Chapter 12

Countertrade

ORIGINS OF COUNTERTRADE

Countertrade is any commercial arrangement in which sellers or exporters are required to accept in partial or total settlement of their deliveries, a supply of products from the importing country. In essence, it is a nation’s (or firm’s) use of its purchasing power as a leverage to force a private firm to purchase or market its marginally undesirable goods or exact other concessions in order to finance its imports, or obtain needed hard currency or technology. Although the manner in which the transaction is structured may vary, the distinctive feature of such arrangements is the mandatory performance element that is either required by the importer or the importer’s government, or made necessary by competitive considerations (Verzariu, 1985, 1992).

The origins of countertrade can be traced to the ancient times when international trade was based on the free exchange of goods. Barter flourished in Northern Mesopotamia as early as 3000 BC when inhabitants traded in textiles and metals. The Greeks also profited by the exchange of olive oil and wine for grain and metals sometime before 2000 BC (Brinton et al., 1984; Anyane-Ntow and Harvey, 1995). Even with the flourishing of a money economy, barter still continued as a medium of exchange. Present-day countertrade involves more than the use of simple barter. It is a complex transaction that includes the exchange of some currency as well as goods between two or more nations. A countertrade transaction may, for example, specify that the seller be paid in foreign currency on the condition that seller agrees to find markets for specified products from the buyer’s country.

The resurgence of countertrade has often been associated with East-West trade. At the start of the 1950s the former communist countries of Eastern Europe faced a chronic shortage of hard (convertible) currency to purchase
needed imports. In their dealings with Western countries, they insisted that their products be taken in exchange for imports from the latter countries. This practice also proved quite attractive to many developing nations, which also suffer from a shortage of convertible currency. The use of countertrade has steadily increased and is presently estimated to account for approximately 15-20 percent of world trade (Hennart and Anderson, 1993). By the end of 1995, the number of countries using countertrade exceeded 100. Although there may be disagreements concerning the current volume of countertrade, the broad consensus is that countertrade constitutes a significant and rapidly growing portion of world commerce (McVey, 1984; Bost and Yeakel, 1992). A large number of U.S. corporations find it difficult to conduct business with many countries without relying on countertrade. For example, about two-thirds of foreign purchases of American commercial and military jets are paid for with local products instead of cash (Bragg, 1998; Angelidis, Parsa, and Ibrahim, 2004). In response to this growing interest, some U.S. banks have established their own countertrade departments.

Example: PepsiCo traded drink concentrate for Basmati rice in India and for silk and mushrooms in China. The mushrooms are used in PepsiCo’s Pizza Hut chain and the silk is dyed, printed, and sold for profit (Welt, 1990).

In the 1980s, countertrade was mainly used as a vehicle for trade finance. It is now used to meet a broad range of business objectives: capital project financing, production sharing, repatriation of profits from countries with hard currency shortages, and competitive bidding on major government procurements (Caves and Marin, 1992; Egan and Shipley, 1996).

Other Examples of Countertrade

- Indonesia negotiated for a power station project with Asea Brown Boveri and for an air traffic control system with Hughes Aircraft. Counterpurchase obligations were to be 100 percent of the FOB values. The firms export, through a trading company, a range of Indonesian products: cocoa to the United States, coal to Japan, and fertilizer to Vietnam and Burma.
- Lockheed Martin agreed to sell F-16 military aircraft to Hungary in exchange for large investment and counterpurchase commitments. The firm agreed to buy $250 million (U.S.) worth of Hungarian goods. It established an office in Budapest to participate in tendering and to procure the country’s industrial goods for export.
- Taiwan purchased 60 Mirage 2000-5 from a French aviation company, Dussault. In return, Dussault undertook a joint venture with
Taiwan’s aerospace company, Chenfeng, for the production of key aircraft parts and components for local aircraft and export (Anonymous, 1997a,b,c).

**BENEFITS OF COUNTERTRADE**

**Benefits for Buyers**

**Transfer of Technology**

In exchange for a guaranteed supply of raw materials or other scarce resources, a developed nation will provide the capital, equipment, and technology that is needed to develop such resources. Western firms, for example, assisted Saudi Arabia in the development of its refinery and petrochemical industry in exchange for the right to purchase a certain amount of oil over a given period of time.

