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Global Financial Trade: How Far Have We Come?*

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Abstract

In this paper, I review recent trends in global integration of financial systems and assess the implications for international macroeconomic adjustment. While recent growth in the scale of international balance sheets has been dramatic, product markets remain quite segmented. The mis-match between financial and real integration means that the role of exchange rates in international adjustment has taken on an even more crucial role.

Keywords: financial globalization, net foreign assets, macroeconomic adjustment.

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1 Introduction

A defining feature of recent international economic history has been the tremendous growth in cross-border financial trade. The “international balance sheets” of countries now look quite different relative to the situation in earlier periods, with the accumulation of large gross cross-holdings of foreign assets and foreign liabilities across a broad spectrum of investment categories. In this paper, I discuss the drivers of international financial integration and ask whether all barriers to asset trade have been eliminated. I next consider the macroeconomic implications of these trends. Finally, I analyse the interaction between financial globalisation and real globalisation, where the latter refers to the international integration of product markets.

2 Measuring International Financial Integration

There are a number of different options in measuring the extent of financial globalisation. One popular method has been to measure shifts over time in the prevalence of capital controls (see Grilli and Milesi-Ferretti 1995 for an influential contribution). However, that approach does not indicate the extent to which cross-border asset trade actually takes place once legal prohibitions on international capital mobility are removed. Another route is to focus on price-based measures of integration: does arbitrage ensure that the prices of similar assets are equalised across locations? While useful, this route also does not reveal the extent of asset trade that occurs once barriers to arbitrage have been eliminated.

Rather, my research with Gian Maria Milesi-Ferretti has focused on tracking volume-based measures of international financial integration. The volume of international asset holdings plays a central role in international macroeconomic models, since the scale of international balance sheets largely determines the scope for risk sharing and influences the international transmission of financial shocks. Until recently, a problem in pursuing volume-based measures has been a lack of data on the value of international investment positions. While much was known about international capital flows, the dynamics of investment

holdings also heavily depend on revaluation effects: for instance, a large capital loss on a given foreign asset holding may vastly outweigh new flows in that asset class.

The situation has improved markedly in recent years: Lane and Milesi-Ferretti (2001a) employed a variety of valuation techniques to assemble data on stocks of foreign assets and liabilities for 67 countries over 1970-1997, while there has also been a greater effort to improve the official statistics on international investment positions. (However, the latter typically only covers the most recent years, rather than providing a long time series of data.) Moreover, in addition to measuring the aggregate positions, the work of Lane and Milesi-Ferretti (2001a, 2001b) has also highlighted the importance of the composition of the international balance sheet. For instance, the potential for international risk sharing is sensitive to the debt-equity mix in terms of the external capital structure of nations.

These new data sources highlight that there has been a trend increase in international financial integration since the early 1980s.¹ An important feature of the data is that this trend has accelerated since the mid-1990s: the pace of financial globalization has increased over the last decade. For a group of industrial countries over 1983-2001, Lane and Milesi-Ferretti (2003) seek to identify the drivers of international financial integration by running a panel regression of the form

$$\Delta IFIGDP_{it} = \alpha_i + \gamma * X_{it} + \beta * \Delta Z_{it} + \varepsilon_{it} \quad (1)$$

where $IFIGDP_{it}$ is the ratio of the sum of gross foreign assets and gross foreign liabilities to GDP and X_{it}, Z_{it} are a set of country- and time-varying determinants.² Their results highlight that domestic and international financial deepening are highly complementary: a key driver of international asset trade has been the growth in domestic stockmarket capitalizations. In addition, growth in GDP per capita and the volume of product trade have also been associated with a faster pace of financial globalization. The latter result also underlines the tight connection between real and financial dimensions of global integration:

¹See also Obstfeld and Taylor (2004) for a longer-term perspective.

²Baele et al (2004) provide much interesting material on the regional dimension to international financial integration, focusing on the impressive degree of market consolidation among euro area countries. See also Spiegel (2004) for a case study of Portugal.

we return to this point later in this paper. In summary, those industrial countries that are enjoying domestic financial deepening, faster output growth and expansion of international trade in goods and services are also those that are furthest ahead in terms of financial globalization.

With respect to the emerging market group of developing countries, financial globalization has also been taking place, albeit with some major fluctuations associated with the various crises of the 1990s.³ As is shown by Lane and Milesi-Ferretti (2004a), a noteworthy feature of recent years has been that the emerging market economies are accumulating significant stocks of foreign assets. While a large proportion of this can be attributed to increases in official external reserves, other asset categories such as FDI and portfolio equity are also expanding for a number of these countries.

