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No. 102, November 1973

## PAYMENTS ARRANGEMENTS FOR LESS DEVELOPED COUNTRIES: THE ROLE OF FOREIGN ASSISTANCE

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INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

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# Payments Arrangements For Less Developed Countries: The Role of Foreign Assistance

Interest in payments arrangements for less developed countries has risen considerably in the last few years. In Central America, a clearing arrangement and a Monetary Stabilization Fund have been established among members of the Central American Common Market. Clearing arrangements exist among members of the Latin American Free Trade Association and among the three countries—Iran, Pakistan, and Turkey—of the Regional Cooperation for Development group, and two monetary unions have been established covering twelve former French territories in Central and West Africa. Proposals have also been drawn up for the establishment of a clearing arrangement and a multilateral reserve center in Asia under the auspices of the Economic Commission for Asia and the Far East. While the ECAFE countries have not reached a formal agreement on either of these proposals, there are indications that a clearing arrangement has the support of a number of countries in the area.

Recently the third United Nations Conference on Trade and Development (Santiago, April-May 1972), in its resolution on regional integration, recommended inter alia that "developing countries, where appropriate, promote... the establishment of suitable payments arrangements among themselves; ... developed countries support such payments or monetary arrangements; ... and the Secretary General of UNCTAD request the International Monetary Fund to consider the possibility of establishing a special facility to support trade expansion efforts among developing-country members of regional or subregional groupings." These recommendations raise policy questions about the role that developed countries or the International Monetary Fund can play in assisting the less developed countries in these efforts and the relationship of such assistance to overall development assistance from bilateral or multilateral sources.

The purpose of this essay is to examine the objectives of payments

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arrangements among the less developed countries, the issues that such arrangements raise, and their usefulness for attaining these objectives. The analysis will give special attention to the proposals now under consideration in ECAFE. On the basis of the analysis, the last section investigates the role that developed-country donors or the IMF can play in assisting the establishment and operation of these arrangements.

#### 1. Institutional Alternatives

Until now consideration has focused on three basic kinds of monetary cooperation: (a) a simple clearing arrangement with a relatively short interval between settlement dates and the provision solely of interim credit (such arrangements are in force among members of the Central American Common Market and elsewhere and are proposed for ECAFE); (b) a payments union, where clearing is supplemented by a facility that provides medium-term credit to the participants; and (c) a reserve-pooling arrangement, which can range from simple agreements to pool a portion of total reserves and extend medium-term credit to participants to complete monetary union.

For each of these alternatives, there are variations with respect to specific features, such as the contributions of nonparticipants, the credit terms, the terms of settlement, the types of transactions covered, and the degree of monetary integration. This section discusses the three alternatives on the basis of both past experience with individual agreements and an analysis of some proposals that have not as yet been put into effect. The descriptive portions rely in part on the UNCTAD (1966) and Nowzad (1972) studies of payments arrangements. Readers familiar with the institutional features of payments arrangements might wish to omit this section and proceed directly to section 2.

## Clearing Arrangements

A clearing arrangement is established among a group of less developed countries, usually within the same region, to provide an alternative to the existing payments network, which involves denominating transactions in some convertible foreign currency, such as dollars, francs, or sterling. This system substitutes a centralized arrangement of mutually compensated settlements for intragroup transactions, using an agreed-upon unit of account. Typically, this arrangement involves the extension of only interim credit up to certain predetermined limits. Settlement of net balances arising from trade and service transactions among the participants is made periodically in convertible currencies.

In the Central American Common Market (CACM) clearing arrangement, participants have agreed to extend credit up to \$0.5 million to each member, with a six-month settlement period. If members exceed those limits, they must pay to other participants the excess in full in convertible currencies, unless a central bank agrees to increase the credit it extends. In the proposed Asian clearing union, each country would extend credit equal to one-sixth of its annual exports to participants and receive credit amounting to one-twelfth of its imports; the settlement period would be one month (Lee, 1972). In both instances, clearing would be voluntary for individual traders and a common unit of account has been established or proposed—the Central American peso in the former, the Asian dollar in the latter. Similar, if slightly less formal, arrangements have been established among the Regional Cooperation for Development (RCD) countries. The terms include a one-month settlement and a \$2 million credit ceiling.

Among the members of the Latin American Free Trade Association (LAFTA) and the East African Community, agreements have also been reached for the establishment of reciprocal lines of credit. In addition to the basic clearing mechanism, LAFTA central banks agreed in 1969 to extend longer-term reciprocal lines of credit to be used by countries in balance-of-payments difficulties. The total initial amount of credit available was to be \$30 million, but the agreement is not yet in force. In both these groups, the interim credit extended is less automatic than in the others discussed above, in the sense that it is based on the overall balanceof-payments and reserve position of the debtor, as well as the country's credit position within the group.

## Payments Unions

While at present no payments union exists among less developed countries, the creation of such an arrangement has often been the subject of discussion and proposals, such as those by the UNCTAD Expert Group (1966) and the Pearson Commission (1969). The basic distinction between a payments union and a clearing arrangement is the provision of medium-term credit. The union could be based on mutual credit extended only among the participating members, or could be financed in part by outside contributors. The European Payments Union was such a mixed arrangement, with the United States contributing \$100 million but not otherwise participating in the arrangement. The use of outside assistance allows creditors to be paid in part or in full, with larger credit extended to the debtors than would have otherwise been possible.

The apparent success of the EPU has led to repeated efforts to create similar institutions in the less developed countries. Some of the original proposals in the ECAFE region called for a payments union financed without outside credit (although the option of contributions from developed countries was left open), on the basis of initial positions. In a payments union based on initial positions, credit is provided only with respect to increments in trade among less developed countries. Thus, a less developed country would be asked to participate in the arrangement not with respect to all its trade, but only with respect to changes from the original position. How these original positions are established presumably would be subject to negotiations among the member countries. One approach would be to take a three- to five-year average prior to the establishment of the union.

