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A PACIFIC CURRENCY AREA : A NEW APPROACH TO INTERNATIONAL MONETARY REFORM

By KIYOSHI KOJIMA*

I. *International Monetary Problems*

As important world traders, Pacific countries were greatly disturbed by the series of international monetary manoeuvres—devaluation of sterling on 18th November 1967, the gold-rush following British devaluation and its impact on confidence in the dollar, dollar defence measures, the introduction of a two-tier gold price system, rumours about the re-arrangement of European exchange rates—that occurred during the late 'sixties. These manoeuvres warned of the precariousness of international economic and financial co-operation within the framework of the International Monetary Fund and General Agreement on Tariffs and Trade, and pointed to the need for tighter international monetary and economic integration. The contribution that a Pacific Free Trade Area and Pacific Currency Area might make to the promotion of world trade liberalisation and international monetary reform should be examined with this background in mind.

In the last twenty five years, much attention has been paid to the need for increasing international liquidity on a global basis in order to sustain rapid expansion in world trade without excessive inflation. Basically, the gold-exchange system has functioned over the years on the premise that the United States Treasury would honour its promises to buy gold from, and sell gold to, official monetary institutions in other countries at the official price (\$US35 per ounce of pure gold) and has allowed the creation of additional international liquidity in so far as other countries accepted the dollar, a national currency, as a means for international transactions. However, as dollar holdings in other countries (\$US 15.7 billions with official monetary institutions in 1967) surpassed United States' gold reserves (\$US 12.1 billions in the same year), confidence in the dollar dwindled. The United States was forced to reduce the deficit in her balance of payments, and thereby, the creation of international liquidity through the availability of dollar reserves has been curtailed. The position in which the dollar now stands in relation to the international monetary system had an exact parallel in the case of sterling.

The International Monetary Fund has operated to create international liquidity too. Liquidity available through the IMF is based upon the gold tranche which constitutes one quarter of each member's quota allocation. The creation of international liquidity by the Fund was, however, limited by the size of members quotas, which are fixed institutionally, and the regulations governing their use. Thus, total quotas have been increased from time to time and regulations governing drawings have been gradually softened.

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In addition to these sources of liquidity, an impressive network of international credit arrangements, such as the General Agreement to Borrow, Roosa Bonds, the swap agreements between central banks and major commercial banks, has been developed partly in order to meet international monetary emergencies as they arose throughout the 'sixties.

Currently, considerable faith is being placed in the creation of new international liquidity through the introduction of IMF Special Drawing Rights. Seventy per cent of SDRs so created will constitute a net addition to international liquidity, since they will be usable without obligation for repayment, acceptable among members, and transferable internationally.¹ This new international liquidity, it is said, should act as a third kind of international currency.

A fundamental characteristic of these international monetary institutions is that they all aim to increase international liquidity, supplementing the slow growth of monetary gold, on a global basis. But because the liquidity they create ultimately depends on the backing of monetary gold held by the United States and the IMF, the importance of which is diluted by the very growth of these dollar reserves, sterling reserves and IMF drawings, important confidence problems have resulted.²

It is said that the creation of IMF Special Drawing Rights is a first step towards dethroning gold from its central position in the international monetary system. In this respect, the objection of the IMF reforms is similar to that of Triffin's scheme for the establishment of a world central bank.³ Increases in international liquidity have certainly been welcomed in the past, but significantly, only to the extent that such liquidity has been solidly backed by monetary gold holdings. When doubts about the strength of gold backing have arisen, monetary crises have occurred.⁴ The demand for gold backing merely reflects the lack of international monetary integration and a parallel lack of international solidarity. A successfully managed international currency system must be founded on co-operation in an international society among like-minded countries possessing considerable solidarity in their political and economic aims. In this context, the contribution of a regional approach to the solution of the international monetary problem, paralleling the regional approach to trade liberalisation, is worth examination.

Other roads to international monetary reform have been advocated. Some economists, for example, have stressed the importance of allowing exchange rates to fluctuate more freely. These proposals for more flexible exchange rates are essentially different in their approach to the international monetary problem from the proposals for a managed international currency system. First, they aim at eliminating or reducing the need for international liquidity and emphasise rapid balance of payments adjustment through exchange revaluations, thus turning the focus from liquidity problems to the adjustment problems. Second, they involve an atomistic approach in which every country engaged in foreign transactions copes independently with its own balance of payments difficulties, thus turning away from the global approach

¹ The best explanation of the SDR system is, so far as I am aware, in Fritz Machlup, *The Rio Agreement and Beyond, Remaking the International Monetary System*, CED Supplementary Paper No. 24, The Johns Hopkins Press, Baltimore, 1968.

² Warning of this was given by Robert Triffin, *Gold and the Dollar Crisis, The Future of Convertibility*, Yale University Press, 1960.

³ Robert Triffin, *ibid.*

⁴ If SDR's are created to the extent of \$US 2 billions annually, they will amount to \$US 10 billions in five years. This can be compared with about \$US 40 billions worth of monetary gold in the world or \$US 12.1 billions worth in the U.S.

implicit in the managed currency solution to liquidity problems.

Even if an exception is made of the extreme position taken by Friedman and Sohmen⁵ in their advocacy of freely fluctuating exchange rates, these proposals appear quite unrealistic and impracticable. If there were only a limited freeing of exchange rates and they were allowed to fluctuate within a wider band (say 5 per cent) than at present⁶ or a crawling (or sliding) peg⁷ allowing continual change in exchange rates were established, many disadvantages would remain. No single country can cope with largescale speculation against its currency independently. Even the 14.3 per cent British devaluation or the 11.1 per cent French devaluation and 9.3 per cent German revaluation as well could not have been engineered successfully without consideration being taken of the possibility of retaliation and the need for financial support by other countries. Moreover, the relevant elasticities, especially for smaller and less developed countries, are likely to be so small that devaluation will be ineffective in eliminating balance of payments deficit, or devaluation will have to be so large as to be ultimately destabilising. Exchange rate fluctuations make foreign trade and investment risky, and even though forward exchange arbitrage eases some of these risks, they are likely to hinder the steady growth of international trade and investment. Thus, from the businessmen's and bankers' point of view, the adjustable peg system under the present IMF arrangements is to be preferred.

