

Miriam L. Campanella

University of Turin

Senior Fellow ECIPE Brussels

miriam.campanella@unito.it

China's Excessive foreign exchanges reserves: a bilateral debt redeployment diplomacy to make the most of it¹.

Abstract.

Ten years of vast global imbalances have generated large amounts of foreign exchange reserves (EFRs) in export-driven economies. Holding large amounts of reserves has helped governments in Asia-- especially in China-- to stabilize currency exchange rates by providing a defense against external shocks, and consequently exports performance. Rules aimed at limiting EFRs in order to prevent currency manipulation have been discussed repeatedly, but never implemented. After reviewing the most recent proposal crafted by Bergsten and Gagnon (2013) linking currency manipulation discipline to excessive EFRs, this Policy Brief tackles the other side of the issue. The uncomfortable exposure of sovereign creditors to debt monetization, and likely sovereign default, will abolish their reserves won with difficulty. China's EFRs corresponds to more than 45 percent of its GDP, and are mostly allocated to sovereign debts. Due to market risks and persistent, loose dollar and euro monetary policies (the two currencies EFRs are mostly denominated in), the value of China's EFRs is set to deplete over time. Examining the case of China as a major holder of EFRs, this Policy Brief recommends an *ex ante, bilateral and confidential diplomacy*, aimed at fixing sovereign debt redeployment by swapping foreign reserves in long-term investments in foreign countries. After years of financial bubbles, reverting paper currencies into real economic stuff could offer a template for other EFRs countries to follow.

Executive Summary

- As a result of large trade surpluses and capital controls, China's official reserves accrued to \$ 3.82 trillion (2.82 trillion euros) in 2013, almost twice as large as Japan's foreign exchanges reserves, the second largest in the world. This wealth is closely centralized, owned, and managed by the Chinese government, and works as a solid defense against external shocks like those experienced by Asian economies in late 90ties. The reserves have served Chinese authorities well as "ballast assets" to stabilize the value of their national currency exchange rate, and have upheld its export-driven economy.
- In 2009, the IMF rang an alarm that countries with excessive reserves were causing spiraling global imbalances and threatening the stability of the international monetary system. Conversely, the Independent Evaluation Office of the IMF showed that excessive foreign

¹ The author would like to thank Fredrik Erikson, Benjamin Cohen, and Qiao Yu for their comments that helped improve the manuscript. This Policy Brief will be published by ECIPE in the coming weeks.

exchange reserves were the epiphenomenon rather than the cause of the problems, and current account imbalances were the real things to highlight.

- Recently, during the debate over the Trans-Pacific Partnership, Fred Bergsten and Joseph Gagnon advocated for a “strong currency manipulation discipline” directed toward countries holding excessive foreign exchange reserves, and that failing to comply would cause the U.S. to exit from the final agreement. Yet, claiming that excess foreign reserves are evidence of currency manipulation could turn out to be a red herring. In late 2013, China’s foreign exchange reserves jumped from approximately \$500bn to \$3.8tn. The growth, which followed a big slow in 2012, was mainly due to speculative capital inflows as investors were betting on a steady rise in the Renminbi.
- From the side of sovereign creditors, EFRs are more of an issue than a blessing. Among other liabilities of holding large piles of foreign currencies, China’s official reserves are exposed to systemic risks arising from the steady debauching of the dollar and the euro resulting from the U.S. Federal Reserve quantitative easing program and the ECB’s intention to follow analogous measures. Since 2005, the Chinese administration has adopted a number of policies aimed at relocating the country’s dollar and euro reserves. Centered on the China Investment Corporation (CIC), the country’s sovereign wealth fund, these investment strategies face a number of political and regulatory challenges that inevitably slow the allocation process. This Policy Paper points at a redeployment of EFRs similar to a debt-to-equity swap (DES) scheme, in an attempt to prompt sovereign debtors to craft *bilateral debt redeployment diplomacy*.

