

Countertrade— counterproductive?

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It started, perhaps, with a couple of Stone Age hunters. An agreement between the two to share the bounty of their daily hunt worked

well until the day one bagged a pheasant and the other, an elephant. On that day the need for a more efficient mechanism for exchange became apparent.

Over time, forms of “money” were developed to help solve this discontinuity in the value of exchanged goods. This led to more efficiently functioning markets in which these exchange discontinuities were no longer a major problem.

Nonetheless, in modern times barter and its numerous derivations, which have conceptually been gathered together under the rubric “countertrade,” have gained renewed stature in international trade. This has occurred despite the fact that international money and credit markets have attained unparalleled levels of sophistication.

Where readily acceptable forms of money exchange and viable credit facilities are available, markets shun cumbersome and inefficient barter-type transactions. But, international liquidity problems and government restrictions on the operation of markets have prompted many less developed countries (LDCs) and nonmarket economies (NMEs),¹ as well as industrial countries, to promote “creative” trade transactions that circumvent the normal exchange medium of modern markets.

Costly, inefficient, and disruptive, countertrade is still a significant factor in modern international trade, mainly because of political and economic policy distortions

What is countertrade?

The term countertrade does not tell us much about what it is, or is not. As the concept has evolved it has taken on a broad range of meanings. At present, the term “countertrade” includes practices that go well beyond the simple barter of goods. Indeed, the literature on countertrade leads one to suspect that more and more trade forms are being defined as countertrade. It has been defined to include transactions that range from the basic barter of goods to offsetting hard-currency cash transactions that take place over long periods of time.²

In the definition of countertrade, intent is the key. A goods-for-cash deal with no strings attached is not classified as countertrade. A goods-for-goods deal is countertrade. But, a goods-for-hard-currency deal is countertrade *if* the seller agrees to make an offsetting purchase at some future date. Strings, however long, make the difference. Countertrade is tied trade.

Countertrade agreements take several basic forms:

1. Barter;
2. Compensation or buy-back;
3. Counterpurchase;
4. Offset; and
5. Switch trading, an activity that often accompanies countertrade as an adjunct to any of the previous four forms.

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Barter is the oldest form of exchange transaction and involves the direct exchange of goods or services without recourse to currency. Although currency is not a part of the transaction, participants in international barter must establish, nevertheless, the relative price of the goods or services exchanged. They must then determine an implicit exchange rate in order to set the relative value of quantities to be traded.

Barter, in the strict commodity-for-commodity sense, is not currently a widely used form of countertrade. This attests to the widespread understanding by trade participants of the basic economic inefficiencies associated with countertrade, especially when taken to the barter extreme.

Nonetheless, even the United States government has formally embraced barter, particularly to assist in the disposal of surplus agricultural products. In the Agricultural Act of 1949, again in the Agricultural Trade Development and Assistance Act of 1954 (also known as Public Law 480 or the Food for Peace program), and most recently in the Food Security Act of 1985, legislation specifically sanctioned barter trade.

PL 480 set the procedure for the U.S. Department of Agriculture, through its Commodity Credit Corporation (CCC) to dispose of surplus U.S. agricultural products, especially wheat, cotton, and dairy products. During the 1950s and 1960s the act facilitated exchange of these surplus domestic food staples for storable foreign nonfood products, especially goods that could be added to the U.S. strategic stockpile.³ Title I of the act provided for the sale of commodities for local (nonconvertible or "soft") currencies, which were required to be used to purchase goods or services in the local economy. Such transactions might be considered to be on the fringe of barter. Title III provided for the strict goods-for-goods barter.

During the period 1950 to 1973, when the barter program was suspended after CCC-held surpluses ran out, \$6.6 billion in surplus agricultural products were bartered for materials added to the government's strategic stockpile, goods and services for overseas military operations, and AID projects.⁴

When the agricultural surplus once again became burdensome in the 1980s, political interest in barter arrangements once again arose. During the early 1980s, for example, several barter arrangements were carried out between the CCC and the government of Jamaica—the U.S. government traded dairy products, wheat, and rice for bauxite.⁵

Outside the United States, proposals for and completed barter arrangements appear to be common. In particular, Middle East oil-exporting countries engage in the barter of crude oil for goods and services. A typical example is a recent contract for the construction of an oil pipeline in Iraq by the South Korean firm Hyundai Engineering. According to reports, about 90 percent of the more than \$200 million pipeline cost is to be paid for in oil with the remainder in cash.⁶

Buy-back agreements became common during the 1960s with the advent of major economic development projects in the NMEs and the LDCs. Large industrial projects built by Western firms occasionally have been "financed" in this manner. The purchasing NME or LDC country buys the plant. In turn, the plant is paid for by selling to the Western firm (i.e., the exporting company buys back) some portion of the output of the plant over an extended period.

