# MACROECONOMIC ASPECTS OF FINANCIAL GLOBALIZATION

Ing. Rajmund Mirdala, PhD.
Technical university in Košice
Faculty of economics
Department of economic theories
rajmund.mirdala@tuke.sk

#### **ABSTRACT**

The literature on the benefits and costs of financial globalization for developing countries has exploded in recent years, but along many disparate channels and with a variety of apparently conflicting results. For instance, there is still little robust evidence of the growth benefits of broad capital account liberalization, but a number of recent papers in the finance literature report that equity market liberalizations do significantly boost growth. Similarly, evidence based microeconomic (firm- or industry-level) data shows some benefits of financial integration and the distortionary effects of capital controls, while the macroeconomic evidence remains inconclusive. We attempt to provide a fresh synthetic perspective on the macroeconomic effects of financial globalization.

#### **KEY WORDS**

capital account liberalization, financial integration, growth and volatility, financial crises, developing countries

JEL Classification Numbers: F32, F34, F36, F43

### 1. Introduction

The framework we present provides a fresh synthetic perspective on the macroeconomic effects of financial globalization, both in terms of growth and volatility. The main points are as follows:

The majority of empirical studies are unable to find robust evidence in support of the growth benefits of capital account liberalization. However, studies that use measures of de facto integration or finer measures of de jure integration tend to find more positive results. More importantly, studies using micro data are better able to detect the growth and productivity gains stemming from financial integration.

There is little formal empirical evidence to support the oft-cited claims that financial globalization in and of itself is responsible for the spate of financial crises that the world has seen over the last three decades.

The conceptual framework we present suggests that in addition to the traditional channels (e.g., capital accumulation), the growth and stability benefits of

financial globalization are also realized through a broad set of "collateral benefits" (see Figure A). These collateral benefits affect growth and stability dynamics indirectly, implying that the associated macroeconomic gains may not be fully evident in the short run and may be difficult to uncover in cross-country regressions.

Various threshold effects play important roles in shaping the macroeconomic outcomes of financial globalization (see Figure B). Countries meeting these threshold conditions are better able to reap the growth and stability benefits of financial globalization.

The framework also points to a fundamental tension between the costs and benefits of financial globalization that may be difficult to avoid. Financial globalization appears to have the potential to play a catalytic role in generating an array of collateral benefits that may help boost long-run growth. At the same time, premature opening of the capital account in the absence of some basic supporting conditions can delay the realization of these benefits, while making a country more vulnerable to sudden stops of capital flows.

The recent wave of financial globalization got started in earnest in the mid-1980s, with rising cross-border financial flows among industrial economies and between industrial and developing economies. This was spurred by liberalization of capital controls in many of these countries, in anticipation of the benefits that cross-border flows would bring in terms of better global allocation of capital and improved international risk-sharing possibilities. The strong presumption was that these benefits ought to be large, especially for developing countries that tend to be relatively capital-poor and have more volatile income growth.

With the surge in financial flows, however, came a spate of currency and financial crises in the late 1980s and 1990s. There is a widely held perception that developing countries that opened up to capital flows have been more vulnerable to these crises than industrial economies, and have been much more adversely affected. These developments have sparked a fierce debate among both academics and practitioners on the costs and benefits of financial globalization. This debate has intensified and become more polarized over time, in contrast to the debate on trade liberalization, which has more or less moved toward a consensus.

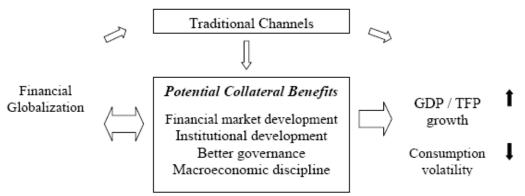
Figure A Two Views of Impact of Financial Globalization on Developing Countries ...

The Traditional View



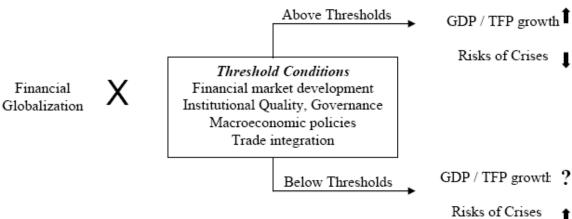
The traditional view focuses on the importance of channels through which capital flows could directly increase GDP (gross domestic product) growth and reduce consumption volatility.

## A Different Perspective



Our perspective acknowledges the relevance of the tradition channels, but argues that the role of financial globalization as a catalyst of certain collateral benefits may be more important in increasing GDP/TFP (total factor productivity) growth and reducing consumption volatility.

