Reserve Currency And A Lender of Next-To-Last Resort: A Literature Review

Alida S. Skold, International School of Management
Reserve Currency
And A Lender Of
Next-To-Last-Resort

A Literature Review

The role of the US dollar as the global dominant reserve currency is eroding. Debate is ongoing regarding next steps. Moving the international monetary system to a single global currency is part of the debate. Literature reviews the eroding role of the US dollar and implications the erosion carries for the US. The Special Drawing Rights developed by the IMF could fill the role of Keynes’ recommended global currency known as the “bancor.” Regardless of the nature of the global reserve currency, access to liquidity is required to have an effective international monetary system. Literature defines a missing layer of liquidity stability in the financial system. Research of a global GSE lender of next-to-last resort is recommended by this paper to increase global access to reserve currency liquidity.

By Alida Skold
October 20, 2012
Reserve Currency And A Lender Of Next-To-Last-Resort

Abstract
The role of the US dollar as the global dominant reserve currency is eroding. Debate is ongoing regarding next steps. Moving the international monetary system to a single global currency is part of the debate. Literature reviews the eroding role of the US dollar and implications the erosion carries for the US. The Special Drawing Rights developed by the IMF could fill the role of Keynes’ recommended global currency known as the “bancor.” Regardless of the nature of the global reserve currency, access to liquidity is required to have an effective international monetary system. Literature defines a missing layer of liquidity stability in the financial system. Research of a global GSE lender of next-to-last resort is recommended by this paper to increase global access to reserve currency liquidity.

Introduction

Currency has evolved throughout history. Paper currency was first used in China during the Tang Dynasty in the years 618 to 907 C.E. (Hvistendahl, 2009). Today, the global dominant reserve currency is the United States paper dollar.

The first section of the literature review defines reserve currency and the economic conditions that encourage its formation and growth. Next, the eroding role of the United States dollar as the dominant reserve currency and the possible implications the erosion carries for the global and US economies are reviewed.

Alternatives to the US dollar as the dominant reserve currency are reviewed in the following section including Keynes’ model for a single global currency called the bancor, and the synthetic currency established by the IMF known as the special drawing rights (SDR). International payments made by international businesses, bilateral agreements between governments, and currency swaps are additional alternatives that are reviewed.

Research in the literature review found the US banking system was stretched to its limits, and there was not enough global supply and liquidity of the dominant reserve currency during the financial crisis of 2007-2008. This paper will be continued with research to answer the question if a global loan bank will provide the missing layer of stability to supply liquidity upon demand.
to the global economies during a financial crisis.

Research Questions

Literature review shows an opening for a system that increases access to global reserve currency supply and liquidity during normal times and especially during a financial crisis. During normal growth periods, frontier and emerging economies experience a scarcity of reserve currency funding. Both developed and developing economies experience a greater demand and in some times a scarcity of reserve currency supply During a financial crisis. Central banks have taken measures to provide additional liquidity, although there is a stigma attached to borrowing from the lender of last resort, and the discount window can be expensive and have too short of a term (Ashcraft, Bech & Frame, 2010).

This paper analyzes a literature review to answer the following questions. 1) Is there a need for increased liquidity of the reserve currency in the global financial system? If not, then the status quo is sufficient. If it is found there is a need for increased liquidity then the following question will require further research. 2) Would a global loan bank system sponsored by governments around the world provide a reserve currency supply and liquidity solution as the lender of next-to-last resort, similar to the Federal Home Loan Bank system sponsored by the government of the United States?

LITERATURE REVIEW

Dominant Reserve Currency

A currency that is held by many governments and institutions as part of their foreign exchange reserves is a reserve currency. When a specific currency is held as the majority currency, it is the dominant reserve currency (Rouse, Boff, Sanderson, Cardullo & Sage, 2011). The dominant reserve currency is the one most commonly used for international trade transactions and is a store of value due to confidence in its future value (Carbaugh & Hedrick, 2009). It is used to provide a liquid store of value for exchange in international trade.
Reserve Currency And The Economic Conditions That Encourage Its Development

