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*A key aspect of
economic advancement
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ladder.*

Does Foreign Direct Investment Help Emerging Economies?

by Anil Kumar

The gap between the world's rich and poor countries largely comes down to the financial and physical assets that create wealth. Developed economies possess more of this capital than developing ones, and what they have usually incorporates more advanced technologies. The implication is clear: A key aspect of economic advancement lies in poorer nations' capacity to acquire more capital and scale the technological ladder. Emerging economies undertake some capital formation on their own, but in this era of globalization, they increasingly rely on foreign capital.

Indeed, total capital flows to developing economies have skyrocketed from \$104 billion in 1980 to \$472 billion in 2005.¹ The foreign capital has the potential to deliver enormous benefits to developing nations. Besides helping bridge the gap between savings and investment in capital-scarce economies, capital often

Does Financial Globalization Shape Fiscal Policy?

Reckless macroeconomic policies that include large fiscal deficits and excessive borrowing can trigger a vicious cycle of speculative capital outflows and higher interest rates, with dire consequences for a developing economy.¹ Facing a crisis of confidence, governments may raise interest rates to keep foreign investors from leaving, and higher borrowing costs may tip the economy into recession.

Because policymakers would want to avoid that outcome, fear of large-scale reversals of international capital flows could have a disciplining effect. Governments may, for example, seek to lessen the risk of capital flight by curbing fiscal deficits.²

If we look at financial globalization, as measured by the ratio of foreign assets and liabilities to GDP, we see that it seems to coincide with rising fiscal deficits in 19 emerging economies over 15 years from 1990 to 2004 (*Chart A*).

The correlation, however, could be misleading if it doesn't account for country-specific factors that may be associated with both capital inflows and budget deficits—for example, inflation and economic growth. Moreover, the relationship would look exactly

the same if budget deficits were driving financial globalization.

If we account for these factors, we find a negative correlation between financial globalization and the fiscal deficit (*Chart B*). Although the list of other factors isn't exhaustive, the data suggest that financial globalization through larger capital flows helps discipline fiscal policies in host countries.

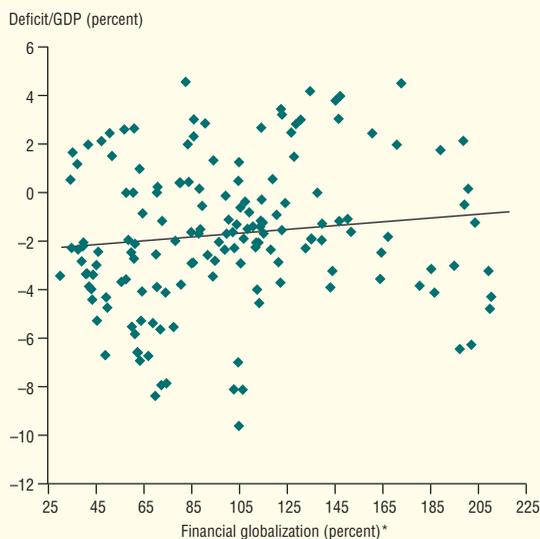
Notes

¹ For more on financial globalization and fiscal policy, see "The Global Capital Market: Benefactor or Menace?" by Maurice Obstfeld, *Journal of Economic Perspectives*, vol. 12, Fall 1998, pp. 9–30, and "Does Financial Globalization Induce Better Macroeconomic Policies?" by Irina Tytell and Shang-Jin Wei, International Monetary Fund, Working Paper no. 04/84, May 2004.

² Globalization may also help shape monetary policy with consequences for inflation. For a discussion, see "Openness and Inflation," by Mark A. Wynne and Erasmus K. Kersting, Federal Reserve Bank of Dallas *Staff Papers*, forthcoming.