Figure B ... But There Are Thresholds



Financial globalization leads to better macroeconomic outcomes when certain threshold conditions are met. This generates a deep tension as many of the threshold conditions are also on the list of collateral benefits.

calls for capital controls and the imposition of frictions, such as "Tobin taxes," on international asset trade. Others

Some academic economists view increasing capital account liberalization and unfettered capital flows as a serious impediment to global financial stability (e.g., Rodrik, 1998; Bhagwati, 1998; Stiglitz, 2002), leading to

argue that increased openness to capital flows has, by and large, proven essential for countries aiming to upgrade from lower- to middle-income status, while significantly enhancing stability among industrialized countries (e.g., Fischer, 1998; Summers, 2000). This is clearly a matter of considerable policy relevance, especially with major economies like China and India recently taking steps to open up their capital accounts. Although consensus may be too much to hope for, some clarity on what theory and data do tell us—and what they do not tell us—is important for informing the ongoing debate.

A central conclusion of this paper is that although the rapidly-growing empirical literature is gradually tilting toward supporting a significant positive role for financial globalization, there are many unanswered questions about how a country should organize and pace its move. At the same time, we find there is very little meaningful empirical support to underpin the more polemical claims of those who argue that capital account liberalizations (as opposed to, say, inappropriately rigid exchange rate regimes) are the root problem underlying most developing country financial crises of the past fifteen years. We hope, in this paper, to provide a synthetic perspective on this literature so the reader may judge for herself. At the same time, we try to develop a few organizing principles that will perhaps point the way to where future research is most needed.

The fundamental point we make in this paper is that the main benefits from successful financial globalization are probably catalytic and indirect, rather than consisting simply of enhanced access to financing for domestic investment. Of course, this perspective differs from the standard neoclassical framework, which views the key benefit of financial globalization as arising from long-term net flows of capital from industrial to developing economies. Since the former group of countries is capital rich while the latter is relatively capital poor, this would generate welfare gains for both groups of countries. Yet a survey of the literature on capital account liberalization by Eichengreen (2001) concludes that there is no empirical substantiation of the conventional theoretical tenets about the growth benefits of capital account liberalization.

Even after taking into account the fundamental distinction between de jure and de facto financial globalization (which we shall discuss later in this paper), we still conclude that, taken as a whole, the vast empirical literature provides little robust evidence of a causal relationship between financial integration and growth. Moreover, we find that, among developing countries, the volatility of consumption growth relative to income growth appears to be positively associated with financial integration, the opposite of what canonical theoretical models would predict. In theory, access to international markets should allow all countries to smooth consumption by insuring against country-specific income risk. What accounts for these discrepancies between the advertised benefits of financial globalization and the mixed empirical evidence?3

We argue here that far more important than the direct growth effects of access to more capital is how capital flows generate a number of what we label the "potential collateral benefits" of financial integration. There is now a rapidly growing literature showing that financial openness can - in many but not all circumstances - promote development of the domestic financial sector, impose discipline on macroeconomic policies, generate efficiency gains among domestic firms by exposing them to competition from foreign entrants, and unleash forces that result in better government and corporate governance.

The notion that financial globalization mainly influences growth through indirect channels has important implications for empirical analysis of its benefits. For one thing, building institutions, enhancing market discipline, and deepening the financial sector takes time, and so does the realization of growth benefits through such channels. This may explain why, over relatively short periods, it seems much easier to detect the costs but not the benefits of financial globalization. More fundamentally, even at long horizons, it may be difficult to detect the productivity-enhancing benefits of financial globalization in empirical work if one includes structural, institutional, and macroeconomic policy variables in cross-country regressions that attempt to explain growth of GDP or productivity. For then, by construction, there can be little added explanatory power left for the financial openness measure. Indeed, this could explain why simple correlations tend to show that financially integrated economies have higher growth rates, on average, than less integrated economies, yet it has proven difficult to find a causal effect of financial integration on growth once the other factors mentioned previously are controlled for.

The approach we have outlined above helps to link a number of other pieces of the literature. For instance, a majority of the papers looking at the effects of overall capital account liberalization have relied on de jure measures of capital account openness, which reflect legal restrictions on capital movements (or lack thereof). But the collateral benefits are likely to be realized at least as much through de facto integration, which, as we show, can be quite different. In practice, the distinction between de jure and de facto openness can be very important. Many countries have capital controls that are quite strict on paper but toothless in practice, so their de facto level of integration - as measured by capital flows or stocks of foreign assets and liabilities - is quite high; this, in itself, could act as a disciplining device on the government and firms. In contrast, many other countries are quite open to global capital markets on a de jure basis, but in practice capital flows are minimal. In our survey, we consider results based on both kinds of measures and argue that the choice of measure has important consequences for empirical analysis.

