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# **The Welfare Implications of Global Financial Flows**

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Any discussion of whether the global financial system has served the world well requires us to think about what it is that capital flows could achieve in the best of circumstances. The basic neoclassical model suggests that, with rising financial globalization, capital should flow from rich to poor countries, making people in both sets of countries better off by enabling a more efficient international allocation of capital from countries where capital is less productive to those where it ought to be more productive. In addition, financial flows should allow for more efficient sharing of risk across countries, thereby facilitating the smoothing of national consumption against country-specific shocks to national output. These benefits are likely to be greater for developing countries as they have less capital and more volatile growth, implying that both the growth and risk sharing benefits would be larger for them.

Have international capital flows delivered these benefits? The macroeconomic evidence that financial integration has accounted for systematically higher growth rates in developing economies is not robust, especially when one controls for other determinants of growth (Kose et al., 2006). And there is certainly no evidence that developing economies, or even the smaller group of emerging market economies, have been able to better share their income risk and achieve improved consumption smoothing during the recent period of financial globalization. Indeed, some observers have argued that financial globalization is the proximate determinant of the financial crises experienced by many developing economies over the last two decades.

And yet, financial globalization has continued apace, with rising cross-border financial flows and with developing countries actively seeking to open up their capital accounts. So what have these flows wrought? And do the patterns of these flows imply that the international financial system is working well or not?

### **Patterns of Flows**

One of the remarkable features of recent capital flows, especially since the beginning of this decade, is that total capital flows (private plus official) have been from relatively poor non-industrial countries (emerging market economies and other developing countries) to advanced industrial countries, exactly the opposite of the direction predicted by theory (see Figure 1; Figure 2 shows similar calculations excluding the United States). This is despite the fact that there have been no sudden stops, drastic capital flow reversals or other types of financial crises that have hit developing economies during this decade. Furthermore, among non-industrial countries, more capital seems to go to slower-growing economies rather than faster-growing economies, a phenomenon that has been dubbed the allocation puzzle by Gourinchas and Jeanne (2006). Indeed, as a group, the faster-growing developing economies have been exporting capital during this decade (see Figure 3).

A large portion of the flows of capital from developing to industrial economies is of course in the form of official accumulation of international reserves. But, from a financing perspective, the net effect is still the same—that of reducing the quantum of capital available for investment in developing countries. In short, the flow of capital from developing countries would seem to be starving these already capital-scarce economies of capital and sending it to richer industrial countries where, given the relative abundance of capital, its productivity should be lower.

Does this seemingly perverse flow of capital from developing to industrial countries adversely affect growth in the former group? The recent strong growth performance of emerging market economies suggests that this is not the case. Remarkably, the historical evidence also suggests that such uphill flows of capital do not adversely affect growth in

developing economies, at least in one very basic sense. Contrary to the predictions of standard theoretical models, there is some evidence that, among this group of countries, those that run larger current account surpluses (or smaller current account deficits) tend to have superior growth performance (Prasad, Rajan and Subramanian, 2006). Consistent with other evidence that financial integration (as measured, for instance, by net capital inflows) does not have a robust positive association with growth, this suggests that a dearth of financing for domestic investment may not be the primary factor holding back growth in developing countries.

Why is it that a reduced reliance on foreign capital is associated with higher growth among non-industrial countries? One possible explanation for this correlation is that the pattern of flows is indicative of weaknesses in the financial sectors of the capital-exporting developing countries. These weaknesses imply that the ability to absorb and effectively intermediate foreign capital is limited in these countries. Indeed, capital inflows in economies with weak absorptive capacity may also generate real exchange rate appreciations and consequent “Dutch Disease” effects that hurt long-term growth. Hence, economies that are less reliant on foreign capital may in fact grow faster. Another possible explanation for the positive correlation between current account balances and growth is that domestic savings constitute a less volatile and more reliable source of financing for domestic investment.

All of this is not to say that financial integration has no discernible benefits—indeed, there is accumulating, if yet circumstantial, evidence that there are strong indirect benefits. Openness to foreign capital appears to serve as a catalyst for domestic financial market development as well as improvements in institutional quality and governance, and may also serve as a

disciplining device for domestic macroeconomic policies. These “collateral benefits” may prove to be even more important than raw financial capital in terms of boosting long-term productivity growth.