Chart A

Financial Globalization Appears to Be Positively Correlated with Budget Deficits

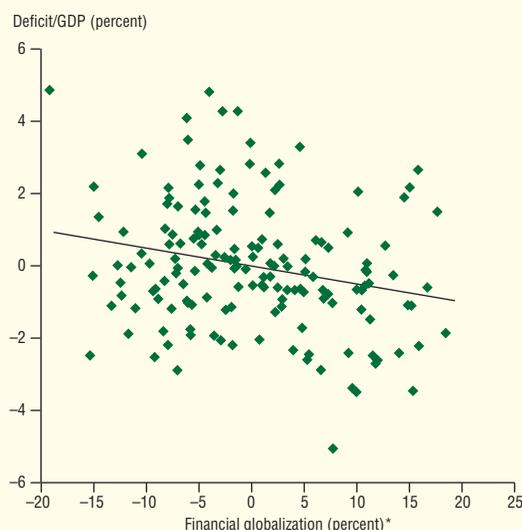


*Total foreign assets and liabilities as a percentage of GDP.

SOURCES: Lane and Milesi-Ferretti (2006); World Bank WDI Online database; author's calculations.

Chart B

After Netting Out Other Factors, Financial Globalization Lowers Deficit



*Total foreign assets and liabilities as a percentage of GDP, after eliminating other factors for both variables. The result is significant at the 1 percent level.

SOURCES: Lane and Milesi-Ferretti (2006); World Bank WDI Online database; author's calculations.



brings with it modern technology and encourages development of more mature financial sectors. Capital flows have proven effective in promoting growth and productivity in countries that have enough skilled workers and infrastructure. Some economists believe capital flows also help discipline governments' macroeconomic policies (see box titled "Does Financial Globalization Shape Fiscal Policy?").

Capital flows come in three primary forms:

- Portfolio equity investment, which involves buying company shares, usually through stock markets, without gaining effective control.
- Portfolio debt investment, which typically covers bonds and short- and long-term borrowing from banks and multilateral institutions, such as the World Bank.
- Foreign direct investment (FDI), which involves forging long-term relationships with enterprises in foreign countries.

FDI can be made in several ways. First, and most likely, it may involve parent enterprises injecting equity capital by purchasing shares in foreign affiliates. Second, it may take the form of reinvesting the affiliate's earnings. Third, it may entail short- or long-term lending between parents and affiliates. To be categorized as a multinational enterprise for inclusion in FDI data, the parent must hold a minimum equity stake of 10 percent in the affiliate.

Establishing foreign affiliates usually entails starting new production facilities—so-called greenfield investments—or acquiring control of existing entities through cross-border mergers and acquisitions. Recent years have seen a marked shift toward international mergers and acquisitions.

In developing nations, equity investments as a percentage of gross national income have been flat in recent years. Debt flows, however, have picked up since 2002 after plunging to zero in the previous two years. Meanwhile, FDI as a share of

GDP has grown rapidly, becoming the largest source of capital moving from developed nations to developing ones (Chart 1).

From 1990 to 2005, developing economies' share of total FDI inflows rose from 18 percent to 36 percent. In addition, the geographical composition of FDI flows has changed dramatically over the past four decades. Within developing economies, Latin America's share of FDI has fallen from 52 percent in the 1970s to 33 percent since the 1990s. Asia's share of inflows has risen from 25 percent to 60 percent during the same period.

Within Asia, China and India have gained FDI share relative to Southeast Asia. Today, these two emerging economic giants are the most attractive markets for FDI. China's FDI shot up from \$3.5 billion in 1990 to \$60 billion in 2004, while India's rose from a paltry \$236 million to \$5.3 billion. The shift reflects the two nations' more open economic policies, as well as their sheer size and dynamic growth.

The rush to invest in places like China and India suggests that FDI will continue to be an increasingly impor-

tant source of development finance. To better understand these capital inflows and their ripples, we need to examine their effect on key aspects of the receiving countries' economic performance—stability, trade, savings, investment and growth.