None of the efforts to establish payments unions by less developed countries has succeeded to date, for reasons to be discussed later. Instead, in recent periods attention has focused on reserve-pooling arrangements.

### Reserve Pooling

The most highly integrated system of reserve pooling at present is in the franc-area countries of Central and West Africa. These arrangements have involved the creation of two monetary unions—the West African Monetary Union and the Equatorial and Central African Monetary Union—using a common currency (the Communauté Financière Africaine franc), but each with its own central bank. The reserves of the participant countries are pooled in each case and deposited in the French Treasury, which guarantees the convertibility of the CFA franc into French francs, as well as unlimited overdraft facilities. If a country's imputed reserves in the pool become negative, the country pays a charge on the debit balance.

An arrangement involving far less monetary integration was established in Central America in 1970 in support of a regional common market. The Central American Monetary Stabilization Fund is, in fact, a partial pooling of reserves. Its objectives have been, first, to create a mechanism for mutual balance-of-payments assistance to member countries experiencing reserve losses as a result of short-term disequilibrium in the balance of payments, and, second, to contribute to the stability and broadening of the base for cooperation in trade and payments policy among the participating countries. In case of balance-of-payments difficulties by one of its members, the CAMSF can extend loans up to 75 per cent of the reserve loss in the previous twelve months

and subject to conditions designed to effect improvements in the country's balance of payments. Each of the five participants has agreed to deposit \$1.5 million of its reserves in the Fund. In addition, the Fund obtained a loan from the U.S. Agency for International Development, swap arrangements with the central banks of Mexico and Venezuela, and lines of credit from American commercial banks, bringing its total resources to \$77.5 million in 1972.

The proposed Asian Reserve Bank is similar to the CAMSF but somewhat more ambitious. It would serve the region much as the IMF serves the whole monetary system. Members would deposit 10 per cent of their official reserves with the bank and could borrow in case of overall balance-of-payments stringency. The basic differences are that the ARB would be able to borrow in convertible currencies; buy bonds issued by international organizations, such as the Asian Development Bank; and receive loans from nonparticipating countries. In addition, the following features of the proposals for the establishment of the bank are outlined in a recent ECAFE report (1972, pp. 7–8):

(a) All deposits will earn interest, comparable to the interest earned on deposits in major financial centers.

(b) Deposits will be denominated in an Asian unit of account, possibly

fixed in value in relation to Special Drawing Rights.

(c) The Bank will be required at all times to maintain freely usable foreign exchange, gold and SDRs, equal to two-thirds of its deposit obligations. If such assets of the Bank fall below the minimum reserve position required, all lending and investing operations of the Bank will be halted until the minimum reserve position is restored.

(d) Member borrowing will be limited to one-half the decline in a member's official reserves during any one quarter. Within this limit, members may borrow, at an interest rate based on the rates prevailing in the major international financial centers, amounts up to their statutory deposits (i.e., ten per cent of their total official reserves) automatically. They may borrow more than their statutory deposit and up to twice that deposit if approved by a majority vote of the managing board. Borrowing beyond this latter sum requires approval of a four-fifths majority of the managing board.

(e) The full amount of any increase in a member's reserves subsequent to borrowing from the Bank must be repaid to the Bank. If this is not accomplished in three years' time, then the remaining balance must be repaid in full by contractual quarterly instalments extending over a period of not more than two years. In the event of a default, the facilities normally available to the member from the Bank will be suspended.

If all ECAFE countries had joined the scheme proposed for the region as of November 1971, the ARB would have had total assets of \$2.3

billion, with \$727 million available for lending or long-term investment.

The limit on the bank's reserve-creating capacity would depend on the bank's excess reserves. The bank's excess reserves, in turn, would depend on the total reserves of members and the proportion of these reserves that members were required to deposit with the bank, on any other deposits attracted from members or nonmembers, and on the ratio of required reserves to the bank's deposit liabilities. This limit could be increased by the bank's own short-term borrowing.

The ECAFE report (1972, pp. 9-10) expresses the view:

[E] ventually, if the Reserve Bank operated efficiently and its liabilities became competitive with other reserve assets, members might deposit more than the sums required, increasing the Bank's lending capacity, as would non-member deposits, without increasing the automatic claims on that capacity. From this point it would be a short step to acceptance by members of the Reserve Bank's liabilities in settlement of intraregional payments deficits and the Bank would become more like a regional commercial bank.

#### 2. Benefits and Objectives

The benefits that would presumably accrue to less developed countries from payments arrangements fall into four broad categories: improvement in the payments system, expansion of trade, increased ability to deal with short- to medium-term balance-of-payments disequilibria, and enhancement of the regional integration process.

Obviously, the relative emphasis each type of payments arrangement places on these objectives is likely to differ. Yet, in all instances, the arrangements are expected to result in increased regional cooperation and integration. In this section we will examine the extent to which the various types of existing or proposed payments arrangements have contributed in the past and/or can be expected to contribute in the future to the attainment of these four broad objectives.

## Clearing Arrangements

Multilateral clearing arrangements will improve the payments system as well as promote trade expansion if international trade is hampered by bilateral agreements leading to the accumulation of inconvertible balances. This is not the case at present in trade among most developing countries. Unlike the situation prevailing in Europe prior to the establishment of the European Payments Union, the incidence of bilateral agreements in less developed countries is minimal. Trade among less developed countries is carried out in convertible currencies, primarily

dollars, sterling, and francs, through banking arrangements that the banks of these countries establish with banks in major financial centers (Mookerjee et al., 1969).

