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Financial globalization: the need for a single currency and a global central bank

***Abstract:** Financial globalization, by definition, means the integration of financial markets of all countries of the world into one. This is only possible provided uniformity can be brought in the terms and conditions across the globe for raising international loans. The existence of different currencies with their different degrees of convertibility prevents uniformity in the terms and the conditions for loans. Consequently, not only does the existence of different currencies act as a barrier to such integration, but it disproportionately benefits the developed countries. This problem can only be eliminated provided a single worldwide currency is introduced. In its absence, financial globalization remains incomplete.*

***Key words:** financial globalization, financial liberalization, single international currency, world central bank.*

Globalization has become established in theoretical discourse over the past three decades or so. Finance has been an important component of this process, so much so that the term *financial globalization* has assumed its own theoretical discourse and exegesis. At the same time, however, the free movement of finance across national boundaries over the same period, following financial liberalization, may have given the

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impression that the financial markets are truly globalized. We argue in this paper that financial liberalization provides a necessary, but not a sufficient, condition for financial globalization. The sufficient condition, we suggest, is that of a single currency and an international monetary authority to manage it.¹ The term *financial globalization* refers to the process by which financial markets of various countries of the globe are integrated as one. The existence of various currencies with their different degrees of convertibility power causes unequal access between countries to the international financial market and remains as a barrier to such integration (Arestis and Basu, 2003; 2004). The necessary condition for a complete process of financial globalization is the need to introduce a worldwide single currency for settling all transactions. This currency should be managed and regulated by a single international monetary authority.

The first age of unregulated financial globalization—1870s to 1913, when London arguably acted as the center of financial activity and the sterling was used for settling most of the financial transactions—was a period that is often referred to as the early stage of the development of international financial institutions and markets (Eichengreen and Bordo, 2002). That period was marred by a series of banking crises due to speculation, excessive lending, poorly managed funds, ill-regulated banking systems, and nondisclosure of information (Keynes, 1971, depicted the 1870–1913 financial globalization in similar terms). The history of international financial sector development in the interwar period, 1919–39, was not a particularly happy one either; in fact, it was deeply scarred by the collapse of stock markets around the world in the late 1920s, followed by the Great Depression. The post–World War II period was characterized by a number of financial controls and fixed exchange rates, at least until up to the early 1970s, clearly a period that did not have the ingredients of financial globalization. Banking crises were absent during the period from 1945 to the early 1970s, although currency crises were in evidence (for example, the 1949 and 1963 sterling pound crises that led to the devaluation of the currency).

From the early 1970s onward, the process of financial liberalization began, and banking crises reemerged in a new era of broadly flexible

¹ We should state at the outset that we do not necessarily adhere to the common currency and whatever this may imply. We merely argue in this paper that a common worldwide currency is a necessary requirement for a truly financial globalization environment to be achieved.

exchange rates, which inaugurated a period of free movement of capital.² The resulting global expansion of finance and export of capital accentuated the key monetary weakness of the period—namely, the absence of world money. In other words, the weakness is all about the lack of a reliable means of hoarding and for international payments. The dollar might have performed such a role, but its ability to perform such a role is limited for an important reason. It is not created as the liability of a true world central bank that uses it to provide liquidity to other banks in a global money market. This is the period that is thought to be the latest era of financial globalization (see also Prasad et al., 2003). We argue in this paper that this process is incomplete due to the absence of a single international currency, along with a truly global central bank.

Financial liberalization, integration, and globalization

We begin this section by clarifying the terms *financial globalization* and *financial integration*. A useful definition along with an attempt to distinguish between these two terms is made by Prasad et al.: “Financial globalisation 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 globalisation is perforce associated with rising financial integration on average” (ibid., p. 7). This effectively means integrating the different countries’ financial markets into a single worldwide financial market. This is precisely the definition of financial globalization we provided above. We propose to follow this terminology and distinction between these terms in the rest of this study.

Unregulated financial integration can have detrimental effects. Many countries acknowledged this aspect across the world, following the experience of the Great Depression. Accordingly, not only developed but also newly formed countries undertook various measures in order to prevent financial instability that has frequently emerged in the process of integration. It was recognized that much of the financial instability principally emerged from the fact that in the process of integration, financial flows move away from the productive (i.e., real activity) to the speculative parts of the economy (i.e., those parts where the return of the asset is

² For a discussion of banking crises and the events that underpinned them, see Basu (2003).

no longer dependent upon real activity but rather on expected changes in the price of the asset), thereby themselves becoming barriers to integration. Consequently, it was thought that to integrate the financial market with the entire economy and to prevent the emergence of financial instability, there was a need to introduce certain sets of regulations (for more details, see Arestis and Basu, 2004; Basu, 2002; Sayers, 1960).