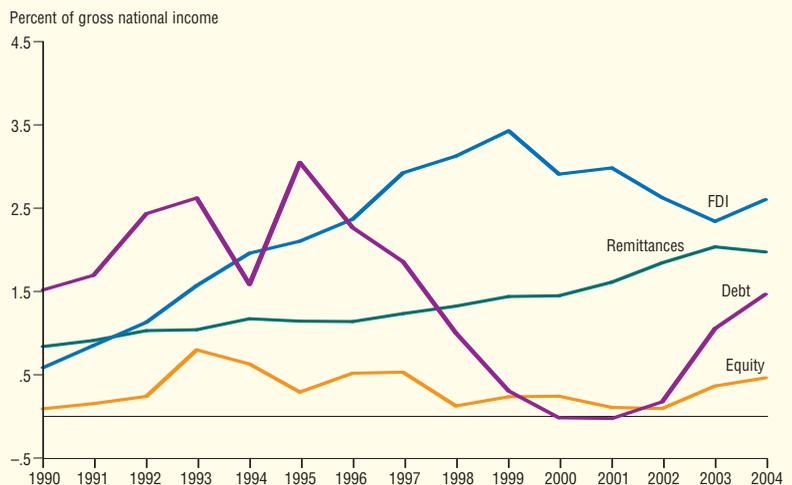
FDI's Stability

For emerging economies, FDI has significant advantages over equity and debt capital flows. Foreign firms' participation in domestic business encourages the transfer of advanced technologies to the host country, and it fosters human capital development by providing employee training. It also strengthens corporate institutions by exposing host countries to developed economies' best business practices and corporate governance.

From a macroeconomic perspective, FDI is more stable than other types of capital flows (Chart 2). Equity and short-term debt in particular tend to be highly volatile and speculative, and their role in igniting and deepening financial crises in the 1990s has been closely scrutinized.² FDI's relative stability and long-term character make

Chart 1

FDI Dominates Developing Economies' Capital Flows

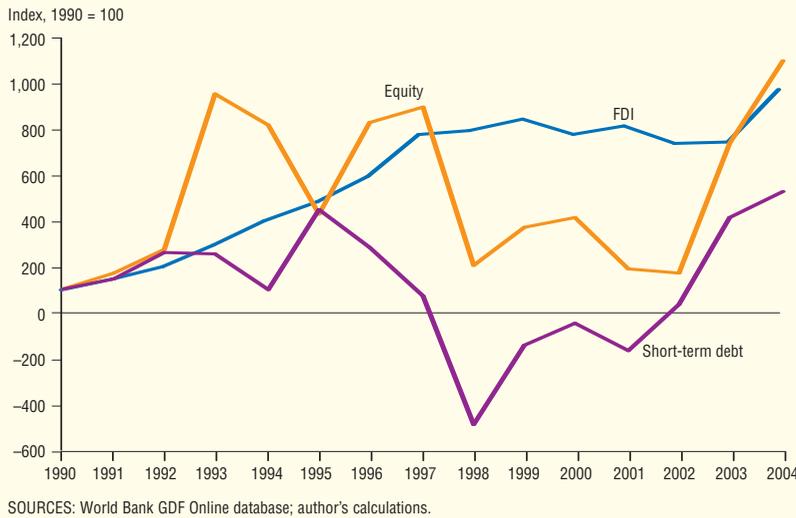


SOURCES: World Bank GDF Online database; author's calculations.



Chart 2

FDI More Stable than Equity and Short-Term Debt



it the preferred source of foreign capital for many emerging economies. In fact, FDI has been so stable in tumultuous times that some economists have called it “good cholesterol” for emerging economies.³

The declining volatility of foreign capital flows has paid off in higher economic growth. With FDI’s share of developing nations’ foreign investment rising, host countries have experienced less overall volatility in investment flows, as measured by their deviation from average rates of incoming capital. Comparing total capital flows with mean real GDP growth rates for emerging economies, we find that higher volatility coincided with lower economic performance from 1970 to 2004 (*Chart 3*).

