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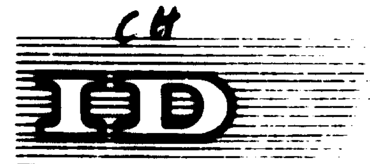

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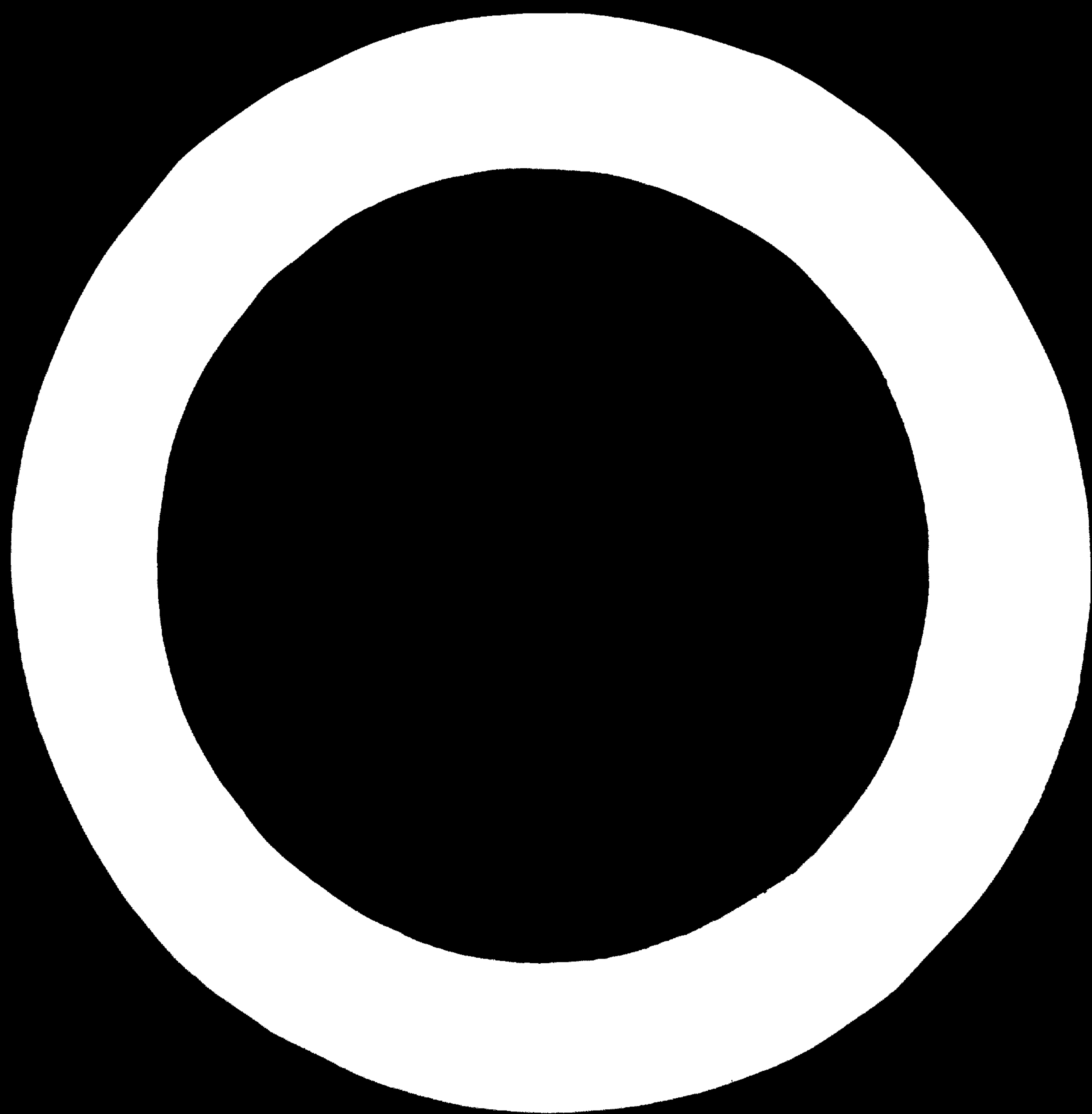

