The Ongoing Weakening of the International Financial System *

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1. Introduction

Putting aside the perceptive work of Triffin (1961) and Kindleberger (1986), the question of the role of a dominant financial power or hegemon as a buttress to the resilience of the international financial system has not been given the analytic attention which it merits.[1] The presentation of the White Plan at Bretton Woods amounted to a commitment by the United States to accept the role of financial leader: the undertaking was made largely on the basis of self-interest although the underlying analysis explicitly recognized the need for capital exports and unilateral transfers to be made by the United States (Acheson 1944, Gray 1996).

The decline in the ability of the United States to play the hegemon was first noted by Triffin (1961, p. 63) who concluded that the decline in the (positive) net reserve position of the United States in the late 1950s "could not continue indefinitely without ultimately undermining foreigners' confidence in the dollar as a safe medium for

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[1] Because Kindleberger (1988, pp. 153-159) finds overtones of bullying in "hegemon" he prefers "leader". The political meaning of "hegemon" implies tribute but in terms of a leader of the international financial system, the "hegemon" supplies international public goods and is therefore a contributor. In this paper, the words are used interchangeably.

As is made clear below, some discipline may need to be exerted on the follower nations if the leader is not to be so weakened by carrying out its hegemonic duties as to lose its effectiveness. Also see Stoga (1986).

reserve accumulation". Over recent years, under a system of flexible rates of exchange, the chronic current account deficit of the United States (and its financing through an increase in *net* financial liabilities to foreigners) has averaged almost $ 100 billion per annum (see Table 1). The chronic deficit has gravely weakened the ability of the United States to act as hegemon and, with it, the ability of the international financial system to withstand a major (exogenous or endogenous) shock without a financial crisis resulting in a substantial loss of value of financial assets.[2] This paper argues that the international financial system stands in serious need of being recast to allow for the potential vulnerability of the key currency.

Mainstream economic analysis has tended to assume that a first-best system of international finance is possible: such a system would normally be viewed in terms of global allocative efficiency and would, therefore, allow for the perfect freedom of capital movements as well as of free trade in goods and services. Recognition that allocative efficiency may not be compatible with adequate financial stability efficiency (Gray and Gray 1981) and the growing possibility of financial crisis contributes to three related policy problems.

1. The need to force recognition of the dangers for the international financial system inherent in large chronic US current deficits and the corresponding surpluses – particularly if the deficits are financed by easily-encashable liabilities.

2. The need to enable the system to avoid crisis until a new one can be put in place.

3. The devising of the new system and effecting the change-over. The new system will also be forced to acknowledge interdependence between the strength of the hegemon (the inherent stability efficiency of the international financial system) and the degree to which financial capital movements can proceed unhindered.

The international financial system has always been much less susceptible to serious malfunction (more robust) when there existed a financial superpower playing the role of hegemon and supplying international public goods.[3] The United Kingdom filled this role in

[2] Such a crisis will be likely to generate a severe decrease in the prices of real assets as well (Gray 1992).

[3] For a historical account of the success of hegemonic systems see Eichengreen (1989).

TABLE 1

CUMULATIVE CURRENT BALANCES, 1982-1993[a]
(billions of US dollars)

Country	Cumulative surplus (deficit = –)	Longest number consecutive years with same sign[b]	Cumulative balance as per cent of 1993 exports of goods & services
Australia	–123.8	12*	229
Belgium	+38.9	9*	27
Canada	–138.8	9*	86
France	–37.5	6[c]	13
Germany	+212.3	9[c]	49
Italy	–76.6	6[c]	34
Japan	+779.2	12*	193
Korea	+15.6	4	16
Netherlands	+78.0	12*	49
Sweden	–12.6	6	21
Taiwan	+130.1	12*	132
U.K.	–129.9	8*	56
U.S.A.	–1,147.0	12*	185

[a] These data must be viewed as orders of magnitude because statistical discrepancies (errors and omissions) can be substantial.

[b] An asterisk denotes that the longest consecutive sequence is unended in the last year for which data are available.

[c] France had a string of six deficits prior to two surpluses in 1992 and 1993; Germany had nine consecutive surpluses prior to two deficits in 1992 and 1993; Italy had six consecutive deficits prior to a surplus in 1993. These intra-EU phenomena are undoubtedly related to the realignment of exchange rates in 1992 and to the reunification of Germany.