Almost every country initiated further provisions that were designed to ensure that the productive sectors were neither constrained by the price of finance nor by inadequate financial flows. This was predicated on the premise that financial markets operate in the presence of uncertainty, and as a result, lenders cannot calculate whether borrowers will be able to repay the loan (i.e., principal plus interest rate) in advance. Consequently, lenders ask for collateral or some form of security in order to ensure that should borrowers default on loans, some alternative means exist to enable lenders to recoup their loan capital. This alternative means to secure at least the principal is what we refer to as the *credit standard* (see also Arestis and Basu, 2004; Basu, 2002). As a result, the ceiling on interest rates was introduced in order to ensure that borrowers were not constrained by the price, and specialized banks were developed to ensure that the lenders' lack of knowledge did not prevent the financial flows to specific sectors. Furthermore, in certain countries, the government stood as guarantor, and in other countries, banks were instructed to reduce the credit standard requirements. That was aimed at ensuring that certain groups of borrowers were not constrained by interruptions to the financial flows that arose from their inability to meet banks' credit standard requirements. The credit standard is implemented to protect the principal should the borrower default on loans. As loans are normally nonmarketable, in recent years in the United States, lenders have developed a way to market loans by selling the expected future cash flow of current loans in the form of bonds to a third party, which is referred to as securitization. But this does not replace the importance of the credit standard, as banks remain ultimately responsible to meet their bond obligation on its maturity. This obligation has to be met from the cash flow of the loans or else banks have to resort to alternative means to recoup the loan so that the bondholder's obligation can be met.

At the international level, a variety of controls were established in order to ensure that foreign financial flows were mainly concentrated on the productive parts of the economy. In order to prevent a free financial flow and exit, those controls also embraced the purchase of foreign currency. In some instances, governments stood as a direct guarantor between the foreign lenders and the domestic borrowers to ensure that the

growth of local industries was not constrained by inadequate foreign financial flows arising from their inability to meet the foreign lenders' credit standard requirements. In the past, many nationalist governments were highly suspicious of multinational corporations' (MNCs') activities. This suspicion might have emerged from the fact that foreign direct investors were mainly interested in investing in the host country's export sector, and this sector was vitally important to finance imports. Allowing MNCs to control this sector meant the national government lost its sovereignty over its import policy. In addition, in those early days, most of the developing countries' export sectors were small compared to their gross domestic product (GDP), and mainly consisted of the primary sector, in which many small producers derived their living, and this made foreign direct investment more sensitive. Furthermore, the terms and conditions that are often required to attract foreign direct investment were not acceptable to the host country, either on political or economic grounds or often on both. Consequently, these countries, instead of inviting foreign direct investment, imposed restrictions and relied more on foreign loans to finance their development programs.

The main objective of those regulations was to avoid financial instability and to promote governments' economic and social objectives. This was the case for developed as well as for developing countries. However, the ineffectiveness of those regulations in terms of either improving smaller borrowers' access to the loan market or of achieving satisfactory growth rates led countries to deregulate their financial sectors. The view was taken that government intervention distorts the determination of the price of loans, thereby adversely affecting not only the allocation of loans but also savings. This view was originally put forward by McKinnon (1973) and Shaw (1973), and was, subsequently, further developed by Fry (1995; 1997), King and Levine (1993a; 1993b), and others.³ That view became known as the financial liberalization thesis, the main message of which is that the lack of competition brings inefficiency to the financial sector. Interest rate liberalization is a first step, but it was thought that this alone would not generate competition in this market, because it operates within the frame of oligopolistic competition. Consequently, not only is there a need to increase the number of players in this market but also to tap a larger pool of savings, which a country may be required to seek beyond its own domestic boundary. To

³ See also Greenwood and Jovanovic (1990), Levine and Zervos (1996; 1998), Rajan and Zingales (1998), Roubini and Sala-i-Martin (1992), and Saint-Paul (1992), who produce arguments along similar lines.

increase the number of players, there is a need to remove entry restrictions so that other banks and nonbank financial intermediaries (NBFI) as well as overseas banks can enter into this market. In order to tap a larger pool of savings, there is a need to remove controls over the purchase and sale of foreign currency. Consequently, the need for the liberalization of the external sector of financial markets also took place. A number of studies, though, such as those by Arestis and Demetriades (1997; 1999), Arestis et al. (2003), Basu (1994; 2002), Diaz-Alejandro (1985), Morisset (1993), and Singh (1997), point out that the propositions and results derived by the supporters of the financial liberalization thesis are neither empirically nor theoretically tenable.

A further elaboration of the financial liberalization view emerged, in a historical context similar to the formation of the “Washington Consensus” as developed by Williamson (1990), that government intervention in the foreign exchange market to determine the price of currency could cause much of the distortions in the allocation of exports and imports, adversely affecting the balance of payment (Corden, 1981; Krueger, 1974). This problem might have been further aggravated by the existence of restrictions on foreign direct investment. That may have caused debt to rise to an unnecessarily high level, which otherwise could have been addressed via foreign direct investment. An important implication was that if the currency were allowed to float, then the mechanism of its appreciation and depreciation would ultimately bring a balance between exports and imports. This is, of course, the familiar adjustment process known as the J-curve effect, which was based on the assumption that the downward part of the J-curve is attributed to the absence of the Marshall–Lerner condition in the short run and, therefore, devaluation would initially affect the current account deficit adversely. However, in the long run, everything is a good substitute for everything else, and, therefore, the J-curve must turn upward as the Marshall–Lerner condition begins to be satisfied; thereafter, the situation would improve continuously (Corden, 1981). Any remaining trade imbalance could be addressed via directly promoting the inflow of foreign direct investment. Country after country joined in the floating exchange rate system and in the removal of financial controls.

