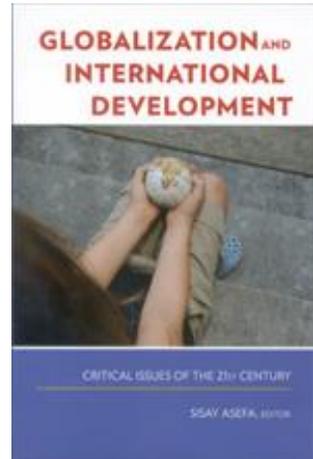

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The Composition and Allocation of Global Financial Flows: What Are Markets Doing?

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5

The Composition and Allocation of Global Financial Flows

What Are Markets Doing?

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This chapter focuses on global financial flows and how they have changed in response to the series of financial crises that swept through emerging markets in the mid- to late 1990s. There have been some significant changes in the direction and the composition of capital flow, and this chapter argues that some of those changes can be understood as the response of markets to fundamental weaknesses in the global financial system—weaknesses that have not been adequately addressed by multilateral institutions or by individual governments.

Development is fundamentally about moving resources to the places where they are needed most. Somehow the movement of those resources needs to be financed, whether as outright transfers, through loans, through direct investment in foreign corporations, or through securities markets. The nature of development finance has changed dramatically over time, and we have learned, sometimes through painful experience, about how the composition of capital flow from rich to poor countries matters. While the composition of capital flow is by definition a “macro” phenomenon, I suggest that micro evidence on the way firms structure their lending to emerging markets contains important clues about the vulnerabilities of the global financial environment, and how firms have responded to those weaknesses.

The financial crises that swept through East Asia and Latin America in the mid- to late 1990s interrupted global flows, but one feature that stands out is the resilience of, and even the expansion of, foreign direct investment (FDI) flows. One can think of the policy reforms applied to emerging markets in two phases: first as the “Washington Consensus

I,” which emphasized getting prices right (the Washington Consensus is explained further in the following section). We learned from financial crises that getting prices right is not enough, and there is a new perspective that I have labeled “Washington Consensus II,” which is about getting institutions right. The world made progress with phase I, the opening of markets, but has been less successful with phase II. Failure to adequately address institutions has not stopped capital flow, but it has changed the nature of that flow.

GLOBAL FINANCIAL FLOWS AND THE WASHINGTON CONSENSUS

Historically, flows to developing countries moved through official channels—from multilateral agencies or governments to recipient governments. Bank lending and FDI played a role, but official flows accounted for the majority of capital flow to developing countries. In the 1990s, the composition of capital flow began to shift away from official assistance toward private capital flow. Much of this shift was due to the dramatic changes in policy that occurred under the “Washington Consensus,” a term coined by John Williamson (2002) at the Institute for International Economics. It was a convenient label for the broad set of policies supported by the U.S. Treasury and the IMF for reforming economies in emerging markets.

The Washington Consensus covered three broad areas, the first of which was that developing countries should have greater macroeconomic discipline, including a reduction in fiscal deficits, reprioritization of expenditures, and tax reform. The second major component was to encourage policies that foster the market economy to liberalize interest rates, liberalize the banking system, deregulate financial institutions, privatize government-run enterprises, and encourage greater securitization. In other words, the reforms were intended to create a greater role for market-determined prices to affect allocations. One of the key prices in small open economies is the exchange rate, although the debate still ensues today about the best way to manage exchange rates.

Finally, the consensus supported opening the economy to the global marketplace through trade liberalization and, to some extent, capital

