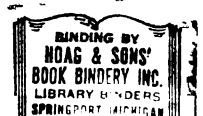


PERSONAL CORRELATES OF
ORGANIZATIONAL MODERNITY:
AN INVESTIGATION OF THE
IRANIAN APPLIANCE INDUSTRY

Thesis for the Degree of Ph. D.
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ABSTRACT

PERSONAL CORRELATES OF ORGANIZATIONAL MODERNITY: AN INVESTIGATION OF THE IRANIAN APPLIANCE INDUSTRY

By

M. Reza Vaghefi

The main purpose of the present study was to examine the relationship between individual and organizational modernity in the Iranian appliance industry. An additional purpose was to generate information regarding the individual firms within this industry and the people who manage them.

Individual modernity was defined in terms of the Rokeach Dogmatism Scale: the lower the score, the less dogmatic or closed minded the individual, hence the less traditional or more modern the individual. This follows from a model of traditionalism-modernism according to which closed mindedness defines the traditional end of belief systems and open mindedness the modern end.

Organizational modernity was defined in terms of 17 criteria adopted ad hoc for the present study, but reflecting the work of Max Weber on bureaucracy and rationalization, as well as other literature on organization and economic development. The 17 criteria may be classified under the following five headings: (1) Plant Evaluation (technology of the production units, safety standards

application, maintenance cost system and records); (2) Manpower System (skilled manpower evaluation, employees financing policy, apprenticeship scheme application, systematic on-the-job training); (3) Organization (delegation of authority, committee system, "standard operating procedures", consultative decision-making, computers in decision-making, information flow); (4) Management Sales Policy (credit sales, sales promotion); and (5) Innovational Policy (frequency of model change, research and development).

It was hypothesized that there would be positive correlation between the two modernities, or negative correlation between organizational modernity and managerial dogmatism--i.e., that the more modern managers (lower dogmatism scores) would be in the more modern firms, or that the more modern firms would be staffed by the more modern managers.

Three questionnaires were administered to 105 managers drawn from 13 of the 15 appliance manufacturing firms in Iran.

The first questionnaire dealt with the managers--their ethnic, religious, socioeconomic and educational backgrounds, their motives for entering private business, their perception of their role in Iranian society, and their perception of the proper business-government relationship for their industry.

The second questionnaire dealt with the firms-- physical facilities, personnel practices, decision-making process, sales policy, and research and development.

The third questionnaire was the Rokeach Dogmatism Scale, translated for Iranian use.

The main findings are as follows:

(1) Contrary to the hypothesis, there is a low but significant positive correlation between organizational modernity and managerial dogmatism--hence, inverse correlation between the two modernities. The more modern firms showed a slight tendency to be managed by the more traditional men.

(2) There is inverse correlation between managers' education and dogmatism: the more educated managers are less dogmatic or more open minded than the less educated managers.

(3) Relatively few of the managers had been educated abroad; and the modernizing impact of these managers was small.

(4) Engineers are less dogmatic or more open minded than other managers; and among the engineers, those who studied abroad are the most open minded.

(5) Class mobility is low within the sample; only three percent of the 105 managers had fathers who were either workers or peasants.

(6) Most of the firms are family-owned-and-managed.

(7) Government-business relations are perceived by the managers in two ways: (a) the role of the government is to protect the firm from foreign competition and labor unrest; and (b) the role of the firm is to politically support the government.

(8) There is very little industry organization; e.g., there is no trade press, reliable information is scarce, secrecy with respect to all aspects of operations is the norm.

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By
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DEDICATION

This work is dedicated to my wife for
her undiminished support, patience,
and understanding of my objectives.

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Since early 1969 when the initial conception of this research emerged, I often doubted it would ever reach the stage which it finally has. That it has is due to the help and encouragement of many people and institutions appropriate to mention on this occasion.

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CHAPTER I

INTRODUCTION

1.1 Definition of the Problem of Modernization

In order to achieve socioeconomic progress in a developing society, it is important that modern technology, which is Western in genesis and has evolved over the past three centuries, be imported and applied. Modern technology requires not only the instrumentalities of technology and pure science as a body of knowledge and a dominant institution but also a social and psychosocial structure at least compatible with, if not reinforcing of, the drive towards better technology and scientific inquiry. Developing societies, however, usually have an institutional apparatus and value system which are either indifferent, incompatible, or hostile to, modernization. A process of modification, adaptation and reform of many social institutions and values is necessary in order for these societies to benefit appreciably from the introduction of science and technology. People and organizations must also restructure their modes of behavior in productive processes so that the full productivity of modernization can be obtained. The transfer of science and technology from modern to pre-modern societies is really a process of

social change within the developing society and not solely the physical importation of equipment and scientific-technical manpower, useful as these are in the modernization process.

In order to study and analyze the process of modernization it should be possible to distinguish a "modern man" from one who is not; a "modern organization" from one which is not; and a "modern society" from one which is not. The model of modern man adopted is that of Inkeles (in Weiner, 1966). The model of modern organization adopted for analysis is that of Max Weber as complemented by contributions from current organizational and behavioral science. A traditional society in the sense used by Weber is taken as an example of a non-modern society.

1.2 Modernization Causality

The necessary preconditions for economic development and modernization have provided a long-lasting subject for two groups of social scientists. One group is composed of development economists, the other of sociologists. The economic orientation tends to see value beliefs as derivatives from economic factors. Most sociological analysis, on the other hand, following in the tradition of Max Weber in the famous, "Protestant Ethic" essay, have placed major emphasis on the independent role and effects of values in fostering economic development (Lipset, p. 77). This tradition

tends to emphasize the dominant value system of the society within which industrial development takes place. It is argued that unless the value system that prevails is such as to bestow social approval upon the role played by the entrepreneurs, they cannot succeed, and modern industrial development will not occur or at the very best will be hopelessly retarded.¹

In this view, a drastic change in the value system of a society is a necessary precondition for industrialization to be achieved. The view receives some support from the prevailing attitude in some advanced countries of Europe and North America. These societies tend to cherish, and reward, economic success. They

often make idols of their successful businessmen. Societies in which generals and civic leaders of the first rank retire into top business positions without any loss of prestige will easily draw capable and ambitious men into industry and business.²

If, on the other hand, the best talent may lose respectability by entering business, it is much less likely to, and thus much retardation may occur in the business of the economic system. The reason for the low status of business depends upon the particular history and religious beliefs of each underdeveloped country. In Iran, for example, business is not an attractive alternative to talented men of Iranian origin and Islamic religion. Alcoholic beverages

¹Alexander Gerschnkron, Continuity in History (Cambridge, Mass.: Harvard University Press, 1968), p. 134.

²Johannes Hirschmeir, The Origin of Meiji Entrepreneurs (Cambridge, Mass.: Harvard University Press, 1964), p. 4.

and interest are banned in orthodox Islamic practice. As a consequence, the brewery industry in Iran is dominated by Armenian Iranians, who are Christians, and the small scale money market by Jewish money lenders. These two industries dominated by men of non-Islamic orientation are clear examples of the effect of religious doctrines on economic activity. However, though interest paid to the money lender is "usury," interest charged by the bank is legitimate, apparently because it has the status of a government institution.

1.3 Modern Individual

Rokeach's model of "open-minded" man was adopted as a definition of a modern individual--on the basis of the rationale provided by Stark,³ which runs as follows:

1. There is some evidence that members of more traditional ("conservative," "fundamentalist," "orthodox") religious groups are more dogmatic than members of more modern ("liberal," "progressive," "reform") religious groups.⁴

³S. Stark and Y. Kugel, "Toward An Anthropology of Dogmatism: Maladjustment, Modernization and Martin Luther King," Psychological Reports 27(1970):291-309.

⁴M. Rokeach, The Open Mind and Closed Mind (New York: Basic Books, 1960); R. H. Bohr, "Dogmatism and Age of Vocational Choice in Two Religious Orders," Journal for the Scientific Study of Religions 7(1968):282-283; Susan K. Gilmore, "Personality Differences Between High and Low Dogmatism Groups of Pentecostal Believers," Journal for the Scientific Study of Religions 8(1969):161-164.

2. There is some evidence that people unfavorably oriented to "modernistic" treatment of "traditional" authorities--e.g., irreverent treatment of military leaders--are more dogmatic than people who are favorably oriented.⁵

3. There is some evidence that Catholic Church members unfavorably oriented to modernizing ("updating") change in religious liturgy, e.g., English language, lay participation, are more dogmatic than members who are favorably oriented.⁶

4. There is some evidence that dogmatism and fatalism are positively correlated, and fatalism is often a part of the definition of traditionalism.⁷ Kahl says that "almost all observers have stressed this component (fatalism vs. activism) as central to the contrast between the rural and the industrial value-systems."⁸

5. According to Rokeach, his Scale's primary purpose is to measure "openness or closedness of belief systems," and he adds, "Because of the way we have defined open and

⁵M. F. Rosenman, "Dogmatism and the Movie 'Dr. Strangelove'," Psychological Reports 20 (1967):942.

⁶G. J. DiRenzo, "The Role of Personality in Liturgical Change," Worship 41 (1967):348-363.

⁷E. Rogers, Modernization Among Peasants: The Impact of Communication (New York: Holt, Rinehart & Winston, 1969), p. 285.

⁸Joseph A. Kahl, The Measurement of Modernism (Austin: The University of Texas Press, 1968), p. 18.

closed. . . the scale should also serve to measure general authoritarianism and general intolerance."⁹ For Rokeach, then, a high scorer on his scale may be described not only as generally "dogmatic," but also as generally "authoritarian," "closed minded" or "intolerant." And this is expressed not only by Rokeach. According to a recent review of the dogmatism scale literature;

Dogmatism has been a fruitful concept, particularly as a generalized theory of authoritarianism. Research has demonstrated. . .that this authoritarianism is basically independent of ideological content.¹⁰

The significance of this identity of "dogmatism" and "authoritarianism" is that some students of social change include "authoritarianism" in their definition of "traditionalism," or in their instrument for measuring it.¹¹

What are the specific implications of negative scores on the Dogmatism Scale? The "low dogmatic" should exhibit more readiness to accept differences of opinion than the "high dogmatic," and this should prevail where attitudes,

⁹op. cit., pp. 71-72.

¹⁰Ralph B. Vacchiano, Paul S. Strauss and L. Hochman, "The Open Mind and Closed Mind: A Review of Dogmatism," Psychological Bulletin 71(1969), p. 269.

¹¹See, e.g., L. W. Doob, "Scales for Assaying Psychological Modernization in Africa," Public Opinion Quarterly 31(1967):419-420; J. A. Kahl, The Measurement of Modernism (Austin: University of Texas, 1968), p. 33; R. C. Williamson, "Social Class and Orientation to Change," Social Forces 46(1968):326.

beliefs, values, and differences in action and behavior of people are matters of discussion. The "low dogmatic" should be more ready to judge ideas on their own merits and qualifications, rather than on their personal, historical, and hierarchical sources and connections. Likewise, they should be more ready to pass judgment on individuals' own accomplishments, achievements, and performance rather than on the ascribed characteristics of the individuals concerned. The "low dogmatic" should be more adaptable to new circumstances and creative ideas and this should equally apply to the creative ideas of those in a different environment, such as in Rogers' definition of innovativeness--"the degree to which an individual is earlier than others in his social system to adopt new ideas."¹² For Rogers, "adapting to new technological ideas is certainly the heart of the modernization process."¹³

In recent years, a new version of "modern man" has gained significance in the literature on modernization--the version of Inkeles.¹⁴ According to Inkeles, an individual is modern when he exhibits:

readiness for new experiences and . . . openness to innovation and change . . . (2) he has a disposition

¹²op. cit., p. 12.