The complication is that the cost-benefit tradeoff for countries undergoing integration into international financial markets seems to be subject to certain threshold effects. For instance, when an economy has an underdeveloped financial system and weak institutions, financial openness increases vulnerability to risks. The benefits of financial integration, on the other hand, are more clearly evident only when financial systems and institutions reach the level of development typically seen only in advanced industrial economies. This creates an obvious conundrum for developing countries that view financial integration as an avenue to gain some of the potential collateral benefits but fall short of the threshold conditions on some of the same dimensions.

These threshold effects are also relevant in the context of realizing the potential risk sharing benefits of financial flows. Existing evidence suggests that the risk sharing benefits of financial globalization have in large part accrued only to countries that are highly integrated into global financial markets; these levels of integration are typically seen only among industrial economies. One reason for the inability of emerging market economies to attain the risk-sharing benefits may be that access to international financial markets has turned out to

be procyclical for these economies, implying that they lose access to external financing just when they need it the most.<sup>1</sup>

The fact that financial integration has important indirect benefits for growth and promotes efficient risk sharing, but only beyond certain thresholds, has important implications. It may be one reason why countries that are in the process of opening up their capital accounts may be self-insuring against the risks associated with open capital accounts by building up a large cushion of international reserves (which, in effect, involves exporting financial capital through official channels). In principle, this allows developing countries to try and attain some of the benefits of financial globalization, but without fully exposing themselves to the transitional risks associated with volatile capital flows.

### **Implications for Global Imbalances**

The pattern of capital flows described above, combined with factors such as the demand for capital arising from the financing needs for U.S. private and public consumption, has fueled global current account disparities. These widening disparities—rising current account deficits in many industrial countries, most notably the United States, and surpluses in many emerging market economies—are now referred to rather ominously as global imbalances. Some analysts have made dire predictions that massive exchange rate adjustments will be needed

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<sup>1</sup> One implication of this discussion is that financial markets are far from complete and having institutions such as the IMF catalyze the development of financial instruments that allow countries to better share macroeconomic risk would be helpful. Regional pooling arrangements may serve a useful purpose as well. But it is often the case that countries in a region tend to be vulnerable to similar sorts of shocks, and regional pooling would not provide much insurance against such shocks that affect a majority of the countries in a region.

among some of the key economies in order to correct these imbalances. In light of the earlier discussion of financial globalization, should these imbalances really be a source of deep concern?

Now that these current account disparities have persisted and, indeed, continued to grow over the last eight years with no apparent disruption of international financial markets, there is a legitimate question about whether it makes sense to continue crying wolf. It would of course be rash to rule out the possibility of a shift in market sentiment that caused these imbalances to correct in an abrupt manner with pain all around. Moreover, it is likely that the tail risks of a disorderly adjustment increase with the level of imbalances.

Even if these imbalances turn out to be sustainable in the sense that they do not trigger any abrupt adjustments and dissipate smoothly in the course of a decade or two, however, it is worth asking what the welfare implications of these imbalances are. Or, more precisely, are there any welfare costs associated with the policies required to maintain this configuration of imbalances.

As exhibit A, consider China, where current account and capital account surpluses have led to a massive buildup of reserves over the last few years. This reserve buildup has been facilitated by the maintenance of a stable nominal exchange rate relative to the U.S. dollar even in the face of strong pressures, based on fundamentals such as productivity growth, for an appreciation of the currency's external value. The maintenance of a fixed exchange rate has complicated domestic macroeconomic management since it has, despite the existence of

moderately effective capital controls, effectively meant that monetary policy can not be targeted to domestic objectives. Thus, while the reserves may serve as a useful cushion against external shocks and instabilities associated with a dilapidated banking system, the financial repression (and relatively closed capital account that has limited outflows) that has helped sustain the fixed exchange rate regime may have longer-lasting consequences. In particular, the lack of an independent monetary policy has further hindered the already difficult process of financial sector reforms by forcing monetary policymakers to rely on ad hoc policy actions, including moral suasion and non-prudential administrative measures, rather than market instruments such as interest rates to control and guide credit growth.

