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## To be or Renminbi: Trend in the Evolution of the International Monetary System<sup>2</sup>

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**Abstract:** *By joining the recent research bandwagon in international finance, this paper reexamines the potential of Chinese yuan for becoming a leading world currency. After analysing historical perspective and the ongoing state of affairs in de facto tripolar global monetary system, both external and internal impediments to internationalisation of the 'redback' are given a due consideration. In light of portfolio rebalancing urges in developing countries' FX reserves structure, as well as China's own interest, a role for SDR, bitcoin, gold and alike substitutes comes under investigation too. Notwithstanding the fact that Triffin's dilemma makes a spectacular comeback as equally perplexing mirror-image in regard to options available for currencies aspiring to usurp the US dollar on the world's reserve denominator throne, if global recession and financial crisis remnants fail to recede any time soon, yuan can become one of the leading international currencies within only a decade or so.*

**Key words:** *renminbi, global currency status, trade invoicing, impediments to reserve currency status, capital controls, floating exchange rate, SDR, monetary gold.*

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## **Biti ili juaniti: Trend u evoluciji međunarodnog monetarnog sistema**

**Apstrakt:** *Nadovezujući se na skorašnji talas istraživačkih napora u međunarodnim finansijama, ovaj rad preispituje potencijal kineskog juana da postane vodeća svetska valuta. Nakon analize istorijske perspektive i tekućeg stanja stvari u de facto tripartitnom globalnom monetarnom sistemu, dužna pažnja je posvećena kako eksternim tako i internim preprekama internacionalizaciji „crvendaća“. U svetlu potreba za rebalansiranjem valutne strukture deviznih rezervi zemalja u razvoju, kao i u kontekstu interesa same NR Kine, uloga specijalnih prava vučenja, bitnovčića, monetarnog zlata i sličnih supstituta dolaru takođe je uzeta u razmatranje. Ne prenebregnuvši činjenicu da tzv. Trifinova dilema ostvaruje spektakularan povratak kao jednako zbujujući odraz iz vizure ne samog dolara i SAD, već opcija kojima raspolažu emitenti valuta koje bi trebalo da ga uzurpiraju na svetskom valutnom tronu, ukoliko globalna recesija i recidivi svetske finasijske krize uskoro ne iščeznu, juan može postati jedna od vodećih međunarodnih rezervnih valuta za svega desetak godina.*

**Ključne reči:** *renminbi, status globalne valute, fakturisanje međunarodne trgovine, prepreke statusu svetske rezervne valute, kontrola međunarodnog kretanja kapitala, plivajući devizni kurs, specijalno pravo vučenja, monetarno zlato.*

### **1. Introduction**

Inevitable debasement of the US dollar, caused by persistent current account deficits (themselves being a corollary of dollar-centric international monetary institute) and more recent quantitative easing policies of the FED, on one hand, as well as indisputable economic prominence of miraculous Chinese economy on the other, have gradually yet ostensibly pushed ahead the issue of renminbi's internationalisation on the global financial agenda, equally among the Chinese leadership and across the economics think-tanks worldwide. Furthermore, rising external indebtedness of the US (its 17 trillion US\$ debt currently exceeds the US GDP) combined with China's explosive economic and trading prowess has started a media hype of forecasts about immediately declining dollar and equivocal coronation of renminbi in the realm of global finance. Even though such immediate sensationalism in the world

press may lack both scientific foundation and empirical confirmation, the utmost importance of the topic stands unchallenged. Despite a number of academic studies pointing at renminbi's bouncing significance in the international monetary system [Jaeger, 2010], [Fratzscher-Mehl, 2011], [Cohen, 2014], [Lee, 2014], out of five largest economies on the planet, Chinese yuan is the only national money still not comprising the IMF's global pseudo currency called special drawing rights (hereafter SDR) [Obstfeld, 2011], nor designated a reserve currency role [Prasad-Ye, 2013]. What's more, China announced the ambition and carefully devised platform for internationalisation of renminbi back in 2009 already, having made a visible progress in implementing its regional yuanisation policy over the last five years. In addition, the issue bears broader financial ramifications since many developing countries on a top of China suffer capital losses in terms of the dollar portion of their FX reserves portfolio with greenback's steady depreciation.

Therefore, this paper tries to evaluate the Chinese official strategy and plausible time horizon for yuan's internationalisation, pinpoint both internal and external impediments to renminbi's reserve currency status, as well as take into account most frequently mentioned contenders such as monetary gold, crypto-currencies or SDR in the run-up to sharing a global currency throne.

The rest of the paper is structured as follows. Section 2 offers historical perspective and current state of affairs in regard to yuan's international aspiration. Section 3 deals with tremendously controversial external and internal impediments on renminbi's pathway to reserve currency status, as well as considers potential alternatives. Finally, section 4 unfolds a closing discussion, succeeded by the list of consulted references.