¹³Ibid., p. 13.

¹⁴Alex Inkeles, "The Modernization of Man," in Modernization, ed. by Myron Weiner (New York: Basic Books, Inc., 1966).

to form or hold opinions over a large number of the problems and issues that arise not only in his immediate environment but also outside of it . . . also . . . his orientation to the opinion realms is more democratic . . . (3) he is oriented to the present or the future, rather than to the past . . . accepts fixed hours . . . schedules his time . . . (4) is oriented toward planning and organizing and believes in it as a way of handling life . . . (5) . . . believes that man can learn . . . to dominate his environment in order to advance his own purposes and goals, rather than being dominated entirely by that environment, (6) . . . in calculability . . . the modern man is one who has more confidence that his world is calculable. (7) . . . modern man . . . has more awareness of the dignity of others and more disposition to show respect for them . . . (8) the modern man has more faith in science and technology. . . (9) . . . modern man is a great believer in . . . distributive justice . . . he believes that rewards should be according to contribution.¹⁵

As to relationship between the Rokeach and Inkeles models, there is empirical evidence that they are significantly correlated.¹⁶ Therefore, it is assumed in this study that Rokeach's Dogmatism Scale has the power to reveal modernity of thinking, as does the Overall Modernity Scale of Inkeles.

1.4 Modern Organization

Organization as such is neither a traditional nor a modern phenomenon; it is as old as man himself. But what distinguishes a "modern" from a "traditional" organization?

¹⁵ Ibid., pp. 141-144.

¹⁶ M. Kugel, "Communalism, Individualism, and Psychological Modernity: A Comparison of Kibbutz and Moshav Members on the Overall Modernity and Dogmatism Scales," (Unpublished doctoral dissertation, Michigan State University, East Lansing, Michigan, 1970), p. 41.

The essentials of a modern bureaucracy as stated by Weber (and it is the Weberian model of modern organization that is used as a paradigm) primarily rest on the concept of authority:

The purest type of exercise of legal authority . . . is that which employs a bureaucratic administrative staff . . . the whole administrative staff under the supreme authority then consists, in the purest type, of individual officials who are appointed and function according to the following criteria: (1) they are personally free and subject to authority only with respect to their impersonal official obligation, (2) they are organized in a clearly defined hierarchy of offices, (3) each office has a clearly defined sphere of competence in the legal sense, (4) the office is filled by a free contractual relationship; thus in principle, there is free selection, (5) candidates are selected on the basis of technical qualification . . . (6) they are remunerated by fixed salaries . . . the salary scale is primarily graded according to rank in the hierarchy . . . (7) the office is treated as the sole, or at least the primary, occupation of the incumbent, (8) it constitutes a career . . . (9) the official works entirely separately from the ownership of means of administration and without appropriation of his position, (10) he is subject to strict and systematic discipline and control in the conduct of the office.¹⁷

Furthermore, "the purely bureaucratic type of administrative organization . . . is . . . capable of attaining the highest degree of efficiency and . . . it is superior to any other form in precision, in stability, and in its reliability. It thus makes possible a particularly high degree of calculability of results for the heads of organization and for those acting in relation to it . . .

¹⁷Max Weber, "The Essentials of Bureaucratic Organization: An Ideal-Type Construction," in Reader in Bureaucracy, ed. by Robert K. Merton, et al. (New York: The Free Press, 1952), pp. 21-22.

and in the scope of its operations . . . is formally capable of application of all kinds of administrative tasks The primary source of superiority of bureaucratic administration lies in the role of technical knowledge which, through development of modern technology and business methods in the production of goods . . . has become completely indispensable.¹⁸

From such considerations as the foregoing, from knowledge of business operations in general, and from knowledge of the Iranian appliance industry in particular, the following 17 criteria of organizational modernity were derived and weighted:

ORGANIZATIONAL MODERNITY CRITERIA AND
WEIGHTS ASSIGNED TO EACH
CRITERION

	<u>Weights</u>
I. <u>PLANT EVALUATION</u>	
1. Technology of the Production Units	3
2. Safety Standards Application	4
3. Maintenance Cost System and Records	5
II. <u>MANPOWER SYSTEM</u>	
4. Skilled Manpower Evaluation	5
5. Employees Financing Policy	2
6. Apprenticeship Scheme Application	2
7. Systematic on-the-job Training	3
III. <u>ORGANIZATION</u>	
8. Delegation of Authority	5
9. Usability of Committee System as a Tool of Modern Management	5

¹⁸Ibid., p. 17.

	<u>Weights</u>
10. Availability and Application of "Standard Operating Procedures"	5
11. Consultation Prior to Decision Making	4
12. Utilizing Computer for Decision Making	3
13. External and Internal Information Flow	4
 IV. <u>MANAGEMENT SALES POLICY</u>	
14. Degree of Credit Sales	5
15. Degree of Sales Promotion	5
 V. <u>INNOVATIONAL POLICY</u>	
16. Frequency of Model Change	5
17. Research and Development	5

The 17 criteria are grouped into five classes. The first attempts to evaluate the newness of the production units in the organization, their safety and regular maintenance. The second covers management of human resources. The third is related to the essence of a modern organization and has the greatest weight of all the criteria used for measuring organizational modernity. The fourth and fifth classes include practices found only in modern managerial policy, i.e., the areas relating to sales product innovation and planned research and development.

1st Criterion: Technology of the Production Units.

The firms under study were established in different years. Some older ones renovated their plants and equipment. Some others felt no need to renovate. As some managers indicated, there was no need for them to renovate; they could operate satisfactorily with older equipment. However, the desire

for profit maximization as contrasted to satisfactory profit is a distinctly modern attitude, and particularly in Iran where the greater investment in such equipment to yield lower costs goes counter to the general desire to maximize liquidity, and thus avoid heavy fixed costs. The criterion of modernity was assigned a maximum weight of 3.

2nd Criterion: Safety Standards. The recognition of safety provisions in industry is common in modern industrial organization, and uncommon in industry in underdeveloped economics. The economic benefits of reducing industrial accidents requires managerial sophistication, particularly in undeveloped countries where labor is plentiful and safety laws where they exist are poorly enforced. Safety factors here include installation of fire extinguishers, safety hats for employees, safety glasses, machine guards and adherence to other safety standards. It was assigned a maximum weight of 4.

3rd Criterion: Maintenance-Cost System and Records. This factor was assigned a maximum weight of 5. It involves a number of important aspects of modern organization. It shows management belief in proper utilization of assets; it indicates management determination in detecting problems as early as possible and it involves appreciation of the non-obvious economics of running a business. Furthermore, it involves the training of specialized maintenance employees, itself a modern practice.

Since a good maintenance policy implies a preventive policy rather than a remedial one, it involves recognition of the importance of planning in industrial operations.

4th Criterion: Skilled Manpower Evaluation. In a developing society like Iran, skilled manpower is very important and scarce. If the firms make a special attempt to train and keep such skilled manpower, it indicates their desire both to produce high quality goods and to minimize costs. A high weight of 5 was assigned to this criterion.

5th Criterion: Employees Financing Policy. This criterion was assigned a relatively low weight of 2. It pertains to such activities as loans for employees and financing their education, etc. This practice is common in traditional societies deriving from patrimonial organization in which the master would provide many additional benefits to his servants. However the financing of education is a modern attitude.

6th Criterion: Apprenticeship Scheme. This criterion also received relatively little weight (2) because apprenticeship is an old practice of handicraft days. However where apprenticeship was part of a wider employee training program it is considered a modern practice.

7th Criterion: Systematic on-the-job Training. Although firms could recruit desirable workers through a process of hiring and firing, their willingness to bear the

cost of providing new workers with an opportunity to learn on the job, represents a recognition of the hidden costs of such a practice. This criterion differs from the preceding one in that apprenticeship scheme refers to a situation whereby a firm establishes a vocational program for unskilled young men to learn specific specialized skills, for later application on the job. Systematic on-the-job training, on the other hand, refers to a period between 2 to 6 months where the young workers actually engaged in production jobs are provided a chance to learn on the job through instruction provided by the firm, which supplements whatever skills they have. A maximum weight of 3 was assigned to this criterion.

8th Criterion: Delegation of Authority. This refers to delegation of authority with regard to employment. Employment in traditional societies is typically the province of the master who not only wishes to satisfy himself as to competence but desires also personal loyalty. Hence, a firm in which the top manager (usually the owner in Iranian electrical appliance industry) had installed procedures whereby subordinate managers could exercise the function of hiring or dismissing employees in their supervision represents a break with traditional practice. Therefore a maximum weight of 5 was assigned to this factor.

9th Criterion: Using Committee System. This criterion refers to use of committees in the management of

an enterprise--a very important criterion of modernity, hence given a maximum weight of 5. If a firm used the committee system, such a firm utilized the specialized talents available in decision situations, so it was rated high on this factor. Most of the firms under study are closely held and usually the decision of the top manager is final. But if the top manager had installed a policy whereby the available specialized talent representing the various departments in his organization was used to recommend solutions that organization would be rated accordingly. However a committee system composed of relatives or cronies having no relevant functional responsibility was not considered to satisfy this criterion.

10th Criterion: Standard Operating Procedure. This criterion is a very important aspect of modernity in that it aids proper solution of routine problems without demanding the time of higher management. It represents a recognition of analysis of the firm's problems by distinguishing policy questions, from operating ones, by introducing standardized procedures and thus reducing uncertainty of response and is an essential ingredient of bureaucracy. Therefore it is assigned a maximum of 5 weight.

11th Criterion: Consultation Prior to Decision Making. If managers at different levels of organization were consulted by top management then this was considered modern

organizational behavior, and therefore the firm was rated accordingly. The factor was weighted only slightly less (4) than the three preceding factors.

12th Criterion: Utilizing Computer. With due consideration to the importance of this new management tool, and also with understanding of the nature of the business under study, it was judged that a maximum weight of 3 would appropriately measure the modernity of an organization as far as the use of computer was concerned.

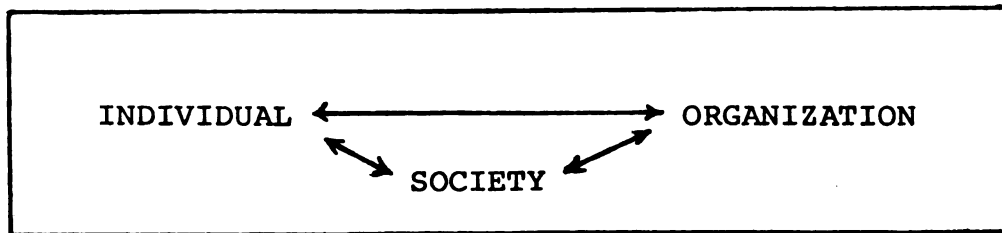
13th Criterion: Information Flow. Free information flow, internal as well as external to the firm is an attribute of modern business organization and is given a high rating (4). Secrecy is a typical characteristic of business practice in underdeveloped countries. The free flow of information to relevant managerial personnel is contrary to this practice. It reveals an understanding that a modern organization requires representation and participation of numerous personnel for proper decision making.

