

## WHO NEEDS CAPITAL-ACCOUNT CONVERTIBILITY?<sup>1</sup>

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Imagine landing on a planet that runs on widgets. You are told that international trade in widgets is highly unpredictable and volatile on this planet, for reasons that are poorly understood. A small number of nations have access to imported widgets, while many others are completely shut out even when they impose no apparent obstacles to trade. With some regularity, those countries that have access to widgets get too much of a good thing, and their markets are flooded with imported widgets. This allows them to go on a widget binge, which makes everyone pretty happy for a while. However, such binges are often interrupted by a sudden cutoff in supply, unrelated to any change in circumstances. The turnaround causes the affected economies to experience painful economic adjustments. For reasons equally poorly understood, when one country is hit by a supply cutback in this fashion, many other countries experience similar shocks in quick succession. Some years thereafter, a widget boom starts anew.

Your hosts beg you for guidance: how should they deal with their widget problem? Ponder this question for a while and then ponder under what circumstances your central recommendation would be that all extant controls on international trade in widgets be eliminated.

Substitute “international capital flows” for “widgets” above and the description fits today’s world economy quite well. We have just gone through a lending boom-and-bust cycle in Asia which is astounding in its magnitude. In 1996, five Asian economies (South Korea, Indonesia, Malaysia, Thailand, and the Philippines) received net private capital inflows amounting

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to \$93.0 billion. One year later (in 1997), they experienced an estimated outflow of \$12.1 billion (IIF 1998), a turnaround in a single year of \$105 billion, amounting to more than 10 percent of the combined GDP of these economies! Consequently, three of these economies (Indonesia, Thailand, and South Korea) are mired in a severe economic crisis the magnitude of which would have seemed inconceivable even to the most knowledgeable and insightful observers of the region.

The Asian crisis is hardly an isolated incident in the history of financial markets. We have seen at least two other major international lending crises in the last twenty years: the generalized debt crisis of 1982 and the Mexican crisis of 1994-95. Charles Kindleberger, perhaps our wisest chronicler of financial folly, claims that financial crises have appeared at roughly ten-year intervals for the last 400 years or so (1984, 269). As he puts it, “the record [in financial markets] shows displacement, euphoria, distress, panic and crisis occurring decade after decade, century after century....” (1984, 273). Boom-and-bust cycles are hardly a side show or a minor blemish in international capital flows; they are the main story.

From this perspective, embracing as the IMF’s next major mission the liberalization of capital accounts—albeit in an “orderly” fashion and buttressed by enhanced prudential regulation of financial practices—sounds genuinely odd. One wonders which of the ills of international capital markets the proposed medicine will remedy. Will the African countries get the foreign capital they need if they remove capital controls? Will “emerging markets” be less at risk of being flooded with foreign capital when such flows conflict with the domestic goals of inflation control or of maintaining a competitive exchange rate? Will sudden reversals become less likely than before? Will contagion across countries become less severe? Will more of the inflows take the form of long-term physical investments rather than short-term flows?

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It is not that capital controls are necessarily the answer to these problems; they are not. But capital-account liberalization fits the bill even less. We can imagine cases where the judicious application of capital controls could have prevented a crisis or greatly reduced its magnitude. Thailand and Indonesia would have been far better off restricting borrowing from abroad instead of encouraging it. Korea might just have avoided a run on its reserves if controls on short-term borrowing had kept its short-term exposure to foreign banks, say, at 30 percent, rather than 70 percent of its liabilities. On the other hand, which of the recent blowups in international financial markets could the absence of capital controls conceivably have prevented?

If the recent evidence teaches us anything, it is that there is a compelling case for maintaining controls or taxes on short-term borrowing. The three countries hardest hit by the Asian financial crisis—Indonesia, Thailand, and Korea—were the three in the region with the largest short-term obligations (in relation to reserves or exports). Admittedly, we know too little about what kinds of controls work best in these circumstances. The evidence on the effectiveness of controls on short-term borrowing is patchy, even in the relatively clean and well-studied case of Chile (Edwards 1998).

Where knowledge is limited, the rule for policy makers should be: first do no harm. Enshrining capital-account convertibility in the IMF's articles of agreement is an idea whose time has not yet come. We have no evidence that it will solve any of our problems, and some reason to think that it may make them worse.