**Alleviating Balance of Payments Difficulties**

The debt crisis of the 1980s, coupled with adverse movements in the price of key export commodities, such as coffee or sugar, left many developing countries with severe balance-of-payments difficulties. Countertrade has been used as a way of financing needed imports without depleting limited foreign currency reserves. Some countries have even used it as a way of earning hard currency by promoting the export of their domestic output. Countertrade has thus helped these nations avoid the burden of additional borrowing to finance imports as well as the need to restrict domestic economic activity. After the debt crisis, private lending by commercial banks has virtually dried up and now represents about 5 percent of long-term capital flows to developing nations, compared with 40 percent a decade ago. Countertrade is also used as a method of entering a new market, particularly in product areas that invite strong competition.

**Maintenance of Stable Prices for Exports**

Countertrade allows commodity exporters to maintain nominal prices for their products even in the face of limited or declining demand. The price of the product that is purchased in exchange could be increased to take into account the inflated price of exports. In this way, an exporter can dispose of its commodities without conceding the real price of the product in a competitive
market. In the case of cartels, such as OPEC (Organization of Petroleum Exporting Countries), a member could attract customers for countertrade opportunities without violating price guidelines.

**Benefits for Exporters**

**Increased Sales Opportunities**

Countertrade generates additional sales that would not otherwise be possible. It also enables entry into difficult markets.

**Access to Sources of Supply**

Countertrade provides exporters access to a continuous supply of production components, precious raw materials, or other natural resources in return for sales of manufactured goods or technology.

**Flexibility in Prices**

Countertrade enables the exporter to adjust the price of a product in exchange for overpriced commodities (see International Perspective 12.1 on organizing for countertrade).

**THEORIES ON COUNTERTRADE**

A limited number of empirical studies on countertrade have been conducted. The following findings characterize some of the theoretical studies on countertrade practices:

- Countertrade is positively correlated with a country’s level of exports. This means that a higher level of international commercial activity is associated with a high level of countertrade (Caves and Marin, 1992; Hennart and Anderson, 1993).
- Countertrade is often used as a substitute for foreign direct investment (FDI). Even though FDI reduces market transaction costs (i.e., by internalizing sources of raw materials and components through vertical integration), multinational companies resort to countertrade as a second-best solution when host countries impose restrictions on inward FDI. Countries engaged in heavy countertrade tend to be those that severely restrict inward FDI. FDI may also be less attracted to politi-
cally risky countries, in spite of their positive attitudes toward foreign investment. Such countries are likely to have a high level of countertrade activity (Hennart, 1990).

- The stricter the level of exchange controls, the higher the level of countertrade activity. This appears to be a response to the restrictions imposed on the acquisition of foreign currency. Some studies also show that a significant percentage of countertrade has little to do with foreign exchange shortages, but rather is intended to reduce high transaction costs that affect the purchase of technology or intermediate products.

- Countertrade is positively correlated with a country’s level of indebtedness. Casson and Chukujama (1990) show that countries with higher debt ratios are more strongly engaged in barter. A country’s creditworthiness, as measured by a composite of ratings of international banks, is positively correlated with its barter activities (Hennart and Anderson, 1993).

**INTERNATIONAL PERSPECTIVE 12.1. The Mechanics of a Barter Transaction**

Suppose a private firm is selling drilling equipment to country A in exchange for ten tons of basmati rice. One method is to use reciprocal performance guarantees such as performance bonds or standby letters of credit. Each party posts a guarantee, and this provides payment to the aggrieved party in the event of failure by the other party to perform its part of the contract (i.e., failure to deliver the goods or delivery of nonconforming goods). However, the fees charged by banks for such guarantees are quite high. Another method is to use an escrow account to secure performance of an obligation by each party. The steps used are as follows:

- The firm opens a documentary letter of credit in favor of country A. In cases where the product is passed to a trading company, the letter of credit is opened by the trading company in favor of the nation.
- Country A delivers the rice to the firm or trading company and title is transferred.
- When the title passes to the firm, funds equal to the value of the rice shipped is transferred by the firm under the letter of credit into an escrow account.
- The firm makes delivery of the drilling equipment simultaneously, or at a later date, to country A and title is transferred to the nation.
- Funds in the escrow account are released to the firm.
- In the event the firm delivers nonconforming goods or fails to deliver the goods, the funds in the escrow account are paid to the nation.
FORMS OF COUNTERTRADE

Countertrade takes a variety of forms (see Figure 12.1). Such transactions can be divided into two broad categories:

- Transactions in which products and/or services are traded in exchange for other products and/or services: these include barter, switch trading, and clearing arrangements.
- Transactions that feature two parallel money-for-goods transactions: these include buy-back, counterpurchase, and offset arrangements.