While this conclusion may apply to the less developed countries in general, trade among certain subgroups may be inhibited by inadequate clearing and payments arrangements. Difficulties in obtaining conversion into foreign exchange and tardiness in clearing have been considered serious handicaps to expanded trade between the sterling-area and francarea countries of West Africa, and more specifically between Niger and Nigeria, and Ghana and Upper Volta. Undoubtedly, in these instances of partial inconvertibility, improvements in the payments mechanism could be expected to encourage trade expansion, and clearing arrangements have been established among these pairs of countries. However, because of a large contraband trade carried out at black-market rates of exchange, the effects on trade expansion have not been substantial. Without appropriate exchange-rate policies, which would reduce the incentives for making payments through the black market, it is doubtful that a clearing mechanism based on the official rate can significantly increase trade.

Clearing arrangements are also likely to provide only very limited support to trade liberalization, because the interim credit they provide is by definition very short-term and its amounts are usually quite limited. Even if we assume that balance-of-payments difficulties of less developed countries inhibit trade liberalization, the provision of short-term liquidity by clearing arrangements is not likely to impel these countries to undertake trade-liberalization commitments (UNCTAD, 1970).

The conclusion that clearing alone will not provide a strong stimulus to the trade of less developed countries seems to contradict Vanek's (1966) assertion that these countries can derive considerable benefit from clearing arrangements even in the absence of accompanying forms of economic integration. Vanek's argument is that the overvaluation of the currencies of less developed countries makes it difficult for them to expand exports to each other or to third countries. He points out that less developed countries suffer from a scarcity of the hard currencies in which international trade transactions are denominated. Thus, while their currencies are not overvalued vis-à-vis each other (since they are approximately equally overvalued with respect to hard currencies), their trade is nevertheless discouraged by the fact that transactions are carried out in hard currencies. He then suggests that the creation of a payments arrangement with short settlement periods and interim credit would promote a vigorous expansion of trade among less developed countries:

"Under such conditions all the divergences in relative prices and costs imputable to over-valuation with respect to the hard currencies . . . will be eliminated, and trade generally will expand a good deal" (pp. 190–191).

It is difficult to share Vanek's enthusiasm for clearing arrangements as an instrument for trade expansion. First, the assumption of similar degrees of overvaluation of currencies is, as he also realizes, somewhat unrealistic. Developing countries vary drastically in the degree to which their currencies may be overvalued with respect to hard currencies. Second, clearing arrangements with interim credit do not reduce the need for foreign-exchange reserves to meet balance-of-payments contingencies. A participating country's net payments in gold and hard currencies are not affected, except in the very short term. Since settlement presumably is effected in hard currencies and the official (overvalued) exchange rate is used in the clearing, it is hard to see why the bilateral clearing arrangement would provide a stimulus to trade.

Finally, considerable experience with clearing arrangements among less developed countries suggests that little trade expansion can be traced to the arrangements themselves. This has been true for the Regional Cooperation for Development group (Iran, Pakistan, and Turkey) and for Latin America, where the ratio of regional trade to total trade has not increased significantly. The experience of the CACM is also instructive in this respect. Trade among the members of the CACM expanded at a very rapid pace in the period following the formation of the common market and clearing arrangements. The rate of growth of intra-CACM trade between 1960 and 1969 was 26 per cent per annum, compared with 6.5 per cent per annum for extraregional trade. However, this rapid growth in trade appears to have resulted primarily from the substantial preferential trade margins provided to participants in the CACM vis-à-vis outside producers and to the expansion of markets. The facilitation of payments through the clearing arrangement was responsible only to a very limited extent.

While clearing mechanisms may not provide either a significant stimulus to increased trade among the less developed countries or a substantial reduction in their foreign-exchange needs, these arrangements may still result in improvement in the payments mechanism of participating countries.

In the first place, the use of regional, as opposed to foreign, currencies for regional transactions may lead to some small economies in the use of foreign exchange. For example, a clearing arrangement may enable less developed countries to reduce the level of idle working balances held with foreign banks. These balances are in convertible currencies maintained to finance day-to-day servicing of international transactions through foreign banks. Since transactions would be carried on through the clearing mechanism, the funds that members would have had to keep in foreign financial centers could be reduced, thus freeing some, albeit small, amounts of foreign-exchange reserves. How much would be freed is difficult to say, because less developed countries would still have to maintain balances to finance trade with nonparticipants.

Use of the clearing mechanism will also reduce the need for transfers of funds between accounts of less developed countries in foreign financial centers, such as New York or London, to settle individual traders' transactions, but the charges that foreign banks make for these transfers are small—around .25 per cent. The CACM clearing union, perhaps the most successful of these arrangements, has clearly achieved a significant increase in the use of the clearing mechanism for the settlement of regional transactions; about 85 per cent of all transactions among member countries are being handled through the clearing arrangement. In the Latin American Free Trade Association the proportion is 40 per cent, while in the Regional Cooperation for Development group it is barely 1 per cent. Assuming that clearing reduces fees in foreign exchange amounting to .25 per cent of each transaction and that all transactions cleared through the CACM between 1962 and 1970 had been cleared in London or New York, the member countries would have had to pay some \$3.3 million in additional fees. Savings on these fees represent 1.2 per cent of the \$267.5 million in reserves held by CACM countries in 1971. Thus, it would appear that the savings that could accrue to participants in clearing arrangements on account of the payments are likely to be small.

Clearing arrangements may result in some economies that accrue to traders in the participating countries but not to the countries as a whole. For instance, if transactions are carried out in the regional unit of account and participating countries deal in each other's currencies at par, this would reduce the conversion margin of the banks and hence the transaction cost to the trader. Traders would also benefit from not having to obtain forward cover, as transactions under clearing are normally covered under exchange-rate guarantees.