FDI and Trade

Many developing countries pursue FDI as a tool for export promotion, rather than production for the domestic economy. Typically, foreign investors build plants in nations where they can produce goods for export at lower costs. Another way FDI helps boost exports is through preferential

access to markets in the parent enterprise’s home country.

Multinational enterprises, the creatures of FDI, play a dominant role

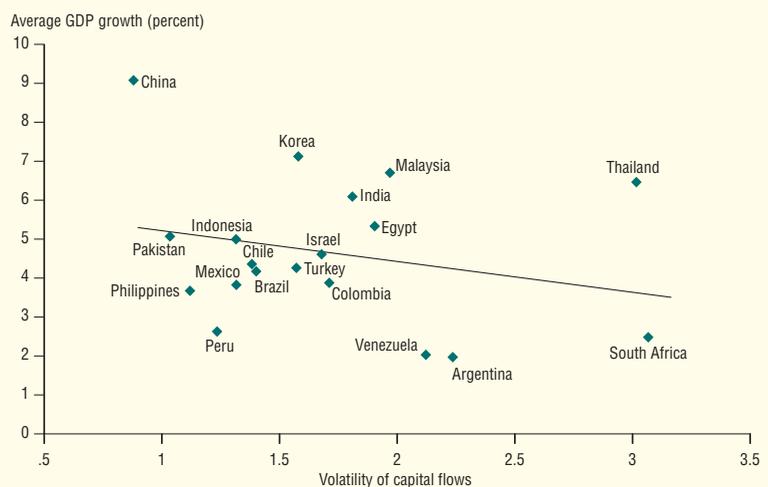
in world trade, accounting for two-thirds of all cross-border sales.⁴ Foreign affiliates were responsible for more than half China’s exports in 2001 and 21 percent of Brazil’s. They accounted for just 3 percent of India’s. At the country’s current rate of economic liberalization, however, foreign companies are likely to increase their share of India’s exports.

FDI can also provide a path for emerging economies to export the products developed economies usually sell—in effect, increasing their export sophistication.⁵ A new study by Dani Rodrik puts the export sophistication of China, a leading FDI recipient, at least three times higher than that of countries with similar per capita GDP. India, another FDI hot spot, also did well on this score.⁶ Some emerging economies are fast becoming attractive destinations for multinationals’ research and development centers, suggesting further gains for developing nations.

FDI is an important channel for delivery of services across borders—

Chart 3

Higher Capital Flow Volatility Means Slower GDP Growth





for emerging economies as well as developed ones. Services aren't as widely traded as goods, making up only a fifth of world exports. That figure is expected to rise rapidly, however, as the Internet and other communications make more services tradable and facilitate the spread of outsourcing. In fact, FDI has grown faster in services than in goods in recent years.⁷

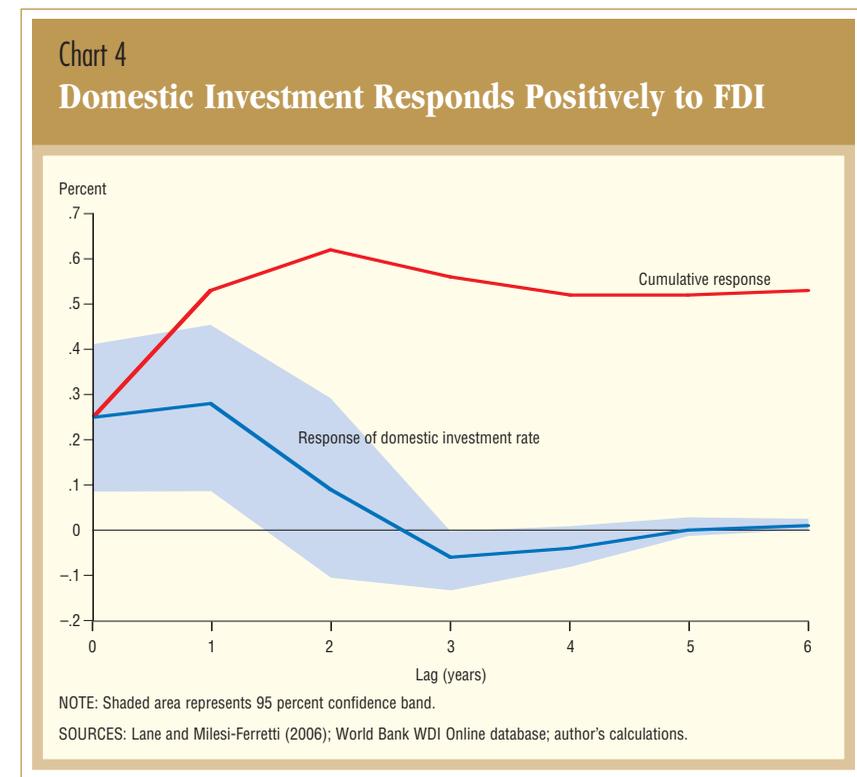
In most developing nations, service industries have been closed to foreign investment. As countries further open their economies, services can be expected to continue outpacing goods. The pattern of services FDI has also been changing. In 1990, finance cornered 57 percent of services FDI in developing economies. By 2002, its share had fallen to 22 percent as business services' share rose from 5 percent to 40 percent.