Several Eastern European industrial development projects have been financed in this manner. One of the best known projects of this type was the USSR's purchase of fertilizer plants and technology during the early 1970s from Occidental Petroleum. The plant and equipment were paid for by the subsequent importation by Occidental of nitrogen fertilizers produced at the facilities. In another case, General Electric sold machines for the production of medical equipment and the license to produce such equipment to Poland. Payment was in the form of electrocardiogram meters.⁷

Counterpurchase agreements, as the name implies, involve standard hard-currency transactions between the seller and buyer. The tie in the transaction is that, in order to make the sale, the seller (usually an industrial-country firm) agrees to a "return" purchase, that is, to counter-

purchase with hard currency a minimum quantity of specified goods or services from the buying country (a developing or non-market country) within a specified period. Failure by the seller to meet its counterpurchase requirement often results in substantial penalties.

A typical, but hypothetical, example of such a transaction might have a U.S. construction equipment company selling \$10 million in road construction machinery to the Indonesian government (a country that in fact actively engages in countertrade). This hypothetical contract calls for the U.S. company to be paid in U.S. dollars. The contract also calls for the U.S. company to buy from Indonesia a minimum of \$8 million in Indonesian-sourced goods within a period of five years. This contract would constitute an 80 percent counterpurchase agreement, (the agreement could call for a \$12 million, or 120 percent, counterpurchase). The counterpurchase agreement would most likely exclude petroleum—a product that Indonesia has no difficulty selling for dollars on world markets—from the permitted counterpurchase items. If the U.S. company fails to meet the \$8 million counterpurchase, the contract might specify a penalty of the difference between the contracted amount and actual purchases, plus some percentage of the contracted counterpurchase.

The catch to this type of agreement is that the “specified goods” to be counterpurchased, especially nontraditional goods from an LDC or NME country, may be of the type for which a ready market has not been established. Counterpurchase agreements are increasingly appearing in combination with offset agreements.

Offset agreements are an increasingly common form of countertrade. Offsets are unique in that they are more likely to involve (but are not restricted to) transactions between industrial countries—often a firm in one country and the government of another country. As a condition for a firm to sell its product in the second country, the government of the second (buying) country requires that some portion of the final output be produced in that country, or the buying government may request that the

seller firm assist in marketing or in finding a market for other goods made in the buying country.

Sales of commercial aircraft or military equipment, where portions of the product are made in the purchasing country, are among the most common forms of this type of countertrade. For example, in 1987 the U.S. aircraft manufacturer Boeing concluded a sale of AWACS (airborne early warning systems) aircraft with the French government with the offset, in part, being that the aircraft would be outfitted with French-built Snecma engines.⁸ Other examples include the U.S. sale of F-15 fighter aircraft to Japan with the offset that the airframe and other components are built in Japan. Commercial U.S. jet aircraft are often purchased by airlines in the U.K., but with the stipulation that they be outfitted with British Rolls-Royce engines.

Switch trading is not a specific form of countertrade in the same sense as the above categories. However, it is often a part of these transactions in that switch trading identifies a second or subsequent stage in a countertrade transaction.

For example, consider a hypothetical case where a U.S. exporter enters into a countertrade, let's say barter, agreement and accepts \$5 million in indigenous art objects in exchange for \$5 million in exports of natural-gas-powered electrical generators. The U.S. firm is unable to use the goods directly (its halls are already covered with pictures from a previous transaction) and lacks the marketing expertise or retail outlets to market the goods directly. Rather, the firm simply wishes to get rid of the goods as quickly as possible and “get its money out.” This is done by enlisting the aid of a switch trader.

The switch trader buys the art at a discount for \$4.75 million (the U.S. exporter knew the goods would be sold at discount so it attempted to build some or all of the discount into the price of its exported goods). Now, the switch trader accepts the obligation of finding a home for the goods.

In some cases the switch trader may have to go through several additional countertrade transactions before all countertrade obligations are settled and a

final hard-currency transaction is completed. The art objects may be traded for canned hams and the canned hams for steel bars and the steel bars for dollars. Each of these steps cuts the margin the switch trader receives, so its final profit depends importantly on its negotiating skill in the trades and on its knowledge of the market for the goods it is trading.

The allure of countertrade

The primary reasons for countertrade fall into three areas:

1. Countertrade provides a trade financing alternative to those countries that have international debt and liquidity problems.
2. Countertrade relationships may provide LDCs and NMEs with access to new markets. Countertrade may also provide a positive competitive element for those exporting companies willing to engage in it.
3. From a trade perspective, countertrade fits well conceptually with the resurgence of bilateral trade agreements between governments.