There are others who advocate raising the price of gold, for example, doubling it from \$US35 to \$US70 per ounce. This would make possible a sudden increase, from \$US40 billions to \$US80 billions, in international liquidity in the form of gold reserves.⁸ The principal effect, it should be noted, would not come from any stimulus to gold production that resulted from the increase in gold price, but from the revaluation of gold reserve assets.

The scheme for raising the price of gold has merit that does not attach to the alternative proposals that have been mentioned. Under alternative schemes for increasing international liquidity, there is the problem of how to deal with accumulated dollar and sterling reserves.⁹ For example, if present dollar and sterling balances were converted into SDRs or gold, the SDR scheme and gold-exchange standard would founder. Even the flexible exchange rate solution is made less viable because of accumulations of reserves since they provide a source of speculative funds. If the price of gold were doubled, on the other hand, the United States and the United Kingdom could liquidate accumulated dollar and sterling balances, and the capital-gainers may be willing to provide additional aid to less developed countries.

The plan for raising the price of gold also has demerits. Quite apart from the fact that the benefits of gold revaluation would be distributed very haphazardly—indeed, in just about

⁵ Milton Friedman, "The Case for Flexible Exchange Rates," in his *Essays in Positive Economics*, Chicago, 1953. Egon Sohmen, *Flexible Exchange Rates*, Chicago, 1961. Also see, Milton Friedman and Robert V. Roosa, *The Balance of Payments: Free Versus Fixed Exchange Rates*, Washington, D.C., 1967.

⁶ G.N. Halm, *The 'Band' Proposal: the Limits of Permissible Exchange Rates Variations*, Special Studies in International Economics, Princeton University, No. 6, January 1965.

⁷ J.E. Meade, "The International Monetary Mechanism," *The Three Banks Review*, September 1964. J.H. Williamson, *The Crawling Peg*, Essays in International Finance, Princeton University, No. 50, December 1965.

⁸ Gold revaluation was advocated by Roy F. Harrod, "Imbalance of International Payments," *IMF Staff Papers*, April 1953 and explained by Jacques Rueff, "The Rueff Approach," Randall Hinshaw, ed., *Monetary Reform and the Price of Gold, Alternative Approaches*, The Johns Hopkins Press, 1967.

⁹ This problem was explored by Zentaro Matsumura, "An Evolutionary Plan for World Monetary Reform," *The Banker*, September 1966.

the least desirable fashion imaginable—and the damage that would be done to United States monetary prestige, the basic objection to this plan is that it would not provide any permanent solution to the international monetary problem. Repeated gold revaluations would be required at periodic intervals and such revaluation would be associated with a temporary excess of world liquidity and inflationary pressures. Moreover, gold revaluation would undermine confidence in the key currencies, especially in countries such as Canada and Japan which hold large dollar reserves by gentlemen's agreement with the United States.

II. *The Effect of Reserve Pooling*

The question is whether the formation of a Pacific Currency Area can buttress the international monetary system and contribute to the solution of international monetary problems. A Pacific Currency Area would possess five main characteristics. Firstly, the Pacific Currency Area suggested here would initially include the five advanced Pacific countries, the United States, Canada, Japan, Australia, and New Zealand, but it would be an open-ended currency area into which other interested countries could be welcomed. Such a currency area would be established in conjunction with or prior to the formation of the Pacific Free Trade Area explained in earlier occasions.¹⁰ Secondly, full membership would involve the pooling of gold and foreign exchange reserves. Thirdly, within the currency area, member countries would maintain fixed exchange rates in relation to the dollar, after any initial exchange adjustments that are necessary were made. In effect, therefore, the Pacific Currency Area would be a regional Dollar Area. Fourthly, in adjustments in the Area's balance of payments vis-à-vis the rest of the world, the dollar's par value in terms of gold would be allowed to fluctuate within a narrow band (say, 5 per cent above and below the par value). Limitation of these exchange fluctuations would under normal circumstances, involve the need for exchange equalisation operations which could be effected in terms of gold. Fifthly, the balance of payments among member countries could be adjusted through freer capital movement and changes in each country's credit with the reserve pool.

My proposal for the establishment of a Pacific Currency Area rests on the conviction, shared by Mundell, that "the dollar standard that prevailed after the second world war was an effective standard, conducive to the rapid expansion of international trade and payments and consistent with economic goals both of the United States and of the countries using the dollar as international currency and the New York market as a source of capital. A dollar standard remains the best system for a large number of countries despite the gold problem with which the United States has recently been faced..."¹¹

The idea of a Pacific Currency Area is not unfamiliar. A number of similar schemes have been put forward, but it may be worth applying the theory of the optimum currency area to the Pacific-Asian-Latin American region and relating it specifically to the formation of a Pacific Free Trade Area.

¹⁰ See Kiyoshi Kojima, "A Pacific Economic Community and Asian Developing Countries," *Hitotsubashi Journal of Economics*, June 1966, pp. 17-37, and "Japan's Interest in the Pacific Trade Expansion: PAFTA Re-considered," *Hitotsubashi Journal of Economics*, June 1968, pp. 1-31.

¹¹ Robert A. Mundell, *The International Monetary System: Conflict and Reform*, The Private Planning Association of Canada, July 1965, p. 6.

A brief review of the theory of optimum currency areas is in order. A currency area is simply an area in which there is a common monetary unit. Ideally, perfect competition prevails in both commodity and factor markets, and prices throughout the area are equalised through competition. In other words, the common monetary unit possesses the same purchasing power over commodities and factors of production within the currency area. Finally, there is, ideally, a single monetary-fiscal authority and its monetary-fiscal policies have equivalent influence within the currency area.

This is the strict definition of an optimum currency area, which is similar to the concept of "a country" as defined in the theory of international trade. The definition is, however, too strict and the concept so defined too abstract. Although a single country represents an optimum currency area for all practical purposes, there will be transportation costs, and therefore some price differences, even within a single country. Moreover, one region within a single country may enjoy prosperity while others suffer recessions. And one region may have close trade and investment ties with foreign countries while others may not.