As services become increasingly tradable, FDI in these industries can forge a strong link with exports of emerging economies. Multinationals operating in such services as banking, telecommunications and trade enhance the efficiency of homegrown providers in myriad ways, contributing to the export competitiveness of these economies' service sectors. With both FDI and trade rising rapidly in services, FDI has an important role in promoting the sector's globalization in other emerging economies.

FDI, Savings and Investment

Foreign investment can ripple through receiving economies in many ways. It can finance current account deficits through its effect on investment or offset other financial transactions, such as increases in reserves or capital outflows. The imported capital may simply result in additional consumption rather than investment. In principle, it needn't always boost the country's productive capital stock. If foreign and homegrown companies vie for the same investment pie in the host country, FDI may simply offset, or crowd out, domestic investment.

Of course, FDI may represent a



net capital gain or even "crowd in" domestic investment through a number of channels, such as transfers of technology and key expertise that doesn't exist in host countries. India, for example, has opened up parts of its retail sector to foreign investment, although it limits outsiders to a maximum 49 percent stake. FDI is likely to spur domestic investment in India's retail sector as existing players partner with such foreign giants as Wal-Mart to open stores.

We can test for crowding out by determining how a percentage point increase in the ratio of FDI inflows to GDP impacts domestic investment as a share of GDP. Using data from the World Bank, International Monetary Fund and other sources for 19 emerging economies, our model indicates the domestic investment rate rises in the first year following the FDI increase, with positive effects continuing beyond the second year (*Chart 4*).⁸ The 95 percent confidence bands, with upper and lower bounds, suggest the positive response could be as short as a year but may continue as

long as two. The cumulative effect of an increase in FDI on domestic investment is positive in the long run.⁹

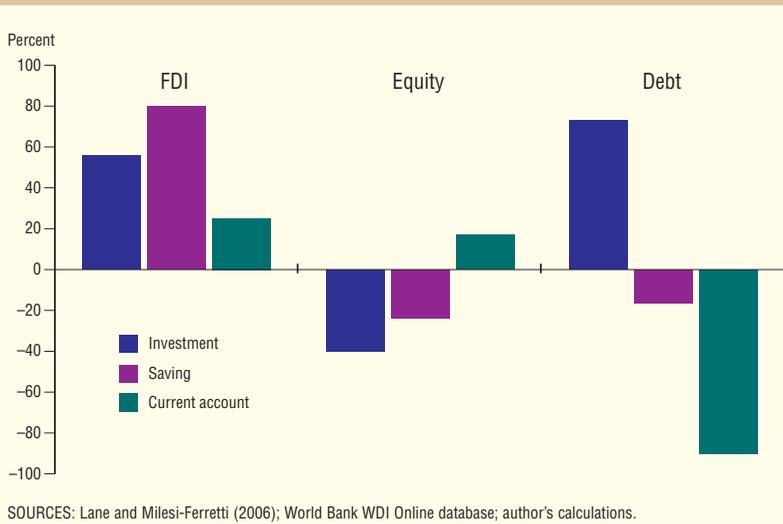
Of course, this doesn't account for the full range of capital inflows. Equity and debt investments may differ from FDI in the direction and magnitude of their impacts on investment. Because it's more stable, FDI is likely to have a larger impact on domestic investment than equity flows do. Some forms of debt, particularly long-term borrowing from multilateral institutions like the World Bank, may be highly beneficial for domestic investment if used to fund extremely productive infrastructure projects in emerging economies. To compare the impact of FDI and other capital flows, we need to account for all three types of incoming foreign investment.