Current-account versus capital-account convertibility. It is tempting to think of capital-account liberalization as the natural follow-up to the establishment of convertibility for current-account

transactions. If international trade is beneficial when it concerns goods and services, why not extend the freedom of trade to financial and physical assets too?

As the thought experiment I started out with suggests, the analogy is misleading. There is a fundamental difference in the way that markets operate in these different areas. Markets for goods and services are rarely textbook-perfect, but they operate in most instances with a certain degree of efficiency and predictability. Financial markets are fundamentally different. Market failures arising from asymmetric information, incompleteness of contingent markets, and bounded rationality (not to mention irrationality) are endemic to financial markets. Some of the consequences are well known and have been highlighted in the literature:

- asymmetric information combined with implicit insurance results in excessive lending for risky projects;
- a mismatch between short-term liabilities and long-term assets leaves financial intermediaries vulnerable to bank runs and financial panic, a problem that is particularly severe in cross-border transactions where there is no international lender of last resort (Sachs 1995; Radelet and Sachs 1988);
- when markets cannot observe the intrinsic quality of money managers, these managers are likely to place too little weight on their private information and exhibit herd behavior (Scharfstein and Stein 1990), resulting in turn in excess volatility and contagion effects;
- since asset values are determined by expectations about future returns, the dynamics of asset prices can be quite rich, exhibiting bubbles and peso problems.

Such problems, to cite only some of the rational explanations for observed anomalies in financial markets, are part and parcel of the playing field, rendering the issue of capital controls an inherently second-best one.

Is it mostly fundamentals? A counter-argument is that financial markets get it mostly right, and that sharp reversals of capital flows are usually the result of changes in fundamentals, such as external shocks or policy mistakes. While at least a grain of fundamentals surely underlies every financial crisis, the magnitude of the crises are often incommensurate with any plausible change in the fundamentals. We know of no changes in fundamentals that could possibly account for the sharp reversal of capital flows to Asia in 1997. The simple fact is that commercial banks either got it terribly wrong in 1996 (and before) in showering Asian countries with loans, or they were terribly wrong in completely pulling out thereafter.

A sad commentary on our understanding of what drives capital flows is that every crisis spawns a new generation of economic models. When a new crisis hits, it turns out that the previous generation of models was hardly adequate. Hence, the earliest models of currency crises were based on the incompatibility of monetary and fiscal policies with fixed exchange rates. These seemed to account well for the myriad balance-of-payments crises experienced through the 1970s. The debt crisis of 1982 unleashed an entire literature on over-borrowing in developing countries, placing the blame squarely on expansionary fiscal policies (and, in some countries, on inappropriate sequencing of liberalization). But crises did not go away when governments became better behaved on the monetary and fiscal front. For example, the ERM crisis in 1992 could not be blamed on lax monetary and fiscal policies in Europe, and therefore led to a new set of models with multiple equilibria. The peso crisis of 1994-95 did not fit very well either, so economists came up with yet other explanations—this time focusing on the role of real exchange rate overvaluations and the need for more timely and accurate information on government policies. In the Asian crisis, neither the real exchange rate nor inadequate information seems to

have played a major role, so attention has shifted to moral hazard and crony capitalism in these countries.<sup>2</sup>

The moral of this twisted story is twofold: (a) financial crises will always be with us; and (b) there is no magic bullet to stop them. These conclusions are important because they should make us appropriately wary about statements of the form, “we can make free capital flows safe for the world if we do x at the same time,” where x is the currently fashionable antidote to crisis. Today’s x is “strengthening the domestic financial system and improving prudential standards.” Tomorrow’s is anybody’s guess. If we are forced to look for a new series of policy errors each time a crisis hits, we should be extremely cautious about our ability to prescribe a policy regime that will sustain a stable system of capital flows.

This point was recognized in a prescient set of comments by Arminio Fraga in an earlier Princeton symposium following the peso crisis:

If Mexico is thought to have borrowed so much, it is also fair to ask why the markets were so lax in providing the financing. Having asked the same question about the debt crises of the 1930s and 1980s..., I would answer again that investors behave myopically, each one perhaps thinking that it will be possible to exit ahead of the rest....