1. Excess foreign reserves and global imbalances: a cause-effect dilemma?

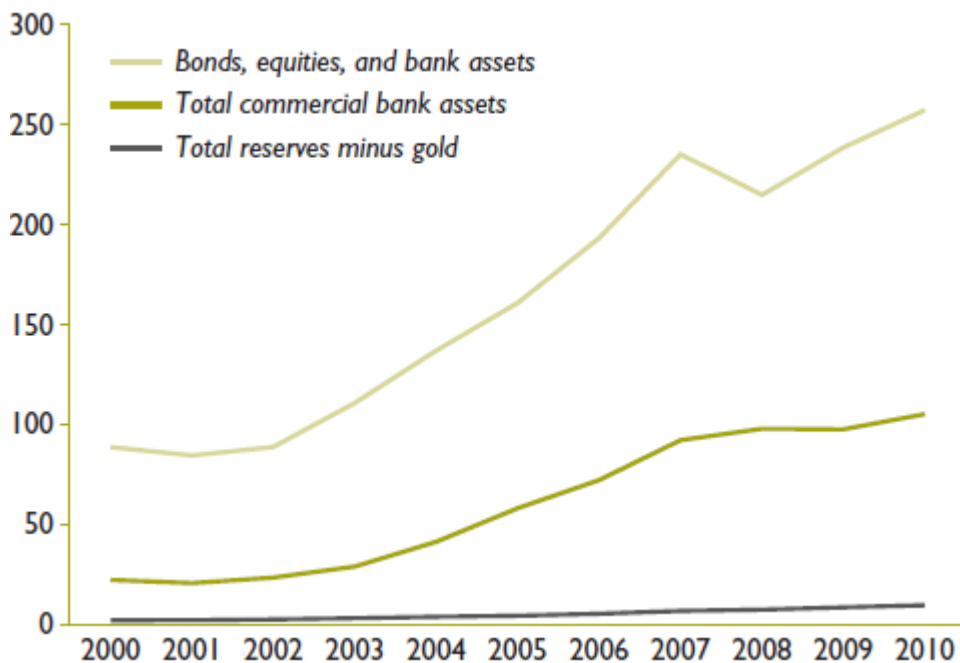
In the wake of the financial crisis, global imbalances resulting from excessive reserve accumulation have spurred an animated debate in the IMF community and academia. As for the IMF, in the decade before the crisis, both emerging markets and low-income countries did accrue reserve holdings of over 5 trillion dollars², which, as the Fund recognizes, helped as a first line of defense against external turbulence. “Countries with adequate reserves generally avoided large drops in output and consumption, and were able to handle outflows of capital without experiencing a crisis” (IMF 2011). However, the Fund questions whether higher reserves are always better as the impact of the crisis declines and central banks in many countries resume building up large reserves. The IMF suggests that in the new post-crisis environment it’s necessary to reconsider the tools available for assessing adequate levels of reserves and to establish a clear metric for the reserve needs of emerging markets and low-income countries. And the Fund concludes that “holding large reserves entails costs, both directly for each individual country, globally large reserves are detrimental in the form of macroeconomic imbalances” (IMF 2011).

Clearly the Fund’s analysis underlines a strong correlation between excessive reserve accumulation and global imbalances, and assumes that large foreign exchange reserves could be instrumental in altering exchange rates, and consequently, in jeopardizing the stability of the international monetary system (IMF 2011). The response to the Fund’s analysis came from its internal Independent Evaluation

² As the IMF admits the precautionary motive was an important reason for the buildup of reserves in a number of emerging markets in the early 2000s following the balance of payments and banking crises of the 1997-1998 in Asia. The Fund also admits the precautionary benefits of reserves were perceived to have increased not only in emerging economies but also in some advanced countries, in recognition of new sources of vulnerability that were highlighted during the crisis (IMF 2009).

Office (IEO). In the 2012 Report, the IEO maintains that the Fund’s argument that foreign reserves held in emerging countries must conform to adequacy measures is not persuasive. The IMF’s arguments relate mainly to current account imbalances and not to reserves per se. In addition, the IEO maintains that when viewed in the context of global financial markets’ evolution, the size of official international reserves do not appear excessive (Figure 1). Therefore, the IEO concludes, “in analyzing the international monetary system the IMF should have placed greater emphasis on more pressing issues than reserves, for example the growth in global liquidity and capital flow volatility”. As the IEO acknowledges, a common view among interviewees was that the IMF’s attempts to cast excessive reserve accumulation as a risk for the international monetary system reflected some shareholders’ interest in ensuring greater exchange rate flexibility in key Asian economies.

Figure 1. Global Bank Assets and International Reserves (From IEO, 2011)



As of 2012, following a weakening dollar and persistent slow recovery in developed economies this trend has started to reverse. Growth in foreign reserves has paused, and as in the case of China, witnessed a downward trend (Figure 2).

