



RICARDO CABALLERO

## Understanding Global Imbalances

By Ricardo Caballero, Ph.D.  
Ford International Professor of Economics, MIT

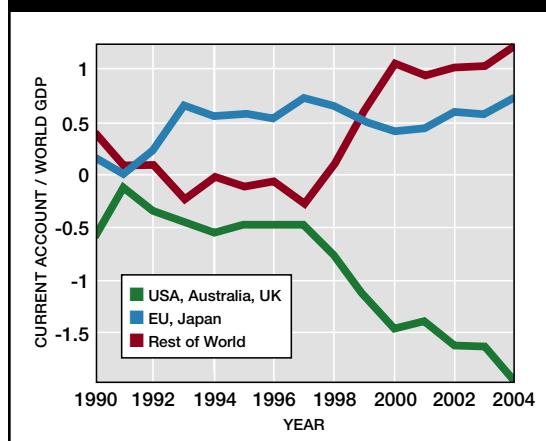
The global economy has been characterized in recent years by striking imbalances in capital flows, a continuous flow of capital from poorer countries to richer ones, volatile asset markets, several “speculative bubbles” that have driven asset prices up and then burst, and historically low real interest rates. A variety of explanations have been advanced for these disparate phenomena. But a new paper by MIT Economist Ricardo Caballero, building on his joint work with several other MIT economists, has a simple explanation for all of them: a shortage of global assets. The world economy is saving as always, but there are not enough assets in which to invest this savings.

Caballero’s explanation starts in the developing world: as developing countries grow, their ability to generate savings advances more rapidly than their financial institutions for investing savings. China, for example, is excellent at producing cheap products which are purchased around the world and generate cash balances for the nation, but it is still developing the sophisticated financial assets in which investors would like to store their savings. Developing countries have 80% of the world’s population but only 10% of the world’s market capitalization. Thus, individuals from developing countries are sending their savings to developed countries.

The developed country of choice for investing savings from the developing world is the United States, where assets have a high degree of security, come in many varieties, and are generally very liq-

uid. The result is an enormous inflow of capital to the U.S., and to a lesser extent to other developed nations. This keeps interest rates low, as individuals and firms can readily find savings to borrow to finance their investments. It also keeps the U.S. trade deficit high: to obtain the U.S. dollars that they desire as a store of value, foreign nations such as China must sell us many more goods than we buy from them. This is illustrated in Figure 1, which shows the deficits or surpluses in the current account (the sum of goods trade and net factor payments) in the U.S., Australia and the U.K., the E.U. and Japan, and the rest of the world (developing economies). The current account deficit for the U.S. has been large and growing for almost two decades, while developing countries have developed in recent years quite a large surplus.

FIGURE 1: Global Imbalances



Caballero notes that the shortage of assets can explain the highly volatile nature of asset markets, with many “speculative” episodes such as the tech bubble in the U.S. in the late 1990s. Figure 2 presents data on the speculative episodes. Each line shows a different episode, ranging from the Japanese stock market bubble of the late 1980s, to the emerging markets bubble of the mid-1990s, to the NASDAQ bubble of the

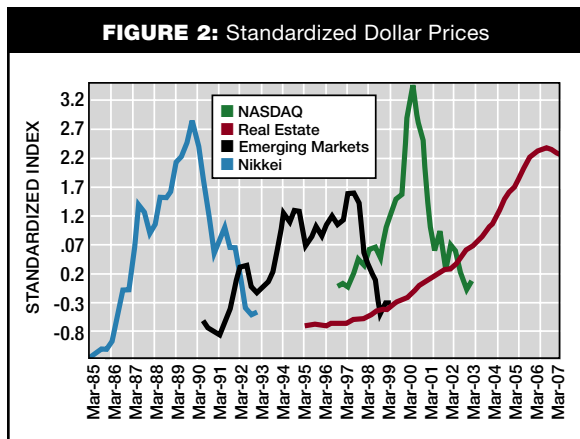
late 1990s, to the the alleged recent bubble in the real estate market. With a large pool of investable funds searching for investment opportunities in so few assets, the appearance of an apparent excess return will draw in funds quickly, leading to yet higher returns and more fund inflow. This will occur until investors decide that the underlying asset has simply gotten too expensive as a store of value and move their investments elsewhere, leading to a collapse.

Caballero's unified view of the source of current account imbalances and financial market volatility leads to dramatically different policy prescriptions than might be recommended by considering each of these phenomena in a vacuum. Consider, for example, the U.S. trade deficit. For years macroeconomists have argued that such a deficit is unsustainable, that at some point other nations will tire of buying more of our goods than we buy of theirs and that the U.S. exchange rate will fall until our goods become cheap enough to offset this imbalance. This leads to the prescription that the U.S. should take direct steps to reduce our trade deficit before it leads to a huge reduction in

the value of our currency. The long standing and growing U.S. trade imbalance is inconsistent with this view. Caballero believes this trade deficit is simply a natural consequence of asset shortages and should not be viewed as necessarily problematic. In the long run, as assets develop outside the U.S., individuals will need fewer dollars and buy fewer of our assets. But this should happen gradually, rather than as a crash, and in the meantime the large trade deficit simply reflects the inherent worth of U.S. assets as a store of value.

Or consider the problem of asset “bubbles.” Many have argued that asset bubbles are inherently bad, and that as soon as they emerge governments should take action, such as raising interest rates, to “pop” them before they get too large. But Caballero argues that such bubbles are a natural consequence of asset shortages, and that if the government pops a bubble in one area, another will just emerge somewhere else. Or worse, popping a bubble may exacerbate the asset shortage and generate deflationary pressures. Rather, he says, governments may have no option but to keep interest rates low until financial development and gradual asset creation bridges the gap and avoids bubble creation.

Continuing global imbalances, low interest rates and speculative bubbles support Caballero's theory about asset shortages in the global economy. This provocative analysis provides a framework for analysts and policy makers to understand recent developments in the international macro-economy and to respond appropriately.



To download a full-length version of this research paper, please visit <http://econ-www.mit.edu/files/171>.

For further information about the current research activities of the MIT Economics Department, please contact Professor James Poterba, Mitsui Professor and Department Head, at [poterba@mit.edu](mailto:poterba@mit.edu) or (617) 253 6673.