At this point, I am forced to conclude that better disclosure of country data and stronger economic institutions (such as independent central banks and more transparent budgetary practices) can reduce the chances of another Mexican crisis but cannot totally prevent it (Fraga 1996, 53-54).

Fraga sensed that the policy errors *du jour* emphasized by the policy community after the peso crisis may have aggravated the endemic instability of capital markets, but they were not the heart of the matter. He has been proved right by the Asian crisis.

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<sup>2</sup> For two recent papers on changing perspectives in the currency-crisis literature, see Flood and Marion (1997) and Krugman (1998).

One might add that the current emphasis on strengthening domestic financial systems glosses over the practical difficulties. Putting in place an adequate set of prudential and regulatory controls to prevent moral hazard and excessive risk-taking in the domestic banking system is a lot easier said than done. Even the most advanced countries fall considerably short of the ideal, as their bank regulators will readily tell you. The U.S. Comptroller of the Currency recently complained that only four of the 64 largest North American banks practice state-of-the-art portfolio risk management and that loan standards are therefore more lax than they ought to be.<sup>3</sup> Imagine the problems that will keep bank regulators awake at night in India or Turkey!

Think of capital flows as a medicine with occasionally horrific side-effects. The evidence suggests that we have no good way of controlling the side effects. Can it be good regulatory policy to remove controls on the sale and use of such a medicine?

What about the costs of capital controls? The fundamental argument in favor of removing capital controls is that they are costly to economic performance. In theory, the costs come in different forms. Capital controls prevent risk-spreading through global diversification of portfolios.<sup>4</sup> They result in an inefficient global allocation of capital. And they encourage irresponsible macroeconomic policies at home. What about the evidence?

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<sup>3</sup> "Banks Warned on Letting Loan Standards Slide," Financial Times, February 19, 1998, p. 5. I am grateful to Marty Feldstein for this reference.

<sup>4</sup> Such diversification can be desirable not only because it reduces risk but also because it allows higher-yield (and higher-risk) investments to be undertaken, enhancing economic growth. See Obstfeld (1994) for a model of this.

Table 1 lists all developing countries that, according to the IMF, have had unrestricted capital accounts during at least some of the period since 1973.<sup>5</sup> There are 23 such countries, four of which have maintained openness continuously throughout this period (Hong Kong, Indonesia, Panama, and Malaysia since 1974). Many others have experienced long stretches of openness: Bolivia (1987-96), Ecuador (1973-93), Liberia (1973-84), Mexico (1973-82), and Republic of Yemen (1973-90) to cite some examples. The list includes a number of high-achievers, but also many under-performers. If there is a correlation between openness on the capital account and successful economic performance, it does not jump out from the table.

More systematic evidence is presented in Figures 1-3, which show partial scatter plots relating capital account liberalization to three indicators of economic performance: per-capita GDP growth, investment (as a share of GDP), and inflation. Each of these indicators is measured as an average over the 1975-89 period. The indicator of capital account liberalization is the proportion of years during 1975-89 for which the capital account was free of restrictions. The sample covers almost 100 countries, developing as well as developed. The following controls are used in each scatter plot: initial per-capita GDP, initial secondary enrollment rate, an index of the quality of governmental institutions, and regional dummies for East Asia, Latin America, and sub-Saharan Africa. Hence, the scatter plots display the relationship between the capital-account regime and economic performance controlling for these other variables.

The bottom line is easily summarized. There is no evidence in the data that countries without capital controls have grown faster, invested more, or experienced lower inflation. Capital

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<sup>5</sup> The information is taken from the IMF's annual reports on Exchange Arrangements and Exchange Restrictions via Kim (1997). Countries with capital controls are those that the IMF classifies as having "restrictions on payments for capital transactions."



controls are essentially uncorrelated with long-term economic performance once other determinants are controlled for.

Two issues relating to the exercise just carried out need further comment. First, policy choices regarding the capital account are endogenous, and to some extent determined by economic performance itself. This potential for reverse causation clouds the interpretation of the scatter plots. But to the extent that this is a problem, it biases our results in the direction of finding a positive relationship between open capital accounts and good performance. This is because countries are more likely to remove their capital controls when their economies are doing well. Consequently, our evidence is more likely to hide a negative relationship between open capital accounts and performance than a positive one.