Sources: International Monetary Fund, *International Financial Statistics* (various issues).
For Taiwan: *The Statistical Yearbook of the Republic of China 1994*, and International Commerce Bank of China *Economic Review*, Taipei, September/October, 1994.

the latter years of the XIX and the early part of the XX centuries and the United States was the unchallenged financial leader for the first twenty or so years after World War II.[4] Both were periods of remarkable global prosperity and increases in the volume of inter-

[4] The pre-World War I task of the United Kingdom was much more limited and, since it largely predated universal suffrage in democracies, much easier than the task of the United States after World War II. The commitment of the United Kingdom after 1920 was an example of noble and futile subordination of the national economy to recognition of the need for a hegemon.

national trade and investment.[5] The record of periods without a hegemon is much less enviable as the inter-war years show only too clearly. The worst of all possible worlds exists when a nation tries to play the hegemon without both adequate financial resources and the national commitment required for the task. This state of affairs has existed only when countries which have lost their earlier hegemonic capacity have failed to recognize the fact (Eichengreen 1989, p. 282): the United Kingdom in the 1920s and early 1930s is the obvious example. The current position of the United States could be considered to have the potential for a similar episode.

Section 2 of the paper provides a simple model of potential instability in asset markets and the role of the hegemon. Section 3 briefly shows how the existence of the hegemon simplifies the process of generating adequate global aggregate demand, i.e. in preventing balance-of-payments constraints from holding global aggregate demand at some unsatisfactorily low level;[6] Section 4 considers the dangers of a system without a hegemon. Section 5 draws some inferences with respect to what should be done given that no nation seems currently to be capable of playing the hegemon.[7]

[5] The higher rate of international trade and investment within currency unions (which might reasonably be termed partial hegemonic systems) is also evident – particularly so when the members of the union include nations of substantially different resource endowments (as an example, consider the Commonwealth and the sterling area). However, the Bretton Woods era was also a period of postwar recovery under a remarkably enlightened hegemon (cf. Schlesinger 1988).

[6] The question of what is "adequate" is imprecise and interesting. For one definition focusing on the ability of the developing nations to attain levels of output not severely constrained by the availability of foreign exchange, see Davidson (1991). The criterion here is less ambitious: it places primary emphasis on the avoidance of financial crisis and secondary emphasis on ensuring that adequate global aggregate demand is not frustrated by shortcomings (inadequate liquidity) in the international financial system. No international financial system will be able to ensure "global capacity output" unless there are adequate *creditworthy* borrowers or the necessary volume of unilateral transfers.

[7] Triffin (1987) referred to the present arrangements as a scandal rather than as a system.

2. A model of instability and hegemonic strength

Figure 1 shows excess demand for financial assets in a potentially unstable financial market and defines the potential for downward instability (stability inefficiency) in terms of two measures: *a* and *b*.[8] The robustness of a financial market, the magnitude of shock which it can resist without entering into a self-reinforcing downward spiral, is measured horizontally by *a*. The size of *a* depends upon the expectations of the actors in the market, the degree to which they can finance their (leveraged) positions in the face of a fall in asset values and their confidence in the ability of the central bank or hegemon to infuse liquidity into the system. Confidence in the potential successful intervention by a lender of last resort can be expected to increase *a* as can protracted recent experience of tranquillity (Tversky and Kahneman 1982): the greater the financial leverage of positions in the market (allowing for any hedging positions taken in derivative markets), the greater is the risk of an endogenous shock caused by a sharp change in confidence and the smaller will be *a*.[9] The market will be unstable if the magnitude of the shock, endogenous or exogenous, exceeds *a* (shifts the excess demand curve to the left by an amount greater than *a*).

More important is the size of *b* which measures the potential fall in asset prices (the distance between the multiple equilibria) in the event that asset holders should try to reduce their positions. This process is self-reinforcing through the effect of falling prices on the confidence of other asset holders and through the greater difficulty of financing levered positions as asset prices decline. While the central bank or hegemon could try to counter a deflationary spiral, it would require a much greater infusion of reserves than restoring confidence *ex ante* and increasing the size of *a*.

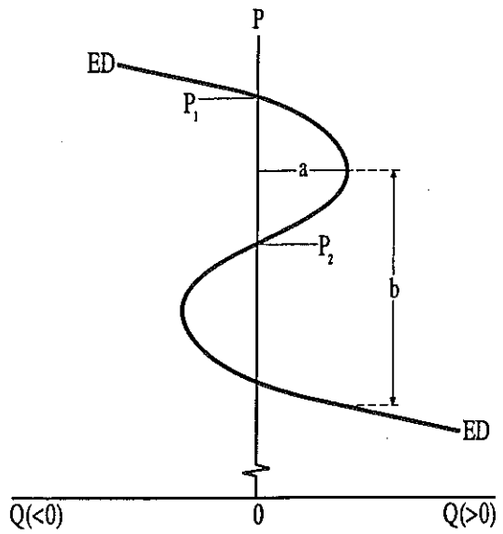
This simple model can be applied to the market for financial assets in a single country, to the international position of a single

[8] The figure derives from Hicks's classic S-curve diagram of instability in a goods market and defines stability in the usual way, i.e. that an increase in price will decrease excess demand (Hicks 1946, p. 65). In a market for assets, current supply can be neglected and the analysis conducted in terms of a given stock of assets. The detail of the model, including the role of interdependent markets, is given in Gray (1992).