The concept of a country in the theory of international trade has found an extension in the concepts of the customs union and the free trade area. Similarly, the concept of an optimum currency area can be softened and extended. In the first place, a currency area does not necessarily require a single monetary unit but a single currency regime, or in other words, a fixed exchange-rate system with guaranteed currency convertibility. Commodities and factors of production should move much more freely within such an area and there should be greater similarity in prices and the purchasing power of currencies within it than outside. And finally, common policies with respect to the maintenance of full employment, growth, balanced international payments, and stable price levels, should be pursued in concert by the members of such a currency area.

Although the idea of optimality is complex and difficult to quantify precisely, a well-integrated area such as the EEC or EFTA can be thought of as an optimum currency area in these terms.

An optimum currency area, either strictly or less rigidly defined, of its nature involves a form of discrimination. In trade theory, the existence of national frontiers implies some form of discrimination. The emergence of the EEC and EFTA and the existence of the British Preferential Area raised the question of whether such trading arrangements contradicted the principle of non-discrimination embodied in GATT and the IMF. In fact, of course, their existence is admitted under Article 24 of GATT as representing progress towards freer global trade. Indeed, the free trade area approach to trade liberalisation is justifiable on precisely the grounds that "the free trade area is the natural arrangement for a group of countries that wish to accelerate progress towards world free trade in the face of reluctance on the part of others to adopt," and "the free trade area method has the substantive advantage over bargaining for tariff reductions multilaterally in GATT that it promises to arrive at complete free trade, albeit only with other member countries, within a finite and predictable period of time."¹² A similar justification is applicable to the case for the currency area approach in relation to the global approach to monetary arrangements, since the currency area question is a direct extension and counterpart of the customs union or free trade area argument.

¹² Harry G. Johnson, "A New World Trade Policy in the Post-Kennedy Round Era: A Survey of Alternatives, with Special Reference to the Position of the Pacific and Asian Regions," Kiyoshi Kojima, ed., *Pacific Trade and Development*, The Japan Economic Research Center, Tokyo, 1968, pp. 246-7.

Thus, an optimum currency area is a well integrated monetary area which operates monetary-fiscal policy as if it were a single country. Firstly, within an optimum currency area there is a managed currency system and no gold reserves are required for intra-areal settlement or currency issues. Secondly, the balance of payments vis-à-vis the rest of the world is settled ultimately through gold, allowing for some fluctuation of exchange rates within a narrow band. The establishment of such currency areas would contribute to "economising the use of gold" since gold reserve drains would be associated entirely with extra-areal deficits in the balance of payments. It can be observed how in a parallel fashion, the use of scarce gold supplies was economised historically by a gradual shift from the public circulation of gold coin to its use as gold reserves for the banking system and then, to its use as reserves by a central bank or financial authority. Thus, the formation of currency areas is not inconsistent with the pursuit of global monetary management within the framework of the gold-exchange standard, but aims to put the present system on a sounder basis. Thirdly, a successful currency area requires not only such solidarity as is required for the pursuit of co-operative internal monetary-fiscal policies, the mutual accommodation of balance of payments vis-à-vis the rest of the world, and freer commodity and capital movements, but it also implies a large degree of solidarity in political objectives. Only those countries which possess such solidarity of purpose could establish an effective currency area.

Let us examine more specifically the beneficial effects that might be derived from the formation of a Pacific Currency Area or Dollar Area. Since the Pacific Currency Area¹³ would involve the pooling of gold and foreign exchange reserves, total reserves available for extra-areal settlement would increase.

(i) It can be seen that at the end of 1967, the establishment of a Pacific Currency Area would have increased gold reserves of \$US12.0 billion for the United States alone to \$US13.6 billion for the area as a whole (see Table 1). This increase is not particularly large. It reflects the pre-condition, in which Canada and Japan had refrained from converting dollar reserves into gold by gentlemen's agreement. Member countries could pool reserves with the United States Federal Reserve System, but it would be preferable to establish a Pacific Reserve Bank (similar to the Bank for International Settlements at Basle). All Pacific Currency Area members, including the United States, would sell monetary gold to the Pacific Reserve Bank and deposit the receipts on which a gold guarantee and appropriate rate of interest would be provided.

(ii) At the end of 1967, the IMF reserve position was \$US420 millions for the United States and \$US877 millions for the other four countries, amounting to \$US1,300 millions for the area as a whole. If members agreed to use IMF reserves through a pooling agreement, the maximum availability of credit through the IMF for the Pacific Currency Area as a whole would be substantial.

(iii) Foreign exchange reserves at the end of 1967 amounted to \$US2.34 billions for the United States and \$US3.54 billion for the other four countries, or \$US6.2 billions for the Pacific Currency Area as a whole. The foreign exchange reserves of Canada (\$US1.26 billion) and Japan (\$US1.45 billion)¹⁴ were mainly dollar reserves, whilst those of Australia (\$US1.0

¹³ Ronald I. McKinnon recommends the formation of optimum currency area for the EEC or Western Europe, in his "Optimum World Money Arrangements and the Dual Currency System," *Banca Nazionale del Lavoro Quarterly Review*, Vol. 16, 1963.

¹⁴ It is worth noting that Japan's foreign exchange reserves have increased rapidly since 1968.

TABLE 1. GOLD AND FOREIGN EXCHANGE RESERVES
OF THE FIVE PACIFIC COUNTRIES
(at the end of 1967)

	(\$US million)			
	Gold	Reserve Position in IMF	Foreign Exchanges	Total Interna- tional Reserves
U. S. A.	12,060	420	2,340	14,830
Other 4 countries	1,585	877	3,840	6,302
Canada	1,015	433	1,260	2,709
Japan	338	239	1,453	2,030
Australia	231	205	993	1,429
New Zealand	1	—	134	134
Total	13,645	1,297	6,180	21,132

Source: IMF, *International Financial Statistics*.

billion) and New Zealand (\$US 0.13 billion) were mainly sterling. United States reserves comprised the currencies of various countries. Thus, foreign exchange reserves for extra-areal payments, other than in sterling, would not be large for the area as a whole. As mentioned before, more than anything else, this reflects the pre-condition necessary to the establishment of the currency area, which would have the effect of putting existing gentlemen's agreement on a sounder institutional footing.

