COMMENTARY

Global Imbalances and the Financial Crisis: Products of Common Causes

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One of the main global economic concerns before the financial crisis was the presence of large "global imbalances," which refer to the massive and persistent current account deficits experienced by the United States and financed by the periphery. This concern was intellectually grounded on the devastating crises often experienced by emerging market economies that run chronic current account deficits. The main trigger of these crises is the abrupt macroeconomic adjustment needed to deal with a sudden reversal in the net capital inflows that supported the previous expansion and current account deficits (the so-called "sudden stops"). The fear was that the U.S. would experience a similar fate, which would unavoidably drag the world economy into a deep recession.

As we all know, the crisis eventually came, and it came with more force than we all anticipated. However, the mechanism did not at all resemble the feared sudden stop, as quite the opposite occurred. During the crisis, net capital inflows to the U.S. were a stabilizing rather than a destabilizing force. The U.S. as a whole never experienced, not even remotely, an external funding problem.

Some pre-crisis imbalance critics have chosen to ignore the inconvenient fact that their anticipated mechanism played no role in the crisis, choosing instead to take the credit for the realization of the forecast of doom. One can feel the tension in the current paper: At times Maury and Ken are tempted to go the self-gratifying "I told you so" route, but they are intellectually too solid to do so, and hence they pull themselves out of it. Deeply at heart they still feel that global imbalances did it, but they also know that they need to find a different mechanism from the conventional sudden stop story if they are to match the facts.

I am not sure they have yet found a fully coherent mechanism, but this is fine since at this time no one can credibly claim to know exactly what happened. They want to blame it on economic policy here and abroad, but the story still needs more work to be fully convincing and serve as a guide to policy. In the body of the paper they talk about misguided sterilization policies in Asia that

facilitated postponing the reversal of loose monetary policy in the U.S., which in turn fueled the savings glut by boosting commodity prices.

But we know that the full story can be told without reference to monetary policy, just as a result of expansion and contraction of asset supply and demand around the world (see Caballero et al. 2008a,b). The paper argues against a narrow version of such a model which only considers asset demand (the savings glut story). I believe their evidence based on timing of events is consistent with the implications of the full demand-supply model. Thus, we still need more work to disentangle the relative importance of these stories.

In their conclusion they are more balanced and argue that financial underdevelopment in China is one of the main sources of the global imbalances.[1] But if so, what is the right policy with respect to global imbalances in the short run given these structural problems? And in particular, what is the form of optimal monetary policy? I could imagine scenarios where the optimal monetary policy is to be more expansionary than in the absence of the structural problems, in order to prevent deflationary forces from developing (Caballero 2006). In any event, I couldn't get a good sense from the paper on how to answer these important questions, and we certainly need answers for them . . . or at least I hope that we do seek them before rushing into implementing antiglobal imbalances policies.

Despite this general unease with the paper and its policy implications, I must admit that there are many great lines in it. One of my favorites is, "In effect, the global imbalances posed stress tests for weaknesses in the United States, British, and other advanced-country financial and political systems—tests that those countries did not pass. . . ." Brilliantly said, I fully agree with them. Although probably what they mean is a bit different from what I mean by *the test, its failure*, and *how to move forward*, thus I want to spend the rest of my comments developing my views on these things.

I believe that the root imbalance was *not* the global imbalance but a *safe-assets imbalance:* The entire world, including foreign central banks and investors, as well as many U.S. financial institutions, had an insatiable demand for safe debt instruments, which put an enormous pressure on the U.S. financial system and its incentives (Caballero and Krishnamurthy 2009). This is the stress test the U.S. economy failed.

Within this perspective the main mechanism prior to the crisis worked as follows: As the demand for safe assets began to rise above what the U.S. corporate world and safe mortgage borrowers naturally could provide, financial institutions began to search for mechanisms to generate AAA assets from previously untapped and riskier sources. Subprime borrowers were next in line,

but in order to produce safe assets from their high-risk loans, "banks" had to create complex instruments and conduits that relied on the law of large numbers and issuing a tranche of their liabilities. Similar instruments were created from securitization of all sorts of payment streams, ranging from car to student loans. Along the way, and reflecting the value associated with creating financial instruments from them, the price of real estate and other assets in short supply rose sharply. A positive feedback loop was created, as the rapid appreciation of the underlying assets seemed to justify a large AAA tranche for derivative collateralized debt obligations and related products. Credit rating agencies contributed to this loop, and so did greed and misguided homeownership policies, but they probably were not the root cause.