Criteria 14, 15, 16, and 17 received the highest weight (5). All are very important for a modern firm. The recognition that sales must be actively developed by the firm and that credit is an important tool is a distinctively modern attitude. The rule of "caveat emptor" which entails cash transactions is an ancient policy. The promotion of sales through advertising and other means is a trait of modern business as well. Model changes also

constitute a recognition of the need to develop and promote sales, rather than the traditional small merchant attitude of passively awaiting customers. Research and development, even on a small scale is also a modern practice reflecting the awareness of the ability of a producer to stimulate and form customer demand, through style and product innovation.

1.5 Modern Society

The possible inter-relationships between "individual modernity", "organizational modernity" and "societal modernity" is exhibited in the following diagram.



It is conceived that an individual affects the degree of modernity of an organization, and in turn is affected by the degree of organizational modernity and both affect and are affected by the degree of modernity of the society they function in. The external environment (i.e., the society) of the modern man (in the Rokeach sense) and modern organization (in the Weberian sense) "may be summarized by reference to a series of key terms such as urbanization, education, mass communication, industrialization, and politicization. These terms signify that in

contrast to his forebears living in the traditional order of his society, the modern man is less likely to be a farmer and is more likely to be employed in large and complex productive enterprises based on intensive use of power and advanced technologies."¹⁹ The modern man will live in a city or some other form of urban conglomeration. It should be noted that the Iranian appliance industry is located in Tehran, the largest Iranian city; only one of the total of 13 firms is located elsewhere.

As the above diagram shows, it is possible (in principle) to achieve modernization by significantly changing any of the components, viz, the individual, the industrial and other organizations within which he works, and the basic institutions and values of the wider society. Marxist type revolutions have operated on a society by radically altering its basic class structure. In Iran the path towards modernization has focused on the modes of production, relying implicitly on the assumption that modern methods of production will gradually change the organization, the individual and ultimately the society. The strategy of the Iranian Government encourages industrialization relying upon the pursuit of wealth as a motive, attempting to create attitudes favorable to private enterprise, and protecting Iranian industry from foreign

¹⁹op. cit., Inkeles, p. 139.

competition with high tariffs, quotas, and direct and indirect subsidies. Class struggle a concomitant of industrialization is discouraged and the Communist Party is outlawed. Unions are discouraged from acquiring socialist economic or political objectives. The objective is a mixed economy, some sectors such as petroleum being public and others private. It is hoped that free enterprise in the American sense can flourish with government encouragement in such a mixed economy in which "five year" industrialization plans are formulated by government but are expected to be implemented by both the public and private sectors.

1.6 The Purpose of the Study

The main purpose of the study is to explore the relationship between organizational and individual managerial modernity in the Iranian appliance industry. To do this, questionnaires were designed to test the following hypothesis:

A negative correlation exists between managerial scores on the Dogmatism Scale and organizational scores on modernization measures.

In addition, the questionnaires were designed to reveal facts about the managers, their organizations and their environment insofar as they might bear upon the problem of modernization. To provide such information is a secondary purpose of the study. It should be noted that the influence of societal structure, and beliefs as these

influence individual modernity and organizational modernity is not specifically treated.

1.7 The Organization of the Study

The study is organized in the following manner:

In the first chapter the concept of modernity is introduced, and the relevance of the concept to individuals and organizations as well as to society is spelled out.

In the second chapter, the methodology of the research is discussed and some of the problems encountered by the researcher are briefly analyzed.

In the third chapter managers are described in socioeconomic and religious terms. Other characteristics such as age, education, and so forth are set forth. Also treated in this chapter are the managers' view of their roles as managers in relation to Iranian society, their conception of the government's proper role towards their firm and to the economy at large. The bearing of these attitudes on modernity is discussed.

In the fourth chapter some of the practices of the organizations under study will be thoroughly discussed and the modern aspects of these practices will be analyzed.

In the fifth chapter the criteria which define the modernity of an organization will be applied.

In the sixth chapter the findings of the research will be brought together and further analysis will provide

some statistical interpretation of the findings of the research.

In the seventh chapter are the summary and conclusion, as well as discussion of the limitations of the research and suggestions for further research.

CHAPTER II

RESEARCH DESIGN AND METHODOLOGY

2.1 Statement of the Problem

The problem is to learn whether and how the modernity of individual managers is associated with the modernity of their firms.

2.2 The Problems of Research in a Traditional Society

Research is an endeavor for uncovering new information about a phenomenon. It is a process of careful and systematic investigation in some fields of human knowledge. Therefore, in order to provide possibilities for a systematic and careful investigation, the existence of some conditions is desirable and that of others is necessary.

To be successful, scientific research requires a climate conducive to free inquiry. The concept has to be valued and conceived as a valuable process for advancement of human knowledge. It requires a sense of dedication on the part of the researcher as well as on the part of the other cooperating individuals who are the subjects of the scientific inquiry.

It is also fundamental that scientific research be understood by the subjects, not necessarily in terms of

its essence but at least of its purpose. A lack of understanding will thwart effective or willing participation on the part of subjects of the research.

Even if the above two types of conditions are fulfilled, if a general sense of mistrust prevails in the society, the researcher, in all likelihood, will find his task extremely difficult, if not indeed impossible. There must be some degree of consistency between the goals of the researcher, the organization in which he is conducting research, and the society in which they both work. There should be some consistency in the motives of the researcher and of the organizations which are involved in the research. If this consistency does not exist, it has to be established in order to provide the necessary climate for research.

Scientific research does not receive high priority in Iranian society. Newness, if it entails rigorous discipline for its achievement, is not much appreciated. The most common act is imitation, rather than initiation, innovativeness, and novelty. This is especially true in the business community. There it is not only novelty which is unappreciated; openness and publicness are avoided as much as possible.

2.3 Top Management Attitude

There are a total of fifteen firms in Iran engaged in manufacturing appliance items. Initial formal approach

proved that two firms were uncooperative. They refused to even respond to the request for participation in the research. Fortunately, they constituted a very small proportion of the total industry. There remained thirteen firms which, judging from the initial response from the top managers, would allow further contacts to be made.

But resistance had yet to be faced. Although the 13 top managers were willing to be interviewed and even to be asked some sensitive questions about certain of their rights and prerogatives, most resisted the idea of their subordinate managers also being interviewed. Some thought it outrageous. How could one even conceive of putting the same questions that he puts to the most important man in the firm to the manager far below him?

This was the most sensitive stage of the research. The researcher feared that nothing could be accomplished. But then it was conceived that such research should have some mutual interest and understanding. This point was emphasized and managers were thoroughly briefed on their educational and social responsibility and on the fact that findings of the research would be put at their disposal with the stipulation of complete anonymity on their part.

The whole strategy was designed to minimize the suspicion which the Iranian managers-owners have about anyone who is not thoroughly known by them. This lack of trust and confidence shapes their outlook and external relation. It seems that the only agency which receives

reliable data from these firms about their production is the Central Bank of Iran and that is for calculation of the GNP.

In every case before the slightest contact was made, arrangements were made so that a personal conversation with the manager of each firm was carried out either by a high ranking member of the Chamber of Industry and Mines, or by an official of the school of business where the present researcher was on the faculty. Additionally, the researcher had established some previous academic contact with some of these firms so subsequent contact was easier to make.

2.4 Other Managers' Attitudes

In contrast to the attitudes of top managers in each firm, the attitude of lower managers varied from indifference to excitement about their involvement in this research. Most of them were cooperative to the degree that if work pressure kept them from using company time for the interview--which took an average of one hour and a half--they met the researcher at their residences, leisure hours, etc. Therefore, the major block to be surmounted was the top manager.

2.5 Research Design and Instruments

As indicated above (p. 19), a secondary goal of the present research was to provide information regarding managers, their organizations and their environment

insofar as it might bear upon the problem of modernization.

While there are many sources which emphasize the historical and literary aspects of the Iranian society and culture, such sources are merely homiletics.* There are scarcely any empirical studies done on any aspect of Iranian industry and economic growth. Inspection of the literature failed to reveal any prior empirical research on the present subject matter and particularly with respect to the fundamental hypothesis of this thesis. What is available, in scattered form, is primarily data on the general nature of the economy usually provided by the official government agencies. One can hardly come across an objective report about the actual performance of the economy, or an industry or any specific sector or sub-sector. This situation--i.e., the lack of objective empirical information--provided a real challenge to the researcher.

Before a thorough description of the questionnaire is made, it would be useful to record the sources of the data. The sources of data for this research were the managers in the industry. They include the top manager in every firm and managers at all levels down to the functional managers such as sales managers, production

*Exception is made of Norman Jacobs' The Sociology of Development: Iran as an Asian Case Study (New York: Frederick Praeger, 1967).

managers, service managers, etc. In other words, all of the people in management positions were individual subjects of this research.

Accordingly, the questionnaires were addressed first to the top manager and then to the second level men in the organizational hierarchy and then to third level managers. In very rare cases, the research went beyond the third level and if it did, it was simply because of the large size of the firm or due to over-centralization of authority and power.

2.51 Manager's Profile: Questionnaire I (Appendix 1)

The first questionnaire explored the profile of managers: their educational background, socioeconomic status, and mobility patterns; their motivation to enter or to be in business and their conception of alternatives before them. An area of significant interest was managers' perception of the firm, what they thought of criteria of success and the like. Of equal interest was the managers' conception of the Iranian government's role in society as well as its relation to business. It will be appropriate to provide a brief description of the above questionnaire.

2.511 Description of Questionnaire I

Section One - This section asks for personal data, such as age, sex and marital status.

Section Two - In this section the educational background of managers was the subject. Questions as to where the manager received his education and in which field were posed. The manager was also asked whether he continued to participate in specialized courses and, if so, the number of such programs he participated in. Further questions as to his capability to communicate in other than his native language were raised, whether he received part or all of his education abroad, and the source of payment for his education.

Section Three - This section was concerned with the socioeconomic, ethnic, and religious background of the managers.

Section Four - This section obtains information about the founders of the firm and their family relationship to the present owner or managing director. It also obtains information about political and professional affiliations and previous work history of the managing director or owner.

Section Five - In this section an attempt was made to probe the motivation of managers in entering private enterprise rather than, say, government service. The strength of motivation was rated by the subjects.

Section Six - This section is concerned with the manager's perception of what the firm is, how successfully it operates, compared to competing firms, definition of "success" and factors he believes influenced it.

Section Seven - This section covers the perception of the manager as to his role as a manager. It also asks for his views as to the provision of employment for Iranian workers.

Section Eight - This section covers the views of managers concerning the role of the Iranian government with respect to his industry, to the economy at large, and to the provision of social services such as medical care and education.