Second, capital controls come in various guises, and the measure I have used indicating the presence (or lack thereof) of capital controls is an imperfect proxy for what we may be trying to capture. Let me distinguish between two questions that one might wish to answer with the statistical analysis of the type carried out here. First, we might be interested in the possibility that some forms of capital controls—deposit requirements on short-term borrowing as in Chile, for example—will enhance economic performance. The dummy variable that I use for capital controls is too coarse for that purpose, and therefore the exercise is not tremendously informative. A second question, however, is whether we are likely to see an improvement in economic performance following the removal of existing capital controls. The statistical evidence does have a bearing on this issue, and suggests that there is little reason for optimism. After all, countries are here classified according to the IMF's own rating of their policies. If an amendment to the IMF's articles were to come into effect, countries with capital controls would have to satisfy the IMF definition of openness on the capital account.

It is possible to argue that I have not carried out a fair test of the argument in favor of removing capital controls because I have not distinguished between countries that have strong financial systems and other complementary institutions and those that do not. It is difficult to get a handle on this issue, partly because the argument quickly becomes tautological. But the logic of this view suggests that capital-account convertibility should have beneficial effects in countries with strong institutions. I find no evidence for this in the data: interacting capital-account liberalization with indices of the quality of public institutions yields insignificant (and often “wrong”-signed) coefficients.

Where does this leave us? We have to live with financial markets that are prone to herding, panics, contagion, and boom-and-bust cycles. Appropriate macroeconomic policies and financial standards can reduce the risks but not eliminate them. This is as true of domestic financial markets as it is of international ones. Thanks to advances in technology and communications, international capital flows will likely continue to expand irrespective of government policy. The question is whether it makes sense to link up domestic financial markets tightly with international ones, and therefore speed up this process. There are two major risks in doing so: First, we increase the liquidity to which borrowers in an individual country have access, thereby greatly magnifying the effects of any turnaround in market sentiment. Second, we increase systemic risk through contagion from one market to another. On the other hand, the benefits of removing capital controls remain to be demonstrated.

The greatest concern I have about canonizing capital-account convertibility is that it will leave economic policy in the typical “emerging market” hostage to the whims and fancies of two dozen or so thirty-something country analysts in London, Frankfurt, and New York. A finance

minister whose top priority is to keep foreign investors happy will be one who pays less attention to developmental goals. We would have to have blind faith in the efficiency and rationality of international capital markets to believe that these two sets of priorities will regularly coincide.

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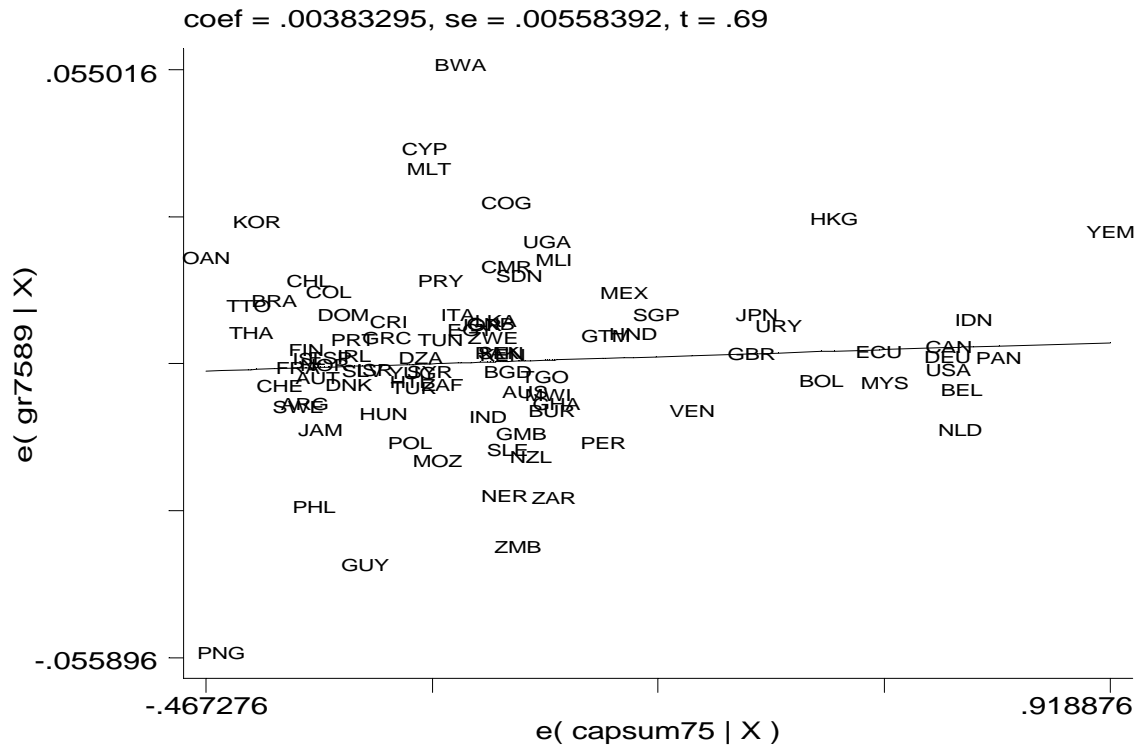
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Table 1