## **2. Historical Perspective and Current State of Affairs**

In a world of 200 sovereign countries or so, no government can easily compel foreigners to use its money, be that for trade finance, investment purposes or as a liquidity storage medium. Therefore, manufacturing a leading international currency is comparatively fairly cumbersome, as global influence must be exercised indirectly, through persuasion, objective attraction, co-optation or outright bribery, rather than via "divine sovereign's right" [Cohen,

2014]. However, the use of a dominant world currency such as US dollar as an international tender comes with peculiar costs of its own making, better known as the so-called Triffin Dilemma.<sup>3</sup> Flourishing global economy as well as –quite to the contrary- insurance priorities in financially uncertain times, equally cause a surge in the world's demand for piling international currency reserves, which has been steadily rising in spite of planetary recession and in accordance with capital flow reversals occasionally experienced across the emerging economies [Lee, 2014]. Thus, reserve issuing country remains practically forced into continuously running a current account deficit in order to keep abreast with growing demand for leading international currency [Bergsten, 2009]. Hence, external indebtedness of the US or, more generally, international tender-issuing sovereign could rise limitless, until -often almost overnight- foreign investors realise the unsustainability of the position and demonstrate their lost confidence with a sudden-stop phenomenon [Krugman, 2007]. One of the chief reasons why equivocal confidence in mighty US dollar has been ostensibly undermined is precisely because the very worst financial crisis ever since the Great Depression initially erupted on the US soil and in the heart of its real estate and hedging particles of domestic financial system [Malović, 2014\*\*]. Moreover, to the extent that emerging markets more or less fix the value of their currencies to the US dollar, which could be optimal policy response from an individual country's standpoint, contemporary international monetary system facilitates bouts of global imbalances in return, although their net value may be smaller than we commonly think [Lee, 2014\*], [Malović, 2013]. Nevertheless, potential demise of one reserve currency is always evolutionary seen as an opportunity for the other to increase its significance and fortifies its worldwide acceptance status.

For the Chinese renminbi, the key turning point in this regard came already in 2006 with publication of an agenda on “The timing, path and strategies of RMB internationalisation” by the People's Bank of China (PBC). Against the backdrop of the recent ‘falling eagle, rising dragon’ catch-phrase, China has set off on a quest for “a greater say” and an increased “power standing” in international monetary system [Cohen, 2014]. The plan has been a rather simple one, if inevitably gradual. China's economic size and ascending share in international trade have been set to entice the economic incentives of its many trading partners, especially small open economies, to account for and

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<sup>3</sup> The trade-off between flattering short to medium term benefits and serious long term costs of an international reserve-currency role from a national economic viewpoint was first identified and described by the Belgian-American economist Robert Triffin back in 1960.

invoice that commerce in yuan, and even to 'manage' their currencies relative to renminbi in as much as China has been strengthening their principal trading partner status. Moreover, once renminbi won the international unit of account and commercial transaction vehicle status, path would be paved for yuan's greater official and private use as an investment denominator and a store of value [Jaeger, 2010], [Huang-Wang-Fan, 2014].

With that in mind, China's authorities have systematically (but in careful increments) kick-started the more global use of renminbi in particular by [Prasad-Ye, 2013, p.564]: a) permitting and encouraging the settlement of international trade transactions with 'redback', b) setting up local currency bilateral swap lines with foreign central banks, c) relaxing restrictions on remittances used for trade and payments settlement, d) allowing handpicked banks to offer offshore renminbi deposit accounts and e) supporting the issuance of renminbi-denominated bonds ("dim-sum" bonds) in Hong Kong-China and by foreigners on the mainland ("panda" bonds). Obviously, renminbi has long been accepted as the settlement currency by non-residents in the region, especially neighbouring countries like Laos, Mongolia, Myanmar, Nepal, N. Korea and Vietnam [Cohen, 2014].<sup>4</sup> Initially, promoting renminbi as international unit of account and means of trade settlement comprised ASEAN members, Hong Kong- and Macau-China, tied to five mainland cities and 20 provinces in People's Republic of China (PRC), albeit with trade finance heavily skewed towards import settlement in foreigners' anticipation of the safe-bet revaluation of yuan [Eichengreen-Kawai, 2014]. In parallel, offshore renminbi accounts soared from a mere 1,1% of total deposits in Hong Kong in 2009 to almost 11% in early 2014.

Last but not least, apart from 6 swap arrangements inked between 2001 and 2006 with the aforementioned ASEAN economies, PBC has entered into 25 currency swap arrangements (see Table 1.) worth hundreds of billions of US\$ with its opposite numbers across the globe, thereby promoting trade finance as well as short term reserve currency role of renminbi and –weather permitting- also saving super hard currency (such as dollar, pound or euro) for both parties. On a top of it, PBC has also signed 4 direct trading arrangements (which are not involving 'greenback' at all) with Malaysia (2010), Russian Federation (2010), Japan (2011, effective 2012) and Australia (2013) [Eichengreen-Kawai, 2014], [Volz, 2014]. These schemes are

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<sup>4</sup> For example, as much as 60% of cash in circulation in Mongolia may now be in yuan [*Ibidem*, p.5].

designating a medium run FX reserve currency role for the renminbi in those countries.

