; BIS calculations (based on Roger (1993)).

4. Prospects for EM currency internationalisation

The prospect for the internationalisation of EM currencies varies across dimensions. The sovereign credit rating of the issuing country is important. The credit standing of many EMEs has improved. Some EM currencies may become more actively traded in global markets and used in international transactions, as has been the case with the Australian, Canadian and New Zealand dollars or the Swedish krona. And despite large cyclical fluctuations, aggregate foreign holdings of EM local currency financial assets have risen over the past decade.

There are also downsides. Managing currency risk in a global portfolio is costly; and there are diminishing returns to including additional currencies in a global portfolio. Because there are a presumably small, optimal number of currencies in a global portfolio, only a few EM currencies could become major reserve currencies at the global level. In time, some EM currencies could displace the currencies of the smaller advanced economies.

A second ground for caution is the considerable degree of home bias in global portfolios. Nevertheless, as discussed in Section 2, foreign investors now play a greater role in connection with EM local currency assets, although the recent turmoil in EM financial markets underscores some underlying financial vulnerabilities. Thus it may take longer for EMEs to gain ground in international transactions and

investments. As historical experience shows, inertia can be quite considerable, further raising the bar for any EM currency to become an international one.

Finally, the relative benefits and costs could play a role in any consideration to internationalise EM currencies. While international status for an EM currency may have beneficial impacts by lowering funding and transaction costs and helping residents to better share currency risks with the rest of the world, it could also imply large costs. A sustained appreciation of the currency owing to increased demand from the rest of the world may result in frequent misalignment, giving rise to unsustainable current account deficits. This is a variation of the Triffin dilemma.[3]

Moreover, to the extent that international currency status would typically be associated with a more open capital account, global shocks are also more likely to propagate into the domestic economy through either the exchange rate or financial channels. Given a lesser degree of policy discretion, the financial system might come under strain during large adverse external shocks.

5. Historical and recent experiences

The historical experience offers some noteworthy lessons: the force of habit and inertia in the international status of a currency can be important.

5.1 A brief historical review

Sterling was the first national currency to gain international currency status under a gold standard. There are three related facets to this. The first was the large and growing size of the UK economy in the 19th century. Second, the United Kingdom's dominant position in international trade and politics resulted in the pound becoming the most important national currency worldwide. London also became a major financial centre. Financial development included a process of monetary standardisation that resulted in the effective operation of the payment system. The Bank of England also took on the role of lender of last resort for the banking system. Third, the consolidation of the gold standard in the 1830s and 1840s as an international monetary arrangement went hand in hand with the expansion of British banks' activities abroad.[4] That expansion created networks that added to the United Kingdom's unrivalled position, in turn bestowing international currency status on the pound.

At the beginning of the 20th century, sterling was still the dominant international currency even though the United States had overtaken the United Kingdom as the world's largest economy. However, the United Kingdom accounted for the largest share in world trade, at 12% (Krugman (2004)). Another reason why

[3] But the causality is far from mechanical. For a given current account balance, international currency status may follow from more two-way gross capital flows being denominated in the currency.

[4] There are differences in the interpretation of this process. Some authors emphasise the development of the merchant banks as the main financiers of foreign trade (Eichengreen (2010, 2011)). Others emphasise the overseas expansion of UK banks, with the establishment of branches in British colonies and foreign countries (Jones (1990)).

the dollar was still playing a negligible role in international trade and payments was that the United States maintained restrictions on the branching of its banks abroad (Eichengreen (2013)).

The First World War was a major watershed. After the war, the role of sterling started to wane and it was gradually replaced by the dollar (Krugman (1984)). Exchange restrictions eroded the international standing of the pound. This development might have also been related to the strength of the US Treasury market. Financial markets in the United States benefited from sound fiscal and monetary institutions and credible financial policies (Bordo et al (2005)).

The historical record also illustrates the role of inertia or persistence. The Second World War further weakened the pound's standing, but did not completely deprive it of its international status. While the dollar's role continued to grow over the next 50 years, sterling maintained its international status in transactions concentrated in its former sphere of imperial influence.

