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Effects of Financial Globalization on Developing Countries: Some Empirical Evidence

(A Summary)

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This is a summary of the IMF paper with the same title. The long version was published as IMF Occasional Paper 220.

The recent wave of financial globalization since the mid-1980s has been marked by a surge in capital flows among industrial countries and, more notably, between industrial and developing countries. While these capital flows have been associated with high growth rates in some developing countries, a number of countries have experienced periodic collapse in growth rates and significant financial crises over the same period, crises that have exacted a serious toll in terms of macroeconomic and social costs. As a result, an intense debate has emerged in both academic and policy circles on the effects of financial integration for developing economies. But much of the debate has been based on only casual and limited empirical evidence.

This short article summarizes a recent IMF paper on the subject with the same title, which is a part of the IMF's ongoing research program on globalization. The main purpose of the paper is to provide an assessment of empirical evidence on the effects of financial globalization for developing economies. The paper focuses on three related questions: (i) does financial globalization promote economic growth in developing countries? (ii) what is its impact on macroeconomic volatility in these countries? (iii) what are the factors that appear to help harness the benefits of financial globalization?

The principal conclusions that emerge from the analysis are sobering, but in many ways informative from a policy perspective. It is true that many developing economies with a high degree of financial integration have also experienced higher growth rates. It is also true that, in theory, there are many channels by which financial openness could enhance growth. However, a systematic examination of the evidence suggests that it is difficult to establish a robust causal relationship between the degree of financial integration and output growth

performance. From the perspective of macroeconomic stability, consumption is regarded as a better measure of well-being than output; fluctuations in consumption are therefore regarded as having a negative impact on economic welfare. There is little evidence that financial integration has helped developing countries to better stabilize fluctuations in consumption growth, notwithstanding the theoretically large benefits that could accrue to developing countries in this respect. In fact, new evidence presented in this paper suggests that low to moderate levels of financial integration may have made some countries subject to even greater volatility of consumption relative to that of output. Thus, while there is no proof in the data that financial globalization has benefited growth, there is evidence that some countries may have experienced greater consumption volatility as a result.

While the main objective of this paper is to offer empirical evidence, not to derive a set of definitive policy implications, some general principles nevertheless emerge from the analysis about how countries can increase the benefits from, and control the risks of, globalization. In particular, the quality of domestic institutions appears to play a role in this respect. A growing body of evidence suggests that it has a quantitatively important impact on a country's ability to attract foreign direct investment, and on its vulnerability to crises. While different measures of institutional quality are no doubt correlated, there is accumulating evidence of the benefits of robust legal and supervisory frameworks, low levels of corruption, high degree of transparency and good corporate governance.

The review of the available evidence does not, however, provide a clear road map for countries that have started on or desire to start on the path to financial integration. For instance, there is an unresolved tension between having good institutions in place before

capital market liberalization and the notion that such liberalization in itself can help import best practices and provide an impetus to improve domestic institutions. Furthermore, neither theory nor empirical evidence has provided clear-cut general answers to related issues such as the desirability and efficacy of selective capital controls. Ultimately, these questions can be addressed only in the context of country-specific circumstances and institutional features.

A. Definitions and Basic Stylized Facts

Financial globalization and financial integration are, in principle different concepts. Financial globalization is an aggregate concept that refers to rising global linkages through cross-border financial flows. Financial integration refers to an individual country's linkages to international capital markets. Clearly, these concepts are closely related. For instance, increasing financial globalization is perforce associated with rising financial integration on average. In this paper, the two terms are used interchangeably.

Of more relevance for the purposes of this paper is the distinction between *de jure* financial integration, which is associated with policies on capital account liberalization, and actual capital flows. For example, indicator measures of the extent of government restrictions on capital flows across national borders have been used extensively in the literature. By this measure, many countries in Latin America would be considered closed to financial flows. On the other hand, the volume of capital actually crossing the borders of these countries has been large relative to the average volume of flows across all developing countries. Therefore, on a *de facto* basis, these countries are quite open to global financial flows. By contrast, some

countries in Africa have few formal restrictions on capital account transactions but have not experienced significant capital flows. The analysis in this paper focuses mostly on *de facto* measures of financial integration, as it is virtually impossible to compare the efficacy of various complex restrictions across countries. In the end, what matters most is the actual degree of openness.

A few salient features of global capital flows are relevant for the central themes of the paper. First, the volume of cross-border capital flows has risen substantially in the last decade. Not only has there been a much greater volume of flows among industrial countries but there has also been a surge in flows between industrial and developing countries. Second, this surge in international capital flows to developing countries is the outcome of both “pull” and “push” factors. “Pull factors” arise from changes in policies and other aspects of opening up by developing countries. These include liberalization of capital accounts and domestic stock markets, and large-scale privatization programs. “Push factors” include business cycle conditions and macroeconomic policy changes in industrial countries. From a longer-term perspective, this latter set of factors includes the rise in the importance of institutional investors in industrial countries and demographic changes (e.g., relative aging of the population in industrial countries). The importance of these factors suggests that, notwithstanding temporary interruptions in crisis periods or during global business cycle downturns, the past twenty years have been characterized by secular pressures for rising global capital flows to the developing world.

