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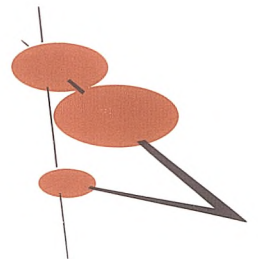
SAN FRANCISCO

FEDERAL RESERVE BANK OF PHILADELPHIA

# Monthly Review

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*December 1971*

### **The Semiprecious Metal**

... The ingredients were present in 1971 for a sharp upsurge in silver prices, but speculators bet wrong and prices went down.

### **Factories on the Border**

... Mexican workers in American plants — but on the Mexican border — have become quite numerous within the past several years.

**Editor: William Burke**

# The Semiprecious Metal

"Everybody" was sure that the price of silver would soar once the U.S. Treasury stopped supplying the market in late 1970, but it turned out that "everybody" was wrong. From a quotation of \$1.80 an ounce at the time of the last Treasury sale in November 1970, the price went down instead of up, reaching \$1.31 an ounce in October of this year. Many traders are now referring to silver ironically as a "semiprecious metal," in view of its somewhat tarnished performance during the last several years.

The ingredients were present in 1971 for an upsurge in silver prices. On the supply side, there was the cessation of Treasury sales, plus the shortages caused by strikes at the copper mines which supply (as a byproduct) a large share of the nation's newly mined silver. On the demand side, there was an improving economic picture, plus an international monetary crisis of the type that has so frequently created heavy speculative demands in the past. But the upward price pressures created by all these factors were swamped by the weight of the massive (although largely unmeasured) supplies overhanging the market as a consequence of the heavy speculative buying of the late 1960's.

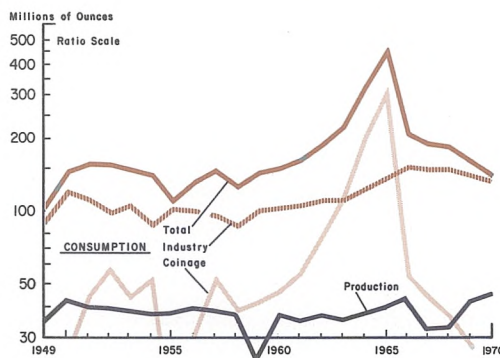
## U.S. demand: how large?

Total U.S. silver consumption jumped from 148 million ounces in 1960 to 457 million ounces in 1965, but then quickly subsided, falling to 136 million ounces in 1970. But this sharp fluctuation in demand was due almost entirely to the very heavy utilization of silver for coinage purposes in the 1963-65 period, followed by the sharp decline and eventual elimination of that market factor.

Nonetheless, industrial demand trends were interesting in themselves. Domestic demand rose from 102 million ounces in 1960 to a peak of 150 million ounces in 1966, as the Pentagon, the space agency, and industrial users in the private sector found increasing uses for this versatile and serviceable metal. But then demand began to subside, finally reaching 135 million ounces in 1970, partly because of lagging demand in certain sectors of the economy, but also because of the unrealistically high prices quoted by silver suppliers in the latter part of the decade.

In practically all major applications, silver usage has fallen off in recent years after rising sharply in the preceding half-decade. The photographic industry, which accounts for more than one-fourth of the total market, reduced its purchases by over 10 percent (in volume) between 1965 and 1970, after a strong 40-percent gain between 1960 and 1965. In contrast, the electrical and electronics industry — another one-fourth

## U.S. consumption falls as coinage demand disappears, industry sluggish



of the total — increased its purchases slightly over the past half-decade and dramatically (75 percent) over the past decade as a whole. Other industrial uses — such as for batteries, alloys, and solders — are substantially above 1960 levels, but one traditionally important market — silverware and jewelry — now purchases considerably less silver than it did a decade ago. (Data now available do not even indicate much of an upturn for 1971, a year that should have celebrated a record number of silver wedding anniversaries, judging from the upsurge of marriages in early postwar 1946.)

