



## Editorial

# Overview of conference volume “*Financial and Commercial Integrations*”<sup>☆</sup>

By all accounts, we are firmly entrenched in the “second era of globalization”.<sup>1</sup> It distinguishes itself from the first era by involving not only traded goods and services and capital, but also services that before the arrival of the internet and telecommunications revolution, might have been regarded as non-tradable (such as call centers, business process outsourcing, medical transcription — the list is endless). The second era has had its share of economic policy controversy, the most significant pertaining to the prescription for open capital accounts, a cause unequivocally championed by the International Monetary Fund until the string of emerging market debt and financial crises starting with East Asia in 1997. Nevertheless, few would doubt that globalization is here to stay. In fact, the big push of developing countries towards trade and financial integration is the big economic story of the second half of the twentieth century. The take-off experienced by the most populous countries, China and India, has profoundly changed the global scene. By now, more than half of global production takes place in developing and emerging markets.

These events have spearheaded considerable debate about the future desirable course of policies, especially in the context of financial integration. In order to gain a better understanding of the issues involved, a conference under the aegis of *JIMF* took place on September 29–30, 2006, at UCSC. The conference dealt with the implications of the growing financial and commercial integrations of nations. This volume provides the refereed proceedings of that conference. It includes seven papers and Andrew Rose’s keynote address, heralding the emergence of a new, remarkably stable international monetary system. We start this volume with a brief overview of these papers.

In his keynote address, “*A Stable International Monetary System Emerges: Inflation Targeting is Bretton Woods, Reversed*”, Rose provides a novel and provocative assessment of the emergence since the early 1990s of a stable international monetary system. A large number of industrial and a growing number of developing countries now have domestic inflation targets administered by independent and transparent central banks. These countries place few

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<sup>1</sup> The term “first era of globalization” is used by economic historians to refer to the then unprecedented free flow of goods and capital across international borders during the period 1875–1913. The process ended with the First World War and remained in abeyance throughout the interwar period and the Second World War and only began to achieve similar proportions in the 1990s.

restrictions on capital mobility and allow their currencies to float. Looking at the experience of these countries, Rose concludes that the domestic focus of monetary policy in these countries does not have any obvious international cost. Inflation targeters have lower exchange rate volatility and less frequent “sudden stops” of capital flows than similar countries that do not target inflation. Inflation-targeting countries also do not have current account balances or international reserves that look different from other countries. As a result of its manifest success, inflation targeting has continued to spread; it now includes a number of developing countries as well as a large chunk of the OECD. Indeed the spread of this monetary strategy has been remarkably fast in the conservative world of monetary policy. This system was not planned and does not rely on international coordination. There is no role for a central country, the IMF, or gold. It is durable. In contrast to other monetary regimes, no country has been forced to abandon an inflation-targeting regime. Succinctly, it is the diametric opposite of the post-war system – Bretton Woods, reversed.

The paper “Sources for Financing Domestic Capital – Is Foreign Saving a Viable Option for Developing Countries?” by Joshua Aizenman, Brian Pinto and Artur Radziwill is an empirical piece asking whether the higher degree of financial integration of the past 15 years or so has made a difference to how the stock of physical capital in developing countries is financed. Towards this end, it proposes a new method for measuring the degree to which the domestic capital stock is self-financed. The main idea is to use the national accounts to construct a self-financing ratio, indicating what would have been the autarky stock of tangible capital supported by actual past domestic saving, relative to the actual stock of capital. It uses the constructed measure of self-financing to evaluate the impact of the growing global financial integration on the sources of financing domestic capital stocks in developing countries. On average, 90% of the stock of capital in developing countries is self-financed, and this fraction was surprisingly stable throughout the 1990s. The greater integration of financial markets has not changed the dispersion of self-financing rates, and the correlation between changes in de-facto financial integration and changes in self-financing ratios is statistically insignificant. There is no evidence of any ‘growth bonus’ associated with increasing the financing share of foreign savings. In fact, the evidence suggests the opposite: throughout the 1990s, countries with higher self-financing ratios grew significantly faster than countries with low self-financing ratios. This result persists even after controlling for the quality of institutions. The paper finds further that higher volatility of the self-financing ratios is associated with lower growth rates, and that better institutions are associated with lower volatility of the self-financing ratios. These findings are consistent with the notion that financial integration may have facilitated diversification of assets and liabilities, but failed to offer net new sources of financing capital in developing countries.