Figure 2. Growth in Foreign Reserves 2011-2012. (Source: Thomson Reuters Datastream 2012)

Growth in foreign reserves (US\$)

% change



Source: Thomson Reuters Datastream

In summary, the research community's brainstorm at the IMF has reached two important conclusions. The traditional metrics of reserve adequacy are arbitrary³, because establishing reserve adequacy ratios for each country underscores the limits of using a "one-size-fits-all" indicator. So, enforcing currency manipulation rules, when there is little international consensus on what constitutes an adequate level of reserves, is almost unrealistic. More importantly, the IMF researchers have converged on the root cause of excessive foreign exchanges as an epiphenomenon rather than the source of global imbalances, and that current accounts imbalances are the real thing to address.

2. Foreign exchange reserves: once again "currency manipulation discipline".

Accusing China of being a "currency manipulator" based mainly on the large pile of foreign reserves evaporated with the recognition of the impracticality of establishing a one-fits-all adequacy metric⁴. In the same way, in the semi-annual report to the Congress on International Economic and Exchange Rate

³ As a rule of thumb, countries should hold foreign reserve assets in order to cover their imports for three to four months. All Asian countries, with the possible exception of the Philippines appear to be well above the threshold.

⁴ Though, in the post-Asian crisis period (2004-2010) reserves accumulation that was not obviously related to country insurance needs has been correlated to undervalued exchange (IMF 2013).

Policies, U.S. Treasury Department declined to name China as a currency manipulator, saying that China's current account surplus, due to appreciation of China's real effective exchange rate has been an important factor in reducing the current account surplus, which has declined from a peak of 10.1 percent of GDP in 2007 to 1.9 percent of GDP in 2011 and 2.5 percent in the first half of 2013.

Nevertheless, in reference to the Trans Pacific Partnership (TPP) and the Transatlantic Trade and Investment Partnership (TTIP)-- which constitute one of the biggest potential benefits to the global economy-- Fred Bergsten builds on his previous work with Joseph E. Gagnon (Bergsten, Gagnon 2013), and has returned to excessive foreign reserves and policies of intervention on exchange rates. Bergsten's main argument advises that it's high time for the U.S. to finally rule and implement a "strong currency manipulation discipline" in defense of the country's exports. Failing to converge on the discipline could compel the U.S. to sink the deal. This attitude would send a serious warning to present and prospective partners, especially Japan, China, and others, that the U.S. is serious about enforcing currency manipulation discipline. To help the Congress to pinpoint the likely villains, Bergsten draws on a test created by Joseph Gagnon (2013), in which three measures are used to identify a currency manipulator, including: excess foreign exchange reserves superior to three months' worth of imports, including sovereign wealth funds; the purchase of significant additional amounts of official foreign assets, which would imply substantial intervention on the exchange rate; and last but not least, excessive trade surpluses as definitive proof of currency manipulation practices. At this point, Fred Bergsten claims that excessive foreign reserves would trigger strings of penalties for guilty countries, including: losing market access obtained via free-trade pacts; countervailing duties against exports subsidized by deliberate undervaluation; and sweeping import surcharges. Bergsten expects such penalties to deter "objectionable currency practices by trade pact participants". In addition, TPP and TTIP members could seek to add these disciplines to IMF and World Trade Organization rules so that the same standards would eventually apply to all countries.

The Bergsten-Gagnon proposal is turning into a hot potato for the U.S. Administration. On January 14th, Fred Bergsten advocated a recommendation for a currency manipulation chapter in U.S. trade agreements, which has deeply influenced Congressional views, informing the American Automobile Policy Council's (APPC) currency manipulation proposal as well. On January 2014, the APPC divulged its proposal for a currency manipulation clause for the TPP trade agreement, making its support for this key trade initiative contingent on the adoption of such enforceable provisions, while leaders of the Congressional committees with jurisdiction over international trade finally introduced the draft of a trade promotion authority bill with the novel addition of currency manipulation as a main negotiation objective. Congressman Sander Levin, ranking member of the House Ways and Means Committee, withheld his support of this bill, noting among his objections that it did not go far enough on currency intervention issues⁵.

