



VOL. 6, NO. 5  
MAY 2011

# Economic Letter

*Insights from the*  
FEDERAL RESERVE BANK OF DALLAS

## Upstream Capital Flows: Why Emerging Markets Send Savings to Advanced Economies

by *Simona E. Cociuba*

**E**merging market economic growth during the global recovery has exceeded performance in advanced economies. This differential has triggered a rush of private capital inflows to the emerging markets from investors seeking to maximize returns. While capital flows typically benefit receiving economies, sudden surges or stops may pose challenges for economic development.<sup>1</sup> The recent revival of private inflows has put pressure on prices and currencies of some emerging economies, leading them to impose capital controls. Moreover, some observers have argued that accommodative monetary policies in advanced economies are fueling inflows to emerging markets by making returns there seem even more appealing.

At the same time, public capital is flowing from emerging to advanced economies. Over the past decade, the governments of major emerging economies have channeled increasing amounts of domestic savings into international capital markets. These investments were directed toward the safe and liquid assets of advanced economies.<sup>2</sup> Holdings of reserve assets, particularly foreign exchange, by major emerging economies have increased more than tenfold since the late 1990s.<sup>3</sup>

The recent private inflows of capital to emerging markets have been more than offset by government investments into safe foreign assets. Thus, on net, total capital—private and public—is actually flowing upstream: from labor-abundant, fast-growing emerging market economies to capital-rich advanced economies.

### Capital Flows and National Accounts

Capital flows are streams of surplus savings channeled into or out of a country. To understand what this means, consider the connection

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between such flows and domestic savings, domestic investment and the current account balance.

In national accounting, a country's current account balance equals its domestic savings less its investment.<sup>4</sup> Simply put, any savings not invested domestically is sent abroad in the form of goods and services. A country with a current account surplus is a net lender and sends its excess savings to the rest of the world. In exchange for this *capital outflow*, the country increases its net holdings of foreign assets by an equal amount. Similarly, a country with a current account deficit is a net borrower from the world; it attracts surplus foreign savings in the form of *capital inflow* to finance its domestic investment. The current account balance provides a measure of the net amount of total capital—private and public—flowing into or out of a country.

During the 1960s and 1970s, U.S. domestic saving and investment were of comparable size, roughly 20 percent of gross domestic product (GDP). This meant that the current account balance was quite small (*Table 1*). The average from 1960 to 1979 showed a surplus of about 0.3 to 0.4 percent of GDP. This surplus was equivalent to a capital outflow and a corresponding increase in the U.S.'s ownership of foreign assets relative to foreigners' ownership of U.S. assets. Starting in the early 1980s, the U.S. saved less and became increasingly dependent on outside capital to finance its domestic investment. In 2006, the U.S. current account deficit was at its highest, 6 percent of GDP. The U.S. became a net borrower, and other economies—including emerging markets—now own a significant portion of U.S. assets.

### Emerging Market Capital Flows

Increased capital inflows to emerging economies, which have grabbed recent headlines, involve private capital only. However, it is important to consider both private and public flows because they provide a complete measure of a country's net borrowing or lending.

Chart 1 shows net private capital flows for a group of major emerging-market economies. All flows are expressed as a fraction of the combined GDP of the economies considered, in order to gauge their relative magnitude. Looking at the composition of private flows, net direct investments are relatively stable, while portfolio and other investments are more volatile.<sup>5</sup> In the midst of the latest recession, portfolio and other flows to emerging markets sustained large reversals.

Since the first quarter of 1990, total net private flows have been positive—with the exception of a few quarters—averaging about 2.2 percent of GDP. While it is true that in the wake of the recent crisis, inflows exceeded this average in many quarters, the level of these flows is not unprecedented. Private inflows were

Table 1

### U.S. Saving, Investment and International Transactions (in percent of GDP)

	Average: 1960–79	2006
<b>National Income and Product Accounts (NIPA)</b>		
Gross saving	20.3	16.2
Minus: Gross domestic investment	20.5	20.5
Plus: Statistical discrepancy	0.6	-1.6
<i>Equals:</i> Balance on the current account	0.4	-6.0
<b>International Transactions Accounts (ITA)</b>		
Balance on current account	0.3	-6.0
Plus: Capital and financial account: outflow (-); inflow (+)	-0.3	6.0
Of which: U.S.-owned assets abroad	-1.5	-9.6
Foreign-owned assets in U.S.	1.2	15.4
Net financial derivatives*		0.2
<i>Equals:</i> Balance of payments	0.0	0.0

\*Financial derivatives are contracts in which a financial instrument is linked to another for the purpose of trading risk (such as interest rate risk or foreign exchange rate risk) in financial markets. There are two broad types of financial derivatives: options and forward contracts.