Title page of Industrial Finance in Iran

INDUSTRIAL FINANCE IN IRAN

A Study of Financial Practice in an Underdeveloped Economy

Richard Elliot Benedick

DIVISION OF RESEARCH
GRADUATE SCHOOL OF BUSINESS ADMINISTRATION
HARVARD UNIVERSITY
BOSTON · 1964

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Chapter 19

B. F. GOODRICH IRAN, S.A.

Inaugurating an Industry

Rising incomes and development efforts have occasioned a noteworthy increase in the number of automotive vehicles and the accompanying consumption of rubber tires and tubes in Iran. Lacking an extensive railroad system, road traffic has become the backbone of communications and trucking the principal means of transporting heavy materials throughout the country. By 1961 there were approximately four times as many vehicles as in 1948, and local automobile assembly plants for several European and American manufacturers, including Willys, Fiat, Mercedes, and Ford, existed or were in planning stages. Persian consumption of rubber tires and tubes averaged almost $17 million in recent years, all of which was imported. Nonmilitary demand of one million units was expected to grow by 10% annually.

Several years ago, the Shah's Pahlavi Foundation invited international rubber companies to send representatives to Tehran for discussions on establishment of a domestic rubber industry with foreign technical and financial assistance. The B. F. Goodrich Company of Akron, Ohio, which accounted for approximately one-fourth of the local market through a few independent distributors, thus began to investigate the feasibility of a Persian subsidiary. Goodrich analysts were impressed both with the expanding economy's consumption potential and with favorable changes in investment climate in the mid-1950's, manifested by government tax and foreign investment legislation. Participation of Iranian private investors in the new company was deemed essential as a source of local market and credit information and as an additional protective factor against political risks.

Negotiations undertaken with the Persian government resulted

in complete exemption of plant and equipment from tariffs and authorization of duty-free raw material imports for ten years. In addition, as a new productive industrial investment, Goodrich Iran was granted a five-year tax holiday; interestingly, the agreement provided total tax exemption even though the project was to be located within the 60-kilometer Tehran area which would normally qualify for only 50% income deduction. Discussions were also held on the subject of infant industry protection, but despite verbal promises the government delayed any formal commitment. Import lobbies were quite active, and the confusion accompanying several changes of government did not help. In fact, one of the company's major concerns was a pyramiding of tire and tube imports that dated roughly from the time B. F. Goodrich's plans became common knowledge.

In cooperation with a group of Persian investors, the American firm established Goodrich Iran S.A. in 1959 with capitalization of $5.4 million. Parent company financing—$1.54 million in controlling equity, $1.0 million long-term loan, and more than $1 million in support of finished goods stocks—represented the largest foreign investment in Iran outside the oil industry. B. F. Goodrich applied for and was accepted for AID investment guarantees totaling $6.2 million against expropriation and over $10.5 million to cover convertibility risks for transfers of both capital and profits.

The factory, located some 12 kilometers from Tehran at Hassan-Abad, would utilize chiefly U.S. equipment and would employ over 500 workers in three shifts. Construction on the site was begun by Swedish contractors in 1959. The industrial complex also included a self-contained power plant and water system. Potential annual capacity of 50% of Iran's present tire and tube requirements would save an estimated $6 million to $7 million per year in foreign exchange. Besides local production, the new company would attempt to hold part of the import market as agent for Goodrich tires and tubes, which would account for approximately 15% of its total sales.

Distribution outside of Tehran would be handled by an independent dealer in each province, supplied with stocks on consignment and selling in turn to subdistributors within his area. This system, which minimized the number of debtors to Goodrich and

at the same time served a warehousing function, was made possible by relative geographical isolation of provincial centers. Sixty percent of national consumption, however, is in the capital city, where division into discrete markets is not enforceable, while appointment of only a few large dealers would present from the factory's standpoint a possibly dangerous concentration of power. Thus, Goodrich Iran must work with about 120 separate distributors in Tehran alone.