In short, some of the policies that have helped foster and sustain global imbalances have significant distortionary consequences that should be part of the welfare calculations when assessing the effects of these imbalances. This argument has one important implication—even if each country did the right thing in terms of changing such policies, it is not immediately obvious that this would eliminate current account imbalances. Take China as an example again. Notwithstanding recent modest movements in the exchange rate, the relative rigidity of the nominal exchange rate has complicated domestic macroeconomic management. An appreciation of the currency could in fact reduce savings by increasing the wealth of Chinese households even at a given level of income. More importantly, an independent monetary policy would foster macroeconomic stability and could help push along financial sector reforms, which could also reduce savings. At the same time, a better-functioning financial system may, in addition to shifting the financing of investment to a process more driven by commercial principles, reduce the level of investment. Thus, the net

short-run effects of financial sector reforms on the saving-investment balance—i.e., the current account—are not obvious. Nevertheless, these measures would help China get on to a more sustainable and welfare-enhancing growth path, which would be good both for China and the world economy.

### **Concluding Remarks**

In sum, the apparently perverse flows of capital that we have been seeing are not in themselves indicative of deficiencies in the international financial system. This is not to suggest that all is well with the international financial system or that it has reached a level of maturity wherein a policy of benign neglect by policymakers and international institutions would be appropriate. Indeed, rising financial integration has the potential for taking existing weaknesses and blowing up their effects on a larger scale.

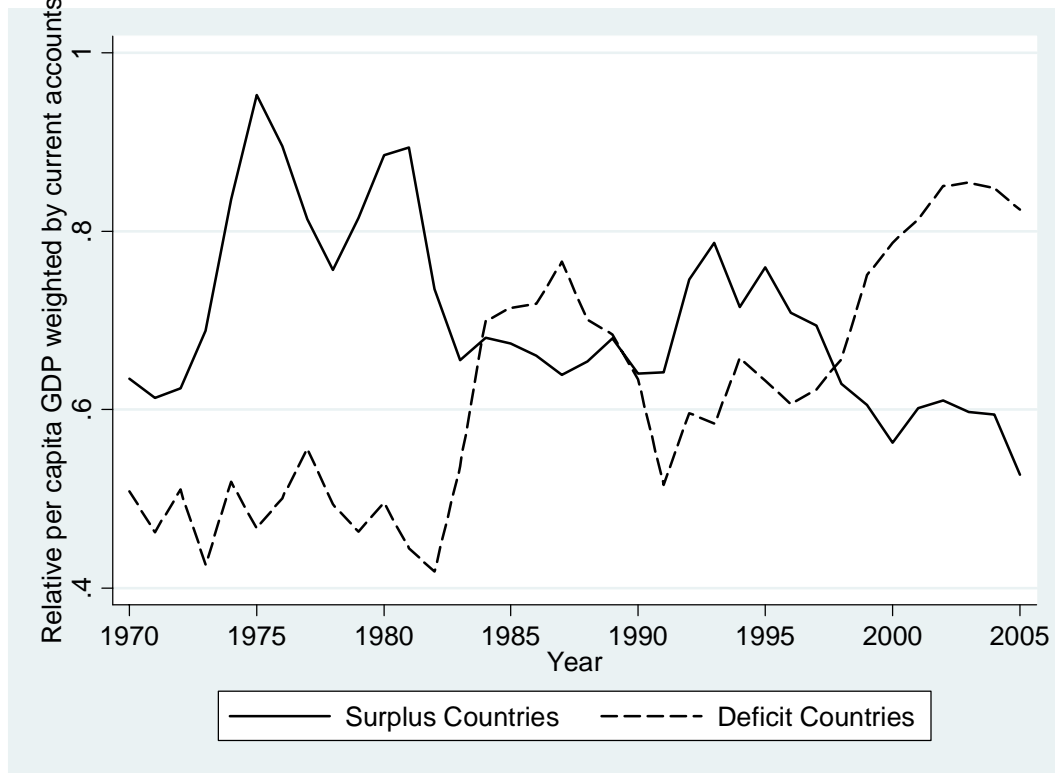
But a constructive way of looking at global imbalances—rather than just arguing about whether they will spell disaster or not—is that they could serve as a useful device to focus the minds of policymakers on underlying policy distortions and institutional weaknesses that represent departures from the first best. In an ideal world, relatively capital-poor economies would have better financial systems that would allow them to absorb and effectively intermediate both domestic savings and foreign capital, and thereby achieve higher growth rates both through direct and indirect benefits accruing from financial integration. And industrial countries would generate surpluses to finance investments in developing economies, rather than running deficits to finance consumption.