Our approach could help understand why recent research that focuses on the growth effects of equity market liberalizations seems to find such strong positive effects despite the fact that portfolio equity inflows are typically small relative to other types of flows. For instance, one possibility is that equity market liberalizations typically take place in tandem with various other domestic reforms and when national governments have confidence in their own ability to adequately supervise domestic financial markets. Besides, equity inflows are precisely the ones that, along with foreign direct investment (FDI), are most likely to confer the sort of collateral benefits discussed earlier. Our analysis may help explain why there is much stronger evidence based on microeconomic (firm- or industry-level) data on the distortionary effects of capital controls and the benefits of capital account liberalization.

The collateral benefits perspective also ties in with the literature on thresholds in the effects of financial globalization. It has become a mantra in academic and policy circles that financial globalization can in principle, be good for any country - in terms of delivering the benefits and minimizing the risks - but that the benefits-to-cost calculus is much more compelling for countries with robust institutions and good macroeconomic policies. The set of prescribed requirements tends to be vast—encompassing sound monetary and fiscal policies, depth and sophistication of financial markets, the quality of financial sector regulation and supervision, transparency and good governance, and so on.

Most developing countries clearly do not measure up to all of these desiderata, and, for many of them, the length of this list makes things look hopeless at the outset. Does this imply that developing countries would do best to shield themselves from external influences while trying to improve the quality of their domestic policies and institutions to attain some acceptable level? The academic literature we survey does not seem to offer a simple answer, in part because the links are bidirectional. In theory (and with some supporting evidence, as we shall see), financial opening may, in fact, play an important catalytic role in improving institutions, allowing for transfer of good governance practices, strengthening macroeconomic discipline, and so on. But there remain a number of unresolved questions in the literature that make it difficult to draw firm policy conclusions. We list some of these questions that require further research in the final section of the paper.

# 2. Brief overview of theory

We offer a very brief review of the basic implications from theoretical models about how financial globalization should affect growth, volatility, and comovement of output and consumption.

#### A. Growth

As we have already noted, the simplest benchmark onesector neoclassical framework suggests that financial globalization should lead to flows of capital from capitalrich economies to capital-poor economies since, in the latter, the returns to capital should be higher<sup>1</sup>. These flows should complement limited domestic saving in capital-poor economies and, by reducing the cost of capital, allow for increased investment. Certain types of financial flows could also generate technology spillovers and serve as a conduit for imbibing managerial and other forms of organizational expertise from more advanced economies.

There are also a number of indirect channels through which financial globalization could enhance growth. It could help promote specialization by allowing for sharing of income risk, which could in turn increase productivity and growth as well<sup>2</sup>. Financial flows could foster development of the domestic financial sector and, by imposing discipline on macroeconomic policies, lead to more stable policies. We discuss the mechanisms and evidence for some of these channels later in the paper.

### **B.** Volatility

The effects of financial integration on output volatility are not obvious in theory. In principle, financial integration allows capital-poor countries to diversify away from their narrow production bases that are often agricultural or natural resource-dependent. This should reduce macroeconomic volatility. At a more advanced stage of development, however, trade and financial integration could simultaneously allow for enhanced specialization based on comparative advantage considerations. This could make countries more vulnerable to industry-specific shocks.

Theory does have a strong prediction, however, about the relationship between financial integration and consumption volatility. Since consumers and, by extension, economies are risk-averse, consumption theory tells us that they should desire to use financial markets to insure against income risk, thereby smoothing the effects of temporary idiosyncratic fluctuations in income growth on consumption growth. In theory, the benefits of international risk-sharing could be quite large.

trying to resolve this puzzle.

<sup>&</sup>lt;sup>1</sup> Indeed, the fact that the actual volumes of such flows do not come anywhere near what might be predicted by neoclassical growth models has been characterized as a puzzle by Lucas (1990), with many subsequent papers

<sup>&</sup>lt;sup>2</sup>Concerns about increases in volatility that may result from a specialized production structure could discourage countries from taking up growth-enhancing specialization activities; higher volatility might also reduce investment rates. Financial globalization could facilitate international risk sharing and thereby reduce countries' consumption volatility. Among developed countries and across regions within developed countries, better risk sharing appears to be associated with greater specialization (Acemoglu and Zilibotti, 1997; Obstfeld, 1994; and Kalemi-Ozcan, Sorensen, and Yosha, 2001).