Our model indicates that FDI has a significant effect on both investment and savings (*Chart 5*). A percentage point rise in the ratio of FDI to GDP leads to an increase of a half percentage point in domestic investment and three-fourths percentage point in domestic savings. The results suggest



Chart 5

FDI Has Positive Effect on Both Savings and Investment



FDI and Growth

Despite FDI's potential to boost technology, productivity, investment and savings, economists have—some-what surprisingly—struggled to find a strong causal link to economic growth. Some studies have detected a positive impact, but only if the country has a threshold level of human capital.¹¹ This seems to confirm FDI's important role in propelling growth in China and India, which have vast, untapped technical workforces. China graduates 600,000 engineers every year; India produces 215,000.¹²

A stumbling block to identifying FDI's impact on growth lies in the fact that these investments can be the cause as well as the result of economic vitality because foreign capital beats a path to the world's hottest developing-market economies.

Other problems make it difficult to disentangle FDI's effect on GDP growth. For countries with high tariff and nontariff barriers, FDI may simply be the result of multinational corporations trying to access domestic markets because the export route has

that FDI actually crowds in domestic investment and delivers a positive impact on savings. While FDI has strong positive effects on savings and investment, it has a small positive effect on the current account—the difference between domestic savings and investment.¹⁰

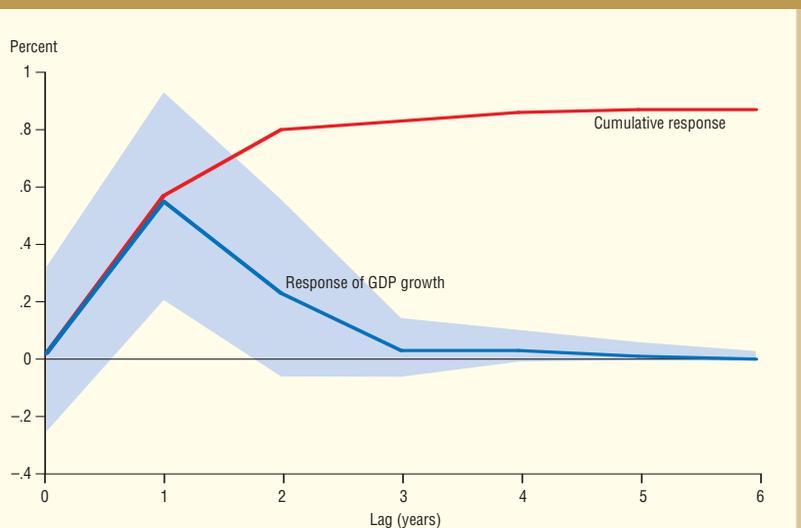
In our model, FDI performs better than other types of foreign investment. Equity inflows show no discernible effect on investment or savings, possibly because they're considerably more volatile than FDI and may represent largely speculative investment in financial markets. Debt, on the other hand, has a strong positive effect on investment, an indeterminate effect on savings and a significant negative impact on the current account.

The data support the notion that FDI should be the preferred form of foreign investment. It makes a net addition to developing nations' productive resources, without causing deterioration to the current account. This suggests FDI will bolster the receiving country's overall economic

performance. The question is whether FDI's desirable effects on savings and investment produce tangible effects on developing nations' growth.