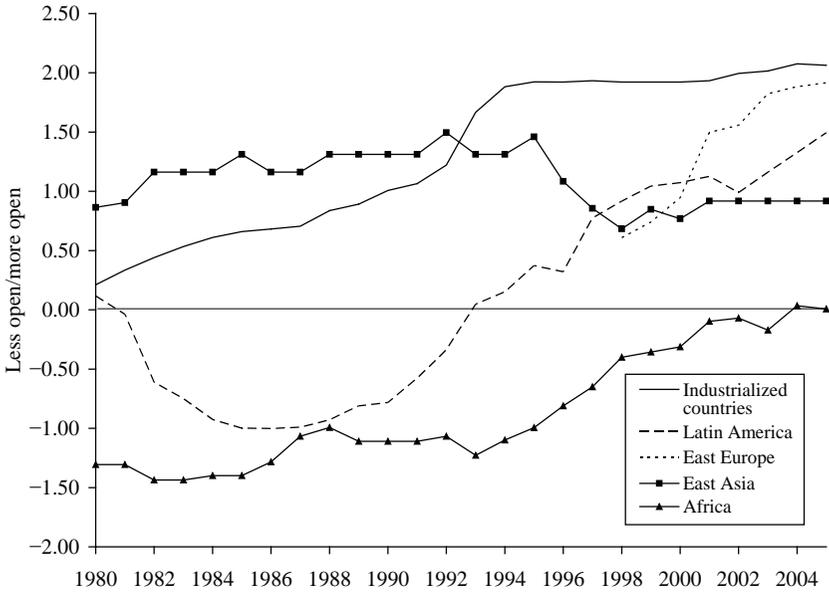
account liberalization. *Ex post*, there is now a heated debate about whether capital account liberalization is a good idea and if so, how it should best be accomplished, but *ex ante*, many economists believed that emerging market economies would benefit from lifting restrictions on the extent of foreign control, allowing foreigners to become shareholders in local firms and encouraging the entry of foreign banks. In response to pressure from the IMF and other institutions, many countries undertook massive privatization programs and liberalized their capital markets. These privatization programs took place in conjunction with the removal of capital account restrictions that permitted increased market access to foreign investors.

Economists predicted that such reforms would generate a number of benefits for emerging markets. Economic theory suggests that opening to global financial markets should stimulate the flow of capital from capital-rich to capital-poor countries and reduce the cost of capital in markets where it is scarce. The reforms should increase the efficiency of the financial sector and facilitate the transfer of technology. A second-order effect is to help diversify risk by reducing local investors' exposure to country-specific risk. At a minimum, these reforms, even if they do not change the long-run growth rate, would speed the transition to the country's long-run steady state by an inflow of foreign capital. The more optimistic view is that financial liberalization and openness could potentially increase economic growth rates.

Many countries took this policy advice and opened their markets. The number of countries with stock markets open to foreign investors increased from 14 in 1980 (essentially the largest OECD countries) to 35 in 1992, leveling off to 41 in the late 1990s (Bekaert, Harvey, and Lundblad 2005). Chinn and Ito (2006) develop an alternative measure of openness, taking into account policy differences across countries in the various components of the capital account (see Figure 5.1). Their measure captures the opening of the capital accounts, particularly in Latin America and East Europe.¹

Net resource flows to developing countries, and most notably flows to emerging markets, increased dramatically from the early 1980s to the mid-1990s (see Figure 5.2). If we strategically stop time in 1997, it appears that capital flow responded as economists predicted it would: with a quadrupling of total flow from \$75 billion in 1990 to over \$300 billion in 1997. Looking at flows by type, FDI followed a similar path,

