

MAKING RADIO AND TELEVISION SETS IN MEXICO

A Case History of One Firm

A Report from James G. Maddox

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Many contemporary discussions of the problems of underdeveloped countries put special emphasis on the lack of technical
knowledge and the shortage of capital as being among the major
impediments to economic growth. These, therefore, are areas meriting special attention in any attempt to understand the ways in which
the economic system of an underdeveloped country develops and expands. Mexico, because it has traveled considerably farther along
the road of industrialization than many other Latin American countries,
offers some good examples of the ways and means by which the obstacles imposed by the shortage of technical know-how and capital are
being surmounted. Special efforts of many different types are contantly being made to break through these two impediments to economic growth--efforts by the Mexican government, by independent
organizations of businessmen, farmers, and laborers, and by individual entrepreneurs.

Among the long list of government activities aimed at aiding in the solution of these problems are such things as: scholarships and grants to selected Mexicans for study abroad; the hiring of individuals and specialized firms from the more highly developed countries to assist and advise Mexican agencies, both private and public, in the solution of technical problems; a complex of fiscal and monetary policies, including substantial foreign borrowings, aimed at increasing the level of investments in Mexico; participation in technical assistance programs sponsored by United Nations agencies, the Organization of American States, and the government of the United States; and various special inducements to both foreign and domestic business firms to start or expand operations in Mexico. In the field of public policy, therefore, it is possible to learn what actions government is taking to combat the lack of technical knowledge and the shortage of capital. are well worthy of study.

However, it usually is the individual businessman who faces these problems in their most concrete manifestations. He is the person who is faced with the task of combining the technical knowledge that is available with whatever capital he can control

into some sort of productive process, which he hopes will make him a profit by supplying a product or service that the consumer wants and is willing to pay for. It is not, therefore, amiss to take a detailed look at the problems with which individual business firms are faced in their attempts to operate in an economy where technical knowledge and available capital are in short supply.

The attached case history of Briarcliff and Company, S.A., a manufacturer of radio and television sets in Mexico, provides such an opportunity. This case was written for the Harvard Graduate School of Business Administration. However, it provides several illustrations of operating policies and practices that may be of general interest.

For instance, the case is a good illustration of how three young United States nationals, who had already gained considerable experience in Mexico, were able to combine the specialized technical knowledge which one of them had acquired through training and experience in the United States, with a small amount of capital of their own and a line of credit from a large United States firm that was looking for wider markets for its products and that had the financial resources to extend credit to a new Mexican firm that would provide a part of that market. The way in which this line of credit is managed, through the shipping of material to a bonded warehouse for release to the Mexican firm only if it keeps its account on a current basis, is an interesting example of a device by which credit can be safely extended to a firm with meager assets. It is obviously a social invention to fit the needs of a business environment in which the scarcity of capital is a constantly limiting factor. Its use is growing throughout many branches of Mexican business.

Another point of interest is the wide discrepancy between the wages paid by Briarcliff and Company and the prices at which it sells its products. A few of the highest-paid skilled workers earn about \$125 to \$130 per month, but most of the workers -- those who assemble radio and television sets and make television cabinets -get only \$50 to \$60 per month. This is approximately one-fourth as much as workers in the United States are paid for comparable Yet the price of television sets in Mexico is roughly twice as high as in the United States. Why the difference? A satisfactory answer would require investigations far beyond the scope of those that I have undertaken, or can undertake. However, a few points seem fairly obvious. Unit costs are high even though wages are low, and a substantial part of the explanation for high unit costs appears to be as follows: (1) production methods in the plant are not highly efficient; (2) the component parts shipped from the United States, usually in relatively small lots and placed in the bonded warehouse where carrying charges are high, finally end up costing the company considerably more than the cost of such parts to comparable firms in the United States; (3) the cost of those components which the company is forced to buy from Mexican manufacturers is very much higher than that of comparable parts in the United States; and (4) overhead is high in relation to volume. However, it is clear that the level of the price to the consumer cannot be explained entirely in terms of high production costs. The profits of this firm have been good, and it has been able to expand the scale of its operations at a rapid pace. It is clear, I think, that the television industry has been skimming the cream off the upperclass market. It may be able to continue to do this for a while, as new stations are opened in some of the other large cities, but in a few years price competition may become a reality.

Incidentally, we have in this case a typical example of wage and price relationships in a large part of Mexican industry. The prices of nearly all factory-made goods in Mexico are higher than for comparable qualities of the same types of goods in the United States. This is particularly noticeable in the consumer "hard goods" field -- automobiles, refrigerators, electric and gas stoves, television and radio sets. Automobiles are 60 to 80 per cent higher in Mexico than in the United States, yet most of them are assembled in Mexico, and some of the parts are made here with labor that is paid very much less than automobile workers receive in Detroit. The immediate explanation for these price discrepancies is, of course, the protectionist policy being followed by the government. The tariff wall is high, and is deliberately kept high to promote the growth of Mexican industry. Economists, both in and out of Mexico, may debate the wisdom of this policy, but it is, nevertheless, a fact, and it is one of those facts that is likely to be quite durable.