Table 1. Renminbi centred bilateral currency swap arrangements signed by the PBC

<i>Year signed</i>	<i>Customs Territory/Note</i>
2009	Belarus
2009	Argentina
2011	N. Zealand
2011	Uzbekistan
2011	Kazakhstan
2011	R. of Korea (extended from 2008)
2011	H. Kong-China (extended from 2009)
2011	Thailand
2011	Pakistan
2012	UAE
2012	Malaysia (extended from 2009)
2012	Turkey
2012	Mongolia (extended from 2011)
2012	Australia
2012	Ukraine
2013	Brazil
2013	Singapore (extended from 2010)
2013	UK
2013	Hungary
2013	Albania
2013	Iceland (extended)
2013	Indonesia (extended)
2013	EMU
2013/14	Germany and UK (extended)

Source: PBC, ADB, International Chinese Radio, The Economist (2014)

All in all, from a bare 1% of the PRC's international trade settlement, renminbi-denominated share had exploded 17-fold by the second half of 2013, whereas yuan's share in the world trade finance had shot up from mere 1.89% in 2012 (4<sup>th</sup> most significant currency) to 8.7% in 2014 (second only to US dollar). Further still, PBC has been busily putting together a new China International Payment System (CIPS), aiming to additionally promote and accelerate internationalisation of renminbi through state of the art technical platform for cross-border invoicing and payments [Cohen, 2014]. This should

come as no surprise since -even for trade invoicing denomination only- latest empirical investigation by Chin and Ito (2014) found financial depth and capital account openness (other than inertia) to be the chief determinants of currency's international success.<sup>5</sup>

*Summa summarum*, PRC is now the second largest economy in the world, represents the second largest global trader and has been the largest exporter on the planet for quite some time already [Jaeger, 2010],[Lee, 2014].<sup>6</sup> Naturally, more exporters and importers are likely to desire renminbi if it offered them more possible uses to choose from, i.e. if they could use it not only for trade settlement but for a range of other financial transactions including FDI, buying bonds, real estate and even fancier financial assets. However, contrary to popular belief among the top-notch western economists including those cited thus far, PRC has almost fully liberalised inward FDI more than 20 years ago, and significantly relaxed administrative barriers to outward FDI in 2011, result of which have been 33% of total PRC's 2012 FDI settled in yuan! Offshore renminbi denominated deposits in H. Kong<sup>7</sup> have been allowed for both domestic and foreign entities as early as 2004, their pouring in (just under 10% of all FX deposits in H. Kong) saturated only by changing portfolio preferences out of cash and into 'redback' denominated bonds [Eichengreen-Kawai, 2014]. Famous "dim-sum" bond market also picked up from 2010 owing to several huge issues by such prestigious names like HSBC, Caterpillar, Volkswagen and McDonalds. Meanwhile, 'panda' foreign bond sales in Shanghai international financial centre (cautiously nurtured since 2005) on the mainland, were also recently authorised for the very first time [Cohen, 2014]. The only seriously opaque capital controls remaining are those on portfolio investment and short-term capital flows,

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<sup>5</sup> For invoicing and trade finance, deep and liquid financial market seems to play more important role than cross-border financial liberalisation, since their model predicts continuous rise of renminbi's share in trade payments even without freer capital flows [Chin-Ito, 2014].

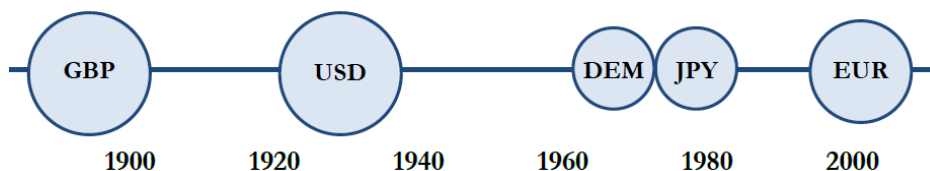
<sup>6</sup> PRC has been constantly running BoP surpluses ever since 2000, while Chinese trade surpluses have been around consecutively from 1993 already.

<sup>7</sup> In less than 3 years, PRC managed to convert tenth of its 2011 3.6 trillion US\$ international trade in renminbi and successfully oversee the growth of an offshore yuan market in H. Kong [Chatterjee, 2013]. However, still emerging and imperfect nature of this market is revealed by Ding, Tse and Williams (2014) who found absence of proper price discovery between onshore and offshore spot segments, and yet documented presence of price discovery between onshore spot and offshore nondeliverable forward rates. Apparently, two offshore rates have been tracking different investment aspects of yuan dynamics, namely, offshore forward rate concentrates on onshore spot rate, whereas offshore spot market focuses on onshore interest rates [Ding-Tse-Williams, 2014].

which in our opinion, should not be abolished in the first place, neither soon nor swiftly.

From a more distant and broader historical perspective, over the last 500 to 600 years, Portuguese and Dutch currencies enjoyed the global reserve currency status for some 75 years each, while Spanish peseta and British pound sterling served as international reserve currencies for some 110 years each [Money Morning Consulting, 2014]. On the average, reserve currencies made it some 95 years on the world leading currency throne. As it happens, American dollar has been sitting there for (give or take) those same 95 years. Nonetheless, Eichengreen's (2005) research on currency competition shows that international currency status is neither winner-takes-all nor zero-sum game, hinting that several currencies have been and will be sharing that role. In spite of being faced with existential plights, euro is already performing this role alongside dollar. So, what appears to be wrong and/or perplexing with renminbi itself, what is holding China's reserve currency ambition back?