Another important feature of international capital flows is that the components of these flows differ markedly in terms of volatility. In particular, bank borrowing and portfolio

flows are substantially more volatile than foreign direct investment. In spite of a caveat that accurate classification of capital flows is not easy, evidence suggests that the composition of capital flows can have a significant influence on a country's vulnerability to financial crises.

B. Does Financial Globalization Promote Growth in Developing Countries?

This section of the paper summarizes the theoretical benefits of financial globalization for economic growth and then review the empirical evidence. Financial globalization could, in principle, help to raise the growth rate in developing countries through a number of channels. Some of these directly affect the determinants of economic growth (augmentation of domestic savings, reduction in the cost of capital, transfer of technology from advanced to developing countries, and development of domestic financial sectors). Indirect channels, which in some cases could be even more important than the direct ones, include increased production specialization due to better risk management, and improvements in both macroeconomic policies and institutions induced by the competitive pressures or the "discipline effect" of globalization.

How much of the advertised benefits for economic growth have actually materialized in the developing world? As documented in this paper, the average income per capita for the group of more financially open (developing) economies does grow at a more favorable rate than that of the group of less financially open economies. However, whether this actually reflects a causal relationship and whether this correlation is robust to controlling for other factors remain unresolved questions. The literature on this subject, voluminous as it is, does

not present a conclusive picture. A few papers find a positive effect of financial integration on growth. However, the majority find no effect or at best a mixed effect. Thus, an objective reading of the vast research effort to date suggests that there is no strong, robust and uniform support for the theoretical argument that financial globalization *per se* delivers a higher rate of economic growth.

Perhaps this is not surprising. As noted by several authors, most of the cross-country differences in per capita incomes stem not from differences in the capital-labor ratio, but from differences in total factor productivity, which could be explained by “soft” factors like governance and rule of law. In this case, while embracing financial globalization may result in higher capital inflows, it is unlikely to cause faster growth by itself. In addition, some of the countries with capital account liberalization have experienced output collapses related to costly banking or currency crises. This is elaborated below. An alternative possibility, as noted earlier, is that financial globalization fosters better institutions and domestic policies but that these indirect channels can not be captured in standard regression frameworks.

In short, while financial globalization can, in theory, help to promote economic growth through various channels, there is as yet no robust empirical evidence that this causal relationship is quantitatively very important. This point to an interesting contrast between financial openness and trade openness, since an overwhelming majority of research papers have found a positive effect of the latter on economic growth.

C. What Is the Impact of Financial Globalization on Macroeconomic Volatility?

In theory, financial globalization can help developing countries to better manage output and consumption volatility. Indeed, a variety of theories implies that the volatility of consumption relative to that of output should go down as the degree of financial integration increases; the essence of global financial diversification is that a country is able to offload some of its income risk in world markets. Since most developing countries are rather specialized in their output and factor endowment structures, they can, in theory, obtain even bigger gains than developed countries through international consumption risk sharing, that is, by effectively selling off a stake in their domestic output in return for a stake in global output.

How much of the potential benefits in terms of better management of consumption volatility has actually been realized? This question is particularly relevant in terms of understanding whether, despite the output volatility experienced by developing countries that have undergone financial crises, financial integration has protected them from consumption volatility. New research presented in this paper paints a troubling picture. Specifically, while the volatility of output growth has, on average, declined in the 1990s relative to the three earlier decades, the volatility of consumption growth relative to that of income growth has on average *increased* for the emerging market economies in the 1990s, which was precisely the period of a rapid increase in financial globalization. In other words, as argued in more detail later in the paper, procyclical access to international capital markets appears to have had a perverse effect on the relative volatility of consumption for financially integrated developing economies.

Interestingly, a more nuanced look at the data suggests the possible presence of a threshold effect. At low levels of financial integration, an increment in financial integration is associated with an increase in the relative volatility of consumption. However, once the level of financial integration crosses a threshold, the association becomes negative. In other words, for countries that are sufficiently open financially, relative consumption volatility starts to decline. This finding is potentially consistent with the view that international financial integration can help to promote domestic financial sector development, which in turn can help to moderate domestic macroeconomic volatility. However, thus far these benefits of financial integration appear to have accrued primarily to industrial countries.