Moreover, as the case of Briarcliff and Company illustrates, the tariff and related import restrictions are not the only devices by which the Mexican government encourages the growth of industry. It also grants special tax concessions. A part of the company's early success in the manufacturing of radios stemmed from the fact that it was exempt for five years from the payment of a substantial part of the regular tax load borne by its competitors, and about one-half of its 1955 profits came as a result of the tax-exempt status which last August was granted to the company's television business. Only 2 of its 11 competitors enjoy the same tax-exempt status. Such concessions are granted only after a careful review of each application by both the Ministry of Economics and the Treasury Ministry. They are valuable prizes, and many firms seek It is commonly said by the representatives of United States business firms in Mexico City that the government tends to grant tax concessions more liberally to small, new firms, whose stockholders and officials are Mexican citizens or have been in Mexico for many years, than to subsidiaries or branches of large, wellestablished United States firms. This is in line with a rather robust spirit of nationalism which pervades many aspects of Mexican life, but I haven't been able to check the accuracy of these reports.

A final point worth noting is how the fear of devaluation affects the company's policies. The officials of the company point to the lack of capital to expand sales as being the one big problem which they face. If only they had the capital to finance their dealers, who sell sets to consumers on the installment plan, they would be able, they say, to expand volume, thus reducing overhead per set and probably lowering somewhat their direct production

costs through volume purchasing. Moreover, they say that they can borrow dollars in the United States, but they are afraid to do this. This fear apparently stems in large part from the action of the government in April 1954, when-in the most recent of a rather long series of devaluations -- it unexpectedly reduced the value of the peso from 8.65 to the dollar to 12.50. This act, contrary to most of the earlier devaluations, caught a lot of people by surprise. Firms which were borrowing dollars and extending credit in pesos were particularly hard hit. As they collected their outstanding peso accounts, they used these pesos to buy dollars with which to pay their creditors in the United States, but the pesos they collected after devaluation bought about 40 per cent fewer dollars than formerly. Briarcliff and Company was not seriously hurt by the 1954 devaluation largely because its stocks of unassembled parts were in the bonded warehouse -- still the property of the United States firm which had shipped them and thus not dollar liabilities of the company. Nevertheless, company officials are unwilling to depend heavily on dollar loans to expand their operations. The fact that the Bank of Mexico is currently reporting that its reserves of gold and foreign exchange are higher than at any time in recent years, and that local business gossip says Miguel Alemán (former president and one of the newly rich businessmen of Mexico) is bringing his money back home, doesn't impress them. They are looking for ways other than borrowing dollars to expand their business.

The officials of Briarcliff and Company, a small manufacturer of radio and television sets in Mexico City, have been faced with a chronic shortage of capital since the company first started operating in 1946. Although the company has been profitable, and sales have expanded rapidly, company officials foresee growing competition from several large United States manufacturers which have subsidiaries engaged in radio and television manufacturing in Mexico. They are, therefore, concerned about Briarcliff's ability to compete with these well-financed organizations in the years ahead. The crucial problem is the need for capital to finance sales. Dealers sell sets on the installment plan to consumers, and the limiting factor in Briarcliff's sales is the amount of credit which it can extend to its dealers.

ORGANIZATION AND OWNERSHIP

Briarcliff and Company, S. A. (Sociedad Anonima), is a small corporation owned by eight stockholders, seven of whom own all the common stock. It was organized in 1946 by two Briarcliff brothers, Joseph and William, and their brother-in-law, Carl Sanchez. All are citizens of the United States, but they have been in Mexico for many years. Joseph Briarcliff and Carl Sanchez both have degrees in mining -- the former from the Colorado School of Mines, which he attended while his parents were residing in Mexico, and the latter from the National University of Mexico, where he took the five-year mining course. The elder Briarcliff and Sanchez -- fathers of the boys who now run Briarcliff and Company -- were employees of a large United States mining company which owned and operated mines and smelting works in Mexico. When Joseph Briarcliff and Carl Sanchez finished their university courses about 1940, they went to work in Mexico for this United States mining company. However, it was losing money on its principal Mexican operations, and it sold out to an agency of the Mexican government in 1945. Soon thereafter there was a reduction in the number of United States employees. Joseph Briarcliff and Carl Sanchez started a small trucking company, but this business didn't last long, because William Briarcliff, who had graduated as an electronics engineer from a United States university and was at that time working for a large United States electronics company in New England, persuaded them to join him in founding Briarcliff and Company in Mexico. He took about a year off from his regular job in New England and came to Mexico, where he helped his brother and brother-in-law with the engineering problems involved in starting the company and aided in working out an important arrangement for obtaining radio parts from the Company with which he was connected in the United States.