In addition to its capital contribution, B. F. Goodrich of Akron entered into a 20-year technical agreement with the new company to supply research, development, engineering, and other services. The U.S. firm provided seven experienced executives to fill the positions of general manager, treasurer, and heads of production, sales, statistical control, chemical, and design departments. Goodrich's goal was to replace gradually four of the seven with Iranians as they gained experience and proved their qualifications; the general manager, treasurer, and plant manager, however, would remain parent company personnel for an indefinite period. Further, two Goodrich engineers supervised construction, machinery installation, and start-up operations, and eight American foremen served for six months as labor trainers. B. F. Goodrich also hired nine Persian graduate engineers from U.S. universities and trained them in production processes and techniques for several months at American plants; these engineers would be the key production foremen, joined by nine locally employed Iranian chemists and technicians.

By the spring of 1961 the plant was erected, equipment substantially in place, and the entire project about three months ahead of schedule. The first tire was turned out in mid-February, and subsequent weeks were spent in testing both machinery and products. Due to its size and significance, Goodrich Iran hardly could afford a mistake. Official production commenced in April, with a gradual adjustment from one to three full shifts per day reached by June.

Equity Capital

The capital cost of $5.4 million included about $1 million for land and basic construction, $1.2 million for power plant and

water system, and the balance for manufacturing equipment. Equity comprised just over half of this capital structure: $2.8 million in 50,000 rial ($667) shares. The parent company held 55%—$1.54 million—with the remainder subscribed by local investors. A majority of the Iranian share was taken by Pahlavi Foundation and two individuals—a prominent politician businessman and a leading bazaar merchant *cum* vice-president of the Tehran Chamber of Commerce. The balance was sold to 54 other private investors in blocks of 10 to 500 shares. Ten percent of equity, divided in the same proportion between American and Persian interests, was designated preference stock to receive double dividends as an acknowledgment of otherwise uncompensated efforts during negotiations, stock distribution, and organization.

The stock was not publicly offered and, as in virtually all Persian corporations, the shareholder group was bound together by personal relationships. No difficulty was experienced in receiving commitments for the entire portion of Iranian equity. In fact, the number of individual stockowners is far greater than would be apparent from subscription lists, since some major holdings actually represented a pooling of many interests—perhaps approaching 250 in all. Through this means, facilitated by bearer shares, well-connected investors served as distribution channels to their own friends and relatives, receiving in return the influence associated with large share control; this is an interesting parallel to the informal "underwriting" that occurred in IMDBI's issue, described earlier. Local enthusiasm for the stock was high because of the prominent foreign participation—which reassured smaller savers—and from an appreciation of the new product's market potential. Although bearer shares would involve some technical difficulties in arranging for dividends and stockholder meetings, the promoters believed marketability was increased because of investor preference for anonymity. A similar concession to custom was the arrangement for stock sale on an installment plan, with 50% down and the balance payable over a year.

The relatively broad ownership would assist Goodrich Iran's acceptance in the local economy, and at the same time could be helpful in providing domestic bank connections and credit information on customers. There is evidence that the chief sources

of investment funds were land and trading profits; at least one shareowner admitted that he even sold a village in order to raise cash. Many large stockholders emphasized that their investment goal was not high immediate dividends but rather capital appreciation. Goodrich Iran shares almost immediately went to a 30% premium in informal bazaar markets.

Long-Term Debt

To finance local construction costs, RLF extended a ten-year $1.6 million loan at 4%, secured by first mortgage. This rate of interest is extremely low for Persia and can be considered as another evidence of government concern for domestic rubber—particularly in light of the theoretical 6% rate on RLF credits.

The parent company advanced $1 million, also for ten years at 4%. This loan, which was unsecured and, of course, subordinated to other long-term debt, financed capital equipment imports.

IMDBI was involved in the project with an eight-year $1 million credit at 10% interest. The factor of foreign association was important to the bank, and one of its conditions was continuance of the American firm's capital participation and management control for at least the outstanding term of the loan. However, neither this nor any other Goodrich Iran debt was guaranteed by the parent company.