Furthermore, laws relating to takeover and merger activities were relaxed. The threat of a takeover may improve the performance of those otherwise not performing as expected. Internal and external liberalization of the financial sector were also undertaken with the expectation that this would bring efficiency to this sector. This, in turn, would improve the growth performance of those countries, and in the process, it would open up the opportunity for financial capital to move freely from

one country to another. The speed of this movement is further enhanced by the advancement in high-tech and telecommunication systems. The combination of these latter two developments has given the wrong impression that financial markets are now truly globalized. In what follows, we elaborate on this particular proposition and try to justify why this is a wrong supposition. The problem with true globalization is that different parts of the globe should be merged into one. In the case of financial globalization, this means the lending and borrowing parts of countries should be merged into one market. Assuming such a process has indeed begun, as the free movement of finance may indicate, then liberalization has removed one barrier. But the process has also brought a series of financial crises. The experience of that era has produced an interesting view that “developing countries need to have a set of preconditions in place to benefit from financial globalisation and to avoid an increased probability of a currency or banking crisis” (Dawson, 2003, p. 9). The main elements of this “cautious” approach, supported by the International Monetary Fund (IMF), are: “First, the long end of the market should be opened up before the short—that is, foreign direct investment should come before portfolio flows. There may be a case for imposing or retaining some capital controls, especially price-based controls on short-term flows. . . . Second, the institutional and regulatory regime in the financial sectors is very important. A strong prudential regime should be in place before the capital account is fully liberalised” (ibid., p. 10).

Barriers to financial integration

Financial liberalization provides a platform, which is a necessary, but not a sufficient, condition for financial integration and globalization. Not only do different currencies act as a barrier to integration but they also segregate financial markets across the globe, which can be a source of financial crises. This segregation principally arises from the fact that different currencies carry varying degrees of capability of being accepted as means of exchange in the international market. Accordingly, the world financial market has been divided into various subgroups. On one end of the spectrum, there is a subgroup with hard currencies, mainly comprised of developed country means of exchange. Hard currencies are referred to as those currencies that can be easily converted to any other currencies. In short, hard currencies are liquid in the sense that they are readily convertible into the means of settling specific international contracts. At the other end of the spectrum, there is a subgroup with soft currencies, mainly comprised of means of exchange of the poorest coun-

tries of the world. The soft currencies are those that have the lowest degree of convertibility power. Therefore, soft currencies are not readily liquid for international contractual settlements; their degree of liquidity is often associated with the foreign reserve position of the nation's central bank. The remainder of the world's currencies fall within these two extreme ends of the spectrum, with their convertibility closely correlated with the foreign reserve position of the central bank of the country concerned. We assume that there are only two groups of countries, one with a hard currency and the other with a soft currency. This assumption is made for the sake of analytical simplicity, although the thrust of the argument is not affected by this assumption. The existence of different currencies divides the entire financial market into two groups in a very important and telling way. There are two problems worth examining.

First, this system causes unequal access to the international loan market. Inequality in access to the international financial market principally arises from the fact that a country with a hard currency can raise loans in the international market by using their own currency, whereas a country with a soft currency cannot use their own currency to raise loans in the international financial market. Even dollarization or currency board arrangements cannot resolve the problem. For example, Ecuador inhabitants use the U.S. dollar (hard currency) as their domestic currency, yet they cannot readily borrow from international financial markets. This is mainly because under currency board arrangements, the central bank must hold \$1 of foreign exchange for every \$1 of domestic currency or by fixing a different rate. But under dollarization, the domestic currency is abandoned and replaced with the U.S. dollar. But even adopting a foreign hard currency unilaterally so as to improve credibility, such an arrangement can neither give the freedom to print the foreign currency nor allow the flexibility to issue debt denominated in the foreign currency. Ultimately, it boils down to looking at the key source of earning the convertibility power—that is, via the country's ability to accumulate foreign exchange primarily through export earnings. In other words, countries with a hard currency can raise loans in the international market with the agreement that they will repay the loan in their own domestic currency. But countries with currencies that carry a lower degree of convertibility cannot do so. They have to borrow in hard currency, should they wish to raise loans from the international financial market. In short, for these countries, foreign loans would have to be paid in foreign currencies, and only those sectors with the potential to earn hard currency could have access to the international financial market. However, in countries with hard currencies, all their sectors will have access to the foreign loan

market. Not only does this limit the process of globalization, but it also leads to unequal access to the international financial market.

Second, there is a problem relating to the fact that the loan market operates in an environment of uncertainty. In this market, therefore, lenders are required to introduce a credit standard, which includes collateral or some other form of security, as an alternative means of payment, should the projects' return turn out not to be sufficient to meet the debt obligation. Securitization does not resolve the problem of the credit standard, for it cannot guarantee loan repayment; it merely makes the loan marketable. The existence of different currencies with differing degrees of convertibility in the international market produces another serious constraint to the introduction of a uniform credit standard across the globe. For the international financial market, domestic borrowers are required to have an international marketable asset in order to meet international credit standard requirements against which they can obtain loans. Countries with hard currencies and with a relatively high degree of convertibility are able to offer a range of acceptable international marketable assets, and, as a result, there is hardly any difference in their domestic and international credit standard requirements. Convertibility depends on the foreign reserve position and the willingness of the central bank to allow the domestic currency to be converted into foreign currency.

By contrast, countries with soft currencies, and, thus, with a relatively low degree of convertibility, are faced with a difference between domestic and international credit standard requirements. This segregates the domestic financial market from the international financial market. A real difficulty thereby ensues in that a uniform credit standard across the globe cannot be introduced and that different countries have differential access to the international financial market. This implies that different countries will have different degrees of ability to attract foreign financial capital. For example, foreign private capital flow is much greater in the case of "advanced" developed countries compared to any other group of countries.