Briarcliff and Company was formally organized in the

I The names of the company and its officials are fictitious.

summer of 1946 with an original capital of 20,000 pesos (equivalent at that time to a little over US\$4,000) as a Sociedad de Responsabilidad Limitada, which is roughly similar to a partnership in the United States. Its owners were the two Briancliff brothers, Sanchez. and one outsider with a distinctly minority interest. No shares of stock were issued under this form of organization. In early 1949, the capital of the firm was increased to 100,000 pesos (equivalent at that time to about US\$12,500). No new owners were brought into the business, however, and the company continued as a Sociedad de Responsabilidad Limitada. In March 1951, however, the company was organized as a corporation (sociedad anonima) and the capital was raised to 600,000 pesos (equivalent at that time to about US\$70,000). About 20-25 per cent of the stock was sold to a few friends of the original founders. In the summer of 1952, the capital was again expanded to 900,000 pesos (equivalent at the time to about US\$95,000) represented by 9,000 shares of stock--of which 8,335 shares were common stock with a par value of 100 pesos per share, and 665 shares were preferred stock also with a par value of 100 pesos per share. The two Briarcliff brothers and Sanchez own 52 per cent of the The other stockholders are friends of theirs. common.

Even with the corporate form of organization, the company does not have a board of directors. Instead, its charter provides for an administrator, who can exercise the ordinary powers of a board, and a general manager, who has powers identical to those of the administrator. Joseph Briarcliff holds the post of administrator and Carl Sanchez is the general manager. Thus, these two men run the company. The one limitation of their powers, as provided by the charter, is that neither of them can obligate the company for liabilities not directly concerned with company operations. William Briarcliff returned to his position with the United States electronics company a few months after Briarcliff and Company, S. A., was launched. He continues, however, to be important in giving technical advice and assistance, even though he is in the United States.

PRODUCTION METHODS

The offices and manufacturing facilities of Briarcliff and Company are located in part of a large storage building in an industrial section of Mexico City. The plant is centrally located so that delivery of sets can be made by truck to practically any part of the metropolitan area within an hour, and deliveries to the stores and shops of most of the dealers in the city can be made within thirty minutes. The space is rented by the company.

The third floor of that part of the building used by Briarcliff and Company is utilized for the manufacture of television cabinets. The wood, all of which is purchased in Mexico, is brought to the third floor by elevator, from which it immediately enters into a small carpentry section of the plant. Here it is planed, cut into proper patterns by power saws, and assembled by hand into unfinished cabinets. After these rough cabinets are assembled, they are moved a few feet across the floor to the finishing section, where they

are sanded, stained, varnished, and finished. In its route through these two sections of the plant, the wood travels a generally U-shaped course so that the finished cabinets arrive back at the same end of the room in which the elevator is located. They are carried by hand or by small truck across the room to the elevator and taken to the second floor where the assembly lines for both television and radio sets are located.

The second floor is taken up mainly by: (a) two distinct assembly lines, one for radios and the other for television sets; (b) a small art and printing department, where the lettering and printing work for dials is done, as well as color printing of advertising posters; and (c) a bonded warehouse, under the control of The Lowell Company, 2 a firm which specializes in the operation of warehouses in Mexico. The actual assembly of the radio and television sets takes place within the confines of this bonded warehouse. The television cabinets are brought down from the third floor; the radio cabinets which are purchased from a local plastics manufacturer are brought in from the outside; and the many different tubes and parts that go into the radio and television sets are stored on this floor.

In the process of assembly, the sets move from station to station along the assembly lines, with a man at each station adding a few circuits, condensers, tubes, etc., according to a plan which was originally worked out by William Briarcliff on the basis of his experience in the United States. The various steps in the assembling of radios, where a limited number of circuits, tubes, and other parts are involved, are quickly memorized by the men so that they do not need special drawings or models to show them the work that is to be done at each station along the assembly line. On the television line, however, there is a chassis of a set at each station which shows exactly the various circuits, tubes, and parts that are to be added at that station. This model stays in a fixed position at about eye-level to the worker, just above the long worktable on which the assembling takes place. With these models before them, the men can hardly make an error in carrying out their jobs. All of the assembly work is done by hand, and the men often exchange stations to relieve the monotony of their work.

In the early years of the Company's life, emphasis was centered on making a small, cheap radio for workers. There was not much competition in this line. This is still the bulk of the radio business. However, sets are also made for automobiles, and for large radio-television-record-player combinations. The company has been centering its emphasis on producing television sets since 1954. Television production is standardized on sets with 17" and 21" screens. Most of the models are of the small type to be set on a table or individual stand. However, there is a floor-model type of cabinet which is intermediate in size between the table model and the large combination set. This model stands about 36" high and is about 24" wide; the speaker is in the lower part

The name is fictitious.

of the cabinet below the picture tube. In appearance and engineering, both the radio and television sets manufactured by Briarcliff and Company are much like those commonly seen in the United States. The same is true of their competitors' products made and sold in Mexico.