Figure 5.1 Chinn-Ito Financial Openness Index

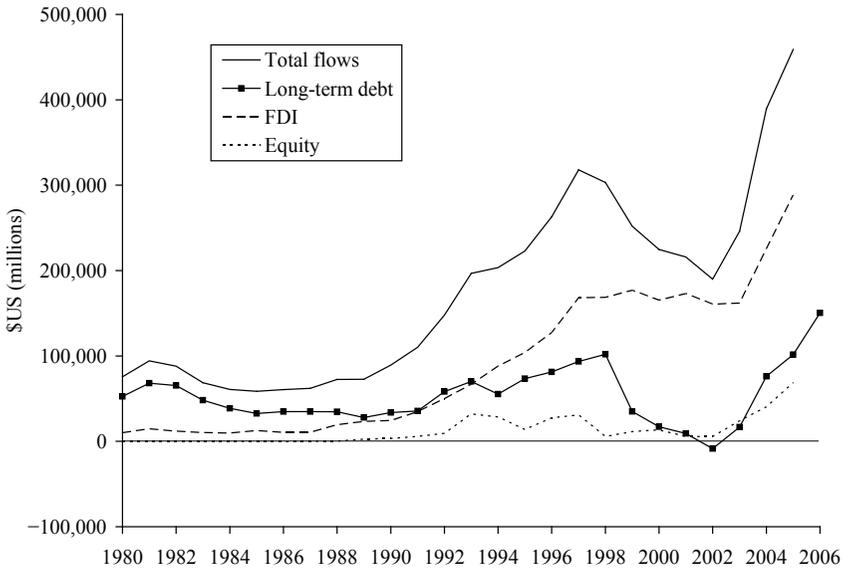


SOURCE: Chinn and Ito (2006).

increasing from less than \$50 billion to more than \$150 billion over the same period. International investment in portfolio equity, which was virtually nonexistent in the 1980s, accounted for an increasing share of capital flow in the early 1990s. At its peak in 1993, equity flows accounted for 20 percent of total capital inflow in developing countries.

Privatization and increased foreign investment led to a boom in emerging stock markets. The growth in stock market capitalization of emerging markets, which reflects the increase in the number of firms listed on the market as well as the change in stock prices, was a staggering 250 percent over the 1990–1996 period. The U.S. equity market, enjoying its own stock market boom over this period, grew about 170 percent, with slower rates of growth in the United Kingdom and Japan. Foreign markets, particularly emerging markets, looked like a good investment, and U.S. investors responded. Home bias, measured as the

Figure 5.2 Net Resource Flows to Developing Countries, 1980–2005



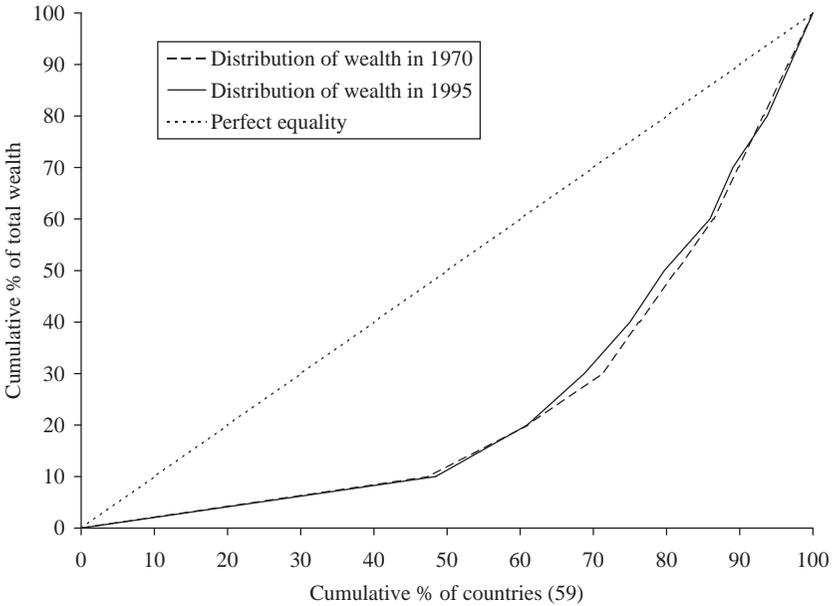
SOURCE: *Global Development Finance*, World Bank.

fraction of U.S. equities in the U.S. portfolio, declined from 97 percent in the 1980s to about 88 percent in 1995.

Despite the increased flows to developing markets, international capital markets were still dominated by flows between industrialized countries. Of the total global outflow of FDI of \$322 billion in 1995, 94 percent, or \$302 billion, was invested in industrialized countries. Similarly, 96 percent of outward investment in portfolio equity was invested in industrialized countries. So, while there was some seepage of global flows into developing countries, the volume of that flow remained relatively small.