As the degree of currency convertibility power is low for all developing countries, all their foreign loans have to be paid in foreign currency. In this situation, it is reasonable to assume that only the exporting sector of a country is able to meet the international credit standard. Only this sector can offer international marketable assets in view of its potential to earn foreign currency. This, therefore, suggests that the possibility of attracting foreign financial capital ultimately depends upon the country's ability to offer international marketable assets as a security against which the country can seek a loan. Furthermore, this access improves as the

size of a country's international marketable assets increases. Clearly, then, apart from a few industrialized nations, export-led growth economies will now have greater access to this global financial market (see Harris, 1998, and World Bank, 1997, for more details on this issue). As the export-led economies' growth rate rises, the value of their assets, particularly those owned by the export sector, also rises in international markets. These economies, therefore, are able to borrow even more by offering a higher value of assets. This incremental rise in the value of these assets also attracts capital directly to purchase these assets with the expectation that they may make a profit from the expected change in their price.

Empirical observations

In Table 1, we examine the trends in all the major emerging market economies with regard to exports, private capital flows, and external debt. These economies have relatively weaker currencies than the advanced economies, whereas low-income economies are constrained in general, with a rising external debt burden. It is quite clear from Table 1 that higher export earnings can attract foreign capital, either in the form of foreign direct investment and portfolio investment or in the form of commercial loans. We carry out a panel estimation for the 12 countries in Table 1 with annual data for the 1976–2000 period to test the above proposition. The three variables used in the estimation are as defined in Table 1. The estimations, using the method of generalized least squares with cross-section weights, are carried out in Eviews econometric software. The estimates are corrected for panel-specific autocorrelated residuals of order one, and for White heteroskedasticity-consistent standard errors and covariance. These estimates are also checked for robustness using fixed as well as random effects. There is little effect on the common coefficients; the results are as follows.⁴

$$\text{CAPFLOW}_{it} = 1.873 + 0.157 \text{ EXPORT}_{it}. \quad (1)$$

(4.11) (5.97)**

Sample size = 300; [t = number of time periods (25); i = number of cross-sections or panels (12)]; adjusted $R^2 = 0.48$; F -statistic = 134.71 [0.00]; ** denotes significance at the 1 percent level of significance; where CAPFLOW stands for capital flows, and EXPORT stands for exports. Both the variables are defined as a percent of GDP.

⁴ The fixed and random effect results are available from the authors upon request.

Table 1
Exports, private capital flows, and external debt in emerging economies

	Exports of goods and services (percent of GDP)				Private capital flows (percent of GDP)			External debt (percent of GNI)		
	1960s	1970s	1980s	1990s	1970s	1980s	1990s	1970s	1980s	1990s
Argentina	6.5	7.3	8.8	9.0	6.3	9.2	12.4	18.8	56.1	39.6
Brazil	6.7	7.3	10.1	8.8	4.1	4.2	8.4	21.3	40.0	30.3
Chile	13.5	18.5	26.5	29.6	8.3	16.3	18.8	43.3	93.6	45.5
Ecuador	15.6	23.3	24.9	27.5	6.5	6.8	15.2	29.7	81.2	100.4
Ghana	20.9	16.3	11.2	25.1	4.3	2.8	4.4	28.8	48.7	86.3
India	4.2	5.2	6.1	10.0	0.1	0.6	3.1	13.7	17.5	28.4
Kenya	31.2	29.8	24.7	30.6	5.4	3.6	6.8	37.8	63.0	88.8
Malaysia	42.6	44.1	57.2	91.24	7.2	10.2	13.9	19.3	56.2	44.3
South Korea	7.9	25.0	34.9	32.6	8.1	6.0	11.5	36.4	40.4	21.9
Thailand	16.3	19.0	25.9	43.0	4.6	6.4	14.9	15.6	36.2	57.9
Turkey	3.5	4.7	13.3	19.0	3.4	2.8	7.5	15.7	36.7	42.3
Venezuela	25.9	25.2	24.6	28.9	5.4	7.3	17.2	18.5	55.6	54.4

Source: Calculated with data from *World Bank Development Indicators* and World Development Finance Database, World Bank.

Note: 1970s refers to 1970–79, 1980s refers to 1980–89, and 1990s refers to 1990–99; GNI (gross national income).

Equation (1) suggests a positive significant relationship between capital inflows and exports. For a 1 percent increase in exports, private capital flows increase by 0.16 percent. This then leads us to examine the effect of rising exports and capital inflows on the external debt of the countries considered here. The results of this panel estimation are given as follows:

$$\text{EXDEBT}_{it} = 30.75 + 0.865 \text{EXPORT}_{it} + 0.139 \text{CAPFLOW}_{it}. \quad (2)$$

(16.00) (5.343)** (1.20)

Sample size = 300; [t = number of time periods (25); i = number of panels (12)]; adjusted $R^2 = 0.8668$; F -statistic = 623.75 [0.00]; ** denotes significance at the 1 percent level; where the variables are as before, with the exception of EXDEBT, which stands for the external debt variable. All the variables are defined as a percent of GDP.