Exchange of Goods (Services) for Goods (Services)

Barter

A classic barter arrangement involves the direct exchange of goods/services between two trading parties (see International Perspective 12.2). An exporter from country A to country B is paid by a reciprocal export from country B to country A and no money changes hands. The transaction is governed by a single contract. In view of its limited flexibility, barter accounts for less than 15 percent of countertrade contracts. The major problems with barter relate to the determination of the relative value of the goods traded and the reluctance of banks to finance or guarantee such transactions.

Example: In 1996, Ukraine agreed to barter its agricultural products for 2 million tons of oil from Iran. A Macedonian company agreed to pay 30 percent of the price for the purchase of Russian gas in goods/services such as medicines, pipes, and construction work.

Switch Trading

This is an arrangement in which a switch trader will buy or market countertraded products for hard currency (Figure 12.2). The switch trader will often demand a sizable fee in the form of a discount on the goods delivered.

Example: A U.S. company exports fertilizer to Pakistan. However, the goods to be counter delivered by Pakistan are of little interest to the U.S. seller. A Romanian company (switch trader) converts the Pakistani goods into cash, pays the U.S. exporter, and retains a commission.
Clearing Arrangements

Under these arrangements, two governments agree to purchase a certain volume of each other’s goods and/or services over a certain period of time, usually a year. Each country sets up an account in one currency, for example, clearing dollar, pound, or local currency. When a trade imbalance exists, settlement of accounts can be in the form of hard-currency payments for the
shortfall, transfer of goods, issuance of a credit against the following year’s clearing arrangement, or by switch trading. In switch trading, the creditor country can sell its credit to a switch trader for a discount and receive cash payment. The switch trader will subsequently sell the corresponding goods to third parties (see Figure 12.3).

Example: A Swedish company, Sukab, accumulated a large surplus in its clearing account with Pakistan. Sukab sold its credit to Marubeni, a Japanese company, at a discount and Marubeni in turn liquidated this imbalance by purchasing Pakistani cotton and exporting it to a third country for hard currency (Anonymous, 1996).

Parallel Transactions

Buyback (Compensation Agreement)

In a buyback or compensation transaction, a private firm will sell or license technology or build a plant (with payment in hard currency) and agree to purchase, over a given number of years, a certain proportion of the output produced from the use of the technology or plant. The output is to be purchased in hard currency. However, since the products are closely related, a codependency exists between the trading parties (see Figure 12.4). The

![Figure 12.3. Clearing Arrangement](image)

![Figure 12.4. Buyback](image)
duration of a compensation arrangement could range from a few years to thirty years or longer in cases in which the technology supplier (seller) is dependent upon the buyer’s output for itself and its subsidiaries. The arrangement involves two contracts, each paid in hard currency, that is, one for the delivery of technology and equipment and another for the buyback of the resulting output. The two contracts are linked by a protocol that, inter alia, stipulates that the output to be purchased by the technology supplier is to be produced with the technology delivered. Since the agreement entails transfer of proprietary technology, it is quite important to pay special attention to the protection of patents, trademarks, and know-how, as well as to the rights of the technology recipient (importer/buyer) with respect to these industrial property rights.

*Examples:* A Japanese company exports computer chip processing and design technology to Korea, Singapore, and Taiwan, with a promise to purchase a certain percentage of the output over a given period of time. Levi Strauss transfers its know-how and trademark to a Hungarian firm for the production and sale of its products, with an agreement to purchase and market the output in Western Europe.

**Counterpurchase**

As in compensation arrangement, counterpurchase consists of two parallel hard currency-for-goods transactions (see Figure 12.5). However, in counterpurchase, a firm sells goods and/or services to an importer, promising to purchase from the latter or other entities in the importing nation goods that are unrelated to the items sold. The duration of such transactions is often short (three to five years), and the commitment usually requires a reciprocal

![FIGURE 12.5. Counterpurchase](image-url)
purchase of less than the full value of the original sale. In cases in which the reciprocal purchase involves goods that are of low quality or in excess supply, the firm usually resells them to trading companies at a discount. Since the arrangement is often governed by two separate contracts, financing can be organized in a way that is similar to any other export transaction. In addition to flexibility in financing, the contractual separation also provides for separate provisions with regard to guarantee coverage, maturity of payments, and deliveries. As in compensation agreements, the two contracts are linked by a third contract that ties the purchase and sales contracts together and includes terms such as the ratio between purchases and sales, starting time of both contracts, import-export verification system, and so forth (Welt, 1990; see International Perspective 12.3 on countertrade contracts).