Figure 1. Recent evolution of the world's leading currencies



Source: Lee (2014\*)

### 3. Global currency- controversial impediments and argued alternatives

Contrary to prevailing opinion [e.g. Prasad and Ye (2013), The Economist (2014), Lee (2014), Volz (2014)], in this paper we venture to claim that Chinese capital account is much more open than generally thought, and that its further liberalisation isn't in Chinese best interest nor it's necessary for yuan's aspiring reserve currency status. What may be, then, the impediments for yuan's international and particularly reserve currency role?

On the surface, much like the US back in 1913, China is gigantic, fast-growing, relatively open economy with striking relative advantage in both



manufacturing and services, coupled with leading position in international trade. In fact, even through most recent post-crisis cum global recession period, Rogoff (2014\*) gives an excellent explanation why Chinese slowdown in growth is in all likelihood a healthy rebalancing towards demand driven, service-based economy rather than beginning of the macroeconomic collapse (which would by the way -at least proportionally- hurt also the growth of economies being traditional exporters of capital-intensive goods to China). As with the Eurodollar market from 1960s, the offshore renminbi deposit and bond markets in H. Kong offer highly rated corporate entities opportunity to readily fund themselves at very low rates of interest [Kroeber, 2013, p.34]. However, there is still no US\$-comparable volume of demand for offshore yuan-denominated borrowing facilities, chiefly for two reasons: a) because both foreign and Chinese blue-chip companies either can get all the money they need at depressed non-market rates from domestic banks or they already have businesses in PRC which generate steady cash-flow streams usually next to sufficient for their needs and b) because foreign companies at the moment have no other use for yuan-denominated funds than to invest them back in PRC [Kroeber, 2013, p.37].

When it comes to trade invoicing and trade finance, indeed, yuan has made long strides lately and became second most important currency in international trade, however, comprising still less than 10% of goods and services exchanged it lags badly behind US dollar which accounts for 81% of cross-border invoicing&trade finance. Despite indisputable progress in significance of renminbi in international commerce especially for regional invoicing [Chey, 2014], even in East Asia, particularly in respect to intra-industry trade, dollar still reigns as the main invoicing currency [McKinnon-Schnabl, 2014]. In addition, some 4 billion US\$ is being exchanged on FX markets every day, only tiny fraction of it going for trade payment/finance. Out of total FX turnover, US\$ occupies at least one side of the transaction in 85% of the cases, whereas yuan claims only 0.5%-0.8%, which places renminbi anywhere between 9<sup>th</sup> and 12<sup>th</sup> position on most traded currencies chart [Malović, 2014].<sup>8</sup> In a nutshell, in the realm of international finance, 'greenback's' dominance is even more superior. Even though after more than 90 years on the leading currency throne dollar shows certain signs of fatigue,

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<sup>8</sup> While expressing gratefulness to the anonymous referee who drew our attention to the fact that the very latest data hint at renminbi claiming even 2.2% of the world FX market turnover [He, 2014], [Lee, 2014\*], the fact remains that it still falls way too short of either euro's or US dollar's share.

with only 20% of US share in the world economy, 'greenback' still takes up some 60% of 9.7 trillion \$ of the allocated world FX reserves, while PRC herself maintains some 2 trillion US\$ reserves denominated in dollar (mostly in US government bonds) out of her 3.7 trillion US\$ total (i.e. 54%). Before stripping the US dollar, of course, yuan would first have to usurp the euro, EMU's common currency which in spite of its ambiguous plights remains the second most significant reserve currency with circa 26% of the world's FX reserves denominated in €.

That said, what answers offers the literature in regard to determinants and appeal of reserve currency status? According to Papaiaonnou and Portes (2008), following preconditions underpin global reserve currencies' acceptance: size of national economy, monetary stability and low exchange rate volatility, broad, deep and efficient financial market as well as geo-political stamina. Lee (2014) corroborates Chinn's and Frankel's methodology in terms of significance of output and trade volume, financial market openness, confidence in currency stability and deployment inertia (in favour of currencies already put in global use) as determinants of reserve currency potential. Wu, Pan and Zhu (2014) found economic size and network externalities (deployment inertia) to dominate exchange rate stability and rule of law issues. When it comes to benefits from reserve currency status, lower transaction costs, absence of FX risk and ability to borrow in domestic tender, international seignorage and economic prestige&political influence appear to be the most obvious ones. In addition, Jaeger (2010) identifies liquidity discount,<sup>9</sup> improved terms of trade and more competitive financial industry as fringe benefits.

We have already argued that measured by output and trade volume PRC's economy can easily support renminbi's global reserve currency status. Same goes for the monetary stability imperative, since reflation remains subdued for years now. Similarly, PRC's geo-political prominence is self-evident, if not entirely aligned with western preferences. What remains problematic, in our view, is reform of financial system coupled with stronger democratic accountability as internal impediments and carry trade issue together with network externalities as exogenous obstacles.

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<sup>9</sup> To the extent that foreign lenders are more willing and likely to hold reserve currency denominated liabilities, reserve currency's economy benefits from up to 100 basis points lower interest rates, if one uses the US/dollar as a yardstick [*Ibidem*].

