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Accepting Soviet Goods in Countertrade: Problems with Product Quality

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Since the collapse of world oil prices in January 1986, and Mr. Gorbachev's subsequent call on Soviet enterprises to increase exports of "high value-added manufactured goods" to decrease the country's dependence on oil for export earnings, pressures on Western trading partners to engage in countertrade have multiplied. Countertrade is one or more transactions involving the payment for materials purchased with other goods. Payment can be made either completely with products or commodities, or partially with products/commodities and partially with cash.

A key consideration for Western companies countertrading with the Soviets is the usability or the salability of the goods they receive in exchange. This article examines various considerations in the evaluation of Soviet product quality. The impacts on product quality generated by the Soviet Union's centrally planned economy, its foreign trade system, and its quality control system are explored and evaluated. The emerging importance of countertrade in Soviet foreign trade is also discussed. Finally, some predictions regarding the future of Soviet product quality and the implications for Western firms accepting Soviet goods in countertrade are offered.

INTRODUCTION

Unprecedented political and economic changes are occurring in the Soviet Union, making it easier for Western companies to conduct business in the Soviet market. The country's 286 million consumers provide an untapped and relatively cashrich market that American and European firms are eager to tap. Due to convertible currency shortages, however, the Soviets are increasingly unable to pay for imports with Western currencies (except those imports considered absolutely essential to the economy), and are imposing increasing countertrade requirements on foreign trade transactions. Countertrade allows the Soviets to pay for imports, in full or in part, with Soviet products. The Soviets have developed a persistent reputation in the West, though, for poor quality in

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their manufactured goods. Unable to sell many of their exports in the advanced industrial countries, the Soviets have turned to countertrade to acquire Western technology and, at the same time, dispose of otherwise largely unmarketable Soviet products.

The purchasing manager in a Western firm is often assigned the task of finding suitable goods that his or her company can accept in a countertrade deal. For this reason, it is important that such purchasing professionals understand how the Soviet foreign trade system works and what pitfalls they may encounter in countertrading with the Soviets. Purchasing managers frequently also must find an external buyer or an internal use for the goods received in countertrade. The quality of these goods is therefore very important to the purchaser.

This article examines selected aspects of the Soviet economy, foreign trade system, and quality control system that affect the quality of Soviet goods. The role of countertrade in Soviet foreign trade also is examined. Finally, the future of Soviet product quality and the implications for purchasing managers of continued growth in East-West countertrade are discussed.

THE SOVIET ECONOMY AND THE FOREIGN TRADE SYSTEM

In keeping with Marxist-Leninist ideology, the Soviet Union has almost no private ownership of the means of production. Instead, the state owns enterprises and capital equipment, and assigns managers to run and administer them. Central planners in the Soviet government determine what and how much should be produced, to whom the output will be sold, from whom an enterprise should buy inputs, and at what prices. State managers receive directives for their enterprise from the central planners.

In order to evaluate plan fulfillment, the central planners have drawn up a list of priorities, a system of incentives to direct managers toward the goals of the state, and a means of measuring industrial production. The most frequent measure of output in Soviet industry has been the value of gross output; bonuses have usually been linked to output quantity targets. Until recently, enterprise managers have had no incentive to make efficient use of labor, to reduce costs, to maintain or improve product quality, or to innovate. Since the production plan must be fulfilled 100 percent in order to receive the bonus, managers have diverted their resources to the quantity target by scrimping on quality expenditures and product improvements. The consequences of this disregard for quality, among other things, have been repercussions throughout the entire economy, due to the dependence of finished goods' performance on the type and quality of the inputs used in the manufacturing process. Quality deterioration appears to be one of the most serious defects in the operation of the production plans.

Another systemic contributor to poor product quality has been the widespread use of arbitrary costs and prices in the Soviet economy. Prices are not determined by the interaction of supply and demand, but rather by administrative order. They rarely reflect true costs of production, even though they are supposed to be set on the basis of average production costs in an industry. Once set, prices typically have remained unchanged for many years, despite the variation of costs over time.