Debt and hard currency issues. Central to the expanded use of countertrade in recent years is the shortage of hard-currency reserves available to the LDCs and NMEs. Countries in this situation find it difficult to service their foreign debt obligations. Thus, they often face difficulty in attracting foreign capital in the form of international credits to finance imports and foreign investment to finance domestic development projects. This development harkens back to the reason countertrade (barter) occurred in the first place—the lack of (or breakdown in) a system of monetary exchange.

Such debt problems have prompted some governments to impose austerity measures on their domestic economies and restrictions on the use of scarce foreign exchange to acquire certain types of imports. Sometimes, external authorities such as the International Monetary Fund, the World Bank, and foreign commercial bank lenders insist on such measures as a condition for the extension of additional international credits. Countertrade transactions, which

can avoid hard-currency exchange, may be utilized to circumvent such restrictions.

When a country's economy (like those of Eastern Europe) is not "plugged into" the exchange system of the rest of the world, its ability to purchase goods or services from the rest of the world is strictly limited, in the short- as well as long-term, by its ability to generate convertible currencies through conventional export sales to convertible currency countries. For the NMEs this has typically meant a shortage of convertible currency. They have responded by requesting countertrade provisions in many of the trade transactions entered into with Western companies. The argument supporting these transactions is that countertrade has facilitated an increase in world trade.

The rebuttal to this argument is that, if the world market really wanted the NME product or service that was the key to the transaction, that product or service, if competitive, could have been sold in the world market for convertible currency without the disruptive strings of countertrade. Furthermore, by avoiding the costly machinations of countertrade the NME would have received a higher price for its export, paid a lower price for its import from the Western exporter, or some combination of the two. In the longer-term, if not in the short-term, the NME would be better off had it utilized conventional markets instead of countertrade.

A potentially more serious issue arises with respect to the relationship of countertrade to the debt-ridden LDCs (in some cases this also applies to the NMEs). At the first stage, the issue of the use of countertrade by these countries is the same as outlined above for the NMEs. But the second stage is more critical. If the debt burden for one of these countries becomes so great that it is forced to default on its international borrowing obligations, its capital inflow from international markets would likely dry up.

The question then arises: Without this capital (i.e., credit) inflow, would not imports of food and manufactured goods on which these countries depend cease? Not necessarily. Initial disruptions in trade would occur, of course. But, "collateralized countertrade" trade would take over

(the term seems redundant, yet it emphasizes the tie of goods-to-goods). International trade would continue. It would be more costly in terms of the real resources that would have to be committed by the LDC. Consequently, the volume of trade would decline from what it otherwise would be. But, other things remaining equal (a major concern likely would be political stability), the LDC's economy would continue to engage in international trade.

Importantly, the structure of the relationship between the defaulting country's domestic and international economy would be substantially altered, after default. It can be argued that because the LDC's imports would be tied closely to its transfer of real resources abroad in the form of exports, there would be a strong incentive on the part of the LDC's government to arrange the composition of imports so that they would be tied closely to the support of domestic economic development. In this context, a countertrade framework, in place as a contingency for reducing the external disruption to the international trading system from a major default on international debt by the LDCs, may have merit. Even so it is a costly and inefficient contingency.

New markets and competitive issues. The LDCs and NMEs may also choose to promote countertrade transactions as a means to break into new markets with, for them, nontraditional exports. In the process they attempt to take advantage of the more sophisticated marketing knowledge or the greater name acceptance of the countertrade partner.

Such a transaction may develop as follows: An LDC enters into a counterpurchase agreement to purchase irrigation equipment from a multinational company. The multinational agrees to counterpurchase a specified value of goods from the LDC within three years. However, the goods available for counterpurchase are limited to manufactured goods of a type that the LDC has not traditionally exported but for which it is attempting to build an international market, for example, automotive parts or consumer electronics. Additionally, the LDC only proposes goods for which the multinational company has world-wide mar-

kets and marketing knowledge. The multinational's use or marketing of the LDC's nontraditional exports will ease the product's entry into the world market and may add credibility to the LDC's bid to become an exporter of a nontraditional product.

Export firms in industrial countries provide another reason for the increased attractiveness of countertrade. As the various forms of countertrade gain greater acceptance in the marketplace, export firms may use their own willingness to accept countertrade proposals as a key competitive element in transactions. The more successful the export firm is in engaging in and carrying out countertrade transactions, whether through internal expertise or external contacts, the better its position against firms not so endowed when it competes for transactions in which countertrade is a required or desirable condition imposed by the importing country.

