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Expanding Beyond Borders: The Yen and the Yuan

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Abstract

As all eyes are on the strategy and policy measures of the People's Republic of China (PRC) to push the international use of the yuan, this paper turns to the internationalization of the Japanese yen and compares it with what the PRC is doing. There are some fundamental differences in the regional context and in the pattern of regional integration, and these distinguish the PRC's current strategy from the Japanese experience in the 1980s. The yen's development as an international currency, and the comparison with the PRC's strategy, highlight the importance of regional integration as a way to overcome network externalities and market inertia. Using an analytical framework that assesses both the range of different roles (the *scope*) and geographical scale (the *domain*) of a currency in the global market, the paper suggests that economic fundamentals alone, albeit essential, are not sufficient to warrant a fully fledged scope and global domain of the currency. The paper concludes by suggesting that in the next decade the PRC yuan will become Asia's leading currency due to the PRC's deep economic integration in the region, and that the Japanese yen's function as an international asset and store of value can be further enhanced if Tokyo's competitiveness as a leading international financial center is improved.

JEL Classification: E42, E44, F33

Contents

1. INTRODUCTION

Japan's allegedly failed attempt to internationalize its currency—i.e., to turn it into a currency that non-residents, both from the private sector and the public sector, are willing to use to invoice and settle international transactions and to hold in their portfolios—has come to epitomize not only the country's long economic malaise, but also the authorities' fundamental reticence, in the boom years, to open up to the rest of the world, fearing the impact of a strong yen on a trade-dependent economy (Henning 1994; Grimes 2003). Scholars from the People's Republic of China (PRC) (Wang 2012; Xia and Chen 2010; Yin 2012; Wei 2006) have been assessing Japan's experience to see if it holds lessons for the PRC's own currency internationalization, especially in terms of possible mistakes to be avoided. The Plaza Accord of 1985, in particular, is seen as the turning point for Japan, when American pressure to appreciate the exchange rate ushered in inappropriate exchange rate and monetary policies, and a long period of stagnation. The sharp appreciation of the yen after Plaza is seen as a compromise that was forced on Japan. It damaged the country's export-oriented economy[1] and dragged it into a deep recession and resulted in the "lost decade"[2] (Yu 2010; Wei 2006) while it benefited the United States (US) (Yu and Wei 2003; Zhao 2008).

Is it appropriate to compare Japan's attempt to turn the yen into an international currency with what the PRC is doing with its own currency in order to draw lessons for policymakers? And by which parameters can the internationalization of the yen be assessed?

In this paper, I argue that the success of currency internationalization tends to be assessed on how that currency competes with the dollar and on the likelihood that it will replace it. This measure of success was appropriate when the world economy was dominated by the US and the international monetary system by the US dollar. However, as the world economy is becoming multi-polar and the international monetary system no longer revolves around one dominant currency (Subacchi and Drifill 2010; Eichengreen 2012), international currencies can no longer be depicted in hierarchical and competitive terms. Even if there is a zero-sum game aspect as international currencies expand and decline in relative terms, the dynamics of the international monetary system are not just determined by competition with the dominant currency. This way of thinking was clearly wrong when, at the time of its creation in the mid-1990s, the euro was seen as being in competition with the dollar and there was a debate about whether the euro could eventually overtake the dollar as the dominant currency (Bergsten 1997; McCauley 1997; Mundell 1998; Cohen 2003; Chinn and Frankel 2008; Papaioannou and Portes 2008; Posen 2008).

This approach no longer reflects the reality of the post-Cold War world. Economic and financial integration, in particular at the regional level, has been the dominant trend of the last twenty years. Regional integration and the rise of regional blocs mean it is unlikely any currency will enjoy the dominance the dollar enjoyed in the post-war world economy. Europe's single market and the creation of the euro have deepened regional integration, and the euro has not developed in direct competition with the dollar.

[1] "The yen appreciated, very erratically, all the way from ¥360 to the dollar in 1971 to about ¥116 to the dollar in 2003. Massive appreciations failed to eliminate Japanese trade surpluses but simply reflected higher Japanese saving propensities" (McKinnon 2003).

[2] Wei Jianing, senior fellow at the Development Research Centre (DRC) of the State Council has suggested that rapid appreciation of the yen directly resulted in sharp contraction of Japan's exports.

Network externalities and inertia mean that the dollar continues to enjoy global use and acceptance, even if its relative weight is likely to be reduced, and remains the only currency to act as a vehicle for transactions between countries others than the US.

A more accurate framework to define international currencies is needed. Such a framework should take into account the regional as well as the global context. The regional context, more so than the global context, is critical to the process of internationalizing a currency and to push its use beyond the borders of the issuing country. Such a framework should also take into account the different roles that international currencies play in the international monetary system. Many currencies, such as the Japanese yen, the United Kingdom (UK) pound sterling, and the Swiss franc, fit the definition of an international currency, but they have different roles in the international monetary system, and these roles define each currency's scope. The dollar is the key global currency, as its use in denominating international transactions, settling international payments, and providing a wide range of assets is by far larger than the role played by any other international currency. The euro is also an international currency even if its scope and geographic domain are more limited compared with the dollar.

In this paper, I look at the Japanese yen as an example of how size and low, stable inflation rates are insufficient criteria to assess whether an international currency is able to significantly expand its scope. I argue that the lack of a regional context did not help the yen. In the 1980s, at the time of the first phase of yen internationalization, Japan was the only advanced economy in Asia, hence most of its trade and financial relations were with other developed countries, notably the US.[3] The considerable development gap between Japan and its neighboring countries meant limited regional integration and limited options for expanding the use of the yen within the region. The yen, therefore, ended up developing as an international currency in a broader context. Moreover, Japan's trade partners were locked into a de facto dollar bloc. Network externalities and inertia, and the consequent transition costs, acted as disincentives for firms and other market participants to switch to using the yen. The Japanese authorities' reticence to push the yen and their concerns about the exchange rate did not help, but were not fatal either. Indeed, international use and acceptability of the yen increased on the back of the size of the Japanese economy and macroeconomic stability. However, coordination problems and the lack of a regional context constrained the process of internationalization and hence the expansion of the yen's scope.

As the regional context for today's PRC is fundamentally different from Japan's regional context in the 1980s, it is difficult to draw significant comparisons. Thus, there are not many lessons that the PRC authorities might draw from Japan's experience, except that the size of the economy, the share of global trade, macroeconomic stability, an open, deep and diversified financial sector, credible institutions, and the rule of law matter (Mundell 1983; Swoboda 1990; Tavlas and Ozeki 1992). The yuan is still work in progress. It is still too early to assess whether the increase in the cross-border use of the PRC currency since 2009 will turn it into the leading regional currency in Asia. But the strategy of pushing the use of the yuan in the region where the PRC is highly integrated is right as it puts the whole process of currency internationalization on a path of least resistance. Developing the yuan into Asia's leading currency, with already about 50%–60% of the regional trade invoiced and settled in yuan and a significant share of assets denominated in yuan—like the euro for Europe—looks like a plausible scenario.

[3] In the 1980s, over 61% of Japan's trade was with advanced economies. Trade with the US was almost 30% of Japan's total trade.

How should the Japanese authorities prepare for such a scenario? I argue that of the three functions of money—unit of account, means of exchange, and store of value—the yen is at its best as a store of value. Like the UK pound sterling and the Swiss franc, the yen is a currency with limited scope and limited global domain, but one that is related to a key international financial center, Tokyo, and one of the world's biggest debt markets. Within the international monetary system, the yen is in a complementary rather than a competitive position with the dollar, and in Asia it might eventually be in a complementary position with the yuan. In a similar fashion, the UK pound and the Swiss franc are neither in competition with the dollar, nor, within Europe, with the euro. Therefore, the Japanese authorities should support the yen as an asset that international investors and central banks want to hold to diversify their portfolios while at the same time developing Tokyo as one of the leading international financial centers.