3. Excessive Foreign exchanges: China's concerns.

Yet, the Bergsten-Gagnon "currency manipulation discipline" and the heated campaign for its implementation could become a *red herring*⁶. Excessive foreign reserves are a big concern to China's

⁵ The piece draws on Solis 2014.

⁶ Ed Dolan has made carefully the point by saying that building up reserves of foreign assets to maintain an artificially an undervalued currency helps some interests in China, especially those of its exporters. However, it harms other interests, in particular, industries that rely on imported inputs, both high-tech components and raw materials, and middle-class consumers of imported goods". In his conclusion, Dolan writes: "China's currency

authorities, but for the opposite reason. Holding EFRs bears opportunity costs. According to Larry Summers's calculations, forgone growth for China would have cost almost 6% of GDP growth in ten years (summers quoted in Steil 2010). On a similar note, Qiao Yu of Tsinghua University cautions that in addition to market risks, China's official reserves are exposed to systemic risks developing from the steady debauching of the dollar and the euro as a result of the U.S. Federal Reserve quantitative easings, and the ECB'd readiness to adopt analogous measures⁷. Those risks could heavily impact China's assets (3.82 trillion dollars in EFRs) of which 64 percent are parked in U.S. debt securities, mostly U.S. Treasury bonds, and about 30 per cent is denominated in euros, totaling about half the country's GDP.

Another disappointing facet of the issue, as Qiao Yu observes, is that China cannot settle these assets openly without taking a blow. By considering that the unit purchasing power of China's foreign reserves against composite commodities is set to decline by over one third in the next few years, what could happen if China were to settle these assets openly, which are regarded as being highly liquid after all? Their prices would drop sharply with China taking the blow, and would have devastating effects on the global debt market. In addition to a possible default of U.S. Treasury securities, Qiao Yu warns about the big uncertainty surrounding the European Monetary Union, as potential domino defaults of European sovereign debts could possibly downsize or even meltdown the Eurozone, and cause subsequent restructuring and reform of the international monetary system (2013:6).

Definitely, China urgency to defend its riches is justified. The administration's efforts to relocate its foreign exchanges reserves are exemplified in the active allocation policies adopted since 2005 through the creation of the China Investment Company (CIC), the country's sovereign wealth fund. With market managers and a portfolio approach, the CIC has implemented substantial investment diversification in a variety of asset classes, including direct investments, institutional real estate, and infrastructure. The CIC's investment policies have focused particularly on resources investments, a "strategically motivated" policy due the country's export-dependent economy⁸.

Top officials in the People's Bank of China (PBoC) have made it clear that they are ready to rein in dollar purchases, as China does not benefit anymore from increasing its foreign currency holdings⁹. In

manipulation has not been highly effective, nor, at the present exchange rate, does it demonstrably do great harm to the United States" (2013).

⁷ Bini Smaghi (2014) has carved good reasons in favour of ECB quantitative easing.

⁸ Still, CIC officials have bowed from the energy sector, due the cyclical volatility poses a risk to the fund, which reports the value of its assets by market price. At the same time annual Chinese outward foreign direct investment (OFDI) in the United States has grown from less than \$1 billion before 2008 to more than \$14 billion by 2013. Technology and innovation targets are now a key driver of Chinese interest. In the first quarter of 2014 alone, Chinese investors announced high-tech deals worth more than \$6 billion, including the takeovers of Motorola Mobility, IBM's x86 server unit, and electric carmaker Fisker (Rosen Heineman 2014)

⁹ On February 14, the U.S. Treasury released figures of China's holdings of U.S. Treasuries falling by \$47.8 billion in December 2013, the biggest one-month drop in two years. The decline in T-bonds purchases comes at the same time that the Federal Reserve is pulling back on its own purchases of government debt, a withdrawal of stimulus known as tapering. As the U.S. can't rely on China to be the biggest U.S. treasuries bond holder, it might mean

2013, Zhou Xiaochuan, the PBoC's governor, declared that "the monetary authority will basically end normal intervention in the currency market and broaden the Renminbi daily trading rate", and that the "Renminbi appreciation benefits more people in China than it hurts". Yi Gang, deputy governor at China's central bank, who chairs the State Administration of Foreign Exchange (SAFE), in a speech organized by China Economists 50 Forum at Tsinghua University, said: "It's no longer in China's favor to accumulate foreign-exchange reserves" (reported by Bloomberg 2013).

