Finally, the U.S. should sponsor moves to provide an important role for the World Bank as an independent technical advisor and consultant in global energy discussions. The World Bank has the proven capabilities to evaluate and advise on development projects, energy, international finance and the problems of developing countries. Coupled with a realistic and sympathetic understanding of the world's economic and political forces, its participation would be beneficial to all. In time the World Bank might be encouraged to sponsor or convene a global conference.

Energy negotiations will be slow, frustrating and difficult; and unless we start now we will not be in a position to meet our needs when a critical shortage arises. Although some progress is currently being made, the required changes in attitude and participation demand patience and strong leadership. I do not believe we have any realistic alternatives for the long term other than to make these changes. Both producers and consumers have too much to lose not to commence international energy negotiations now, thorny though they might be.

In late 1978, the Occidental Petroleum Company signed a \$250 million agreement with the Soviet Union to provide eight ammonia plants, pipelines and port facilities in exchange for ammonia, urea and potash. Earlier in the year, Japan signed a \$20 billion, eight-year agreement with China to provide technology, whole plants and equipment in exchange for oil and coal. In February 1979, Container Transport International (U.S.) agreed to provide China

The Resurgence of Countertrade: An Alternative Method of Financing Trade for the Developing Countries

DANIEL K. H. CHAO

with \$50 million worth of plant construction technology in exchange for a percentage of the factory's future production of containers.

These examples of countertrade activities indicate that more countries are turning toward unconventional methods of import financing. Countertrade — the payment for imports in a form other than on a straight cash basis — is becoming more common as many non-oil producing developing countries are

Daniel K. H. Chao holds the Ph.D. Degree from The Fletcher School and works at Chemical International Finance Ltd., a division of Chemical Bank.

suffering from larger trade deficits and higher debt service requirements. This has promoted the use of a wider variety of finance and trade procedures, affecting billions of dollars worth of business. Barter, switch, and compensation trade, cooperation agreements, and joint ventures that include product buyback stipulations, are all included under "countertrade."

Countertrade in its simplest form, barter, has been used ever since man began to trade in his most primitive stages of development. When the straight barter system was replaced by payment in gold and silver, and then followed by the introduction of paper currencies, countertrade declined. However, as limitations on the convertibility of currencies increased, and as the Communist bloc emerged following World War II, countertrade increased. Countries began to enter into bilateral clearing arrangements in order to maintain a degree of equilibrium in their trade balances. These agreements recorded transactions only on a ledger basis with so-called "clearing dollars" being credited and debited by the central banks of the COMECON countries and a few developing countries. This method was designed to facilitate trade by circumventing the problems of currency inconvertibility and of low levels of foreign exchange reserves. Still, the scope of countertrade in the 1950s and 1960s was limited. As the world economic system prospered, credit became readily available, and debt service burdens for most countries remained at acceptable levels. Countries were thus able to rely on more conventional trade financing methods to fund development programs.

In the 1970s, however, changes in the international economic order have heightened worldwide interest in the numerous aspects of countertrade. Heavier oil-import financing burdens due to the unabated rise in oil prices, limited access to the markets of the West, and higher levels of foreign borrowing have increased the balance of payments problems of non-oil developing countries. In addition, the COMECON countries all carry large amounts of foreign debt, and the prospect of a cutback in oil supply from the Soviet Union within the next five years would further increase balance of payments pressures for the Eastern bloc. Because of these developments, many nations face onerous debt service requirements and shortages of foreign exchange. As a result, they have begun to search for new strategies and trade practices in order to boost exports and to conserve capital reserves. Countertrade is one such practice.

Various methods of countertrade enable countries to: 1) conserve valuable foreign exchange without sacrificing imports or jeopardizing development goals; 2) gain greater access to Western markets; and 3) improve the balance of trade. For example, product buy-back arrangements allow countries to pay for imported technology or machinery with the goods produced from these imports, instead of using scarce foreign exchange reserves. In the case of a partial compensation transaction, part of the repayment for imported goods may be in foreign exchange with the remainder being offset by a parallel sale of products.