The paper is organized as follows. Section 2 focuses on the definition of international currencies and draws a distinction between currencies with a regional domain and currencies with a more global one. The comparison between the US, the eurozone, and Japan, and the use of their currencies, helps to shape the definition of a leading global currency and a leading regional currency. While the dollar emerges as the leading global currency and the euro as the leading regional currency, the yen appears to be an international currency that has a defined role as store of value, with a global rather than regional domain. Part 3 explores the PRC's yuan strategy and looks back on the two phases of yen internationalization, in the 1980s and from the late 1990s to the early 2000s. By comparing today's internationalization of the yuan with the trajectory followed by the yen in the 1980s, I argue that today's PRC is more integrated in Asia through trade and investments than Japan in the 1980s, and therefore the path towards expanding its currency's cross-border use should be smoother than it was for the yen. Part 4 concludes by looking at the possible future scenarios for the yuan and the yen, and discusses how Japan's policymakers can support the yen in its function of store of value for international investors and central banks.

2. GLOBAL CURRENCIES AND REGIONAL CURRENCIES

2.1 Defining International Currencies

The "classic" definition of an international currency as formulated by Cohen (1971), Kenen (1983), and Chinn and Frankel (2005), extends the three roles of money—unit of account, means of exchange, store of value—beyond the borders of the country that issues that currency. An international currency is therefore a currency that governments hold in their official reserves, use as a vehicle for foreign exchange interventions, and use as a peg to anchor the domestic currency. Similarly, an international currency is held by foreign investors and firms as an investment asset in their portfolios, and is used for invoicing and settling foreign trade transactions, discharging international financial obligations, and denominating financial instruments in international capital markets.

Empirical evidence and the history of currencies show that a currency can fulfill these functions in different degrees. Benjamin Cohen (2013) expands the definition to include the scope and the domain of an international currency. The scope is defined by the number of roles that the international currency plays. Its domain is defined by its geographic range. "At any given time, only a few national currencies tend to play any international role at all. Even fewer play all six roles, and even fewer still are used on a truly global scale" (Cohen 2013).

The main international currencies—the US dollar, the euro, the Japanese yen, the UK pound sterling, and the Swiss franc—fulfill the six functions of international money in different degrees and in different, and more or less broad, geographic domains. By far, the dollar is the leading international currency in terms of both scope—it fulfills all six functions—and geographic range—it is used for trade and financial transactions all over the world. Trade both to and from the US is invoiced and denominated in dollars. The dollar is the vehicle currency—a currency that is extensively used in transactions that do not involve direct transactions with firms or individuals resident in the US—to invoice and settle transactions between, for example, a company from the Republic of Korea and one from Indonesia. No other currency is so extensively used. Given the dollar's scope and geographic domain, throughout the paper I will refer to it as the leading *global* currency.

The dollar dominates foreign exchange transactions with a 90% share of total transactions.[4] 60% of total cross-border bank deposits are held in dollars and approximately 57% of total bank loans are denominated in dollars. It is also extensively used as the anchor in the exchange rate arrangements for many currencies, especially those of developing countries.[5] Despite a decline after the global financial crisis in 2008, the dollar has retained its position as the dominant exchange rate anchor with a 23% share of the overall exchange rate arrangements. In 2012, 43 out of 187 International Monetary Fund (IMF) member countries pegged their currencies to the dollar.[6] Of the 25 countries with "hard pegged" currencies, 17 use the dollar as the anchor.[7]

Above all, the dollar remains the preferred store of value. Dollar bond markets are supported by the issuance of dollar-denominated debt, which currently accounts for up to 40% of total bond holdings, and by a large sovereign bond market (approximately $9,500 billion). The dollar is also the prime currency of issuance for corporate bonds in Asia and the Pacific, Latin America, and the Middle East (WTO 2012). In addition, almost 70% of banknotes held overseas are dollars. About three-quarters of hundred-dollar notes and half of fifty-dollar notes are held abroad.

Central banks around the world hold about two-thirds of the allocated foreign exchange reserves in dollars, for a total value of almost $4,000 billion.[8] Asian countries hold the largest pool of foreign exchange reserves, which are approximately 66% of total allocated reserves, or just below $7,000 billion (Figure 1). Europe holds about 12% of total reserves while the Americas hold about 8%. Assuming that Asian countries hold at least 70% of their reserves in dollars—and about 18% in euros and 12% in other

[4] Figures refer to the end of 2012 and are from the International Monetary Fund (IMF), CLS, and European Central Bank (ECB). Currency shares total 200% because each transaction involves two currencies.

[5] For instance, the dollar's usage as an exchange rate anchor decreased in the late-1980s, the mid-1990s, the late 1990s, and most recently in 2008 and 2009 (ECB 2011).

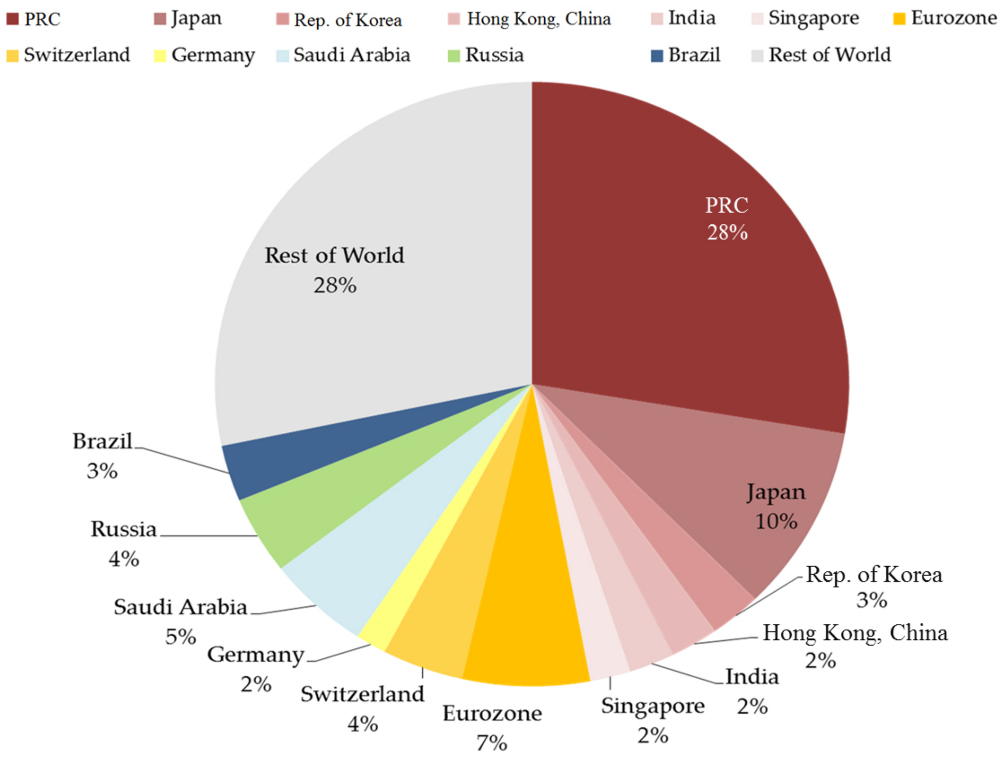
[6] IMF (2013) classifies exchange rate arrangements into four main categories: hard pegs, soft pegs, floating regimes, and a residual category. Currencies classified as US dollar pegging are either hard pegs (which includes exchange arrangements with no separate legal tender) or soft pegs (such as conventional pegged arrangements, pegged exchange rates within horizontal bands, crawling pegs, stabilized arrangements, and crawl-like arrangements).

[7] IMF AREAER report (2013).

[8] In December 2012. Source: IMF, Currency Composition of Official Foreign Exchange Reserves (COFER).

currencies including the yen—it is evident that an enormous amount of dollars has been amassed in the region.

Figure 1: Global Foreign Exchange Reserves



Sources: IMF, US Central Intelligence Agency.

