"ABS Inflows to the United States and the Global Financial Crisis"

Nontechnical Summary

Carol Bertaut, Laurie Pounder DeMarco, Steve Kamin, and Ralph Tryon

This version: August 5, 2011

It is widely accepted that international capital flows played an important role in the emergence of the U.S. housing bubble and the global financial crisis that followed the bursting of that bubble. In this view, an excess of saving over investment in many emerging market economies, popularly referred to as the "global saving glut" (Bernanke, 2005, 2007), led to a surge in capital flows into the United States that increased available credit and lowered interest rates. In combination with a number of additional factors—the increase in securitization, excessive reliance on credit ratings, increases in leverage, failures to manage liquidity and risk, and inadequacies of supervision and regulation—the expansion of financing associated with the capital inflows contributed to the U.S. housing bubble and to the buildup in financial vulnerabilities more generally that led to the crisis.

However, as argued in Bernanke et al., 2011, the global saving glut (GSG) story is an incomplete description of the developments in international capital markets that contributed to the crisis. The emerging market economies at the center of the global saving glut—China, other Asian developing economies, and the oil exporters—for the most part restricted their U.S. purchases to Treasuries, Agency debt, and other low-risk investments. Their provision of savings to the U.S. housing market was indirect, as the capital inflows pushed down yields on Treasuries and Agencies, increasing the appetite among private investors for alternative assets and lowering yields on them as well. In fact, yields on mortgages and mortgage-backed securities fell even more than those on Treasuries in the years leading up to the crisis.

In this paper, we argue that it is important to address a second feature of international capital flows that has received less attention—direct foreign purchases of private label mortgage-backed and other asset-backed securities (which we collectively call ABS) and other structured products issued in the United States. By adding to the demand for private-label ABS, foreign — primarily European — acquisitions of these securities likely contributed to the decline in their spreads over Treasury yields and to the increase in their supply, thus directly increasing the flow of resources to subprime and other risky borrowers. At the same time, foreign purchases of U.S. ABS ensured that when the bubble finally burst, the financial crisis would not be confined to the United States, but would spread throughout the world.

We analyze the evolution and financing of European acquisitions of U.S. ABS and structured instruments, on the one hand, and acquisitions of U.S. Treasuries and Agencies by the "global saving glut" countries, on the other, to explore the relative importance of these respective flows in creating vulnerabilities leading to the crisis. From 2003 through mid-2007, GSG country acquisitions of Treasuries and Agencies totaled roughly \$1 trillion, but European acquisitions of U.S. corporate debt amounted to even more, at \$1.25 trillion, of which nearly \$500 billion consisted of private-label ABS. However, the capital flows from the GSG countries and from

Europe were financed in very different ways. Acquisitions of U.S. assets from the saving glut countries represented the disposition of their sizable trade and current account surpluses. In contrast, Europe had roughly balanced current accounts, and financed its acquisitions through a considerable expansion in external liabilities, which were purchased by, among others, investors in the U.S. and the GSG countries. Taken together, the cross border financial flows between the United States, Europe, and the GSG countries represented a global "triangular trade" in financial assets. Because Europe was financing what were, at least *ex post*, risky investments in the United States through, in part, issuance of safe bank deposits and sovereign debt, it can be viewed as acting as a hedge fund in the global securities market, a role previously assumed mainly by the United States.

We present regression estimates and simulations of a stylized portfolio balance model to gauge the relative contributions of the inflows from the GSG countries and from Europe to the downward pressure on U.S. interest rates, noting that these respective acquisitions were related: By taking U.S. government debt off the market and lowering its yields, the acquisitions of the GSG countries encouraged European purchases of ABS. While mainly illustrative, the model's predictions of the effects on bond yields are consistent with both our own reduced-form econometric estimates and those of other analysts, suggesting that in the years leading up to the crisis, purchases of U.S. Treasuries and Agencies by the GSG countries depressed 10-year Treasury yields on the order of 140 basis points, and spillovers from this outcome likely lowered ABS yields by some 160 basis points. Our results also indicate that, even though much of Europe's acquisitions of U.S. ABS were financed by "reverse" flows of U.S. investments into European liabilities, the effect of this exchange was to lower ABS yields by about 60 basis points and Treasury yields by 50 basis points; if we consider all European purchases of U.S. corporate debt, these declines deepen to -160 basis points and -130 basis points, respectively. The combined effect of all of these inflows on U.S. interest rates, all else equal, would have been huge, but of course actual declines in yields were much smaller, as supplies of the assets to the market rose substantially as well.

We also explore the reasons why foreigners, especially Europeans, purchased so many ABS and similar securities. Europe's acquisitions of ABS did not exclusively reflect a boost to European demand for these assets that *pushed* capital into the U.S. financial system. Although that was likely the case in part, as European wealth expanded rapidly, home bias diminished, and a number of regulatory and financial factors encouraged Europeans to buy U.S. ABS, at least some of these acquisitions were probably caused by the expansion of the supply of ABS, which would have *pulled* in capital from Europe in response to attractive returns. But even in that latter case, European investors would have played a significant role by absorbing part of the increased supply of ABS and thus containing any rise in ABS yields that otherwise would have occurred.

In conclusion, we find that capital inflows from both the global saving glut countries and the advanced economies, especially Europe, helped depress U.S. interest rates during the middle of the past decade, contributing to Greenspan's (2005) "conundrum," whereby Treasury yields remained contained even as the federal funds rate was raised from 1 percent to an eventual level of 5½ percent. A critical question not addressed in this paper is the extent to which these declines in interest rates exacerbated the housing bubble and other financial vulnerabilities. This remains an open issue, and should represent the focus of additional research.