The United States dollar became the reserve currency after the two world wars, when it was clear the British pound sterling could not adequately fill the role. The process of change was abrupt with the Bretton Woods Agreements reached by forty-four countries represented in a meeting held in Bretton Woods, New Hampshire in 1944. Countries would be allowed to exchange gold for the US dollar. The exchange arrangement set the condition for the US dollar to become a commonly used currency in the international trade markets, since the value was pegged to gold. The IMF and the World Bank were also established with the agreements (Bretton Woods II and the New Economic Order, 2012). In the 1970s, a new arrangement was reached that is often referred to as Bretton Woods II. President Nixon of the US further evolved the currency reserve system by dropping the gold standard. President Reagan was faced with unusually high interest rates and deficit. The slow US economy was aided by Japan, Saudi Arabia and additional OPEC countries that began purchasing US companies, real estate, and most notably US treasury debt. The purchases allowed the US to decrease its high interest rate and decrease its deficit without raising taxes (Judis, 2008). The interconnectedness of economies created by the foreign direct investment and the floating foreign exchange rates are central features of the current reserve currency system with the US dollar as the dominant reserve currency.

As the reserve currency system continues to evolve, the US dollar is continuing to satisfy a number of economic conditions to maintain its role as the dominant reserve currency. It is important to review the conditions as part of analyzing the need for increased reserve liquidity.

The first condition filled by the US dollar is the large size of global trade transacted. The US dollar is commonly used for external transactions, and is a liquid store of value for external transactions initiated and completed by international countries and non-US institutions (Carbaugh & Hedrick, 2009).

The second condition that has been filled by the US dollar is stability in macroeconomic and political policies to establish confidence in the currency (2009). As shown above, the confidence that supports the currency’s future store of value increases the desirability of using the currency as a liquid exchange in international transactions. There must be a commitment to low inflation and sustainable public debt by the government (Prasad & Ye, 2012). As written about by Judis (2008), other countries have aided the US dollar as the dominant reserve currency by aiding US macroeconomic policies, further demonstrating the interconnectedness of the global economy. When a currency is a large portion of a country’s foreign exchange reserve, it is important to have the currency maintain its value. If the value cannot be
maintained, one method governments and private institutions will use to hedge the currency risk is to exchange the currency for one that is perceived to have more stability. A barrier for the exchange that serves to slow the release of the dominant reserve currency is the level of liquidity of the replacement currency in the international market.

The third condition involves the size of the financial market. Prasad & Ye (2012) provide a succinct description of the financial market development; “A country must have deep and liquid financial markets—that is, markets, especially in government bonds, with many buyers and sellers to provide “safe” assets that can be held by international investors and central banks from other countries. Turnover (trading volume) in these bond markets, which is a measure of liquidity, is also important.”

The fourth economic condition is the external market driven valuation of the currency determined through the ability to freely trade between partners. A flexible exchange rate is required, although central banks will intervene at times if the exchange rate is considered to be too extreme, whether high or low (Prasad & Ye, 2012).

The final economic condition filled by the US dollar as the dominant reserve currency is an open capital account where the reserve currency is acceptable for payment and easily traded in global financial markets. Thin capital markets subject to direct government control through restrictions on capital flow do not allow a currency to be easily used as payment and traded in global financial markets, precluding the use of the currency as a reserve currency (Prasad & Ye, 2012).

**Downward Trend In The Use Of The US Dollar As The World’s Dominant Reserve Currency**

The conditions that have established the US dollar as the dominant reserve currency are evolving, and the US dollar is experiencing an erosion of its role. Currently the US is the largest economy of the world; however the relevant sizes of international GDPs are changing. China overtook Japan’s economy to become the second largest economy in February of 2011 and is forecasted to overtake the US’s economy to become the largest economy by 2020 (British Broadcasting Corporation, 2011).

Further challenging the lead position of the US size of GDP and economy is China’s growth combined with the US’s downward trend of its global competitiveness. The World Economic Forum (WEF) uses twelve metrics to measure productivity and sustainability of a country’s economy. Some of the metrics include infrastructure, macroeconomic environment,
technology, labor efficiency, innovation, and education (Global Competitiveness Report 2012-2013, 2012). After moving lower on the list of the most competitive nations for four consecutive years, the US has fallen to the seventh place. The good news for the US is that the country continues to be one of the world’s top innovators supported by an excellent university system (US Slips Down The Rank Of Global Competitiveness, 2012).