Equation (2) indicates that there is a strong positive and significant relationship between exports and a country's ability to borrow from abroad (i.e., external debt increases). With a 1 percent increase in exports, external debt increases by 0.86 percent, reflecting nearly a one-to-one correspondence between the two variables. The reason for this is that as the size of the export market expands, it improves the country's external *credit standard*, and, therefore, it elevates the willingness of commercial creditors to lend to that particular country. The capital flows variable, on the other hand, was not found to be significantly influencing the external debt burden in the sample period, partly because of collinearity between capital inflows and exports, as CAPFLOW is endogenous in Equation (1). Hence, we estimated Equation (2) again, excluding CAPFLOW, which produced Equation (3):

$$\text{EXDEBT}_{it} = 31.99 + 0.91 \text{EXPORT}_{it} \quad (3)$$

(2.07) (5.63)**

Adjusted $R^2 = 0.8673$; F -statistic = 938.59 [0.00]; ** denotes significance at the 1 percent level.

It is worth pointing out that even a higher coefficient of 0.91 between EXDEBT and EXPORT has emerged, with this estimate being highly significant as shown in Equation (3).⁵

⁵ Hypothetically, a counterpart to this regression could be the omission of the EXPORT variable, but including CAPFLOW. The estimate for the coefficient of capital flows on external debt burden is just 0.27 percent. Moreover, in the absence of a growing export sector, capital flows do not exist, thus ruling out the importance of this regression.

There remains, though, a serious inherent problem associated with the form of lending. This is the possibility that loans may be advanced with the agreement that in the event of a default, the country would have to allow the foreign lender to sell their international marketable assets to recoup the proceeds of the loan. Perhaps it was not recognized that the repayment of the loan, mainly in the case of developing countries, directly relates to the earnings performance of the internationally traded marketable assets. If the foreign loans are not used for the enhancement of export facilities, then the loan repayment no longer depends upon the project's performance. This is where a serious problem begins in the process of globalization. The problem in this context is a critical one. Since all foreign loans have to be paid in foreign currency, in the case of developing countries, only the assets of their exporting sector are acceptable as an international credit standard. Not only does this limit the process of integration, but it also introduces another problem, which is that if the foreign loans are not used for the enhancement of export facilities, then the loan repayment no longer depends upon the project's performance.

This makes project evaluation irrelevant and also implies that the credit standard no longer remains as an alternative means of recouping the loan; it becomes the principal means of repaying the loan. In other words, the credit standard no longer provides the security against which the loans are issued. Rather, it is directly linked with the earning performance of the internationally marketable assets. This means repayment of the loan is independent of the project's performance. In this case, capital plays a purely redistributive role. In either case, what matters is whether or not the loan has been used for the enhancement of export facilities. The process will ultimately be locked into the global financial market, and the expected growth in the value of the emerging markets' export sectors should not be expected to materialize.

The problem here is that if the expected growth rate does not materialize, then the fall in export earnings will not only cause a problem for maintaining the repayment of debt, but it will also cause a fall in the value of these assets, as their value is linked to their earnings potential. This, in turn, will increase the credit risk to a very high level. In other words, a collapse in the assets' value will no longer be able to protect foreign lenders' loan capital. This scenario can be described as over-lending or overborrowing or else overinvestment. This situation can first lead to a banking crisis and then to a currency crisis, and it is here, also, where the difference between the two groups of countries is at its worst, particularly in relation to their ability to manage the crisis. Dollarization,

or for that matter, currency board arrangements, does not allow a country to avoid such a scenario. In fact, it can make the situation worse, as the case of Argentina suggests.

Argentina, under a currency board arrangement, externalized all its domestic debt, as it could be called to be paid in dollars. But the problem is that externalizing the domestic debt does not imply that all the domestic assets will be acceptable to the international creditors as meeting their international credit standard requirements, regardless of their ability to earn foreign currency. In this sense, the country's ability to borrow in the international market still depends upon its export earnings. Thus, by switching to a currency board system, it has not enhanced its position in terms of improving its ability to raise loans in the international financial market, nor has it increased its ability to sell domestic assets in the international market in order to meet its international debt obligation. What is worse is the fact that by moving to such a regime, it ties its money supply to its foreign currency reserve, and this means that as reserves fall, there will be a pressure for the money supply to fall. This effectively means that as the foreign currency reserve falls, there will be a downward pressure not only on the value of international marketable assets, but also on that of domestic assets, forcing domestic investors to transfer their assets overseas. The country with hard currency can issue an international debt in their own domestic currency, which means all debts will be paid in their own domestic currency. In this case, all debts are internalized, and there is no need to make a distinction between external and internal debt.

Consequently, not only do we observe that there is no separate item to identify external debt, but more importantly, as all debts are internalized, this enables these countries' central banks to act as lenders of last resort should there be a banking crisis. For those countries carrying soft currencies, if at any point in time there is a trade imbalance, then that country has to borrow in hard currency, and the loan has to be repaid in hard currency. Therefore, for these countries, there is a need to make a distinction between domestic debt, that is, those debts that are held in the domestic currency; and foreign debt, that is, those debts that are held in foreign currencies. This is where a serious problem emerges. Although the domestic central banks can act as lenders of last resort should there be a crisis in the domestic debt market, they cannot act as lenders of last resort should there be a crisis in the foreign debt market. The country cannot raise loans in hard currency from the international financial market, because most of its domestic assets are not recognized in the international market. Consequently, it cannot meet the international credit

standard. The international credit standard in these cases depends upon the country's foreign currency reserve. The higher the foreign currency reserve, the greater the willingness of the country to allow the domestic currency to convert into hard currency, which enables the country to improve the international marketability of its domestic assets and vice versa.

