

# International Conference on Capital Flows and Safe Assets

By Jian Wang



## 2013 Conference Summary

**When:** May 26–27

**Where:** Fudan University, Shanghai, China

**Sponsors:** Federal Reserve Bank of Dallas Globalization and Monetary Policy Institute, Finance Research Center of Fudan University, Center for Economic Policy Research and Graduate Institute of International and Development Studies



From just after the Great Depression until the beginning of the 2007–09 financial crisis, the global financial system was relatively quiet, with no major calamity afflicting advanced economies. Although emerging markets periodically confronted crises, these events were usually limited to a small set of countries that tended to recover quickly. The devastating consequences of the financial crisis caught most policymakers and economists off guard.

Policymakers and researchers from the U.S., China and Europe who studied triggers of the crisis gathered to discuss global financial industry stability and implications for monetary policy at the “International Conference on Capital Flows and Safe Assets” in Shanghai, China. Presenters explored the role of capital flows and the scarcity of global safe assets in financial markets and exchanged ideas about crucial global economic issues such as monetary policy in the U.S. and China, the euro-area debt crisis and flaws in the global monetary system.

Two keynote speeches, nine paper presentations and three panel discussions examined the “puzzle” of insufficient safe assets—liquid debt claims with negligible default risk—as well as other economic concerns such as global liquidity and exchange rates and the unconventional monetary policies adopted worldwide as a result of the crisis.

### Keynote Speeches

Richard Portes, an economics professor at the London Business School and president of the Center for Economic Policy Research (CEPR), opened the conference with his keynote speech, “The Safe Asset Meme.”

Safe assets are crucial for modern finan-

cial systems. For instance, they serve as reliable stores of value, as collateral in financial transactions and as assets to meet prudential institutional requirements. A global shortage of safe assets and its impact on the global financial system have been significant themes in recent policy debates. A safe-asset shortage can lead to financial instability, Portes said, noting that such scarcity had depressed real interest rates, forcing investors into excessively risky assets. A lack of safe assets, attributable to high savings rates in emerging markets, is believed to be a cause of global imbalances and asset bubbles before 2007.

Depending on the definition of “safe assets,” there are conflicting indicators of a shortage, Portes said. U.S. dollar- and euro-denominated safe assets declined relative to emerging market foreign exchange reserves, especially after 2008. However, if safe assets include government debt of all Organization for Economic Cooperation and Development (OECD) countries rated AA and higher, there is no evidence of a safe-asset shortage. Such scarcity also isn’t obvious based on the prices (interest rates) of safe assets.

Downward-trending long-term real interest rates in the U.S. and the U.K. after the 1990s have been cited as evidence of a safe-asset shortage. But similarly low interest rates with no shortage of safe assets occurred in those same countries in the 1950s and 1970s. Therefore, Portes argued, we should be cautious when using safe-asset shortages to explain recent financial market instability. More theoretical and empirical studies are needed to further examine this issue.

Maurice Obstfeld, an economics professor at the University of California, Berkeley, gave the second keynote, “Finance at Center Stage: Some Lessons of the Euro Crisis.” Obstfeld reviewed the roots of the euro crisis and praised the euro

area for quickly correcting some of the currency union's design flaws. For instance, the euro area's decision to reform its financial sector and initiate centralized financial supervision will improve future financial stability.

However, Obstfeld also highlighted a financial/fiscal “trilemma”: Euro-area countries cannot simultaneously enjoy financial integration among member states, financial stability and fiscal independence. He argued that with those countries' financial integration, the cost of banking rescues may now exceed national fiscal capacity. Therefore, it is necessary to establish centralized fiscal backstops to finance deposit insurance and bank resolution on top of the centralized financial supervision. This argument provides additional support for fiscal constraints in a monetary union.

### Session One: Safe Assets and Shadow Banking

The first session, chaired by Hans Genberg of the International Monetary Fund (IMF),

featured three papers on the consequences of increased demand for global safe assets—the shortage of such assets, the dollar's safe-haven effect and shadow banking.