With the bank's DLF and IBRD credit lines hardly touched by borrowers, IMDBI was firm in insistence on a foreign exchange advance. Goodrich Iran would, of course, have preferred also to transfer local currency loan proceeds for imports as needed, but the unavailability of additional financing from Bank Melli/RLF and the absence of other local facilities for long-term capital forced it to accept the foreign exchange risk. IMDBI utilized DLF resources because Goodrich Iran expected to purchase primarily from the United States. A direct DLF credit would have cost the company 4% less in interest, but since the amount was within IMDBI's capacity, DLF preferred not to enter into competition with an institution under its own support.

A special difficulty connected with this loan was the policy of both DLF and IMDBI to debar working capital financing. By

the time that Goodrich negotiations with the bank were completed, however, all capital equipment had been ordered,[1] and the company's financial need remained. With special DLF permission, Goodrich actually utilized loan proceeds for initial raw material inventories. The Daedalian reasoning by which these funds were considered to have metaphysically "replaced" resources previously expended on fixed assets has been mentioned in Chapter 15.

Another major issue of the IMDBI loan was security. Although Bank Melli's 130% coverage[2] did not include all of Goodrich's fixed assets, its loan contract terms effectively blocked any first mortgage on remaining property. Since IMDBI could not have its customarily required first lien, tripartite negotiations induced Bank Melli's accession to a cooperative liquidation plan notwithstanding IMDBI's nominal second mortgage. If IMDBI does not agree to a joint auction in a given situation, Bank Melli must make three attempts to realize a price that would cover both banks' claims; only if there is no response after the third advertisement can Bank Melli foreclose on its own behalf as first mortgagee. The restriction of separate action by Bank Melli at the possible expense of the second lien thus improves IMDBI's position over that of a normal second mortgagee.

The insistence of both lenders on after-acquisition rights was a serious concern to Goodrich Iran. Although this clause enhanced the creditors' position in any liquidation, it eliminated potential security for debt financing of additional working capital necessitated by plant enlargement, since any new fixed assets would have been automatically subsumed under the existing first and second mortgages; purchase of the added equipment itself was a comparatively smaller problem due to supplier credit availability. This issue was met by an exchange of letters between Goodrich Iran, Bank Melli, and IMDBI, under which the banks agreed to provide reasonable credit facilities for future expansion, and to assist the company in procuring outside financing in case they could not themselves loan enough at the necessary time. Such

[1] In fact, most machinery had been billed so early that prohibitions on retroactive financing prevented even reimbursement of prior obligations.

[2] On two loans: $1.6 million already mentioned and a shorter term working capital advance of $1.0 million discussed below.

assistance, although not defined, could presumably involve participation with domestic or foreign lenders, guarantee of any new loans, waiver of after-acquisition rights, or any combination of these.

It should be noted that unusually long grace periods extended by both Bank Melli and IMDBI reflected an appreciation of liquidity problems in setting up a pioneering factory employing complicated technical processes. Bank Melli loan repayments were not scheduled to begin until 1966, a six-year grace period, while IMDBI's first installment was not due until four years after initial drawdown was made in 1961.

Working Capital Financing

The financing of working capital requirements was an even more difficult challenge to Goodrich Iran than establishment of the capital structure. It was originally estimated that working capital of $2.0 million to $2.5 million would be needed. By the summer of 1960 this appraisal had been raised to over $4 million, and in the spring of 1961, with the factory about to commence production, the figure stood at nearly $7 million. This extraordinary revision was caused chiefly by underestimation of factors in the Persian economy which entailed carrying heavier receivables and inventories than originally planned. Even normal delays and discontinuities became intensified by the stabilization program which descended on the business community in 1960–1961. Moreover, local distributors for competing tire producers stockpiled imports in anticipation of infant industry protection for the new plant. The resultant temporary market glut, combined with general liquidity tightness, obliged the company to carry receivables of some 130 dealers for 12 months or more.[3] At estimated annual sales of 800 million rials, an average of 400 million rials ($5.3 million) would be required for accounts receivable. Goodrich had evidently encountered the not unfamiliar problem of Persian manufacturers being constrained to finance the bazaar.