The recent increases in financial globalization have been impressive. Moreover, many of the driving factors point to further growth in the coming years, since developments such as capital account liberalization, deregulation of domestic financial systems, domestic financial deepening, growth in international product trade all look to be ongoing processes that are largely irreversible.

However, it is important to realize that we are still far from the notional end point of a unified global capital market. The prevalence of home bias in investment and portfolio decisions is well known, even if it may be getting weaker. Moreover, even when investors do go overseas, the pattern of international investment is far from the benchmark prediction that the representative investor should hold the ‘world market’ portfolio, with each destination country represented in proportion to its share in global capitalization. Exploiting a new large-scale IMF-coordinated survey of international portfolio holdings, Lane and Milesi-Ferretti (2004b) study the determinants of bilateral equity holdings. Their regression

³Kose et al. (2003) show that the net gains to financial globalization have been typically lower for these countries compared to the advanced industrial nations. This in part can be attributed to the impact of the 1990s crises but also highlights the importance of high-quality domestic institutions and policies in maximising the gains from liberalization. For lower-income developing countries, financial flows are dominated by official lending, with a much more limited role for private capital.

specification is

$$\log(EQ_{HS}) = \alpha_H + \alpha_S + \beta X_{HS} + \varepsilon_{HS} \quad (2)$$

where EQ_{HS} is the equity holdings by source country S in host country H , α_H is a host-country fixed effect, α_S is a source-country fixed effect and X_{HS} is a set of bilateral variables that may influence portfolio allocations. It is important to include the fixed effect dummies for the source and host countries: otherwise, a high level of equity holdings by country S in country H may simply reflect that the source country invests heavily in all locations and/or the host country is a major recipient of international investment from all sources. In this setting, the bilateral variables X_{HS} are included in order to explain why source country S may under- or over-weight host country H relative to other countries.

Their study highlights an important complementarity between trade integration and financial integration: a robust covariate of bilateral portfolio holdings is the bilateral volume of trade. In addition, informational proxies such as a common language and distance also turn out to be typically significant in explaining the bilateral variation in holdings. Holding fixed these variables, ‘financial’ factors such as the correlation in returns between markets do not appear to be significant. These results indicate that the theoretical simplification of a homogeneous global investor is quite misleading: investment patterns remain quite fragmented, in line with the presence of trade and informational frictions.⁴

3 Financial Globalization and Macroeconomic Adjustment

In the previous section, we focused on the growth in gross holdings of cross-border investments. However, by promoting risk diversification, financial globalization may also be associated with an increase in the dispersion of net foreign asset positions, with some countries emerging as long-term creditors and others long-term debtors. For many countries, net

⁴Portes and Rey (2004) show that such frictions are also important in explaining bilateral turnover volumes in equity markets.

international investment positions remain quite small but there are important exceptions, with the most notable case being the emergence of the US as the world's largest net issuer of external liabilities.⁵ On the other side, countries such as Hong Kong, Japan, Singapore and Switzerland have very positive net foreign asset positions.

The facilitation of non-zero long-term net foreign asset positions is one of the putative gains from international financial integration. Countries that wish to generate future investment income may naturally run current account surpluses, while countries that prefer current to future expenditure are enabled to run current account deficits. In addition to standard cyclical fluctuations, Lane and Milesi-Ferretti (2002a) show that the dynamics of net foreign asset positions can be fairly well explained by a parsimonious model in which the driving variables are relative output per capita, net public debt and demographic structures. According to their estimates, countries that have lower output per capita, larger government debts and youth-biased demography are more likely to be long-term net debtors, while richer countries with lower public debt and an older population emerge as the corresponding group of net creditors.

However, increased dispersion in net foreign asset positions has implications for macroeconomic stability and external adjustment. Even if large net positions are perfectly sustainable, the lack of perfect integration in product markets means that the distribution of trade imbalances that is implied by a world of long-term creditors and debtors requires substantial movements in real exchange rates. As is shown by Lane and Milesi-Ferretti (2002a, 2004), the magnitude of this transfer effect is quite sizeable and varies with degree of trade integration: the scale of the real exchange rate adjustment that is required to shift the trade balance of large, domestically-orientated country is much greater than for a small, highly-open economy. One implication is that the scale of exchange rate adjustment that is required in response to larger net international investment positions will depend on the extent and nature of real globalization in addition to the evolution of financial globalization.