[9] Longer duration of adverse conditions will increase the possibility that hedging contracts will expire during a period of lower prices so that the original hedge cannot be renewed.

FIGURE 1

DOWNWARD INSTABILITY IN AN ASSET MARKET



country or to the global economy. The role of the central bank/hegemon is to ensure that confidence never wanes to the point of significant vulnerability, through regulations which prevent overleveraging by asset holders and, more particularly, by financial intermediaries and that reserves are adequate to prevent any crisis from leading to a serious decline in asset values. Regulatory effectiveness aside, the central bank/hegemon needs to be able to infuse reserves into the financial system at a time of need. The international financial system is more vulnerable to crisis than national systems because an adverse shock can be triggered by political strains and/or by a flight from a national currency and because an inadequate hegemon may not be able to infuse *liquidity into the system in the form of the appropriate currencies*.[10]

Ideally, the hegemon will ensure that a satisfactory international payments system exists, that international financial factors do not impede the smooth working of the constituent economies, and that international investments are guarded against systematic default. In

[10] Strictly, infusing a currency that is not in excess demand into a system is counterproductive and does *not* add liquidity.

other words, the private financial system of the hegemon acts as banker and maker of financial markets to the world. Its central bank and treasury act as central banker to the world as supplier of liquidity both directly to foreign governments and indirectly through its own private financial system as well as ensuring that (its own) financial firms are sufficiently disciplined to avoid putting strain on the international system.

Many would identify the existence of a hegemonic power with the prevalence of a (gold-standard) regime of fixed rates of exchange and free movement of capital. Such a system is a feasible but not inevitable feature of a well-ordered hegemonic system. A gold-standard regime can flourish because the hegemon has the financial and political strength to meet all runs into and out of its currency without sacrificing acceptable levels of domestic performance.[11] By assuming a position of financial dominance, the hegemon has effectively transformed its national currency into a global (reserve) currency (and its national financial market into a global financial centre). Together with non-resident convertibility (at least), a fixed-rate regime allowed for as large a volume of trade as extant commercial policies and information systems permitted. Since both the United Kingdom and the United States (Acheson 1944) were convinced about the desirability of free trade, free and open trade received strong support during the major hegemonic regimes. A fixed-rate regime also provided countries with deficits on current account with the privilege of borrowing foreign exchange as needed for such projects and purposes as would pass the credit standards of the hegemon's financial institutions.[12] These are all conditions conducive to global prosperity and, as long as the hegemon and its currency remained above suspicion, the international financial system

[11] "Acceptable" is a more demanding concept in democracies in a time of universal suffrage.

[12] Capital movements are traditionally thought of as involving borrowing by deficit nations for long-run investments (project financing) or for short-run balance-of-payments needs. Capital flight and portfolio investment in financial instruments also gave rise to capital movements where they were permitted (or accomplished). Since World War II, the development of the multinational corporation (MNC) has resulted in large amounts of funds being transferred abroad at the instigation of domestic firms. These decisions require approval by the financial institutions of the capital-exporting countries only if the MNCs finance their ventures by raising funds in the home-country financial markets. Generally, MNC assets owned abroad are illiquid and are unlikely to instigate financial instability.

was stable in the sense that the likelihood of a general financial crisis was extremely remote. Call a hegemon operating successfully in a fixed-rate system, a "dominant hegemon".[13]

There is no reason why some flexibility of the exchange rate of the hegemon's currency should not be used to ease the economic burdens of hegemony,[14] except that such flexibility increases the possibility of massive international flows of capital.[15] Call a hegemon operating under these conditions, a "weak hegemon". Under a fixed rate regime, a shift in the net barter terms of trade requires changes in relative price levels in local currencies:[16] in economies in which there is resistance to inflation and downward price-stickiness, adjustment to changes in the terms of trade under fixed rates of exchange are likely to engender severe costs of adjustment. These costs may be expected to increase exponentially with the magnitude of the required adjustment. A hegemon serves a major global function if it is able to play a shock-absorbing role so that adjustment in patterns of international trade and investment can proceed without violent swings in (real) rates of exchange. In other words, there exist conditions where "moderated exchange rate variability" would be a feature of a hegemonic system and would be far less costly than a simple laissez-faire regime of freely-flexible exchange rates. A "weak hegemon" should have or control large reserves and impose an active interest rate policy on its own financial markets designed to ensure that no major withdrawal of funds took place in the event of a possible weakening of the hegemonic currency. The need for this set of policies would be reduced as the freedom of international financial transactions was reduced in the light of the need to sustain the hegemon. This requirement is different only in degree from the costs imposed on a dominant hegemon.