The condition of deep and liquid financial markets is experiencing a downturn in the US, including the cash products, which is the market emphasized by Prasad and Ye (2012) to be important to the role of reserve currency. The Dodd-Frank Wall Street Reform and Consumer Protection Act into law on July 21, 2010 may be the reason, although further research is needed to make a definitive determination. Even so, it should be taken into consideration. The Act contains over 2,300 pages and has been surrounded in controversy. There is agreement that good regulation is required to maintain a healthy and vibrant financial system; however, there is concern the complicated and unclear compilation of rules in the Dodd-Frank Act may unintentionally harm the US financial system. The following quote is a short analysis of one of the many rules that are in the Act. The rule is known as the Volcker Rule and its purpose is to regulate the capital markets. The rule was in the comment stage when the following quote was written:

“The unintended consequences of the proposed Volcker Rule can either partially or completely derail the intended results. The intention of regulation is to protect the vulnerable. However, unintended consequences of regulation can cause the opposite to occur. In its present form, the proposed Volcker Rule has the potential of continuing the liquidity crisis that aided in the degradation of the housing market into decreased liquidity in the capital markets (Skold, 2011).”

Although the rule has not yet gone into effect, it was first scheduled to be enforced beginning on July 21, 2012. US capital markets have thinned and liquidity has decreased since the date the Volcker Rule was proposed to go into effect. Financial holding entities may have prepared for compliance by leaving the markets. The reasons may be twofold. The first reason may be the proposed implementation date of July 21, 2012, and the second reason may be the discrepancy between the interpretation of proprietary trading that is prohibited by the rule, and market making, which is allowed. Market making is how liquidity is formed in capital markets by financial institutions.

Even though the US economy has been in a slow recovery since 2008, trading volumes on the New York Stock Exchange (NYSE) has markedly decreased in the month and a half after the proposed implementation date. The average daily volume (ADV) of trading decreased 15.8 percent in July 2012 over July 2011 (NYSE Euronext Announces Trading Volumes for July 2012,
2012). The ADV for the month of August 2012 on the NYSE has decreased even more meaningfully year-over-year and month-over-month. The NYSE has released statistics showing the ADV for the tapes and the exchange traded funds (ETF). Tape A listed issues consolidated ADV is down by 47.3 percent, tape B consolidated listed issues ADV is down by 63.5 percent, ETF ADV is down by 65.0 percent. Most importantly to the condition of deep and liquid financial markets is that US cash products ADV was down by 54.6 percent year-over-year in August 2012. The September ADV for US cash products rebounded from August by 15.4 percent, although it decreased 34.7 percent from September 2011 (NYSE Euronext Monthly Volume Summary, 2012). Given the decreases in trading volume, the US capital markets are thinning and becoming less liquid.

Regarding the condition of stable macroeconomic policy, the US economy is currently in the precarious position of facing the fiscal cliff. Politicians have not agreed to a course of action to avoid reaching the debt ceiling that is coordinated with the end of tax cuts to occur on January 1, 2013 (Investors Eye the ‘cliff’ as Obama Gains in Polls, 2012; Milesi-Ferretti, 2012). The US economy is expected to shrink by $600 billion, contracting by 3 percent annual rate in the first half of 2013, and unemployment is expected to rise to 9.1 percent by the fall of 2013. There is concern a new global recession would occur as a result (Investors Eye the ‘cliff’ as Obama Gains in Polls, 2012).

The large debt accruing in the US is a macroeconomic concern in that if not controlled, it could destabilize the dollar. By the end of 2012, the US debt is forecasted by the IMF to become larger than the country’s GDP with a ratio of 106.5999 (World Economic Outlook Database, 2012).

**Effects From A Decreasing Role Of Dominant Reserve Currency For The US Dollar**

Both the global economy and the US economy have gained benefits from the US dollar maintaining its role as the dominant reserve currency. During the global financial crisis, US treasuries provided a safe haven. However, the large capital inflow to the US government treasuries was different from foreign direct investment into the private sector (Ussher, 2009). The global economy has benefitted from the US acting in the role of banker, and the redirection of capital inflow from the private sector to the government is decreasing the private sector’s capacity to act as the world’s banker.