4. Central banks' non-standard policies and foreign exchanges debasement.

China's defensive approaches to the value of its \$3.82 trillion forex reserves could become vulnerable to the fluctuations of the central banks' non-standard policies, which-- as Larry Summers asserted at the IMF Conference on November 2013-- are likely to cast a persistent shadow over the global economy for the years to come. Summers warns that the "lesson from this crisis is-- and my overarching lesson, which I have to say I think the world has under-internalized-- is that it is not over until it is over; and that is surely not right now, and cannot be judged relative to the extent of financial panic; and that we may well need, in the years ahead, to think about how we manage an economy in which the zero nominal interest rate is a chronic and systemic inhibitor of economic activity, holding our economies back below their potential" (Summers 2013).

By the same token, the Bank of America-Merrill Lynch warns about the overlong central banks' ultra-accommodative policies, and the unintended consequences of the U.S. Federal Reserve keeping interest rates low for an additional two to three years. A more likely outcome is the continuation of bubbles in global economy. "Investors seeking yield might well continue to move money out of bonds and into dividend stocks. Over time, that shift could prompt corporate executives to distribute more income back to investors and allocate less to capital expenditures, R&D, mergers and acquisitions, and other forms of reinvestment" (Bank of America 2013).

Sovereign debt bonds unpalatable to private investors are politically indigestible to sovereign holders too. To date, the debate over sovereign debt has mainly focused on euro-zone sovereign debt restructuring, offering solutions from the side of debtor countries in near or open default situations, with the IMF aiming to strengthen enforcement of debtors' budget compliance. Policymakers from Brussels and Washington have left out the critical position of sovereign creditors vis-à-vis their counterparts, in the case of sovereign debtors' defaulting (Brookings-Report, October 2013).

China and other sovereign creditors must clearly craft a distinct approach to defend their foreign exchange reserves. What will happen if their piles of debt in dollars and euro go up in smoke? Could sovereign creditors eschew public censure if they do not move urgently to find new ways to secure their countries' hard-won savings? And what will happen to international economic cooperation if this wealth goes bust? Will it spur an awful blame game, or worse, a massive sovereign debts crisis?

than yields have to rise. Market analysts expect the yields on the benchmark 10-year Treasury, now at 2.71%, to rise nearly 1 percentage point by the end of the year due to the pullback in purchases by China.

In order for China and other sovereign creditors to rescue their own riches from the trap of debasement and likely sovereign defaults, they must work out a preemptive *ex ante* strategy for freeing the massive forex reserves from the trap of monetary debasement policies pursued by the nonstandard monetary policy of the US Federal Reserve and European Central Bank.

5. A bilateral debt redeployment diplomacy

It is crucial for China to take effective action regarding its EFRs in order to rebalance its export-led economy and transition to the next phase of a service economy, and continue to tap global investment demand in real economic sectors in Africa, Europe, and in the U.S. In other words, real economies need real money, and China must establish proactive policies aimed at redeploying its debt claims. A *bilateral debt redeployment diplomacy* would aim to engage sovereign debtors in fixing the issue¹⁰ and working together to outline the terms of a debt-to-equity swap (DES). Largely applied as *ex post* instruments, DES are structural vehicles designed to address problems of debt defaults and/or compensation during liquidation processes, and are appropriate as an *ex ante* method of sovereign debt restructuring (Buljevich 2005; Cosio-Pascal 2007; Qiao 2013). In 2000, China experienced a program of *ex post* debt-to-equity swaps with mixed results to address the vast accumulation of non-performing assets in the national banking system and their failing state enterprise borrower (Steinfeld 2001).

An *ex ante* debt-to-equity approach can help fix the “our money (bond), your problem” dilemma once and for all, which has made U.S. sovereign debt a nightmare for its major creditors. By starting an *ex ante bilateral debt redeployment diplomacy* to defend its forex reserves, Beijing authorities would shift to a proactive approach to address the country’s huge forex reserves before the situation gets worse. *Ex ante* debt-to-equity swap agreements targeted at rearranging a significant portion of foreign reserves in real businesses sectors do not imply any kind of debt restructuring, as creditors will get what they really craves. To actually prevent huge losses on its forex reserves values-- Professor Qiao Yu writes-- China needs to convert around \$1.5-2.0 trillion of the foreign reserves parked in sovereign debt securities into private equity-related claims” (2013).