The second benefit of forming a Pacific Currency Area would derive from economy in the pooling of reserves by the group of countries as a whole. Richard N. Cooper presented an interesting model for assessing the extent to which reserves could be economised through reserve pooling.¹⁵ This study covered the period 1955-1966, but here the period covered extends from 1955-1967.

In Table 2, the standard deviation of year-to-year reserve changes in billions of U.S. dollars for each country is shown on the main diagonal. The sum of the standard deviations for all five countries amounts to \$US 2.123 billion which represents the minimum reserve

TABLE 2. BILATERAL RELATIONSHIPS BETWEEN CHANGES IN RESERVES
1955-1967

	Australia	Canada	Japan	New Zealand	United States
Australia	.264	.138	-.380	.189	.294
Canada	.006	.163	-.019	.323	-.378
Japan	-.030	-.001	.296	.274	-.667
New Zealand	.002	.002	.006	.039	-.412
United States	.120	-.084	-.269	-.022	1.361

Note: Entries above diagonal are correlation coefficients (r_{ij}), entries along the diagonal are standard deviations (σ_i in billions of U.S. dollars), and entries below the diagonal are covariances ($r_{ij}\sigma_i\sigma_j$).

Source of original data: *International Financial Statistics*.

¹⁵ Richard N. Cooper, "Financial Aspects of Economic Cooperation around the Pacific," in Kiyoshi Kojima, ed., *Pacific Trade and Development*, The Japan Economic Research Center, Tokyo, 1968.

requirements for the separate settlement of occasional deficits in their international payments under the assumption that the amount of reserves required to meet these contingencies is directly related to the expected size of the contingencies, that is, the expected standard deviation of disturbances in the balance of payments.

It is usual that when the payments position of the United States deteriorates, that of Japan or Canada tends to improve, and *vice versa*. Generally this relationship between balance of payments positions will be more usual, the closer are ties of trade and capital between two countries. When this relationship exists, the pooled reserves of a pair of countries is less liable to change than the reserves of each country separately. The entries above the diagonal in Table 2 record the correlation coefficients for reserve changes of each relevant pair of countries. Gains from reserve pooling arise for any degree of correlation less than unity, but the gains increase as the correlation falls, and the maximum gains are obtained when the correlation is minus unity. The correlation between the United States and Japan (-0.67) was the highest negative correlation recorded for the period; next was that between the United States and New Zealand (-0.41); and the correlations between Japan and Australia, and the United States and Canada (both of which were -0.38) were also negatively high. Thus, it is clear that large absolute gains would have arisen from pooling reserves between these pairs of countries during the period in question.

The absolute gains from reserve pooling are indicated by the covariances, that is, the product of each correlation coefficient with the two relevant standard deviations, in the entries recorded below the diagonal in Table 2. The standard deviation of combined reserve changes for the five Pacific countries¹⁶ would have been \$US 1.25 billion, compared with the sum of standard deviations for the countries taken separately, which amounted to \$US 2.123 billion. Hence, the pooling of reserves would have reduced the need to hold reserves against contingent payments deficits by 41 per cent.¹⁷ "This could represent a substantial savings, and if the experience of the past decade is any guide to the future, it suggests that reserve pooling might be mutually beneficial."¹⁸

III. *The Effectiveness of Floating Exchange Rates*

I have suggested that in the adjustment of extra-areal payments, exchange rates should be allowed to float within a small band (say, 5 per cent above and below par value) and that this measure be supplemented by exchange equalisation operation when necessary. Another way of putting this would be to say that the margins on the United States' buying price and selling price for gold should be widened by 5 per cent either side of par value. As Mundell has suggested such a proposal is quite consistent with the gold-pegging clauses in the IMF.¹⁹

¹⁶ Algebraically, the standard deviation (σ_n) of combined reserve changes for n countries is given by the expression:

$$\sigma_n = \sqrt{\sum_i \sigma_i^2 + 2 \sum_i \sum_{j>i} r_{ij} \sigma_i \sigma_j}$$

The expression in root will be smaller, the smaller are the correlation coefficients r_{ij} ($i, j=1, 2, \dots, n$). σ_n will equal the sum of the individual standard deviation σ_i only if $r_{ij}=1$ for all i, j .

¹⁷ This amounts to 44 per cent for the period 1955-1966 according to Richard N. Cooper, *ibid.*, p. 299.

¹⁸ *Ibid.*, p. 299.

¹⁹ Robert A. Mundell, *The International Monetary System: Conflict and Reform*, *ibid.*, pp. 39-43, and pp. 61-62.

The effects of this means of adjustment in extra-areal payments for a Pacific Currency Area should be examined in more detail.

Why would more flexible exchange rates be effective for a Pacific, or any such large, currency area, in view of our judgment that they would not be workable for a single country? Significantly, for a large currency area like a Pacific Currency Area, the relevant balance of payments elasticities would be larger than for a single country. In consequence, relatively large gaps in such a currency area's extra-areal balance of payments would be more readily adjusted through small changes in exchange rates (or gold margins). There are three main reasons for this.

First, it can be expected that the price elasticity of import demand would be larger for the Pacific Currency Area as a whole than for each separate member country. Since imports are the excess of domestic demand over domestic production, the price elasticity of import demand, η , is shown by:

$$\eta = \theta \left(\frac{P}{M} e + \frac{C}{M} d \right),$$

where θ is the elasticity of domestic prices with respect to changes in the price of competitive imports, and takes a constant value which depends upon the degree of product and quality differentiation between domestic and imported goods, the tastes of consumers, and policies such as buy-national-product policies; e and d are the price elasticity of demand and supply respectively; and $\frac{P}{M}$ and $\frac{C}{M}$ are the ratios of domestic production and consumption to imports respectively (where $C = P + M$). Since θ , e , and d are constant for each commodity, the smaller the degree of import dependence, or the larger $\frac{P}{M}$ and $\frac{C}{M}$, the larger will be η , the price elasticity of import demand.