Because internal prices do not reflect the true value of commodities, the Soviet Union has had to use world prices as its basis for trade, even when trading with other centrally planned economies. The direct controls and administration of the volume of trade by the foreign trade organizations (FTOs) have relegated the exchange rate to a mere statistic used for accounting purposes. Fluctuations in the valuation of the ruble have had no effect on the convertible currency prices of exports and imports, or on the ruble prices of the same commodities sold in the Soviet market. The volume of goods traded has remained the same.

A problem compounding the Soviet Union's currency inconvertibility is the significant restriction the Soviet authorities put on purchases by nonresidents. Because most commodity flows are directly planned, items not explicitly designated for export are usually unavailable for sale to trading partners. Shortages caused by taut planning also reduce the assortment of goods non-Soviets can buy. Irrational prices assigned to goods in domestic markets produce free trade disadvantages for the Soviets because of the large subsidies that depress the prices of many goods. If foreigners were allowed to purchase whatever they liked in the Soviet market, the domestic economy could possibly incur substantial losses.

On January 1, 1988, a number of foreign trade reforms were introduced in the Law on State Enterprises. The reforms reduced the authority of the foreign trade ministry and transferred the FTOs that belonged to the Ministry of Foreign Trade to the industrial ministries in an effort to link foreign trade and production. Permission to establish trade relations with foreign firms was extended to all enterprises on April 1, 1989. Future reforms will devalue the ruble and gradually phase out the complex collection of convertible currency coefficients.

How successfully are these reforms being implemented? According to the respondents to a survey conducted by Business Eastern Europe, little indication of the decentralization decreed can be seen yet. Managers' comments included: "The bureaucracy still exists" and "We haven't seen much in the way of changes yet." A majority of respondents reported that central governmental authorities were continuing to place their orders. But increasing numbers of Western firms were finding the Soviet end-user to be a participant in decision making, in contrast to the former decoupling of purchaser and user. Remarked one manager, "The ultimate yes or no comes from Moscow, but more and more, the real decision is being made at a lower level, often by the republic itself."

One concluding note on the foreign trade reforms involves countertrade. The new decree permits "Soviet enterprises and other units to set up consortia, associations, trading houses, or even joint stock companies for marketing and other foreign trade coordination." This provision could make linkage, long a problem in countertrade transactions, easier by providing a means for traders, ministries, and end-users to cooperate on deals. This will be an interesting development to watch in the years ahead.

THE ROLE OF COUNTERTRADE

Soviet interest in and demands for most types of countertrade were minimal before the restructuring of the foreign trade bureaucracy and the oil price collapse of 1986. There were several large turnkey projects in the chemicals and energy sectors which involved compensation to the Western partner in the form of product payback, but other than that, countertrade requirements in foreign trade totaled no more than 5 to 15 percent of an agreement, if they were imposed at all.⁴

Due to the lack of government regulations and the country's limited experience with countertrade, much extemporization is necessary when engaging in countertrade with the Soviet Union. The Soviets typically do not distinguish between barter, counterpurchase, and buy-back (all forms of countertrade are called "kompensatsiya"—i.e., compensation), and no central planning organization oversees countertrade transactions. Coordination and cooperation between FTOs and ministries is almost nonexistent; consequently, Western companies must make arrangements directly with the ministry to which they are selling.

Counterpurchase involving unrelated products, a common practice in Western trade with the smaller East European nations, has occurred infrequently in Soviet-West trade. More common have been exchanges of raw materials with the West, or buy-back agreements in which a Western firm is compensated for the construction of a plant with deliveries of that plant's end products. The most well-known buy-back arrangement was the construction of the gas pipeline by West Germany, France, Italy, and Britain to deliver Soviet natural gas from Siberia to consumers in the four West European nations. Closer to home, Occidental Petroleum agreed to build chemical plants in the USSR and purchase their ammonia output for sale in the West as part of a \$20 billion, 20-year buy-back contract. In doing so, Occidental secured a long-term market in the Soviet Union for its phosphate fertilizer.⁵

Countertrade pressures first appeared in the Soviet Union in 1985-1986. The 1986 fall in world oil prices from the planned level of \$26.50 per barrel to less than half this benchmark caused Soviet export earnings to plummet; their convertible currency shortfall amounted to around \$7 billion. Mr. Gorbachev criticized the foreign trade sector for being too dependent on energy and raw materials for its convertible currency earnings, and

called for an increase in exports of high value-added goods as a means of making up the deficit. This order was translated into countertrade pressures on Western companies from Soviet central, regional, and enterprise officials.