Events after the Second World War feature some other interesting developments. The dollar retained its hold as an international currency against the backdrop of an international monetary system of floating exchange rates after the breakdown of the Bretton Woods agreement. At the same time, the depth of US financial markets and free international capital movements played a greater role in sustaining the dollar as a dominant global currency.

The yen experience is also of interest. Japanese banks started expanding overseas to recycle the country's large current account surpluses in the 1980s. Government action to promote Tokyo as an international financial centre encouraged the use of the yen as an international currency. However, a protracted banking crisis and economic stagnation in the 1990s and 2000s led to a retreat of Japanese banks from overseas. In addition, foreigners' access to the domestic bond and currency markets remained limited, holding up the process of yen internationalisation.

The euro inherited an immediate international role from the currencies it replaced, thanks almost entirely to the Deutsche mark's credibility. Before the advent of the euro, the mark had become the second reserve currency, given Germany's sound monetary policy, deep capital market, solid growth and trade expansion. Although the banking and sovereign crises in 2008–09 and 2010–12 gave rise to uncertainty about the future of the euro, its use internationally was not much affected. One lesson from this experience is that international currency status is very much tied to a sound banking sector (as well as to sound macroeconomic policies) and its smooth cross-border operation.

5.2 The case of renminbi internationalisation

The recent momentum of renminbi internationalisation presents an interesting case from a historical perspective. First, despite being the second largest economy and trader in the world, China now is less dominant than either the United Kingdom or the United States was when sterling or the US dollar was the world's dominant currency. Second, China is currently experiencing fast growth, currency appreciation and a gradual financial liberalisation process – a scenario bearing some resemblance to the experiences of Germany and Japan in the 1980s, when the Deutsche mark and yen became second-tier reserve currencies. However, in terms of China's per capita income, financial openness and the quality of its institutions,

there is still some way to go before its currency can be compared with the mark and yen.

That said, over the past decade, several milestones have been passed by the renminbi on its path to greater internationalisation. In 2003, the offshore renminbi market started up with retail banking business in Hong Kong SAR, whereby local residents could convert the Hong Kong dollar into renminbi subject to a daily limit. In 2009, the Chinese government unveiled a pilot scheme for settlements in cross-border renminbi trade and it issued the first renminbi-denominated treasury bonds in Hong Kong SAR. In 2010, all banks and corporations in Hong Kong SAR could open renminbi accounts and conduct business in renminbi. In addition, some central banks and banks participating in renminbi trade settlements and clearance were invited to participate in the onshore interbank bond market in China. In 2011, the first renminbi-denominated corporate bond was issued in Hong Kong SAR, and restrictions were also lifted on renminbi-denominated outward and inward direct investment from and into China and offshore funds to be invested in onshore debt and stock markets under a quota. By 2012, any non-resident could open a renminbi account and trade renminbi products in Hong Kong.

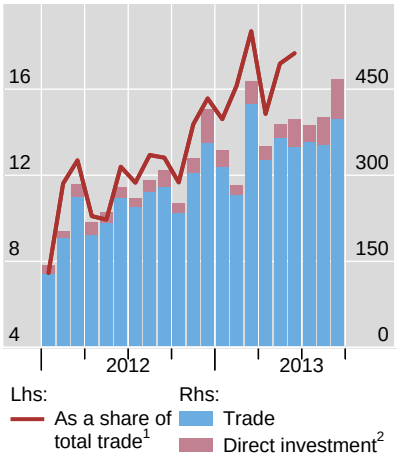
The Chinese government has been following a three-pronged approach to promoting the external uses of the renminbi by removing some of the restrictions placed on such uses. The first move was to encourage cross-border trade settlements in the renminbi, even while China's capital account was still heavily managed. The second has been selective and incremental capital account opening. The two-way cross-border renminbi flows now also take place through the direct investment channel and via managed schemes of portfolio investment and bank loans. The third step has been the creation of offshore renminbi markets where renminbi products trade between non-residents. Once exclusively offshore, the renminbi is now fully convertible, with most renminbi products being traded freely, albeit cross-border renminbi flows are still managed.