In both instances, the importing country is able to reduce its outflow of foreign exchange and gain greater access to foreign markets.

In the recent past, these types of arrangements have been carried out primarily by countries with non-convertible currencies, specifically the COM-ECON nations. Now, however, seminars on the subject are proliferating as countries and companies are beginning to respond to the fact that countertrade is becoming an integral part of international trade which is not restricted to the Eastern bloc.

The present estimated volume of countertrade is one indicator of the growing importance of this trade financing method. In 1978, countertrade accounted for 10-15 percent of East-West trade. The total volume of trade had grown approximately 21 percent over the previous year, from \$60.9 billion to \$73.5 billion, while the countertrade portion had increased 25 percent over the same one-year period from \$6-9 billion to \$7.5-11 billion. Clearly, COMECON has found countertrade to be a useful method of gaining access to Western goods and markets. From the perspective of the developed countries, it is equally evident that countertrade plays an important role in the settlement of payment obligations. For example, approximately 15 percent (\$2.2 billion) of the Federal Republic of Germany's exports to Eastern Europe in 1978 were completed through countertrade transactions.

On the level of individual transactions, the countertrade component might range up to 100 percent of the total export value. Bulgaria, East Germany, Rumania, Hungary and the U.S.S.R. all require, at times, that the foreign exporter take payment by purchasing an equal amount of domestic goods. China is another country which has requested that repayment take the form of a 100 percent buy-back arrangement. By structuring the financing in this way, payment is not only made in kind, but it is deferred to a later date. Clearly this is beneficial to the importing country.

The future prospects for countertrade are bright for several reasons. First, if attempts by the developed countries to curb activity in the Eurodollar market are successful, the amount of credit available to the developing countries will decrease. Although foreign credit remains relatively easy to obtain in many countries, more reliance will have to be placed on increasing exports in order to fund ambitious development programs. Countertrade is one method which can help to boost exports and reduce trade deficits.

A second factor which enhances the prospects for countertrade is that a growing number of non-oil developing countries are approaching the limits of their borrowing capacity. Yugoslavia, Ghana, Zaire and Turkey are examples of countries which have required debt restructuring in the recent past. Interest

Jan Stankovsky, "Kompensationsquotum im Ost-West-Handel," in Grundlagen Der Kooperation (Austria), 1 February 1979.

payments are saddling governments with heavy burdens and eroding some of the gains of development. Trade balances continue to worsen as imports are funded by credit rather than by export revenues. In the near future, many developing countries will become more averse to increasing their debt repayment requirements and will begin to emphasize export growth instead.

Third, other methods of development financing such as foreign aid and loans from multilateral development banks have proven inadequate to meeting the needs of the developing countries. Two new financing services are now being studied by the Group of 24;2 one to provide medium-term funds for balance of payments support, and the other to provide long-term money for capital goods purchases. However, until these plans are implemented, countries must continue to emphasize exports in order to finance their import sectors. Again, countertrade provides a method for circumventing restrictions in world markets, thus boosting the export sectors of the developing countries.

An examination of the foreign debt of the COMECON countries and of the non-oil developing countries clearly indicates that debt repayment burdens are increasing and that trade balances are worsening. In the COMECON countries. the total trade deficit increased 32 percent from \$7.7 billion in 1977 to \$10.2 billion in 1978, and in 1979 this deficit is expected to reach \$11-11.5 billion. Higher energy costs, which have diverted resources from hard-currencygenerating activities, have limited demand for COMECON exports, and greater food imports have increased the pressures on their trade balances. The gross hard-currency indebtedness of the Eastern bloc rose \$6.3 billion (11.25 percent) to reach \$62.3 billion from 1977 to 1978, and estimates for 1979 and 1980 indicate that the debt will rise from \$70.5 billion (13.2 percent over 1978) to \$77-80 billion in 1980 (9.2-13.5 percent over 1979). These finance problems, combined with the growing trade deficit and a familiarity with countertrade concepts, will encourage the growth of COMECON countertrade in the foreseeable future. Moreover, the existence of a well-established countertrade organizational structure, including both foreign trade organizations and Western trading agents, will further facilitate countertrade activities.