A large proportion of the various components flows through the stock room of the bonded warehouse and, as has been said, the assembling of the sets takes place there. Likewise, when a set is completed, tested, and ready for sale to a dealer, it moves to the first floor of the building, where it goes into a stock room which is also a part of the bonded warehouse. This warehouse, operated by The Lowell Company, is an important capital-saving device for Briarcliff and Company. Approximately 40 per cent in value of the parts used by Briarcliff in the manufacture of television sets and 15 per cent in value of the radio parts are purchased from the electronics firm in the United States with which William Briarcliff is associated as an electronics engineer. Briarcliff and Company has a \$100,000 line of credit from this firm. The material purchased from it is invoiced to Briarcliff and Company in care of the bonded warehouse. Within 30 days after a finished radio or television set moves out of the warehouse, Briarcliff and Company must pay the United States firm for the value of the parts supplied by it for the set. Similarly, Briarcliff and Company is able to borrow United States dollars from a Mexican finance company up to 70 per cent of the value of tubes and other components that are imported from the United States from suppliers other than the firm with which William Briarcliff is connected, immediately on the movement of such parts into the bonded warehouse. Repayments of these loans are made at the time the finished sets leave the warehouse.

In effect, therefore, the bonded warehouse, for which Briarcliff pays The Lowell Company one per cent per month on the value of the stock in the warehouse, relieves Briarcliff of a substantial part of the financial burden of carrying a stock of component parts. It also provides insurance against a sudden devaluation of the Mexican peso. A small firm, such as Briarcliff, which buys a large proportion of its components in United States dollars and sells its finished products on credit for pesos, can find itself in a very vulnerable position after a sudden devaluation of the peso. The United States suppliers, conscious of the devaluation threat, are loath to sell to small firms unless they carry extraordinarily high liquid reserves, preferably in dollars. With, however, the stock of parts being kept in a bonded warehouse (where their peso value can be marked up overnight in case of devaluation) and being paid for in dollars at the time of withdrawal (or within thirty days thereafter), both the supplier and manufacturer are hedged to some degree against sudden devaluations. About \$300,000 worth of material from the United States electronics firm moved through the warehouse in 1955, although there was rarely more than \$60,000 worth of its stock in the warehouse at any one time. However, the procedure freed several times this amount of working capital for Briarcliff, and the general manager estimates that Briarcliff's television sales were at least 40 per cent higher than they would have been if the company had been forced to pay

for all parts purchased within 30 days after they were received, instead of 30 days after they were sold in the form of assembled sets as was possible with the bonded warehouse.

WAGES AND LABOR RELATIONS

Although the size of the labor force varies somewhat depending on production and sales schedules, the following number of employees by principal divisions of the plant is typical for 1955: Carpentry section for making television cabinets........... 16 Finishing section for making television cabinets.......... 30 Radio assembly line..... 3-15 Television assembly line..... 8-15 Stock room for assembled sets awaiting sale and delivery..... 2 Service department to assist dealers in handling difficult Outside workers for delivering sets to dealers and bringing needed materials and supplies to the plant........ 4

In addition, there is a production manager, a salesman who is also sales manager, a purchasing manager, and an engineer, besides the general manager and administrator. Accounting services are purchased from an auditing and control corporation, in which Briarcliff and Company owns a 60-per-cent interest.

The company has a unique system of paying its employees. All of the workers in the carpentry and finishing sections and on the radio and television assembly lines are paid a weekly wage plus a bonus. The size of the latter depends on the output of teams or groups of workers within each of the sections. The carpentry section for making television cabinets can serve as an illustration. A "team" or "group" in this section is normally composed of three men--a carpenter and two assistants. The weekly payments for one such group were calculated for a given week in February 1956 as follows:

Carpenter (worked 6 days @ 17 pesos)--Salary 102 pesos Assistant #1 (worked 5 days @ 14 pesos)--Salary 70 pesos Assistant #2 (worked 4 days @ 14 pesos)--Salary 56 pesos

Total weekly salary for the group

228 pesos

During the week the group made 25 cabinets of a table model, each of which had a unit value for purposes of bonus payments of 10 pesos, and 10 cabinets of a floor model without doors, each of which had a unit value for purposes of bonus payments of 19 pesos. Thus, their total units earned during the week were 250 plus 190, or 440 pesos. This amount minus the group salary earnings of 228 pesos gave the group a bonus of 212 pesos.

The division of the bonus earned by the group among the individual workers is made according to the proportion that each man's salary bears to the total salaries for the group. Thus, in the preceding example, the carpenter earned 45 per cent of the total weekly salary for the group; assistant #1 earned 31 per cent; and assistant #2 earned 24 per cent. 3 Each received his respective percentage of the group bonus of 212 pesos: the carpenter received a bonus of 95.40 pesos; assistant #1 received a bonus of 65.72 pesos; and assistant #2 received 50.88 pesos. When these bonus payments were added to their salaries, their respective weekly earnings were: 197.40 pesos; 135.72 pesos; and 106.88 pesos. Of the total, it is obvious that almost one-half was represented by bonus payments.