Many Soviet organizations are continuing to require countertrade as a basis for trade with Western companies, but their countertrade demands are limited by the lack of available goods for exchange. Countertrade levels still average only 5 to 10 percent. It is rare for the Soviets to ask Western companies to accept 100 percent compensation for an import through countertrade. (This is a common requirement in many of the smaller East European countries.) But the new provisions for marketing, self-financing, and foreign trade coordination, set out in the Law on State Enterprises, coupled with the continuing convertible currency scarcity, are causing countertrade pressures to rise. The Soviets' commitment to large capital equipment purchases from the West to fuel their modernization programs ensures a greater role for countertrade in future transactions.

Continued constraints on countertrade include irrational prices, the problem of linkage, and the poor product quality of domestically manufactured goods.

Soviet prices remain an unreliable indicator of the value of imports and exports, because domestic prices are determined separately from world market prices and they reflect subsidies and turnover taxes set according to political priorities. This practice obscures the true worth of Soviet goods.

When Western firms are willing to engage in a counterpurchase arrangement, there remains the problem of finding suitable Soviet goods they can accept in exchange for the products they are selling. This problem can be traced to two sources: (1) the low level of linkage between enterprises, FTOs, and ministries; and (2) the often inferior quality of goods offered by the Soviet partner.

Due to the nature of the central planning system, and the bilateralism characteristic of most Soviet foreign trade, coordination between different levels of governmental hierarchy and between different organizations on the same level has been very poor. FTOs have had little communication with each other—enterprises even less contact. For example, a U.S. electronics firm, which had agreed to a counterpurchase deal, could not find marketable products from those offered by its trading partner, the FTO Elektronorgtekhnika. The firm sought to purchase goods from three other FTOs. Initially, the FTOs agreed to allow these procurements. But three months later, the deputy foreign minister called off the arrangement, saying it was too difficult to establish linkage among so many FTOs.

The delegation of trade rights to the enterprises has not solved the problem. Western companies countertrading in the engineering sector find they must either buy goods from the ministry or FTO they sell to, or else invest a tremendous amount of time to find someone with enough authority that can facilitate linkage. The one exception to the linkage headache occurs when the Soviet "export" is a service. Soviet transport

services, for example, can be arranged relatively easily in a counterpurchase deal.

Even buy-back agreements have been affected by the linkage difficulty. Traditionally, the responsibilities for buying the plant and equipment and delivering the resultant end-products to the Western partner were handled by the same FTO or by FTOs within the same ministry. Companies reasoned that ministerial oversight of the entire arrangement would ensure the later counterflow of goods from the factory. But under the foreign trade reforms, FTOs are being dismantled and their responsibilities shifted, so that the linkage between delivery of plant and delivery of product is no longer guaranteed. The FTO that signed the original contract may no longer have the authority to secure the shipment of products for the Western company. FTOs in different ministries, which must now finance their own operations, have no incentive to help each other. The Western partner is caught in the middle.

The inferior quality of Soviet goods made available in countertrade arrangements is symptomatic of a larger problem with the quality of Soviet manufactures. For a Western company, accepting poor quality items means that the goods are either not marketable, or must be sold at a discount. Some items purchased in countertrade arrangements have been unsuitable even for internal use. Because raw materials and intermediate goods lose their identity in production, they have been more acceptable than finished goods. But poor quality inputs impose a cost on the Western buyer, making countertrade less profitable and therefore less attractive.

How do the Soviets contol quality and why have their products consistently fallen short of world standards? This issue is discussed in the following section.

CONTROLLING PRODUCT QUALITY IN THE SOVIET UNION

Design and materials standards are used to specify dimensions and establish quality characteristics for the materials and finished products in question. The use of standardization reduces variation in individual items and assigns a minimum level of acceptable quality. Standards also permit a firm to reduce the number of materials with which it deals, and subsequently to reduce its cost of materials. A concomitant benefit is the ability to ensure the quality capability of sources of supply.