The role of the dollar as the leading global currency reflects the legacy of the Bretton Woods arrangements as well as the hegemonic role played by the US in the post-war world. However, the relative weight of the dollar is likely to decrease, following the trend of the US economy over the last two decades. Like other advanced economies, the US has been losing relative weight in favor of emerging markets economies. In 1990, for example, the US economy's share of the world economy was about one quarter; in 2012 it was approximately 19%. In 1990, the US share of the world's total trade was about 13%; in 2012 it was just below 10%. In 1990, the PRC's share of the world economy was almost 4% and its share of world trade approximately 2%. In 2012, the PRC accounted for almost 15% of the world economy and its share of total exports was almost 11%. Even so, network externalities and inertia, coupled with the fact that the US remains the largest economy in the world, has a credible central bank and a good legal system, will support the dollar as the leading global currency.

2.2 Adapting the Definition to the Changing Dynamics of the World Economy

Over the last two decades, the world economy has expanded and countries, such as the PRC, that for long had been little integrated, are now key components. Regional blocs such as the European Union (EU) have also expanded their relative size and share in global trade and finance. Has this changed the scope of their currencies? And how do currencies reflect the changing dynamics of the world economy and the shift in the relative weight of advanced economies in favor of the emerging market economies?

Looking at the international currencies, in particular the dollar, the euro, and the yen, the classic definition does not capture the complexity of the current international monetary system and the interdependencies among the underlying economies. It is worth noting that the US, the eurozone, Japan, and the UK are systemically important countries (SICs).[9] These are also the countries that issue the key international currencies. The only SIC that does not issue an international currency is the PRC.

Interdependencies and the scope and geographic domain of each currency suggest expanding the definition of international currencies to include the regional dimension. I therefore define a regional currency as a currency that is extensively used to invoice and settle trade among countries within a specific geographic domain, such as a region, and is extensively used to denominate assets by countries within the region.[10] This definition does not imply currency substitution, i.e., the regional currency does not circulate in countries within the region, other than the issuing country. In this sense the euro is an exception—it is not only the leading regional currency in Europe, but it is also the currency that circulates in the countries that have adhered to Europe's economic and monetary union.

Compared to the dollar, the euro does not have the same scope and geographical domain even if the size of the eurozone's gross domestic product (GDP) and that of the government bond market (approximately $8,600 billion) are similar to those of the US. It is extensively used in Europe. Indeed, about 60% of exports to the eurozone and about 50% of imports from the eurozone are invoiced and settled in euros. About 60% of exports of goods and about 54% of imports of non-euro EU member states are invoiced and settled in euros. Within Europe, the use of the euro to invoice and settle exports and imports depends on each country's pattern of trade. For example, Slovakia, a member of both the eurozone and the EU, uses the euro to invoice and settle 90% of its exports and 70% of its imports. But Greece, another member of both the eurozone and the EU, uses the euro for only 30% of its exports and 23% of its imports. Sweden, an EU member state but not part of the eurozone, uses the euro to settle 23% of its exports and 17% of its imports (ECB 2013). The euro also denominates bond issuances in non-euro EU member states such as Scandinavia, the UK, and central Europe (Goldberg 2010).

The euro's share of allocated reserves (about 24%), of banknotes held overseas (approximately 14%), and of cross-border bank deposits and loans (both around 20%), suggests a more limited function as store of value, and it also reflects the currency's regional dimension. Assuming that the portion of allocated reserves held in central banks in the eurozone reflects the latter's share of the world's GDP, then approximately 14% of euros are held in reserves in central banks in the eurozone. This leaves approximately 10% of total reserves in euros allocated outside the eurozone. The share of dollars held in reserves outside the US is 40%.

The Japanese yen has the features of a currency with limited scope and limited geographic domain; it is neither a leading global currency nor a leading regional currency. Japan's economy accounts for 5% of total world GDP, is equivalent to about 62% of the GDP of the US, 64% of that of the eurozone, and approximately 73% of the PRC's GDP. The use of the yen to invoice and settle trade is similar to that of the euro, and this suggests a regional dimension for the yen. Indeed, approximately half of

[9] Or the "five systemic economies" as in the latest IMF spillover impact report (2012).

[10] Tavlas and Ozeki (1991) define as a reference currency the currency that is used within a region.

Japanese exports to Asia are invoiced and settled in yen.[11] As for the use of the currency in international banking and finance, the yen has a considerably smaller role compared to the dollar and the euro, especially in foreign exchange transactions. Yen cross-border bank deposits are 1.8% and yen cross-border bank loans are 2.8%. But the yen, together with the UK pound sterling, is the third currency in terms of allocated foreign exchange reserves, with 4% of the total. Also, the size of the government bond market, at $9,650 billion, compares well with those of the US and the eurozone. This suggests the yen has a limited—compared to the dollar and the euro—but relevant role as store of value for both the private sector and the central banks.

The PRC's yuan is still "work in progress" and does not reflect the issuing country's economic relevance as the world's second largest economy. In 2011, the PRC's contribution to world trade was 12%, whereas the yuan's share in world payments was a mere 0.2% (SWIFT 2011). By the end of May 2013, this had increased to 0.7% (SWIFT 2013a). The use of the yuan as a world payment currency trails behind the dollar, the euro, and the yen, and even the currencies of smaller economies such as Thailand. This is due to the limited development and constrained openness of the PRC's financial sector.

2.3 The Issues with Currency Internationalization

It is the limited role of the PRC's currency in the international monetary system, especially in relation to the size of the country's economy and its share of global trade, and its overexposure to the dollar that has prompted the PRC authorities to consider whether well-designed policies could expand the international use and acceptability of the yuan and, at the same time, overcome the existing restrictions on the capital account. As a result, the internationalization of the yuan—or the process of developing and expanding its cross-border use to invoice and settle international trade transactions, and to denominate financial assets—has become an important element of the PRC's monetary and financial development.[12] This is hardly surprising. Currency internationalization is an issue that seems to appear on the policy agenda at the time of a country's rapid economic expansion. This was the case with Germany and Japan in the 1970s and 1980s, and it is the case with the PRC now.

Currency internationalization is driven by economic fundamentals such as the size of the issuing country's economy and its share of world trade. As a country becomes more integrated regionally or internationally and the size of its economy ranks it among the world's largest economies, the argument for using its currency in trade and finance becomes more compelling. Using a country's currency in cross-border transactions means reducing transaction costs for enterprises and individuals, and thus it reduces the need for hedging against exchange rate risks they face when engaging in overseas trade and financial transactions. In addition, the country issuing the currency can benefit from seigniorage because the non-interest bearing claims are denominated in its own currency.

[11] Approximately 38% of total Japanese exports and 22% of imports are invoiced using the yen. In the last few years the share of dollar invoicing exceeded that of yen invoicing (Ito et al. 2010). Also, about 40% of Japanese exports to the rest of the world are invoiced and/or settled in yen, against 10% of Japanese exports to the US.

[12] The PRC authorities have not published any official documents to present the road map for the PRC's yuan internationalization. However, the 12th Five-Year-Plan for the Development and Reform of the Financial Industry (CBRC 2012) and various press releases from the People's Bank of China (PBoC) highlight many policies for the PRC's yuan strategy.

The choice of international currencies responds predominantly to market forces, but there may be some inertia owing to network externalities and to the cost of changing currencies. Well-designed policies, however, should encourage market participants to use a country's currency by providing infrastructure such as the clearing system, removing barriers, implementing the rule of law, and overcoming inertia.

Given network externalities, the economic activity generated by the issuing country needs to be large enough to create traction, at least at the beginning of the process of internationalization. All the major international currencies—the US dollar, the euro, the Japanese yen, the UK pound sterling, and the Swiss franc—are issued by countries with economies that are among the world's largest (Table 1).[13]

Table 1 shows a considerable gap between the size of the economies of the US, the eurozone, and the PRC, all with a share of world GDP between 15% and 19%, and the Japanese economy, with a share of world GDP of approximately 6%. These countries—or regional blocs like the EU—account for a similar and significant share of world trade.[14] Japan is the world's fourth largest economy and yet its share of world trade is also significantly lower than that of the other three economies. In terms of the size of trade, Japan is closer to the UK. The currencies of these two countries also have a similar share of allocated foreign exchange reserves and a similar turnover in foreign exchange markets.

[13] The economy of Switzerland is considerably smaller than those of the US, the EU, Japan, the PRC, and the UK. However, it is among the world's largest 20 economies.