**Examples:** In 1989, PepsiCo and the former Soviet Union signed a $3 billion deal in which PepsiCo agreed to purchase and market Russian Vodka and ten Soviet-built ocean vessels in return for doubling its Soviet bottling network and nationwide distribution of soft drinks in aluminum and plastic bottles. Rockwell and the Government of Zimbabwe signed a contract in which Rockwell offered to purchase Zimbabwe's ferro chrome and nickel in exchange for its sale of a printing press to Zimbabwe.

**Offsets**

An offset is a transaction in which an exporter allows the purchaser, generally a foreign government, to “offset” the cost of purchasing its (the exporter’s) product (Cole, 1987; see Figure 12.6). Such arrangements are mainly used for defense-related sales, sales of commercial aircraft, or sales of other high-technology products. Offsets are used by many countries as a way to compensate for the huge hard-currency payments resulting from the purchase, as well as to create investment opportunities and employment. Such arrangements became widespread after 1973 when OPEC sharply increased the price of oil and countries were left with limited hard currency to pay for major expenditures (Schaffer, 1989; Egan and Shipley, 1996).

**Direct Offsets**

These are contractual arrangements often involving goods or services related to the products exported. Direct offsets include coproduction, subcontractor production, investments, and technology transfer.

**Coproduction:** This is an overseas production arrangement, usually based on a government-to-government agreement that permits a foreign government or producer to acquire the technical information to manufacture
all or part of an equipment or component originating in the exporting country. It may include a government-to-government production under license. The essential difference between coproduction and licensed production is that the former is normally a joint venture, while the latter does not entail ownership and/or management of the overseas production by the technology supplier. In coproduction, there is usually a government-to-government negotiation, whereas licensed production is based on direct commercial arrangements between the foreign manufacturer and host government or pro-

---

**INTERNATIONAL PERSPECTIVE 12.3.**

**Negotiating Countertrade Contracts: Pointers**

*Costs:* All costs are included into one price. The price also includes the commission payable to dispose of the countertraded goods.

*Contract(s):* One or separate contracts can be used. Separate contracts are signified by three legal documents: the original sales contract, which is similar to any standard export contract; the subsequent agreement to purchase from the original buyer a certain amount of goods over a given time period and some type of protocol that tie the two contracts together.

*Barter contract:* Barter usually requires one contract. Key provisions include: (1) description of goods to be sold and countertraded; (2) guarantee of quality; (3) penalty or other arrangements in the event of late delivery, failure to deliver, or delivery of nonconforming goods. This includes bank guarantee or other guarantee in the form of standby letter of credit in the event of default and providing for full payment; and (4) provisions for settlement of disputes.

*Buy-backs, counterpurchase, or offsets:* Such contracts require the use of one or separate contracts. Key provisions include: (1) the compensation ratio: this establishes the counterpurchase commitment by the original exporter; (2) range of products to be countertraded: parties must agree on the list of products to be purchased; (3) assignment clause: this enables the original seller to transfer its counterpurchase or buyback obligation to a trading house or a barter business club; (4) The penalty clause: this provides for penalties in the event that the original seller fails to fulfill its obligations (i.e., quality specifications and delivery schedules); (5) marketing restrictions: it may be important to secure the right to dispose of the countertraded goods in any market; and (6) provisions on force majeure (delay or default in performance caused by conditions beyond the party’s control), applicable law (i.e., the law governing the contract), and dispute settlement.
In most cases, coproduction and licensed production are direct offsets because the resulting output directly fulfills part of the sales obligation.

Example: France purchased AWACS (airborne warning and control system) aircraft from Boeing, based on a coproduction arrangement between the U.S. and French governments. According to the agreement, 80 percent of the contract value was to be offset by the purchase of engines produced through a joint venture between General Electric and a French firm.

Subcontractor production: This is usually a direct commercial arrangement between a manufacturer and an overseas producer (in the host country) for the production of a part or component of the manufacturer’s export article to the host country. Such an arrangement does not often involve licensing of technological information.

Example: In 1996, Italy announced plans to purchase four U212 submarines from Germany. The industrial cooperation agreement will give Italian companies substantial subcontracting work in building the submarines and their systems. Indirect offsets (i.e., arrangements involving goods and services unrelated to the exports) will also be utilized as compensation for the predominance of German-supplied subsystems and components.
Overseas investments: These are investments arising from the offset agreement that usually take the form of capital investment to establish or expand a company in the purchasing country.