Simple dollarization does not improve the international marketability of domestic assets. For example, Ecuador officially dollarized in 2001, yet this has not improved its ability to raise loans in the international financial market. This is simply because dollarization is a way to improve a country's balance-of-payment problem by importing credibility so as to stabilize inflation. Thus, the assumption is that exports will expand and imports will contract, thereby reducing any balance-of-payment deficit. Argentina, using the same assumptions and rationale, also went into currency board arrangements in 1991, but that did not improve its balance-of-payment deficit, and consequently, in 2001 it opted out from the currency board arrangements. Whether it is dollarization or currency board arrangements, the argument in both cases is based on the assumptions of perfect price wage flexibility and the existence of perfect import substitution industries. As both of these assumptions are unrealistic, this suggests that neither dollarization nor Argentina's model can provide a convincing solution to balance-of-payments disequilibria. Neither dollarization nor currency board arrangements offer a convincing way of improving foreign currency reserves and, therefore, cannot improve the country's ability to meet the conditions of the international credit standard. Consequently, these countries have no option other than to rely upon the IMF to meet their debt obligation.

Countries then have no option other than to use the IMF as a de facto central bank. But the IMF does not have sufficient resources to rescue all these countries; it has to raise loans from the international financial market.⁶ As these countries cannot meet the international credit standard, the IMF acts as guarantor that these countries will meet the international creditors' demand. Consequently, the IMF has to set conditions that comply with international creditors' demand, and these conditions then act as the credit standard against which the international loans are issued. In contrast to this situation, developed countries' own central

⁶ For example, according to Fischer (1999), the current volume of world trade is nine times larger compared to the volume in 1945, and IMF requires over \$2.5 trillion to manage the current scale of crisis, while its quota is only \$290 billion.

banks can act as lenders of last resort, so that they can bypass the IMF and avoid the unnecessary austerity conditions that are imposed by the IMF.⁷ We do not know the beneficial aspects of the austerity conditions, but observation reveals that since the current process of globalization began, and the necessity for the IMF to intervene has increased, there has also been a rising foreign debt level for the developing and emerging countries, compared to the era that preceded it, referred to as the era of government intervention.

The above analysis highlights the argument that the existence of different currencies, with their differing degrees of convertibility, stands as a serious impediment to the integration of the different financial markets into one. It also segregates the market in such a way that in an unregulated environment, it disproportionately favors developed countries at the expense of the developing world.

Conditions for financial globalization

The intervention of the IMF, and for that matter, its role as an international lender of last resort, has received criticism on three grounds. First, it has been claimed that the IMF's role as an international lender of last resort is more likely to accentuate the moral hazard problem and thereby encourage more imprudent lending and borrowing and ultimately give rise to financial crises (Calomiris, 1998). Second, the IMF was criticized on the basis of Bagehot's (1873) principle, which suggests that domestic lender of last resort and international lender of last resort should be in a position to lend freely, at a penal rate, and with good collateral. The IMF cannot meet the latter requirement, and should, therefore, not act as an international lender of last resort (Pattanaik, 2001; Schwartz, 1999). The IMF cannot meet the latter requirement mainly because of the existence of different currencies with their differing degrees of convertibility, which prevents the implementation of uniform credit stan-

⁷ A similar situation might have emerged during the last so-called financial globalization that took place during the height of the industrial revolution, in which the demand for raw materials and the expansion of railways led financial capital to move from one country to another. The problem was that the expansion of the railways might have integrated the domestic economy, but the repayment of the loans for the expansion of the railways depended on the export earnings from raw materials. That alone, however, was not sufficient, and, in the process, it might have also caused periodic overinvestment that led to the emergence of a variety of regulations. In this sense, the current financial globalization may not be altogether very different from that one.

standard requirements. Even the dollarization of the domestic currency, or for that matter, currency board arrangements, is not likely to resolve the problem, because the degree of convertibility depends upon foreign reserves, which ultimately depends upon export earnings. Dollarization, or currency board arrangements, has been proposed as a mechanism for improving export earnings, but unless the actual export earnings increase, there will be no change in the degree of convertibility. Thus, the international marketability of domestic assets will also remain unchanged. This suggests that to call one domestic currency, such as the peso, for example, as equivalent to the dollar, or for that matter, abandoning the domestic currency in favor of some hard currency, does not improve the currency's international credibility. This is the second criticism, since as was observed in the case of Ecuador and Panama, dollarization does not improve access to the international loan market. Consequently, the IMF has to implement conditions that would enable it to apply proxies for the credit standard against which it can act as international lender of last resort.

It is these conditions that have brought the third criticism, largely because developed countries can bypass these conditions while the remainder of the world is not in a position to do so. Consequently, it has been seen as applying one set of rules for developed countries and another set of rules for the rest of the world (Stiglitz, 2002). But this problem also originates from the existence of different currencies with differing degrees of convertibility. This enables developed countries to issue international debts in their own domestic currency, with their own central bank acting as a lender of last resort, so that they can ignore the IMF, in a way the rest of the world is not in a position to do. Thus, it appears that the above problem principally emerged due to the absence of a single currency. The absence of a single currency is not only the principal barrier to financial globalization or integration, but it also segregates the market, thereby causing unequal treatment.

The above analysis suggests that there is a need to introduce a single currency and to establish an international financial institution with sufficient power to be able to play the leadership role required to alleviate these problems. The current international institutional arrangements do not appear to provide a global financial institution, which is prepared to play such a central coordinating role. Historically speaking, the only time the world ever came close to such a situation was during the late nineteenth century, when Britain was able to use the sterling to play a crucial and central role in world financial markets. An attempt was subsequently made in 1944 with the use of dollar, but it collapsed in 1973

with the abolition of the fixed exchange rate by the United States. This led to the emergence of regionalism, which is perhaps still in a transitional phase (Harris, 1998).