[14] The EU share of world exports includes both intra-EU trade and extra-EU trade. This is why the percentage is larger than those of the US and the PRC. Given that over three-quarters of EU trade is intra-EU, it is plausible to assume a 10% share of world trade.

Table 1: Main Economies and Main Currencies

Economic Size (December 2012)	US	EU	Japan	PRC	UK	Switzerland
GDP, $ trillion	15.7	16.6	6.0	8.2	2.3	0.6
Share of world GDP[a]	18.9%	19.4%	5.6%	14.9%	2.8%	0.4%
Share of world trade[b]	10.7%	31.3%	4.6%	10.7%	3.0%	1.1%

Use of Currencies (December 2012)	US Dollar	Euro	Yen	Yuan	Pound Sterling	Swiss Franc
International bond offering[c]	71.2%	69.2%	79.0%	26.7%	n.a.	n.a.
Supply of debt securities[d]	38.8%	37.7%	3.4%	0%	n.a.	n.a.
Total foreign exchange holdings, (allocated reserves), $ billion	3,725.5	1,471.5	245.0	n.a.	243.6	17.2
Share of global FX reserves (%)	61.2%	24.2%	4.0%	n.a.	4.0%	1.5%
Turnover in global FX market (%)[e]	90.0%	40.0%	19.5%	0.9%[(6)]	13.1%	7.8%

US = United States, EU = European Union, PRC = People's Republic of China, UK = United Kingdom, GDP = gross domestic product, FX = foreign exchange, n.a. = not available.
[a] IMF data of GDP based on purchasing power parity (PPP) with adjustment of current price (PPP dollar).
[b] EU trade including intra-EU trade.
[c] European Central Bank (ECB) measure of outstanding international bonds and notes by financial institutions for US dollar, euro and Japanese yen.
[d] ECB "broad" measure of shares of major currencies in the supply of debt securities.
[e] Currency shares total 200% in each column because each transaction involves two currencies.
[f] Data for the share of the yuan in global foreign exchange transactions is based on the Bank for International Settlement's Triennial Central Bank report, published in 2010.
Sources: IMF, Currency Composition of Official Foreign Exchange Reserves (COFER); IMF, World Economic Outlook (WEO); World Trade Organization, European Central Bank, Bank for International Settlements.

Confidence in the value of a currency as measured by the long-term trend of its exchange rate, the variability of the exchange rate, and the country's long-term inflation rate are all elements that are essential for developing and expanding the international use of that currency. A deep and broad financial sector is also critical. International investors need to have access to a wide range of financial instruments denominated in that currency and tradable in different markets. This requires the existence of well-developed secondary markets, a wide variety of financial instruments on offer, availability of liquidity, and limited constraints on capital movement. Finally, a robust institutional framework and confidence in the political stability of the issuing country are essential for non-residents to wish to hold that country's currency.

3. CURRENCIES IN ASIA: THE YEN AND THE YUAN

3.1 What the PRC is Doing

The PRC has been promoting the internationalization of the yuan since 2009, in response to its over-reliance on the dollar, and the potential losses on dollar holdings in its foreign exchange reserves. Internationalizing the yuan also addresses the PRC's political ambition of developing a currency that matches the country's growing economic outreach. The internationalization of the yuan, therefore, is a policy-driven process where the authorities are deemed to provide the conditions and the incentives to non-resident market participants to use and hold yuan. While expanding the international use of the yuan, the PRC authorities plan to move forward the reform of the financial sector and to develop an international financial center in Shanghai by 2020. However, in the PRC's plans the internationalization of the yuan comes before the full liberalization of the PRC's capital account.

To overcome this restriction, in addition to encouraging the use of the yuan in cross-border trade, the PRC authorities have been supporting the development of the offshore market, while a series of policy initiatives have improved liquidity, created infrastructure and new products, and developed the yuan-denominated debt market. Since 2010, the monetary authorities of both mainland PRC and Hong Kong, China have been supporting the development of the offshore market in Hong Kong, China. As a result, the use of the currency to settle cross-border trade has become more extensive and non-residents are now willing to hold yuan and yuan-denominated assets in their portfolios.

Even so, as long as the yuan remains a non-convertible currency, its international use and acceptance will be limited and constrained. The liberalization of the capital account is essential to make the yuan available to non-residents. Policy measures that facilitate the yuan strategy, such as the R-QFII and RMB ODI[15] schemes, have lifted several barriers. The PRC government needs more time to build a sound institutional infrastructure and to gain market credibility. Fears of exposing its immature financial and banking sector to external shocks and volatility are widespread among policymakers and scholars. These concerns have built great resistance against further financial reforms, hindering attempts by the People's Bank of China (PBoC) to accelerate the reform progress. As a result, the PRC authorities are following a cautious and gradual approach to opening the country's bond and stock markets to international investors, and remain reluctant to let the exchange rate fully float.

Since 2009, mainland PRC has been developing a two-track strategy to internationalize the currency (Subacchi 2010). This strategy aims to establish the yuan both as a currency for settling cross-border trade and as an asset that non-residents are willing to hold. The Cross-Border RMB Trade Settlement Scheme provides a platform that allows all types of trading companies around the world to use the yuan to settle trade without any geographical restriction. Companies now have the option to use the yuan to invoice and settle trade, and so to reduce transaction costs. For those that receive payments in yuan but still wish to convert the payment into another currency, the conversion can now be made in the offshore market in Hong Kong, China. Here CNH (the abbreviation used for its offshore yuan) can be converted into any type of foreign currency at free-floating market rates. In other words, the cross-border yuan scheme coupled with the yuan market in Hong Kong, China expands the de facto convertibility of the yuan beyond current account transactions.

Since its inception as a pilot program in June 2009, the cross-border yuan trade settlement scheme has increased the share of the PRC's cross-border trade that is settled in yuan. Approximately 12% of the PRC's trade, worth more than CNY3 trillion, is now settled in yuan, against less than 0.5% in 2009. Given the PRC's trading capacity and its wide network, especially within the region, it is expected that more trade will be settled in yuan as more trade enterprises and offshore financial intermediaries use the yuan settlement system. According to the IMF, the PRC's imports and exports will continue to grow at an annual rate of 10% in the next five

[15] The R-QFII scheme is the Renminbi-Qualified Foreign Institutional Investor program, which allows foreign investors to invest in the mainland's capital markets with offshore yuan funds. RMB ODI scheme refers to the Renminbi Overseas Direct Investment program, enabling enterprises in mainland PRC to invest onshore yuan funds abroad.

years. The PRC's total yuan trade settlement has therefore the potential to reach CNY7.7 trillion by 2017, corresponding to 18% of the value of the PRC's total trade (Subacchi and Huang 2013).

This should support the expansion of yuan offshore deposits. Under the trade settlement scheme, yuan funds are transferred to the offshore markets and become offshore deposits. Yuan deposits build up a stable stock of liquidity that stays in the offshore market. From June 2010 to March 2013, Hong Kong, China's yuan deposits increased from less than CNY100 billion to over CNY668 billion. Offshore yuan businesses such as deposit-taking, currency exchange, finance, and remittances are made possible through the participation of banks from both the onshore and offshore markets. As the yuan offshore market is still limited in both size and scale, the volume of yuan deposits provides a proxy to measure the level of offshore yuan businesses. At present, liquidity conditions in the yuan offshore market are still not adequate and investment options for offshore investors are restricted. The limited convertibility of the yuan constrains its international use as store of value and this has an impact on the share of trade that can be settled in yuan.[16] The PRC's yuan strategy is an interim solution to promote the international use of the currency, but one with limited room for significant expansion because of the limited openness of the capital account.

3.2 The Two Phases of the Internationalization of the Yen

What the PRC is doing—and is expected to do—with its currency is not entirely new. A similar trajectory was attempted by the Japanese authorities regarding the yen, even if through different modalities and perhaps with different objectives. What is new, however, is that the internationalization of the yuan is policy-driven with a specific focus on expanding the use of the yuan in the region. The size and scale of the yuan offshore market, which remains quite limited despite being the most important aspect of the process of internationalizing the yuan, is another indicator of the yuan's regional dimension. Indeed, the yuan has been promoted and adopted on a regional level in the Asia-Pacific, and there is no similar trend in other emerging countries like Brazil (SWIFT 2012).