Finally, a clearing arrangement can undoubtedly prove beneficial in promoting consultation and perhaps even cooperation among central banks and monetary authorities in a region. Having noted this fact, it is difficult to say much more in assessing the importance of clearing arrangements relative to other forms of international cooperation. In areas where such arrangements have been established, they have followed or ac-

companied decisions to undertake important integration commitments but have not been the catalyst for such commitments. On the other hand, in regions where trade cooperation has proved difficult, the establishment of a clearing union might prove a useful first step. It is relatively simple to establish and operate and requires few commitments on the part of the participating countries. In Asia, where past integrative efforts have had little success, in part because the tremendous political and economic diversity of countries in the region made it difficult to undertake extensive trade-liberalization commitments, clearing appears to be a promising mode of cooperation.

## An Aside—Worldwide Clearing for Less Developed Countries

The proposals of Michael and Frances Stewart (discussed in Lipton, 1972) for the establishment of monetary arrangements covering all less developed countries should be mentioned in the same context. The Stewarts start from the premise that prospects for exports from less developed countries to markets of developed countries are dim and that, for a variety of reasons, less developed countries ought to restrain imports from developed countries. This leads them to emphasize expansion of trade among less developed countries as a solution. The proposed monetary arrangements would then be an instrument to promote trade expansion, and preferential rates of exchange would apparently be used to provide a stimulus.

This is not the appropriate place to discuss the complex and far-reaching implications of the Stewarts' assumptions and argument. Neverthe-

less, some general observations are appropriate.

First, differential exchange rates would promote trade in the same way that a customs union does, except that the preferences would be granted through the exchange-rate mechanism rather than through tariffs. Thus, payments arrangements of this type are substitutes for, rather than complements to, trade liberalization through reduction of trade barriers. While preferential exchange rates might provide a strong stimulus to trade of less developed countries, their usefulness in this respect must be compared with the alternative way to attain the same objective—by providing preferential treatment to the tradable goods of other less developed countries. Since the differential exchange rates presumably would cover all transactions, their effects would be pervasive and similar to those of a customs union. These effects might be cushioned by the establishment of controls that would allow protection for certain countries or certain industries in order to enable them to compete with other participating countries. Despite this possibility, the establishment

of differential exchange rates appears to require the kind of political commitment to integration whose very absence, with few exceptions, has hitherto inhibited the establishment of bona fide customs unions among less developed countries. These problems obviously increase with an increase in the number of potential members in the union.

Second, the creation of a third-world monetary system can have potentially adverse repercussions on the existing system of trade and payments, resulting in a reduction of efficiency in the payments mechanism through discrimination against developed countries. While such discrimination may be justified as a means of effecting resource transfers from developed to less developed countries, direct transfers to these countries would appear to be a more efficient transfer mechanism.

Third, the creation of such a system is not a practical alternative. At present, trade and payments relations with developed countries play a dominant role in the trade of less developed countries. These relations would pose insuperable obstacles to the establishment of an alternative and competing payments mechanism. For example, an alternative international banking system would be needed, as the existing one is dominated by banks of the developed countries. Such an undertaking does not appear feasible. In addition, an alternative exchange system would require commitments to convertibility on the part of less developed countries if it were to function as efficiently as the competing system, and only a few of these currencies are strong enough at present to pass the convertibility test.

## Payments Unions

It is widely recognized that a simple clearing arrangement alone is not likely to yield substantial benefits to the participants and materially contribute to the liberalization and expansion of their trade. Thus proposals for a clearing arrangement usually blend into proposals for a payments union to supplement it.

At the start of our analysis, it is appropriate to discuss the validity of one of the basic assumptions underlying proposals for payments arrangements: that trade liberalization in less developed countries is inhibited by their balance-of-payments fears and, hence, that special payments arrangements are a necessary, although not sufficient, condition for trade expansion and liberalization among less developed countries. Payments arrangements with intermediate credit, it is asserted, will provide these countries with the necessary "security" with respect to the balance of payments to enable them to liberalize trade. This assertion rests at the core of payments union proposals (UNCTAD, 1970).

To determine the validity of this assertion, one must explore the factors that are responsible for the establishment of trade controls, as well as the likely effects of trade liberalization on the balance of payments. Recent investigations by Balassa (1971) and Little, Scitovsky, and Scott (1970) have focused attention on the pattern and factors responsible for the trade barriers erected by less developed countries. Their investigations conclude that these countries have in most instances erected an assortment of haphazard trade controls, often quite restrictive but typified by very large variations in the level of effective protection accorded to various industries. Originally, the motivation for trade controls may have been short-term balance-of-payments crises and/or a basic policy of industrial promotion through trade barriers.

Whatever the original motivation, the unplanned application of controls has led to the establishment and expansion of industries differing widely in efficiency and ability to compete with imports without substantial protection. Hence, the problem posed by trade liberalization is not the potentially damaging effect on the balance of payments (this can be dealt with by a simultaneous devaluation) but the effect on output and employment in industries that have flourished under protection. Less developed countries often find it even more difficult to liberalize trade among themselves because of the damage liberalization might do to inefficient industries. The small amount of trade involved diminishes the incentive to adjust the exchange rate in order to deal with the potentially adverse effect on a few industries. Of course, it is precisely the displacement of inefficient import-competing production that would be most beneficial.

Undoubtedly, payments unions could be of some help, through extension of medium-term credit to less developed countries in aid of balance-of-payments disequilibria. It is not at all clear, however, that a payments union is necessary or even important in inducing less developed countries to liberalize their mutual trade. In any case, the establishment of payments unions among less developed countries has been inhibited by many problems, and no such agreements have been concluded to date. It is to these problems that we can now turn our attention.

Mutual credit. In the case of a payments union with mutual credit, the fundamental problem is to discover less developed countries willing to become creditors within the union in light of the fact that they are typically large debtors in their overall balance of payments. The alternative—to pursue as a conscious aim continuous balance in trade among participants—would adversely affect both the efficient allocation of resources in the participating countries and the trade of nonparticipants.

Over the long run, trade balance is important to the viability of the union, but it should not be a short-run objective.

A country's willingness to participate in a payments scheme would depend on the likelihood, first, that its position as a creditor within the group might change to debtor and, second, that its trade would expand more rapidly as a result of the union. Unless reversals in imbalances occur as anticipated, there is no incentive for a creditor country to participate.