The same principle of salary plus bonus applies to the workers in the finishing section for television cabinets, and on the radio and television assembly lines.

The approximate monthly earnings of indivudual workers on the combined salary and bonus system were as follows, in 1955:

Man	in	charge	of	carpentry	and	finishing	sections	1,617	pesos
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Carpenters	1,236) #
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The regular bonus system does not apply to the men who do the final inspection and testing of sets at the end of each assembly line. Neither does it apply to stock-room, warehouse,

The percentages have been rounded to the nearest whole number for purposes of easy illustration. This rounding was not done by the company in the calculation of individual bonus payments.

and office workers, nor to members of the service department. Stock-room workers average about 350 pesos per month, and clerks in the office about 630 pesos per month.

All of the workers, except the head production man on each floor and the executives of the company, belong to a local union which is affiliated with C.T.M. (Confederación de Trabajadores de Mexico), the largest central organization of laborers in Mexico. The company has a two-year contract with the local union, which was negotiated and approved by representatives of the C.T.M. Each member of the union pays dues of 5 pesos per month, which are collected by the company and remitted to the central organization. In accordance with common practice in Mexico, the company also makes a substantial monthly payment to C.T.M., and at the time of contract negotiations a sizeable lump-sum is paid to this organization. total payments made by the company to C.T.M. over the two-year life of a contract are approximately 20 to 25 per cent more than the sum of the payments made by the union members in the plant. It is not altogether surprising, therefore, that the company has excellent relations with the union. The latter is accepted by company officials as: (1) an important component of the ruling political party in Mexico, PRI (Partido de la Revolución Institucional); (2) an organization which helps to keep peace in the factory; and (3) a place where workers can be hired, if at any time there is a shortage of labor available to the company. The general manager is genuinely appreciative of the services that the C.T.M. has rendered. He says, "It has helped the company grow." The contract specifies, however, that none of the representatives of the union can work in the plant. They too often cause trouble. The general manager prefers to call the union offices when he needs union assistance. He feels that the basic labor law of Mexico is a good one; that practically all labor-management problems could be solved by recourse to this law; and that, therefore, the union is in the nature of a political racket. At the same time, however, he accepts the union as an important existing organization, and is determined to work in harmony with it.

The contract with the union covers salaries but not the system of bonus payments. It recognizes that workers will be paid a bonus, but the method of determining the amount of bonus payments is left entirely in the hands of the company. Thus, about one-half of the total payroll is not a matter for bargaining between the union and management. The company also has considerable flexibility with respect to the size of its "permanent" labor force, through a system of contracts with individual laborers. Under the Mexican labor law, and also in accordance with provisions of the union contract, each new employee is on trial for a period of 28 days. After this 28-day period, he automatically becomes a "permanent" worker, and a "permanent" worker who is fired without cause must be paid three months' salary as termination pay. Moreover, a decline in sales -- thus causing a retrenchment in production and reduction of the labor force -- is not a legal cause for firing a worker. However, if the company management is not sure of the desirability of a new worker he can be given a special contract for a further 28-day trial period, and this contract can be

renewed and extended, with union approval, for two or three such periods. Moreover, it is possible for the company to contract with a worker for a specific job for a definite period of 60, 90, or 120 days, without his becoming a "permanent" employee. Through this system of individual contracts with workers, about 15 to 20 per cent of the labor force never achieves "permanent" status. Because of this, the company can make significant cuts in production and lay off 15 to 20 per cent of its workers without becoming liable for termination pay.

In accordance with the provisions of the Mexican labor law, all workers are paid for seven days' work each week, although they work only six days. If a man is absent for one day during the week, he is paid his proportionate part, or five-sixths, of the salary for the seventh day. The contract with the union establishes a schedule of paid annual vacations, as follows:

all workers who have had a "permanent" status for one year are entitled to a vacation of 7 days;

workers with a "permanent" status for two to five years get a vacation of 9 days; and

those "permanent" workers who have had this status for more than five years receive a vacation of 10 days.

The general manager says that he has no difficulty with problems of labor turnover or absenteeism. The law provides that any man who is absent from the job for more than three days during any 30-day period, without a permit from his boss in the factory or a doctor's certificate, can be dropped from the payroll without rights to termination pay. This law is fairly enforced and effectively prevents absenteeism. There are good attitudes and a spirit of harmony between labor and management. As in many small plants, the general manager and the workers are in close daily contact with each other.