The formation of a free trade area or an optimum currency area among a group of countries shifts some proportion of each member country's imports into areal production since some proportion of each member country's trade will be with partner countries. Thus, it is obvious that the ratio of production to imports for the area as a whole will be larger than for each member country separately.

The more intensive intra-areal trade, the larger will be the ratio of production to imports for the area as a whole relative to the similar ratio for each participating country. The ratio of intra-areal trade to world trade for the five Pacific countries concerned was 32.5 per cent in 1958 and it had increased to 37.3 per cent in 1965, which compares well with the share of 43.5 per cent for intra-areal trade among the EEC countries.

The results will not only be affected by the aggregate ratio of intra-areal trade to total trade, but also by the composition of member countries imports and exports. Take, for example, the case of a member country whose imports consist mainly of raw materials which are not produced within the area, and whose supplies are all obtained from outside the area. The areal ratio of production to imports will not increase for those products with the formation of a currency area. In other words, the key to effective operation of the exchange mechanism in this context is the extent of substitutability between areal and outside production. In this respect, the formation of a Pacific Currency Area, which would include not only exporters of manufactures, such as Japan and the United States, but also major primary producers such as Australia and New Zealand, and the diversified Canadian economy, recommends itself. Within that region there is likely to be a high degree of substitutability with

respect to outside supplies, and aggregate elasticities of import demand for outside commodities are likely to be high—much more so, for example, than for the EEC.

It can be demonstrated, by the so-called stability condition for the balance of payments,²⁰ that the greater the elasticity of import demand, the more effective small changes in exchange rates will be in adjusting imbalance in the balance of payments.²¹

Secondly, the formation of a Pacific Currency Area, if accompanied by progress towards a free trade area, would be associated with the growth of intra-areal trade stimulated by the trade creation, trade diversion, and dynamic effects of such trade liberalisation. Trade dependence on the outside world would decrease relative to growing intra-areal trade dependence, and the increased price elasticities of import demand would buttress the effectiveness of more flexible exchange rates vis-à-vis the rest of the world.

The third reason why flexible exchange rates are likely to be more effective for a currency area than for a single country relates to the importance of "money illusion". Exchange fluctuations are more fully effective in so far as consumers in the devaluing country resist downward movements in wages and prices expressed in terms of domestic currency but do not resist the same real changes if these are effected by changes in exchange rates. In other words, the argument for flexible exchange rests on the proposition that money wages in domestic currency are inflexible, but that real wages are not inflexible if they are changed by alternation of the exchange rate. In a country which imports all of its foodstuffs and exports all of its output, an alteration of the exchange rate would lead to an immediate and proportionate change in the cost of living, and one can assume that the real effects of these changes would be noticed. On the other hand, if a country imports a very small proportion of its consumption, one would expect that an exchange rate alteration would have no perceptible influence on the cost of living, at least in the short run, and would not lead to any general upward movement in wages and prices. Hence, it is reasonable to expect that the larger the optimum currency area and the smaller its dependence on extra-areal trade, the more effective flexible exchange rates are likely to be.²²

These three factors suggest that flexible exchanges would present an effective means whereby a Pacific Currency Area could adjust its balance of payments vis-à-vis the rest of the world. The only significant problems would arise through speculative attacks upon the dollar, the currency area's key currency. But to meet that problem, exchange equalisation operations with total reserves of \$US 21.1 billion or gold and IMF reserves of \$US 15.0 billion would not seem inadequate.

²⁰ Cf. Joan Robinson, "The Foreign Exchange," in her *Essays in the Theory of Employment*, London, 1947. The simplest stability condition is that the sum of price elasticities of import demands in home and foreign countries should be greater than unity. See A. P. Lerner, *The Economics of Control*, New York 1964, p. 378.

²¹ The way in which the price elasticity of export supplies would change with the formation of an optimum currency area may be analysed in a similar fashion. The analysis of export elasticities has not been undertaken here since the most important element in the effectiveness of exchange changes is the elasticity of import demand, rather than export supply.

²² Cf. Robert A. Mundell, "Theory of Optimum Currency Area," *American Economic Review*, September 1961, p. 663.

IV. *Intra-areal Balance of Payments Adjustment*

Countries hold international reserves, if possible the optimum amount of reserves, so that they can be used as a buffer against the adverse effects of short term balance of payments variations on important economic policy objections, such as the pursuit of long run economic growth, the maintenance of full employment, and stability in the domestic price level. A large currency area will hold reserves for the same reasons. Such a currency area will be the more effective if its reserve pool is large, there is scope for economising reserves, and flexible exchange rates work efficiently to adjust the extra-areal balance of payments. A Pacific Currency Area is desirable specifically because it will help to free the pursuit of these important economic objectives from short run balance of payments considerations.

The establishment of a Pacific Currency Area would have several important effects on the efficiency with which intra-areal settlements are made. In the first place, the cost of exchange transactions would be reduced since within the currency area fixed exchange rates would be maintained between member country currencies. More particularly, Japan presently settles most of her foreign exchange transactions through the United States dollar, while Australia and New Zealand settle most of their accounts through sterling. In the settlement of transactions between, say, Japan and Australia, three clearing operations are required: between Japanese yen and the United States dollar, between the Australian dollar and sterling; and between the dollar and sterling in London or New York. Each clearing demands the payment of some commission. Moreover, the relevant exchange rates fluctuate, even within the small margin of $\frac{3}{4}$ of one per cent, and the accumulated margin in three clearing operations are not insignificant in businessmen's profit calculations. These extra costs would be eliminated if a foreign exchange market were organised with a Pacific Currency Area so as to allow direct clearing between the Japanese yen and Australian dollar or between any pair of member country currencies. It might also be feasible to eliminate the marginal fluctuations of member country exchange rates around their par values, and implement a rigid fixed exchange rate system within the currency area.