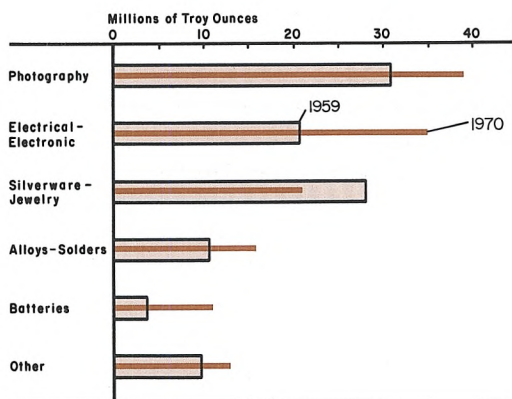
### The gap: how wide?

For the non-Communist world as a whole, silver usage in industry has increased from 225 to 358 ounces within a decade because of the rapid increases recorded in markets abroad. (Between 1960 and 1970, the increases were roughly 80 percent abroad as against 30 percent in this country.) In contrast, new silver production worldwide rose only 20 percent, from 207 to 247 million ounces, over the same time-span. Thus, a growing gap developed between industrial usage and production, after a decade in which the trend had been just the other way. Although coinage usage has fallen precipitously in recent years, the wide disparity remains between total current consumption and production.

Throughout modern history, silver production has been concentrated in the mountain ranges of the Western Hemisphere. Last year, four countries alone — Canada, the U.S., Mexico, and Peru — accounted for about two-thirds of total production in the non-Communist world. Those four nations generally boast roughly equal shares of the total market, with the actual figures shifting from year-to-year as dictated by changing production or marketing factors.

The U.S. led the world production race last year with 45 million ounces, followed closely by Canada. Over 40 percent of the U.S. total came from Idaho's famed Coeur d'Alene district, the only district in the world producing predomi-

### Long-term trend upward in most industrial applications



nantly silver. (Since its discovery in the 1880's the Coeur d'Alene district has produced three times as much silver as Nevada's fabulous Comstock Lode.) Utah and Arizona between them accounted for another 30 percent of the total, since they contain very large copper mines which produce silver as a byproduct. The rest of the nation's production came from Montana and other Mountain states.

Mine production in this country jumped almost 25 percent between 1964 and 1970, after several decades of relative stagnation, as higher prices enticed mining firms to seek out new supplies. But despite the growth in production and the slowdown in consumption, a substantial production deficit existed throughout the past decade — and the gap domestically was widened in most years by large increases in net exports. Last year, the gap was 90 million ounces in this country and 150 million ounces worldwide, and it was considerably greater during the years of heavy coinage demands. The U.S. Treasury was the principal factor in closing this gap, but at the cost of losing its role as a supplier of silver coins.

### From 2 billion ounces . . .

The events of the late 1960s could scarcely have been foreseen a decade earlier. The Treasury began the crucial decade with huge stocks of

silver, as a result of heavy purchases to support silver prices during the long period when the mines were producing far more silver than could be used for coinage and industrial needs. At the end of 1959, Treasury silver holdings totaled more than 2 billion ounces, nearly all of which was held as reserve against silver certificates.

Two significant trends began to emerge at about that time, however. The first was the rapid acceleration in the demand for coins, under the stimulus of an expanding economy and the growing use of vending machines. The second was the upsurge in industrial requirements, until demand from that source eventually exceeded current production on both a domestic and worldwide basis. The growing gap between production and consumption was made up in large part from Treasury stocks of free silver — stocks in excess of reserves against silver certificates. These stocks dropped by about 200 million ounces between April 1959 and November 1961, at which time sales were suspended.

In the early 1960s, the Government faced a rapidly growing need for silver to meet coinage demand, but the supply could not come from domestic production, which was already inadequate to meet industrial demand. Evidently, the only practical solution was to retire silver certificates from circulation, thereby freeing the silver held as a reserve for these certificates. The Treasury believed — wrongly, as it turned out — that the retirement of silver certificates and their replacement with Federal Reserve notes would free enough silver to meet the Treasury's coinage needs for decades to come.

Instead, the tremendous production of coins required to keep pace with the increasing demands of the economy cut deeply into the Treasury's silver supply. In 1962 and 1963 alone, nearly 200 million ounces of Treasury silver were used for coinage. Moreover, by mid-1963, the pressure of private market forces had driven the price of silver to its monetary value of \$1.29 an ounce — far above the \$0.90 floor which had

served as the effective price for most of the preceding decade.