[13] The downfall of the Bretton Woods system was adumbrated by the massive outflow of foreign direct investment by MNCs and by the reduction of the United States' technological lead (probably the balance-of-payments strains caused by the Vietnam war were the trigger mechanism). The large role played by MNCs in the modern world would seem to make the role of "dominant hegemon" almost impossible to sustain.

[14] One colleague stressed the benefits of being hegemon that allow the hegemon to finance balance of payments deficits without adjustment for a longer period of time. This point is valid if (and only if) the deficits are naturally self-correcting: in the absence of such self-correction, the deficits can cumulate over many years and plunge the hegemon into being the world's greatest debtor (see below).

However, the inevitable exposure to capital flight also constrains domestic policies which may be desirable (Keynes 1933, p. 757).

[15] Such a feature may be a prerequisite for future hegemonic systems given the seeming impossibility of achieving relative price stability when national economies are working at or near full capacity. This would require the hegemon to endure real interest rate constraints on its own domestic performance.

[16] Present-day advocates of fixed exchange rates essentially assume the existence of some hegemonic central bank and advocate international co-operation of macroeconomic policies to keep strains to a minimum.

Crucial to the success of the hegemonic system was the ability of the hegemon to both bear the required burdens and, in democracies, to maintain the necessary political support. The burden borne by the economy of the hegemon was rewarded almost wholly in the "glory of the role" – a glory shared by a relatively small *élite* of high-level civil servants and politicians and by bankers. The costs of constraints on domestic economy activity caused by higher real rates of interest would be felt throughout the nation and primarily by marginal members of the electorate.

3. Global aggregate demand

While the level of aggregate demand for the world as a whole has always been an important determinant of national rates of output, it has become increasingly important with the spectacular increases in the level of international trade and investment (globalization) and, particularly in recent years, in the increases in the level of cumulative trade imbalances (see Table 1). An efficient international financial system improves both the level of global aggregate demand and global allocative efficiency.

In terms of aggregate demand, the hegemon acts (more-or-less) passively as the n^{th} country offsetting the sum of the aggregate demand targets of the other $(n - 1)$ countries. This role as the n^{th} country is most easily seen with the aid of a set of Keynesian equations for a multi-country world. Just as in any simple Keynesian model, the equilibrium level of world output, Y_n, is equal to the sum of spending on consumption (C), investment (I), government expenditure on goods and services (G), and current surplus or net exports ($X - M$) in each nation

$$(1) \qquad Y_n = \Sigma C_i + \Sigma I_i + \Sigma G_i + \Sigma (X_i - M_i) \quad (i = 1,2, \ldots, n)$$

Because of the symmetric activities of exporting and importing:

(2) $$\Sigma(X_i - M_i) \equiv 0$$

Global aggregate demand then comprises:

(3) $$Y_n = \Sigma Y_i = \Sigma I_i + \Sigma I_i + \Sigma G_i$$

Global income or output is the sum of aggregate demand in the n economies.[17]

What is important is the role of current surpluses, $(X - M)$, in the distribution of global aggregate demand since this is a source of effective aggregate demand and potential instability not usually considered. The mechanics of this system are fairly straightforward. Any surplus on current account serves to transfer saving (potential additional absorption) from the surplus nation to the deficit nation: it allows the deficit nation to increase its absorption beyond what would be possible in an economy with balanced current account and the same level of global economic activity. This transfer mechanism will enhance global aggregate demand if the surplus country would have produced less if its current surplus were not available, and will, if the transfer is not a simple unilateral transaction (gift), increase the international net worth of the surplus nation *vis-à-vis* foreigners. At the same time, a current deficit will reduce international net worth (INW) (Gray 1974, pp. 46-49).[18]

International investment and saving play a positive allocative role in the global economy by allowing saving in one country to be transferred to another in which real rates of return to investment are perceived to be higher. The transfer of aggregate demand among nations does not necessarily increase global saving and global investment; it merely redistributes a global amount of saving among nations. The nations that generate saving increase their total net worths by capital formation at home and international investment abroad. This international investment may be either real or financial.[19]

[17] This is, of course, what global income would be in a world of balanced current accounts.