Rather than asking whether seemingly odd patterns of capital flows may reflect irrational behavior, it may be more useful to ask what it is that the patterns of international financial flows may be signaling to us about more basic problems in different parts of the world economy. In short, whether or not global imbalances are destined to end badly, they are a sign of things gone awry.

### **References**

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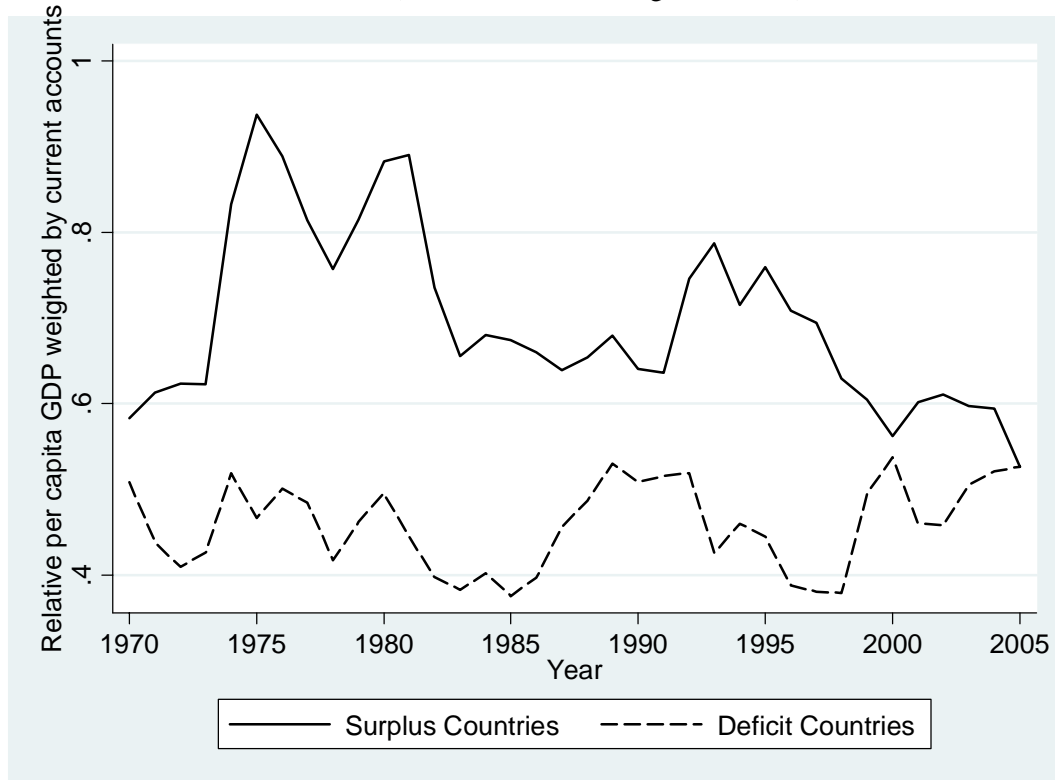
Figure 1. Relative Incomes of Capital-Exporting and Capital-Importing Countries



Notes: For each year, we separate our sample of countries into two groups—those with current account surpluses and those with deficits in that year. For the first group, we then take each country's share of the total current account surplus accounted for by all countries in that group. We then multiply that share by the relative PPP-adjusted per capita income of that country (measured relative to the per capita income of the richest country in the sample in that year). This gives us a current account-weighted measure of the relative incomes of surplus countries. We do the same for current account deficit countries. This enables us to compare the relative incomes of surplus versus deficit countries in each year.

Source: Prasad, Rajan and Subramanian (2006)