Unfortunately, it appears that trade-balance reversals are uncommon in trade among less developed countries. In intra-CACM trade there was only one trade-balance reversal among the five countries in the five-year period from 1964 to 1969; only a small number of reversals have occurred in the ECAFE region in recent periods; and an Agency for International Development study (Michalopoulos, 1970) of sixteen less developed countries in various regions accounting for 42 per cent of all trade among less developed countries showed that only two experienced trade-balance reversals in intragroup trade over the period 1962-1968.

To some extent, reversal in the existing positions can be effected by provisions guiding the extension of credit and repayment. In general, two approaches can be used: Repayments can be based on the reversal

of position or on a prearranged time schedule.

The EPU used the first approach. The procedure, broadly, was as follows: Repayment was made on a monthly basis, partly in cash and partly in the form of credit under a quota system. (Originally, a sliding system of cash and credit was utilized, to be changed later on to a uniform fifty-fifty rate.) Any payments in excess of the quota were settled in cash—with some exceptions relating to extreme debit or credit cases. Under this system, a debtor country could enjoy continued credit for an indefinite period as long as it remained within its quota, and repayment hinged on a reversal of its position. The same applied to creditors. Such a system spreads the onus of adjustment between debtors and creditors, but at the same time the quotas limit to predetermined amounts the credit that is extended to or received by any single country.

The alternative method requires repayments on the basis of a prearranged timetable irrespective of position. It throws the onus of adjustment more heavily on the debtor, which must either take actions that force a reversal within the union or gain a surplus on trade with the rest of the world.

The relative feasibility of these approaches depends on the cooperation prevailing among the members of the union. If there is considerable

agreement between debtors and creditors on general economic policy questions, assuring that reversals of position will occur, then the former method is preferable. If, on the other hand, such cooperation cannot be assumed, then the generally harsher terms implicit in the second approach may have to be imposed in order to reduce the amount of credit that would have to be extended by participants to persistent debtors within the union.

Even if policy coordination is undertaken, there is no guarantee that intragroup trade would not leave many countries with large credit or debit positions. It would then make little sense for a less developed country to participate in this arrangement as a creditor, particularly if such a country, though a creditor in the union, is an overall debtor, requiring foreign transfers to maintain a satisfactory growth performance. It is for this reason especially that the idea of a payments union was abandoned in the ECAFE region and instead a multilateral reserve center was proposed. Thus, the basic problem of a payments arrangement for intragroup trade and payments is that it focuses on only a segment of the overall balance of payments, and probably on a relatively unimportant segment at that.

The prospects for success of a payments union will grow if the creditors anticipate large increases in their exports as a result of the union. For this to occur, however, the payments union must be tied to an agreement that obligates participants to undertake trade liberalization over time. This is a very important condition which, if not fulfilled, is likely to render any payments arrangements inoperative. It should be recalled in this context that the EPU was expressly tied to a code of liberalization of intra-European trade to which members had to accede if they were to participate in the payments arrangements. This code involved commitments to eliminate all quantitative restrictions over a five-year period, as well as other measures facilitating intra-European trade. The likelihood appears remote at present that groups of developing countries could agree to a similar code of trade liberalization.

Initial positions. In order to avoid the problems resulting from large and persistent debtor or creditor positions and the need to finance substantial intraregional, as opposed to global, deficits, it has been suggested that payments arrangements be established on the basis of initial positions. This approach could well achieve the main objective of the union, trade expansion and liberalization, at a lower cost in terms of the amount of financing needed. Since the agreement would apply to changes in trade, it would be less likely that large, irreversible credit and debit positions would be established, and those less developed coun-

tries that are likely to be creditors on overall trade with other such countries would have more incentive to participate. Also, since the scheme would be related only to changes in trade, both the amount of financing needed and the scope of credit extended would be smaller than if all trade were included.

The AID study referred to earlier showed that if 100 per cent financing for all the intragroup balances for sixteen less developed countries had been undertaken in 1968, net credit outlay for that year would have been \$347.1 million. By contrast, if the year-to-year changes in intragroup balances were fully financed, a credit outlay of only \$18.7 million per year would have sufficed on the average.

However, such a modification raises additional questions: Would the initial positions remain constant or would they be adjusted? And if they are adjusted, what rules should be used? One answer might be to employ moving averages. The answer apparently proposed in an earlier ECAFE study was to embody in the agreement a growth rate for each country's exports and imports. The difficulties in arriving at such commonly agreed rates of growth cannot be minimized, and the situation is not helped by the absence of prior experience with a payments union operated on such a basis.

Solutions for these difficulties would be easier if it could be ascertained that the participants in the union were doing their best to expand trade among themselves and to pursue policies that did not take unfair advantage of the possibilities for credit opened to them by the payments union. But this requires a unity of purpose and a solidarity that have only rarely been present in arrangements involving either developed or less developed countries. It could be argued that the EPU did play its part in promoting European integration, but within the context of the overall European recovery and integration efforts of the 1950's. However, it is almost impossible to judge the role that a payments union could play, alone or in combination with regional trade arrangements, in promoting integration among less developed countries.

## Reserve Pooling

The rationale of reserve-pooling arrangements is to provide a first line of defense for balance-of-payments problems experienced by less developed countries in a region. By pooling reserves, each country presumably is better able to deal with occasional disturbances in its balance of payments. The major benefits expected from reserve pooling have been perhaps best articulated in the proposals for creating an Asian Reserve Bank (ECAFE, 1972, Add. 1, p. 2):

- (1) facilitating members' participation in proposals for trade liberalization and expansion, either individually, regionally, or worldwide.
- (2) reducing the likelihood that members losing reserves will adopt income, an exchange rate, and trade policies that would reduce regional and world economic welfare.
- (3) directly economizing on the reserves held by members and so freeing some portion of these reserves to be used for investment in development projects in the region, raising regional growth rates and expanding regional markets.
- (4) providing, at a low or zero marginal cost, reserve "insurance" for the cooperating nations and so reducing the risk, when payments problems arise, of trade distorting and income reducing speculative movements in capital and commodities.