Obviously, what is good for China could be good for other excess foreign reserves countries, including Norway, GCC countries, and even excess reserves countries in Africa¹¹. If appropriately swapped into equity funds and diversified investment vehicles, the saved resources could finance long-term investments in the real economy, filling the infrastructure gap that most investors with limited time horizons are unwilling to do (Qiao Yu 2013:17). Since creditors and debtors are ready to consider the potential financial scope, excessive foreign reserves could turn into the new Pareto win-win game of the next global economic development.

If the sovereign debt entities involved would agree on the deal, the *ex-ante* sovereign debt-to-equity approach could serve as an inspiration and a solution to the current sovereign debt predicaments in the U.S.A. and in Europe. Leaving aside the different technicalities that the debt-to-equity swap could assume in each sovereign debt constituency, the DES could ease the conditions of some debtors.

¹⁰ Cosio-Pascal (2007) “In a swap under the Paris Club rules, a creditor government might sell some of its claims on a debtor country to an investor who in turn would sell them to the debtor government in return for local currency for use in specific approved projects or to buy an equity stake in a local company (e.g., as part of a privatization campaign”.

¹¹ In Africa, Cédric Achille, Mbeng Mezui and Uche Duru (2013) find that several countries have held excess reserves in the range of \$ 165.5 and \$ 193.6 billion on average per year between 2000 and 2011. This numbers are more than the infrastructure financing gap identified at U.S. dollar 93 billion per year, with an associated social cost of holding these excess reserves amount to up to 1.65% in GDP terms on average.

Not all sovereign debts are born equal. An *ex-ante* debt-to-equity swaps negotiation introduces a distinction among debtor countries, and allows the removal of countries which banking on considerable riches from the list of “sovereign debtors”, and that could redeem their liabilities in exchange of equities.¹² Of course, it is in the interest of sovereign creditors that the DES deal not affect the debtors’ bonds ranking.

By freeing their debt claims in sound real economic stuff, China and other sovereign creditors could play a greater role in mending the ills the crisis has caused in the USA and Europe, with unsustainable levels of fiscal burden on business and families, matched to credit crunches on private companies’ investments, and lack of sufficient capital investments in infrastructures, which all converge on low growth rates.

Examples of inadequate strategic capital investments are visible everywhere. In the crumbling U.S. infrastructures, capital investment for the nation’s wastewater and storm water systems are estimated to total \$298 billion over the next twenty years¹³. According to the World Economic Forum, global spending on basic infrastructure—transport, power, water and communications—currently amounts to \$2.7 trillion a year when it ought to be \$3.7 trillion.

With governments under financial strain, private money from banks should be eligible to tap these needs. Although, as a recent IMF document (2014) discloses that important banks have continued to receive subsidies in all countries, especially in the euro area. In Europe, the banking union, dreamt up to unleash more resources for infrastructures, could fail. The national resolution funds expected to run in the next decade will remain puny next to Europe’s gigantic banking sector. The €100 billion that EU officials say will be in the currency union’s resolution and deposit-guarantee funds by 2026 pale in comparison to the €25.46 trillion in liabilities euro-zone banks had at the end of October 2013, or the €1.13 trillion euro-zone governments deployed in bank bailouts between 2008 and 2011 (Steinhauser, Troianovski 2013).

A debt-to- equity swap approach freeing EFRs could help tap the financial thirst for large infrastructure projects, still on hold since the 2008 crisis, and could somewhat patch the huge losses and ensuing severe budget policies, which have compelled sound government expenditures, with consequences on unemployment, domestic demand, and lower level of family welfare.

In conclusion

In contrast to opinions that would introduce severe discipline on the holders of excess reserves as a means of tackling unfair trade advantages, this Policy Brief has drawn attention to the risks that large holders of sovereign reserves denominated in dollar and euro are set to face in the continuation of the debtors zero nominal interest rate policy. With the U.S. Federal Reserve pushing down interest rates near zero, and other central bankers in the world following suit, this policy leads to the debauchment

¹² Italy is a case in point. With about 370 billion euros real estate and 100 billion euros equity capitals, for a whole of 500 billions, the central administration and public local entities could slash more than 500 billion euros out of the huge accumulated debt of 2.1 trillion euros. The cut would dent by around 20% the euro area average public debt in 2013 at 92.2 per cent of the area GDP (Eurostat 2013), and make euro zone better than the U.S. with a public debt at 101.6 per cent of GDP (U.S. Bureau of Public Debt 2013).