Even if we assume that there is no need for such an institution, a problem still remains with integration. This problem principally arises from the lack of a single currency, in the absence of which it is not possible to bring uniformity in the implementation of credit standards. As mentioned earlier, because the loan market operates in the presence of uncertainty, there is a need to introduce credit standard in order to ensure that should the borrowers' project fail, for which the loan was advanced, there remains an alternative means to repay the loans. This problem principally arises from the fact that integration requires individual nations to have the ability to attract financial capital, which is independent of external barriers. Integration is then mainly determined by the internal state of the economies concerned, and the future opportunities these economies can offer. Another important ingredient to this process is that of removing the "home bias." Greenspan discusses this issue and suggests that "[a] clear benefit of financial globalisation is that, to the extent that it reduces home bias, savings will be better directed to the most promising investments in the world, increasing global economic growth and prosperity. However, so long as risk aversion exists and trust is enhanced by local familiarity, we cannot expect that home bias will fully dissipate" (2003, p. 3). This argument highlights further the problems with currency board arrangements. Such arrangements do not automatically improve the international credibility of the domestic currency, and, instead of improving access to the international market, provide the opportunity for domestic investors to transfer their domestic currency into dollars and invest them in the United States. There is still, though, the interesting question of whether savings would be directed, as Greenspan suggests, to most promising investments. Apparently, the currency board of Argentina merely encouraged rich Argentineans (and other Latin Americans) to move their savings to Miami. Thus, instead of alleviating Argentina's international currency problems, it aggravated them by not providing more income for Argentinean residents that could be used to settle Argentinean obligations to the external world.

The analysis so far in this paper suggests that unregulated opportunities for free financial flow between countries are a by-product of financial liberalization. But this opportunity for free financial flow between countries does not alone constitute financial globalization. To complete the process of financial globalization, there is a need first to develop a global institution that can play the central coordinating role, and, more

importantly, for the purposes of this paper, to regulate the system. In addition to this requirement, there is a need to develop a single currency. Neither of these two requirements should depend on any national currency. Dollarization, or for that matter currency board arrangements, does not meet these requirements. This principally arises from the fact that as the country's foreign currency reserves increase, so does the monetary authority's willingness to allow investors to convert domestic currency into hard currency. This gives the impression that international marketability of domestic assets depends upon the foreign currency reserve. Thus, it is assumed that as foreign currency reserves increase, so does the country's ability to increase the international marketability of its domestic assets, irrespective of its export earning capabilities. This gives the impression that the country now can offer more domestic assets to meet the international credit standard, and therefore its access to the international financial market will also increase. But what was perhaps not recognized was that the international marketability of the domestic assets in this case does not emerge from these assets' export earning potential, but it is rather a result of a rise in foreign currency reserves. Therefore, a fall in foreign currency reserves following a fall in export earnings will immediately undermine the international marketability of these assets. In short, a rise in the international marketability of the domestic assets does not necessarily mean a rise in the ability to meet the international credit standard. In other words, if the country falls short of meeting its international debt obligation, it cannot settle its debt obligation by offering domestic assets. The only avenue left for the country is to offer the assets of the export sector in order to settle the international debt. If the value of these assets is not sufficient, then the country will fall into a debt trap, as the country has to refinance its debt.

Regulating financial globalization

Dollarization, or for that matter, currency board arrangements, does not fundamentally alter the country's position in terms of its access to the international financial market. Dollarized nations cannot issue international debts in their own domestic currency, and therefore, their ability to raise loans from the international market depends upon the same conditions that apply to the nondollarized nations. This is where the important difference emerges between the countries that can issue their international debts in their own domestic currency as opposed to those who cannot. In those countries that issue their international debts in their own currency, the international marketability of their domestic assets does

not rise or fall according to their export earnings. In other words, the degree of convertibility of a country's currency does not change according to its balance-of-payment position, although the relative value of the currency may change. Consequently, its ability to borrow from the international market remains intact, irrespective of its export earnings or, for that matter, its balance-of-payment position. For those countries that cannot issue international debts in their own currency, their ability to borrow from the international market is severely restricted by their export performance. This difference in the ability to borrow principally arises from the fact that when a country can issue international debt in its own currency, its domestic credit standard requirements automatically meet the international credit standard requirements, and this enables it to offer stable credit standard requirements. As opposed to this, for a country that cannot issue its international debt in its own domestic currency, its domestic credit standard does not automatically meet the international credit standard, and the domestic assets' ability to meet the international credit standard then becomes a function of foreign currency reserves. Consequently, a country's ability to meet the international credit standard changes according to its foreign currency reserves. This effectively means that the assets that have been accepted as collateral in the international market today may not be accepted tomorrow; so that it is not only possible to bring uniformity in the credit standard requirements, but also fluctuations in the international credit standard. This is due to changes in the acceptability clause, which may not permit a country to settle its international debt. This means the country has no option other than to refinance its debt. It is here where the difference in the treatment between developed and developing countries in the international financial market emerges.