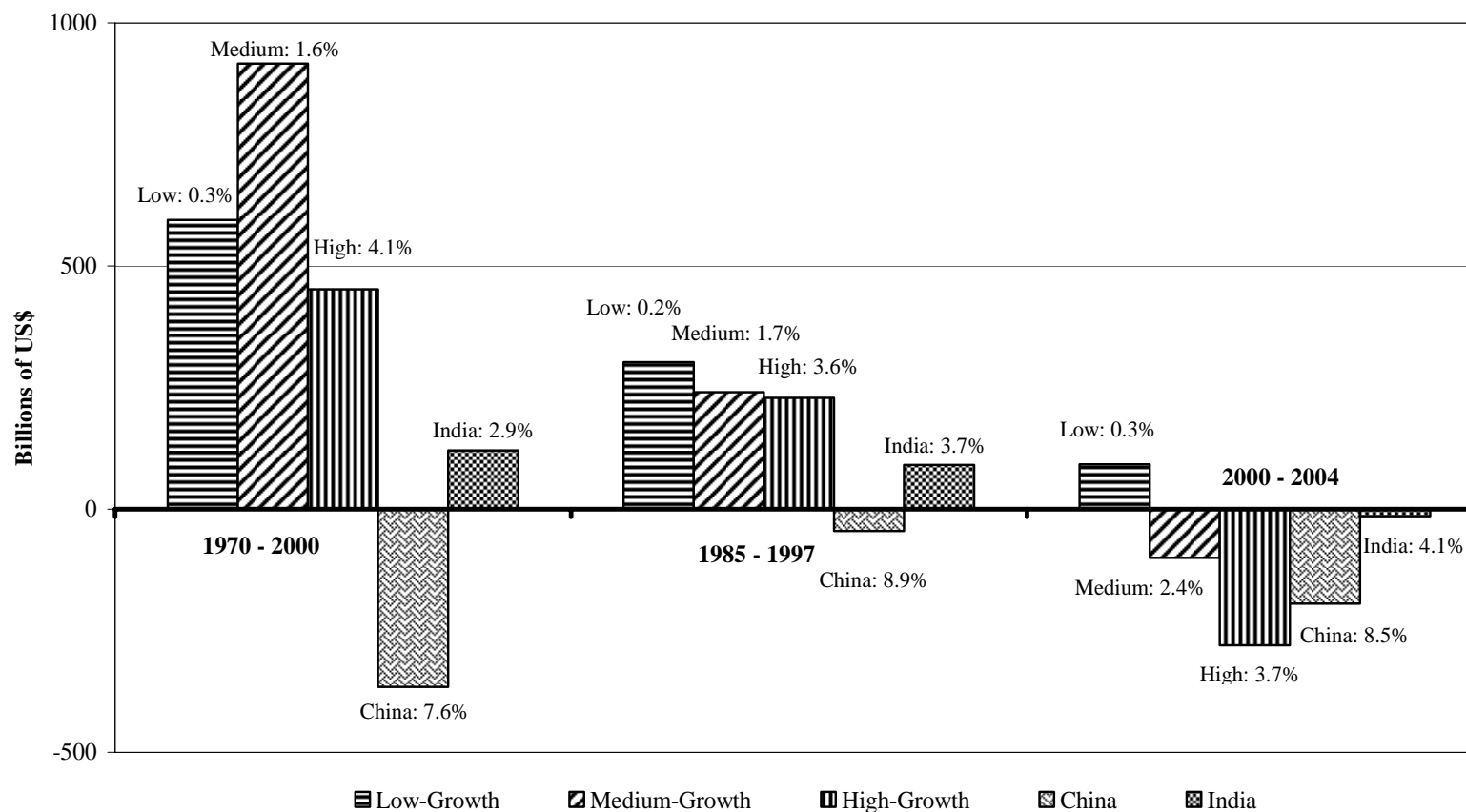
Figure 2. Relative Incomes of Capital-Exporting and Capital-Importing Countries  
(calculations excluding the U.S.A.)



Notes: For each year, we separate our sample of countries into two groups—those with current account surpluses and those with deficits in that year. For the first group, we then take each country's share of the total current account surplus accounted for by all countries in that group. We then multiply that share by the relative PPP-adjusted per capita income of that country (measured relative to the per capita income of the richest country in the sample in that year). This gives us a current account-weighted measure of the relative incomes of surplus countries. We do the same for current account deficit countries. This enables us to compare the relative incomes of surplus versus deficit countries in each year. The calculations are the same as in Figure 1 except that we exclude the U.S.A. from the sample.

Source: Prasad, Rajan and Subramanian (2006)

**Figure 3. The Allocation of Capital Flows to Non-Industrial Countries**



Notes: The non-industrial countries in our sample are split into three groups with roughly equal total populations in each group. China and India are treated separately. Each panel shows the cumulative current account deficits (in billions of U.S. dollars, deflated by U.S. CPI indexed to 1 in 2004) summed up within each group over the relevant period. A negative number indicates a surplus. Median real GDP growth rates for the countries in each group (after averaging over the relevant period for each country) are also shown.

Source: Prasad, Rajan and Subramanian (2006)