Section Nine - This section is concerned with attitudes of the managers toward their workforce, covering rights of hiring and firing, provision of accident, old age, sickness and disability insurance, and who should pay the costs thereof.

2.52 Managerial Adaptability: Questionnaire II (Appendix 2)

This questionnaire, which deals primarily with the internal aspects of the firm, has been designed in nine sections in order to avail the researcher of all information needed for testing the organizational modernity aspect of the hypothesis. This questionnaire provides for ranking responses, and descriptive responses. As a precaution, some of the questions which were more than "yes or no" were provided with an open-end option. This policy later on proved useful since many managers did not agree with what had been provided as a possible response, and therefore had a choice of their own. The following section provides a description of Questionnaire II.

2.521 Description of Questionnaire II

Section One - This section requested information about the background of the individual firm, e.g., the date the firm was established, the form of ownership. Also asked was whether, during the period between the date of establishment and the date of this interview, there had been any change in the composition of ownership such as from proprietorship to corporation; and if so, what had caused it. Additional items concerned number of employees and the range of products, again between the firm's inception and the interview date.

Section Two - Questions here pertain to some aspects of the structure of the industry. These questions were meant to determine whether the managers of different firms were aware of the state of well-being of their competitors. Questions such as maintenance cost and cost due to down-time of the machines in each firm were raised to see if different firms differed in their attempt to evaluate the cost of maintenance services or breakdowns.

Section Three - An attempt was made here to probe the manager's awareness of the quality of competing firms' plants and equipment. Additional information was acquired about the nature and standards of plant and equipment safety.

Section Four - This section sought to (a) categorize and enumerate the managerial and technical staff in each firm, (b) learn how many of these managers had received

advanced education, and (c) explore managers' awareness of the quality of their counterparts in various firms.

Section Five - This section was comprised of questions related to activity of labor unions (if any) in the firms, installation and operationality of fringe benefits programs, and existence of plans to finance educational programs for employees, staff and labor. Additional questions concerned hiring practices for staff and skilled personnel. Together with questions about the nature and locus of authority for employment, managers were asked questions to see if they all had perceived hiring practices similarly. In order to see if modern tools and concepts of management were utilized, questions required the respondents to state whether or not staff services were available to top management and if there were standard operations procedures available so that managers and operating personnel could conduct their daily tasks without too much reference to upper managers for instruction on every aspect of their work.

Section Six - This section sought to learn whether (a) managers in different levels considered or practiced such concepts as participative management, (b) consultation before a decision was made and (c) open avenues of communication with subordinates existed.

Section Seven - Since technology was considered to be very important in this industry, a question was raised about the existence of expatriates; that is, if skilled

personnel from industrially advanced countries were employed in the relevant firm, or if the firm had made any use of indigenous engineering and management consulting services.

Section Eight - Marketing was the subject of this section. The marketing and sales function has a very important place in modern business. Therefore it was important to find out if the appliance manufacturing firms in a traditional society had a special place and consideration for these functions. The section includes questions related to comparability of the production and the sales functions, since in an affluent society where products are plentiful, the sales function receives greater attention whereas in an underdeveloped economy greater weight in the organization is given to the production function. Some questions about this perception of the sales and production function therefore seemed justified.

Section Nine - This section was designed to provide some clues to the nature of the information flow system. It includes questions about visits to trade fairs, use of consultants from other advanced countries, and, if such technical services were employed, in which field they were used. The questions on information flow were raised in relation to both internal-to-the-firm and external-to-the-firm flows. The former inquired about such mechanisms as the reporting system, including cost, sales, production

and employment, as well as utilization of computer from simple to advanced form. The latter covered the flow of information within and outside the framework of the firms and the significance of such information in terms of its functional utility.

Section Ten - This section raised questions about product development and innovation; specifically, whether the firms had engaged their resources in innovation and developing new products and, if so, how many high-level personnel were assigned to do the job.

Section Eleven - Because research and development is an important arm of the modern manufacturing firm, two questions dealt with this activity. Probably a small firm can do without it, but what happens to the large firm which does not have large R & D expenditure? Although research indicates that large firms spend a lesser proportion of their budgets on R & D than medium size firms, it would nevertheless be significant to observe if the same pattern is followed in the Iranian appliance industry.

2.6 Functional Description and Interpretation

In this section an attempt is made to see if there are trends, occupational-wise, in the industry which would render some degree of modernity to the industry at large.

All together, there were 25 different positions. The number of incumbents in each position ranged from one to thirteen, the latter being the managing directors in these

firms. They are the equivalent of the top executive in a comparable U. S. company.

The most significant aspect of the "Position Composition Table" (Table 1) is the number of jobs which usually appear in an advanced economy. Such positions are "market research analyst," "in charge of computer," "Research and Development Manager," are important enough to render a firm some score of modernity.

It should be noted that some of these functions seem to represent the personal image of the top executive officer rather than the total firm or the industry. For instance, the only firm which had a position for computer supervision was headed by a highly educated man with a universal outlook. The same manager has been expanding his firm during the last decade to the extent that now he is at the top of a highly diversified, and successful conglomerate, of which appliances are just one line of products.

Generally, the composition of occupation in the industry is consistent with the degree of organizational modernity of the firms, as shall be seen in Chapter V.

2.7 Dogmatism Scale: Questionnaire III (Appendix 3)

The third questionnaire was Rokeach's Dogmatism Scale, Form E. The two previous questionnaires were administered in English; but because some of the statements in the Dogmatism Scale needed specific interpretation, the whole

Table 1. Composition of Positions in the Industry.

	No. of Firms	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Positions															
1. Chairman of Board	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
2. Chairman and M.D.	1	1	1	1	1	1	1	1	1	-	1	1	1	1	12
3. Deputy M.D. for Technical Affairs	1	1	-	1	1	1	1	-	-	-	-	-	1	1	7
4. Deputy M.D. for Sales	-	1	-	-	-	-	-	1	-	1	-	-	-	-	3
5. Director of Oper.	-	1	-	1	-	-	-	-	-	-	-	-	-	-	2
6. Asst. Director for Operations	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
7. Production Director	1	2	1	-	-	-	1	-	1	1	1	1	1	1	10
8. Plant Manager	-	-	1	-	-	-	1	1	1	-	1	1	1	-	7
9. Engineering Head	1	1	-	-	-	1	-	-	-	1	-	1	-	-	5
10. Quality Control & Service Manager	1	1	-	-	-	1	-	-	-	-	-	1	1	-	5
11. Procurement Director	1	1	1	-	-	1	1	1	-	-	-	1	-	1	8
12. Chief Accountant	1	1	1	-	-	-	1	-	-	-	-	1	1	1	7
13. Business & Sales Manager	1	1	1	1	1	-	1	1	-	1	-	-	1	1	9

Table 1 (cont'd)

Positions	No. of Firms	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
14. Administration Director	1	1	1	1	-	-	-	1	1	-	-	1	-	-	6
15. R & D Manager	1	1	1	-	-	1	-	1	-	-	-	-	-	-	4
16. Market Research Analyst	1	1	1	-	-	-	-	-	-	-	-	-	-	-	2
17. Distribution Manager	-	1	1	1	-	-	-	-	-	-	-	-	-	-	2
18. Marketing Manager	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1
19. In charge of Computer	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
20. Financial Manager	-	-	-	-	-	-	1	-	-	1	-	-	1	-	3
21. Maintenance Manager	-	-	1	1	-	-	1	-	-	-	-	-	-	-	2
22. Legal Advisor	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
23. Project Manager	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
24. Technical Advisor	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
25. Technical Service Manager	-	1	1	-	1	-	-	-	1	-	-	-	-	-	3
TOTAL	11	18	9	5	5	7	9	8	5	7	3	8	9	6	104

scale was translated into Persian, the native language of the managers (See Appendix 5). A colleague was asked to translate the Persian version into English so that if there were inaccuracies in the Persian version they could be corrected at the early stage.

The Dogmatism Scale presents the subject with forty statements, each to be responded to as follows:

<u>Statement</u>	<u>Extent of Agreement</u>
1. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.	Agree very much Agree on the whole Agree a little Disagree a little Disagree on the whole Disagree very much

Each item is scored by allocating points to the extent of agreement or disagreement indicated by the subject as follows:

Agree very much	3 points
Agree on the whole	2 points
Agree a little	1 point
Disagree a little	-1 point
Disagree on the whole	-2 points
Disagree very much	-3 points

The total scale score is then determined by summing the points assigned to each response.

Summary

In this chapter, the problem of doing the research was discussed and the instruments used in the research process were described. The following chapter will present findings on the managerial profile and socioeconomic background of the managers.

CHAPTER III

FINDINGS: THE MANAGERS

Appendix 1 contains the questionnaire used to obtain information on the Iranian managers employed in the appliance industry. One hundred and five subjects were interviewed, though not all answered each of the questions. The questionnaire has nine sections which were briefly described in the preceding chapter.

3.1 Definition of a "Manager"

In this study a manager is one who participates in the daily decision making process in the firm and who contributes to the total management of the enterprise by adding his specialized knowledge. Additionally, he can make such decisions as are required for normal operation of the firm and does so according to the authority granted him by the top manager in the firm. In order to ascertain that no one without managerial authority and responsibility was included in this research, every manager's position and managerial standing was cleared with the top manager in each firm.

3.2 Managers' Socioeconomic Background

One hundred managers responded to the question on the occupation of his father. This is tabulated in Table 2.

Table 2 shows 97% of the managers had parents who were either in business as merchants, or were in some profession or employed by government. Only 3% came from either the working class or were farmers. Thus, it is apparent that if these statistics are representative, business as an occupation in Iran is virtually closed to those of peasant or working class origin. These two strata of the Iranian population are of course the overwhelming bulk of the Iranian population. This fact is all the more noteworthy considering that the first Reza Shah started his "modernization" program almost one-half century ago, and his son the present King has been engaged in far more vigorous attempts to modernize during the past 10 years.¹

¹Although the present Shah Mohammad Reza Pahlavi assumed leadership of the country in 1941 (upon abdication of his father, the late Reza Shah Pahlavi), his early efforts to introduce socioeconomic reforms were impeded by powerful groups, especially the landlords, the aristocracy and the ecclesiastics. The last twenty years have witnessed a more determined effort. The Shah began in 1962 on a vast modernization drive aimed at total transformation of primarily an agrarian society. The landlords were deprived of their long-held privileges due to extensive land reform. The aristocracy were deprived of many seats of power through a referendum which changed the electoral laws. The power of the clergy was sharply reduced as a result of the secularization of many of their functions. The government appropriated their rich endowments and eliminated their quasi legal and educational functions. To this list should be added the most successful movement in improving the general population's literacy, the instrument of which was the literacy corps now scattered throughout the nation and in remotest rural areas. The Shah should be given full credit for this movement; indeed at times he staked his personal life.

Table 2. The Socio-Economic Background of the Managers.