Macroeconomic stabilization policies that reduce consumption volatility can usually have only minimal welfare benefits continues to be influential. The higher volatility that developing countries experience implies that they can potentially reap large benefits from international risk-sharing arrangements.

### C. Comovement

Another prediction of theory, related to the consumption smoothing issue, concerns the cross-country comovement of major macroeconomic aggregates. In theory, the effect of increased financial integration on cross-country correlations of output growth is uncertain, since it depends on the nature of shocks and specialization patterns. In any case, financial integration should in theory help countries diversify away country-specific risk and should, therefore, result in stronger comovement of consumption growth across countries. Thus, in parallel to the discussion of volatility, economic theory has clear implications for how financial integration should affect cross-country consumption correlations but not for correlations of output or income.

In summary, there is a strong presumption in theory that financial integration is good for growth and, although its effects on output volatility are unclear, it should unambiguously lead to reductions in the relative volatility of consumption (and increase the cross-country comovement of fluctuations in consumption).

### 3. Conclusion

Measuring the extent of a country's integration into global financial markets is an important but complicated issue. In particular, the distinction between de jure and de facto integration appears to matter a great deal in understanding the macroeconomic implications of financial globalization. The basic problem with de jure measures that capture legal and regulatory restrictions on capital flows is that implementation and enforcement differ so greatly across countries that international comparisons are dubious. Thus, although most empirical papers analyzing the effects of financial integration rely on de jure measures of openness, de facto integration measures may be more relevant for analyzing the direct and indirect benefits associated with financial globalization.

The composition of capital inflows has a substantial influence on the growth benefits of financial globalization for developing countries, although the evidence is far from decisive. Studies based on both macroeconomic and microeconomic (industry- or firmlevel) data find that equity market liberalizations have positive effects on output growth. Interestingly, despite the general consensus that FDI is the form of capital inflow most likely to spin off positive growth benefits, these benefits are harder to detect in aggregate data than is the case for equity flows. Fortunately, recent work using

micro data is starting to confirm that FDI flows do have significantly positive effects on output and productivity growth, especially through spillover effects associated with vertical linkages. Overall, studies using micro data are better able to detect the growth and productivity gains stemming from financial integration as well as the distortionary effects of capital controls.

In addition to the traditional channels such as efficient allocation of capital and expanded international risk-sharing opportunities, the growth and stability benefits of financial globalization are also realized through a broad set of "collateral benefits"—financial market development, better institutions and governance, and macroeconomic discipline. These collateral benefits affect growth and stability dynamics indirectly, implying that the associated macroeconomic gains may not be fully evident in the short run and may be difficult to uncover in cross-country regressions.

Various threshold effects play important roles in shaping the macroeconomic outcomes of financial globalization. Some key thresholds are related to the level of development of domestic financial markets, the quality of institutions and corporate governance, the nature of macroeconomic policies (including the exchange rate regime), and the extent of openness to trade. Recent research suggests that countries meeting these threshold conditions are better able to reap the growth and stability benefits of financial globalization.

For the body of your document, use Times New Roman font, 10-point type size, single-spaced. The whole document should be fully justified (not only left-justified). Headings should be 12-point, upper- and lower-case, bold. Subheadings should be 10-point upper- and lower-case.

#### **References:**

- [1] Rodrik, Dani, 1998, "Who Needs Capital-Account Convertibility?" *Essays in International Finance*, No. 207 (Princeton, New Jersey: Princeton University).
- [2] Bhagwati, Jagdish, 1998, 'The Capital Myth. The Difference between Trade in Widgets and Dollars," *Foreign Affairs*, Vol. 7, No. 3, pp. 7–12.
- [3] Stiglitz, Joseph, 2002, Globalization and Its Discontents, (New York: W.W. Norton and Company).
- [4] Summers, Lawrence H., 2000, "International Financial Crises: Causes, Prevention, and Cures," *American Economic Review*, Vol. 90, No. 2, pp.1–16.
- [5] Fischer, Stanley, 1998, "Capital Account Liberalization and the Role of the IMF," in "Should the IMF Pursue Capital-Account Convertibility?," Essays in International Finance, Department of

- Economics, Princeton University, Vol. 207, pp. 1–10.
- [6] Eichengreen, Barry J., 2001, "Capital Account Liberalization: What Do Cross-Country Studies Tell Us?" World Bank Economic Review, Vol. 15 (October), pp. 341–65.
- [7] Lucas, Robert E., Jr., 1990, "Why Doesn't Capital Flow from Rich to Poor Countries," *American Economic Review*, Vol. 80, pp. 92–6.