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# Journal of International Money and Finance

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## Overview of the special issue on “Policy Implications of and Lessons from the Global Financial Crisis”

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### A B S T R A C T

#### Keywords:

Global liquidity  
International reserves  
The Global Financial Crisis

This paper reviews the special issue “Policy Implications of and Lessons from the Global Financial Crisis,” and its themes: Global liquidity and the use of international reserves; real and financial economic patterns before and during the global financial crisis.

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### 1. Introduction

The financial crisis of 2008–2009 triggered in the US, following the collapse of Lehman Brothers morphed shortly after into a global crisis, with wide reaching implications affecting a host of countries. While the global crisis is by no means over, its first four years provide preliminary insights into the challenges facing the continuation of financial and trade globalization. In order to gain a better understanding of the issues involved, a conference under the aegis of the *Journal of International Money and Finance* took place on September 23–24, 2012, at the University of California at Santa Cruz.<sup>1</sup>

The conference dealt with the topic “International Policy Implications of and Lessons from the Global Financial Crisis” his volume provides the refereed proceedings of that conference, including eight papers and a keynote address. The focus of the volume is on two broad themes: Global liquidity and the use of international reserves and real and financial economic patterns before and during the crisis.

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<sup>1</sup> The conference was sponsored and financed by JIMF, the Federal Reserve Banks of Atlanta and San Francisco, SCIE (Santa Cruz Institute for International Economics) and the University of Southern California.

## 2. Global liquidity and the use of international reserves

Global liquidity issues have been the focus of attention following the rapid increase in the ratios of international reserves to GDP of developing countries. This rise started in the 1990s, following the massive financial crises that rocked many of the emerging-market countries. While the demand for reserves reflected mostly exposure to trade instability during the Bretton Woods regime, observers noted that exposure to sudden stops of capital inflows, capital-flight crises and mercantilism played important roles in accounting for the buildups of reserves in the more recent era of deeper financial integration between emerging-market and rich countries. These developments induced massive increases in the demand for US dollar bonds, the global reserve currency, allowing funding of US fiscal deficits at a relatively low cost.

“The dollar and its discontents”, the keynote address by [Jeanne \(in this issue\)](#), outlines a model of the equilibrium returns associated with the key reserves currencies. He points out that the ideal global currency should be characterized by three virtues: liquidity and safety, provision in sufficient quantity, and the ability to deliver an appropriate return. The 2008 financial crisis has put in question the central role of the US dollar in the current system. Jeanne’s paper focuses on the return that the rest of the world has received and should expect to receive in the future on its dollar assets. The consumption-based cumulated return on dollar assets for the BRIC countries, the four emerging market countries that accumulated the most international reserves in the 2000s, was negative, and sizable between 2000 and 2007. In the broader sample of 28 emerging market economies, countries that increased their international reserves the most also received a lower consumption-based return on their reserves. This is because the countries that accumulated more reserves also tended to have currencies that appreciated more relative to the dollar.

Jeanne then goes on to present a model that can explain this finding. In this model, a country accumulates international reserves to resist the real appreciation of its currency, and to accumulate international liquidity in proportion to the growth in the domestic tradable good sector. In both cases, the country accumulates more reserves at the same time as its currency appreciates in real terms, which in turn decreases the consumption-based return on the reserves. The result is a kind of “saver’s curse”: the countries that accumulate more net foreign assets also tend, in equilibrium, to have a lower consumption-based return on those assets. The implications of these findings is that if the consumption-based return on dollar reserves is low for the reasons conjectured in this paper, it is not a problem that the international monetary system can or should try to solve.

In Adjustment patterns to commodity terms of trade shocks: the role of exchange rate and international reserves policies, [Aizenman et al. \(in this issue\)](#) use a “commodity terms of trade” data set to analyze how commodity-price shocks affect the real exchange rate, and how international reserves and the exchange rate regime affect the relationship between the terms of trade and the real exchange rate. The authors’ results confirm the idea that international reserves are crucial to buffering the adjustment of the real exchange rate to terms of trade shocks. A higher stock of reserves increases the persistence of terms-of-trade shocks on the real exchange rate, delaying the reversion of the real exchange rate toward equilibrium, but accelerating this movement once the real exchange rate starts to revert back to equilibrium. The results support the view that “leaning against the wind” is potent, but more effective when intervening to support weak currencies rather than intervening to slow down the pace of real appreciation. Thus the authors’ results validate the idea that a higher stock of international and active exchange rate management dampens the volatility of the real exchange rate.