Firm Identity		1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Parental Occupation															
1. Merchant:															
(1) Small		1	4	3	1	-	2	4	2	-	-	1	-	-	18
(2) Medium		-	-	-	-	-	-	-	2	2	-	-	2	2	8
(3) Major		1	1	1	-	-	1	3	-	-	1	-	-	-	8
2. Armed Forces Officer		1	1	-	1	-	1	-	-	-	-	2	-	1	7
3. Engineer		2	2	-	-	-	-	-	-	-	1	-	1	1	7
4. Doctor		-	2	1	-	3	-	-	-	1	1	2	-	-	10
5. Government Employee		5	1	1	1	3	3	-	-	3	-	2	4	1	24
6. Farmer		-	-	-	-	-	-	1	-	-	-	-	-	-	1
7. Skilled Worker		-	-	-	-	-	1	-	-	-	-	1	-	-	2
8. Teacher		1	5	-	-	-	-	-	1	-	-	-	1	-	9
9. Politician		-	-	-	-	1	-	-	-	-	-	-	-	-	1
10. Priest		-	-	1	-	-	-	-	-	-	-	-	-	-	1
11. Landlord		-	1	-	1	-	1	-	-	-	-	-	-	-	3
12. Judge		-	-	-	-	-	-	-	-	-	-	-	1	-	1
TOTAL		11	17	7	4	7	9	8	5	6	3	8	9	6	100*

*It should be noted that the total does not match the total number of interviews made because some managers preferred not to reveal their parental occupation.

As would be expected, those whose fathers were merchants would constitute the largest single group from whom managers are chosen. However, the next largest group come from fathers who were in government, either in civilian or military capacity. These constituted 31% of the total, almost equal to the merchant class. The significance of this is that the role of government is so overwhelming in Iran, that such a background gives desired "connections" to government influence--an "influence" which in Iran is necessary for the success of business operations. As noted by Jacobs, a shrewd Iranian businessman seeks out a coalition with an influential . . .

political patron who will be in a position to go to others to move things along in the right direction, or that actor attempts to influence directly the individual official(s) responsible formally for the decision-making process that affects his economic interests, whether those individuals be judges or lowly policemen on the beat.²

3.3 Education of Fathers

Table 3 shows the education of the father of the manager. Thirty-one percent of the fathers had some education above high school. Though the table classifies all this as "college," it should be noted that only engineering, medicine, and law would correspond to an American classification. Military and teacher's colleges are not equivalent to a four-year U. S. college background.

²Norman Jacobs, The Sociology of Development: Iran as an Asian Case Study (New York: Praeger Publishers, 1967), p. 129.

Table 3. Years of Education of Manager's Fathers.

Category	Status of Education	Number of Respondents	Percentage (%)
1	Illiterate	19	19
2	Primary Education	17	17
3	Theology (Traditional System)	1	1
4	High School	31	31
5	College Education		
	A) Military Academy	7	7
	B) Engineering	7	7
	C) Doctor (Medical)	10	10
	D) Law	1	1
	E) Teacher's College	<u>6</u>	<u>6</u>
	Total Number of Respondents	<u>100</u>	<u>100</u>

High school education was achieved by 32% of the fathers, primary education was achieved by 17%, and 19% were illiterate. Referring back to Table 1, one can see that all the illiterates and those of primary education (which constitutes 36% of the fathers) were either merchants or government employees, since armed forces officers, engineers, doctors, teachers, and judges all have education beyond primary grades. Thus, though parent occupation in business or profession or government seems to be necessary for a managerial position, it is not necessary that fathers needed literacy or education beyond the primary grades to achieve a position as a merchant or government employee.

3.4 Religious Background

Table 4 shows the religious background of those managers. As would be expected in a society in which Islam accounts for about 95% of the population, the great majority of managers are of the Moslem faith--all of the Shiate branch. The next largest group is Jewish (17%), which is vastly greater than the proportion of this faith, which is about 1% of the Iranian population. The appliance industry is concentrated in Tehran and so is the Jewish population of Iran; hence it is unlikely that this proportion is representative of Iranian managers throughout the country.

Table 4. Religious Beliefs of Managers.

Firm Identity Religious Orientation	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Islam: Suni	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shiate	4	14	9	-	6	9	8	-	-	3	8	9	6	76
Christian: Gregorian	1	2	-	-	-	-	-	-	-	-	-	-	-	3
Jewish	-	-	-	5	-	-	-	5	7	-	-	-	-	17
Zoroastrian	-	2	-	-	-	-	-	-	-	-	-	-	-	2
Bahaie*	6	-	-	-	1	-	-	-	-	-	-	-	-	7
TOTAL	11	18	9	5	7	9	8	5	7	3	8	9	6	105

*Bahaie sect is not recognized as a religion in Iran.

The significance of Table 4 is that the non-Moslem population is over-represented in the managerial class, or that the Moslem population is under-represented. This is consistent with the hypothesis that Islam traditions do not encourage business as a career. Firms Four, Eight, and Nine are owned by Jews whose fathers were also merchants. High government or military careers are virtually closed to non-Moslems. At lower levels of government service or of the armed forces, members of minority religions have the same occupational opportunity as do others; they are discriminated against when it comes to promotion to higher positions. This probably acts to deter members of the minority religious groups from entering government service, and tends to channel the most ambitious and able into business and the professions. Thus, the probability is higher that one whose parent was in business will also engage in business if he is a member of a minority religious group than if he is a member of Islam.

3.5 Mobility Within the Firm

3.5.1 Managing Directors

The "managing director" of the Iranian appliance firms combines the duties of the chief operating officer and chief policy maker. That is, he is both president and chairman of the board. With the exception of Firm Six, which was founded in 1954, all the managing directors were also founders of the firms. Firm Six was founded by the

father of the present managing director. The managing director of Firm One, the oldest, established in 1935, is a member of the family of the founder. Though seven firms are legally corporations, the stock of these firms is owned largely by the managing director and his family. Of the six other firms, five are proprietorships and one is a partnership.

As Table 5 shows, the oldest firm (Firm One) was established in 1935, so that at the time of the interview it was 35 years old. It started as a producer of water tanks and switched to electrical appliances after World War II. The very high tariff imposed on imports of electric appliances beginning in the early 1950's stimulated the creation of electric appliance plants, which were set up as assembly operations, with the basic components (motors, condensers, vacuum tubes, picture tubes, etc.) imported from abroad. Seven of the firms were started in the fifties; the largest of all the firms (Firm Two), employing 1,700 people as of June, 1970, was established in 1959. Five of the firms were started in the 1960's; the youngest firm (Firm Three) was started in 1965 as a partnership. Many of the younger firms, those started in the 1960's, were assembling television sets.

Because of the fact that the founders are still alive and managing, the chances of non-family members achieving a position as managing directors are very remote. As noted, even though seven are corporations, the stocks of

Table 5. Legal Form, Number of Employees, and Date of Establishment of 13 Appliance Firms as of June, 1970.

Firm	Legal Form	Number of Employees	Date of Establishment
1	Corporation	1440	1935
2	Corporation	1700	1959
3	Partnership	350	1967
4	Proprietor	274	1954
5	Corporation	134	1964
6	Corporation	1000	1954
7	Corporation	300	1955
8	Corporation	90	1964
9	Corporation	105	1962
10	Proprietor	80	1953
11	Proprietor	160	1954
12	Proprietor	350	1958
13	Proprietor	251	1965
	TOTAL	6234	

these are controlled by the managing director. In this regard, i.e., succession to managing directorships, outsiders have no better chance in the corporations than in the proprietorships. Whether these firms will eventually become corporations with widespread stock ownership so that non-family persons could achieve the top position cannot, of course, be predicted. Present practice in this regard is traditional, i.e., family-oriented management even for firms of very much larger size is still the major mode of rising to managing directorships.

3.52 Middle and Lower Management

Of 105 managers who were interviewed, 104 were employed long enough so that a shift in economic status would be a reasonable expectation. Increased income was the test of movement. The managers were asked to classify themselves into five income groups defined broadly enough so that a response would not reveal a person's exact income. Such increased income came about in two ways. The first was promotion to a higher paying job. In many cases this meant more important responsibilities without a change in job title; sometimes it meant both. The second way was simply higher salaries without change in either job title or duties, because the firms were growing and becoming more profitable. Because of the broadness of the classification, it should not be assumed that no salary increases were received if a manager reported that his

position in an income class was unchanged from the time he first started to the time of interview. All that can be concluded is that whatever salary increase he did receive was not enough for him to classify himself in a higher group. Given this condition we would probably be correct in interpreting these answers as conservative estimates of income movement.

Table 6 summarizes the economic mobility of the managers by firm and by nature of income class. As can be seen, no manager classified himself as in the "lower" income class. At the beginning of their work period 12 managers out of 104 classified themselves as in the "upper-lower" class. At the time of interview none so classified themselves; all had moved from that position to a higher position, i.e., to middle; two managers moved from middle to upper-middle. None had moved from upper-middle to upper-upper. Thus, 14 managers out of 104, or 13.5% had experienced an upward shift in income class. It is interesting to note that the highest rate of mobility was in the largest firm (Firm Two), 7 out of 18 managers having improved their position--39% of the managers. Firm Two was only 11 years old. In contrast, Firm One, the second largest and the oldest, showed a movement of 1 out of 11 managers--from middle to upper-middle. The managers in Firm Two included six who moved from lower-middle to middle, and one from middle to upper-middle. Firm Seven showed a movement up of 3 out of 8 managers, Firm Thirteen, 2 out of

Table 6. Economic Mobility of Managers Within Firm.

Firm Identity	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Number of Employees	1440	1700	350	274	134	1000	300	90	105	80	160	350	251	
Economic Status of Manager at the beginning of work	upper-upper	upper-middle	middle	upper-lower	lower									
	1	12	8	5	7	7	5	5	6	1	8	8	4	86
	10	6	1	-	-	-	3	-	-	-	-	-	2	12
	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	-	-	-	-	-	-	-	-	-	-	-	-	-	104
Economic Status of Manager at time of inter-view as compared to above	upper-upper	upper-middle	middle	upper-lower	lower									
	2	17	9	7	7	7	7	5	6	1	8	8	6	97
	9	-	-	-	-	-	-	-	-	-	-	-	-	0
	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Total Managers	11	18	9	7	7	8	8	5	7	3	8	9	6	106
Total Shifts	+1	+7	+1	0	0	0	+3	0	0	0	0	0	+2	14

Note: (+) Means movement to higher income class.
 (-) Means movement to lower income class.

6, and Firm Three, 1 out of 9 managers. Eight of the 13 firms showed no movement, including Firm Six with 1,000 employees, and the only firm in which a manager reported himself in the upper-upper category. No patterns of mobility seem to be revealed by size of firm. The largest firm has the highest mobility, but Firm Seven with only 300 employees is almost equally high, and Firm Six with 1,000 employees shows no shift, and in Firm One only 1 out of 11 employees showed movement.

3.53 Age of Managers

Table 7 compares the age of the managing director and the mean of the other managers' ages in the firm. It also brings together information on the legal form of the firm. As the table shows, the top manager is younger than the average manager in his firm in Firms Six, Eight and Nine. In these firms the average age of the other managers is also lower than the average of the thirteen firms. Interestingly, these three firms show no shifts of managers over the period of their employment into a higher income class. Firm Six was in existence 16 years, Firm Eight 6 years, and Firm Nine 10 years--old enough, i.e., for shifts to have occurred. The three firms employed 20 managers. This suggests that significant income mobility appears to be associated with age of managers. This is a traditional attitude compared to income mobility of modern societies which depends more on position and duties.