In the case of the Central American Monetary Stabilization Fund, it was expected that the creation of the Central American Common Market would result in significant trade liberalization among participating countries. The CAMSF would be a useful support for this liberalization and provide the means for cooperation in meeting balance-of-payments crises of individual CACM countries, a further step toward economic integration of the region.

Experience with these arrangements is limited and centers on the monetary unions in franc-area Africa, whose characteristics cannot be easily generalized to other less developed countries because of the special monetary relations in the franc area. On the payments side, it seems that the Banque Centrale des Etats de l'Afrique de l'Ouest, the central bank for the West African Monetary Union (UMOA), is mainly committed to the financial objectives of keeping excessive external reserves and limiting credit facilities to avert balance-of-payments difficulties. It pays little attention to what should be the primary objectives of economic development. In fact, the BCEAO customarily maintains external reserves at a level about five times higher than necessary to handle any likely UMOA external imbalances. These assets, moreover, are immobilized in French francs in France rather than being used for African development.

The BCEAO's restrictive credit policy seems to be designed not to stimulate domestic savings but rather to protect the "theoretical" over-draft facilities on the French Treasury. Such a system is very costly to the participating countries, since it results, in effect, in lending by the less developed countries of UMOA to France for the not-very-valuable privilege of overdraft facilities. These facilities are strictly limited both in time and in amount; no deficit is allowed beyond sixty days, and the

maximum amount is 10 per cent of the previous year's domestic fiscal

receipts.

The CAMSF has been in existence too short a time to allow a general judgment of its effectiveness in dealing with balance-of-payments questions. In the one important balance-of-payments crisis since 1970, in Costa Rica in the summer of 1972, no assistance was extended by the CAMSF and none was officially sought. The crisis, in fact, drove Costa Rica temporarily out of the clearinghouse arrangement, because the application of preferential exchange rates to other CACM countries, through the clearinghouse, led to large intraregional trade deficits.

From the trade side, the argument that reserve pooling will promote trade liberalization is subject to the same reservations as with payments unions: It is doubtful that trade liberalization in less developed countries

is seriously inhibited by balance-of-payments uncertainties.

It is ironic that, after the CAMSF was established, expansion in intra-CACM trade was slower than before. However, this development should not be viewed as a by-product of the CAMSF; it has been due mostly to the *de facto* secession of Honduras from the CACM, as well as the balance-of-payments problems faced by Costa Rica since 1970. Similarly, the monetary unions in Africa have definitely not helped promote intraregional trade. Monetary integration has not even materially helped commercial integration. Rather, the arrangements seem primarily to facilitate business and trade with France and the European Economic Committee.

It would therefore appear that the benefits of the proposed Asian Reserve Bank in the realm of trade liberalization would be small or nonexistent. On the other hand, from the payments standpoint, the proposed facility may be feasible and may have the potential to provide some benefits in intermediate balance-of-payments support to the participants.

To investigate the feasibility of an Asian Reserve Bank, ECAFE determined what reserves would have been available and how they would have been used if such a bank had been in operation in the period 1958-70, under the basic conditions outlined in section 1 above. The study

concludes:

A reserve bank covering all ECAFE members (including developed countries exercising borrowing rights) would have enjoyed a mixed experience in the 1958-70 period. In eight of the thirteen years covered, the bank would have fallen below its reserve requirement if it serviced all the semi-automatic drawing rights (twice beginning period required deposits) of members and members exercised these rights (unlikely for several). Only

by borrowing in several years could the bank both have serviced members' semi-automatic borrowing rights and maintained its required reserve posisition. In addition, the bank would have had funds to invest in long-term securities in only five of the thirteen years.

While some countries would have been on the creditor side most of the time, all less developed member countries would have used the bank's lending facilities at least once. In fact, eleven of the eighteen members would have been in debt in four to eight of the years covered, alternately using and contributing to the bank's lending capacity. This suggests that the benefits would not have been polarized.

The hypothetical reserve bank would have functioned better if the developed countries in ECAFE continued to deposit 10 per cent of their reserves but did not borrow. Under these circumstances, a regional reserve bank would have been able to meet its reserve requirement, service the semi-automatic borrowing rights of borrowing members, and have substantial amounts available for long-term investment in ten of the thirteen years covered, compared with five years for a regional reserve bank with *all* members borrowing. In fact, in the last five years over \$100 million would have been available for long-term investments.

Finally, the study suggests that all these operations would have been undertaken at minimum risk of reserve loss or illiquidity for the Asian Reserve Bank. For the bank to be illiquid, total reserves of the member countries would have had to decline by 30 per cent. In fact, the largest annual decrease in this period, in 1961, involved a decline in total reserves of only 3 per cent. Of course, the results are impaired by the assumption the study makes that the existence of such a bank would have had no effect on the payments transactions in the region. If the bank had stimulated trade expansion, as it is supposed to do, the analysis presented in the study, based as it is on what happened without the bank, would be inaccurate.

Nevertheless, the proposed Asian Reserve Bank has many attractive features. Credit is extended on the basis of the overall balance-of-payments position rather than the balances on intragroup trade. This approach makes it possible to tackle one of the serious problems likely to be faced by payments unions among less developed countries—how to deal with countries that are creditors within the union but overall debtors. Thus, while its effect on trade liberalization is likely to be minimal, there is little doubt on the basis of this analysis that the establishment of a reserve bank in Asia is feasible, particularly if the developed-country members contribute but do not exercise borrowing rights.