Relaxing administrative grip, broadening and deepening of banking and financial markets in PRC ought to touch many a base. Still subpar outward FDI liberalisation [Cheng-Ma, 2010], notwithstanding two renminbi (outward) FDI schemes from 2011 [Volz, 2014], should help in closing external imbalance which otherwise inflicts appreciation pressures and deteriorates Chinese export price competitiveness. Financial reform also assumes richer development of derivative markets and alike hedging instruments, that would enable multinationals to execute cash management procedures in yuan.<sup>10</sup> This should also encourage the creation of innovative financial products, link monetary policy more closely to capital markets and improve liquidity of fixed assets [Jun, 2014]. Moreover, PRC's financial intermediation industry urgently needs interest rates deregulation together with increasing bank competition [Malović, 2014]. To make a useful historical comparison to illustrate the case in point, even though GDP *per capita* in today's PRC is in constant Geary-Khamis dollars 20% higher from the US after the Great War (when the 'greenback' took over from pound sterling), American bank deposits/GDP and stock market capitalisation/GDP were around 30% and 100% (before the Great depression) respectively, whereas contemporary PRC marks 100% bank deposits/GDP and 50% market cap [Eichengreen-Kawai, 2014]. Quite expectedly, China is still overwhelmed with internal administrative oppression (typically independent of capital account openness topic) and turf-claiming 'war' between central planning authority (NDRC), ministry of finance and PBC [Volz, 2014]. Its gradual transition, especially in finance, hasn't always and entirely been the child of careful strategy, but often times a by-product of internal rivalries and vested interest. The biggest winners of financial reform would be households and owners of SMEs due to toppling of outrageously fat interest spread in Chinese banking.<sup>11</sup> The biggest losers would be the banks, now protected by red tape from deployed foreign competition and handsomely remunerated by disproportionate retail spreads, in exchange for extremely low interest rates on government bonds and reserve requirements bought/provided by those same banks to the state sector, the other player who as the biggest domestic debtor in the economy stands to lose from financial liberalisation. Ideally, smooth deregulation and

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<sup>10</sup> For the sake of the argument, renminbi interest rate swap and repo markets are still virtually absent from derivative products segment, leading corporate treasury managers to operate in dollars [Eichengreen, 2014].

<sup>11</sup> This would also diminish if not eliminate a huge informal/illegal shadow banking sector currently serving the crowded-out economic agents (mostly SMEs and poorer households) [McKinnon, 2014], [Volz, 2014].

privatisation of Chinese intermediation industry is supposed to minimise the net losses from this ownership portfolio adjustment of the economy. Finally, in order to foster renminbi's use in international finance, authorities should increase the biggest banknote denomination (at the moment the most valuable is 100 RNB) and decrease the cash-to-money supply ratio as a part of required financial reform. However, this shouldn't include further and swift(er) capital account opening, since, as demonstrated by Bachetta, Benihma and Kalantzis (2013), when in transition, a rapidly growing economy has a higher welfare without full-fledged cross-border capital mobility, alas at the expense of optimal home interest rate being temporarily well above the world interest rates. Be that as it may, as long as yuan remains essentially non-convertible currency, its international use will remain limited and regionally constrained [Subacchi, 2013].

Additionally, the second internal impediment to renminbi's reserve currency status remains the rule of law and transparency of institutional process. Evenhandedness, reliability, more precisely, institutionalised reassurance that there are lawfully imposed limits to arbitrary (re)actions by the currency issuer are of utmost importance for global acceptance of renminbi as an international store of value. This implies not that PRC has no choice but to move to full-blooded electoral democracy in order to claim the leading international currency status; nevertheless, reinforcing transparent and politically independent judiciary system when it comes to regulating financial industry is an absolute imperative, in itself most likely associated with fairly mature civil society of western provenance [Eichengreen-Kawai, 2014]. For example, back in 1970s when Japanese yen was considered potential contestant for the global currency throne, Japan had even tighter capital controls and weaker structural characteristics than PRC today, but on the other hand -unlike China- had already developed a fully fledged democracy with trustworthy institutions and credible legal system [McDowell, 2013], [Subacchi, 2013].

External impediments, however, seem to be even more perplexing. In terms of monetary stability, inflation appears to be in check for ages although in the medium run could be threatened by three years of persistent economic slowdown and/or oversupply in the housing market.<sup>12</sup> Further still, monetary stability may well be jeopardised via back-firing exchange rate policy, either

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<sup>12</sup> As justifiably pointed out in the recent crisis literature, monetary stability does not guarantee financial stability and yet, financial stability if challenged can ruin monetary stability too [Malović, 2013\*].

through interest parity relationship and its impact on cross-border capital flows, or simply through exchange rate pass-through mechanism, which brings us to the low exchange rate volatility requirement for wide acceptance of reserve-currency internationally. Ever since 1994, after abandoning the multiple exchange rates regime, until recently, value of renminbi has been more or less fixed and pretty firmly pegged to the US dollar until 2005. From 2005 to 2007 it moved away from a rigid dollar peg allowing for cumulative appreciations within a very narrow band. In 2007, even though having switched a considerable part of the dollar weight onto the euro, it remained essentially fixed basket peg with pinch of flexibility around central parity [Frankel, 2009]. Due to demise of the euro, PRC diversified the basket of its anchors yet again, however, it remained a *de facto* dollar peg. Contrary to rather influential papers by McKinnon (2014) and McKinnon and Schnabl (2014), we argue that predominantly fixed exchange rate of yuan may have outlived its usefulness by now. Nonetheless, let us examine their arguments.