Table 7. Age of Managing Directory and Mean of Managers' Age.

Firm Identity	Size Rank	Firm's Date of Establishment	Legal Form	Managing Director's Age	Mean of Manager's Age
1	2 (1440)	1935	C	44	38
2	1 (1700)	1959	C	54	41
3	4 (350)	1967	P	52	44
4	7 (274)	1954	Pr	48	44
5	10 (134)	1964	C	38	36
6	3 (1000)	1954	C	36	41
7	6 (300)	1955	C	55	43
8	12 (90)	1964	C	35	38
9	11 (105)	1962	C	37	39
10	13 (80)	1953	Pr	45	41
11	9 (160)	1954	Pr	47	44
12	4 (350)	1958	Pr	58	48
13	8 (251)	1965	Pr	51	48
			Mean	$\frac{46}{42}$	$\frac{48}{42}$

Note: "C" = Corporation; "P" = Partnership; and "Pr" = Proprietorship

3.6 Managers' Reasons for Pursuing a Business Career and Their Conception of Their Role in Iranian Society

Managers were asked to classify their reasons for pursuing business as a career (Table 8). These answers fell into four broad classes as follows:

(a) They wished to be self-independent, insofar as this was possible.

(b) They wished to gain some sense of self-achievement.

(c) They wished to make a "good income," which for some meant as high as possible, and for all meant income which would put them into the upper-middle or higher class.

(d) They wished to help Iranian society.

All managers were asked to rank-order these reasons, (most important a rating of 1 and least important a rating of 4). Not all managers answered this question. Of the 106 managers, 101 rated the income motive, 90 the self-achievement motive, 89 the self-independence motive, and only 21 the social motive (help to society). Table 8 shows the responses of the managers and their rating by firms. The ratings are not mutually exclusive.

The most interesting result in Table 8 is the fact that the social motive is mentioned as a motive by only 21 of the 101 managers who responded, and of these 18 gave it the lowest importance. It is well-known that underdeveloped societies have little sense of national pride; family, village, ethnic and religious groups are typically more important. However, given the long and great tradition

Table 8. The Most Important Motivating Factors to Enter Private Business.

Firm Identity Factors	RA	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
		RE	RE	RE	RE	RE	RE	RE	RE	RE	RE	RE	RE	RE	
1. Achievement Motive	1	6	10	2	2	2	5	3	1	2	1	2	8	1	45
	2	4	6	3	1	3	3	4	3	1	-	3	1	2	34
	3	1	2	3	-	1	1	1	1	-	-	1	-	-	11
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Self-Independence Motive	1	0	0	1	1	-	1	-	1	1	2	-	0	1	8
	2	2	6	5	1	3	2	3	2	1	-	1	1	-	27
	3	5	11	2	-	3	4	5	2	1	-	4	6	1	44
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Income Motive	1	5	8	6	2	5	3	5	3	2	1	6	1	4	51
	2	5	7	-	2	1	5	1	-	2	2	2	7	1	35
	3	1	4	1	1	1	1	3	2	-	-	-	1	-	15
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Social Motive (Help to Society)	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3	1	-	-	-	-	-	-	-	-	-	2	-	-	3
	4	4	6	3	-	-	1	2	-	-	-	1	-	1	18

RA: Rating indicating the priority that individual manager attaches to this particular factor.

RE: Number of individual managers responding to specific factors.

of Persia, together with the fact that both the first and current Shah of the ruling dynasty have been attempting to arouse Iranian patriotism and national pride for almost half a century, the extremely low showing of social motives as a reason for pursuing a career is striking. The interpretation may be that business should be confined to its own objectives. The economic development of a society and the improvement of the well-being of the masses is not part of responsibility of the prevailing business organizations. Business is simply a matter for each person. How one earns his living, and how well, is not a national concern. Business is simply not viewed as being concerned with public goals.

Most managers rated the income motive as the most important (51), followed by the self-achievement motive (45). Self-independence was rated as the highest importance by only (8) managers. Of these four were non-Moslem (three Jewish and one Bahaie). In a predominantly Moslem society, those of non-Moslem faith can achieve self-independence only through ownership of property and particularly business property and through the professions. High government posts, either civil or military, are effectively closed to them. One further comment is in order. Of the (21) managers who rated the social motive as of some importance, (11) were managers of the two largest firms (employment of 1,700 and 1,500 approximately). The other firms--Six, Three, Seven and Eleven--are also

among the largest, having employment of 1,000, 350, 300, and 160, respectively. The interpretation for this response is that as the firms grow larger, they find it incumbent to play a more active role in the society, the growth of which will have an impact on their own business.

Table 9--the managers' conception of their role in society--is very similar to Table 8, and may be viewed as another aspect of the same question. A person's reasons for entering an occupation cannot be too much at variance with his role in society--since what a person does as a vocation is really his social role, or at least an important social role he plays in addition to others which he may believe he performs. Thus, Table 8 shows that 100 managers believed that one of their social roles was to provide an income for their family; of these, 89 believe it the most important role he played in society. This is certainly consistent with traditional family obligation. In contrast, only 12 managers out of 85 managers who mentioned this item rated "contributing to the industrialization of the country" as of highest importance. Only one manager, a member of the largest firm, rated providing jobs for people as the most important social role, and 12 rated it as of average importance. Only 60 managers mentioned this item as a social role in society. Of the 12 managers who rated "industrialization" of highest priority, only 2 were members of the two largest firms. However, 37 of 69

Table 9. Managers' Conception of Their Role in Society.

Firm Identity Factors	1		2		3		4		5		6		7		8		9		10		11		12		13		TOTAL
	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	
To provide income for his family	1	9	17	9	4	6	9	7	7	3	5	1	7	7	5	89											
	2	1	0	0	1	1	0	1	1	1	0	1	1	1	1	9											
	3	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2											
To contribute to industrialization of the country	1	2	0	0	1	1	0	1	2	1	1	1	1	1	1	12											
	2	7	13	9	3	3	8	6	2	4	0	7	5	2	69												
	3	1	0	0	0	1	0	1	1	1	0	0	0	0	4												
To provide jobs for people	1	-	1	0	0	-	0	0	0	0	0	0	0	0	0	1											
	2	2	4	0	0	1	1	1	2	0	1	0	0	0	0	12											
	3	7	6	4	1	3	7	6	1	2	0	5	4	1	47												

RA: Rating indicating the priority that individual managers attach to the particular factor.

RE: Number of individual managers responding to specific factors.

managers who rated this as 2 (in a three point rating scale) were members of the four largest firms. It seems reasonable that managers of the largest firms would rate contributing to industrialization of the country as an important social role, since such a role is consistent with their belief that as a firm grows larger it is thereby helping the industrialization of Iran. The managers of the smaller firms are heavily oriented to family obligations as their social role even more than the managers of the larger firms.

The responses in Tables 8 and 9, though crude, seem to provide evidence that the dominant view of the managers concerning their vocation as business executives is that it is primarily a private matter; that obligation to provide jobs for others is of very little importance to them. Unlike the Calvinist business view of the 17th and 18th centuries, they do not conceive of their success in business as doing "God's Work"--nor does their success carry with it connotations of obligation to people outside their own personal and family circles.

3.7 Manager's Conception of the Role of the Iranian Government and Related to Their Industry

Table 10 summarizes the responses of the managers to questions eliciting their views as to the proper role of the Iranian government as related to their industry and firm. The managers were asked to rate on a four point scale (1 most important, 4 least important) four functions

Table 10. Managers' Conception of Iranian Government Role as Related to this Industry.

Firms Identity	1		2		3		4		5		6		7		8		9		10		11		12		13		TOTAL	
	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE
Factors																												
1. Protection from foreign competition	1	9	16	8	4	5	9	8	5	5	-	1	8	7	5	85												
	2	2	2	1	-	2	-	-	-	-	3	1	-	1	1	13												
	3	-	-	-	-	-	-	-	-	-	1	1	-	-	-	2												
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-												
TOTAL																												
2. Provision of technical assistance	1	-	-	-	-	1	3	-	-	-	2	-	-	-	1	6												
	2	1	10	-	-	2	6	3	1	1	1	1	4	4	1	34												
	3	7	7	4	-	3	-	4	2	1	1	1	2	4	-	35												
	4	1	1	-	-	-	-	-	-	-	1	-	-	1	-	4												
TOTAL																												
3. Provision of Financial and Monetary incentives for firms	1	-	1	-	-	-	-	-	-	-	2	1	-	1	-	5												
	2	-	1	-	-	1	1	1	-	-	1	-	-	1	1	7												
	3	-	-	-	-	-	1	1	-	-	-	-	-	-	-	2												
	4	1	4	1	-	2	3	2	1	1	1	-	1	1	1	18												
TOTAL																												
4. Government should prevent disruption of work	1	1	1	1	-	1	-	-	-	-	1	1	-	1	-	7												
	2	5	5	8	4	1	4	4	4	-	-	1	4	3	2	45												
	3	3	11	-	-	2	2	3	1	1	1	-	3	5	2	33												
	4	1	-	-	-	1	2	1	-	-	1	-	-	-	-	6												
TOTAL																												

RA: Rating indicating the priority that individual manager attaches to this particular factor.

RE: Number of individual managers responding to specific factors.

of government which preliminary discussion by the writer with the managers revealed as those most frequently mentioned.

As Table 10 shows, protection from foreign competition is overwhelmingly the most important function which the managers conceive for their government. Eighty-five managers rated this as 1; the next highest function (prevention of work disruption) received only 7 number 1 ratings. The latter function means two things to the managers: prevention of strikes, and maintenance of political and social stability, the lack of which would lead to work disruption. Protection from foreign competition received 100 responses; work disruption received 91 responses. The latter, as the table shows, was the second most important function. Provision of technical assistance was the third most important function, being mentioned by 79 managers. Provision for financial assistance was the least important, being mentioned by only 32 managers, and receiving a rating of most important by only 5 managers.

The lack of interest by managers in financial assistance and incentives from government may be viewed as consistent with the classical entrepreneur who rejected government involvement in business. But the "laissez-faire, laissez-passer" attitude is, of course, not subscribed to by the managers since they strenuously insist on protection from foreign competition. It is more likely

that they reject government financial assistance because this involves putting the government camel's nose under the tent. That is, money from the government means involvement of government officials, which means possible new pressures, coercion, expensive payoffs, information which could form the basis of higher income and business taxes, and so forth. At the bottom, such an attitude reflects distrust in the enforcement of laws and the honesty of government officials, an attitude not without foundation in Iran.