The resurgence of bilateralism. The world trade environment has changed dramatically in the post-World-War II period. According to GATT (General Agreement on Tariffs and Trade) estimates, the real volume of trade, as measured by exports, increased nearly ten-fold from 1950 to 1987.⁹ During the post-war period, trading nations of the noncommunist bloc completed seven "rounds" of multilateral trade negotiations that were directed toward reducing the number of restrictions on and distortions to international trade.

From the standpoint of multilateral trade, the freeing of international trade in terms of reduced tariff and nontariff barriers has taken great strides during the last three decades. Furthermore, the international community is continuing its efforts towards freeing world commerce from the costly distortions that still stifle the efficiency of international trade transactions. To that end the members of the GATT are currently engaged in the eighth round of multilateral trade negotiations.

Ironically, as the most obvious of the world trade distortions have dissipated over time, other restrictions and distortions that had gone unnoticed—indeed, may have been ineffective when the more onerous restric-

tions were in place—have taken on new importance. Some may not be easily dealt with in a multilateral environment.

The response to this difficult environment has been a resurgence of (regression toward) the bilateral and reciprocal trade agreements common to the late 1930s when governments were attempting to dry themselves out after a binge of protectionism earlier in the decade. In short, the negotiation of conditional trade relationships between two governments has once again become an important element of trade policy. While bilateral arrangements may be more desirable than the continued trade restrictions they displace, they are only partial solutions to the problem.

Unfortunately, bilateral agreements between governments often take on the characteristics of countertrade. Examples include “voluntary marketing agreements” in which one party agrees to restrict the volume of its exports in exchange for the other party’s agreement to guarantee a certain level of access to its market. Such marketing agreements—in effect they are quotas—are as trade restrictive and distortive of trade patterns as surely as legislated quotas are. The only ingredient lacking in such voluntary agreements, in terms of the similarity to countertrade, is the transfer of goods or services.

Thus, it can be argued that, while the official position of industrial-country governments in general is to discourage countertrade, the example they set is less than consistent. Indeed, many industrial-country governments directly encourage countertrade offset agreements, especially for military equipment.

The shortcomings of countertrade

1. Countertrade has a high inherent transaction cost.
2. Countertrade limits competitive markets.
3. Countertrade contributes to market distortions that lead to inappropriate economic planning.

Inefficiency in transaction costs. The underlying weakness of countertrade as a mechanism of trade and exchange is its inefficiency. The indivisibility of goods made

barter inefficient, for example, and forced those involved with such trade to search for a better way. Barter gave way to goods/services-for-money exchange, which permitted transactions to incorporate divisibility as well as time-shifting. The opportunity for more convenient (i.e., efficient), multiparty trade, became a reality.

A major factor in the expansion of world trade during the last half of the 20th century has been the emergence of a few widely accepted currencies, especially the U.S. dollar, as settlement currencies for international transactions. The development of international credit markets to support trade depended upon the fact that transactions could be entered into without undue concern by the parties involved as to the delivery of the specific quantity and quality of goods and the timeliness of payment. A key characteristic of this type of market is that the channels of communication and exchange are well defined and relatively simple.

As a consequence of this clarity and simplicity, such markets are efficient. Specifically, the direct and indirect costs involved in the process of exchange account for a relatively small portion of the total cost of the transaction.

Such efficiency is not present in the conditional transactions that make up countertrade. The inefficiency cost must be borne by one or more of the parties involved.

Many countertrade transactions are entered into because the importing country is unable to obtain financing in the international markets and is short of hard-currency reserves. The lack of access, or limited access, to the credit markets may be due to restrictions on the country, placed as a condition for specific new lending by the International Monetary Fund (IMF) or foreign commercial banks. In this environment countertrade is sometimes viewed by an LDC government as a means of engaging in trade without the cost of entering the international finance markets.

While it is correct that countertrade may mean that the international financial markets may not have to be tapped, it is not correct to assume that there are no financing costs associated with a countertrade

transaction. In fact, due to the complexity associated with carrying out a countertrade transaction, the cost is higher than if the LDC had had access to those credit markets. Moreover, countertrade may end up subverting the capital and austerity restrictions that in some cases are a part of an IMF/LDC lending agreement.

In countertrade the costs of financing are shifted. They become implicit rather than explicit. The seller may absorb this cost in the form of accepting the obligation to buy and use or resell goods it otherwise would not accept (thus reducing its return on the transaction). Alternatively, the seller may build the transaction's finance costs into the price the buyer must pay. The finance costs are there, though hidden.