In the Soviet Union, quality standards are set at three levels—enterprise, ministerial, and national. Enterprise standards can be used to forge the foundation of a purchasing contract, and to ensure the incoming quality of raw materials and other inputs. Industrial ministries may lay out branch standards for factories under their authority. However, only the national standards provide a legal basis for quality enforcement, since they carry a clause regarding noncompliance.

National standards can be separated into two types: (1) those that define the general parameters of manufactures

within a generic group of items, and (2) those that specify parameters for particular models of a product produced at a certain plant. The first type of standards assigns appropriate testing procedures and acceptable tolerances for the class of items produced, in addition to the general parameters of the products. These standards determine the major features of the manufactured items.

Because Soviet enterprises may only meet the minimum requirements of these national standards, and because additional design and manufacturing features may not be capable of expression in measurable, quantitative terms, the national standards may not capture all the characteristics necessary to assure that the final product *performs* well. In a market economy, competitive pressures compel firms to produce goods at higher quality levels than those required by the minimum specifications in the national standards. But in the Soviet Union, where consumers face a sellers' market with little or no choice of alternative supply sources, these competitive pressures are essentially absent. The Soviets have attempted to remedy this problem by establishing the *mark of quality* system of standards.

The mark of quality system is an endeavor by the Soviet authorities to raise Soviet product quality standards to those found on the Western world market. Any product that is judged to be at a quality level similar to or higher than its counterparts manufactured in the advanced industrial nations is granted a price increase and the mark of quality stamp of approval. So, unlike the national standards, whose purpose is to reduce variation and assure some minimum quality floor, the mark of quality system aims at motivating enterprises to produce items at the highest international quality levels. The mark of quality specifications are more detailed and productspecific than the national standards (they include product parameters, manufacturing methods, and quality control procedures), and they also provide information on product style and extent of usage. The Soviet authorities have counted on this incentive to raise the quality level of all manufactures. The system's "mark of quality" is shown in Figure 1.

Figure 1
THE SOVIET 'MARK OF QUALITY'



The State Committee of Standards categorizes products into three levels of quality: highest, first, and second. Those products put into the highest category are granted the mark of quality, based on their comparability to Western products in reliability, durability, style, standardization of parts, and "economic advantage to the purchaser." Products in the first category are those that conform to the national standards but do not meet the higher requirements for the mark of quality. Products in the second category are those deemed obsolete, or unable to meet current needs, and require updating or discontinuance. The second category is gradually being eliminated, in order to pressure enterprises to discontinue the manufacture of obsolete goods and product lines. Any items that cannot be put into the highest or first categories must be withdrawn from production within two months, unless special permission is allowed for continued production on a limited basis. Further, in 1986, products in the highest category were given an additional price increase and products in the first category a discount, in order to motivate continued upgrading in the quality of manufactured items.8

On January 1, 1987, the Soviets launched a new program of quality conrol—gospriyemka—in 1,500 enterprises, embracing about 20 percent of the country's industrial output. The program has emphasized strict adherence to technical standards and more attention to visual appearance. About two-thirds of gospriyemka's participants were from the machine-building sector, an industry targeted as crucial to the country's modernization program, since it is a major manufacturer of producer and consumer durables, and military hardware.

Machine building has long been a priority sector in Soviet development plans. However, in spite of intensive internal efforts to improve the quality and reliability of machinery, mechanical problems continue to plague Soviet-produced industrial equipment, leaving approximately 20 percent of it inoperative at any particular time. Many factors, which affect the quality of all Soviet manufactures, have contributed to its persistently disappointing record. These include: "poor worker training, the low quality of raw materials, lax labor discipline, ..., an emphasis on quantitative plan fulfillment, the lack of competition, reliance on ill-enforced and ineffectual standards as a surrogate for quality, and ineffective quality oversight."