The paper “Foreign reserve management during the global financial crisis” by [Dominguez \(in this issue\)](#) focuses on the degree to which countries actively used reserves during the global financial crisis. She distinguishes between passive reserve changes that occurred due to interest income and valuation changes on existing assets, and active asset purchases and sales. The decomposition of foreign currency reserves into changes due to market movements in asset prices and changes due to purchases and sales of reserve assets was made possible by a new initiative at the IMF which requires subscribing countries to provide detailed monthly information on the asset composition of their foreign reserve portfolios, known as SDDS. By 2010, SDDS covered countries that held about half of the global stock of international reserves. Dominguez finds that many emerging economies actively depleted reserves. While reserve stocks remained stable for many countries during the crisis, interest

income and valuation changes on these stocks of assets offset the effects of reserve sales, especially in emerging economies. The data indicate that depletion of reserves during the crisis was higher in countries where pre-crisis excess reserve levels were more evident. Changes in reserves due to interest income and valuation changes, influences government decisions to purchase or sell reserve assets. Countries that experienced losses on their reserve stocks during the global financial crisis tended to accumulate reserves after the crisis.

### 3. Real and financial patterns before and during the crisis

The second part of this special issue is made up of six papers dealing with various real and financial patterns before and during the crisis. These papers in one way or another search for regularities that can provide better explanations for observed patterns before the crisis and adjustments to the crisis.

Rose and Wieladek (in this issue) evaluate evidence on the “Too big to fail” doctrine, which probably accounted for the massive bailouts in the first phases of the crisis. Their paper “Too big to fail: Some empirical evidence on the causes and consequences of public banking interventions in the UK” examines the determinants of a number of the government interventions that took place: unusual liquidity support, public capital injections, and nationalizations. Rose and Wieladek ask what determined the style and the recipients of public interventions, and whether these interventions had a measurable impact on bank behavior.

They use a confidential Bank of England bank-level data set containing information on the balance sheets of all UK-resident banks. They find that a bank’s size, relative to the size of the entire banking system, typically has a large positive and non-linear effect on the probability of public sector intervention for a bank. They also apply instrumental variable techniques to show that British interventions helped; there is fragile evidence that the wholesale (non-core) funding of an affected institution increased by over 38% following capital injection or nationalization. Overall, they find strong and robust evidence that the size of a bank (relative to that of the entire banking system) has a positive but declining effect on the probability of an official rescue. A key indicator – access to wholesale funding markets – does indeed respond positively to intervention. British bank nationalization or public capital injection permits a bank to raise its access proportion of wholesale funding. Judged on this narrow metric, they conclude that British banking interventions seem to have been successful during the crisis.

In “How resilient and countercyclical were emerging economies during the global financial crisis?” Didier et al. (in this issue) show that, contrary to the conventional wisdom that emerging market countries escaped the worst of the crisis, these countries actually experienced decreases in real {growth comparable to those of the advanced economies. Still, compared to the advanced economies, the emerging market economies returned to their trend growth rates much quicker. Unlike in earlier crisis episodes, they were able to avoid the amplification of external shocks resulting from domestic banking, currency and debt crises that characterized these episodes.

The main reason that these economies were much more resilient than in the past was that during the last crisis the root of the problem was in the financial markets of the advanced economies. Emerging market economies had low exposure to these markets relative to the advanced economies. The other important reason was the fundamental change in the way that emerging economies conducted their fiscal and financial policies. During previous worldwide turbulent episodes, most emerging economies were unable to perform countercyclical policies, and their currencies and debt were substantially downgraded by the financial markets. In contrast, the current financial crisis found many emerging economies with more fiscal space (larger fiscal surpluses going into the crisis), better credit ratings, and better balance sheets for banks. Before the crisis, many emerging economies worked hard to become net creditors to the rest of the world in debt contracts, and lengthened the maturity profile of their debt, considerably lowering their external vulnerability.

The financial crisis that started in the summer of 2007 led to the worst U.S. recession since the Great Depression and monetary policymakers responded by implementing unprecedented programs to stabilize financial markets and restore economic growth. Constrained by the zero lower bound on nominal interest rates, the Federal Reserve also engaged in “unconventional” monetary policy, including the large-scale purchases of mortgage-backed securities and debt issued by Fannie Mae,

Freddie Mac, and Ginnie Mae, in addition to buying longer-term Treasury securities. As in the United States, the Bank of England's asset-purchase program has been financed by the issuance of central bank reserves, leading to a sharp increase in its balance sheet. In "Central bank announcements of asset purchases and the impact on global financial and commodity markets", [Glick and Leduc \(in this issue\)](#) present empirical evidence on the impact of these asset purchase programs on both domestic and international financial asset prices. More specifically, they study the joint reaction of long-term interest rates, exchange rates, and commodity prices. Commodity prices are forward-looking variables that in principal respond rapidly to worldwide economic news. They show that announcements about these purchases led to lower long-term interest rates and depreciations of the U.S. dollar and the British pound on announcement days, while commodity prices generally declined despite this more simulative financial environment.