Following McKinnon (2014) and McKinnon and Schnabl (2014), in a globalised economy of multinationals and outsourcing, cross-border competition to attract investment renders exchange rate flexibility a redundant stabilisation instrument. If savings is independent from currency movement, expensiveness of renminbi's appreciation might slash investment and contrary to conventional Marshall-Lerner condition heuristics actually cause deepening of current account surplus! Indeed, Cheung, Chinn and Fujii (2009) observed that PRC's ordinary imports in fact rise in response to renminbi's depreciation. However, trade elasticities tend to be extremely sensitive to econometric specification at hand, and opposite findings are plentiful. For instance, Gala and Rocha (2009) offer both theoretical reasoning and empirical evidence that national savings get influenced by (real) exchange rate both via preventing overvaluation induced consumption booms and via increasing profits of tradable sector. In addition, Shi (2008) performed a rigorous cointegration analysis with different robust specifications only to corroborate that currency appreciations are contractionary after all, due to rising imports and drop in exports. More importantly, McKinnon and Schnabl (2014) make no distinction between flexible exchange rate of yuan and renminbi's appreciation, thereby rooting for fixed exchange rate in order to prevent capital inflows that would risk inflation and asset price bubbles. As a matter of fact, it is by no means obvious that when allowed to float more freely, renminbi could go only up in value. First of all, much of the huge interest rate differential between domestic and world rates responsible for carry trade frenzy is of Chinese own making

as explained earlier and is expected to suppress it once financial reform kicks in. Secondly, in spite of Chinese capital controls (or anybody's for that matter) have never been terribly effective, administrative barriers to hot money inflows (especially portfolio investment) are and will be in place to prevent appreciation pressures just as recently liberalised outward FDI legislative should provide natural leeway in correcting external imbalances caused by 20 years of Chinese trade surplus. Thirdly, gigantic sterilisation costs<sup>13</sup> (co-borne by Chinese banks for as long as they can pass them over to customers through humungous retail spreads) which PRC pays each year (estimated to be of 75-80 billion \$ magnitude *per annum*) despite having the biggest current account surplus in the world, simply aren't sustainable anymore and can be eliminated only by letting yuan to float more freely. Fourthly, to the extent that carry trade-inducing interest differential prevails, interest rate parity relationship suggests it will cause depreciation rather than appreciation of a floating currency in properly functioning national financial markets, as documented by recent events in Chinese foreign exchange market [Chatterjee, 2014].<sup>14</sup> Therefore, in our opinion, PBC isn't forced to postpone further internationalisation of the 'redback' until world interest rates rise to more normal levels, as concluded by McKinnon and Schnabl (2014). Quite to the contrary, it was observed long ago in international finance literature that buying exchange rate predictability among the leading world economies with greater uncertainty in international interest rates "would have been a bad bet" [Reinhart-Reinhart, 2001]. Lastly, for a large country like PRC correcting external imbalance via flexibility of nominal exchange rate is better than resorting to nominal wage increases and price flexibility [Frankel, 2005]. We agree with this view not only because wage and price inflation may ultimately get out of hand,<sup>15</sup> but also because after a few years of gaining value against the dollar and decelerating growth&exports, yuan's longer-term misalignment, if any, is arguably not too bulky. Finally, as we shall discuss below, also

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<sup>13</sup> So far, PBC kept the renminbi's volatility in check through unlimited interventions in the FX market, only to mop up resulting domestic liquidity by engaging in subsequent sterilisation transactions, imperative to avoid overshooting the targeted high-powered money [Economy Watch, 2013]. Meanwhile, PBC's decision to widen renminbi's monitoring band, along the lines laid out in Malović (2006, 2007), appears to be the right and timely step toward a fully convertible yuan [Britton-Gabay, 2014].

<sup>14</sup> Further still, carry trade phenomenon reinforces additional capital inflows so that in absence of two way betting and at least roughly equal depreciation probability renminbi would represent little more than a textbook example of an asset bubble [Eichengreen, 2014], [Chatterjee, 2014\*].

<sup>15</sup> By the way, wages in PRC got raised steeply over the last couple of years already, along with Balassa-Samuelson effect that proverbially follows.

because an increased portion of the basket yuan is going to float against shall be filled with monetary gold.