Gospriyemka was introduced as an effort to remedy the quality problems. The expected improvements in machinery were to produce accelerated production in future years, a larger number of new manufactured items, and supplemental enhancements to product quality. Ironically, however, state inspectors who were charged with overseeing the manufacturing process and making final judgments about the output's quality were so thorough in their inspection that, by the spring of 1987, as much as 30 percent of industrial output was being rejected as unacceptable. Production targets, especially in the machine-building industry, could not be met because of the need to divert resources to the rework of rejected items.

In spite of the high rejection rate and new emphasis on quality, reports from the Soviet press suggest that no large-scale improvement in product quality has taken place. The new quality standards caused so much disruption in manufacturing operations that many were loosened at the end of 1987. For example, a Soviet economist estimated that 35 percent of the 1987 shortfall in plan fulfillment for machinery production was effected directly by gospriyemka, and that another 45 percent was due to supply shortages. Because supplying firms were not always able to manufacture inputs that could pass the tougher quality control standards, gospriyemka was most likely responsible for much of the supply deficiency also. Although some quality gains were achieved, gospriyemka generated disappointing results for the most part—frequent disruptions, reduced output, and little overall improvement in quality.

THE FUTURE OF SOVIET PRODUCT QUALITY

Although gospriyemka has been scaled back from its original ambitious targets, concern for the improvement of product quality, especially among durable goods, remains strong among Soviet leaders. However, the leadership has been reluctant to introduce the type of market incentives and responsibilities that are necessary to push product quality forward. Rather than allow supply and demand to determine prices, the Soviets rely still on state-determined valuations primarily.

The relatively static and artificial method of price determination rules out any cost-benefit analysis by firms in determining what technology or inputs are most appropriate to use to produce an acceptable-quality, efficiently-produced good. The persistent dependence on state orders and production plans excludes any increased sensitivity on the enterprises' part toward consumer preferences.

The continued reliance on state standards for the enforcement of quality levels means that enterprises, if they try to meet these standards, will be producing to meet the state's artificially determined needs rather than creating product utility for consumers. Further dependence on state standards will also mean that any quality improvement in products will occur at the mature, established stage of the technology life cycle, rather than at the inventive, new product stage, because enterprises will be rewarded for conforming to current requirements rather than coming up with improved ideas. The Soviets have had a long history of insufficient rewards for innovation and risktaking; despite political rhetoric to the contrary, no noticeable improvements in the innovation incentive structure have been put in place. Although a recent protocol signed by the Soviets and West Germans may upgrade Soviet quality standards to Western levels, this agreement is only a short-term solution.15 While the Russians are learning to cope with the more stringent German standards, quality expectations on the world market will be changing.

The Soviets are moving in the right direction in placing more emphasis on improved product quality, higher quality standards, and better enforcement of the standards in place. But they will have to free up prices and further decentralize the economy in order to provide the incentives for producers to innovate and improve quality levels voluntarily.

IMPLICATIONS FOR PURCHASING MANAGERS

Making use of countertrade allows a Western firm to enter the Soviet market, thereby expanding its sales volume and utilizing more of its productive capacity at home to meet the increased demand. Without countertrade, items considered non-essential by the Soviets typically are unmarketable there, because the USSR generally requires countertrade when trading for anything other than essential goods. Similarly, in a countertrade transaction, a Western firm may be able to sell products that are technologically out-of-date and, therefore, unsalable in the advanced industrial countries. In a cash transaction, the Soviets would demand the most technologically modern products.

Agreeing to countertrade also builds goodwill with Soviet customers and governmental organizations, because it permits a transaction to proceed without Soviet use of its scarce convertible currency. Countertrade ensures the Western partner that it will be compensated for the goods it sells to the Soviets, and it allows the firms involved to avoid exchange controls.

Nevertheless, Western businesses will continue to face an inefficient, often frustrating Soviet foreign trade system when searching Soviet product offerings for goods they can accept in countertrade. Purchasing managers must be aware of the valuation, linkage, and product quality problems described earlier in the article. And they must be particularly careful in selecting items that their firm can either use in its operations, or possibly resell. The closer the products taken in exchange are to a Western company's main line of business, the easier it is for the buyer to establish the worth and salability of the goods, since he or she is already familiar with that market.