Chart 6

FDI Spurs Economic Growth





been closed. In this case, FDI may contribute to economic growth, but the impact will be reduced to the extent high tariffs stunt growth.

Countries also woo foreign investors with tax breaks and subsidies. Fiscal incentives are doubtlessly a good way to promote FDI. After all, tax havens are prominent FDI recipients. However, researchers have found that such policies aren't effective ways to reap FDI's economic benefits. Indeed, the policies may create distortions that significantly blunt FDI's efficiency and productivity gains. Tax incentives may prove wasteful because FDI responds more to such factors as labor market flexibility, the cost of doing business and the quality of the infrastructure.

As we did with domestic investment, we can examine how a percentage point increase in the FDI-to-GDP ratio affects emerging economies' performance (*Chart 6*). Although FDI doesn't boost growth immediately, it delivers positive effects in the year after FDI increases. This suggests a significant link between FDI and GDP growth, one that develops over time because investment spending increases the nation's productive capacity. Although the growth effect dies down, the cumulative effect on output is still positive in the long run. The confidence bands indicate that the positive growth effect in the year following FDI inflow is statistically significant.

In addition to spurring growth, FDI may have wage and productivity spillovers in the host country. If multinationals pay more than domestic firms, it may force the latter to raise wages. If foreign investors transfer technology to domestic firms, FDI would also help make workers more efficient.

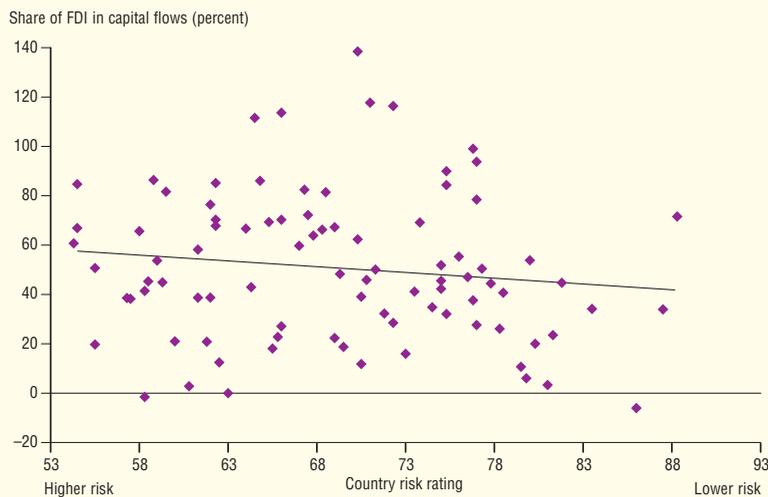
Is FDI Always Good?

FDI offers attractive benefits that include technology, investments, savings and growth. But emerging economies should exercise caution.

Counter to economic intuition, FDI may flow to riskier destinations.

Chart 7

Riskier Countries Tend to Attract Higher FDI



SOURCES: Lane and Milesi-Ferretti (2006); UNCTAD FDI Inward Potential Index database; author's calculations.

We can see that by plotting FDI's share of a country's total capital inflows against that nation's composite risk rating for developing and emerging countries in December 2003 (*Chart 7*). The risk measure is obtained from the UNCTAD FDI Inward Potential Index database, which uses higher numbers to indicate lower risk.

The downward-sloping line indicates that FDI tends to make up a greater share of capital inflow in places investors might otherwise avoid. Most likely, such countries pay a premium for FDI through tax breaks and other incentives.

The relative advantages of FDI during crises are well documented. However, capital flight can't be ruled out. In times of extreme financial crisis, FDI may be accompanied by distress sales of domestic assets, which could be harmful.¹³ Even in normal times, FDI can be reversed or diminished through domestic borrowing by affiliates of multinational corporations and repatriation of funds.