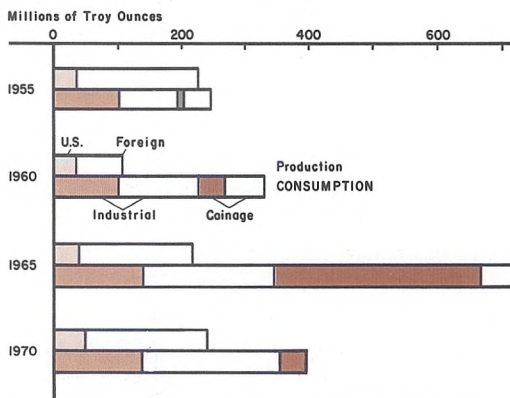
A continued price rise much beyond the \$1.29 monetary value would have made it profitable to melt subsidiary coins for their silver content, thereby threatening the continued circulation of silver coinage. To prevent this possibility, the Treasury in July 1963 resumed the open sale of silver at the fixed price of \$1.29 per ounce.

### ... to 1 billion

Over the next two years, an adequate volume of silver coinage was maintained in circulation, but only at the cost of huge amounts of Treasury silver. In 1964 and 1965 alone, over 500 million ounces of Treasury silver were used up in the production of silver coins, and 230 million ounces were sold in the open market to keep the price at a level which would prevent a wholesale withdrawal of coins from circulation. Altogether, in the years 1962-65, the Treasury used nearly 970 million ounces of silver in order to maintain an adequate volume of circulating silver coinage. This amount was roughly equivalent to the total production of American mines over the preceding quarter-century.

Recognizing that the continued usage of silver for coinage purposes was no longer possible,

### World demand exceeds production, despite slump in coinage usage



Congress in 1965 authorized the production of non-silver dimes and quarters, retaining only the 40-percent silver half-dollars as a link to the past. This legislation naturally required the Mint to go on a forced-draft production schedule to produce enough cupronickel dimes and quarters to meet fully the economy's circulation needs.

Demands on the dwindling Treasury stocks remained high during this transitional period. In 1966 and 1967, about 100 million ounces were needed for 40-percent silver Kennedy halves, and nearly 300 million ounces were sold to maintain the \$1.29 price, up to the time when sales were halted in May 1967. Then, another 100 million ounces were exchanged for silver certificates during the year preceding the redemption cut-off in June 1968.

In May 1967, the Treasury ordered a ban on the melting (or export) of coins. This was done primarily to keep silver dimes and quarters circulating during a period in which supplies of clad coins were not considered fully adequate for commercial needs, and secondarily to enable the Treasury to build up its reserves of silver in the

form of coins. But after a while, it became evident that the supply of clad coins was fully adequate, and that the remaining supply of outstanding silver coins had become locked up in private hoards, leaving little flowback to the Treasury. Thus, in May 1969, this prohibition was lifted.

### **. . . and then to zero**

Congress in 1967 set aside 165 million ounces of silver for the strategic stockpile, and stipulated that any remaining stocks could be sold at not less than the monetary value of \$1.29 an ounce. Then, in July, as the transition from silver to clad coinage was completed, the Treasury authorized the General Services Administration to auction off 2 million ounces a week at the going market price, which was considerably higher than \$1.29. Weekly sales were reduced to 1.5 million ounces in 1969, and all available stocks were disposed of by early November 1970. Altogether, more than 300 million ounces (\$562 million worth) were auctioned off during the 1967-70 period.

The Treasury's withdrawal from the silver

## **Seigniorage: Treasury Makes Money**

The Treasury's general fund became \$2.3 billion richer during the 1966-70 period simply because of seigniorage — that is, because of adding to the Treasury's assets the difference between the face value of its coins and the cost of their component materials. The coinage system, of course, is designed not to maximize seigniorage but rather to meet the country's needs for an adequate supply of circulating coins. Nonetheless, the seigniorage windfall did reduce the Government's borrowing needs by an equivalent amount during a period in which the Treasury was hard-pressed for cash.