Evidence of rising global trade volume has encouraged the impression in the literature that world goods markets are becoming progressively more integrated. One might expect this integration to reduce the degree of international price dispersion. Paul Bergin and Reuven Glick test this presumption in “Global Price Dispersion: Are Prices Converging or Diverging?” They begin with the observation that price convergence has been remarkably uneven over time. They document significant time-variation in the degree of global price convergence over the last two decades. This U-shaped pattern in price dispersion over time applies to varying degrees over various subsets of their data sample, including the full set of 70 countries, city pairs within developing countries as well as pairs within developed countries, and even cities within the US alone. The pattern also applies to varying degrees over eight different classifications of commodities, including food, clothing and footwear, and household supplies. While variation in the degree of rising price dispersion indicates that different factors might be at

work in different sets of cities, or that factors might affect city pairs differently, the fact that a noticeable U-shaped pattern is present in all cuts of the data indicate some common factor is also at work. In particular, there appears to be a general U-shaped pattern with price dispersion first falling and then rising in recent years, a pattern that is remarkably robust across both country and commodity groups. This time-variation is difficult to explain in terms of the standard variables used in the gravity equation common in the literature, as these tend not to vary much over time nor to have risen in recent years. However, regression analysis indicates that this time-varying pattern coincides well with oil-price fluctuations, which are clearly time-varying and have risen substantially since the late 1990s. As a result, they offer new evidence on the role of transportation costs in driving international price dispersion.

In “Trade Liberalization, Capital Account Liberalization and the Real Effects of Financial Development”, Matías Braun and Claudio Raddatz explore how international integration affects the role of one particular institution that has been shown to be quite important for growth: the development of the financial system. They provide evidence that international economic integration changes the real effect of domestic financial institutions. Using a cross-country panel they show that domestic financial development has a smaller effect on growth in countries that are open to trade and capital flows than among countries that are closed in both dimensions. They then use sectoral data to show that this decline in the importance of financial development can be explained by its irrelevance for tradable sectors in countries that are fully integrated to the world economy. In contrast to non-tradable sectors, for tradable sectors international economic integration seems to be a good substitute for domestic financial development. These results are relevant for both the financial development and the international integration literatures. For the former, this paper qualifies the main result that financial development exerts a causal and significant positive effect on growth, extends the evidence by using data across sectors beyond manufacturing, and shows that local factors – the degree of integration, in particular – significantly change the impact of financial development on growth. Overall, despite the fact that the positive effect of domestic financial development on growth is shown not to be always present, the evidence is far from damaging for the case in favor of an important role of finance for growth. Indeed, domestic financial development appeared to matter most precisely when it should: when alternative ways of obtaining financing are not as readily available (when the country is not integrated internationally), and for those sectors that are most dependent on local financial institutions (the non-tradables). The literature on international integration has also focused mostly on the effects of liberalizing trade and capital flows on aggregate outcomes. By focusing instead on how domestic institutions work differently under different integration regimes, Braun and Raddatz are able to show that foreign institutions can serve as substitutes for institutional weakness at the local level.

The main message of this paper is that local financial development and international integration are intertwined. The two, therefore, should not be treated separately, either when assessing their virtues or when determining the chances of success for different reform programs.

China’s currency, the Renminbi (RMB), has occupied a central role in the ongoing debate over the source of global current account imbalances. Some view the growing trade deficit with China as the outcome of heavy intervention by the Chinese central bank, a policy that is alleged to improve China’s competitiveness in relation to the US, inducing the misalignment of the RMB from fundamental market forces, thereby contributing to global imbalances. These concerns are addressed by Yin-Wong Cheung, Menzie Chinn and Eiji Fujii in “The Overvaluation of Renminbi Undervaluation”. They focus on the difficulty in measuring the “equilibrium real exchange rate” and on quantifying the uncertainty surrounding its measurement. They

exploit a well-known relationship between deviations from absolute purchasing power parity and real per capita income using panel regression methods. By placing the RMB in the context of this well-known empirical relationship, exhibited by a large number of developing and developed countries over a long time horizon, the authors address the question of where China's real exchange rate stands relative to its "equilibrium" level. In addition to calculating the numerical magnitude of the degree of misalignment, they assess the estimates in the context of statistical uncertainty. They conclude that although the point estimates indicate that the RMB is undervalued in almost all samples, in almost no case is the deviation statistically significant, and indeed, when serial correlation is accounted for, the extent of misalignment is not even statistically significant at the 50% level. These findings highlight the great degree of uncertainty surrounding empirical estimates of "equilibrium real exchange rates", thereby underscoring the difficulty in accurately assessing the degree of RMB undervaluation. They assess the robustness of the results in the presence of conditioning variables, including demographic variables, measures of trade openness, policy factors such as the extent of capital controls, and institutional factors. While these conditioning variables exert significant effects, their inclusion does not change the basic message: the RMB appears to be undervalued, but not by a statistically significant margin.