In addition, the private sector is removing capital capacity from the economy by deleveraging...
As the US decreases its role as the world’s investment banker by decreasing its recycling of savings into foreign direct investment and running a deficit balance of payments in the form of deficit trade, the world’s foreign reserves are decreasing. If the process is not adjusted, the global economy could be pulled into a contractionary spiral (Ussher, 2009).

The benefits gained by the US economy from having the US dollar in the role of the dominant reserve currency include how its external debts have been synonymous with its internal debts due to the availability and liquidity of the US dollar. Both internal and external debts are denominated in the dollar, and the US is not required to reserve a foreign currency to pay external debts, which is what is done in other countries – most notably in frontier and emerging economies. The newer economies must use foreign currency gained through payments for exports to support their external debt (Arestis, Basu & Mallick, 2005).

The US dollar is experiencing the “Triffin Dilemma,” (Pozsar, 2011). The dollar must be abundant to satisfy global reserve requirements, and at the same time it must be strong to hold its future value. The US has used “deficit spending” by borrowing rather than solely using taxes to grow out of an economic slump (Ussher, 2009). Both China, the country’s number one creditor, and Japan, the country’s number two creditor, have aided the ability of the US to use deficit spending (Appendix 1) (Major Foreign Holders of Treasury Securities, 2012). Due to the deficit spending, the US has become less dependent on manufacturing and exports and more dependent on the financial sector (Ussher, 2009). A delicate balance exists where the economy can continue to grow, and the deficit is too large to coexist with economic growth. The dependence on the financial sector drives the need for effective banking regulation rather than more and highly complicated banking regulation.

Alternatives To Using The US Dollar As Reserve Currency

Keynes’ International Clearing Bank and the Bancor

In the 1940s, the economist John Maynard Keynes introduced the concept of a supranational central bank called the International Clearing Bank (ICB), and a global currency he named ‘bancor.’ In his model, countries would fix the exchange rate of their national currency within a trading range to the bancor (Arestis et al., 2005).

Keynes made rules for reserves, exchange rates, and valuations. The reserves would not be allowed to leave the system with the intention of blocking a run on the bancor. Each member would be allocated a quota of bancor according to their level of imports and exports. The
bancor would be used solely for clearing purposes between countries, and the ICB would be responsible for the accounting (Arestis et al., 2005).

If a country’s holdings were to move above or below the neutral mark of their holding, the country would be charged interest with the intention of motivating the country to seek to adjust the surplus or deficit. If a surplus exceeded half of the allotted quota for a certain period of time, the credit would be cancelled. If a country were to run a deficit to similar parameters, the country’s currency exchange rate control would be surrendered to the ICB and the currency would be devalued (Arestis et al., 2005). The surplus and deficit parameters of the system create a large barrier to implementation of the model.

The IMF’s Special Drawing Rights

In 1969 the IMF created the synthetic currency known as special drawing rights (SDR). The IMF’s SDR is similar to Keynes’ bancor. The SDR was created in response to the dilemma of the dollar backed by the gold standard. There weren’t enough of the two reserve currencies, the dollar and gold, to support the expansion of world trade. However, the SDR did not gain wide use as the new reserve currency due to the change of the fixed exchange rate system into a floating exchange rate system, and the dollar was no longer on the gold standard (Special Drawing Rights Factsheet, 2012).

Currently, the SDR is used as internal money by IMF members and is valued with a basket of currencies. The value is calculated daily by adding together the dollar values based on market exchange rates of a combination of the US dollar, euro, Japanese yen, and pound sterling (SDR Valuation, 2012). Every five years the basket is reviewed for accurate reflection of world trade. It can be reviewed earlier if there is substantial enough reason (Special Drawing Rights Factsheet, 2012).

The SDR does not have the direct value of goods and services behind it. The synthetic currency derives its value from a basket of currencies that have goods and services supporting their values. Therefore, the SDR is a proxy currency (Arestis et al., 2005). The IMF has explored the possibility of using the SDR as a global form of accounting in lieu of calling it a currency. The conclusion is that the SDR would be too cumbersome to use in transactions due to the calculations required for valuation from the basket of currencies (Moghadam, 2010). Further supporting the conclusion is the Bagehot principle that requires central banks, whether national or international lenders of last resort, to have good collateral (Arestis et al., 2005). While national currencies have the backing of goods and services, the SDR is only a proxy.