The shift to a cupro-nickel currency was the major reason for this substantial seigniorage return since copper and nickel are considerably less costly than silver. Seigniorage totaled only \$113 million in fiscal 1965, but it soared to \$650 million in 1966 and \$834 million in 1967 because of the heavy minting of cupro-nickel dimes and quarters in those two years. As the transition to a clad coinage was completed, seigniorage trended downward, reaching \$255 million in fiscal 1970. In addition, during the fiscal years 1968-70, the Mint turned \$132 million into the general fund as profit on sales of silver bullion.

market was complicated somewhat by a prolonged controversy over the production of an Eisenhower silver-dollar coin. The controversy was resolved by legislation, signed by the President on the last day of 1970, that called for the minting of 150 million Eisenhower coins containing 40 percent silver. In May 1971, the San Francisco Mint began producing these memorial coins, priced at \$3 for "uncirculated" coins and \$10 for "proof" coins. When general distribution of these collectors' pieces began this fall, dealers reported very heavy domestic and foreign demand, sometimes at twice the Treasury's asking prices.

The 1970 legislation authorized non-silver Eisenhower dollars and Kennedy halves for general circulation, similar in composition to the present quarters and dimes. (The former 40-percent silver half-dollar was discontinued.) After 47 million ounces of silver were allocated for production of the memorial Eisenhower dollars, the only silver left in Government hands consisted of the 140 million ounces in a scaled-down strategic stockpile, plus 3 million old 90-percent silver dollars which may be disposed of at auction. By the time the curtain fell on this decade-long drama, market forces had depleted Treasury stocks of roughly 2 billion ounces of silver.

### Destabilized market

The disappearance of this key participant from the market has helped account for the severe price gyrations of the past several years. The New York price soared from \$1.29 to \$2.57 an ounce between mid-1967 and mid-1968, and then fell back all the way to the original level over the following three years.

Until 1967 a lid had been maintained on silver prices by the Treasury's commitment to sell silver at the \$1.29 monetary value. But once the Treasury halted sales at that old price and began to offer only limited amounts at the going market price, market pressures all but guaranteed a sharp price upsurge. Those pressures were reinforced

in this case by a series of international financial crises, which caused silver as well as gold to be demanded as a speculative hedge, and by a nine-month long strike at nonferrous-metals refineries, which pulled a large part of the normal refinery supply of silver off the market for a prolonged period of time.

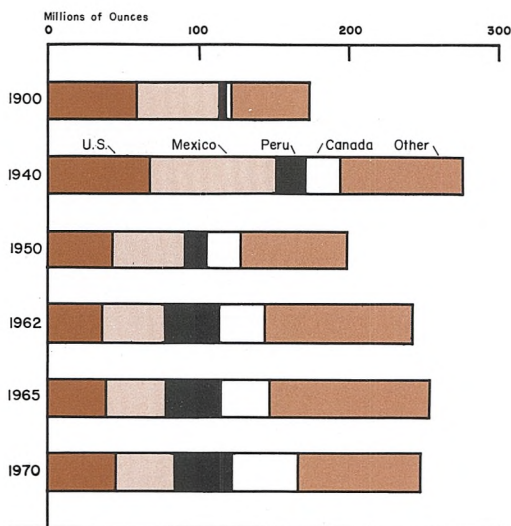
Nonetheless, prices dropped from the \$2.57 peak all the way down to \$1.54 an ounce between mid-1968 and mid-1969. This sharp price break reflected the improvement in the international situation, the growth of supplies resulting from decreased strike activity, the downturn in both coinage and industrial demand, and a fall-off in speculative buying. Speculative interest was dampened, not only because of the perverse movement of prices, but because of the prospect of increased supplies created by the Treasury's withdrawal of its coin-melting ban and by its announcement of continued auction sales through the following year. By late 1969, however, prices rose again to the \$2.00 level as legislators from silver-mining states began advocating a large mint run of Eisenhower silver dollars — a proposal that would have depleted the Treasury's remaining stocks much faster than had originally been anticipated.

Prices fell below the \$2.00 level in early 1970 as the Eisenhower-dollar proposal became bogged down in Congressional debates, and then dropped as low as \$1.60 an ounce during the spring months. This decline reflected not only the underlying factors described above, but also the severe stock-market decline. In many cases, margin calls forced stock-market participants to sell their silver holdings to raise cash, and falling silver prices then led to margin calls in *that* market. As this downward spiral in the silver market continued, many speculators were forced out of business.