Capital markets also did not deliver on the promise of redistributing wealth from the rich to the poor. A Lorenz curve of the distribution of wealth for 59 countries, which shows the fraction of global wealth accounted for by each decile of countries ranked by wealth, shows very little change between 1970 and 1995 (Figure 5.3). Wealth here includes

Figure 5.3 Lorenz Curve for Global Wealth, 1970 and 1995



SOURCE: Author's calculations based on net foreign asset and liability data reported by Lane and Milesi-Ferretti (2001).

the capitalized value of a country's capital stock as well as its stock of foreign assets. If wealth were distributed approximately evenly, the poorest 10 percent of countries would have 10 percent of global wealth. (If the distribution were exactly equal, the Lorenz curve would lie along the 45 degree line and there would be no distinction between the rich and the poor.) The data suggest that 10 percent of global wealth is shared by the bottom 50 percent of countries. These figures are an underestimate of the uneven distribution of wealth, because the sample excludes most of sub-Saharan Africa, the poorest countries in Asia, and Eastern Europe because of the lack of information on capital stocks and net foreign assets in those regions.

Even if one thought that wealth might not be affected by the opening of capital markets, one would hope that the allocation of capital would be affected. That is, open capital markets would encourage

investment in capital-scarce countries even if ownership of that capital, and therefore wealth, remained in the hands of investors in industrialized countries. Unfortunately, the data suggest that there was also very little change in the distribution of capital across countries between 1970 and 1995. In 1995, the richest 50 percent of countries accounted for 85 percent of the global capital stock.

Of course, the clock did not stop in the mid-1990s, and beginning with the Mexican crisis in December 1994, global markets were buffeted with a series of financial shocks that seemed to spread from one market to the next. These crises resulted in (or some would say were caused by) a sudden reversal of capital flow from emerging markets, speculative attacks on fixed exchange rates and the central banks that supported them, collapses in the financial sectors of many Latin American and Southeast Asian countries, liquidity crises, and ultimately widespread defaults. The cause of these crises remains a topic of heated discussion and is beyond the scope of this chapter.

The “sudden stop” in capital flow to emerging markets resulted in a dramatic reduction in total flows to developing countries, from a peak of \$310 billion in 1997 to less than \$200 billion in 2001. Flows of long-term debt fell in 1999 and became negative in 2001. Portfolio equity flows were reduced to a trickle. Interestingly, while the other types of flow declined, FDI remained steady from 1997 on and took a sharp turn upward in 2003. This is seen even more clearly when one looks at the decomposition of flows by type (i.e., as a percentage of total flow). Throughout the entire 1980–2001 period, FDI as a fraction of total inflow steadily increased, and by 2001 it accounted for 80 percent of the total volume of flow to developing countries. The remainder of the chapter examines why, and how one should think about FDI flows in this environment.

To understand FDI flows, it helps to make the distinction between greenfield investments, the inflow of new investments, and “brown-field” investments, mergers and acquisitions (M&As) that reflect the purchase of existing plants and equipment. Throughout the late 1990s the fraction of FDI that is accounted for by the acquisition of firms in emerging markets by firms in industrialized countries increased. In 1999, over 90 percent of FDI in Asia was due to cross-border M&As.

The rise in cross-border M&As as a form of external finance was in part due to changes in the regulations affecting foreign ownership.

In many countries in East Asia, foreign investors were explicitly prohibited from gaining a controlling share in local firms. For example, in 1996 the ceiling on the amount of stock foreigners could acquire in all Korean companies without the approval of the board of directors was only 18 percent. Another feature of the market for corporate control in Korea was that cross-holdings across business groups (Chaebols) were substantial. This situation changed dramatically as a consequence of the financial crises that swept the region during 1997. The IMF bailout packages to Thailand, Korea, and Indonesia included explicit provisions for restructuring domestic capital markets and to allow foreign competition in the market for corporate control.

Another feature of FDI inflows is that they are lumpy; that is, a single transaction in a small market can have a huge impact on aggregate flow. Argentina is an interesting example. In 1999, forecasts about Argentina's near economic future and the viability of its currency board were grim. Debt flows steeply declined and portfolio inflows turned negative. Foreign direct investment, however, surged upward to unprecedented levels. A careful look at the data reveals that the sale of YPF, an oil and gas company, to Repsol, a Spanish enterprise, accounted for 63 percent of total FDI inflow in that year. Had Repsol not made the purchase, net flows to Argentina would have been close to zero.