Network externality, for better or worse, is out there to stay, and it may slightly recede ever so gradually. However, competition for leading international currency position shouldn't be treated and is not a 'winner-takes-all' game: network externalities, while persuasive, aren't so prevailing to cause all transactions, all countries and all trades to gravitate toward a single currency [Eichengreen, 2014]. Fratscher and Mehl (2011) empirically confirmed that renminbi's movements are already dominantly influencing Asian economies' monetary policies and exchange rates. In addition, Huang, Wang and Fan (2014) report similar findings. Hence, it is safe to conclude that dissatisfaction with debasement of the dollar and its high share in sovereign FX reserves, as well as organised efforts within Europe (which gave birth to the euro) and between Europe and PRC [Otero-Iglesias – Zhang, 2014] to minimise the risks and losses there from, have discretely slidden the international monetary system into tripolar state. Precisely because history, geography and capital gains or losses can at times overpower the inertia, convenience and conversion cost cuts, the world has moved through the centuries from species to fiduciary money, from gold standard to pound and dollar centric systems, only to fall back into multi-currency order.<sup>16</sup> But where does the dollar's network externality stem from? As hinted before, current tripolar system is still skewed toward the 'greenback' and before it becomes more symmetric,<sup>17</sup> one should strive to understand it and perhaps look for the viable alternatives. Because other countries chose to peg or even out fluctuations of their currencies to the dollar, the US is able to print much more money than could materially vouch for, holds hardly any official reserves and rarely intervenes in FX market. China and others cannot get rid of the dollar-denominated reserves so lightly, not only for lack of other safe assets in either face or substance, but also due to detrimental effects of consequently falling purchasing power of the US and all dollar-holding trading partners in terms of PRC's still massive export supply.

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<sup>16</sup> After all, even during the times of sterling's utmost dominance between 1890-1913, 20-25% of the world foreign exchange reserves were held in Reichsmarks and French francs [Eichengreen, 2014].

<sup>17</sup> In the current hybrid system, without any substantial innovations, when the US let short-term interest rates near zero lower bound, the other major players must resort to significant capital controls, or join the bandwagon of unduly thin rates of interest or get swamped in hot money tsunami [McKinnon-Schnabl, 2014].

That said, the usual substitute suggestions, until our hybrid international monetary system settles down, are SDRs, crypto-currencies like bitcoin or monetary gold.

Some years back, being aware of the lengthy interim period ahead, PBC under governor Zhou proposed to the global community resorting to truly international currency disconnected from individual economies and thereby stable in the long run, with more fairness in currencies' weight structure during calculation of its value [Chin-Yong, 2010]. Notwithstanding PRC's plead for greater role of the IMF it is indisputable that governor Zhou was actually demanding a place for yuan in the SDR cocktail and a more serious influence on the global financial architecture. Nevertheless, Obstfeld (2011) asserted that in order to minimise low returns and destabilisation of markets with massive inter-currency shifts, IMF would have to allocate SDRs beyond the present reserve-pooling mechanism, i.e. through direct substitution with central banks in return for their own conventional reserves. That way, SDRs couldn't be just a claim to another official entity's FX reserves nor could they stay largely voluntary. However, since there's no global political consensus for such increase of the 'paper gold' at the expense of decrease in conventional international currencies, PRC has kept the interest in claiming the slot within SDR's composition formula. Alas, as uttered by Eichengreen and Kawai (2014), it is a bit of a 'chicken and egg problem', since formal prerequisite for a currency to enter SDR is its wide acceptance in international trade and finance, which would in turn flourish should it be admitted as an SDR ingredient. In a nutshell, SDR in its present shape and form cannot stabilise the international monetary system, while there's momentarily no political will for either inclusion of renminbi in the SDR basket, nor for large scale retraction of sovereign global currencies and their substitution with new SDR issues.

On the other hand, Rogoff (2014) thinks that paper money by and large became unfit for a world of high crime and record low inflation and hence proposes abolishing physical currency in favour of electronic money. However, after analysing the potential of bitcoin (and alike crypto-currencies), Malović (2014\*) found that, lately, its volatility has been so excessive that it arguably cannot serve as a reserve currency at all. Additionally, notwithstanding bitcoin's rising if bumpy credibility as a medium of exchange, since it has been immediately converted in any of the leading world currencies upon payment due to its extraordinary exchange rate volatility, bitcoin's unit of



account potential appears to be dubious too. Moreover, bitcoin's next to none correlation with other major currencies' movements renders it unsuitable for hedging purposes either. Finally, having in mind that it lacks formal reserves or deposit-insurance scheme to back it up (much like SDR, for that matter), yet it's also prone to hacking, bitcoin resembles and behaves more like a pyramidal investment vehicle than a global currency alternative. Nevertheless, technology that made it be may still spawn an evolution in the way we possess things, transfer ownership and pay for goods and services in the near IT-ridden future [*Ibidem*].

This, for the time being, at least, leaves us with gold alternative. True enough, gold standard has failed for a reason, just as insufficient amount of gold made it an unsuitable reserve to be backed up against in a unipolar single currency-led international monetary system. However, inclusion of gold in a basket of a, say, flexible crawling band regime of renminbi within a tripolar global finance, or more probably, external gold-convertibility of yuan in an effort to crowd out some of the network externality occupied by the 'greenback' might prove to be both credibility-boosting at a symbolic level and somewhat equilibrating for China simultaneously. As a matter of fact, PRC needs to strike a fine balance between mild appreciations aimed at attracting financial investors and keeping its trade surplus at bay, and occasional depreciations to disable one-way bets in international finance and reassure overseas trading partners considering to accept being invoiced in renminbi. Gold price behaviour might open up the small but important step in the right direction. Gold gains popularity and appreciates in crisis times, when other countries' propensity to import drops anyway, whereas demand for safe assets surges disproportionately. Conversely, gold price plummets when real interest rates jump and global economy picks up, which is exactly the time when weaker yuan may cash in via improved export price competitiveness channel. It goes without saying that due to the speculative investment character and hence high volatility of gold it shouldn't comprise too big of a junk of the yuan's effective exchange rate basket yet.<sup>18</sup> Finally, PRC has nevertheless accumulated gargantuan reserves of monetary gold (as the world's biggest producer of this precious metal), keeping a low profile about it and indeed mostly unnoticed by the