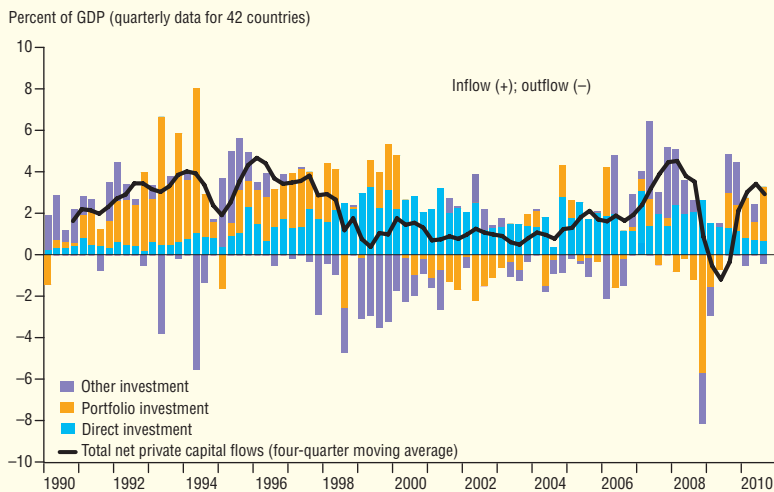
NOTES: Figures may not sum to totals due to rounding. The balance on the current account differs slightly in the NIPA and the ITA due to several data adjustments. For details, see Appendix II in "A Guide to the U.S. International Transactions Accounts and the U.S. International Investment Position Accounts," by Christopher L. Bach, *Survey of Current Business*, Bureau of Economic Analysis, February 2010. The statistical discrepancy in the NIPA reflects measurement differences between income and expenditure components. The Bureau of Economic Analysis views it as income that is not captured given available data sources, and it interprets it as savings. The statistical discrepancy in the ITA is omitted from the table because it rounds down to zero for the reported years.

SOURCE: Bureau of Economic Analysis, U.S. Department of Commerce.



Chart 1

## Private Capital Flows in Emerging Market Economies Are Not Unprecedented



NOTES: The emerging market economies consist of Argentina, Belarus, Brazil, Bulgaria, Chile, Colombia, Costa Rica, Croatia, Cyprus, Czech Republic, Ecuador, El Salvador, Estonia, Guatemala, Hong Kong, Hungary, India, Indonesia, Israel, Jordan, Kazakhstan, South Korea, Latvia, Lithuania, Malaysia, Malta, Mexico, Morocco, Peru, Philippines, Poland, Romania, Russia, Saudi Arabia, Singapore, Slovak Republic, Slovenia, South Africa, Thailand, Turkey, Ukraine and Uruguay.

SOURCE: Balance of payments statistics, International Monetary Fund.

of similar magnitude or even larger throughout the 1990s.

The same fact is observed when the analysis is extended to a longer time frame and a larger set of emerging market economies (*Chart 2*). Since the early 1980s, selected emerging economies have attracted, on average, inflows of about 2 percent of their combined GDP, annual data on net private capital flows show. It is striking to note that once reserve assets are added to private flows—in order to obtain a measure of total capital flows—there has been an outflow of capital from emerging economies since 1999. The largest outflow occurred in 2006 and was 4.6 percent of emerging markets' GDP. Equivalently, these countries have been net lenders to the rest of the world, running current account surpluses. Emerging Asian economies have driven these capital outflows and current account surpluses.

There are several possible reasons why emerging market economies have ramped up saving at home and invested surpluses abroad. Precautionary savings in the aftermath of the Asian financial crisis of the late 1990s may be one reason. The relative shortage of safe assets in emerging markets may also explain the increased demand for such instruments in advanced economies. In addition, some emerging market economies accumulated substantial foreign exchange reserves in an effort to maintain competitive currencies and support export-oriented growth.

### Capital Flows and Imbalances

Free flows of capital across national borders are potentially beneficial to economic development because they help allocate the world's savings to its most productive uses. Standard economic theory tells us that savings should be transferred to developing countries, where the marginal prod-

uct of capital (or return on an additional unit of investment) is highest.<sup>6</sup> However, in today's global economy, capital seems to flow upstream. Some advanced economies, such as the U.S., have run current account deficits and are net borrowers from the rest of the world, while emerging market economies with current account surpluses are net lenders. This allocation of capital away from labor-abundant, fast-growing emerging market economies and to capital-rich advanced economies seems puzzling and is clearly due to factors other than return differentials. Over the past decade, emerging market governments have taken the role of intermediaries, channeling excess savings to international markets.