The next question is how to interpret the boom in foreign acquisitions in emerging markets. Many views in the press range from firms now having access to the "exciting opportunities" in emerging markets, to a fire sale of assets resulting from the liquidity crises, to the fear of "recolonization" by foreign entities (the latter is attributed to Malaysia's Prime Minister Mahathir). Economists also express a range of opinions, from FDI as the "good cholesterol" (borrowing may not be good for you, but if you have to do it FDI is the least dangerous form) to a more neutral perspective (FDI is simply the transfer of assets from domestic to foreign hands and therefore may have little real economic impact) to a more positive view that FDI enables the transfer of technology and creates synergies between parents and their affiliates.

To try to shed light on the factors that drive cross-border M&As, I explore three questions. First, is there value creation from the transfer of assets from domestic to foreign hands? Second, if there is value creation, who captures the gains—targets in emerging markets or acquirers from industrialized countries? And finally, are there special circum-

stances under which gains exist, and why? To get at these questions, I will use the stock price reaction of acquirer and target firms to the announcement of an M&A transaction as a summary statistic for the value created through cross-border M&A activity.

The results in this chapter are drawn from Chari, Ouimet, and Tesar (2009). The returns are cumulated average abnormal returns over a three-day event window around the announcement date.² Our data set includes all acquisitions of firms in 42 emerging markets in Africa, Asia, and Latin America by firms from nine industrialized countries. The sample period covers 1986–2006, making it possible to test for the effects of financial crisis on the gains from an acquisition. The data set includes various firm, industry, and transactions characteristics. We also have data for a control group that includes domestic and other industrialized-country acquisitions by U.S. and European firms. This allows us to compare the gains from acquiring a target in an emerging market relative to the gains from acquiring a target in another industrialized country.

Our analysis yields three main findings. First, there is value creation from cross-border M&As in emerging markets. Between 1986 and 2006, developed market acquirers experienced positive and significant abnormal returns of 1.16 percent, on average, over a three-day event window.

Our second finding is that shareholders of acquiring firms reap the lion's share of the gains, and this gain is associated with acquiring control. The median acquirer records cumulative abnormal returns of 0.72 percent in transactions where control is acquired, while the median cumulative abnormal return for acquirers in transactions where control is not acquired is 0.02 percent. Over the period we study, the cumulated dollar value gain from cross-border acquisitions in emerging markets where control was acquired was \$10.5 billion for developed market shareholders. Note that this is in stark contrast to the results from the domestic M&A literature where studies find that M&As are value destroying and that the gains, if any, accrue to the target's shareholders (Moeller, Schlingemann, and Stulz 2005). This suggests that something very different is going on in the emerging market context. The effect appears to be closely related to corporate control.

Finally, we find that the gains for acquirers are largest in R&D intensive sectors, conditional on gaining control. To obtain this result, we first estimate R&D intensity at the industry level based on a cross-

section of U.S. industries. We then use those estimates as a measure of R&D intensity of targets (by industry). When we include this measure of R&D intensity as a control variable in the regression, we find that corporate control, crossed with R&D intensity, is a significant explainer of acquirer gains. One interpretation of this finding is that there are productive synergies from M&As that involve the transfer of technology, but these synergies are only realized (and the technology is transferred) when the acquirer obtains control.

How can we interpret these findings? In *Financial Crisis, Liquidity and the International Monetary Problem*, Jean Tirole (2001) offers insight into the potential causes of market failure in emerging markets that has direct bearing on the decision to acquire a foreign firm. First, he assumes that there are many lenders, and that lenders do not coordinate their actions. On the borrowing side, he assumes that the local government can take actions that affect the payoffs of the firm, and that the incentives of the government are not fully aligned with those of the firm. Two problems then arise. First, the lack of coordination among lenders means that each lender is uncertain about the borrowing country's overall level of indebtedness, and each lender is uncertain about the relative seniority of his or her own claim. This situation can lead to sunspot equilibria, speculative attacks, and contagion as each investor tries to infer from inexact signals whether or not his or her claim will be honored. The second problem is that lenders would like to contract with the firm, but the government is an implicit partner in the arrangement. Thus, the lender is exposed to expropriation risk; that is, actions that are not in the best interest of the firm.