One further question needs to be raised, however: Do the countries

in the region need this additional facility in light of the facilities now open to them for borrowing for medium-term balance-of-payments support? The adequacy of existing facilities is difficult to determine because of the great diversity in the balance-of-payments situations of the countries in the region. If the ratio of reserves to imports in 1970 is used as an indicator, the ECAFE region fares on the average slightly worse than less developed countries as a whole (28.7 versus 31.9 per cent), but five of the sixteen countries have reserve-to-import ratios far higher than the average for less developed countries. Similarly, looking at the International Monetary Fund positions in 1971, one country in the region was in the third credit tranche, three in the second, and two in the first. This pattern was similar to that prevailing for all less developed countries. Thus, on the basis of this criterion also, one can conclude neither that less developed countries in the ECAFE have nearly exhausted their credit with the IMF in absolute terms nor that they are worse off than other less developed countries. One can say only that while there may be no urgent need for an Asian Reserve Bank, the bank if established might provide tangible benefits to participants in the area of balance-of-payments support when needed.

It is also hard to judge whether the agreement is likely to provide a positive stimulus to general integration efforts in the area. Experience in Africa and Central America indicates that monetary agreements tend to follow basic integration decisions in the trade area rather than lead the way to further integration.

#### 3. The Role of Outside Assistance

The usefulness or desirability of developed-country or IMF participation in the payments arrangements of less developed countries varies considerably with the nature of the arrangement. In clearing arrangements, strictly defined, foreign participation is not needed; the participants can and have easily extended the necessary amount of credit. Foreign participation has not been sought for the clearing arrangements already in existence, nor does its absence appear to be a serious inhibition to the creation of others. However, the situation is quite different in regard to payments unions and reserve pooling. In the case of the former, more than the latter, foreign participation has been considered crucial to their establishment and successful operation. It has often been pointed out that the EPU success was made possible in large part because of the original U.S. grant of \$100 million, which helped the union to deal with the problem of persistent debtors.

The argument for developed-country or IMF contributions to payments unions of less developed countries is simple: Outside aid eases the problem of financing credit positions within the union. Aid funds can pay creditors in part or in full, while a certain amount of credit can be extended to the other participants. The incentive for a creditor to participate would then be the clear benefits that it would derive from potential trade expansion resulting from the union.

A basic issue raised by a payments union with outside credit relates to the criteria for allocating the credit. If there are persistent debtors, then one group of less developed countries enjoys the benefits of the outside credit, implying transfers of resources, while the other group benefits only to the extent that their exports increase as a result of the union. The more fundamental problem is whether or not the allocation of aid funds by a payments union is rational. The debtors, whoever they are, get credit automatically according to certain prespecified rules whose stringency can vary with the amount of credit they request. But it cannot be established if the need for this credit is the result of inappropriate domestic or international trade policies. Furthermore, the extension of credit relates to a balance-of-payments position with respect to the region and not to the world as a whole, and yet it is the latter and not the former that should be considered when foreign aid is extended to a less developed country on balance-of-payments grounds.

Extension of credit for intra-union balance-of-payments support could be justified if it were demonstrated that the need was related to trade liberalization undertaken by the participating countries. However, it does not appear possible to demonstrate this proposition empirically. One way out may be institutional, namely, that the less developed countries make the payments agreements contingent on mutual trade-liberalization measures undertaken by all the participants. Thus we return to the proposition raised earlier: A payments union of any configuration must be associated with a trade-liberalization agreement by the less developed countries involved. Unless such an agreement becomes an organic part of the payments union, the union alone will provide little incentive for creditors to participate and might result in an inefficient allocation of outside credit. Unfortunately, as noted earlier, serious obstacles unrelated to balance-of-payments risks inhibit mutual trade liberalization of less developed countries.

United States support for the EPU was intimately related to the European commitment to liberalize trade. The letter of the U.S. Special Representative in Europe to the Secretary General of the Organization

for European Economic Cooperation transmitting the decision of the United States to assist materially the creation of the EPU read in part:

The Government of the United States understands that the embodiment of the Council Decisions relating to the liberalization of trade in a separate document from the Agreement of the Establishment of a European Payments Union does not in any way derogate from the well-established understanding that the decisions on trade liberalization and the financial principles of the European Payments Union are both parts of a single comprehensive program.

Similar goals of trade liberalization and general economic integration figured prominently in the U.S. decision to extend a \$10 million loan to CAMSF.

Perhaps because such benefits are not likely to materialize in the case of the Asian Reserve Bank or other similar pooling arrangements, outside assistance is sought on different grounds. It is suggested that outside depositors could be attracted to the bank because (a) the rate of return on such deposits, in combination with the low risk associated, might make them attractive to developed-country central banks, and (b) such deposits would be an inexpensive form of foreign aid (ECAFE, 1972, Add. 1, p. 8).

It is doubtful that such an allocation of reserve assets would be attractive to developed countries from the standpoint of their reserve portfolio management. These deposits, irrespective of relative earnings and risk considerations, would be highly illiquid. The only way to view such deposits is as a form of economic assistance, much the same as a contri-

bution by outside creditors to a payments union.

Viewed as aid and judged from the standpoint of efficiency in aid allocation as between countries, outside contributions to reserve pools are preferable to payments unions because the apportionment of credit is based on the overall, rather than the regional, balance-of-payments position. If the objective of foreign transfers were simply to provide general balance-of-payments support for less developed countries, the allocation of transfers through the Asian Reserve Bank would not result in serious inequities. Of course, this conclusion is based on the assumption that the balance-of-payments deficits that would be partly financed through the bank were not the result of policy deficiencies in the recipient countries.