There are differences of view about the most efficient means of adjustment in the balance of payments between the member countries of an optimum currency area. James Meade argues that a common market or optimum currency area can work effectively only if there are flexible exchange rates between the member countries, since a common market eliminates tariffs and import restrictions and exposes countries to much more competitive and international pressure.²³ Mundell and McKinnon, on the other hand, argue that a common currency or fixed exchange rate system is necessary for a currency area to work effectively.²⁴ Only under these conditions, they assert, can there be full integration and the free movement of factors. Indeed, if capital is sufficiently mobile, balance of payments gaps will be filled and

²³ James E. Meade, "The Case for Variable Exchange Rates," *Three Banks Review*, September 1955, and "The Future of International Trade and Payments," *Three Banks Review*, June 1961.

²⁴ Robert A. Mundell, "A Theory of Optimum Currency Areas," *American Economic Review*, September 1961, p. 664. Ronald I. McKinnon, "Optimum World Arrangements and the Dual Currency System," *Ibid.*, pp. 372-373.

flexible exchange rates become unnecessary, perhaps positively harmful.²⁵

The answer to this question really turns on the extent of factor mobility, especially capital mobility, that prevails after the establishment of the currency area. In a Pacific Currency Area, the nature of payments flows, and the strength of pooled reserves, suggests that short-term capital would flow rapidly and freely enough to accommodate balance of payments fluctuations.

While a floating exchange rate makes the integration of securities market among countries very difficult, a fixed exchange rate system facilitates it and the movement of capital. Perhaps a 'free investment area' could be established in conjunction with a free trade area in the Pacific region.²⁶ The practical importance of this notion arises out of the interest of American business, supported by the United States government, in direct investment overseas. In fact, there would be mutual gains from the liberalisation of capital movement within the Pacific area, although there are some major obstacles to its attainment. First, the United States balance of payments position imposes constraints on capital outflow. Second, there is reluctance bordering on fear of free capital inflow in Japan. Japan would be wise to adopt a more positive attitude towards capital inflow. It is likely to do this rapidly as Japanese business begins to overcome its inferiority complex vis-à-vis American business, and as the heavy industrial sector in Japan strengthens its competitive position and learns from experience how to handle direct foreign competition.

The mobility of capital depends upon stability in the value of currencies, which in turn depends upon sound monetary-fiscal policy within each country, under a managed-currency system with fixed intra-areal exchange rates. Since the optimum currency area as a whole operates as a managed currency system, the stability of currencies within the area as a whole, and each member country individually, depends upon the pursuit of effective incomes policies which hold increases in money wages in line with increases in productivity. More long term capital will flow to members who are successful in the pursuit of sound incomes policies, and will act to stimulate more rapid growth in those countries.

Within a Pacific Currency Area, adjustments in the balance of payments between member countries should rely upon sound monetary-fiscal policies and the improvement of productivity in the long run, supplemented by short run accommodation from pooled reserves and short-term capital movements. As is the case within the framework of the present adjustable peg system, this would not prevent the re-arrangement of par values among member-country currencies should fundamental balance of payments disequilibria appear.

V. *The Effect on Economic Development*

The formation of an optimum currency area, such as that proposed for Pacific countries, has discriminatory effects. Member countries maintain fixed exchange rates and have arrangements for accommodating payments among themselves, but exchange rates are allowed to

²⁵ A third view has been put by Johnson who argued that "it might be preferable for members to move to exchange rates fluctuating freely in relation to the currencies of the other members as well as the currencies of nonmembers." Harry G. Johnson, "The Monetary Implication of a Free Trade Association," Thomas M. Franck and Edward Weisband, ed., *A Free Trade Association*, New York University Press, 1968, p. 239.

²⁶ Richard N. Cooper, "Financial Aspects of Economic Cooperation around the Pacific," *ibid.*, p. 287.

fluctuate vis-à-vis the rest of the world. The establishments of a Pacific Currency Area would be accompanied by the creation of a free trade area and free investment area, both of which would have favourable effects on investment flows within the area. But since the mobility of capital between different regions depends in part on stability in the value of currencies between them, floating exchange rate vis-à-vis the outside world would tend to discriminate against extra-areal investment flows. In fact, there would be investment creation, both in consequence of stabilising payments arrangements within the currency area and in consequence of any intra-areal trade liberalisation, and 'investment diversion' both in consequence of floating exchange rates vis-à-vis the outside world and in consequence of the discriminatory removal of trade barriers.²⁷ The elimination of trade barriers would induce enterprise to expand trade as well as investment within the area.²⁸ In this context, investment should be thought of not only, or even primarily, in terms of pure capital flows, that is, a shift of real resources from one country to another, but also in terms of the transfer of management skill and technical know-how.

Neighbouring less developed countries in Asia and Latin America would almost certainly become interested in a Pacific Currency Area, and this should be welcomed. In that case, the original members of the currency area could co-operate in the business of "aid creation," usefully associated with "investment creation," in the wider Pacific region, and contribute significantly to its economic development.

To date, the United States has tended to look toward the possibility of ultimately 'going in with Europe', and has tended to neglect the Pacific region. The flow of financial reserves and direct investment from America to Pacific countries has lagged behind that going to Europe. The Pacific, Asian, and Latin American region has a huge potential for trade growth and development compared with Europe and the potential should be cultivated through the formation of a Pacific Currency Area and PAFTA.

Balance of payments difficulties in America, especially since about 1958, have led to increased restraint on overseas investment, although important exceptions have been made in the Pacific area and for less developed countries, and reduced aid coupled with increasingly 'tied' aid.²⁹ 'Tied' aid, it hardly needs saying, is frequently less economic than 'untied' aid, since it often obliges the recipient country to receive uncompetitive or unwanted products which are available much more cheaply from other sources of supply than the donor country.³⁰

A prime task is to devise effective international mechanism which allows donor countries, such as the United States, to increase aid and investment in the Pacific-Asian-Latin American region and 'untie' development loans without incurring balance of payments difficulties and a drain on gold reserves. A few years back, I suggested that this might be managed through

²⁷ Richard N. Cooper, "Financial Aspects of Economic Cooperation around the Pacific," *ibid.*, p. 287.

²⁸ Bela Balassa, *Trade Liberalization among Industrial Countries*, Council on Foreign Relations, New York, 1967, pp. 160-161.

²⁹ AID aid was 41 per cent 'tied aid' in 1960, but this proportion rose to 95 per cent by 1967. See, *AID Quarterly Report*, Trend of AID Commodity Expenditures of Procurement by Resources, Washington, 1968.