[18] It is possible, and relevant to the current U.S. position, that a hegemon could acquire official and private claims against residents of debtor/deficit countries and have liabilities to residents of creditor/surplus nations so that its foreign exchange reserves will exaggerate its capability to deal with a run on its currency.

[19] This differs from analyses of closed economies in which the acquisition of financial assets does not constitute aggregate investment. While the lender invests internationally by the acquisition of either real or financial assets, there is no guarantee that the funds received will be spent wholly on investment.

The social value of a surplus or deficit depends upon the level of actual Y_n. This question hinges, in turn, on the level of planned expenditures that may be taken as representing target variables in the standard Tinbergian framework (1970). Target values on current account may be denoted with an asterisk and there is no reason to suppose that these targets, independently arrived at, should obey:

(4) $$\Sigma(X - M)_i^* = 0$$

If the sum of planned current surpluses and deficits does not equal zero, the international system must adjust and new values of targets must be accepted.[20] There is every reason to expect that the sum of world targets will be positive. If the sum of the current account targets is positive, then countries will take steps to try and achieve their individual targets as nearly as possible. Subordination of trade policies to the achievement of national macroeconomic targets implies (covert) increases in established levels of impediments to international trade and the global economy will allocate resources less efficiently (Robinson 1966).[21]

The world economy will be expected to work most efficiently when macroeconomic targets do not impede the efficiency of the international economy, that is, when the sum of current targets is equal to zero.[22] This happy state of affairs is most likely to be achieved when there is a hegemon that will play the role of the n^{th} country setting its current-account target (or its tolerance) at the opposite of the sum of the current targets of the other n–1 countries. The hegemon must ensure that the n–1 countries collectively do not impose excessive social costs on it (Stoga 1986) and it must subordinate its own economic performance to its international role: failing

[20] Note that entrepreneurs in some countries might be willing to spend on absorption but are not considered creditworthy by bankers in surplus nations. The hegemon can do nothing to correct this unless it is willing to provide unilateral transfers (foreign aid) as a means of increasing global aggregate demand. Unless there is a combined effort by the major nations, the aid giver will probably suffer a diminution of INW and a part of the aid will, in effect, be financed by accepting financial liabilities from countries which achieve positive net exports as a result of the hegemon's aid payments.

[21] A current surplus is likely to aid the nation's firms in maintaining their international competitiveness by virtue of the profits derived from a more favorable rate of exchange for the national currency than would be incurred with balanced current account (Milberg and Gray 1992).

[22] Most countries have a range of targets for the current balance so that if the sum of the expressed targets is positive, the inefficiencies will arise only when the sum of the minimum acceptable targets is positive.

such acts, it weakens its capacity to continue to be an effective hegemon.[23] Since 1982, the global level of economic activity has been fueled by having the United States serve as global locomotive by running major current international deficits and by financing them with liabilities to foreigners incurred largely by the private financial system (Table 2). Eliminating the US current deficit would, in the absence of expansion by the chronic surplus countries, be likely to throw the global economy into recession even without severe shifts in rates of exchange and to reduce stability efficiency.

4. The hegemon as a creator of international public goods

To function efficiently in a world beset by shocks and rapid change, a financial system must either have some innate characteristics which allow it to absorb and survive exogenous shocks (robustness) or it must devote resources to the creation of capacity for shock absorption (increasing *a*). Such stability-enhancing measures are public goods (Cooper 1977). Their provision in an internationally-integrated financial system is facilitated by the existence of a hegemon.[24] The desirable amount of stability-enhancing public goods is likely to increase when:

1. major financial firms make serious errors of judgement (incur losses) so that the financial system becomes more prone to insolvency, contagion and crisis as the capital adequacy of its intermediaries is eroded;

2. technological innovations increase the interdependence among financial markets of different nations so that the possibility of rapid movement of assets among national currencies exists with the

[23] This was clearly what the United States has been unable to do. This stress began in the early 1960s with the Kennedy expansion and, far more seriously, with its involvement in Vietnam. Here the roles of world policeman and financial hegemon were in conflict and one had to be renounced or sacrificed (Gray 1996).

[24] This section draws deeply on Section V of Kindleberger (1986). The leader may, of course, simply supply the public goods but such a posture would increase the domestic cost of leadership and would increase the probability that the hegemon would ultimately lose its ability to sustain the burden. Stoga (1986) argues that imposing conditions is a legitimate tactic for the hegemon: decisions to create public goods can be imposed by, for example, discriminatory commercial policy enforced against chronically surplus nations in times of a large net surplus in equation (4). This possibility echoes the "scarce-currency" clause (Article VII) of the International Monetary Fund (see Tew, 1958, p. 92).