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<sup>18</sup> After all, even if it wanted more gold as an anchor in redback's basket, PBC wouldn't be able to attain it any time soon. PRC's current gold reserves amount to around 3% of her total FX reserves, whereas her broad money aggregate contains hefty 18 trillion US\$, which compared to 9 trillion \$ worth world gold reserves implies that if PBC bought the entire gold supply on the planet, it could hope to cover only about a half of its money in circulation with gold.

general public.<sup>19</sup> The obvious motivation appears to be the carefully planned and recently launched diversification shift towards more flexible/less dollar-dependant exchange rate policy, with the idea to perhaps decouple gold value from its dollar denomination in time, or make up in gold-backed credibility<sup>20</sup> what one lacks in the rule of law and liberalisation of financial markets track-record. Notwithstanding the fact that exact details are still scant at the time of this writing, the alluring charm of gold seems to be back in international finance one way or another. By the same token, more than a thousand years after having introduced paper money to the world economic legacy, renminbi appears to be back too. And knocking loudly at that.

#### **4. Concluding remarks**

Without any doubt, Chinese monetary and political authorities have been systematically making a concerted effort to increase the regional presence of yuan and promote the overseas use of renminbi as one of the leading international currencies. Consequently, yuan rose to vice champion international currency title in terms of global trade finance and invoicing, second only to but still far behind the US dollar. Nonetheless, the fact that yuan more than quadrupled its share in accounting for and financing the world trade, cannot guarantee its automatic global reserve status and widely accepted cross-border investment currency status. In order for renminbi to become a leading international currency, China would have to commit to evolutionary array of reforms commencing with but not limited to exchange rate policy switch to managed floating (we are witnessing as of late) to deter international interest arbitrage practices, deregulation and privatisation of Chinese banks together with toppling of artificially inflated retail interest spreads, strengthening the rule of law and development of reliable and by Western standards comparable financial order with usual derivative instruments for protection from market risks, increasing the largest bill denomination and decreasing the share of cash in the money supply. However, contrary to assertions of many influential economists, fair share of capital controls would have to stay in order to defend renminbi from external

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<sup>19</sup> Against the virtually zero gold export for years and loads of imports lately, PRC has amassed close to 65 million troy ounces of monetary gold (some 3200 tonnes of it) so far and counting.

<sup>20</sup> Most likely emanation of the return to (kind of) gold standard may come as a trade vehicle in the form of gold-backed letters of credit rather than a full-fledged currency convertibility.

financial repression or too violent capital flow reversals, just as those combined with letting the 'redback' float would arguably stabilise rather than exacerbate the hot money inflow and safe-bet appreciation pressures. In the interim period, issuing more SDRs via substitution accounts and/or inclusion of renminbi into SDR composition formula could considerably help yuan's rise to a reserve currency status, although such proposals lack international community consensus for the time being. Hence, even though persevering adamant in her demands for thorough reform of the international monetary system, China is accumulating colossal quantities of gold instead, counting on metal's credibility and appreciation in the face of global economic adversity, in forging the aspired external convertibility of renminbi. Speaking of adversity, a global (or indeed the US indigenous) shock that would undermine the confidence of the world in the current international monetary system, would from both tactical and historical perspective, hurt the dollar and the US much more than renminbi and PRC, thereby possibly helping the contender currency to establish itself in global finance faster and to a greater extent. Or otherwise, swift ending of the global recession and financial crisis would lend greater specific weight to network externality of the dollar, which like so many times before with anchor currencies in the international monetary history, may in fact survive as the global reserve currency years after US itself lost its economic dominance.<sup>21</sup>

In conclusion, it would take China at least 3-4 additional years to carry out aforementioned adjustments and minimum another 6-7 years before non-Asian economic agents overcome information-asymmetry a propos China's rules, regulations and opportunities within newly emerging global investment platform and gain confidence in simultaneous stability and market formation of yuan's value. In the meanwhile, renminbi shall continue with closing in on the dollar in trade invoicing, FDI and commerce-related lending arena. Will there be a clear substitution on the world currency throne, it remains to be seen, but we're certainly no less than a decade away from possible abdication of the dollar and more symmetrical multicurrency world finance. Nevertheless, global recession, international financial crises and alike dire circumstances may speed up the 'coronation' of the renminbi as a world-wide accepted reserve currency, yet final outcome will depend not only on general economic context

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<sup>21</sup> For instance, USA became the world's largest economy around 1880, while 'greenback' itself did not overtake sterling conclusively until after the Second world war [Britton-Gabay, 2014].

and policies of PBC, but also upon result of the currency crisis in the Eurozone and successfulness of FED's tapering strategy.

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