³⁰ See, for example, Mahbub ul Haq, "Tied Credits—A Quantitative Analysis," J.H. Adler, ed., *Capital Movements*, Macmillan, New York, 1967, pp. 326-359.

a 'Lent Currency Scheme,'³¹ the essentials of which can be implemented more conveniently through an extended Pacific Currency Area.

The premise upon which my earlier proposal was based was that a major element in balance of payments disturbances was the leakage from grants, loans, and military expenditures granted by one country to another but spent in a third country. This is the familiar transfer problem that dogged German reparations after the First World War and that has, in a sense, been the root cause of the American balance of payments difficulties in recent years. Even if one assumes, given the tying of loans that has been common, only 20 per cent of private capital outflows, government grants, and military expenditures were spent in third countries, this leakage would itself account for the major part of America's large net monetary deficit, resulting in the drainage of gold. My proposal is aimed at bridging these transfer difficulties.

The Pacific Reserve Bank, proposed above, could also assume the functions of a development bank, or become the *Pacific Reserve and Development Bank*. The institutional arrangements necessary to these proposals would be as follows:

1) When member country A from the Pacific Currency Area provides country B with long-term private investment or aid funds (in the form of grants, loans, etc.) country B deposits 20 per cent of the borrowed amount with PRDB. This may be called *Lent "A" Currency* (that is, Lent Dollars, Lent Yen, etc.).

2) The Lent Currency is exchangeable with an equivalent to any convertible national currency, and one kind of Lent Currency (say, Lent Dollars) can be exchanged for another (say, Lent Yen). It is not, however, convertible into gold. This prevents a drain of gold from lending countries. The gold guarantee is assured for Lent Currency.

3) The Lent Currency, once deposited by the borrowing country, is used for payment to any country when the borrowing country imports goods and services.

4) The borrowing country, B, is able to use currency thus acquired to make purchases from any country, even from outside the Currency Area, provided that the country, D, joins in the Pacific Currency Area Lent Currency scheme and is therefore willing to accept Lent Currency. Thus PCA would be an open-ended currency area.

5) The Lent Currency circulates in the Pacific Currency Area market as do other convertible national currencies, and ultimately falls into the hands of a balance-of-payments surplus country (called country C) or will be deposited by such a country with PRDB. (When country A—the lending country—earns a balance-of-payments surplus, the Lent 'A' Currency is cleared automatically. There is no transfer difficulty). This means that country C, who is the net earner of international liquidity due to country A's lending to country B, has to refrain from

³¹ Kiyoshi Kojima, "A Proposal for Increasing International Liquidity," *The Oriental Economist*, August 1964. The proposal was reviewed by the *Economist* (London), July 25, 1964, pp. 401-2, under the headline of "How Aid Could be United." It was also recorded in *International Monetary Arrangements: The Problem of Choice*, International Finance Section, Princeton University, 1964, p. 88, as follows: "Deposits of Portions of Aid or Loans Received. An alternative way of ensuring that aid and loan funds do not cause strain on the donors' payments balance is for a small fixed portion of such funds to be deposited by the recipients in special loan accounts at the IMF; and for those to be drawn on for all expenditures out of such loans to third countries. Countries receiving such deposits in payments for goods and services would be able to transfer these loan deposits for their own settlement, but could not convert them into gold. These 'loan deposits' would be liquidated when the loans in question were repaid."

converting earned Lent Currency into gold, and, instead, has to provide short-term credits by holding Lent Currency within the Pacific Currency Area. Thus, international liquidity within PCA will be augmented in the form of Lent Currency.

6) A favourable rate of interest should be payable on Lent Currency deposited with PRDB. The rate of interest should be a little higher than that which is obtainable from the holding of other international liquidity. This arrangement would make the deposit of Lent Currency with PRDB more attractive than the holding of other international liquidity and would stimulate a gradual shift from the latter to the former.

7) Other transfer difficulties are associated with the repayment of loans by the borrowing country B to the lending country A. Under normal circumstances, the Lent "A" Currency will be cleared in such a way that country B earns a balance-of-payments surplus and receives Lent "A" Currency and repays it to country A. Hence, country A does not sustain a balance-of-payments deficit, which usually requires additional adjustment, by the amount of the return flow. Lent Currency efficiently fulfills its purpose in bridging, through time, the two transfer difficulties accompanying the lending and repaying of long-term capital and aid transactions.

8) If the third country, C, earns a balance-of-payments surplus in the course of the return flow, transfer difficulties also result. Country C should reduce its surplus and liquidate accumulated Lent "A" Currency. However, if country C maintains its balance-of-payments surplus, it will accumulate more Lent Currency and it can continue to accumulate Lent Currency just so long as it wishes, providing more credit in that form at its own risk. If country C does not want to accumulate more Lent Currency, it will have to adjust its balance-of-payments out of surplus, either by increasing its own foreign investment and aid or by domestic expansionary policies which increase imports. Thus, reluctance to hold Lent Currency stimulates an automatic adjustment mechanism in the balance-of-payments which is built into this proposal.

If this scheme works successfully,³² it is clear that wealthier countries, especially the United States, would increase the investment and aid they extend to Pacific Currency Area countries, without having to worry about excessive balance of payments strain and the gold drain. Moreover, the advanced countries within Pacific Currency Area would be able to provide more aid to neighbouring less developed countries without having to "tie" aid individually, although in practice they would be "tying" aid as a group to some extent. Less "tied" aid would almost certainly enhance the efficiency of aid.³³

³² An excellent proposal of an Asian (or ECAFE) Reserve System was presented by Robert Triffin, *Payments Arrangements Within ECAFE Region*, Yale University, Economic Growth Center Paper, No. 114, 1967, and "International Monetary Cooperation in Asia and the Far East," Kiyoshi Kojima, ed., *Pacific Trade and Development II*, The Japan Economic Research Center, April 1969. Since the study was sponsored by the ECAFE, the Reserve System was designed for Asian developing countries and Japan, Australia and New Zealand. It might be wiser, as in our scheme, to establish PCA between five Pacific advanced countries and invite Asian-Latin American participation.