Limiting competition. There is another implicit cost when countertrade is required by the LDC or NME buyer as a condition of the transaction. Countertrade limits the potential number of sellers in the market. Not every seller firm is willing or able to engage in countertrade, thus, a LDC or NME buyer that insists on countertrade as part of a trade package limits its potential for obtaining a competitive product, service, or price. The fact is, engaging in countertrade costs the LDC or NME economy more in terms of real resources than a straight commercial transaction.

Market distortions and false signals. Developing countries may not have well developed international marketing facilities. As a result they often find it difficult to break into international markets with goods and services that are nontraditional for their economy.

In other cases an LDC or NME may choose to develop a new domestic industry by buying the technology and plant from abroad. Domestic demand may not be adequate for an efficient plant size. In response, they may opt for a larger, more efficient (but possibly from a world supply view, redundant), plant with the expectation of placing the marginal production on the international market.

Under such conditions counterpurchase or buy-back agreements may be sought by the LDC or NME to finance the importation of plant and equipment for a new industry

(as in a buy-back agreement) or general imports (as in a counterpurchase agreement). The LDC or NME also may be seeking a more knowledgeable partner to handle the international marketing of goods for which it does not have the expertise.

The difficulty with this approach is that countertrade may be used to get goods onto the international market that would not "make it" under usual conditions and will not be competitive once the buy-back agreement expires. Further, the industrial country firm that accepted the countertraded goods may dump them, which would be disruptive to international markets. The result may be that the LDC or NME producer may falsely interpret the signals and overestimate the real market demand for the dumped goods as being stronger than a longer-term, unsubsidized, market can bear.

Moreover, the secondary consequences of countertrade transactions are not benign. The inefficiencies of countertrade—the false price signals that result in the building of redundant plant and equipment—tend to promote the establishment of bureaucracies within governments and private firms that have "bought into" countertrade. In turn, these bureaucracies have a vested interest in maintaining the economic distortions that undergird the growth in countertrade.

Summing up

Countertrade is a significant factor in modern international trade. In its different forms it is used as a marketing tool, as a competitive tool, as a tool to restrict trade alternatives, and as a tool to tie the trade of one country to another country. Countertrade in a modern world economy with highly developed goods, capital, and financial markets appears on its face to be an incongruous development. Countertrade is a costly, inefficient, and disruptive anomaly. Yet observers of international trade suggest that the volume of countertrade is growing.

Countertrade takes place in a world of imperfection where government and industrial political and economic policies distort the relationships between and within the goods, capital, and financial markets. Recognizing the imperfections and the limitations these policies impose on trade, some

buyers and sellers conclude that the countertrade framework offers a viable, and even apparently necessary, alternative form of transaction. However, the thought occurs: The recent growth in countertrade may well be a reflection of, as well as a con-

tribution to, the emerging nontariff distortions in the world economy. If the trade and financial distortions currently imposed on the world economy were to be substantially reduced, would not countertrade go the way of the Stone Age hunter?

Footnotes

¹The term "nonmarket economies" (NMEs) refers to those countries where state central planning performs the function of price and output determination. It refers specifically to the communist bloc countries of Eastern Europe and South East Asia.

²Taken to an extreme, a recent article in *Countertrade & Barter* referred to negotiations between Canada and the United States concerning the free trade agreement as follows: "The Canada-US pact, while proving that the high art of horsetrading is very much alive, shows, moreover, that 'free trade' is really nothing more than countertrade elevated to the broadest bilateral ground and injected with a heady dose of political will." "Ultimate Countertrade," viewpoint in *Countertrade & Barter*, No. 16, October/November 1987, p. 7.

³Lawrence W. Witt, "Development through Food Grants and Concessional Sales," in *Agriculture in Economic Development*, edited by Carl K. Eicher and Lawrence W. Witt (New York: McGraw Hill), 1964, pp. 339-359.

⁴Hearings on Countertrade and Offsets in International Trade, U.S. Congress, House Subcommittee on International Economic Policy and Trade, Committee on Foreign Affairs, 100th Cong., 1st Sess., June 24 and July 10, 1987, p. 120.

⁵Ibid., pp.138-139.

⁶"Deals," *Countertrade & Barter*, No. 16, October/November 1987, p. 51.

⁷Ronald J. DeMarines, *Analysis of Recent Trends in U.S. Countertrade*, U.S. International Trade Commission, USITC Publication 1237, March 1982, pp. 48-49.

⁸"AWACS-ING Poetic," *Countertrade & Barter*, No. 13, April/May 1987, p. 9.

⁹From *International Trade*, (Annual) General Agreement on Tariffs and Trade, various issues.

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