### Growing disillusionment

The market atmosphere during both 1970 and 1971 reflected a growing disillusionment among speculators, because of the persistent failure of

**U.S., Mexico, Peru, and Canada  
mine two-thirds of world's silver**



the market to live up to their price expectations. In particular, as was noted at the outset, speculators expected prices to soar with the end of Treasury silver sales in November 1970, but most consumers evidently had covered their major needs prior to that date, and most speculators too had already bought in because this "sure thing" had been so well advertised. Consequently, with no new buying, and no upward price action, speculators began to bail out of the market, and prices tumbled sharply. Prices, which had risen as high as \$1.85 an ounce in the wake of the mid-1970 stock-market recovery, fell sharply during November, and traded in a \$1.60-\$1.75 range from then until the spring of 1971.

The market weakened again this spring, and prices fell about 25 percent between April and October to \$1.33 an ounce. This renewed weakness reflected the failure of demand to rise as it usually does during international crises, along with the improvement in supplies brought about by the end of the recent copper strike. Throughout this period, selling tended to be very heavy

whenever prices started to recover, as disappointed speculators tried to unload.

After the bloodbath they have been through during the last several years, speculators may be tempted to reassess their estimates of the direction of silver prices. True enough, mine production consistently lags behind consumption worldwide, and that gap will have to be filled from the stocks held by speculators, now that Treasury stocks are no longer available. There are no reliable data on the size of these speculative stocks, but they are generally estimated at about 1 billion ounces. With the worldwide production-consumption gap now running about 150 million ounces annually, these speculative stocks could be used up in a relatively short number of years.

**Price elasticity?**

However, this line of reasoning concentrates on the rising long-term trend of industrial consumption, but tends to ignore the relatively stagnant level of the past half-decade. The latter situation reflects the recent sluggishness of economic activity worldwide, but it probably also reflects a greater degree of price elasticity for silver than speculators had anticipated. Silver users in recent years have found cheaper substitutes for high-priced silver. While prices were rising, primary producers also increased their output through new mine discoveries, old mine reopenings, and improved production technology. Meanwhile, secondary refineries increased the recovery of silver from old scrap. During 1970, approximately 60 million ounces of silver were reclaimed worldwide from old x-ray film, photo-sensitized paper, and other secondary sources, more than double the amount recovered in 1960. Higher prices also brought speculative offerings into the market, including substantial amounts from the unmeasured hoards of India and the Near East.

Now, however, the market is more concerned about finding a bottom than it is about divining the long-term trend of prices. Ironically, a new floor may be provided by the Treasury, which as



of a year ago had believed it was completely out of the market.

According to an almost-forgotten clause of the Coinage Act of 1965, the Treasury is required to buy newly-mined domestic silver, when offered, at \$1.25 an ounce. (This possibility had seemed so remote that the Treasury had to print the necessary forms somewhat hurriedly when it recently began to receive inquiries on possible purchases.) The \$1.25 figure could not be con-

sidered as a floor to the entire market, since U.S. mine supplies represent only a fraction of total world supplies, but it may well serve as a resistance point if the recent price decline continues. In the opposite direction, meanwhile, the large hoards held by speculators may well exert a restraining influence on upward price movements for some time to come, since profit-taking could set in with every rally in the market.