Table 10 shows the responses by firms. These are of some interest when associated with characteristics of the firm such as size, religious affiliation of the managers and dogmatism scores. We defer discussion of the latter factor to Chapter VI. All firms other than Firm Nine rated protection from foreign competition as a most important government activity bearing on their firm. Of the seven managers of Firm Nine interviewed, none rated this as most important and only three rated it as "2" in importance. On the other hand, two of its managers rated technical assistance as "1", and three others gave it ratings of "2", "3", and "4". Two of its managers also rated financial assistance as most important (only five managers in total so rated this item). Firm Nine is a "Jewish" firm, that is, its managing director and other managers are Jewish. It is, however, one of the smallest firms (105 employees) and has the highest dogmatism score

("close-minded" or "traditional") of the thirteen firms tested. Its managing director, however, is a very "open-minded" or low-dogmatic man on the Rokeach scale. Firm Six is an almost polar case from Firm Nine. It is the third largest firm (1,000 employees), ten times the size of Firm Nine. It is a wholly "Moslem" firm, and it has the highest negative dogmatism score (the most open-minded, non-traditional, modern of the thirteen firms). But like Firm Nine, its managers rated technical assistance of highest ("1" rating) and very high ("2" rating) importance. Like Firm Nine, its managers also rated financial assistance (rating of "2", "3", and "4") as important. Of the four items on the government role, only "technical assistance" and "government financial assistance and financial incentives," can be construed as reflecting modern attitudes, since the other two items are both very old functions of government. Firm Six's "modern" conception is consistent with the very high negative dogmatism score; Firm Nine's conception is not. However, it is possible in view of the modernity of its top manager, that the other executives of Firm Nine are dominated by his attitude in these matters.

3.8 Role of the Iranian Government for the Economy as a Whole

Table 11 summarizes the functions of the Iranian Government related to the economy of Iran which the managers viewed as important. Their ratings are on a four

Table 11. Managers' Conception of Iranian Government Role as Related to the Economy.

Factor	Firm Identity		1		2		3		4		5		6		7		8		9		10		11		12		13		TOTAL
	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	RA	RE	
1. Provision of Employment Opportunities	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	9	2	-	-	7	6	2	1	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	36
	3	-	5	3	-	-	2	2	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	15
	4	7	4	1	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	15
TOTAL																													66
2. Provision of Economic and Political Stability	1	10	18	9	4	7	9	8	5	6	1	8	9	4	98														
	2	1	-	-	1	-	-	-	-	-	1	-	-	2	5														5
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-														-
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-														-
TOTAL																													103
3. Government Abstention From Unjustified Cost Increase	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2														2
	2	9	9	6	3	4	2	2	3	3	-	7	-	-	4	52													52
	3	2	6	2	2	-	7	4	1	2	2	1	9	-	-	38													38
	4	-	3	-	-	-	-	1	-	1	-	-	-	-	-	5													5
TOTAL																													97
4. Government Contribution to Social Security	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-														-
	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-													-
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2													2
	4	-	1	1	-	-	-	3	1	1	-	1	2	1	11														11
TOTAL																													13
5. Government Should Limit its Operation in Business	1	1	-	-	-	-	-	-	-	-	1	-	-	-	2														2
	2	1	-	-	-	3	-	-	-	2	1	1	-	-	8														8
	3	9	6	3	2	2	1	-	2	1	-	2	1	-	31														31
	4	-	9	4	2	-	7	9	1	-	-	4	-	-	36														36
TOTAL																													77

RA: Rating indicating the priority that individual manager attaches to this particular factor.

RE: Number of individual managers responding to specific factors.

point scale. The table differs from Table 10 in two respects. It relates to the economy as a whole and not to the appliance industry; and the functions of government are different other than factor two of Table 11 and factor four of Table 10, which are very close. Table 11 summarizes the responses in order of importance of the factors as perceived by the managers.

"Provision of economic and political stability" is consistent with "government action to prevent work disruption" (factor 4 of Table 10). This is an attitude common to both traditional and modern organization because a business firm depends on economic and political stability for future planning. In Iran abstention from cost increases (factor 3, Table 11) means not raising taxes on business and not raising prices of government products (the government owns many industrial enterprises--textiles, petroleum products, cement, steel). Limitation of business operations by government (factor 5, Table 11) means that government should not enter into industrial operations. These views are also common to business enterprise in both modern and non-modern societies which are not completely socialist. Only the provision of employment opportunities, and government responsibility for social security of workers and peasants, can be viewed as specifically modern views of advanced industrial countries. These two functions, particularly social security, are clearly rated of lesser importance than the second and

third factors in Table 11, as summary Table 12 shows. It will be recalled that these managers in rating their own roles, rated providing employment as least important (Table 9). It should be noted that provision of employment by the government was rated as important roughly in order of size of firm. Thus, (Table 11) all 18 managers of Firm Two (1,700 employees), the largest firm, rated the provision of employment; 7 of 11 of Firm One (second largest), 9 of 9 of Firm Six, (third largest), 6 of 9 of Firm Three and 9 of 9 of Firm Twelve (the third largest, each with 350 employees, 8 of 9 of Firm Seven (fifth largest), and so forth. Firm Six and Firm Nine, the two polar opposites, are also similar in this regard. In Firm Nine, though a small firm (105 employees), 4 of 6 managers rated employment as important, though only 1 manager rated it as high as second--which, however, is the highest rating this function received.

Summary

In this chapter, the managers' profile was analyzed. Their views about their personal role in the economy as well as that of the role of the government was discussed and the dependence of the industry on government support was subject of analysis.

In the fourth chapter, organizational modernity findings are presented.

Table 12. Importance of Economic Functions of Government as Perceived by Appliance Industry Managers.

Function	Total No. of Responses	No. 1 Responses	No. 2 Responses	No. 3 & 4 Responses
Provision of Economic & Political Stability	103	98	5	0
Absentation from Cost Increases	97	2	52	43
Limitation of Government Business Enterprise	77	2	8	67
Provision of Employment	66	0	36	30
Contribution to Social Security	13	0	0	13

CHAPTER IV

FINDINGS: THE ORGANIZATIONS

Appendix 2 contains the questionnaire used to obtain information on the organizational modernity of the 13 firms in the Iranian appliance industry. One hundred and five subjects were involved in this interview, but not all answered each question.

4.1 Historical Background of the Firms

The date of establishment of these firms has already been reported in Table 5. The two largest firms, namely Firms 1 and 2, reported a change in the nature of their ownership from proprietorship to corporation. The change was due to expansion of their operation as revealed by the top managers. A good proportion of the shares of the two stated firms are owned by managers in the top echelon in the two firms with some ownership by lower level management. It was thought by the top managers that this had produced beneficial results and since the recipients of the shares had exhibited greater effort after they had been offered the shares.

As to the change in the number of products produced at first and at the time of interview: most of the firms reported that at the inception their operations were

limited to two items, but that they gradually expanded to the extent that now they produce from 3 to 8 items and at times produce each item in different models. The average number of items produced by the industry was 5.

4.2 State of the Art

Most of the managers were ambivalent about some of the questions in this section. This was especially true of the part which requested their information or response about their firms' "state of the art comparability" with that of some foreign firms, namely; American, European, and Japanese firms. Most of the managers did not respond. A couple who responded because of their personal observation or visits to these countries, thought that the present state of the art of their respective firms may not be comparable to the present state of art of the firms in those countries because the visits had been done long ago, and as such their judgment may have little bearing on the issue at hand.

The other question in this section provided useful ground for dialogue. Almost 98% of the interviews stated that their important equipment was in the production line.¹

¹There was, however, one exception where the manager stated that he thought that the most important equipment was in their laboratory which tested the materials before letting them go into the production line. But this manager was the only one in that particular firm who responded in that fashion. This individual ranked relatively low on the dogmatism scale.

One could draw some interesting conclusions from this observation in that capital, being a scarce factor in the production process in a society like Iran, receives a great deal of care. To the question related to production--namely, the rank equivalence of production and sales managers--most of the managers stated that they considered the production manager to be on a higher rank than the sales manager.² This is in contrast to U. S. firms, where, in many instances, sales managers have a much better chance to move up the hierarchy of their respective firms, because of the greater number of challenges in sales than in production. This notion may to some extent illustrate the degree of industrialization and competition in the related industries.

Related to the same question, managers were asked about the age of the most important equipment. More than 80% of the managers in Firms Two, Four, Five, Seven, Ten, and Twelve stated that most equipment in their production system was old; yet they said it was unnecessary to change because the plant could work without investing extra funds in new equipment. Since there is little price competition due to the oligopolistic nature of the industry, and high tariffs on imports eliminates foreign competition, there

²In those cases where the sales manager was judged to be equal, the particular sales manager was one of the major share holders of the firms. Thus the prestige did not derive from the function per se, but from the ownership privileges.

are few incentives to invest in the latest and more advanced equipment.

The most critical question in this section was one related to the firms' maintenance cost. One of the most reliable indices of a firm's mastery of modern production technique is a low percentage of down time due to machine failure.

The data for this were provided in Questionnaire II, Item 12, which inquired about the "percentage of downtime of equipment due to repair and maintenance or equipment failure." It further inquired whether the firms kept any records about the maintenance of the machines (the major machines), and if so, for how long such records were kept in order to derive useful information from such data for adopting maintenance policy decisions and procedures. As may be seen in Table 13, the managements of these firms are not very conscious of maintenance cost; only four firms kept records on downtime of equipment and of these only one kept such records for as long as five years. Five firms did not even hazard a guess as to the percentage of downtime. Eight firms gave answers, but as noted only four firms had records--so the other four answers are estimates based upon casual observation by the managers.

It is generally accepted that private firms are most cost-conscious when the degree of competition is intensive among firms. If through "administered-modernization"--i.e., a modernization process whereby government assumes an

Table 13. Maintenance Cost Due to Failure of Important Machines and Years Such Data Were Collected.

Firm Identity	Cost Records												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Average % of Machine Down- Time Due to Repair	6	*	*	*	4	2	7	5	4	6	7	*	*
2. Are Such Records Kept?	Yes	*	*	*	Yes	*	Yes	No	Yes	Yes	No	*	*
3. For How Long in Years?	5	*	*	*	3	*	*	*	3	3	*	*	*

*No records were kept by these firms about the related question.

active directing role--the degree of competition is lessened then firms would not be motivated to be more careful about cost. The data as reflected in Table 13 may suggest that cost consciousness is not keen. Perhaps the government's infant industry policy has induced cost laxity through its virtual elimination of foreign competition in the electrical appliance industry. However, the interpretation of Table 13 as indicating cost laxity may be erroneous. It may be more a matter of lack of sophistication in record keeping, in recognition of the importance of hidden costs and the necessity of preventive maintenance--a practice which requires a break with customary maintenance practice. In any event a firm which keeps maintenance records is considered modern in this aspect of its operations.

4.3 Intra-Industry Comparison of Plant Technology, High Talent, and Skilled Manpower as Conceived by the Managers

This section integrates the managers' responses to Items 16, 24 and 27. The other questions in this section will be dealt with briefly (Table 14).

Practically all of the firms maintained their own maintenance personnel. This reveals two things. One is that such technical services were considered vital to the day-to-day operation of the firms. The second is that such services were not easily available in the market.