In this vein, the proliferation of financial and currency crises among developing economies is often viewed as a natural consequence of the "growing pains" associated with financial globalization. These can take various forms. First, international investors have a tendency to engage in momentum trading and herding, which can be destabilizing for developing economies. Second, international investors may (together with domestic residents) engage in speculative attacks on developing countries currencies, thereby causing instability that is not warranted based on the economic and policy fundamentals of these countries. Third, the risk of contagion presents a major threat to otherwise healthy countries since international investors could withdraw capital from these countries for reasons unrelated to domestic factors. Fourth, a government, even if democratically elected, may not give sufficient weight to the interest of future generations. This becomes a problem when the interests of future and current generations diverge, causing the government to incur excessive amounts of debt. Financial globalization, by making it easier for governments to incur debt,

might aggravate this “over-borrowing” problem. These four hypotheses are not necessarily independent, and can reinforce each other.

There is some empirical support for these hypothesized effects. For example, there is evidence that international investors do engage in herding and momentum trading in emerging markets, more so than in developed countries. Recent research also suggests the presence of contagion in international financial markets. In addition, some developing countries that open their capital markets do appear to accumulate unsustainably high levels of external debt.

To summarize, one of the theoretical benefits of financial globalization, other than to enhance growth, is to allow developing countries to better manage macroeconomic volatility, especially by reducing consumption volatility relative to output volatility. The evidence suggests that, instead, countries that are in the early stages of financial integration have been exposed to significant risks in terms of higher volatility of both output and consumption.

D. The Role of Institutions and Governance in the Effects of Globalization

While it is difficult to find a simple relationship between financial globalization and growth or consumption volatility, there is some evidence of nonlinearities or threshold effects in the relationship. That is, financial globalization, in combination with good macroeconomic policies and good domestic governance, appears to be conducive to growth. For example, countries with good human capital and governance tend to do better at attracting foreign direct investment (FDI), which is especially conducive to growth. More specifically, recent research shows that corruption has a strongly negative effect on FDI

inflows. Similarly, transparency of government operations, which is another dimension of good governance, has a strong positive effect on investment inflows from international mutual funds.

The vulnerability of a developing country to the “risk factors” associated with financial globalization is also not independent from the quality of macroeconomic policies and domestic governance. For example, research has demonstrated that an overvalued exchange rate and an overextended domestic lending boom often precede a currency crisis. In addition, lack of transparency has been shown to be associated with more herding behavior by international investors that can destabilize a developing country’s financial markets. Finally, evidence shows that a high degree of corruption may affect the composition of a country’s capital inflows in a manner that makes it more vulnerable to the risks of speculative attacks and contagion effects.

Thus, the ability of a developing country to derive benefits from financial globalization and its relative vulnerability to the volatility of international capital flows can be significantly affected by the quality of both its macroeconomic framework and institutions.

E. Summary

The objective of the paper is not so much to derive new policy propositions as it is to inform the debate on the potential and actual benefit-risk tradeoffs associated with financial globalization by reviewing the available empirical evidence and country experiences. The main conclusions are that, so far, it has proven difficult to find robust evidence in support of

the proposition that financial integration helps developing countries to improve growth and to reduce macroeconomic volatility.

Of course, the absence of robust evidence on these dimensions does not necessarily mean that financial globalization has no benefits and carries only great risks. Indeed, most countries that have initiated financial integration have continued along this path, despite temporary setbacks. This observation is consistent with the notion that the indirect benefits of financial integration, which may be difficult to pick up in regression analysis, could be quite important. Also, the long run gains, in some cases yet unrealized, may far offset the short term costs. For instance, the European Monetary Union experienced severe and costly crises in the early 1990s as part of the transition to a single currency throughout much of Europe today. Therefore, the results of the paper should not be interpreted necessarily as an endorsement of heavy-handed capital controls.

While it is difficult to distill new and innovative policy messages from the review of the evidence, there appears to be empirical support for some general propositions. Empirically, good institutions and quality of governance are important not only in their own right, but in helping developing countries derive the benefits of globalization. Similarly, macroeconomic stability appears to be an important prerequisite for ensuring that financial integration is beneficial for developing countries. In this regard, the Fund's work in promulgating codes and standards for best practices on transparency and financial supervision, as well as sound macroeconomic frameworks is crucial. These points may already be generally accepted; the contribution of this paper is to show that there is some systematic empirical evidence to support them. In addition, the analysis suggests that

financial globalization should be approached cautiously and with good institutions and macroeconomic frameworks viewed as preconditions.

This paper does not tackle the appropriate choice of an exchange rate regime or of monetary and fiscal policies. It is worth noting, however, that fixed or *de facto* fixed exchange rate regimes, and excessive government borrowing appear to be major factors that have compounded the problems that some developing countries have in managing capital flows. We leave a systematic examination of these issues to future research.