*William Burke*



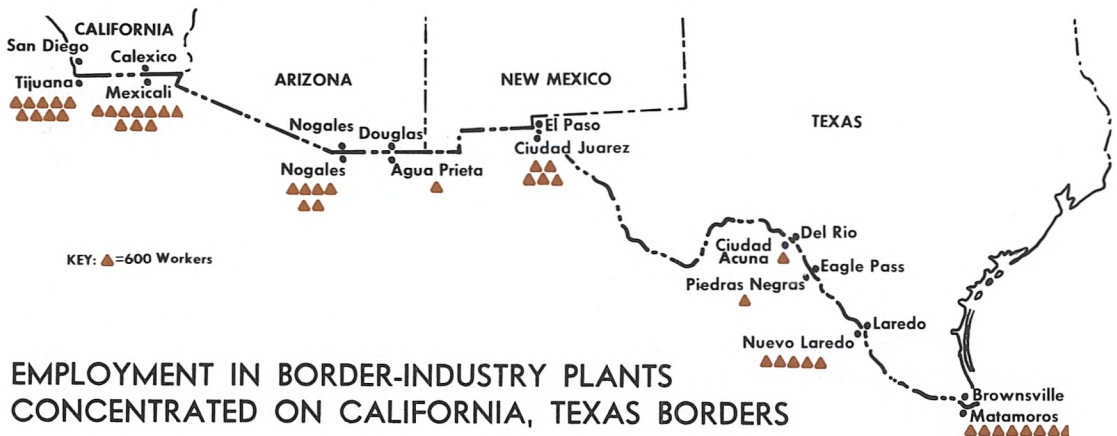
# Factories on the Border

Mexican workers on American farms have become relatively scarce since the termination of the *bracero* program in 1965. However, Mexican workers in American plants — but on the Mexican border — have become quite numerous just within the last several years. Total employment of the plants involved in Mexico's border-industry program may reach 40,000 by the end of 1971, and total production may equal \$500 million this year, according to U.S. State Department estimates. Because of this program, Mexico is now the largest foreign assembler of U.S. components for exports to this country.

Employment and production have more than doubled within the past two years, spurred along by favorable decisions on the part of the U.S. Tariff Commission and the Mexican Government. The 300 firms or more which are active in the program manufacture a number of products, but predominantly electronics and textiles. Their

plants, strung out from Tijuana on the Pacific to Matamoros on the Gulf of Mexico, can be viewed collectively as another Hong Kong, but with considerably greater locational advantages than that Far Eastern manufacturing center can boast.

These factories on the border are characterized by the fact that they import most of their equipment and raw materials, and export their entire production. In addition, their operations are generally labor intensive, of an assembly or limited-processing type. The Mexican Government waives its duties and regulations on the importation of machinery, equipment and raw materials for these plants, as well as its restrictions on foreign capital, so long as the end products (mainly assemblies of U.S. components) are exported. In contrast, Mexico's *overall* industrialization policy is designed to develop a manufacturing industry with a high *national* content.



### Exceptional circumstances

This exception to the general industrialization policy developed out of the exceptional circumstances of the mid-1960s. Mexico had been plagued by persistently high levels of unemployment, especially in the relatively backward border areas, and the problem was accentuated in 1965 when the termination of the *bracero* program cut off employment opportunities in agricultural operations north of the border. Commerce and Industry Secretary Campos Salas saw a solution in developing Hong Kong-style assembly plants servicing the American market, and his proposal was incorporated in the economic program of President Diaz Ordaz.

The border industry program (*Programa de Industrializacion Fronteriza*) was designed specifically to attract foreign manufacturing operations, principally assembly operations, in an effort to promote the economy of the depressed border areas. The initial resolution permitted Mexican or foreign-owned firms to establish manufacturing operations in the customs zones centering around the northern-border cities. However, a resolution of March 1971 extended the authorized zone to a 20 kilometer-wide strip along all borders and coasts. Raw materials and equipment could be imported in-bond and duty-free, but all production was required to be exported. (But some firms operating in "free zones," such as Tijuana and Mexicali, which have been in existence for some years, are permitted to sell some of their production locally.)

The program's success is due not only to Mexican industrial-development legislation but also to U.S. tariff legislation — specifically, Sections 806.30 and 807.00 of the U.S. Tariff Schedule. Under these sections, import duties are partially exempted on U.S. products assembled abroad or on U.S. parts incorporated abroad into essentially foreign products. The duty is paid only on the components of the product not made in this country — that is, on the value added abroad. In the case of the Mexican assembly operations,

this is primarily the labor which assembles the product.

For U.S. customs purposes, the percentage of U.S.-origin components in a reimported product takes into consideration only those components which have maintained their identity. The remainder is considered "value added" for duty purposes. This could include not only labor costs, fixed overhead, and any local raw materials, but also U.S.-origin components which have been transformed (lost their identity), as well as a reasonable profit margin.