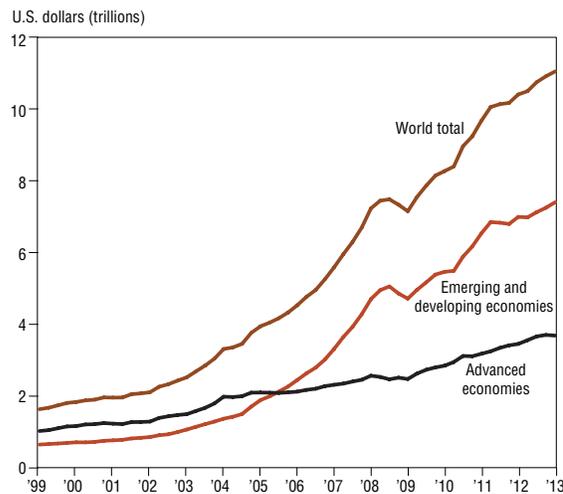
Pierre-Olivier Gourinchas, an economics professor at the University of California, Berkeley, presented “Global Safe Assets,” coauthored with Olivier Jeanne, an economics professor at Johns Hopkins University. They demonstrated in a model of stores of value that supplying public safe assets is a natural way to eliminate the financial instability associated with a safe-asset shortage. The crucial issue in creating safe assets is how to make them truly safe, which usually requires a monetary backstop. Sufficiently safe assets can immunize the economy against bubbles by eliminating private-label, supposedly safe assets, Gourinchas and Jeanne's model shows.

“The definition of safe assets has a key impact on the financial sector and so should not be left entirely to the private sector,” they argued. “The authorities should commit themselves to a

Presenters and discussants at the “International Conference on Capital Flows and Safe Assets.”



Chart 1  
**Foreign Exchange Reserves Increase After 2000**



SOURCE: International Monetary Fund.

clear definition of safe assets and back it with a policy regime that makes those assets credibly safe.”

Gourinchas and Jeanne document that the increased demand for U.S. safe assets comes mainly from the U.S. financial sector and the rest of the world, while U.S. private nonfinancial sector demand remains remarkably stable. Increased financial system demand reflects destruction of internal liquidity during the global financial crisis. Rest-of-the-world demand is mainly driven by precautionary accumulation of foreign reserves by the foreign official sector (*Chart 1*).

Following the 1997–98 Asian crisis, foreign reserves in emerging economies (especially emerging Asian countries) skyrocketed, reflecting these countries’ fear that no international lender of last resort would provide them liquidity if there were an international investor run on their financial markets. Economic frictions and inefficiencies are responsible for both instances of increased demand for safe assets. Therefore, it remains an open question whether the priority of solving the safe-asset shortage should be given to reducing demand by addressing these underlying inefficiencies or to increasing the supply of safe assets.

Matteo Maggiori, an assistant professor at New York University, presented “The U.S. Dollar Safety Premium.” The U.S. dollar acts as the reserve currency for the international monetary system and thus becomes a safe haven during global financial crises when international investors chase safe assets in the market. Because of this flight to quality, investors are willing to hold dollars despite a lower return than on other currencies. Maggiori quantified the U.S. dollar safety premium and found that during the period of the modern floating exchange rate (1973–2010), the annual return on dollars was 1 percent lower than on a basket of foreign currencies. The return differential is much higher in financial crises. For instance, in October 2008, it was as large as 52 percent following the collapse of Lehman Brothers.

“Velocity of Pledged Collateral” was presented by Manmohan Singh, a senior economist at the IMF. One explanation of the recent global financial crisis suggests that a safe-asset shortage led to the private sector’s creation of assets such as mortgage-backed securities. These private safe assets are used as collateral in short-term financing, Singh showed. The use and reuse of pledged financial collateral contributes significantly to the supply of credit to the real economy and has become a key source for short-term financing in the U.S. and many other advanced economies. The process is analogous to the traditional money-creation process, in which collateral acts like high-powered money.

Singh detailed the shadow banking system’s use of private safe assets as pledged collateral and how there are systemic risks to global financial markets if the collateral turns out to be less safe than labeled.