TABLE 2

US INTERNATIONAL NET WORTH
(with direct investments at current cost)[a]
($ billions at end of year)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994[d]
INW (end of prior year)	+378.9	+363.0	+231.4	+132.8	+45.0	−11.1	−134.5	−250.3	−251.1	−355.1	−515.7	−545.3
Current account balance	−44.0	−99.0	−124.2	−150.9	−166.3	−127.1	−106.3	−92.1	−7.4	−62.4	−100.0	−151.2
Statistical Discrepancy[b]	+22.2	+21.3	+23.0	+31.2	−4.0	+55.5	+3.9	+32.6	+2.6	+62.5	36.0	−14.3
Total Adjustments[c]	+5.9	−53.9	+2.6	+31.9	+144.2	−51.8	−13.4	+58.7	−99.2	−160.7	34.4	+30.0
INW at end of year	+363.0	+231.4	+132.8	+45.0	−11.1	−134.5	−250.3	−251.1	−355.1	−515.7	−545.3	−680.8
Memorandum												
With direct investments at market value	+292.1	+172.9	+135.8	+136.4	+71.3	+14.8	−77.1	−211.7	−349.0	−570.6	−453.9	−584.0

[a] Gold is valued at year end market price (see fn. 7 above). INW at market valuations are given in the memorandum. For details, see sources.
[b] When positive, the "statistical discrepancy" shows "unexplained credits". Clearly, incomplete data tend to reduce the reduction in INW.
[c] This number includes value changes of both real and financial assets as well as net capital flows.
[d] Preliminary.

Sources: *Survey of Current Business*, 75, June, 1995, pp. 60, 70 and 85: for details on the argument for the use of current and market costs see Landefeld and Lawson (1991) and Scholl (1991).

likelihood of violent fluctuations in asset prices in the currency suffering net withdrawals and of potentially widespread insolvencies;

3. the key-currency nation has a very high ratio of foreign-owned easily-encashable debt-to-reserves so that a flight from its currency could be triggered by asset holders concerned with the value of their dollar-denominated assets in their home-country (functional) currency.

New technologies for the movement of funds among assets (and currencies) and the larger indebtedness of the financial intermediaries of the hegemon increase both *a* and *b*.

In practice, the existence of a dominant hegemon eliminates much of the need for concern with the supply of public goods. The hegemon will supervise its own private financial system so as to ensure the absence of any chronic weakness. Most important, there is no need for concern about the ability of the hegemon's central bank having the capacity to provide sufficient liquidity, since liquidity is defined in terms of the hegemon's own currency.

A weak hegemon does not inspire the same degree of confidence on the part of depositors, and can only effectively play the n^{th} country in the macroeconomic sense at the cost of weakening its own hegemonic capability. Stability-enhancing public goods are very necessary and become the more necessary the weaker is the hegemon's capability to withstand adverse shock. If the trigger of crisis is flight from the hegemon's currency, then the hegemon cannot, by itself, supply liquidity to the system since it can only supply its own currency which is already in severe excess supply (greatly enhancing *b*).

When there is no effective national hegemon, the services which are provided by the hegemon must be jointly provided after agreement has been reached by the major nations: in other words, the hegemon becomes a committee or a substitute hegemon.[25] The basic

[25] A non-hegemonic system could approach the political scientists' concept of a "regime" which suggests that established institutions and rules of procedure will allow players to act conjointly to address issues of joint concern. For an assessment of the ability of a regime to substitute for a hegemon, see Kindleberger (1988, pp. 153-159). A committee hegemon comprising a small number of important nations, say Europe (Germany), Japan and the United States would be more effective but there is a substantial risk that the relations among committee members would be inconstant and might deteriorate sharply in time of crisis or, indeed, the crisis might be attributable to (the perception of) severe tension among the members of the committee hegemon.

problems in the provision of stability-enhancing public goods in a committee-hegemonic system are:

1. the unwillingness of national authorities to *buy insurance* against instability by incurring a known and present (social or political) cost rather than to risk exposure to a crisis which has a low perceived probability in the short run;

2. the failure of the potential beneficiaries to recognize their stake in the stability of the financial system;

3. the free rider problem (where nations seek to benefit from measures designed to enhance systemic robustness without contributing to the ongoing cost);

4. the need for international negotiators (the political party in power) to be seen to have protected the interests of their constituents (the international competitive interests of domestic pressure groups).

When there is a hegemon-by-committee, the dangers lie in the difficulty of achieving full co-operation and agreement among the members of the committee since (representatives of the) members can run foul of the problems listed above. The need for stability-enhancing public goods increases with the turbulence of the international financial system and its fragility. By any count, both are sufficiently great in the mid-1990s to warrant concern (Schlesinger 1988).