Example: The Greek government purchased forty F-16s, and as part of the offset, the U.S. supplier firms were required to undertake investment, trade, and technology transfer programs. The U.S. firms agreed to contribute $50 million in capital over a ten-year period.

Technology transfer: Even though technology transfer provisions could be included in coproduction or licensed production arrangements, they are often distinct from both categories. A technology transfer arrangement usually involves the provision of technical assistance and R & D capabilities to the joint venture partner or other firms as part of the offset agreement.

Example: Spain purchases F-18 aircraft from the United States under an offset arrangement that requires the transfer of aerospace and other high technology to Spain, as well as the promotion of Spanish exports and tourism.

Indirect offsets are contractual arrangements in which goods and services unrelated to the exports are acquired from, or produced in, the host (purchasing) country. These include, but are not limited, to certain forms of foreign investment, technology transfer, and countertrade.

Example: As part of the cooperative defense agreement, the Netherlands purchased patriot fire units from Raytheon Corporation of the United States for $305 million. Raytheon agreed to provide $115 million in direct offsets and $120 million in indirect offsets. The latter obligation was to be discharged through the purchase of goods and services in the Netherlands.

Arms sales account for a substantial part of offset transactions, which, in turn makes up for the largest percentage of countertrade deals.

COUNTERTRADE AND THE WTO

The prevalence of countertrade practices has directed the attention of policymakers to its potentially disruptive effects on international trade. Trade experts claim that countertrade represents a significant departure from the principles of free trade and could possibly undermine the delicate multilateral trading system that was carefully crafted since World War II. This movement toward bilateral trading arrangements deprives countries of...
the benefits of multilateral trade that GATT/WTO negotiated to confer upon members. Private countertrade transactions, however, fall outside the purview of the GATT, which regulates only governmental actions.

In addition, countertrade tends to undermine trade based on comparative advantages and prolongs inefficiency and misallocation of resources. For example, a country may have to purchase from a high-cost/low-quality overseas supplier to fulfill its obligation under the export arrangement. Countertrade also slows down the exchange process and results in higher transaction costs in the form of converting goods into money, warehousing, and discounting to a trader when it cannot use the goods received.

Countertrade is also inconsistent with the national treatment standard, which is embodied in most international and regional trade agreements. The national treatment standard of the GATT/WTO, for example, requires that imported goods be taxed and regulated in the same manner as domestically produced goods. Any commercial transaction that requires the overseas supplier (exporter) to purchase a specified portion of the value of the exports from the purchaser would violate the national treatment standard (Roessler, 1985).

Countertrade constitutes a restriction on imports. The GATT/WTO prohibits restrictions other than duties, taxes, or other charges applied to imports. This means that if import licenses are granted on the condition that the imports are linked to exports, such countertrade practices would constitute a trade restriction prohibited under the general agreement. Without this government restriction, the producer would be able to import any amount of product that efficiency and consumer demand dictated. Such restrictions would be in conformity with the agreement if they are imposed to safeguard a country’s balance of payments (external financial position), as well as to protect against a sudden surge in imports of particular products (emergency actions).

COUNTERTRADE AND THE INTERNATIONAL MONETARY FUND

The International Monetary Fund (IMF) imposes a dual regime: on the one hand, it attempts to deter members from restricting international payments and transfers for current international transactions, while, on the other hand, it permits its members to regulate international capital movements as they see fit. Payments for current transactions involve an immediate quid pro quo (i.e., payments in connection with foreign trade, interest, profit, dividend payments, etc.), while capital payments are unilateral (loans, invest-
ments, etc.). A governmental measure requiring or stimulating countertrade would constitute an exchange restriction on current transactions if it involved a direct limitation on the availability or use of foreign currency.

GOVERNMENTS’ ATTITUDES TOWARD COUNTERTRADE

Consistent with their commitment to a nondiscriminatory trading system, many countries are opposed to government-mandated countertrade because it distorts the free flow of trade and investment. Yet, they do not publicly discourage firms from engaging in countertrade (U.S. ITC, 1985; Office of Management and Budget, 1986).