³³ In connection with North Atlantic Free Trade Area, Sir Roy Harrod stressed a similar view, saying that "It has been noted earlier that it might be expected that the NAFTA group would be like-minded in thinking that aid to the less developed countries should be increased. It might be possible to tie aid, not to the donor country, but to the NAFTA group as a whole. Thus grants provided by one NAFTA country would be usable in any of the NAFTA countries.... To the extent that the donor was injured by his funds being spent in another NAFTA country instead of in his own, this damage should be, in part at least offset by the arrangement for reshuffling gold outlined above." (Sir Roy Harrod, *Dollar-*

VI. *Feasibility of a Pacific Currency Area*

The desirability of a wide optimum currency area which adopted flexible exchange rates vis-à-vis the rest of the world was first suggested in 1963 in Brookings Report.³⁴ International monetary disturbances since then, as I have suggested above, give added emphasis to the need for such an arrangement for promoting closer international monetary co-operation in the Pacific region. Business circles recently took the initiative in establishing the Private Investment Company for Asia, capitalised with \$US 40 million in March 1969. The Pacific Free Trade Area and Currency Area schemes have the twin aims of promoting free trade among the five advanced Pacific countries and of expanding aid and trade growth between those advanced countries and neighbouring less developed countries. The establishment of PICA is consistent with these aims.

The establishment of a Pacific Currency Area depends largely on the attitude taken by the United States. Canada is already a *de facto* member of the dollar area. Japan also holds dollars and refrains from converting them to gold under a gentlemen's agreement with the United States. Australia has moved rapidly and increasingly into the Pacific financial network. New Zealand, whose ties with the sterling area are strongest, is also gradually changing her attitude towards the region. The pooling of gold and foreign exchange reserves would represent a sounder institutionalisation of growing financial co-operation in the Pacific region.

The international credit network among the five advanced Pacific countries is already well developed. Japan, Canada, and Australia rely heavily upon United States capital. Although capital imports do not provide a very large proportion of their domestic capital formation, the contribution is hardly marginal. The Interest Equalisation Tax on United States purchases of foreign securities and a "voluntary credit restraint program" applicable to foreign lending by American banks were recently introduced because of the United States balance of payments difficulties, although a partial exemption from these measures was accorded the Pacific region. There has also been co-operation in the provision of loan funds through the Asian Development Bank.³⁵ The establishment of a Pacific Reserve and Development Bank which promoted

Sterling Collaboration, Basis for Initiative, The Atlantic Trade Study, London, 1967, p. 67.) The arrangement for reshuffling gold means that "The NAFTA countries could agree that each one of their own gold holdings should rise or fall in the same proportion, quite irrespective of their individual balance of payments. This could be achieved by a swapping of gold against currencies within the group." (*Ibid.*, pp. 65-66). The reserve pooling in our Pacific Currency Area scheme may satisfy more completely this kind of condition.

³⁴ "The best alternative to a system of fixed rates with provision for increasing liquidity, in our view, would be a modified system of flexible exchange rates consisting of a dollar-sterling bloc and an EEC bloc. There would be relatively fixed rates within each bloc and flexible rates between them. Adoption of this system would imply cutting the tie between gold and the dollar." Walter Salant and Associates, *The United States Balance of Payments in 1968*, The Brookings Institution, Washington D.C., 1963, p. 259.

³⁵ The Asian Development Bank could perform the function of a Lent Currency Scheme if its membership were extended appropriately to embrace those countries designed by the scheme. In that case, the task of a Pacific Bank would be confined to the pooling of reserves and other measures which are necessary for a Pacific Currency Area. However, since it would not be easy for the Asian Development Bank to embrace Latin American countries, only a part of the function of a Lent Currency Scheme could be entrusted to the ADB.

economic development in the Pacific-Asian-Latin American region through increased aid and investment would be a further step in the same direction. A regional code of overseas investment and aid would also be adopted if it seemed desirable.

One question that arises is whether PCA's establishment presupposes the establishment or strengthening of other currency areas, such as a European Currency Area, the Sterling Area, and the Rouble Area at the same time.⁸⁶ I believe that the establishment of a Pacific Currency Area can be proceeded with independently of the establishment or strengthening of other currency areas. Even a single country represents one optimum currency area. Though the arguments presented here for the establishment of PCA apply to other areas, they should decide what is best in their own political and economic interests.

The position of sterling and the Sterling Area is another matter. Should Britain join a Dollar Area or a European Currency Area? Should the Sterling Area attempt to strengthen itself independently? The currency area alternatives for Britain are similar to the free trade area alternatives.

If PCA were established, it would be better if the United States did not raise the price of gold since a large share of dollar balances is held by PCA countries. The problem becomes how much of the dollar balances held by the rest of the world would seek gold conversion. Triffin has estimated that excessive dollar holdings in the EEC stood at \$US 3.65 billion at the end of September 1966.⁸⁷ Even though this account will have risen since 1966, only some part of it would seek conversion, and PCA's pooled reserves and flexible exchange rates vis-à-vis the outside world should be adequate to cope with the contingency.

The prospects for both a Pacific Currency Area and PAFTA depend largely on United States attitudes. The proposals represent an outward-looking, non-isolationist alternative for the new United States' Administration.

⁸⁶ The Brookings Report supposes, as in the previous note, a dollar-sterling bloc and an EEC bloc. McKinnon argues for a dual currency world between the Western Europe (with the possible exception of Britain) and North America. R.I. McKinnon, "Optimum World Monetary Arrangements and the Dual Currency Systems," *ibid.*, pp. 379-85. Mundell expects three blocs to emerge saying that "the result might be a monetary division of the free world into the *sterling area* (much of the old British Commonwealth, Scandinavia, and the Middle East), the *thaler area* (composed of Continental Europe and some of Africa), and the *dollar area* (the United States, Japan, Canada, most of Latin America, and parts of the rest of the world)." Robert A. Mundell, *The International Monetary System: Conflict and Reform*, *ibid.*, pp. 47-8.

⁸⁷ Robert Triffin, *Our International Monetary System, Yesterday, Today, and Future*, Random House, New York, 1968, p. 153.