SALES METHODS

The recent sales record of the company is as follows:

(CONTINUED ON NEXT PAGE)

Year	Sales in pesos	Number o Radio	f sets sold: Television
1948 1949 1950 1951 1952 1953	40,000 441,600 856,900 1,094,000 2,133,000 3,743,000 4,690,000	4,985 3,646	1,239 1,547
1954 1955	4,717,000	2,093	1,608

The 1955 sales were deliberately held below the 5,000,000-pesos level, because a company with sales of 5,000,000 or more pesos per year is required by law to have an accounting system different from that which Briarcliff and Company maintained. At the beginning of 1956, however, the accounting system was changed, and the sales goal for 1956 is 9,500,000 pesos.4

In March 1956 the company had about 20 dealers. Only one of these, a dealer in television sets, is located outside of the Mexico City metropolitan area. His business is in Monterrey, where the first television station in the country outside of Mexico City was started in September 1955. A month before the station was opened, Briarcliff and Company had selected a dealer for the area with whom it entered into a partnership to establish a new firm for selling its sets in the Monterrey area. Briarcliff and Company owns 33 per cent of the stock of this new company. In June 1955 a retail outlet for Briarcliff products was started in Mexico City, in which Briarcliff and Company owns 100 per cent of the stock. This outlet accounted for about 15 per cent of Briarcliff's sales in 1955. The Company does not own stock in the firms of any of its other dealers. Only 5 of the 20 dealers are large enough to sell each month Briarcliff products totaling more than 50,000 pesos. Most of them are small firms with limited floor space for displaying sets, and most also sell both radios and television sets of competing manufacturers.

There are 11 United States companies with branches or subsidiaries in Mexico which manufacture television sets. All except two also manufacture radios. The list includes practically all of the large, well-known television and radio manufacturing

The peso was at 12.49 to 12.50 throughout 1955.

As an aid to interpreting the sales figures, the attached balance sheets, and the problem of peso devaluation in relation to sources of capital for the company, the following figures showing the average number of pesos per United States dollar are important:

companies in the United States. These 11 firms, along with Briarcliff and Company, account for the total output of television sets manufactured in Mexico. Their estimated production in 1955 was 25,000 to 30,000 sets. No assembled sets are imported, although a few may be smuggled across the border. Briarcliff and Company, therefore, had about 6 to 7 per cent of the total market in 1955.

The prices of comparable models are about the same irrespective of the manufacturer. The list prices in pesos of Briarcliff's sets in the spring of 1956 were as follows:

Type of set	Briarcliff's price to dealers	Dealer's price to consumer
Small 5-tube radio in colored plastic cabinet	220	360
Table-model television with 17" screen	2,225	3,100
Table-model television with 21" screen	2,610	3,915
Floor-model television, 21 ⁿ screen, without doors	2,765	4,147
Floor-model television, 21" screen, with doors	2,970	4,455
Standard model, television- radio-record-player combinati with 21" screen	4,440 .on	6,660
De Luxe model, television- radio-record-player combinati with 21" screen	5,460 Lon	8,395

Briarcliff and Company customarily gives a discount of 5 per cent below list price to any dealer who buys four or five sets at one time. In addition, it gives discounts in the form of rebates according to the following schedule:

three per cent to any dealer who buys during any threemonths! period Briarcliff products totaling 100,000 pesos;

an additional three per cent to dealers who buy during any three-months' period Briarcliff products totaling 200,000 pesos; and

still an additional three per cent to dealers who buy during any three-months' period Briarcliff products totaling 300,000 pesos.

About 30 per cent of the television sets are sold to

dealers for cash; the rest are sold on credit. The dealers' notes commonly run for either six months or one year. There is only one dealer to whom credit is extended for as long as 18 months. The sets sold to the dealer in Monterrey are shipped to a bonded warehouse, and the dealer pays weekly for all sets taken out of this warehouse. Practically all radios are sold on credit; the dealers' notes for radios usually run for either four or six months.

The dealers commonly sell to consumers on an installment plan, which means that the ultimate purchaser of a set pays considerably more than the dealer's list price. The small radios are commonly sold to workers, who make a small down payment and then pay 15 to 20 pesos per week until their debt is liquidated. For sales of this kind, the radio on which the list price is 360 pesos is actually sold for around 500 pesos. The financing arrangements for the television sets are somewhat more formalized. Some dealers will sell a television set without any down payment, and add a carrying charge of 1-1/2 per cent per month for 18 months, calculated on the original purchase price. Thus the set listed at 3,100 pesos may cost the purchaser an additional 837 pesos in the form of carrying charges (3,100 times 1-1/2 per cent times 18 There will also be an installation charge of about months). 150 pesos. In total, therefore, the 3,100-pesos set may cost the consumer a little over 4,000 pesos. Of course, many purchasers make a substantial down payment, in which case the carrying charge of 1-1/2 per cent per month is calculated on the total of the unpaid balance at the time of purchase.