The process of internationalizing the yen followed a different pattern, as policy support was more limited and the domain was more international than regional. It also developed in two phases. The first one, in the 1980s, was driven by economic fundamentals and market participants. The second phase, in the late 1990s and early 2000s, was driven by policy initiatives. There was a disconnect, and a fundamental contradiction, between what markets wanted and the policy objectives, and this misalignment was underscored by the economic fundamentals. By the time the policymakers sprang into action, Japan had already entered its long economic malaise with, therefore, little traction for the yen from market participants.

From the mid-1970s and throughout the 1980s, the time of Japan's strong economic expansion, the use of the yen in foreign exchange reserves and to invoice and settle trade had increased significantly. By 1990, about 40% of Japanese exports and 20% of imports were invoiced in yen. Central banks from major economies began to hold yen in their reserves thanks to the Bank of Japan's efforts to establish a credible currency that was strengthening in value (Frankel 2011). The yen share of allocated reserves grew throughout the 1980s and peaked at 8% in 1990. This increase in the use of the yen was mainly supported by the growth of the Japanese economy, which in those

[16] There is an apparent discrepancy between using the yuan to invoice and settle trade. Available evidence suggests that trade—imports, in particular—is invoiced in dollars and settled in yuan (Yu 2012).

years was expanding at an average annual rate of 4.2%, and the size of Japan's exports sector. The yen had also considerably appreciated, from ¥360 to the dollar in 1971 to about ¥133 to the dollar in 1990.[17] Since then, the share of Japan's trade that is invoiced in yen has remained almost unchanged. A combination of inertia and deterioration in the economic fundamentals constrained the further expansion in the international use of the Japanese currency.[18]

This suggests that expanding the use of a currency as a share of the issuing country's total trade tends to proceed at a relatively fast pace until it reaches about 30%–40% of the issuing country's trade. To move above that threshold and add further increments, even marginal ones, becomes more difficult. Inertia and network externalities, i.e., the dollar bloc, seem to have worked in favor of the dollar. The invoicing pattern also matters. For instance, Japanese exports to the US tend to be invoiced in dollars even after Japanese firms shifted their production bases to Asian countries. To avoid currency risk, these firms invoice their exports to the production subsidiaries in Asia in dollars (Ito et al. 2010).

Would policies that actively drive the international use of a currency make a difference? The available evidence is not particularly robust, partly because only the PRC has an explicit policy of currency internationalization that is in sync with the country's economic fundamentals. But it is too early to draw any firm conclusion. Japan's authorities, at least in the first phase of yen internationalization, when economic fundamentals could have created traction for a policy-driven process of currency internationalization, chose to adopt a stance of "benign neglect." Until the late 1990s, no explicit effort had been made toward currency internationalization.

It has been argued (Frankel 1984; Randall 1994; Kwan 2012) that in the 1980s the Japanese authorities avoided any active policy intervention and did not consider the internationalization of the yen as a priority because they were too concerned about losing control over money supply and about the risk of increasing the variability of the exchange rate (Frankel 1984). In particular, Japan's Ministry of Finance (MOF) "resisted domestic financial liberalization" and was "reluctant to facilitate a greater international role for the yen" (Henning 1994: 320). It was feared that the greater international use of the yen could trigger changes in portfolio preferences that could negatively affect the domestic economy and that large cross-border capital flows could cause financial instability. It is also worth noting that big Japanese companies did not expect significant benefits from the internationalization of the yen, mainly because they had the capacity to absorb and manage exchange rate risks, unlike smaller companies. Hence, they did not put pressure on the authorities to take more decisive policy action.

In the 1970s and 1980s, Japan went through a series of ad hoc measures to liberalize its financial sector, open the capital account, and allow foreign residents to access a more comprehensive range of Japanese assets. But the main motivation behind these measures was not the internationalization of the yen. It was to please the US and curb protectionism and anti-Japanese sentiment (Frankel 2011).

The interest rate had begun to be liberalized in the 1970s. In 1980, the Foreign Exchange and Foreign Trade Control Law was revised to liberalize in principle all

[17] Since the 1990s, the yen's performance has been quite volatile. It appreciated steadily in the years after the global financial crisis, reaching a peak of ¥76 to the dollar in October 2011. It moved back above ¥100 to the dollar after Bank of Japan had unveiled its new approach to monetary policy in April 2013.

[18] Despite Japan's "lost decade," the international use of the yen in trade did not decrease from the position it had achieved in the late 1980s. However, the yen share of global reserves decreased very significantly from its peak in 1990.

cross-border transactions. However, it was only in the mid-1980s that Japan gave real substance to the liberalization of yen transactions on the capital account. This led to the creation of new yen markets and instruments, such as a yen-denominated bankers' acceptance market and various markets for financial futures and options. However, high fees in the bankers' acceptance market, high stamp duties, and cumbersome administrative procedures de facto constrained use of the yen in international transactions (Kawai 2012).

A decade later, in 1996, Prime Minister Hashimoto launched a policy initiative to embrace a "free, fair and global financial market in Japan" (Pisani-Ferry 1999) and to make Tokyo a globally competitive international financial center on par with London and New York by 2001. The Foreign Exchange Law of 1980 was revised in 1998, and all remaining restrictions on capital account transactions were eliminated. The deregulation of Japan's domestic financial market led to the financial Big Bang.

A report published in 1999 by the MOF argued the case for the internationalization of the yen.[19] The years from 1998 to 2003 saw an intensification of government efforts towards internationalizing the currency, and this involved measures to improve the usability of the yen and expand the market for government bonds and bills (Kawai 2012). The Japanese authorities had finally come aboard and committed to drive and support the internationalization of the yen, but it was too late. Japan's long stagnation and economic malaise since the bursting of the land and equity bubbles at the start of the 1990s meant that the fundamentals were no longer supportive while the banking crisis, Japan's critical fiscal position, its spiraling government debt, and the consequent volatility of the yen undermined the confidence of market participants (Frankel 2011).

3.3 The Yen and the Yuan: Then and Now

There are a number of similarities between the first phase of yen internationalization and the internationalization of the yuan. In 1990, the size of the Japanese economy at 10% of world GDP was similar to the size of the PRC's economy today. At that time, Japan was the world's third largest economy after the US and the EU[20] (Table 2). This was the result of the strong expansion the Japanese economy had experienced in the previous years. By 1990, the financial sector and the capital account had been largely liberalized. As a result, the international use of the yen was more extensive than that of the yuan today, especially with regard to the share of allocated foreign exchange reserves and the share of foreign exchange transactions. However, in the 1990s the yen was trailing behind the dollar, the Deutsche mark, and the French franc, as today it still trails behind the dollar and the euro. The size of both the international bond offering and the foreign exchange market suggest a financial sector still too domestic-oriented to provide traction for the internationalization of the currency.

[19] "Given that the Japanese economy today accounts for about 14% of the global economy and that Japan ranks as the world's largest creditor country, the international status of the yen as measured against the above facts reveals that the internationalization of the yen has not necessarily advanced to an adequate level" (MOF 1999).

[20] In 1990, the EU was called the European Community and was much smaller, with only 12 member states. Today it has 28 members.