In a working paper, the IMF acknowledges another concern over using the SDR as a reserve
currency. It would not be decoupled from a dominant national currency since a large portion of the basket valuation would depend on that currency. The recommendation for the SDR is that it remain an inside money and that a different medium be used as an outside money (Moghadam, 2010).

Multiple Currencies And Institutional International Payments

The evolving economic conditions are applying pressure on the role of the US dollar as the dominant reserve currency. In addition to the diminished stability of the macroeconomic policies, the external use of the dollar is decreasing in trade transactions. As a natural hedge to currency exchange risk, businesses are increasing their use of currencies other than the dollar.

The method used by companies to pay their international suppliers is changing. The furniture store IKEA and the world’s largest wireless network company Ericsson, both home-based in Sweden, are paying suppliers in China with the Chinese yuan from proceeds of sales in China, rather than the US dollar. Approximately 20 percent of IKEA’s spending budget is now paid in yuan.

Reasons for the evolving conditions are decreased currency exchange risk and costs, the increase in ease for suppliers to cover costs in their domestic currency, the increased visibility to analyze cost structures that allows IKEA to help its suppliers improve productivity, and that negotiations can be conducted on business terms without currency fluctuations (Hansegard, 2012).

The Bank for International Settlements (BIS) assembles a report called the Triennial Central Bank Survey that shows the amount of currency used in global transactions and publishes it every three years. Average daily turnover in currency exchanges was 1.2 trillion in 2001 and increased 70 percent to 4 trillion in 2010. By contrast, the use of the US dollar as the reserve currency declined from 90 percent in the 2001 to 85 percent in 2010 (Central Bank Survey of Foreign Exchange and Derivatives Market Activity in 2001, 2012; Triennial Central Bank Survey, 2010).

Government Bilateral Agreements and Currency Swaps

US implementation of loose monetary policy with quantitative easing for domestic monetary policy is impacting international markets, with particular focus on emerging markets. The higher amount of money supply initiated outside of a global reserve currency crisis is creating capital flows into sensitive economies that have difficulty absorbing the excess. Commodity prices are increasing and domestic goods are becoming more expensive to local consumers.
than international imports (Brazil may fire up tax artillery in 'currency war', 2012; Back & Nam, 2012).

Brazil’s Finance Minister Guido Mantega has stated the value of the Brazilian real would be maintained rather than allowed to appreciate to the decreased value of the US dollar. To accomplish the stabilization, short-term capital taxes would be implemented (Brazil may fire up tax artillery in 'currency war', 2012).

The decreased currency value of the US dollar is eroding its future value. While the dollar is allowing US goods to become more competitive in international trade, it is also eroding the economic condition of future value stability.

The role of the US dollar as a national currency does not always synchronize with the international role of the US dollar as the dominant reserve currency. Zhou Xiaochuan, Governor of the People’s Bank of China (PBOC, China’s central bank) understands the domestic policy mandate; however, he points out that the same policy is not always effective internationally (Back & Nam, 2012).

China and South Korea are two emerging markets that are using currency swap agreements to facilitate the free flow of trade and boost liquidity in times of crisis (Back & Nam, 2012). When countries enter a currency swap agreement, either country can exchange a fixed amount of the currency with the other without concern over exchange rates. Through a gradual process, emerging markets have been entering the agreements and increasing financial integration.

In addition to the bilateral agreement that circumvents the dollar as the settlement reserve currency, Mr. Zhou supports the use of a multicurrency system. Mr. Zhou is calling for a wider use of the IMF’s international money system (2012). The IMF supports a multicurrency system through using a basket of currencies to value its synthetic currency called the Special Drawing Rights (SDR) (Special Drawing Rights Factsheet, 2012). Mr. Zhou of the PBOC has stated he is in favor of including the yuan in the basket of currencies, although the process of the currency reform will be conducted at a pace that makes sense for the yuan (More currencies needed for SDR: Zhou Xiaochuan Renminbi a top choice given China’s growth, 2011). In April, 2012, the PBOC took steps toward liberalizing the yuan from the US dollar by widening the trading band from plus or minus 0.5 percent to an expanded plus or minus one percent.