The U.S. policy on countertrade was developed in 1983 by an interagency working group. The policy does the following:

• It prohibits federal agencies from promoting countertrade in their business or official contracts.
• It adopts a hands-off approach toward those arrangements which do not involve the U.S. government or are pursued by private parties. This means that the U.S. government will not oppose participation of U.S. companies in countertrade deals unless such activity has negative implications on national security.
• It provides no special accommodations for cases involving such transactions. The Export-Import Bank (Ex-Im Bank) will not provide financing support for the countertrade component of a transaction or accept countertrade as security, but the U.S. export component is eligible for all types of Ex-Im Bank support. Any repayment to Ex-Im Bank must be in hard currency and not conditional on the fulfillment of a side contract associated with countertrade.

In view of congressional concern with respect to such practices, the 1998 Trade Act mandated the establishment of an office of barter within the Department of Commerce’s International Trade Administration and of an interagency group on countertrade. The Barter and Countertrade Unit established within the Department of Commerce now provides advisory services to firms interested in such transactions, while the interagency group on countertrade reviews and evaluates U.S. policy on countertrade and makes recommendations to the president and Congress.

Some countries have officially instituted mandatory countertrade requirements for any transaction over a certain value. Australia, for example, mandates local content and other investment requirements for all defense purchases valued at U.S.$5 million and above (Liesch, 1991). Certain coun-
tries have passed laws providing for counterpurchase operations and the extension of bank guarantees in the form of performance bonds. Indonesia, for example, established a countertrade division within the Ministry of Trade and has mandated countertrade requirements for any transaction exceeding $500,000 (Verdun, 1985; Liesch, 1991). Other countries may not have an official policy on countertrade or may even be opposed to it due to their position on free trade. However, this opposition often yields to the realities of international trade and competition, and a number of these countries are seen providing tacit approval to such transactions (see International Perspective 12.4 for countertrade with Latin American countries).

**CHAPTER SUMMARY**

**What is countertrade?**

Countertrade is any commercial arrangement in which the exporter is required to accept, in partial or total settlement of his or her deliveries, a supply of products from the importing country. Barter could be traced to ancient times. Presently, countertrade is estimated to account for 15 to 20 percent of world trade.

**Benefits of countertrade**

Benefits for buyers

1. Transfer of technology
2. Alleviation of balance of payments difficulties
3. Market access and maintenance of stable prices

Benefits for exporters

1. Increased sales opportunities
2. Access to sources of supply
3. Flexibility in prices

**Theories on countertrade**

1. Countertrade is positively correlated with a country’s level of exports.
2. Countertrade is partly motivated in order to substitute for FDI.
3. The stricter the level of exchange controls, the higher the level of countertrade activity.
INTERNATIONAL PERSPECTIVE 12.4.
Countertrade with Latin American Countries

A recent study on countertrade with Latin American countries (Angelidis et al., 2004) reports the results of a survey of firms engaged in countertrade transactions. The survey reveals that the following industries account for over 75 percent of transactions: defense (33.3 percent), manufacturing (30.3 percent), and chemicals (27.3 percent). The participants largely employed counterpurchases and offsets.

The survey also provides a detailed analysis of the major reasons for and challenges of countertrading with these countries.

Reasons for countertrade
- Inadequate foreign currency reserves
- A way to gain competitive advantage
- Only way to do business, demanded by customers
- Increases production capacity and helps achieve growth
- Supply of reliable and low cost inputs
- Circumvent protectionist regulations; reduce adverse impact of foreign currency fluctuations
- Release blocked funds
- Increased difficulty of obtaining credit for the buyer
- Availability of expertise in countertrade for buyer or seller

Challenges of countertrade
- Often involves complicated and time-consuming negotiations
- May result in increase in transaction costs, product mismatch, and the purchase of low quality goods
- Problems with disposition of acquired (lack of ready) merchandise, price-setting as well as loss of purchasing flexibility
- Involvement of third parties and the possibility of customers becoming competitors

Forms of countertrade

Exchange of goods/services for goods/services

1. Barter: Direct exchange of goods and services between two trading parties.
2. Switch trading: An arrangement in which the switch trader will buy or market countertraded goods for hard currency.
3. Clearing arrangement: A method in which two governments agree to purchase a certain volume of each other’s goods/services over a given period of time. In the event of trade imbalance, settlement could be in
hard currency payments, transfer of goods, issuance of a credit, or use of switch trading.

**Parallel transactions**

1. **Buyback:** An arrangement in which a private firm will sell or license technology to an overseas customer with an agreement to purchase part of the output produced from the use of such technology. The agreement involves two contracts, both of which are discharged by payment of hard currency.

2. **Counterpurchase:** Two parallel transactions in which a firm exports a product to an overseas buyer with a promise to purchase from the latter or other parties in the country goods not related to the items exported.