Although there is little competition among the 12 manufacturers in the pricing of sets, there is extreme competition in the financing of dealers. The general manager of Briarcliff says, "This is where the competition really hurts." The notes which Briarcliff takes from its dealers bear interest of 1-1/2 per cent per month. Some of them are discounted with banks at 9 to 12 per cent per year, with finance companies at 12 per cent per year, and occasionally with individuals at rates of 24 per cent per year. In 1955, however, the company was able to discount only about 50 per cent of these notes. The amount of credit in pesos which Briarcliff and Company had outstanding to its dealers at five different dates was as follows:

Briarcliff and Company has an advantage over most of its competitors because it has been granted a special five-year tax-exempt status on its television manufacturing operations by the

Mexican government. It first received tax exemption for its radio business in 1950, but this ended in April 1955. An extension was applied for, and indications are that it will be granted. However, it had not yet been approved by the government as of March 15, 1956. In the meantime, however, the television operations had been granted the tax-exempt status in August 1955. Thus customs duties on imported parts were exempt after August 1954, and as a result the company was immediately able to apply for the cancellation of 270,000 pesos in customs duties for which it had previously placed a bond.

The tax exemption not only relieves the company of the necessity of paying duties on television parts that are not manufactured in Mexico and must be imported from the United States, but it also exempts the company from all sales taxes on television sets and from one-half of the income tax arising from its television operations. The effective beginning date for the sales and income tax exemptions was September 1, 1955: for import duties it was August 1, 1954. The general manager says that about one-half of the company's profits in 1955 resulted from the tax exemptions.

In order to maintain its tax-exempt status, Briarcliff and Company must not import more than 50 per cent of the parts used in manufacturing television sets. The remaining 50 per cent must be manufactured in Mexico, and at least 10 per cent of the total parts used by the company must be manufactured within its own plant. Moreover, there is a list of specified parts, including condensers, for example, which cannot be imported but must be purchased in Mexico. The cost to the company of such parts is usually higher than it would be if they could be imported from the United States.

This system of tax exemptions, with the corresponding obligations imposed on the companies receiving the tax-exempt status, is designed to encourage the growth of Mexican industry. Only two of Briarcliff's competitors are tax exempt, and they are not among the largest of the United States firms manufacturing television sets in Mexico. They are, however, Briarcliff's toughest competitors. Although the tax-exempt status causes some special problems in accounting, largely because the exemption applies to the television operations but not to the radio manufacturing and requires that the company's records and manufacturing processes always be open to government inspectors, it is clearly of significant value to the company. The few headaches that come with it are gladly endured.

The only really serious problem with which the company officials are concerned is that of financing sales. They feel that their production processes are efficient; that labor relations are good; that there will be a widening market for television sets (the line on which the company is now centering attention) as new stations are opened in other Mexican cities; and that their sets are competitive in price and quality with those of other manufacturers. They expect, however, to continue to be short of capital necessary for a full exploitation of the available market.

Is this view sound? Are the company officials correct in holding to the established pattern of centering competition in the area of financing sales, rather than in the pricing of sets? Gould Briarcliff significantly expand sales by cutting prices without increasing the volume of credit extended to dealers?

If we accept the view of the company officials--namely, that the major problem is that of finding capital with which to finance sales--what is the wisest course for them to pursue? One alternative which they have considered is that of borrowing dollars in the United States. They say dollar funds are available to the company in sufficient amounts to allow a substantial expansion of sales. The company's most important reason for not borrowing dollars is that the administrator and general manager fear another devaluation of the peso. Would it be sound business procedure for them to take the risk of devaluation? What are the major factors that may bring about another devaluation of the peso? Are Briarcliff officials likely to be able to predict a devaluation sufficiently in advance so that they can rearrange their credit position and not be caught in the squeeze when, and if, devaluation occurs?

Are there alternatives open to the company, other than the borrowing of dollars in the United States, under which the company could obtain additional capital with which to expand sales? If so, what are they? Is the borrowing of dollars as real an alternative as company officials may think? What would be the most likely source of dollar funds in the United States for Briarcliff and Company? What interest rates would it probably have to pay on dollar loans?

James G. Maddas

BALANCE SHEET 0ctober 31, 1955

(In Mexican pesos)

Cur	rent	As	sets

Cash Notes receivable	455,429.65	17,800.06
Reserve for bad debts Finished items in warehouse Materials in warehouse Items in process of manufacturing Note receivable (individual) Receivable from employees	2,912.28	452,517.37 33,020.91 290,972.09 70,865.00 6,250.00 6,857.96
Fixed Assets		
Machinery and equipment Furniture and fixtures		63,981.40 22,449.96
Deferred		
Costs of installation		<u>7,173.95</u>
TOTAL		971,888.70
Current liabilities		67,123.70
Fixed liabilities		287,905.03
Capital		
Capital stock Stock not subscribed Net profit	600,000 37,500	562,500.00 54,359.97
TOTAL		971,888.70

Statement of Profit and Loss January 1, 1951 to October 31, 1951 (In Mexican pesos)