Foreign direct investment, in the form of acquiring control of the emerging market firm, offers a way out of these two problems. By contracting explicitly with the shareholders of the target firm, FDI essentially cuts out other lenders (minimizing the multiple lender problem). In gaining majority ownership of the firm, shareholders of the acquiring firm are able to extend the boundary of the firm into the emerging market, effectively replacing the government of the target-firm nation with that of the acquirer. This is not to say that all expropriation risk is eliminated—the target's government could still violate international law, for example, and nationalize the target. But by consolidating the balance sheets of the target and the acquirer, the acquisition effectively extends the reach of the acquirer's home institutions into the borrower's

market. In a sense, the target imports the corporate and legal institutions from the acquirer.

Foreign direct investment is not, however, a panacea for the weak institutions problem plaguing emerging markets. It is relatively immobile, may be inflexible, and may not help a country diversify its risk. It also comes at a price. In order to attract FDI and to compensate for the weak institutions problem, target shareholders in emerging markets give up both control and, relative to target shareholders in industrial countries, returns. The only complete solution is for governments in emerging markets to address the weaknesses in their contracting environment, to offer greater property rights protection, and to make firms less vulnerable to capricious changes in government policy.

Another recent phenomenon, which I believe is also a symptom of the weak institutions problem, is the dramatic rise in foreign reserve accumulation in developing countries. According to neoclassical theory, capital-scarce countries should be net borrowers, not net lenders. Yet what we see is the accumulation of large holdings of dollar reserves by foreign governments, particularly in developing countries. Economists continue to debate about the explanation of these reserve holdings, but one plausible explanation is that in a world where financial meltdowns are a possibility, foreign reserves serve as collateral and provide a signal to foreign investors that the countries' balance sheets are sound.

SUMMARY

The composition of global financial flows to emerging markets changed dramatically in the postfinancial crisis period. External finance is now much more likely to take the form of the sale of domestic assets, with control rights shifting to the acquiring firm. In my view, this change in the composition of flows is a natural response to institutional weaknesses in emerging markets. Control of foreign subsidiaries allows for both capital flow and for the protection of property rights of the acquiring firm, but it is not a perfect substitute for strong institutions that would extend to all firms in emerging markets.

Notes

1. For more details on their index, see Chinn and Ito (2006).
2. Our working paper includes robustness checks for different windows around the announcement date.

References

- Bekaert, G., C. Harvey, and C. Lundblad. 2005. "Does Financial Liberalization Spur Growth?" *Journal of Financial Economics* 77(1): 3–55.
- Chari, A., P. Ouimet, and L. Tesar. 2009. "The Value of Control in Emerging Markets." *Review of Financial Studies* 21(2): 605–648.
- Chinn, M., and H. Ito. 2006. "What Matters for Financial Development? Capital Controls, Institutions, and Interactions." *Journal of Development Economics* 81(1): 163–192.
- Global Development Finance*. Various issues. Washington, DC: The World Bank.
- Lane, P., and G.M. Milesi-Ferretti. 2001. "The External Wealth of Nations: Measures of Foreign Assets and Liabilities for Industrial and Developing Nations." *Journal of International Economics* 55(2): 263–294.
- Moeller, S., F. Schlingemann, and R. Stulz. 2005. "Wealth Destruction on a Massive Scale? A Study of Acquiring-Firm Returns in the Recent Merger Wave." *Journal of Finance* 60(2): 757–782.
- Tirole, J. 2001. *Financial Crisis, Liquidity and the International Monetary Problem*. Princeton, NJ: Princeton University Press.
- Williamson, J. 2002. "Did the Washington Consensus Fail?" Speech given at the Center for Strategic and International Studies, Washington, DC, November 6.