The renminbi's international status has been growing (Graph 5). Cross-border renminbi trade settlements have expanded from nil before 2009 to a current level of 15% of China's total exports and imports. Renminbi deposits rose tenfold between 2008 and 2013 in Hong Kong SAR, exceeding 10% of Hong Kong SAR's total bank deposits, although still below 1% of China's total domestic bank deposits. Renminbi-denominated bonds outstanding in Hong Kong SAR have also risen more than 10 times. There is a wider range of renminbi products now available offshore, including spot and foreign exchange derivatives, interest rate derivatives, certificates of deposit, bonds and equity-linked products. The renminbi was the ninth most traded currency in 2013, up from 29th in 2004 (Table 4). Geographically, offshore renminbi markets have spread from Hong Kong SAR to Chinese Taipei, Singapore and London. Some 20 central banks have reportedly invested in China's onshore interbank bond market, and more have gained renminbi exposure via Hong Kong SAR.

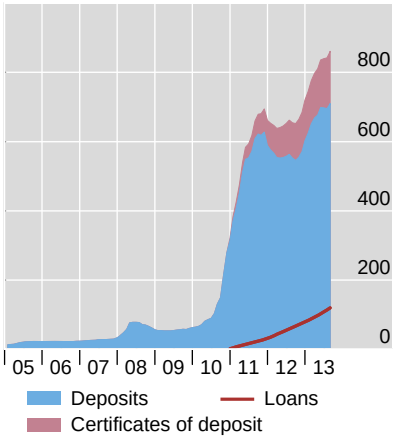
RMB internationalisation

In billions of renminbi — Graph 5

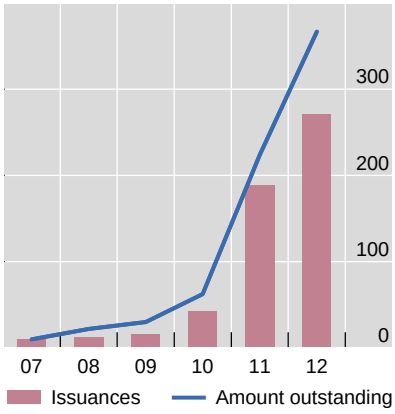
RMB settlement



Deposits and loans in Hong Kong



Hong Kong offshore renminbi debt securities[3]



[1] Total trade is defined by the sum of imports to and exports from China. [2] Direct investment includes foreign direct investment and China's overseas direct investment. [3] Debt securities include both medium and long-term notes, CDs and commercial papers.

Sources: Hong Kong Monetary Authority; CEIC.

Top 10 traded currencies

Shares of average daily currency trading — Table 4

	1998		2001		2004		2007		2010		2013	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
US dollar	86.8	1	89.9	1	88.0	1	85.6	1	84.9	1	87.0	1
Euro	na	na	37.9	2	37.4	2	37.0	2	39.1	2	33.4	2
Japanese yen	21.7	2	23.5	3	20.8	3	17.2	3	19.0	3	23.0	3
Pound sterling	11.0	3	13.0	4	16.5	4	14.9	4	12.9	4	11.8	4
Australian dollar	3.0	6	4.3	7	6.0	6	6.6	6	7.6	5	8.6	5
Swiss franc	7.1	4	6.0	5	6.0	5	6.8	5	6.3	6	5.2	6
Canadian dollar	3.5	5	4.5	6	4.2	7	4.3	7	5.3	7	4.6	7
Mexican peso	0.5	9	0.8	14	1.1	12	1.3	12	1.3	14	2.5	8
Chinese renminbi	0.0	30	0.0	35	0.1	29	0.5	20	0.9	17	2.2	9
New Zealand dollar	0.2	17	0.6	16	1.1	13	1.9	11	1.6	10	2.0	10
Total[1]	200		200		200		200		200		200	

[1] Because two currencies are involved in each transaction, the percentage shares of individual currencies sum to 200% instead of 100%.

Sources: Mauldin Economics; Triennial Central Bank Survey, September 2013.