Further, the long delivery times for raw material—all of which

[3] This would involve careful appraisals of individual credit risks and limits, and decisions on whether additional endorsements on dealer *softehs* or, in rarer cases, local bank guarantees should be required.

must be imported—required relatively high investment in inventory. Of $4 million in annual raw material, at least a two months' supply, or roughly $670,000, should be on hand to allow for lead times. Finally, approximately $750,000 in organization and start-up expenses, plus an unspecified contingency, remained to be met from sources other than long-term debt and equity capital. In sum, total additional financing essential for Goodrich Iran was as follows:

Receivables	$5,330,000
Inventory	670,000
Organization and start-up costs	750,000
Total	$6,750,000

The new company expended considerable effort in securing financial support for these needs. Bank Melli supplemented its long-term loan with a two-year line of credit equivalent to $1 million at 8.5% interest which could be renewed at Goodrich Iran's option.

The firm also hoped to conclude another arrangement with Goodrich U.S.A. for interim aid; in particular, the deferral of payments for approximately $1 million in Goodrich finished products already received by the local company as distribution agent. This would permit utilization of sales revenue by Goodrich Iran rather than its immediate transfer to the parent company. A further liquidity concession was that 6% interest on this credit would be payable from the time of eventual sale rather than the arrival date of the goods.

An additional sum of perhaps $1.3 million could be financed through revolving open accounts with raw materials suppliers averaging 90 to 120 days and extending up to one year. Negotiations were also completed with American firms, and were under way with Japanese and European suppliers, to furnish goods without the bank guarantee customarily required from Persian importers—4% to 5% in guarantee fees could thus be avoided. Goodrich Iran attributed to the parent company's international reputation the favorable terms it was able to elicit from foreign suppliers. The implication of financing raw material purchases in this magnitude is, however, an absolute punctuality in meeting the obligations as they fall due, in order to maintain the credit lines. This places

additional premium on accuracy of cash flow projections as well as provision of a liquidity safety margin.

Negotiations were also undertaken for a loan from Chase International Investment Corporation, which became interested in the project from its association with IMDBI.[4] Chase International offered $1 million at 10%, repayable in two equal installments after two and one-half and three and one-half years, and carrying an option to purchase Goodrich Iran shares from 1962 to 1964. No agreement was concluded, however, although Chase applied to AID for an investment guarantee. Goodrich Iran, while conceding a higher interest charge than on its Bank Melli or American credits, preferred a longer term in light of its other short-run commitments, and would not in any case consider issuance of stock options at that time. (A similar IMDBI proposal was also successfully resisted by Goodrich Iran.)

Another source of funds could be rials generated under the 1960 U.S. Public Law 480 commodity import program. Over $1.6 million had been allocated for Cooley Amendment[5] loans to U.S. firms or their affiliates for purposes of business development in Persia. Goodrich Iran formally applied to the Export Import Bank, which administers the loan program, for a nine-month, 112.5 million rial ($1.5 million) credit. However, singular delays in deposits of sales proceeds by the Persian government resulted in only a few thousand dollars equivalent being available for Cooley loans by the summer of 1961.

The company also dealt with several local banks for discounting customers' notes; verbal commitments were made which could provide another $1 million at rates varying between 10% and 12%. Because of Goodrich Iran's size and credit rating, even the money market tightness did not seriously affect its efforts in this respect.

Finally, management considered possibilities of discounting high denomination receivables of prominent Persian merchants in the Beirut short-term money market. Such financing would undoubtedly require Goodrich Iran and perhaps Bank Melli guarantees, but because of the quantity of investable funds seeking outlets in Beirut,

[4] Possibilities for such loans were a factor in foreign bank participation in IMDBI. (See Chapter 12.)

[5] P.L. 480, Title I, section 104(e).

net cost would probably be lower than at home, even including approximately 2% for currency conversion. There would, however, be a foreign exchange risk involved which, given rial uncertainties and the absence of a forward market, could be a serious drawback to this source.