For example, Pepsico capitalized on its expertise in the beverage industry and won a new generation of Soviet cola drinkers by accepting Soviet vodka as payment for Pepsi. The vodka fit into the multinational's established marketing channels, enabling Pepsico to sell the liquor in the United States and elsewhere in the West. In a smaller transaction that involved three trading partners, machinery valued at \$150,000 was shipped by the Kwik-Way Company of Marion, Iowa to the Soviet Union. The Soviets delivered machine tools to Canada, and the Canadians compensated Kwik-Way with equipment the company could utilize in its operations. In both cases, the countertrade transactions were successful because the companies chose items whose market was closely associated with that of their own businesses.

The consequences of accepting products with which a purchasing manager and his or her company are unfamiliar can be illustrated by citing an arrangement between Control Data Corporation and the USSR. To ensure a sale of computers to the Soviets, Control Data agreed to take Christmas cards as payment. It made the unpleasant discovery after the completion of the exchange that American consumers are not well-disposed toward religious cards with "Made in USSR" stamped on the back.¹⁷

The Soviet Union is a major, potentially lucrative market that American firms have only begun to penetrate. Its consumers have sizable accounts of ruble savings, but few attractive goods to spend their money on—and insufficient hard currency to pay for Western imports with cash. Consequently, countertrade will continue to be a growing part of the Soviets' trade with the West. Companies that refuse to participate may lose business opportunities in the USSR and in Eastern Europe to more sophisticated competitors.

The political climate has never been more favorable for increased commercial exchange between American and Soviet firms. By carefully screening Soviet offerings for items of acceptable quality and character, by "sticking to one's knitting" as much as possible in product selection, and by ensuring that all details of the exchange are spelled out in the countertrade contract, most purchasing managers can find Soviet goods that are acceptable for use or for resale. Future reforms promise to ease some of the linkage problems now existing in countertrade transactions. Those improvements will promote trade relations and facilitate the participation of American firms in what is still an unexplored and relatively unfamiliar market.

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REFERENCES

- Business International, "How Companies Will Meet The 1989 Soviet Challenge," Business Eastern Europe (January 16, 1989), p. 17.
- 2. Ibid., p. 18
- Business International, "New Soviet Trade Decree Promises Major Changes," Business Eastern Europe (January 2, 1989), p. 2.
- Business International, "Current Regional Trends," Countertrade Update (September 1988), p. 9.
- David B. Yoffie, "Profiting From Countertrade," Harvard Business Review (May-June 1984) p. 8.
- Business International, "Current Regional Trends," Countertrade Update (September 1988), p. 9.
- Example taken from Business International, "USSR," Countertrade Update (September 1988), p. 22.
- Malcolm R. Hill and Richard McKay, Soviet Product Quality (MacMillan Press, 1988), p. 14.
- CIA and DIA, "Gorbachev's Economic Program: Problems Emerge," a report by the Central Intelligence Agency and the Defense Intelligence Agency presented to the Subcommittee on National Security Economics of the Joint Economic Committee (April 13, 1988), p. 9.

- Andrew J. Matosich and Bonnie K. Matosich, "Machine Building: Perestroyka's Sputtering Engine," Soviet Economy, Vol. 4, No. 2 (1988), p. 152.
- 11. Ibid., p. 152.
- 12. "Go, go back, go Gorbachev," The Economist (March 25, 1989), p. 53.
- 13. CIA and DIA, op. cit., p. 13.
- M. Karpunin, "Ekonomicheskiye problemy operezhayushchego razvitiya mashinostroyeniya," *Planovoye Khozyaystvo*, 1: 16-23, January 1988; in Matosich and Matosich, op. cit., p. 167.
- Business International, "Soviets Propose to Apply West German DIN Standard," Business Eastern Europe (January 23, 1989), p. 27.
- Kenton W. Elderkin and Warren E. Norquist, Creative Countertrade (Ballinger Publishing Company, 1987), pp. 7-8.
- E.G. Martin and T.G. Ricks, "Countertrading Grows and Cash Short Nations Seek Marketing Help," Wall Street Journal (March 13, 1985), p. 1; in Warren Norquist, "Countertrade: Another Horizon for Purchasing," Journal of Purchasing and Materials Management (Summer 1987), p. 2.