Credit sales Cash sales		646,850.35 11,564.85
TOTAL SALES		658,415.20
Cost of goods sold on credit Cost of goods sold for cash	244,894.62 9,586.84	
TOTAL COSTS		254,481.46
Gross Profit		403,933.74
General Costs Salaries and Commissions Interest	124,163.66 211,015.00 19,825.15	,
TOTAL	355,003.81	
Profit of service dept.	5,430.04	349,573.77
Net profit		54,359.97

BALANCE SHEET

December 31, 1955

(In Mexican pesos)

ASSETS

Current Assets			
Cash Accounts Receivable Notes Receivable Notes Receivable	2,684,641.83	8,127.70 145,906.51	
Discounted Net Notes Receivable Reserve bad debts Accounts Receivable	1,423,713.17 1,260,928.66 131,147.79	1,129,780.87	
Various Inventories		112,894.39	
Finished Goods Goods in Process Raw Materials Stocks and Bonds	537,259.94 70,658.79 816,731.84	1,424,650.57	
Total Current Assets			3,121,360.04
Fixed Assets	-+ 020 021 00		
Machinery and Equipme Depreciation Reserv Furniture and Fixture	re 113,001.80	117,232.22	
Depreciation Reserve	re 33,556.26	27,189.44	
Depreciation Reserv		29,727.29	
Total Fixed Assets			174,148.95
Deferred Assets			1 - 1
"Credito en Radio, S.	7 • и	47,403.17	47,403.17
TOTAL ASSETS			3,342,912.16

LIABILITIES AND NET WORTH

Current Liabilities

Suppliers	286,763.43
Notes Payable	282,065.11
Accounts Payable Various	284,346.74
A U.S. electronics company	(\$48,583.39)607,292.38
Taxes Payable	254,648.17
Corporation Income Tax	75,000.00

Total Current Liabilities 1,790,115.83

Deferred Liability

Reserve for personnel indemnification	68,036.58	68,036.58
TOTAL LIABILITIES		1,858,152.41

NET WORTH

Capital Stock Reserved Surplus for Reinvestment Dividends:	900,000.00 42,235.67	
8,335 shares Common at \$4.00 665 shares Preferred at \$12.00 Net Profit 1955	33,340.00 7,980.00 501,204.08	
TOTAL NET WORTH		1,484,759.75
T.TABIT.TTTES AND NET WORTH		3.31,2.912.16

STATEMENT OF PROFIT AND LOSS From January 1, 1955 to December 31, 1955 (In Mexican pesos)

Sales:		
Television Radio Automobile Radios Miscellaneous		4,144,626.39 521,047.65 51,771.55 77,536.56
	Total Sales:	4,794,982.15
Cost of Goods Sold:		
Television Radio Automobile Radios Miscellaneous	2,583,814.91 346,101.33 37,990.00 35,820.10	3,003,726.34
	Gross Profit:	1,791,255.81
Expenses:		
General Expenses Sales Tax Salaries & Commissions	334,815.09 122,818.46 808,358.85	
Advertisement	24,059.33	1,290,051.73
	Net Profit:	501,204.08

Explanatory Notes to Accompany 1955 Balance Sheet

- 1. The figure for "Notes Receivable" includes interest.
- 2. The figures for "Inventories" include inventory under bond.
- 3. The item "Stocks and Bonds" is represented solely by stock owned in the retail store in Mexico City, which is a completely separate company, and by the 33-per-cent stock interest in the dealership in Monterrey.
- 4. The deferred asset item, "Credito en Radio, S.A.," reflects a situation in which a dealer, who owed Briarcliff and Company for sets purchased, went bankrupt. His ranch was attached to satisfy Briarcliff's claim, but Mexican law prevents a corporation from owning land. The ranch is, therefore, now held by some of the stockholders of Briarcliff and Company. When it is sold, they will remit to the company. In the meantime, the item is carried as a deferred asset.
- 5. The "Notes Payable" and "Accounts Payable Various" are owed mainly to suppliers. There is really no difference in the nature of the two items, except that the company has signed notes to cover the first, whereas the latter represents a series of unsecured accounts carried by suppliers and a few other minor creditors.
- 6. The following notes pertain to the Statement of Profit and Loss From January 1, 1955 to December 31, 1955:
 - A. The interest paid by dealers on their notes is a part of the sales figure.
 - B. The interest paid by Briarcliff and Company on the notes which it discounts is a part of the cost of goods sold.
 - C. The item "General Expenses" includes: rent, telephone, electricity, water, income taxes, and a few other minor items. Rent is 10,000 pesos per month.
 - D. The "Salaries and Commissions" item should be read as "salaries" only. It is not related to volume of sales. For a short while in 1955 a few salesmen were paid small commissions. This practice was discontinued, however, and the sales manager, (the only salesman toward the end of 1955) was put on a flat salary.