There are at least three reasons why Chinese policymakers should encourage the internationalisation of the renminbi. First, the wider external use of the renminbi would allow China to better share currency risk with the rest of the world, mitigating the country's huge long-dollar and short-CNY position (Cheung et al (2011)).

Second, a more internationalised renminbi may spur further domestic financial liberalisation, a parallel being China's preparation for WTO accession in 2001, which helped remove many barriers to domestic economic liberalisation. And third, China aims to have the renminbi become one of the important reserve currencies, such as those that make up the SDR, and thus join the group of countries at the core of the international monetary system.

It remains to be seen how quickly the renminbi can become a meaningful reserve currency. There are two pivotal factors. First, while China is the second largest and fastest-growing economy, the top exporter and the third largest international investor globally, it is still faced with the very challenging task of achieving a deep and liquid domestic financial market and open capital account (McCauley (2011)). And second, the prospect of a greater global role for the Chinese currency also in part depends on the evolving relative fundamentals of the incumbent global reserve currencies.

Conclusion

The use of EM currencies in international financial markets is very limited. But that use is growing as global investors venture to diversify their portfolios. The demand for EM currencies by non-residents is related to the increasing economic, trade and market weight of the EMEs. The development of domestic financial markets in EMEs, including the greater participation in them of global institutional investors, is crucial for an EM currency to achieve international status. Exchange and banking networks and liquidity considerations can create externalities that promote the external use of some EM currencies. The historical record shows that improvements in fundamentals and network effects are both powerful drivers of an international currency. Nevertheless, there are both potential benefits and costs arising from the international status of an EM currency. Governments should see that the latter do not outweigh the former for their economies.

References

Bordo, M, C Meissner, and A Redish (2005): "How original sin was overcome: the evolution of external debt denominated in domestic currencies in the United States and the British Dominions, 1800–2000", in B Eichengreen and H Ricardo (eds), *Other people's money*, University of Chicago Press, pp 122–53.

Cheung, Y, G Ma and R McCauley (2011): "Renminbising China's foreign assets", *Pacific Economic Review*, vol 16, no 1, pp 1–17.

Cohen, B and T Benney (2012): "What does the international currency system really look like?", University of California, Santa Barbara, mimeo.

Eichengreen, B (2010): "The renminbi as an international currency", mimeo.

——— (2011): *Exorbitant privilege*, Oxford University Press.

International Monetary Fund (1994): *Annual Report of the Executive Board for the Financial Year Ended April 30, 1994*.

——— (1998): *Annual Report of the Executive Board for the Financial Year Ended April 30, 1994*.

Ito, H and M Chinn (2014): "The rise of the 'redback' and China's capital account liberalization: an empirical analysis on the determinants of invoicing currencies", paper prepared for the ADBI conference *Currency Internationalisation: Lessons and Prospects for the RMB*.

Jones, G (1990): "Competitive advantages in British multinational banking since the 1890s", in G Jones (ed), *Banks as multinationals*, Routledge.

Kennen, P (2012): "Currency internationalisation: an overview", in *Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific*; *BIS Papers*, no 61, January, pp 1–10.

Krugman, P (1984): "The international role of the dollar: theory and prospect", in J Bilson and R Marston (eds), *Exchange rate theory and practice*, University of Chicago Press, pp 261–78.

McCauley, R (2011): "Renminbi internationalisation and China's financial development", *BIS Quarterly Review*, December, pp 41–56.

Moore, J, S Nam, M Suh and A Tepper (2013): "Estimating the impacts of US LSAPs on emerging market economies' local currency bond markets", Federal Reserve Bank of New York, *Staff Reports,* no 595.

Moss, F (2012): "The euro: internationalised at birth", in *Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific*; *BIS Papers*, no 61, January, pp 57–74.

Rime, D and A Schrimpf (2013): "The anatomy of the global FX market through the lens of the 2013 Triennial Survey", *BIS Quarterly Review*, December, pp 27–43.

Roger, S (1993): "The management of foreign exchange reserves", *BIS Economic Papers*, no 38.