Table 2: United States, European Union, and Japan: A Comparison, 1990

Economic Size (December 1990)	**US**	**EU(12)[a]**	**Japan**
Share of world GDP	24.7%	27.4%	10.1%
Share of world trade	13.0%	38.4%	7.5%
Use of Currencies (December 1995)[b]	**US dollar**	**German mark and French franc**	**Japanese yen**
World trade (1995)	51.0%	31.0%	n.a.
International bond offerings[c] (September 1997)	45.1%	41.9%	9%
Supply of debt securities[d] (December 1996)	50.2%	15.8%	2%
Global FX reserves (December 1995)	59.0%	18.2%	6.8%
FX transactions[e] (April 1995)	41.5%	35.0%	5%

US = United States , EU = European Union, GDP = gross domestic product , FX = foreign exchange, n.a. = not available.
[a] In 1990, the European Community (since November 1993 called European Union) had 12 member states: Germany, France, Italy, UK, Ireland, Denmark, Netherlands, Belgium, Luxembourg, Spain, Portugal, and Greece.
[b] Figures for earlier years are not available.
[c] ECB's measure of outstanding international bonds and notes by financial institutions for dollar, euro, and yen.
[d] ECB "broad" measure of shares of major currencies in the supply of debt securities.
[e] Currency shares total 200% in each column because each transaction involves two currencies.
Sources: IMF, Tavlas (1998), Bank of Japan, Bank of International Settlements.

Back in the 1970s, at the beginning of the process of financial liberalization, the Japanese financial system resembled the one in the PRC today. It was tightly regulated through controls on the quantity and distribution of credit, and on interest rates that were below market-clearing levels. It was rigidly segmented and designed to encourage personal savings, so that the investment needs of private industry and the rebuilding of public sector infrastructure could be financed at low interest rates. Capital controls were much tighter than those in the PRC today.

Apart from a different pace and scope of financial reforms and liberalization, the other substantial difference with the PRC's current phase of currency internationalization lies in the size of government debt. Japan's debt spiraled from 9% of GDP in 1970 to almost 70% in 1990 on the back of expanding social security costs and regional transfers. This resulted in the rapid growth of Japan's primary and secondary bond markets and led to pressures from the financial community for improvements in the efficiency of financial markets. Thus, liberalization measures were implemented in the domestic financial market beginning in the late 1970s, creating and developing new markets and deregulating interest rates.

By the mid-1980s, Japan's capital account was substantially more open than that of the PRC today (Kawai 2012). This is reflected in the larger presence—relative to the size of the market—of foreign banks and securities firms in Japan at the end of the 1980s than is the case in the PRC today. Over the same period, Japanese banks and securities firms also expanded their presence abroad (Table 3).

Table 3: Internationalization of Japan and the People's Republic of China's Financial Institutions

	Japan				PRC	
	1980		1989		2010	
Number	Foreign institutions in Japan	Japanese institutions abroad	Foreign institutions in Japan	Japanese institutions abroad	Foreign institutions in the PRC	PRC institutions abroad
Banks						
Branches	85	139	121	275	90	914
Subsidiaries	…	74	9	269	270	…
Representative offices	103	186	131	441	…	…
Total	188	399	261	985	360	914
Securities Firms						
Branches/subsidiaries	5	39	55	131	52	36
Representative offices	65	26	127	91	165	…
Total	70	65	182	222	217	36

Note: … = not available.
Sources: Tavlas and Ozeki (1992), CBRC, and CSRC.

As Japan did in the 1970s and 1980s, the PRC is currently dealing with the convertibility of the capital account, the reform of the exchange rate, and the upgrading of the financial sector, including the development of Shanghai as an international financial center. As in the case of Japan, current account convertibility was largely achieved at the onset of the country's large economic expansion, twenty years before the liberalization of the capital account (Table 4). In 1964, when it achieved full liberalization of the current account, Japan joined the Organisation for Economic Co-operation and Development (OECD).

The PRC's yuan strategy has been marked by some clear steps, even if policy measures tend to be bundled together rather than properly sequenced (Yu 2012). In fact, unlike the sequence followed by the yen, the internationalization of the yuan precedes the PRC's financial reforms and the opening of the capital account, and the opening of the capital account seems to come before the financial reforms (Yu 2013). Indeed, according to the 12th Five-Year-Plan for the Development and Reform of the Financial Industry (PBoC 2012), the PRC's capital account should achieve "basic convertibility" in 2015, with restrictions only on short-term debt (Table 4). 2015 is also the year when the PRC authorities expect to switch to a flexible exchange rate. As for the financial reforms, it will take longer, but the plan is to have the bulk of them implemented before 2020, which is the deadline set to develop Shanghai as an international financial center. In any case, financial reforms and the gradual opening of the capital account also take place at an earlier stage of the PRC's development than was the case for Japan.

The development of the yen as an international currency moved in line with the reforms and liberalization of Japan's financial sector, the development of a robust regulatory framework, and the opening of the capital account. For the PRC, the opening of the capital account seems to come before financial reforms. Moreover, at the first stage of yen internationalization, Japan was a fully-fledged democracy, with trustworthy institutions and a credible legal system. These features are necessary to establish an international currency that non-residents are willing to hold, but this is not the case for the PRC. The PRC government, however, seems to believe that the creation of a yuan offshore market that is delinked from the mainland's governance and politics would be enough to persuade non-residents to invest in and hold yuan.

Table 4: Timeline: The Internationalization of the Japanese Yen and the People's Republic of China's Yuan

Parameters	Japan	PRC
a. Current account convertibility	**1964** Full current account convertibility when Japan accepted the obligations under Article VIII of the IMF Articles of Agreement.	**1994** Current account convertibility largely achieved, subject to restrictions and other non-tariff barriers on the imports of goods and services.
		2013 Certain imports of services, e.g., individual expenditures for tourism, are still subject to quantitative limits (i.e., $50,000 per year per person; $2,000 per tourist).
b. Capital account convertibility	**1973** The strict ceiling on inward securities investment was abolished.	**2015** Plan to achieve basic convertibility (i.e., capital account liberalized with restrictions on short-term debt).
c. Floating exchange rate	**1971** Under the Smithsonian Agreement, the dollar/yen exchange rate is set at ¥308 and is allowed to fluctuate within a wider band (between ¥301.1 and ¥314.9).	**2005** End of the dollar peg and reform of the exchange rate regime (back to the dollar peg in 2008). **2010** Switch back to a basket of currencies. **2012** Broader yuan trading band with a +/– 1% range of fluctuation interval. **2015** Plan to move to a more flexible exchange rate regime.
d. Financial reform/development of an international financial center within the country	**1985** Internationalization of Tokyo as a major financial center (Foreign Exchange Council Report 1985). **2003** Restoring Tokyo as a major international financial center.	**2011** Shanghai is set to become an IFC by 2020, according to the PRC's 12th Five-Year-Plan (State Council 2011). **2012** The National Development and Reform Commission (NDRC) and the Shanghai government announced a plan to develop the city as a global hub of yuan trading by 2015.

PRC = People's Republic of China, IMF = International Monetary Fund.

3.4 Regional Context

As it is difficult to draw parallels between the two episodes of currency internationalization in different periods and contexts, there are not many lessons that can be offered to the PRC authorities. The key points, which have been extensively discussed in the literature on currency internationalization, are that the size of the economy and growth potential matter in creating market traction for a currency. Policy measures and financial openness are equally important. The temporary solution devised by the PRC to circumvent the lack of convertibility of the capital account confirms the importance of allowing free international currency circulation. What seems fundamentally different between Japan and the PRC's experience with currency internationalization, and what seems to increase the yuan's odds of increasing its international use, is the regional context.

In the 1980s, Japan was the only developed economy with developed capital markets in Asia. At that time Asia was a region of low-income countries ($1,035 or less per head[21]). Its economies were growing at a fast pace, but were relatively small and lacked financial depth. The PRC's economy was one fiftieth of its size today ($202 billion in the 1980s compared with $8,227 billion in 2012). The PRC's total trade was $70 billion at the time, compared with $3,869 billion in 2012. The size of the aggregate GDP of the "Asian Tigers"[22] was approximately $150 billion at that time, compared with over $2,000 billion in 2012.