The US Federal Reserve implemented liquidity currency swap agreements during the global financial crisis with the European Central Bank and the Swiss National Bank in December, 2007. Until May, 2008, the Federal Home Loan Bank (FHLB) provided more liquidity than the Federal Reserve. The currency swaps combined with other measures allowed the Federal Reserve to take over and provide a greater amount of liquidity lending during the crisis (Ashcraft, Bech &
Supply, Liquidity, And The Role Of The Federal Home Loan Bank System

During the global financial crisis in 2008, liquidity was difficult to maintain in markets that did not have the same high levels of counterparty risk as Europe, the UK, and the US. Tokyo is an example of a market that had less liquidity even though it had less counterparty risk. The credit risk of Japanese banks did not deteriorate as substantially as the European and US banks. Even so, the risk premium paid for US dollar liquidity was greater in the Tokyo market measured by the TIBOR than in the London market measured by the LIBOR. Funding liquidity was lower in Tokyo due to the lack of interbank lending. Central bank swap agreements alleviated some of the pressure and helped to decrease the risk premium, although the risk premium was still driven higher for non-US banks (Fukuda, 2012).

Fukuda’s findings regarding the two areas of deficiency in liquidity, the lack of liquidity due to counterparty risk concerns and the decreased supply of funding liquidity show a space in the global financial system for equally accessible liquidity in the dominant reserve currency. In answer to the first research question, yes, there is a need for increased liquidity of the reserve currency in the global financial system.

Institutional Cash Pools And The Triffin Dilemma

Zoltan Pozsar, a researcher for the IMF, has published a working paper on the effects of institutional cash pools in moving liquidity around, and the Triffin dilemma of the US Banking System arising from the 2007-2008 crisis. A structural deficit in short-term, government guaranteed instruments such as Treasuries (T-bills) caused a great demand for private alternatives provided by the shadow banking system (two examples are financial institutions such as insurance companies and broker-dealer money markets). The diversity in counterparty risk was in response to the need for larger institutional cash pools in a financial system with a shrinking number of large banks, most notably in the US (Pozsar, 2011).

Channels used to allocate short-term funding moved away from banks and toward government sponsored enterprises (GSE) and broker-dealers. European banks were a large user of these channels. Prime money market funds provided portals to move vast amounts of dollar funding out of cash pools in the US and into banks in Europe (Pozsar, 2011).

The modern-day Triffin Dilemma occurred in 2007-2008 similar to the stretched convertibility of
the US dollar in the 1960s when the volume of dollars escalated compared to the amount of US gold in reserve. In the 2007-2008 global financial crisis, “the rise of institutional cash pools and their safety preferences stretched the US banking system to its limits in its ability to guarantee cash pools’ principal safety and redeemability on demand and at par and in unlimited amounts and in all states of the world. The US banking system failed at a task no less than endogenously creating private alternatives to Treasury bills, that had the same degree of safety and liquidity than the real T-bills that were in short supply,” (Pozsar, 2011).

Two decades ago, uninsured institutional cash pools were only five percent of US insured deposits. Now, uninsured institutional cash pools are over 55 percent of US insured deposits. The disparity is causing US banks to become increasingly less able to provide a backstop. The institutions have been placed in the position of acting as insurers of last resort for the world’s uninsured dollar liquidity (Pozsar, 2011).

A Safety Valve

During the global financial crisis the FHLB system acted as lender of next-to-last-resort to provide necessary funding liquidity. Banks could not access the usual pipeline of liquidity from interbank lending due to concern over counterparties’ ability to repay their loans. Due to the stigma and higher costs associated with going to the discount window of the Federal Reserve and the longer term lending available through the FHLB, banks preferred to gain liquidity through collateralized borrowing from the FHLB. Eight months after the beginning of the financial crisis the Federal Reserve implemented enough borrowing cost reductions, extended terms, and swap agreements to begin lending more than the FHLB (Ashcraft et al., 2010).

A purpose for forming a new layer in the system with a global loan bank similar to the Federal Home Loan Bank of the US is to add liquidity to the global financial system. The necessity of additional liquidity has been shown through the study of the LIBOR in London and the TIBOR in Tokyo by Fukuda (2012). The liquidity risk premium was higher in the TIBOR even though there was less counterparty risk between banks in the Tokyo market because the supply of US dollars was less in Tokyo than in London (Fukuda, 2012).