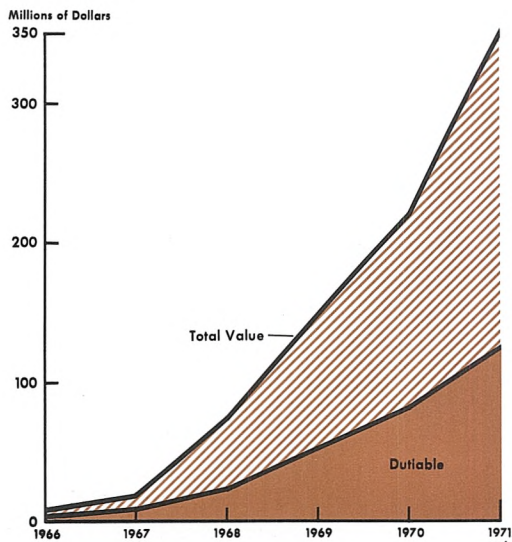
The original intent of this legislation was to maintain U.S. production by encouraging the use of U.S. components in foreign-made products. However, the actual effect is a system whereby U.S. firms utilize low-wage unskilled labor in certain developing countries to assemble products for the U.S. market. The system is common not only in Mexico, but also in Hong Kong, Taiwan and Korea.

The adoption of a temporary 10 percent import surcharge by the United States in August 1971 has created some uncertainty over the prospects for future growth of the border industries. But if the surcharge is removed soon, there should be little if any visible effect on the program.

### Recent upsurge

The rapid growth this past year of border-industry plants has been stimulated by the U.S. Tariff Commission report (October 1970) supporting the continuation of the incentives granted by Sections 806.30 and 807.00. The Commission concluded that repeal of this legislation "would probably result in only a modest number of jobs being returned to the U.S., which likely would be more than offset by the loss of jobs among workers now producing components for export and those who further process the imported products." Growth under the program had begun to lag while this review was under way, but roughly 100 new firms began operating once the Tariff Commission's support became assured.

## Production for U.S. market soars within several years' time



Perhaps as many as 330 firms (including those in the free zones) will be in operation at the end of 1971, according to State Department estimates. The concentration is heaviest in electric-electronic products and textiles, but new ventures have appeared in more diverse fields, including dismantling of scrap railroad cars, food processing and packaging, and assembly of musical instruments, boats, and caskets. Yet, of the 31,000 workers employed last spring, 50 percent were employed by the electric-electronic industry and 20 percent by the textile industry — and roughly 85 percent were female. Here as elsewhere throughout the world, women workers appear to be favored for the tedious operations involved in these types of industries.

Most of the employees are paid the minimum wage; including fringe benefits, this averages about \$0.55 an hour. (The U.S. minimum wage is \$1.60.) Skilled technical workers receive a significantly higher salary, and many textile firms offer piece-work incentive systems beyond the minimum wage.

Most of the firms in the border-industry programs are wholly-owned subsidiaries of U.S. companies. However, many firms have chosen names which do not identify the parent company, and a large number have been set up under the mantle of already existing subsidiary companies in Mexico. Also, a rapidly growing number of companies are being set up as subcontracting operations by either U.S. or Mexican businessmen. No third country has yet established a border-industry plant, although several Japanese firms have expressed interest in West Coast operations.

State Department estimates indicate that total production of these border plants will approach \$500 million in 1971. Around \$350 million of this production will re-enter the U.S. under Sections 806.30 and 807.00, with duty assessed on \$125 million value added in Mexico. Total production and value added under this program will have doubled within just two years' time.

### Twin-city locations

The major centers of border-industry activity are located, in twin-city fashion, directly across the border from their American counterparts. Almost 40 percent of the total jobs involved in the program are located in Tijuana and Mexicali (Baja California Norte), opposite the California cities of San Diego and Calexico, respectively. Other concentrations are in Nogales (Sonora), opposite Nogales (Arizona); Ciudad Juarez (Chihuahua), opposite El Paso (Texas); Nuevo Laredo (Tamaulipas), opposite Laredo (Texas), and Matamoros (Tamaulipas), opposite Brownsville (Texas).

The total population of the cities on the Mexican side of the border almost matches the total population on the American side, at 2.2 million each. However, San Diego accounts for more than half of the population on the American side, so that in most other twin-city pairings, the Mexican city is the larger one. In each of the last three decades, population has increased much more rapidly on the southern side of the border; dur-

ing the 1960s, for example, the Mexican gain was 77 percent, as against a 17-percent increase on the U.S. side. This population upsurge reflects, among other factors, the ability of increased job prospects to attract workers from the interior of Mexico, first with the bracero program, and now with the border-industry program.