## Session Two: Capital Flows and Portfolio Choice

Paul Luk, an economist at the Hong Kong Institute for Monetary Research (HKIMR) presented “A Micro-Founded Model of Chinese

Capital Account Liberalization” during the second session, chaired by Enrique Martínez-García of the Dallas Fed. Luk and coauthor Dong He, director of HKIMR, examined China’s capital account liberalization in a general equilibrium model with endogenous portfolio choice. Their model predicts that Chinese households will increase their holdings of U.S. equity but decrease U.S. bond positions after China removes capital account restrictions. Indeed, China will short U.S. bonds to offset excess real exchange rate exposure to holding U.S. equity.

Yanliang Miao, an economist at the IMF, presented “Coincident Indicators of Capital Flows,” coauthored with IMF colleague Malika Pant. Capital-flows data become available with a lag of three to six months, which substantially constrains timely policy analysis of important capital-flow issues. To address this difficulty, Miao and Pant proposed two coincident composite indicators for capital flows. The first provides a timely proxy for net capital inflows and is based on the difference between the trade balance and the change in international reserves, augmented with other regional and global coincident correlates of capital flows. The second indicator augments data from Emerging Portfolio Fund Research with regional and global correlates of capital flows in an error-correction model and provides a real-time proxy for gross bond and equity inflows.

Miao and Pant showed that their indicators predict one- or two-quarter-ahead actual capital flows considerably better than standard measures used in the literature. At the same time, their indicators are simple enough to be easily constructed and used in policy analysis.

Shu Lin, an economics professor at Fudan University, presented the session’s last paper, “Monetary Policy, Credit Constraints and International Trade,” jointly authored with Jiandong Ju, an economics professor at Tsinghua University and the University of Oklahoma, and Shang-Jin Wei, a professor of finance and economics

at Columbia University. Previous empirical evidence shows that external credit is important in facilitating firm export activities, and credit market conditions generally worsen during monetary policy tightening. Thus, monetary policy may have an important impact on exports by affecting firms’ access to external financing. Lin, Ju and Wei tested this hypothesis, studying the effect of monetary policy on international trade through the credit channel. Employing a gravity-model approach and a large bilateral trade dataset, the authors found that exports fall much more following monetary policy tightening in sectors that are more financially constrained. This supports the credit channel transmission of monetary policy on exports.

### **Session Three: Global Assets and Prices**

Lin chaired the third session, which featured three papers on international asset returns and exchange rates. Hélène Rey, an economics professor at the London Business School, presented “World Asset Markets and Global Liquidity,” coauthored with Silvia Miranda Agrippino, a postdoctoral researcher at the London Business School.

Rey and Agrippino decomposed a panel of world risky-asset prices into three components: global, regional and idiosyncratic asset-specific factors. They found that one global factor—global banks’ time-varying degree of risk aversion—explains most of the variance of world risky-asset prices. U.S. monetary policy is found to negatively affect the risk aversion of global banks; following a positive shock to the federal funds rate, global banks reduce their risk appetite. At the same time, U.S. monetary policy is also found to respond to global risk aversion (loosening when risk aversion increases).

Yi Huang, an assistant professor at the Graduate Institute of International and Development Studies (IHEID) presented the second paper, “The External Balance Sheets of China and Returns Differentials.” As a result of China’s huge current-account surplus in the past 10 years, it

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accumulated a large amount of foreign assets. Yi, seeking to learn how those holdings performed, calculated excess returns on China's net foreign assets. The task was challenging because of data issues, including unavailability of some crucial information.

Yi found that China's net foreign assets incurred a substantial loss—as much as 6.6 percent annually. The asymmetric structure of China's foreign assets is an important reason: China holds a short position in equity and a long position in debt. The return on debt is lower than the return on equity—especially government debt, which accounts for a large portion of China's foreign reserves.

Jian Wang, a senior economist and advisor at the Dallas Fed, presented “The Effects of Surprise and Anticipated Technology Changes on International Relative Prices and Trade,” coauthored with Deokwoo Nam, an assistant professor of economics at the City University of Hong Kong. Exchange rate movement is an important consideration for international capital flows and trade.