From a *systemic* point of view, this newfound source of AAA assets was much riskier than the traditional single-name highly rated bonds. As Coval et al. (2009) show, for a given unconditional probability of default, a highly rated tranche made of lower quality underlying assets will tend to default, in fact it can only default, during a systemic event. This means that, even if correctly rated as AAA, the correlation between these complex assets distress and systemic distress is much higher than for simpler single-name bonds.

The systemic fragility of these instruments became a source of systemic risk in itself once a significant share of them was kept within the financial system rather than sold to final investors. Banks and their structured investment vehicles (SIVs), attracted by the high return and low capital requirement combination provided by the senior and super-senior tranches of structured products, kept them on their books and, once satiated, began to pass their (perceived) infinitesimal risk onto the monolines and insurance companies (AIG, in particular). Through this process, the core of the financial system became interconnected in increasingly complex ways and vulnerable to a systemic event.

Much of the crisis is blamed on the crash of the real estate "bubble" and the rise in subprime mortgage defaults that followed it. But this cannot be all, or even much, of it. The global financial system went into cardiac arrest mode and was on the verge of imploding more than once, which seems hard to attribute to a relatively small shock such as the real estate/subprime combo. Instead, the real damage came from the unexpected and sudden freezing of the entire securitization industry. In a moment's notice, confidence vanished and the complexity which made possible the "multiplication of bread" during the boom, turned into a source of counterparty risk, both real and imaginary. Senior and super-senior tranches were no longer perceived as invulnerable, and worsening matters, banks had to bring back onto their balance sheets more of this new risk from the now struggling SIVs and conduits. Knightian uncertainty took over,

and pervasive flights to quality plagued the financial system. Fear fed into more fear, and caused reluctance to engage in financial transactions, even among the prime financial institutions.

Along the way, the underlying structural deficit of safe assets that was behind the whole cycle worsened as the newly found source of AAA assets from the securitization industry dried up, and the spike in perceived uncertainty further increased demand for these assets. Safe interest rates plummeted to record low levels.

As I said, global imbalances and their feared sudden reversal *never* played a significant role during this deep crisis. In fact, the worse things became, the more both domestic *and* foreign investors ran for cover to *U.S. Treasuries*. Instead, the largest reallocation of funds was across asset classes, in particular from complex to simple safe instruments.

From this perspective the core policy problem to deal with is how to bridge the safe-asset gap without overexposing the financial sector to systemic risk. Raising capital requirements is a knee-jerk policy reaction to reduce vulnerability, but it does not help to deal with the structural problem of excess safe-asset demand. Quite the opposite, by reducing the financial sector's ability to grow its balance sheet, it will worsen the safe-asset gap. The cost of this policy distortion is stronger headwinds for the recovery and the risk that the same pattern of systemically vulnerable safe-asset creation may migrate into the shadow financial sector or elsewhere in the world that is even less prepared to absorb the systemic risk. We need a more balanced response, trading off vulnerability reduction and the safe-asset gap, to determine the socially optimal level of capital requirements (which may well be higher than the pre-crisis levels, especially for illiquid assets) and complementary measures.

To be clear, the main failure was not so much in the private sector's ability to create AAA assets through complex financial engineering as it was in the systemic vulnerability created by this process. We should preserve the good parts of this process while finding a mechanism to relocate the systemic risk component generated by this asset creation activity away from banks and into private investors (for small and medium-size shocks) and the government (for tail events). This transfer should be done on an ex ante basis and for a fair fee, which can incorporate any concerns with the size, complexity, and nationality of specific financial institutions. There are many options to do so, all of which amount to some form of partially *mandated* insurance provision from the government to the financial sector against systemic events (see, e.g., Caballero and Kurlat 2009).

To conclude, while there are many good points in the paper, as one would expect from two stellar academics, I do not think the paper identifies the core of the policy problem we need to address. There is no doubt that global imbalances exacerbated the safe-assets imbalance, since emerging markets have a particularly severe deficiency in producing safe assets, but the real problem is this deficiency not the global imbalances per se. We should not get distracted with secondary illnesses.

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NOTE

1 Which, incidentally, is the main point in Caballero et al. (2008a,b). Contrary to the claim in the current paper, we did not argue that global imbalances were desirable. We simply pointed out that the causes behind them were more structural than it was typically assumed at the time. In particular, we emphasized the financial underdevelopment of emerging Asia and commodity producing economies, and the subpar growth of continental Europe.