3. **Offsets:** A transaction in which an exporter allows the purchaser, usually a foreign government, to reduce the cost of purchasing the exporter’s product by coproduction, subcontracting, or investments and transfers of technology.

**Offsets**

**Direct offsets**

1. **Coproduction:** Joint venture or licensing arrangements with overseas customer

2. **Subcontractor production:** Arrangement for production in the importing country of parts or components of the export product destined to the latter

3. **Investments and transfer of technology:** Certain offset agreements provide for investments and technology transfer to the importing country

**Indirect offsets**

Offset arrangements in which goods and services unrelated to the exports are acquired from or produced in the importing country.

**Countertrade and the GATT/WTO**

Concerns of the GATT/WTO with countertrade:

1. Countertrade represents a significant departure from the principles of free trade based on comparative advantage.

2. Countertrade results in higher transaction costs.
3. Countertrade is inconsistent with the national treatment standard which is embodied in most trade agreements.

**Governments’ attitude toward countertrade**

U.S. government policy toward countertrade:

1. U.S. government prohibits federal agencies from promoting countertrade in their business.
2. Adopts a hands-off approach in relation to private transactions.

Some countries have a countertrade requirement for certain purchases exceeding a given amount. Such transactions are quite common in defense purchases.

**REVIEW QUESTIONS**

1. What are the major factors accounting for the resurgence of countertrade?
2. What is the benefit of countertrade for exporters?
3. “Countertrade is used as a substitute for FDI.” Discuss.
4. What is the difference between switch trading and clearing arrangement?
5. Describe the steps involved in a typical barter transaction.
6. Compare and contrast buyback with counterpurchase arrangement.
7. Discuss direct offsets and its components.
8. What are the challenges of countertrade with Latin American countries?
9. What is the U.S. government attitude toward countertrade?
10. Discuss the concerns of WTO with countertrade.

**CASE 12.1. THE BOFORS-INDIA COUNTERTRADE DEAL**

Bofors AB is a Swedish company that specializes in the manufacturing and sales of weapon systems such as antiaircraft/antitank guns, artillery, and other ammunition. The Indian government concluded an agreement with Bofors AB for the purchase of 410 FH77B howitzers ($1.3 billion) in 1986. The FH77B howitzer is a powerful, highly mobile artillery system. It
has a gun with a range of 30 km and a capability to fire three rounds in 13 seconds. It can be integrated with a 636 all terrain vehicle.

The agreement provided for the purchase of goods from India amounting to not less than 50 percent of the value of the contract. Given its lack of experience in countertrade, Bofors AB signed a contract with other Swedish and U.S. trading companies to fulfill its countertrade agreement with India. Among these companies, Sukab took the leading role due to its vast experience in international trade and expertise in countertrade. Sukab is owned by over 80 Swedish companies and set up after World War II to promote Swedish exports.

Pursuant to the agreement, Sukab promoted the sale of Indian goods in Sweden through various channels including seminars held by Swedish trade councils and chambers of commerce. It also set up offices in India to provide export training, that is, on the best ways and means of exporting Indian goods to Sweden.

The Indian government had to approve of all the products being exported. Bofors AB was provided with a list of approved products. Certain products were specifically excluded from exports.

The major factor that motivated India to enter into the countertrade arrangement was its lack of sufficient hard currency to pay for the purchase of the howitzers. The countertrade arrangement provided an opportunity to India to generate enough hard currency to fulfill a portion of its commitments. Furthermore, the arrangement allowed India to expand its distribution channels and gain new markets. The countertrade arrangement also allowed Bofors AB to win the contract over other competing firms.

**Questions**

1. Do you think this to be an ideal trading arrangement for Bofors AB?
2. Would this form of trade arrangement be more beneficial to India than Bofors? Explain.

**CASE 12.2. OFFSETS IN U.S. DEFENSE TRADE**

U.S. defense contractors entered into 513 offset agreements valued at $55.1 billion during the period 1993-2004. The agreements were signed with forty-one foreign governments for the purchase of U.S. defense weapon systems totaling $77.2 billion. The value of the offset agreements accounted for 71.4 percent of the total value of the related export contracts during the
period. Most of these agreements involved sales of aerospace defense systems such as missiles, aircraft engines, and so on.

Offsets and related defense system exports are concentrated among a few purchaser governments. Ten governments (out of a total of 41) accounted for 77.4 percent of the defense system purchases and 75 percent of the offset agreements (1993-2004; see Table 12.1).