Given the possibility of friction among members of the Committee in a time of stress, the arrangements need to be well-defined *ex ante* so that the system becomes a "regime"[26] and the supply of public goods is instituted without needing clearance by politicians. The difficulty lies in negotiating such a "regime" and in keeping it up-to-date in terms of technological developments.

To supply stability-enhancing measures to the degree that the marginal cost of supply of such goods is less than or equal to the expected (negative) net present value of the malfunction is simply an example of the principle of insurance against risk. The supply of such goods requires a certain, small expenditure at the present against a low-probability event with very large value losses, i.e. certain renunciation of "own" (individual or group) current interests for future and uncertain "collective" benefits. Kunreuther *et al.* (1978) show that

[26] See the preceding footnote.

private insurance decisions tend to be nonrational as the perceived probability of the event decreases.[27] In a world in which collective action is seen to tend not to be least-cost efficient, a bias against insurance activities of this kind is to be expected.

The need for a "regime" can be seen as emanating from two non-exclusive possibilities. First, the erstwhile hegemon does not recognize its loss of capability. Unfortunately, there is no undeniable demarcation of loss of the capacity to play the weak hegemon except actual or impeding crisis and the loss of the financial advantage of having national indebtedness denominated in home currency may make the hegemon unwilling to recognize its weaknesses. Second, the other major financial powers do not perceive the danger of crisis that the lack of a hegemon presents and are prepared to let the erstwhile hegemon continue playing the role as if it possessed the necessary financial strength. In other words, all nations suffer from "disaster myopia" (in context, a chronic tendency to underestimate the probability of malfunction) and do not sufficiently value stability-enhancing public goods. There is an assumption of pervasive stability. The problem may also be enhanced by a failure to recognize that stability-efficiency enhancing measures cannot be quickly put in place nor can they be made to take effect quickly unless they are already in place and not liable to disruption as a result of short-run political tensions.

The free rider problem exists when a person subject to the risk does not subscribe to the insurance premium because he or she believes that the rest of the people at risk will collectively pay the necessary premium. Often stability-enhancement involves tighter and more even-handed regulation of national firms: countries which have allowed their financial firms to sail closer to the wind will find that these firms will lose competitive advantage. This presents severe difficulties for political representatives at international conferences.

There can exist, then, serious difficulties in ensuring the provision of adequate stability-efficiency under a committee-type hegemon despite the fact that it is in the best interest of all for the hegemon to exist. The willingness to confront the needs of the system is likely to be generated only when the possibility of crisis is seen as large enough that delay in taking preventative steps is impossible.

[27] See Tversky and Kahneman (1982) and Simon (1978).

5. Implication of the new system

If there is no nation able and willing to be financial leader of the world, then international co-operation is mandated. Neither Germany nor Japan is able to act as bulwark to the system.[28] The United States cannot continue indefinitely as weak hegemon when it is increasing its *net* international liabilities by about $ 100 billion a year (Table 2) and its gross easily-encashable liabilities to private foreigners at a slightly faster rate (Table 3).[29]

The Cooke or Basle Committee of the G-10 countries (plus Switzerland and Luxembourg) under the auspices of the Bank for International Settlements has made progress in generating agreement among central banks on capital adequacy and responsibility for insolvencies of banks and banks' foreign subsidiaries.[30] But the Committee is not authorized to address the question of macroeconomic co-operation, including the functioning of the lender of last resort when the loans must be made in currencies other than the key currency and certainly not to address the problem of how to replace the US dollar and the private financial US markets as the key ingredients in the existing system.

It is probable that the absence of a dominant or even a weak hegemon curtails the way in which the international financial system must be defined. For example, a committee-type hegemonic system may not be compatible with perfect freedom of capital movements, simply because the committee-type system is likely to prove less robust that a dominant hegemon. The question then becomes one of

[28] Germany can be seen as being too preoccupied with the adoption of a common currency within the European Union, which will require a period of experience before the ecu could become the global currency. For the cultural handicaps which preclude the Japanese playing the role of hegemon, see Murphy (1989). It would be possible to attribute the failure of the United States to maintain its hegemonic capability to fulfilling its role of hegemon without perceiving the way in which the task and its other two leadership roles sapped its capability (Gray 1996).

[29] It is the magnitude of the easily encashable liabilities rather than the annual deterioration in international net worth which is at the heart of the problem: the United States can shoulder the burden of the interest on the debt (Godley 1995). Approximately half of the liabilities to foreigners are liabilities of commercial banks: sudden withdrawal of such deposits could endanger the solvency of those banks (although the too-big-to-fail policy could transmit the shock from individual banks to the US Treasury).