In the aftermath of the financial crisis, discussions have intensified about ironing out the global imbalances. This is no easy task and may take years to implement. It requires consistent policies to be implemented by both economies with unsustainable current account surpluses and economies with large trade deficits.<sup>7</sup> In the meantime, the recent increase in private inflows to emerging markets has put talks about short-term capital controls back on the table. While the jury is still out on the effectiveness of such measures,<sup>8</sup> the International Monetary Fund is working on country-specific policy tools that may help economies manage large capital inflows as they recover from the global crisis.

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### Notes

<sup>1</sup> One example is the Asian financial crisis of the late 1990s, when capital flows to these economies reversed sharply and caused macroeconomic instability.

<sup>2</sup> See, for example, "Global Imbalances and Financial Fragility," by Ricardo J. Caballero and Arvind Krishnamurthy, *American Economic Review*, vol. 99, no.2, 2009, pp. 584–88, and "The Aggregate Demand for Treasury Debt," by Arvind

Krishnamurthy and Annette Vissing-Jorgensen, unpublished paper.

<sup>3</sup> The stock of reserve assets for 57 emerging market economies (listed at the bottom of Chart 2) was about \$5 trillion in 2009, up from only \$400 billion in 1999. Foreign exchange reserve assets consist of currency, deposits and securities.

<sup>4</sup> Domestic saving consists of saving by businesses, individuals and the government. Likewise, domestic investment reflects both private and public investments. The current account balance is defined as the sum of the balance of trade in goods and services, net income receipts and net unilateral transfers.

<sup>5</sup> *Direct investment* refers to investment in a subsidiary or affiliate that gives the parent company a substantial ownership of assets. The IMF's definition of "substantial ownership" is 10 percent or more foreign ownership in a local company. Many countries follow this 10 percent threshold, but there are exceptions. For example,

China's threshold is 25 percent. *Portfolio investment* refers to transactions involving equity and debt securities. The category *other investments* includes remaining flows such as currency and deposits, loans, trade credits, etc.

<sup>6</sup> See "Why Doesn't Capital Flow From Rich to Poor Countries?," by Robert E. Lucas, Jr., *American Economic Review*, vol. 80, no. 2, 1990, pp. 92–96.

<sup>7</sup> See, for example, "Global Imbalances and Financial Stability," Banque de France, *Financial Stability Review*, no. 15, February 2011.

<sup>8</sup> See, for example, "Capital Controls: Myth and Reality—A Portfolio Balance Approach," by Nicolas E. Magud, Carmen M. Reinhart and Kenneth S. Rogoff, National Bureau of Economic Research, Working Paper no. 16805, February 2011. The authors argue that, with the exception of Malaysia, there is little evidence of success in imposing capital controls. They recommend designing country-specific capital controls to effectively influence flows.

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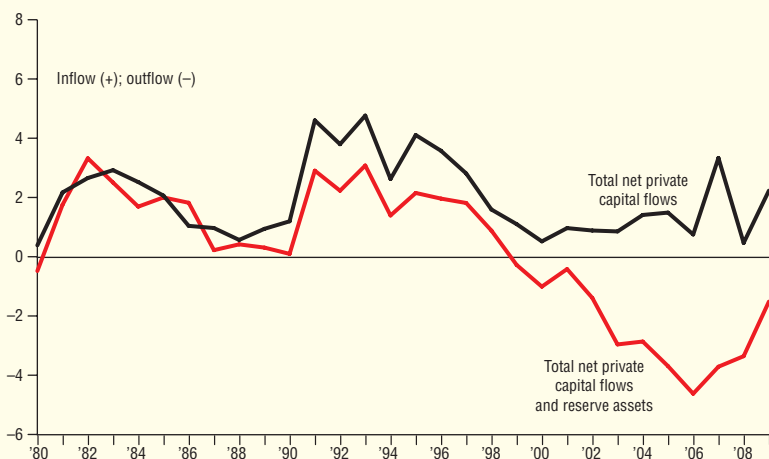
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Chart 2

## Private Capital Inflows in Emerging Economies More Than Offset by Reserve Outflows

Percent of GDP (annual data for 57 countries)



NOTES: The emerging market economies consist of *emerging Asia*: China, Hong Kong, India, Indonesia, South Korea, Malaysia, Philippines, Singapore, Sri Lanka, Thailand; *emerging Latin America*: Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Panama, Peru, Uruguay, Venezuela; *emerging Europe*: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovak Republic, Slovenia, Turkey; and *other emerging economies*: Algeria, Azerbaijan, Belarus, Egypt, Israel, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Oman, Pakistan, Russia, Saudi Arabia, South Africa, Syria, Tunisia, Ukraine. Country groupings are according to the International Monetary Fund's World Economic Outlook classifications, April 2011.

SOURCE: Balance of payments statistics, International Monetary Fund.

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