Too much FDI may not be bene-

ficial. Through ownership and control of domestic companies, foreign firms learn more about the host country's productivity, and they could overinvest, at the expense of domestic producers.¹⁴ There is a possibility that the most solid firms will be financed through FDI, leaving domestic investors stuck with low-productivity firms. Such "adverse selection" isn't the best economic outcome.

Despite these pitfalls, FDI appears to help emerging economies develop. It complements the host country's institutions and human capital. In many countries, however, barriers to FDI remain. These barriers may range from limits on foreign ownership and control to outright bans on FDI in select sectors, such as services. Reducing them may well be a way to speed up economic development. FDI benefits investors, to be sure, but it also pays dividends to the countries that attract it.

Kumar is an economist in the Research Department of the Federal Reserve Bank of Dallas.

Notes

¹ These numbers are calculated using data from the World Bank's Global Development Finance Online database and are not adjusted for inflation.

² For more on this, see the following publications: "International Financial Crises: Causes, Prevention, and Cures," by Lawrence H. Summers, *American Economic Review Papers and Proceedings*, vol. 90, May 2000, pp. 1–16; "Aspects of Global Economic Integration: Outlook for the Future," by Martin Feldstein, National Bureau of Economic Research, Working Paper no. 7899, September 2000; and "The Capital Myth: The Difference Between Trade in Widgets and Dollars," by Jagdish N. Bhagwati, *Foreign Affairs*, vol. 77, May/June 1998, pp. 7–12.

³ "Foreign Direct Investment: Good Cholesterol?" by Ricardo Hausmann and Eduardo Fernandez-Arias, Inter-American Development Bank, Research Department Working Paper no. 417, March 2000.

⁴ *World Investment Report 2002*, United Nations Conference on Trade and Development (UNCTAD).

⁵ "What You Export Matters," by Ricardo Hausmann, Jason Hwang and Dani Rodrik, National Bureau of Economic Research, Working Paper no. 11905, December 2005.

⁶ "What's So Special About China's Exports?" by Dani Rodrik, National Bureau of Economic Research, Working Paper no. 11947, January 2006.

⁷ *World Investment Report 2004*, UNCTAD.

⁸ Unless noted otherwise, this article uses data from the International Monetary Fund's International Finance Statistics; "The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970–2004," by P. Lane and G. M. Milesi-

Ferretti, International Monetary Fund, Working Paper no. 06/69, March 2006; and World Development Indicators Online database, 1970–2004. The sample of emerging economies consists of Argentina, Brazil, Chile, China, Colombia, Egypt, India, Indonesia, Israel, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, South Africa, Thailand, Turkey and Venezuela.

⁹ Estimation was carried out using panel VAR techniques. See "Financial Development and Dynamic Investment Behavior: Evidence from Panel Vector Autoregression," by Inessa Love and Lea Zicchino, The World Bank, Policy Research Working Paper Series no. 2913, 2002.

¹⁰ These results confirm the findings in "Capital Flows to Developing Economies: Implications for Saving and Investment," by Barry P. Bosworth and Susan M. Collins, *Brookings Papers on Economic Activity*, no. 1, 1999, pp. 143–69.

¹¹ "How Does Foreign Direct Investment Affect Economic Growth?" by E. Borensztein, J. De Gregorio and J-W. Lee, *Journal of International Economics*, vol. 45, June 1998, pp. 115–35.

¹² The number of engineers is based on a 2005 study by Duke University researchers Gary Gereffi, Vivek Wadhwa and others. Note that these numbers include engineers with associate degrees and diplomas and are not adjusted for quality, thus not directly comparable with figures for the U.S.

¹³ For a discussion of the implications of such distress sales, see "Fire-Sale FDI," by Paul Krugman, Massachusetts Institute of Technology, February 20–21, 1998, <http://web.mit.edu/krugman/www/FIRESALE.htm>.

¹⁴ "Excessive FDI Flows Under Asymmetric Information," by Assaf Razin, Efraim Sadka and Chi-Wa Yuen, National Bureau of Economic Research, Working Paper no. 7400, October 1999.

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