¹³ The Economist (2014) “With the economy weak and borrowing cheap, it is daft that America’s public infrastructure spending is at a 20-year low, even as the country’s roads, bridges and dams are rated D+ by the American Society of Civil Engineers”

of the debtors' currencies. To escape the corner, holders of foreign exchanges must engage in defensive and proactive policies to limit the value losses.

In this Policy Brief, urgency is solicited for sovereign holders to make them a boon rather than a thorny issue. Sovereign creditors must shift to a proactive stance, moving away from sovereign bonds, which could go up in smoke, and redeploy these assets into real stuff. Battered economies in the West and emerging nations require long-term investors to tap capital investments that governments, still under severe budget constraints, cannot afford. And as real economies need real money, next to Qiao Yu, this Policy Brief proposes a way to exit the trap of "our money (bond), your problem", a nightmare for FERS holders. A debt-to-equity swap, the Policy Brief argues, would be at the core of an *ex ante bilateral debt redeployment diplomacy*. Targeted to rearrange a significant portion of foreign reserves into real businesses sectors, a debt-to-equity swap approach does not imply any kind of debt restructuring, as the creditor will get what really craves. To actually prevent huge losses in the value of its forex reserves, China needs to convert around \$1.5-2.0 trillion of its foreign reserves parked in sovereign debt securities into private equity-related claims.

Once freed, the new assets will be ready to be channeled into long-term investments in foreign countries and would be a source for the Chinese people to enlarge their portfolios and enhance returns. As a major single holder of forex reserves, China could offer the template for other excess foreign reserve countries to follow, reverting money to the real economy after years of financial bubbles.

Bibliography

Bank of America-Merrill Lynch (2013) A Transforming World. Bank of America Corporation.

Bergsten, C. Fred, Joseph E. Gagnon (December 2012) Currency Manipulation, the U.S. Economy, and the Global Economic Order Policy Brief 12-25 Peterson Institute for International Economics

Bergsten Fred (2013) our chance to slash the high costs of currency manipulation. Financial Times 18 December.

Bloomberg 2013 PBOC says No Longer in China's Interest to Increase Reserves. Bloomberg News Nov 21.

Brookings Report (2013) Revisiting Sovereign Bankruptcy. October.

Buljevich Esteban C. (2005) Cross-Border Debt Restructurings: Innovative Approaches for Creditors, Corporates and Sovereigns. International Finance Corporation.

Cédric Achille, MBENG MEZUI and Uche DURU (2013) Holding Excess Foreign Reserves Versus Infrastructure Finance: What Should Africa Do? Africa Development Ban. WP N.178.

Cosio-Pascal Enrique (2007) Paris Club: Intergovernmental Relations in Debt Restructuring.

Dolan Ed (2013) Who are the Biggest Trans-Pacific Currency Manipulators? How Great is the Threat? EconoMonitor

Gagnon, E. Joseph (2012) Combating Widespread Currency Manipulation Policy Brief 1 2. Institute for International Economics.

IMF (2011) "Assessing Reserve Adequacy," SM/11/31, February International Monetary Fund. Washington DC.

IMF (2014) Global Financial Stability Report. Chapter 3. IMF, Washington DC.

Independent Evaluation Office of the IMF (2012) International Reserves. IMF Concerns and country perspectives. IMF Publications Washington DC.

Rosen Daniel H, Thilo Hanemann (2014) High-Tech: The Next Wave of Chinese Investment in America. www.asiasociety.org/centers/northern-california

Schadler Susan (2014) Unsustainable Debt and the Political Economy of Lending: Constraining the IMF's Role in Sovereign Debt Crises.

Solis Mireya (2014) The Answer is Still NO on a Currency Manipulation Clause in the TPP.

Steil Benn (2010) Dollar Reserves Cost Japan and China. Financial News 26 July.

Steinfeld Edward (2001) China's program of debt-to-equity swaps: Government failure or market failure? Conference on Financial Sector Reform in China, Harvard University September 11-13.

Steinhauser Gabriele and Anton Troianovski (2013) Europe's Banking Deal Leaves Doubts . Wall Street Journal 20 December.

Summers Larry (2013) Presentation to IMF Conference. November.

Yu Qiao (2012) Relocating China's Foreign Reserves. Brookings 21 November.