**Developing countries with no restrictions on  
capital account transactions , 1973-96**

Country	period without restriction
Argentina	94-96
Bolivia	87-96
Costa Rica	73-74, 81-82, 96
Ecuador	73-93
Gambia, The	92-96
Guatemala	74-80, 90-96
Honduras	73-80
Hong Kong	73-96
Indonesia	73-96
Iran, Islamic Rep. Of	75-78
Liberia	73-84
Malaysia	74-96
Mexico	73-82
Nicaragua	73-78
Niger	96
Panama	73-96
Paraguay	83-84
Peru	79-84, 94-96
Seychelles	78-96
Singapore	79-96
Togo	95
Uruguay	79-93
Yemen, Republic of	73-90

Source: Kim (1997), using IMF annual reports on exchange restrictions.



**Figure 1:** Partial scatter plot relating economic growth to capital-account liberalization, 1975-89 (controlling for per-capita income, secondary education, quality of governmental institutions, and regional dummies for East Asia, Latin America, and sub-Saharan Africa).

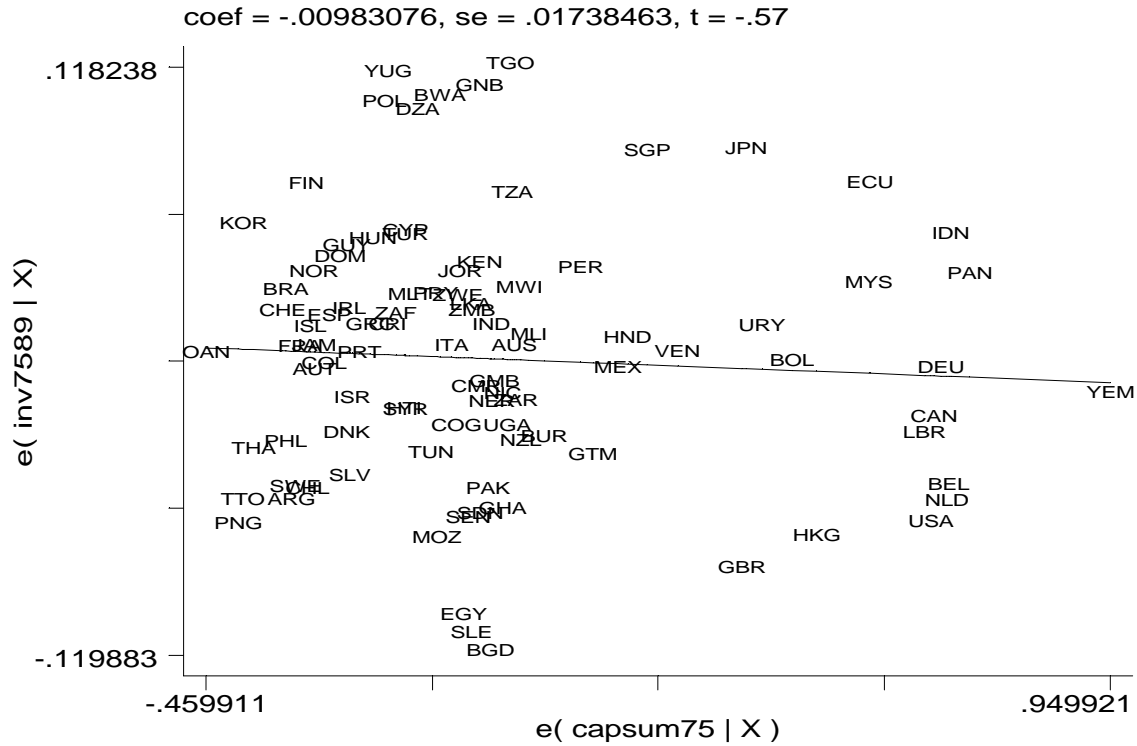


Figure 2: Partial scatter plot relating investment/GDP to capital-account liberalization, 1975-89 (controlling for per-capita income, secondary education, quality of governmental institutions, and regional dummies for East Asia, Latin America, and sub-Saharan Africa).

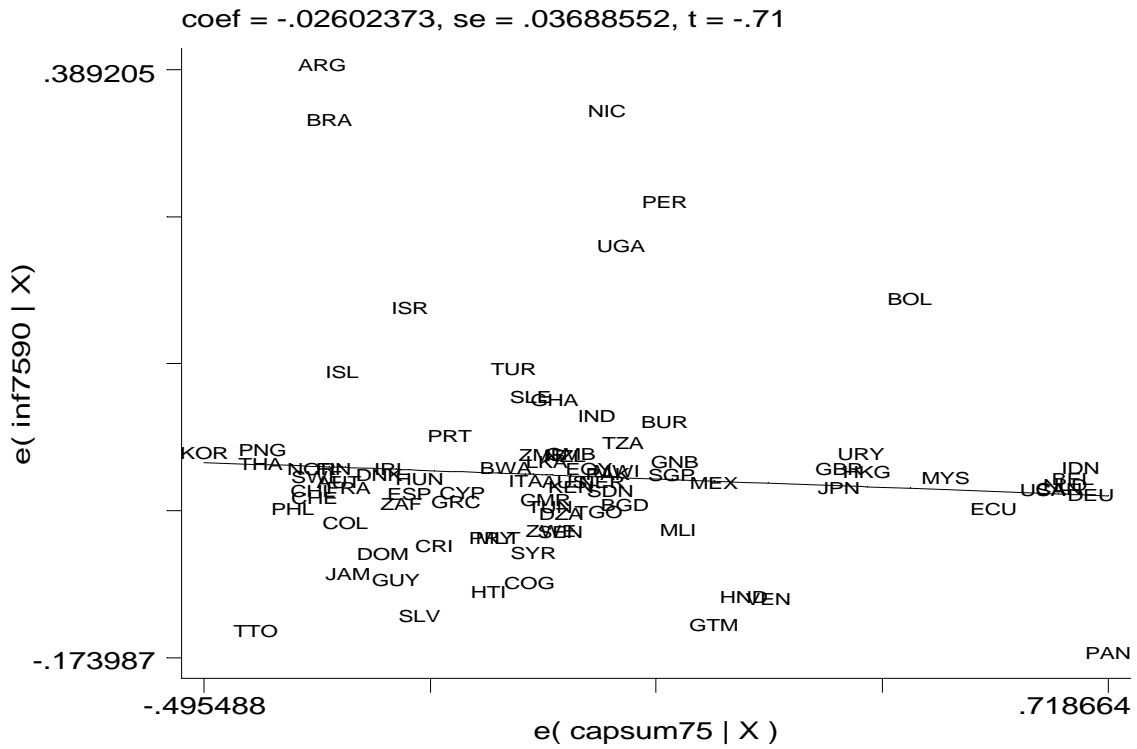


Figure 3: Partial scatter plot relating inflation to capital-account liberalization, 1975-89 (controlling for per-capita income, secondary education, quality of governmental institutions, and regional dummies for East Asia, Latin America, and sub-Saharan Africa).