This begs the question of the inter-relation between the different dimensions of economic

⁵See also Greenspan (2004) and Summers (2004). At a regional level, Blanchard and Giavazzi (2002) show that there is increasing dispersion of current account balance among eurozone member countries.

globalization. As is emphasized by Obstfeld and Rogoff (2002), a generalized reduction in trade costs will also promote financial globalization, since the gains to international portfolio diversification are enhanced by greater trade integration.⁶ However, if trade integration leads to greater specialization in production, the scale of exchange rate adjustment that is required to reallocate global expenditure across countries may actually increase.⁷ Reinforcing this point, it is plausible that international financial integration may actually promote specialization in trade patterns, since the risks inherent in specialized production may be partially diversified via global capital markets (Obstfeld 1994). Along another dimension, if trade integration promotes international vertical integration in production and accelerates international technological diffusion, it is also the case that it may reduce asymmetries across countries and thereby weaken the incentives to run current account imbalances. In view of this complex set of relations between trade and financial integration, the joint study of these different dimensions of globalization is high at the top of the research agenda for international macroeconomists.

In addition, major questions remain unanswered concerning the extent to which the securities of different nations have become close substitutes in global capital markets. Lane and Milesi-Ferretti (2002a) find some suggestive evidence that country risk premia in interest rates remain significant. At a policy level, the most important current issue is the capacity of international investors to absorb ever-growing volumes of US liabilities. In particular, would private investors take up the slack if the Asian central banks revised their strategy of accumulating large dollar reserves?

Related to this point, the possibility of a “sudden stop” in capital flows to the US cannot be discounted.⁸ In such an event, the world economy would have to adjust to a

⁶Anderson and van Wincoop (2004) document that trade costs remain very significant: the costs involved in transferring a good from the original producer to the final consumer are on average 171 percent of the producer price.

⁷See also Krugman (1990), Lane (2001) and Heathcote and Perri (2004).

⁸This term was coined by Calvo (1998) in reference to capital account crises in emerging market economies. In fact, the ability of major financial centres such as the US and the UK to issue highly-liquid short-term liabilities means that they are particularly vulnerable to panic events. See also Kindleberger

rapid closing of the US current account deficit. As is quantified by Obstfeld and Rogoff (2000, 2004), this would require a large exchange rate adjustment if a major recession is to be avoided. The magnitude of the US real exchange rate depreciation could exceed 50 percent, depending on the extent of nominal rigidities and the degree of pass through from exchange rates into consumer prices. Clearly, such a large relative price movement will be the more disruptive, the less flexible are firms and workers not only in the US but also in its major trading partners in Europe, Asia and Latin America.

Finally, as was pointed out earlier, it is important to appreciate that net foreign asset dynamics depend not only on current account flows but also on valuation effects. For instance, a country may run a current account deficit and yet still experience an improvement in its net international investment position if it enjoys sizeable capital gains on its foreign asset holdings and/or inflicts capital losses on its foreign liabilities. As is highlighted by Lane and Milesi-Ferretti (2001a) and Tille (2003) for the US, financial globalization increases the importance of the valuation channel by scaling up the gross size of international balance sheets: for instance, a 10 percent capital gain on foreign asset holdings represents a larger fraction of GDP, the larger is the ratio of gross foreign assets to output. In recent work, Lane and Milesi-Ferretti (2004a) show that the valuation channel represents an additional mechanism by which exchange rates can play role in external adjustment, to the extent that the asset and liability sides of the international balance sheet are asymmetrically affected by a shift in the value of the exchange rate. Moreover, Gourinchas and Rey (2004) make the intriguing finding that such valuation movements have been stabilizing in the US case, with capital gains being timed to coincide with periods in which net foreign liabilities have grown too large. As a general rule, however, it is unlikely that such a channel is exploitable by policymakers, since investors would require a higher return if it is suspected that policymakers might try to confer a capital levy on foreign creditors.

(1965) and Murray and Smithers (2000).

4 Conclusions

In this paper, I have emphasized that the pace of financial globalization has been impressive and is likely to continue. This is radically altering the global macroeconomic environment. However, I have also suggested that behavioural and informational barriers remain significant, such that we remain far from a idealized unified global capital market. In addition, the macroeconomic implications of financial globalization are quite sensitive to the extent of real globalization: substantial convergence has taken place between the research agendas of international trade economists and international macroeconomists.

Finally, I have reviewed the implications of financial globalization for external adjustment. With considerable fragmentation in product markets, the emergence of substantial non-zero net foreign asset positions implies large shifts in real exchange rates over time. Moreover, financial panics cannot be ruled out if investors lose confidence in a major debtor nation: in such a situation, a reversal in capital flows will not only require even larger exchange rate movements but also, in the absence of sufficient flexibility, involve considerable dislocation in production levels across countries.

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