Various developing countries are also areas where countertrade activities are bound to proliferate, primarily due to worsening trade balances and rising debt obligations. From 1977 to 1978, the developing countries' share of total world exports decreased from 13.4 percent to 13.2 percent while their import share rose from 14.3 percent to 14.9 percent.³ The total trade deficit increased 58.4

^{2.} The Group of 24 was established in 1972 by the developing countries in order to coordinate activities on international monetary issues. Since then, the Group has been able to participate more actively in discussions and negotiations on bringing about a new international economic order.

^{3.} International Monetary Fund, Direction of Trade, July 1979, p. 4.

percent to \$47.2 billion in 1978 with a large proportion of this deficit (\$25.1 billion) arising from trade with the industrialized countries. By 1984, it is estimated that about 50 percent (\$100 billion) of the developing countries' current account deficit will have been due to increases in the price of oil.

As of 1977, the total external public debt (excluding undisbursed credit commitments of \$84 billion) of the developing countries was \$201 billion. In 1978, this rose to \$241.8 billion with estimates of \$270.2 billion in 1979 and \$304.1 billion in 1980. From 1974 to 1978, the average annual rate of growth of external debt was 21.7 percent. Because of this, the debt service obligations of the developing countries have increased. For example, Argentina's debt service ratio in 1977 was 15 percent, while Bolivia's was 20.6 percent, Chile's 32.4 percent, Mexico's 48.1 percent, Peru's 30.3 percent, Egypt's 22.8 percent, Indonesia's 12 percent, Guinea's 43.5 percent, and Zambia's 18.6 percent. Today these ratios are considerably higher.

The benefits of undertaking countertrade activities for both the centrally planned economies and the developing countries are clear. However, there are disadvantages which must be recognized and many barriers which must be overcome before countertrade practices become more widely accepted, especially in the developed countries. The primary drawback for the exporter of countertrade goods is the fact that the products are often sold at substantial discounts in order to be acceptable to the importer. A second disadvantage is that the exporter to the developing countries often incorporates an extra margin into his selling price as compensation for the costs involved in having to accept a countertrade obligation.

From the perspective of the developed countries, countertrade presents several disadvantages. First, the inflow of low-priced buy-back products might create excess demand, thereby affecting domestic production and increasing protectionist pressures. Second, companies generally want repayment in cash rather than goods and thus are often averse to countertrade arrangements. Third, corporations which are committed to buy-back arrangements may face serious problems during periods of recession, when payment in kind would aggravate inventory build-up.

In addition to the disadvantages for participants on both sides of the transaction, there are also logistical problems which cannot be easily overcome. Conducting countertrade financing, with all its permutations, is difficult, costly and time-consuming. In addition, there is only a limited number of institutions and individuals in the world who have countertrade expertise. Prospective participants in countertrade (companies, foreign trade organizations, financial institutions, trading houses, etc.) must be educated as to how contracts should

be structured and obligations carried out. Finally, organizational structures must be established in both the developing and the developed countries to facilitate the negotiation and implementation of countertrade arrangements.

Countertrade is a notion which is reemerging in various forms with increasing importance. It is fast becoming an integral part of the international trade system and is a concept which the business communities of both the developed and developing worlds would be well advised to examine. To restrict its application is to constrain certain nations in their struggle to increase their economic well-being; to accept its usage involves making some degree of adjustment. Under the present circumstances, countertrade is an acceptable alternative, especially since the developing countries will most certainly be confronted with a harsher international trade and finance system in the near term.