Nevertheless, there are additional problems connected with allocating aid funds in support of payments arrangements, either of the payments-union or reserve-pooling type. In the first place, given the nature of the

reserve-pooling mechanism, only a portion of the deposits can be lent out; the rest must remain intact in order to maintain bank liquidity. Thus, a given amount of aid funds committed to a reserve pool will have a smaller impact on the balance-of-payments picture than direct support of a less developed country. The Asian Reserve Bank, however, would not need outside credit to provide more loans for balance-of-payments support. Rather, outside deposits would enable it to enlarge its holding of securities issued by regional or other development institutions, increasing the transfer of resources to the less developed countries. But then why is it necessary to use the Asian Reserve Bank as an intermediary; why not allocate more funds directly to regional development institutions?

Although development planning and the management of economic policy in less developed countries have made big strides in the last two decades, in all but a few of these countries donors—including international organizations—can still make a contribution. Such a contribution can best be made in the context of economic assistance in support of long-term development projects or programs, rather than on an ad hoc basis and in response to short- or medium-term balance-of-payments problems whose causation may be difficult to determine. In reserve-pooling arrangements, assistance is typically granted almost automatically in response to balance-of-payments difficulties, and it could be argued that the marginal productivity of such aid is low. This does not mean that present patterns of transfer maximize the marginal productivity of aid transfers nor that balance-of-payments support is not given to individual countries.

Naturally, those who favor foreign-assistance support of payments arrangements would like to view such assistance as additional to that provided under existing programs or as a substitute for even less productive assistance. Thus, even if it were not as productive in promoting the development objectives of less developed countries, it should still make a positive contribution. The problem then is to determine whether such assistance is likely to be additional. This is a familiar and thorny problem to be faced whenever any new aid is initiated. It is my view that, in light of presently prevailing attitudes toward development assistance both in the United States and abroad, and in light of the large unfilled needs of less developed countries in many high-priority areas, it is highly unlikely that additional funding by developed countries for financial support of payments arrangements can be either justified or obtained.

#### 4. Conclusions and Policy Implications

Most writings or pronouncements on payments arrangements among less developed countries conclude with a more or less enthusiastic endorsement of such arrangements as useful instruments through which less developed countries can attain a variety of development objectives. By extension, most studies recommend that developed countries provide financial assistance to make possible the establishment of payments arrangements. This essay has tried to sound a few notes of caution. It recognizes the usefulness of some types of arrangements, primarily in improving payments facilities and providing intermediate balance-of-payments support, but questions the role payments arrangements can play in expanding trade among less developed countries, as well as the need for and desirability of financial assistance from developed countries or the IMF.

Payments arrangements do not appear to have contributed significantly to the integration efforts of less developed countries. Rather, they have generally followed integration commitments already made. Payments arrangements might increase the leverage of less developed countries in their dealings with developed countries or with international organizations. However, it would seem that such countervailing power could best be built on the foundation of trade agreements or agreements establishing common policy toward foreign investors. It is in these areas, rather than in payments or clearing, that confrontations of less developed with developed countries are more frequent and that leverage could more usefully be exercised.

These conclusions by no means imply that developed countries should not endorse payments arrangements or, worse, that they should oppose them. All such arrangements, if feasible, are likely to yield some benefits to the participants, in the form of improvement of the payments mechanism; in some instances, balance-of-payments support and trade expansion; and, in most cases, increased cooperation among less developed countries. There is no substantial evidence that the arrangements discussed here, with the exception of discriminatory exchange-rate proposals, are likely to have adverse effects on the rest of the world or on the operation of the international monetary system in general. Thus, when such arrangements are proposed, particularly in international conferences, developed countries should concentrate not on abstract discussions of principle, as has often been the case, but on seeing to it that the less developed countries devise workable arrangements. Less developed

countries often need technical assistance in order to establish arrangements that maximize the benefits they can derive from the international commitments they are willing to undertake.

The IMF has supplied such assistance in the past by providing technical-assistance missions to groups such as LAFTA, ECAFE, and francarea countries in Africa. In light of the expertise developed by the IMF in this area, there seems to be no need at present for involvement in this area by the United States or other developed countries.

#### References

Balassa, B., The Structure of Protection in Developing Countries, Baltimore,

Johns Hopkins Press, 1971.

ECAFE, Feasibility Study on the Establishment of an Asian Reserve Bank, Trade/TLP/ARB(1)1 and Trade/TLP/ARB(1)1 Add. 1, Bangkok, 1972.

Grunwald, J., M. Wionczek, and M. Carnay, Latin American Integration

and U.S. Policy, Washington, The Brookings Institution, 1972.

Lee, S. Y., "Prospects and Scope of an Asian Clearing Union," paper presented at the SEADAG Conference on Asian Cooperation, Bangkok, 1972.

Lipton, M., UNCTAD SCHMUNCTAD, Brighton, England, Sussex

University, Institute of Development Studies, 1972.

Little, I., T. Scitovsky, and M. Scott, Industry and Trade in Some Developing Countries—A Comparative Study, New York, Oxford University Press, 1970.

Michalopoulos, C., Trade Patterns for Selected LDCs, Washington, Agency

for International Development, 1970.

Mookerjee, S., A. Chandavarkar, and D. Cleary, "Existing International Banking and Credit Facilities in the ECAFE Region," *IMF Staff Papers*, 16 (November 1969), pp. 391-435.

Nowzad, B., and J. Messinesi, "Regional Payments Arrangements among Developing Countries," Central Bank News Digest, Central Bank of the

Philippines, 24 (1972).

Pearson Commission, "Partners in Development," Report of the Commission on International Development, New York, Praeger, 1969.

United Nations, Trade and Monetary Cooperation in Asia and the Far East,

New York, 1971.

UNCTAD, "Payments Arrangements among the Developing Countries for Trade Expansion," Report of the Group of Experts, TD/B/80/Rev. 1, Geneva, 1966.

, International Policies on Payments Arrangements among Develop-

ing Countries, TD/B/AC 10/4, Geneva, 1970.

Vanek, J., "Payments Unions among the Less Developed Countries and Their Economic Integration," *Journal of Common Market Studies*, 5 (No. 2, 1966), pp. 187–191.

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