European countries accounted for the majority of the U.S. weapon system exports (47 percent) and offset activity (66 percent) followed by Asian countries. They often require a minimum of 90 percent offsets on purchases of U.S. defense systems. The average offset requirement by non-European countries was estimated at 47 percent during 1993-2004. However, it has shown a marked increase over the years. The average offset requirement (by value) demanded by S. Korean firms, for example, increased from 33 percent (1993-1998) to 69 percent (1999-2004).

The increase in offset requirements by purchasing governments is partly motivated by the need to increase domestic employment and sustain domestic defense companies, as well as deflect domestic political concerns about significant public outlays for foreign-made defense systems.

Multipliers are incentives used by purchasing countries to stimulate particular types of offset transactions. Prime contractors, for example, receive added credit toward their obligation above the actual value of the transaction when multipliers are used. A negative multiplier is used to discourage

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of Agreements</th>
<th>Export Contracts</th>
<th>Offset Agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>41</td>
<td>11.89</td>
<td>10.05</td>
</tr>
<tr>
<td>Taiwan</td>
<td>39</td>
<td>10.84</td>
<td>2.17</td>
</tr>
<tr>
<td>S. Korea</td>
<td>58</td>
<td>8.28</td>
<td>5.13</td>
</tr>
<tr>
<td>Greece</td>
<td>48</td>
<td>6.31</td>
<td>7.15</td>
</tr>
<tr>
<td>Canada</td>
<td>25</td>
<td>4.42</td>
<td>4.28</td>
</tr>
<tr>
<td>Israel</td>
<td>46</td>
<td>4.42</td>
<td>4.28</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>N/A*</td>
<td>4.09</td>
<td>1.43</td>
</tr>
<tr>
<td>Poland</td>
<td>N/A</td>
<td>4.09</td>
<td>1.43</td>
</tr>
<tr>
<td>Australia</td>
<td>16</td>
<td>3.49</td>
<td>1.60</td>
</tr>
<tr>
<td>Turkey</td>
<td>17</td>
<td>2.69</td>
<td>1.25</td>
</tr>
</tbody>
</table>

*N/A: Not available.

certain types of offsets. It is estimated that about 8.4 percent of European offset transactions had a multiplier greater than one. In the case of negative multipliers, U.S. exporters (contractors) are only credited a portion of the total value of the transaction (see Table 12.2).

A cursory evaluation of the distribution of U.S. offset transactions shows that subcontracts and coproduction (foreign production of goods/services related to the weapon system sold) accounted for 78.3 percent of the value of all direct offset transactions ($10 billion). The purchases category of indirect offsets (foreign production of goods and services) accounted for 62.9 percent of all indirect offset transactions ($12.1 billion) for 1993-2004 (see Table 12.3).


<table>
<thead>
<tr>
<th>Region</th>
<th>Value of Transactions with Multiplier , 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value of Transactions with Multiplier 5 1</td>
</tr>
<tr>
<td></td>
<td>Value of Transactions with Multiplier . 1</td>
</tr>
<tr>
<td></td>
<td>Total Value</td>
</tr>
<tr>
<td>Europe</td>
<td>0.79 (3.7%)</td>
</tr>
<tr>
<td>Middle East/Africa</td>
<td>0.05 (1.1%)</td>
</tr>
<tr>
<td>Asia</td>
<td>0.25 (5%)</td>
</tr>
<tr>
<td>N and S. America</td>
<td>0.09 (8%)</td>
</tr>
</tbody>
</table>


TABLE 12.3. Offset Transactions by Category, 1993-2004

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td></td>
</tr>
<tr>
<td>Subcontract</td>
<td>62</td>
</tr>
<tr>
<td>Coproduction</td>
<td>16.3</td>
</tr>
<tr>
<td>Technology transfer</td>
<td>12.1</td>
</tr>
<tr>
<td>Training</td>
<td>3.7</td>
</tr>
<tr>
<td>Others</td>
<td>5.8</td>
</tr>
<tr>
<td>Indirect</td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>62.9</td>
</tr>
<tr>
<td>Technology transfer</td>
<td>15.6</td>
</tr>
<tr>
<td>Credit transfer</td>
<td>7.4</td>
</tr>
<tr>
<td>Others</td>
<td>14.1</td>
</tr>
</tbody>
</table>

Questions

1. Does the practice of offsets in defense contracts violate the U.S. official position (as well as its commitment to WTO) on countertrade?
2. Do you think such practices should be extended to commercial products? Discuss.