[30] The issues raised in this paragraph are developed in much greater detail in Gray and Gray (1992).

the trade-off between the degree to which the individual nations are willing to forego ostensibly desirable international financial mobility and their willingness to put a strong system in place and submit to (and have faith in) the joint discipline.[31] Under the existing circumstances, when the major threat to financial stability is a massive flight from what is seen as the key currency, the key-currency nation cannot supply liquidity to the global financial system: i.e. it cannot play the role of international lender of last resort.[32]

Even a weak hegemonic system requires that the hegemon be able to supply liquidity in terms of its own (the desired) currency. Under a committee-hegemon, provision must be made for huge lines of credit to be extended by nations (central banks) to any major nation suffering a run on its currency. In Kindleberger's terms (1986, p. 8), there must be a source of supply in acute shortage and the maintenance of open markets in a glut.

To preserve the existing system, pending evolution of a committee-type regime, it is necessary to fund the easily-encashable private dollar-denominated debt. This can be done by arranging lines of credit for the US Treasury, the lines to be denominated in the lender's currency, so that in the event of a flight from (run on) the dollar, an international lender of last resort is effectively in place. As noted, these arrangements cannot be made at the time of crisis when creditor central banks, even with the greatest perception of their proper role, might be impeded by local politicians from playing that role. Restrictions on the convertibility of dollars cannot be instituted, if at all, until the existing system is replaced.[33]

If the new system, as must be expected, retains reliance on national currencies, provision must be made to ensure the absence of global financial crisis with all of the real implications of such a mishap

[31] The new argument against perfect freedom of movement of financial capital, which is compatible with the argument of this paper, is presented by Wallace (1990). The idea that international movements of private financial capital need to be restricted in the interests of the viability of the international financial system is compatible with the trade-off between allocative efficiency and stability efficiency developed in Gray and Gray (1981).

[32] There is an ominous comparison with the inter-war period when the two nations with ample reserves, France and the United States, were not disposed to play the international lender of last resort.

[33] Tobin's (1978) proposal would be more effective in countering a speculative crisis if the tax-rate could be increased by the central bank suffering from currency flight. This possibility would be likely to reduce the willingness of foreigners to finance an overvalued currency. Also see Davidson (1995).

TABLE 3

OUTSTANDING FINANCIAL ASSETS OF NON-AMERICANS IN US FINANCIAL MARKETS
(End of year data in billions of US dollars)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994[p]
Official assets	194.5	199.7	202.5	241.2	283.1	322.0	341.9	375.4	401.7	442.7	516.7	545.3
Private assets	487.7	580.2	737.3	927.2	1,051.6	1,221.4	1,451.9	1,474.9	1,593.2	1,716.6	1,866.4	2,032.8
US Treasury securities	33.9	62.1	88.0	96.1	82.6	100.9	166.5	162.4	189.5	224.8	253.3	265.6
Other bonds	17.5	32.4	82.3	140.9	166.1	191.3	231.7	245.7	287.3	319.9	392.1	417.8
Stocks	96.4	96.1	125.6	168.9	175.6	201.0	251.2	221.7	271.9	300.2	340.0	337.9
Liabilities of non-bank concerns	61.7	77.4	87.0	90.7	110.2	144.5	167.1	213.4	208.9	220.7	229.0	225.1
Liabilities of bank	278.3	312.2	354.5	430.6	517.2	583.7	635.2	631.6	636.6	651.3	671.9	786.3

p = preliminary.
Source: Survey of Current Business, June, 1995, p. 60.

(Gray 1990). This requires that nations recognize the needs of such a system if it is to be stable. The possibility that a laissez-faire world is capable of instability, must be countenanced and the possibility of some sort of impediment to international movements of private financial capital must be considered. The existence of an international lender of last resort now becomes a committee-type operation in which something like long-term swap agreements under pre-specified conditions will be in place.

6. Conclusion

The global financial system is prone to crisis, largely because of the possibility of violent shifts of funds among national currencies with correspondingly large movements of exchange rates.[34] Such wide swings in exchange rates and the accompanying financial transactions could cause a collapse of prices in dollar-denominated financial assets in US financial markets to the detriment of the prosperity of the global economy. It is not possible to revert to a hegemonic system – even a weak one – and a committee hegemon must be created. In this process, it is necessary to define the freedom of international financial activity in terms of the capability of the new system to preserve stability and viability.

[34] Such stress could originate as a result of political disagreement or widespread fear of rupture of commercial arrangements as well as a result of straightforward financial strains. It could be argued that the United States has, by virtue of its indebtedness, lost its freedom of commercial policy action with the creditor nations because a hard line would invoke panic withdrawals of funds.

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