The authors suggest that the announcements likely involved signaling effects about future growth that led investors to downgrade their U.S. growth forecasts lowering long-term US yields, depreciating the value of the U.S. dollar, and triggering a decline in commodity prices. Positive U.S. monetary surprises led to declines in commodity prices, even as long-term interest rates fell and the U.S. dollar depreciated. In contrast, on days of negative U.S. monetary surprises, i.e. when markets evidently believed that monetary policy was less stimulatory than expected, long-term yields, the value of the dollar, and commodity prices all tended to increase.

In "Emerging economies in the 2000s: Real decoupling and financial recoupling", [Levy Yeyati and Williams \(in this issue\)](#) document an intriguing development in the emerging world in the 2000s: a decoupling from the business cycle of advanced countries, combined with the strengthening of the co-movements in the main emerging market assets that predates the synchronized sell off during the crisis. Specifically, the paper examines the real business cycle co-movement between emerging economies and the group of advanced countries within the G7, on the one hand, and the financial asset markets co-movement with core markets. The paper finds that on the real front, emerging economies have indeed reduced their real co-movements with the advanced world, but rather than actually decoupling from the world, they have diversified away from the G7 into emerging Asia, through international trade and the growing economic importance of China. On the financial front, despite the real decoupling, the co-movements between EM and global assets have risen steadily in the late 2000s, even before the 2008–2009 crisis. A closer look at the impact of traditional financial proxies shows that capital flows from global and global emerging equity and bond funds indeed foster financial recoupling during downturns, reflecting the fact that they trade near their respective benchmarks and respond to withdrawals by liquidating holdings across the board.

In "Are Chinese trade flows different?" [Cheung et al. \(in this issue\)](#) examine the behavior of Chinese trade flows to see if the flows conform to the usual behavior that a more appreciated currency implies lower trade balances. This is an important topic in that China's current account surpluses have been identified as a possible cause of the recent global financial crisis. Many policymakers have urged China to allow the Chinese currency, the renminbi, to appreciate faster so as to reduce the country's large trade surpluses. Whether an appreciation of the renminbi would actually lower Chinese trade balances depends on whether the appreciation lowers China's exports and raises its imports. Here the authors obtain some very interesting results. They find that Chinese multilateral trade flows do respond to relative prices – as represented by the trade weighted exchange rate – but that relationship is imprecisely estimated. Moreover, they find that the response of Chinese trade to exchange rates is a bit odd. For example, contrary to the usual finding, in response to a renminbi appreciation, Chinese imports decline. However, Chinese exports do appear to respond to a renminbi appreciation in the expected way.

[Bordo and Meissner \(in this issue\)](#) in "Does inequality lead to a financial crisis?" assess the validity of [Rajan's \(2010\)](#) and [Kumhof and Rancière's \(2011\)](#) conjectures linking increased income inequality both to the credit boom and recent financial crisis in the and to the 1920s US credit boom and the banking crises that followed. Based on analysis of data for 14 advanced countries between 1920 and 2000, Bordo and Meissner conclude that these are not general relationships. They find that a credit boom heightens the probability of a banking crisis, but can find no evidence that a rise in top income shares precipitates the boom. Instead, low interest rates and economic expansions are the only two robust determinants of credit booms in their data set. Anecdotal evidence from US experience in the 1920s

and in the years immediately prior to 2007, as well from other countries, does not support the inequality-credit-crisis nexus either. Rather, it points back to a familiar boom–bust pattern of declines in interest rates, strong real growth, increases in the quantity of credit outstanding, booms in asset prices and crises.

#### 4. Concluding remarks

This is the fourth of five special issues on the recent global financial crisis derived from conferences that JIMF has co-sponsored.<sup>2</sup> The studies that it contains raise a number of pertinent questions regarding the impact of the financial crisis on the world economy and the ways to mitigate exposure to and costs of crises. Our hope is that these papers, like those presented at the other four JIMF conferences, will both shed light on what has transpired during the course of this crisis and motivate further research on the problems to which it has given rise.

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<sup>2</sup> The first conference was held at Warwick Business School on the topic “The Global Financial Crisis: Causes, Threats and Opportunities”, papers from which appeared in the December 2009 issue of JIMF; the second at the University of Rome Tor Vergata on “International dimensions of the financial crisis of 2007 and 2008”, papers from which appeared in the February 2012 issue; and the third at the University of Crete on “Financial Stress in the Eurozone”, papers from which appeared in the April 2012 issue. A fifth conference on “The European Sovereign Debt Crisis: Background and Perspectives” was held at the Danmarks Nationalbank in April 2012 and was co-sponsored by the Copenhagen Business School and SCIE. JIMF will publish refereed versions of the papers presented there in early 2013.