International Economic Trends
May 2010

# Economic Growth and the Global Savings Glut

Emerging countries are generally expected to have low savings rates and high investment rates. Citizens of such countries are not expected to save a lot because their incomes are rising rapidly; why should they save a lot—forgoing current consumption—when they will be much richer soon? Similarly, emerging countries—where capital is scarce—will tend to invest heavily because the returns to additional capital are high. A combination of a low savings rate and a high investment rate means that emerging markets would tend to borrow to import capital goods, thereby running current account deficits and capital account surpluses. On the other hand, rich countries would have lower investment, higher savings, and large current account surpluses.

In fact, however, the opposite is occurring: Many emerging countries, particularly China, save a great deal and run current account surpluses, while the United States saves very little and runs current account deficits. As a result, capital flows from where it is scarce—in the emerging markets—to where it is relatively plentiful—in the developed world.

What causes this seemingly counterintuitive flow of capital? One reason is that emerging economies save a great deal despite—or perhaps because of—their fast income growth. Empirical evidence suggests that high growth leads to high saving, rather than vice versa (see, e.g., Carroll, Overland, and Weil, 2000).

The idea that high income growth induces high savings rather than decreases them seems to contradict Friedman's (1957) permanent income hypothesis (PIH). The PIH argues that people like "smooth" consumption; they don't like to starve in one period and gorge in another. Therefore, if they can borrow and lend, their consumption is determined by their lifetime average income, not just current income. Thus, people who expect higher income in the future should borrow against that future income, or at least not save as much. But in reality, people (especially those in emerging markets) often save a lot despite expectations of higher income in the future.

A key reason for this apparent contradiction is that the PIH assumes that people can borrow freely to consume future income when their current income is low. Wen (2009) shows that when people are subject to borrowing constraints, their marginal propensity to save increases with income because they must accumulate money for emergencies—called "precautionary saving"—rather than being able to borrow money for such contingencies. That is, the inability to borrow not only makes people save more excessively than they would otherwise, but their saving rate also increases with income growth.

Thus, economic theory predicts that fast growth can lead to high saving rates if people lack financial institutions that allow them to borrow. This prediction is consistent with empirical evidence. For example, the average household saving rate in China in the past 30 years has increased as income has grown and is currently around 30 percent, despite low interest rates (see the chart). China's financial system has not yet caught up with its economic growth. Japan in the 1960-70s and South Korea in the 1980-90s experienced similarly high saving rates during their fast-growth periods.

The underdeveloped financial systems of emerging countries have restricted their citizens' ability to borrow against future income, limited their investment opportunities, and diverted their savings toward developed countries. These global savings/investment imbalances are likely to persist until emerging countries develop sophisticated financial and banking systems.

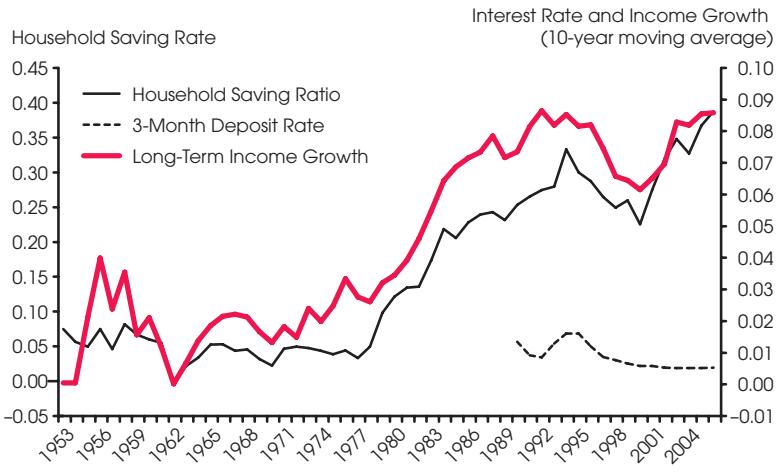
—Yi Wen

Carroll, Christopher D., Overland, Judy and Weil, David N. "Saving and Growth with Habit Formation." *American Economic Review*, June 2000, *90*(3), pp. 341-55.

Friedman, Milton. *A Theory of the Consumption Function*. Princeton, NJ: Princeton University Press, 1957.

Wen, Yi. "Saving and Growth under Borrowing Constraints: Explaining the 'High Saving Rate' Puzzle." Working Paper No. 2009-045B, Federal Reserve Bank of St. Louis, revised October 2009; http://research.stlouisfed.org/wp/2009/2009-045.pdf.

**Household Saving Rate and Income Growth (China, 1953-2004)**




SOURCE: Wen (2009).

*Views expressed do not necessarily reflect official positions of the Federal Reserve System.*