In a follow-up comment, Barry Eichengreen points out that the findings of the paper are rather ambiguous. They are consistent with everything from no undervaluation of the Renminbi to a 50% undervaluation. Eichengreen points out that the weakness of the test reflects a fundamental problem with the extended PPP approach. The alternative way to evaluate the issues at hand is by applying the external balance approach, which involves somehow estimating how large an exchange rate change is needed to restore the current account to sustainable levels. Doing it properly, however, may be challenging, as the current account and relative prices — which are what the authors are modeling in their extended PPP approach — are simultaneously determined. So pinning down the effect of deviations from current account balance on the equilibrium exchange rate requires one to come up with a reasonable instrumental variable. Here, clearly, there is more work to do.

Financial globalization has increased significantly in the last decade. Indeed, many of the standard aggregate measures of financial globalization such as gross capital flows, stocks of foreign assets and liabilities, and degree of co-movement of asset returns suggest that international financial integration has become widespread and reached unprecedented levels. Although these measures offer useful insights on an aggregate basis, they provide less evidence on how extensive or deep financial integration is and how it comes about. In "International Financial Integration through Equity Markets: Which Firms from which Countries Go Global?", Stijn Claessens and Sergio L. Schmukler address these issues using a sample of 39,517 firms from 111 countries covering the period 1989–2000.

They find that, although integration increases substantially over this period, only a relatively few countries and firms actively participate. Firms more likely to internationalize are from larger and more open economies, with higher income, and better macroeconomic environments. These firms tend to be larger, grow faster, and have higher returns and more foreign sales. International financial integration will likely remain constrained by country and firm characteristics. Claessens and Schmukler show that the extent of international financial integration may be more limited than commonly thought. Although many countries have firms participating in international markets, far fewer countries have a non-negligible proportion of internationally active firms. Moreover, only certain firms and countries participate in international markets and both country and firm factors condition the extent of internationalization. With respect

to country characteristics, more developed countries with better macroeconomic (but worse institutional) conditions and more open economies have more international firms. Regarding firm aspects, larger firms, with more foreign sales, and firms that grow faster and have higher rates of returns are more likely to go abroad.

The East Asian and subsequent crises — Russia, Brazil, Turkey, Argentina, Uruguay, the Dominican Republic — resulted in the emergence of a new and more prudent approach towards macroeconomic policy in emerging and transition nations. The overall objective of this new approach is to reduce vulnerability to external shocks and to lower the likelihood of external crises, including sudden stops and major devaluations. In spite of the emergence of a new view on macroeconomic policy, there are still disagreements about the appropriate degree of capital mobility in emerging and transition countries. In “Capital Controls, Capital Flow Contractions, and Macroeconomic Vulnerability”, Sebastian Edwards contributes to this debate, analyzing whether restrictions to capital mobility reduce vulnerability to external shocks. He asks if countries that restrict the free flow of international capital have a lower probability of experiencing a large contraction in net capital flows. He uses three new indexes on the degree of international financial integration and a large multi-country data set for 1970–2004 to estimate a series of random-effect probit equations. He finds that the marginal effect of higher capital mobility on the probability of a capital flow contraction is positive and statistically significant, but very small. Having a flexible exchange rate greatly reduces the probability of experiencing a capital flow contraction. The benefits of flexible rates increase as the degree of capital mobility increases. A higher current account deficit increases the probability of a capital flow contraction, while a higher ratio of FDI to GDP reduces that probability. Lower worldwide liquidity increases the probability, and being an advanced country reduces that probability.

While new conventional wisdom warns that developing countries should be aware of the risks of premature capital account liberalization, the costs of not removing exchange controls have received much less attention. In “*Collateral Damage: Exchange Controls and International Trade*”, Shang-Jin Wei and Zhiwei Zhang investigate this issue. Their paper combines three unique panel data sets: 192 indicators of the exchange controls for up to 184 countries since 1996; importer–partner country-specific tariff rates; and a rating of the extent of non-tariff barriers. These data are then combined with bilateral trade data. The econometric specification is grounded in the theory of trade volume. To minimize evasion of controls, countries often intensify inspections at the border and increase documentation requirements. Thus, the cost of conducting trade rises. The paper finds that a one standard-deviation increase in the controls on trade payment has the same negative effect on trade as an increase in tariffs by about 14 percentage points. A one standard-deviation increase in the controls on FX transactions reduces trade by the same amount as a rise in tariffs by 11 percentage points. Therefore, the collateral damage in terms of foregone trade is sizable. In a case study of the emerging markets during 1996–1999, they find that those countries with greater increases in the controls on capital transactions also experienced a greater fall in their trade, after taking into account their output contractions. Hence, exchange controls effectively work as a form of non-tariff barriers to trade even though they have not been typically characterized as NTBs in the literature.

Rose’s keynote address and the studies in this volume illustrate various interpretations of and constructive ways to deal with the challenges associated with greater financial and trade integration. While aggregate measures suggest that globalization could not have much further to go, closer inspection along the line of the papers in this volume reveals the incompleteness and the challenges awaiting the globalization process. Our hope is that the studies in this volume will motivate continuing research into these issues.

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