How does the exchange rate respond to a U.S. productivity increase? Previous empirical findings are mixed: The U.S. dollar is found to appreciate in some studies but depreciate in others. Wang and Nam argue that the response of the dollar depends on the nature of productivity increases.

The authors decomposed changes in U.S. technology into two components: anticipated changes and unanticipated ones. An example of anticipated technology improvement is a new invention in a firm's pipeline. It is expected to increase the firm's future productivity, but has no impact on today's technology. Wang and Nam show that anticipated technology improvement in the U.S. will appreciate the dollar, but an unanticipated development will depreciate the currency. Additionally, these two types of technology changes induce different dynamics for international trade, as well as for macroeconomic variables such as consumption and investment.

Thus, Wang and Nam argue that the nature of technology change should be carefully investigated when evaluating cross-country transmission of technology change.

### **Policy Panel Discussions**

The first policy panel discussion, “Unconventional Monetary Policies in U.S. and Euro Zone and Monetary Policy in China,” was chaired by Mark Wynne, director of the Globalization and Monetary Policy Institute. Xiaoling Wu, former deputy governor of the People's Bank of China; John Rogers, a Federal Reserve Board of Governors senior advisor; Lars Oxelheim, chair of international business and finance at the Lund Institute of Economic Research, Lund University; and Lijian Sun, director of the Financial Research Center at Fudan University, discussed monetary policies during the global financial crisis.

Rey from the London Business School chaired the second policy panel, “Safe Assets and Capital Flows.” Panelists were Yongding Yu, director of the Institute of World Economics and Politics, Chinese Academy of Social Sciences; Steven Kamin, director, division of international finance, Federal Reserve Board; Hans Genberg, assistant director, independence evaluation office at the IMF; and Gourinchas from the University of California, Berkeley. Speakers discussed the shortage of global safe assets and the impact on advanced and emerging markets.

Portes from the London Business School and CEPR chaired the last policy discussion panel, “China and Global Financial Crisis: Implications and Future Perspective.” Benhua Wei, former vice chair of State Administration of Foreign Exchange of China; Chun Chang, a professor of finance and executive director of the Shanghai Advanced Institute of Finance; and Alexandre Swoboda, an emeritus professor of economics at the IHEID, discussed China's role in global financial systems and lessons learned from the recent global crisis.

## Conclusion

The two-day conference shed light on important lessons of the recent crisis and also prompted questions that may inspire additional research.

First, global banks and shadow banking represent a crucial channel for global economic linkages and policy transmissions. As Rey and coauthor Agrippino found, a global factor highly related to the risk appetite of global banks explains most of the variation in risky-asset prices in many countries. Singh showed that shadow banking system participants—global investment banks and bank holding companies—contributed significantly to the short-term credit supply across the world. Economies are more inter-linked than ever through financial markets. The understanding of such ties is increasingly crucial for conducting monetary policy.

Another important issue discussed was the shortage of global safe assets. The insufficient supply of (or, alternatively, excess demand for) safe assets depressed interest rates after the 1990s and is believed to be one of the main factors that led to the recent financial crisis. Low rates forced investors to put money into risky assets (for example, real estate) for higher returns and created asset price bubbles that burst around 2007. The safe-asset shortage also motivated the private sector to create “safe” assets that were far riskier than labeled. It is important to examine the source of the safe-asset shortage—was it a decline in supply or an increase in demand? Or was there really a shortage of safe assets at all? Additional study can clarify the issue.

Conference participants also examined flaws within the global financial system that are believed to be the underlying cause of the global financial crisis. Emerging-market demand for foreign-exchange reserves accounts for some of the heightened global demand for safe assets. Asian countries learned a difficult lesson regarding the lack or insufficiency of an international lender of last resort during the 1997–98 Asian financial

crisis. As a result, these countries accumulated a large amount of foreign reserves following that crisis to defend their economies from bank runs by international investors.

With emerging markets’ share of world GDP growing bigger, it becomes increasingly difficult for the U.S. to provide enough safe assets to meet emerging-market foreign exchange reserve demand. In the long run, a more sustainable solution may rely on developing a global monetary system in which the U.S. dollar is no longer the only major reserve currency.

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