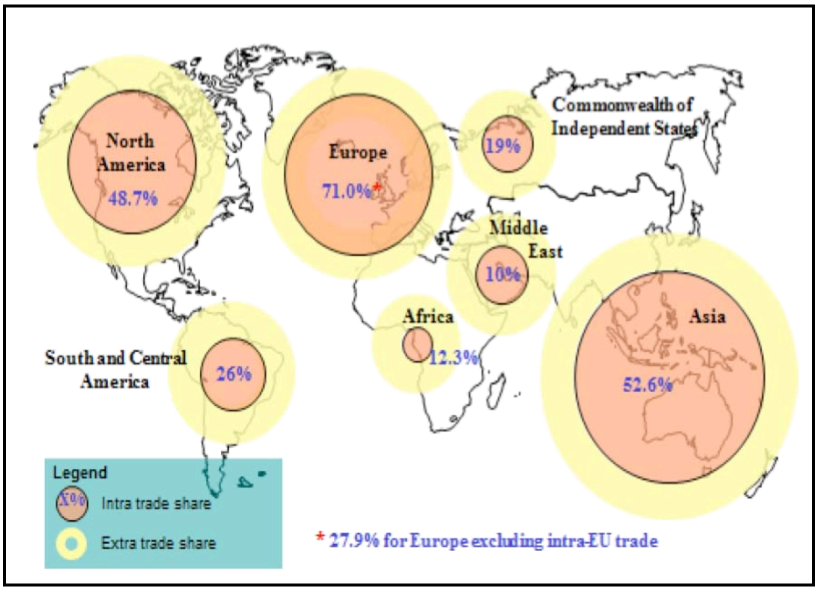
These days, the PRC is growing its economy and expanding the use of its currency in a regional context that is much more advanced than thirty years ago. There are high-income countries (with at least $12,616 per head), lower-middle-income countries like Viet Nam and India (between $1,036 and $4,085 per head), and low-income countries such as Bangladesh. Asia's total trade is more than $10 trillion. Financial markets are more developed and the region has four of the top ten international financial centers—Hong Kong, China; Singapore; Tokyo; and Seoul—and many regional or domestic centers (Financial Centers Future 2013).

Unlike Japan in the 1980s, the PRC is much more integrated in the regional economy. Slightly more than 50% of Asia's merchandise trade is intra-regional, making Asia one of the world's most integrated regions (Figure 2). For the PRC, trade within Asia was $431.6 billion in 2012 (or 11.1% of the PRC's total trade), while Japan's trade with Asia in the 1980s was, on average, just over $50 billion (or 15.9% of Japan's total trade) (Figure 3).

[21] The classification of income group follows the World Bank definition in 2012 based on the Atlas method.

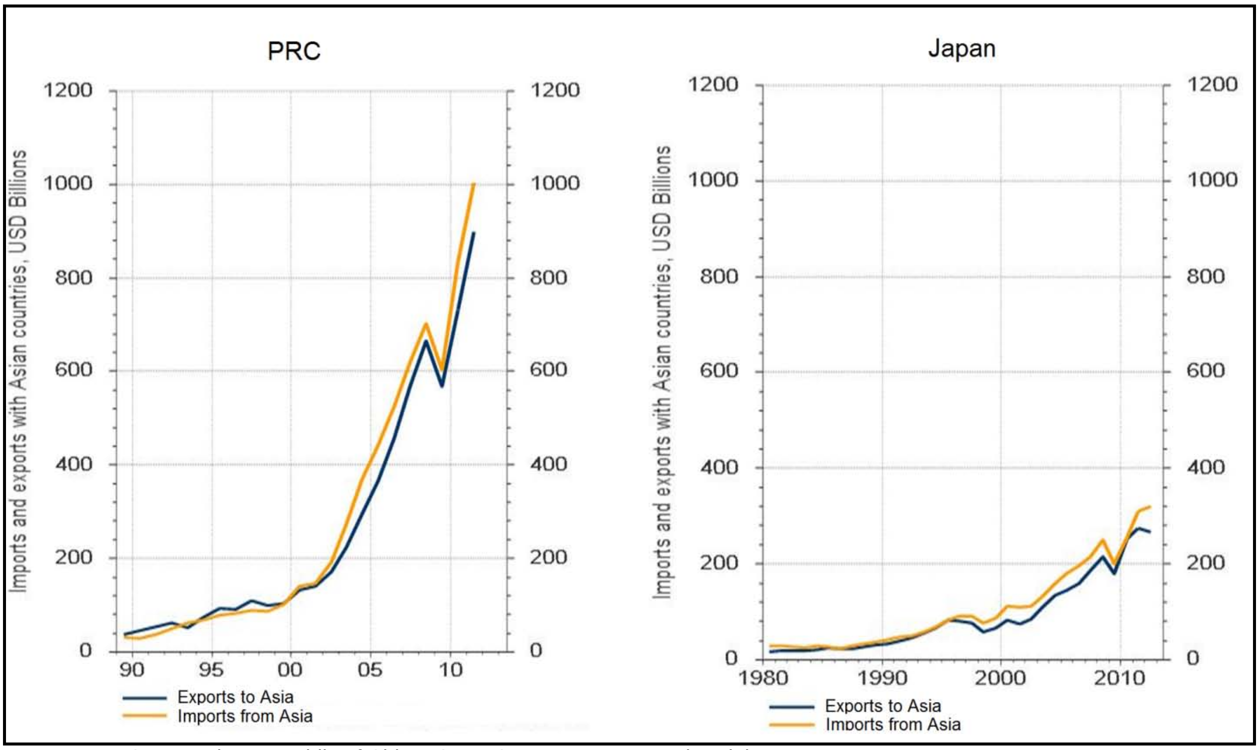
[22] Hong Kong, China; Singapore; the Republic of Korea; and Taipei,China.

Figure 2: Intra-Regional Merchandise Trade, 2010



Sources: WTO. 2012. *Use of Currencies in International Trade: Any Changes in the Picture?*

Figure 3: The People's Republic of China and Japan in Asia's trade



PRC = People's Republic of China, CIF = Cost, Insurance, and Freight.
Source: Thomson Reuters Datastream.

For both the PRC today and Japan in 1990, trade with Asia as a percentage of their total trade is less than the share of their trade with the US and the EU (Table 5). However, while the PRC has significantly reduced exports to and imports from industrial countries, at the peak of its economic expansion Japan increased its trade with other industrial countries. Over twenty years, the PRC also increased its share of regional manufacturing trade (excluding Hong Kong, China) from just over 2% in 1991 to almost 25% in 2011. Over the same period, Japan reduced its share of regional manufacturing trade from 22% in 1991 to 13% in 2011. A more dynamic regional context where business conditions are improving, labor costs remain competitive in the region's developing countries, and income levels and living standards are expanding, explains the shift in the direction of the PRC's trade towards Asia. The end market, however, is mainly outside Asia—in Europe and in the US. For instance, between 2000 and 2010, the PRC's imports of technology-intensive components from Japan; Taipei,China; and the Republic of Korea rose, and this increase is reflected in a widening of the PRC's trade deficit with these economies—from $30 billion to $210 billion. As the PRC then exports the final goods for the developed economies, this may not result in a change in the pattern of trade invoicing.

The choice of the invoicing currency in international trade is affected by many different factors such as relative bargaining power, invoicing currencies in international commodity markets, and trade structure. The PRC's increasing economic dominance in Asia and expanding domestic demand in many low- and middle-income countries indicate favorable conditions for expanding the use of the yuan in the region.

Table 5: The People's Republic of China and Japan: Direction of Trade

	Japan		**PRC**	
(% of Total)	**1980**	**1990**	**1995**	**2012**
Exports				
Asian countries	21.8%	29.6%	6.9%	11.7%
Industrial countries	45.3%	58.6%	77.8%	55.8%
(US)	24.5%	31.7%	16.6%	17.2%
(EU)	15.8%	20.8%	13.8%	17.2%
Developing countries less Asian countries	25.1%	10.8%	53.2%	63.6%
World less Asian Countries	78.2%	70.4%	93.1%	88.3%
Imports				
Asian countries	21.1%	26.6%	5.6%	10.5%
Industrial countries	32.6%	50.2%	78.1%	44.2%
(US)	17.4%	22.5%	12.2%	7.0%
(EU)	6.6%	16.3%	16.5%	11.7%
Developing countries less Asian countries	42.0%	21.6%	8.8%	25.6%
World less Asian Countries	78.9%	73.4%	94.4%	89.5%

PRC = People's Republic of China, US = United States, EU = European Union.
Sources: Tavlas and Ozeki (1992); IMF, Direction of Trade Statistics.