Thus, the issue is not just unequal access to the international financial market, but more importantly, possible changes in the degree of convertibility introduce the possibility of a developing country falling into the debt trap. This problem can only be solved provided we eliminate the differential and change the degree of convertibility of each currency, which is only possible if we introduce a single currency. It is the single currency unconnected with any national currency that will allow the global financial market to develop a uniform credit standard requirement. It is the uniform credit standard that can bring equality in the terms and conditions under which any nation can borrow from the international financial market. In short, the introduction of a single currency will unify the borrowing terms and conditions for all the countries across the globe, and may tie their borrowing ability together with their economic perfor-

mance. As it stands at the moment, the export sector of developing countries in general has been used as a proxy for the credit standard, which also acts as the central means to repay the loan. Therefore, any negative performance of this sector would produce difficulties in recouping the loan, which in turn will bring periodic financial crisis, an aspect we developed extensively above. It is clearly the case, then, that the regulation of financial globalization is an important aspect that needs to be further developed.

Suggesting that financial globalization needs to be regulated does not imply that this will improve the well-being of all people in the world. Nor should this be taken as implying that we take sides on this important issue. We merely highlight the conditions that are required for true financial globalization. To complete the process of globalization, there is a need to introduce an international single currency and to implement a uniform credit standard. Under current international institutional arrangements, the IMF has the capability to undertake this function. A revamped IMF may embrace those aspects suggested by Keynes (1980) in his International Clearing Bank (ICB) proposals for the post–World War II international financial order; also, and more recently, Davidson (1992–93; 2002; see, also 2003) has put forward similar proposals that build on Keynes (1980), for the creation of an International Clearing Union (ICU).

Keynes's ICB proposes the establishment of a supranational central bank, with its own currency—bancor—the value of which would be defined with respect to gold. Each country would fix its currency in terms of the bancor with margins of fluctuation allowed. The bancor would be accepted as equivalent to gold by members who would agree to accept the transfer of the bancor through the ICB in settling international balances. The bancor would be used only for clearing purposes among countries, and the Union would be entirely responsible for the accounting of the whole system. Countries could only buy the bancor from the Union; they could not sell them for gold. The bancor reserves could never leave the system, so any possibility of a run on the bancor is eliminated. Each member's quota of the bancor, allocated according to their previous levels of imports and exports and envisaged to be variable by agreement, would supplement its reserves, and the Union could make overdraft facilities available. Countries would be charged with interest when their holdings of the bancor deviated from zero in either direction, so that an incentive is introduced for both surplus and deficit countries to seek adjustment.

Surplus countries, which would have credit in their accounts with the Union, should consult with the governing body on the best measures to

be implemented by them to alleviate the imbalance, including revaluation of their currencies, if their credit with the Union exceeded half of their quotas. A credit balance unused for a certain period of time would be canceled automatically. A deficit country with debit that exceeded a quarter of its quota could implement, without permission from the Union, a “once-for-all” reduction of 5 percent in the value of its currency. If the deficit continued and grew to half its quota, the Union could enforce devaluation of a magnitude it saw necessary. Creditor countries would be under no similar direct compulsion to revalue their currencies, so that even in this plan, deficit countries surrendered control over their own exchange rates.

Keynes recommended two additional institutions: the Board for International Investment (BII) aimed at ascertaining investment needs and their financing across countries, and the International Economics Board (IEB) to maintain price stability and control of the trade cycle. It is expected that financial globalization can bring allocative efficiency to the financial sector. To the extent that it did not, and the chances are that it would not, then the need for BII and IEB agencies becomes important.

Davidson’s (1992–93; 2002) proposal is very much in the spirit of Keynes, but without the requirement of an international central bank. Davidson argues for an international institutional agreement that “does not require surrendering national control of local banking systems and fiscal policies” (1992–93, p. 158). He envisages a “double-entry book-keeping clearing institution” with an ICU, essentially deposits of the central banks with the Union. The ICU is to be used as a unit of account and reserve asset for international liquidity, which is to be held only by central banks. This would be the only reserve asset for international financial transactions with guaranteed one-way convertibility, from international money to domestic money, in which case, “there can be no draining of reserves from the system” (*ibid.*, p. 158). Overdraft facilities with the specific aim to utilize short-term unused credit balances would be made available. The exchange rate between national currencies and the ICU is left to each nation, at least initially. Although a fixed exchange rate system is envisaged, changes in parities are allowed to reflect permanent changes in unit labor cost and current account deficits at full employment. Changes in the exchange rates should take place gradually and at stipulated magnitudes per period. If the deficit nation is a poor country, the suggestion is for a transfer from the richer surplus countries of some of their excess credit balances to the debtor nations. In any case, creditor countries that accumulate unused ICU reserves would lose them, so that an incentive to stimulate these economies is

introduced. Although Keynes's and Davidson's proposals entail some differences, it is clear that both of them represent examples of the type of international financial arrangements required to complete financial globalization.

Summary and conclusions

We have argued in this paper that we are still a long way from true financial globalization. Achieving true financial globalization would require a global financial institution that can play a central coordinating and regulatory role. An international single currency, which does not depend on any national currency, is also a closely related requirement. We have put forward the essentials of a system that is necessary for a true financial globalization. This system is based on Keynes's (1980) "clearing union" proposal as further elaborated and extended by Davidson (2002; 2003). We may finally raise the issue of the difficulties of creating a supranational central bank that is politically acceptable. This is a serious problem that imposes severe constraints on the feasibility of creating the institutions we have referred to above. Ultimately, it may very well be that, under current circumstances, true financial globalization can at best remain only an academic exercise.

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