Migration has also been stimulated by the prospect of higher wages, low though they may be in absolute terms. The Mexican Government set the basic daily minimum wage for the 1970-71 period at \$2.56 for Mexico City (Federal District) but at \$2.88 for Ciudad Juarez and \$3.68 for Baja California Norte.

Mexican-American collaboration in the border-industry program permits Mexico to take advantage of its surplus of low-wage workers and concentrate on labor-intensive assembly operations, and permits the U.S. to take advantage of its highly capitalized manufacturing facilities and concentrate on the production of basic components. In some cases, this collaboration takes place through the pairing of plants in twin-city locations, although this "twin-plant" concept has not developed nearly as much as originally anticipated.

Under the "twin plant" procedure, U.S. firms establish counterpart operations on both sides of the border. The products are initially processed in the U.S. plant, shipped to the Mexican plant for labor-intensive assembly or finishing, and then returned to the American side of the border for additional operations such as inspection, finishing, packaging and distribution. A majority of the U.S. firms involved in border industries are located in the border states; for instance, many Tijuana firms are tied in with Los Angeles electronics, clothing, and furniture firms. Nonetheless, only a limited number of U.S. border-industry firms have established a significant manufacturing operation in U.S. border cities themselves.

The impact on the U.S. border cities thus is generally indirect, comparable to the secondary impact manifested on the Mexican side. Utilities,

trucking firms, finance establishments, and retail establishments of all types necessarily benefit from the creation of new light-manufacturing jobs in their communities, no matter which side of the border the jobs are located. In some twin-city areas, Mexicans reportedly spend 40 percent of their incomes on the U.S. side of the border.

### Pros and cons

Advocates of the border-industry program claim that by locating in a nearby area where there is a plentiful supply of low-wage and easily trained labor, U.S. manufacturers are better able to meet competition in the U.S. markets from the products brought in from such places as the Far East and the Caribbean. (Wages are considerably lower in the Far East than even in Mexico, but Mexican border firms can offer compensating cost advantages, such as low transportation costs.) They also claim definite benefits for U.S. firms, since Mexico's proximity permits administrative, clerical, and warehousing operations — as well as the manufacture of the basic product — to stay on this side of the border. Other points in favor of the program are that it helps reduce Mexican unemployment, provides training for Mexican workers, and provides a source of foreign exchange earnings for Mexico's balance of payments.

Opponents of the program claim that it encourages firms seeking lower wages to leave this country and go to Mexico, thus creating higher American unemployment, because all such jobs created abroad are lost to this country. The same argument, of course, is applied to the migration of firms to Hong Kong, Taiwan and Korea. Of course, as the Tariff Commission has pointed out, this loss is more than offset by the jobs of workers producing components for export and those of workers who further process the reimported products. These jobs might be lost if the program were to be terminated. Moreover, Mexican consumers do not have the opportunity to buy at home the products which they help produce, since the products assembled under this program

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must be exported if the firms are to qualify for the special border-area incentives.

The program is criticized, as the bracero program was not, for failing to provide job opportunities for adult males. Heavy migration into the border areas also creates shortages of housing, utilities, and medical services which the local authorities find difficult to overcome. Of course, the program will generate tax revenues that will help pay for such public needs.

The border-industry program, finally, may conflict with the Mexican Government's long-term development goals, which are to stimulate the growth of basic industries utilizing local raw materials and to increase Mexican control of assembly operations. For this reason, both President Echeverria and Industry and Commerce

Secretary Torres Manzo have expressed some reservations about the continuance of the program in its present form. The latter, speaking at Tijuana last May, said that the border-industry program is a "necessary evil" which provides employment and training to local workers only until such time as they may be absorbed by Mexican industries. These criticisms may foreshadow some eventual revisions in the program, but for the foreseeable future the prospects appear favorable for the continued growth of border industries, in view of the substantial benefits which result from them for Mexico's balance of payments. For their part, U.S. firms are likely to continue showing interest in the program, considering the substantial profit possibilities inherent in combining labor-intensive assembly operations with advanced technology. *W. B.*

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