Another important difference in the regional context for the yen and the yuan is the development of foreign exchange markets in the region. At the time of yen internationalization, these were underdeveloped, rendering the use of the yen disadvantageous. As a result, the yen was not extensively used in Japan's trade, particularly in imports, with other Asian countries (Ito et al. 2010). The PRC authorities seem aware of this problem and the yuan strategy is built around the use of the currency in regional trade and the development of a liquid market for the yuan by providing funds to be invested in the region.

The direction of foreign direct investment (FDI) is significantly different for today's PRC compared with Japan in the 1980s, when the US was the main recipient of Japanese FDI. In 1990, almost 50% of Japan's FDI went to the US, up from about 40% in 1983 (Table 6). FDI to Asia, on the other hand, dropped from almost 30% in 1983 to 13% in 1990. For today's PRC, Asia is by far the main FDI recipient, and the share of the PRC's FDI going to Asia increased from 2003 to 2010. In 2010, nearly three-quarters of the PRC's FDI went to Asia.

The PRC authorities are also prepared to support the yuan strategy by signing bilateral currency swap agreements with central banks in the region. At the end of August 2013, the PBoC had signed ten swap agreements with economies in the Asia-Pacific (the Republic of Korea; Hong Kong, China; Singapore; Indonesia; Thailand; Malaysia; Mongolia; Pakistan; New Zealand; and Australia).

Table 6: The People's Republic of China and Japan: Foreign Direct Investment by Region

	Japan		PRC	
(% of Total)	1983	1990	2003	2010
Asia	28.2%	13.1%	52.5%	71.9%
Europe	11.1%	26.0%	5.3%	5.0%
US	39.1%	48.1%	2.0%	2.5%
Other	21.6%	12.8%	40.2%	20.6%

PRC = People's Republic of China, US = United States.
Note: The Ministry of Commerce of the PRC started providing public statistics on the regional distribution of the PRC's overseas investments in 2003. Figures prior to 2003 are not available.
Sources: Tavlas and Ozeki (1992), Ministry of Commerce.

What are the implications of this different regional context and different regional integration? Three observations are relevant here. The first one is that the economic fundamentals are a necessary condition to push the international use of a currency, but they may not be sufficient to extend the scope and the domain of a currency. Focusing on the regional context, where the currency can get traction from existing and expanding trade and financial links, puts the process of currency internationalization on a path of least resistance.

The second observation is that integration in regional supply chains and a powerful market position can help a currency to overcome inertia and create market traction. In Asia, the dollar remains the leading currency, but the size of the PRC's economy, its share of regional trade, and large investments in the region should support the expansion of the yuan in the region.

Finally, exchange rate arrangements in other countries in the region matter. In the case of Japan, for example, the exchange rates between the yen and the other currencies in the region were unstable as these currencies were linked to the dollar. The situation may be different for the yuan. Evidence already suggests that the currencies of the Republic of Korea; Indonesia; Malaysia; the Philippines; Taipei,China; Singapore; and Thailand more closely track the yuan than the dollar. The dollar's dominance as a reference currency in East Asia is now limited to Hong Kong, China (by virtue of the peg); Viet Nam; and Mongolia (Subramanian and Kessler 2012).

4. CONCLUSION

In the 1980s, the yen seemed to have all the essential features for currency internationalization: good economic fundamentals, a strong exchange rate, a surplus on the current account, full convertibility on the capital account, a high degree of openness in financial markets compared with most of its neighbors, and the promotion of official Japanese overseas development assistance, credit, and investment. But this proved not to be enough. In the end, the yen developed into an international currency with limited scope, albeit in a global domain.

Looking at the Japanese experience of internationalizing the yen from the perspective of the PRC's current experience with the yuan, it seems that it was an unfavorable regional context that constrained the expansion of the yen. Indeed, in the 1980s the gap in development between Japan and its neighbors inevitably pushed the yen to internationalize beyond the more manageable regional borders and broaden the potential geographical domain of the yen.

At the time of yen internationalization the dollar was the only benchmark. The euro had not yet come into existence.[23] In a report prepared by MOF in the second phase of yen internationalization (MOF 2013), the dollar was often referred to as the benchmark currency to measure the internationalization of the yen.[24] The dollar played the three roles of money to a degree that went well beyond the size of the US economy and its share of global trade. Its domain was global.

The context in which the PRC attempts to internationalize its currency is very different from the one Japan was faced with. Deeper integration and strong growth in the last two decades have expanded the world economy, with the result that more countries now actively take part in it. This period has also seen a reduction in the relative economic weight of the US, as the rapid growth of the emerging markets economies, and especially the PRC, has shifted the balance in the world economy. Asia has become the world's most dynamic region and regional integration has been driving economic growth. The development of the use of the yuan in Asia reflects the structure of the PRC's trade and its integration in Asia's supply chain. Asia is where the PRC's government is developing its yuan strategy. Building on the PRC's presence there and on the region's economic expansion should help the PRC government to push the use of the yuan. Policy support through various measures and the "the PRC goes global" strategy should contribute to reducing the attrition from the dollar. In other words, building on the PRC's regional advantages should create a path of least resistance for pushing the yuan beyond the PRC's borders.

In terms of market access and capital flows, the PRC still has a long way to go. The balance between market autonomy and policy sovereignty is tilted towards the latter as the former is constrained by capital controls and policy interventions. The PRC leadership tends to rein in market autonomy in order to keep economic imbalances and financial instability under control. This is normal for economies that are opening up without having a fully developed banking and financial system, and the appropriate

[23] At the time of the attempt to internationalize the yen in 1999, the euro was in its early days and thus could not provide much of a reference or benchmark.

[24] In the report the German mark and the French franc are mentioned, but not as benchmarks for the yen.

institutional framework. There is a clear trade-off between the danger of systemic risk that arises from being part of a globally integrated market system and the potential costs—both economic and political—of restraining the market. The PRC, however, increasingly shows that this model is becoming less sustainable and a new strategy needs to be devised to move the country forward.

Having international currencies with different scopes and domains intuitively seems to respond to how the world economy is changing, with more countries and regions trading with each other. As the world economy has become multipolar as a result of trade and financial integration, international trade and finance can no longer rely almost exclusively on one currency and a few international financial centers.[25] However, the end of dollar leadership in the world economy is still some years away. Strong network externalities and inertia will keep the dollar going. More fundamentally, no other country—or region—is yet close to achieving the dominance over the world economy that the US acquired in the aftermath of World War II.

A plausible scenario for the next decade is the development of the yuan as Asia's leading currency. Where would this leave the yen? As discussed in this paper, the yen has the potential to expand its function as store of value[26] and play the role of a safe haven during times of crisis, like the UK pound sterling and the Swiss franc do. The Japanese authorities, therefore, should focus on expanding the use of the yen in international banking and finance while developing Tokyo to become one of the leading international financial centers. The yen has a significantly lower share of foreign exchange transactions, cross-border bank deposits, and cross-border bank loans than the dollar and the euro. The domestic bond market should be more open and international bond offerings should be expanded. Along with the development of Tokyo as an international financial center, the authorities should consider establishing a yuan offshore market, as other leading financial centers such as London and Singapore are doing. Developing Tokyo into a fully-fledged international financial center that transforms international liquidity and intermediates short-term deposits and longer-term investments should also contribute to expanding the role of the yen as a global store of value.[27]

[25] The idea of a multi-currencies monetary system is not entirely new. In the 1980s the increased use of the deutsche mark and the yen led to suggestions that the international monetary system was becoming a tripolar currency regime (Tavlas, 1998).

[26] In 2000, Ozawa made the same point.

[27] Tavlas and Ozeki say that the country whose banking and financial sector, provides liquidity to the rest of the world plays the role of banker to the world. "It is this process of international liquidity transformation, whereby a nation provides liquidity to the rest of the world because of the willingness of foreigners to hold its liquidity liabilities, while providing loans and investments to the rest of the world, that underlies the notion that a country can serve as a world banker" (1992: 4).

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