Working capital financing can thus be summarized in the following format:

	(in millions)
Definite	
Bank Melli	$1.0
Foreign suppliers	1.3
Total definite	$2.3
Probable	
B. F. Goodrich (U.S.A.)	$1.0
Under Negotiation	
Chase International	$1.0
Local banks (discounting receivables)	1.0
Beirut (discounting receivables)	1.0
Public Law 480 Cooley loan	1.5
Total probable and under negotiation	$5.5

These figures of $2.3 million in definite loans and $5.5 million under consideration can be compared with estimated short-run requirements of $6.75 million, as listed above. The second year of operations was expected to be a critical period with respect to cash flow. It is evident that, since raising additional equity was not contemplated, the negotiations with prospective funding sources were crucial. If one or more of these alternatives proved unfeasible, Goodrich Iran counted on augmented parent company short-term arrangements and/or discounting more receivables with local banks.

Profits and Prospects

The case of Goodrich Iran S.A. is an important example of a large foreign industrial investment in a developing economy. Because of the significance of this project to Iran—in terms of size, introduction of new products, balance of payments implications—the government offered extensive encouragements to the promoters,

including special tariff and tax exemptions, infant industry protection, and low-cost long-term credit.

Goodrich Iran also exemplified some of the conditions and uncertainties of foreign investment. Among noteworthy points are the considerations involved in attracting local private equity participation, the original underestimate of working capital, the scope of negotiations necessary for completing financing arrangements, and the provisions for experienced management and training of local personnel. Undoubtedly other factors will present themselves as problems of production, competition, raw material delays, and customer credit become crystallized and must be overcome. The project is particularly interesting in that it illustrates the full range of financing possibilities, including domestic and foreign equity, state bank, parent company, private development bank, foreign suppliers, local commercial banks, foreign investment bank, and even a neighboring country's short-term money market. The Goodrich Iran case demonstrates considerable management and financial ingenuity in meeting risks and opportunities of industrial innovation in an underdeveloped country.