The United States FHLB is a system of twelve banks. The system is a cooperative that is a government sponsored enterprise (GSE) created out of the depression to provide liquidity to 8,000 banks that became members of the system. The original intention was to provide wholesale collateralized lending to its members for home loans. The FHLB is sponsored by the government in that its operating costs are reduced through exemptions from paying corporate income taxes and from Securities and Exchange Commission registration requirements for its debt securities (Ashcraft, 2010).
The FHLB system is capitalized by members through the purchase of shares. To be a member, the financial depository institution must be a US institution, or if it is a non-US financial institution it must control a US depository institution. LIBOR institutions that control US depository institutions had access to wholesale funds through the FHLB during the 2007-2008 global financial crisis (Ashcraft et al., 2010). As pointed out by Pozsar (2011) and Ashcraft, et al. (2010), this provision provides further insight into the higher liquidity in London than in Tokyo found by Fukuda’s (2010) research.

A Global Loan Bank System

Pozsar (2011) recommends an intermediary to serve as a bridge between pools of long-term assets, and short-term institutional cash pools. He noted that GSEs served as a bridge, and in answer to the second research question, this paper supports the finding.

The FHLB, a United States GSE, provided the bridge for US members and non-US members that controlled US depository institutions. A global bridge to issue collateralized lending that would increase reserve currency liquidity could be a system similar the GSE Federal Home Loan Bank system. In addition to providing collateralized lending to developed economies, a global loan bank could increase the availability of loan funding in frontier and emerging economies, as well as perform as another layer of stability as lender of next-to-last resort during a financial crisis. This condition for establishment is similar to the condition for establishment during the US Great Depression. Newer economies would have access to funding other than through payment for exports that would provide foreign exchange reserves during normal financial conditions, and they would have access to a lender of next-to-last resort during a crisis.

A global loan bank system could be established through individual government sponsorship that would decrease operating costs in each country. The system could have consistent global regulations that are aligned with US regulations, which have proven to be successful during the 2007-2008 financial crisis.

Management would be consistent if one financial entity were to provide the management for the global system. The IMF is one possible source for management; however, the IMF acts as a lender of last resort similar to a global central bank. In the US model, the Federal Reserve is the central bank that is the lender of last resort, and the FHLB is the lender of next-to-last resort. The global loan bank system would take the role of the lender of next-to-last resort.

A less obvious selection to manage the global loan bank system is a commercial global bank.
The global bank would not own the system; it would manage the system for a fee. In addition to managing the system, the membership shares, and the credit risk analysis, the fee would support the sophisticated cyber security that would specifically fit the global loan bank. The managing commercial global bank would have access to the global markets and could serve as another source beyond its members for reserve currency exchange, providing liquidity to the global loan bank. The multiple currency capability would position the global loan bank system to evolve as the global reserve currency system evolves.

Conclusion

The US dollar is the global dominant reserve currency. There are many benefits to the national currency filling the international role one of which is that the US acts as the world's global investment banker. However, a modern day Triffin Dilemma is occurring where the demand for short-term securities used as reserve currency supply to fund institutional cash pools has stretched the US banking system to its limits. Another layer is recommended to provide added global liquidity through collateralized lending. The layer could be a global loan bank that is modeled after the Federal Home Loan Bank, a United States GSE. A final conclusion will be determined following the completion of research.
## APPENDIX 1

### MAJOR FOREIGN HOLDERS OF TREASURY SECURITIES

|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|

* Includes holdings of Treasury bonds and notes as reported on TIC Form SLT, "Aggregate Holdings of Long-Term Securities by U.S. Domestic and Foreign Residents."

** Includes holdings estimated foreign holdings of U.S. Treasury marketable and non-marketable bills, bonds, and notes reported under the Treasury International Capital (TIC) reporting system are based on annual Surveys of Foreign Holdings of U.S. Securities and on monthly data.

2/ United Kingdom includes Channel Islands and Isle of Man.

3/ Oil exporters include Ecuador, Venezuela, Indonesia, Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates, Algeria, Gabon, Libya, and Nigeria.

4/ Caribbean Banking Centers include Bahamas, Bermuda, Cayman Islands, Netherlands Antilles, and Panama. Beginning with new series for June 2006, also includes British Virgin Islands.

Citations