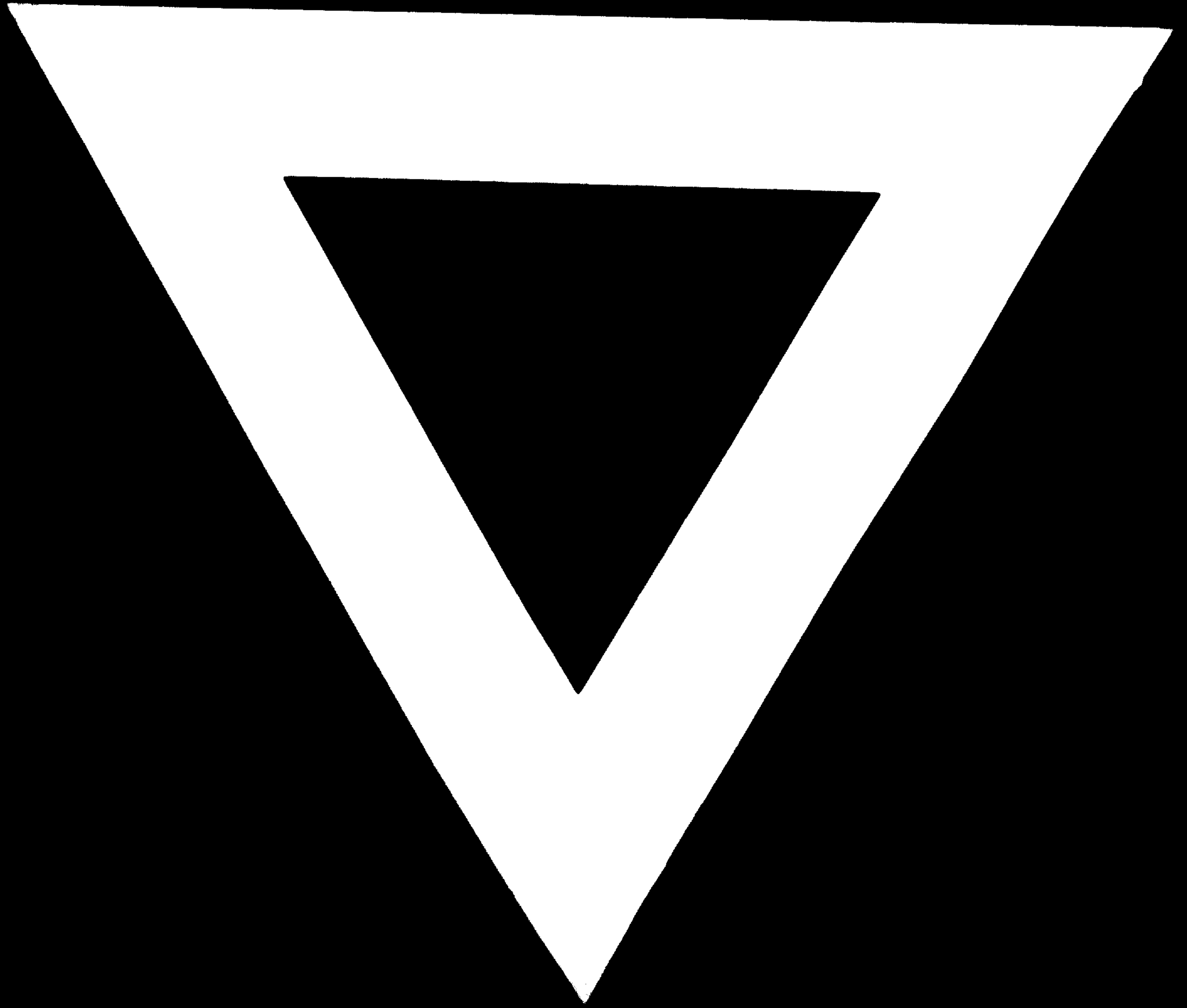
If the company earns 20% profit (before interest) on its expected 800 million rial annual sales, a sum of 160 million rials, or $2.1 million, would be available for interest, principal repayments, reinvestment, and dividends. Interest charges will probably total approximately $650,000, leaving net profit of $1.4 million or 50% on equity. Such a return is enabled by the high leverage factor in financing all of the large working capital requirement with debt. The leverage factor entails, however, a concurrent responsibility to meet loan repayments out of earnings. It is evident that with a possible $7.1 million of funded debt (exclusive of suppliers' credits and discounting) at terms ranging from two to ten years, a very substantial proportion of cash flow will be absorbed by principal installments.

Goodrich Iran has, in fact, stated that its dividend policy will be conservative in the beginning, and that no dividend at all should be expected in the first fiscal year. This would seem contrary to Persian tradition but, as noted above, the investor group assembled by the local promoters has professed long-run goals. It remains to be seen how far shareowners' patience will extend and what kind of

"token" dividends will be required. If this project is successful in terms of its local owners' satisfaction, it could have a salutory effect on prevailing investor shortsightedness and thus contribute significantly to capital market development in Persia. For the company itself, the state of stockholder attitudes will doubtlessly have major implications on any contemplated future expansion.

Certainly, if early cash stresses can be overcome, the project appears able to generate a profit rate which would justify initial risks and provide ample scope for liberal dividends as well as reinvestment. Working capital needs should become proportionately less as time goes on. Return of credit ease in Iran will reduce somewhat the necessity to finance sales for periods of a year or longer. Similarly, development of a domestic chemical sector could lessen Goodrich Iran's dependence upon foreign raw material sources: purchase of synthetic rubber and carbon black from the planned petrochemical industry, as well as other inorganic chemical compounds from small local suppliers, would reduce raw material inventories to be stockpiled and financed.

Expansion is not a remote likelihood: company officials estimate that a doubling of plant capacity, involving an additional $2 million investment, could be feasible within five years. By then possibilities for a new equity issue may be promising. In the meantime, the prospects of Goodrich Iran, as Persia's largest foreign industrial venture, are being closely observed by government, the private business and financial community, and other potential foreign investors.



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