This may explain the self-reliance of the firms in maintenance.³

Safety standards were generally below what would be termed acceptable in a western industrial concern. This is true of plant and equipment. The hidden costs of industrial accidents are not well recognized. A manager will appear thrifty by refusing to buy modern safety equipment for installation in the plant and use by manpower, because he is unaware of its long-run benefits. Further the relatively low safety standards can exist only because the voluminous safety rules and regulations adopted by the government are poorly enforced so that the direct cost of non-compliance is not large.

Table 14 refers to the managers' opinions of the comparability of different plants in the industry and their own plants with respect to technology, high talent personnel and skilled labor.

Almost 70% of the managers thought that the technology of their firm was comparable. Though the date of

³It is interesting to note that there are quite a few contracting firms located in the vicinity of Abadan Oil refinery whose major function is over-hauling the refining units in the refinery, because the oil company does not carry such specialized personnel on its own payroll. Of course, the oil industry in the Iranian economy is a highly advanced industry, relatively old compared to the appliance industry, gigantic in size and financial strength and with a large proportion of foreign technicians for whom maintenance is a routine function. Many of the maintenance firms obtained their personnel from the oil companies who were eager to have such an indigenous industry.

establishment of different firms was dissimilar, and hence their equipment was of different age, they achieved equality through renovation and replacement. Some managers were more insistent than others in their opinions. In Firm One, (which also ranked highest on the "Organizational Modernity" scale) 56% of the managers, including the top man in the firm, considered their equipment and plants superior to that of the competing firms; the remaining managers of this firm considered their equipment as good as any other in the industry. Fifteen percent of all the managers interviewed conceded that their firms' plant and equipment was inferior to plants and equipments of the competing firms. Notable in this reaction are Firms Five, Nine and Ten, in which half or more of the managers believed that their technology was inferior to the rest of the industry. These are three of the four smallest firms.

The technical knowledgeability of the managers as they conceived it was also the subject of a question. Again, the same pattern, more or less, prevailed: 73% of the managers in Firm One rated their managerial know-how superior to their counterparts in other firms, while 68% of all the managers responded that the managerial capability of their own firm is comparable to the rest of the industry. About 11% could not pass explicit judgments on this question.

The greatest diversity of opinion emerged in rating the comparability of skilled labor, such as foremen,

technicians, mechanics, welders. In this case, a more segregated response emerged, with Firm One leading in terms of skilled labor. Ten of the eleven managers in Firm One rated their workers superior, to the workers in the other 12 firms. Actually, Firm One was attracting talented men from other firms within or outside the industry to its organization and paid higher salary and other pecuniary benefits. It also sent some of its managers to visit the advanced industrial countries to observe the industrial units in the appliance industry. This same firm was a regular participant in management development programs sponsored in the country and is well-known for its leadership in the industry. Eighteen percent from other firms--Three, Four, Six, Nine, Ten and Eleven--rated their skilled laborers inferior to those of other firms.

The availability of skilled labor is a crucial issue; all top managers in the firms were worried about the inelasticity of supply of this particular factor of production. A great deal of pirating prevailed in the industry and it was the subject of constant discussion among the managers of different firms. It was such an urgent problem that the big firms in the industry went so far as to train their future technicians. The biggest firm, Number Two, set up a vocational school for training its future manpower as technicians and foremen. Given the size of the problem and the fact that skilled workers are in short supply, the risk in such a program is that once trained, workers may

leave for other employers who pay higher wages. This risk is real since many managers believe that worker loyalty to the master, which used to characterize the traditional relationship of the employer and worker, is diminishing. But in the long run, this may well be an effective solution to the acute problem facing the firms in this and many other industries in Iran.

4.4 Organizational Design, Employment Practices and Labor Relations

This section reports data summarized in Tables 15 through 17.

4.41 Committees and Planning

One would expect that the larger the firm the greater the use of formal committees. By associating the number of committees with the size of the firms as measured by the number of employees, this hypothesis can easily be tested. The data is shown below:

<u>Firm</u>	<u>No. of Employees</u>	<u>No. of Committees</u>
2	1700	4
1	1440	9
6	1000	0
3	350	4
12	350	3
7	300	0
4	274	0
13	251	0
11	160	2
5	134	0
9	105	5
8	90	1
10	80	2

Table 15. Degree of Use of Organizational Tools and Concepts

Firms	1	2	3	4	5	6	7	8	9	10	11	12	13	
No. of Employees	1440	1700	350	274	134	1000	300	90	105	80	160	350	251	TOTAL
Organizational Tools														
Operational Committees:														
Executive	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Finance	-	1	1	-	-	-	-	-	1	1	-	1	-	5
Investment	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Long Range Planning	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Personnel	1	1	1	-	-	-	-	-	1	-	-	1	-	5
Price Reduction	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Pricing	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Production & Engineering	1	1	1	-	-	-	-	-	1	1	1	1	-	7
Research & Development	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Sales	1	1	1	-	-	-	-	1	1	-	1	-	-	6
Marketing	-	-	-	-	-	-	-	-	1	-	-	-	-	1
TOTAL	9	4	4	-	-	-	-	1	5	2	2	3	-	

The three largest firms have a total of 13 committees; but Firm Six the third largest has none. The three smallest firms have a total of 8 committees; Firm Nine alone having 5, the second largest number of committees in the industry. The three smallest firms have more committees per employee than the three largest. Five firms of thirteen operate without formal committees. Firm One the second largest is exceptional, having 9 committees. It does not have a finance committee, using its executive committee for this function as well. It is the only firm with an executive committee, and in this regard is also unique since it represents the use of consensual action on the most important matters of the firm which in all the other firms are left to the chief executive. As the above table shows the use of committees is not significantly associated with size--the size firms of 300 or more employees show two firms using no committees; the seven smaller firms show three firms without committees.

As Table 15 shows, 7 firms have production and engineering committees, 6 have sales committees and 5 have both personnel and finance committees. As would be expected in an underdeveloped economy where mastery of production is not yet achieved, committees on production and engineering would be the most common. Finance, personnel and sales as basic functions would also be among the most common. However, the specialization of committee function in Firm One is unusual and includes committees

found only in the largest firms in advanced industrial countries; viz: investment, long range planning, pricing and research and development. Firm Nine, one of the smallest, is exceptional not only in the number of committees (5) but has apparently specialized its general sales function into sales and marketing, the only firm of the 13 to do so. Firm Six, the third largest is noteworthy in that it operates without committees. It is also unusual among the larger firms in that two of its nine executives believe that it has an inferior staff and inferior skilled workers. Perhaps this accounts for its lack of committees. But in Firm Nine, one of the smallest, a third of its managers believe that it is inferior in plant and equipment, staff, and skilled workers (Table 14); but it has five committees. Firm Six is Moslem and Firm Nine is Jewish; Firm Six as is shown later has a staff which is one of the most open minded; Firm Nine has a staff which is one of the most dogmatic. It may be that the lack of formal committees in Firm Six is not a sign of lack of modernity, in the sense of adhering to traditional practices--but a belief by the manager in the more experimental free flow informal organization, for in some other respects Firm Six shows more modern attitudes such as social functions of industry, and of government.

Most firms engaged in quarterly or shorter range planning for operational functions, i.e., production and purchasing. Firm One's planning was over a wider range of

functions--investment (i.e., equipment and plant) and as noted it had committees on investment and long range planning including sales and products (note also its R & D committee)). Seven of the thirteen firms had manuals of standard operating procedures, including the three largest firms.

4.42 Employment Practices

The managers perceived quite different things regarding employment practices. The footnote next to the number of responses (in Table 16) indicates that the top manager in each firm--who either owns the firm totally or has a majority share in it--agreed that for employment of new personnel the functional managers shared his authority. But there is an apparent discrepancy between what the top manager considered the situation to be and what the other interviewees perceived it to be. The discrepancy can be explained: the situation depended on whom was to be employed. For higher positions, the top manager exercised authority and his decision was final; whereas for lower levels, other managers had a great deal to say and they seemed to exercise their authority.

But the interesting comment on Table 16 is related to Firms Six, Eight and Eleven. While the authority for employment, no matter whom was to be employed, rested in the top manager, grievance cases were completely referred to the available mechanisms of labor law. In effect, this

Table 16. Managers' Perception of Authority for Employment and Workers Conflict Resolution.

Firm Identity	Authority for Employment Vested in:		For Workers Conflict Resolution Mechanisms:		
	Top Manager	Functional Managers	Resort to Labor-Management Committee	Resort to Labor Law	
	No. of Re ¹	No. of Re ¹	No. of Re ¹	No. of Re ¹	
1	8	11	9	6	
2	10	17	16	13	
3	8	1	7	4	
4	5	-	5	5	
5	7	7	1	6	
6	9	1	-	8	
7	6	8	7	7	
8	5	-	-	4	
9	5	5	-	7	
10	3	-	3	3	
11	7	1	-	6	
12	-	9	9	2	
13	6	-	6	6	
	—	—	—	—	
Total Responses	79	60	63	76	

¹No. of "Re" means number of managers in each firm who responded.

constituted an attempt to discourage workers from initiating any grievances, or if they did so, to simply divert them to the labor law labyrinth, where the worker would have a great deal of trouble proving his points. This is the general case and has been so for many years.⁴

4.43 Labor Relations

As may be seen in Table 17, 35% of individual managers agreed that unions should be allowed to perform their professional responsibilities, whereas 65%, or the majority of the managers, believed that institutionalization of this function was unnecessary. The three largest firms are more tolerant of unions than the rest of the industry; Firm One is again noteworthy in that 80% of its management believe unions should be permitted; 50% of Firm Six and 43% of Firm Two also share this view. Of the smaller firms only Firm Nine shows a majority in favor of unions--2/3 of its management.

On the managers who disagreed with union activity, the following provided specific reasons:

- 19% judged that such activity was totally unnecessary. Most of the data provided by item 29 of the first questionnaire revealed that although in some firms a certain loose federation existed, it had no say in the determination of issues which are

⁴The situation seems to have changed in the last two years thanks to the awareness and direction from the Shah of Iran who has paid tribute to the working class. This has softened government bureaucracy toward the workers and the latter get some support in such cases.

Table 17. Manager's Conception of Union Activity.

Identity	If No, Why:					
	1 Do you believe that Unions Should be Allowed to Function	2 They are Unnecessary	3 They are Disruptive	4 They Become Tools of Vested Interest	5 They are Illiterate	6 They are Immature Professionally
1	Yes					
2	No					
3	8	2	1	2	-	-
4	7	10	2	10	-	-
5	2	7	3	6	-	-
6	3	2	-	1	-	1
7	1	2	1	5	-	1
8	4	6	4	3	1	-
9	1	4	5	4	1	1
10	-	7	-	4	-	2
11	4	5	1	1	-	-
12	-	2	-	-	1	-
13	4	-	1	-	1	-
	1	2	1	6	-	-
	3	3	3	3	-	-
	1	5	-	3	-	-
	-	-	-	-	-	-
	35	19	21	51	4	5

Note: The frequency of "No" responses does not equal the sum of reasons for such response because (1) some managers preferred not to give reason for their "No" response, and (2) other managers gave more than one reason.

commonplace in modern collective bargaining, e.g., wage determination, fringe benefits, holiday, etc.

- 21% considered union activity disruptive to the general work process.
- 51% were deeply worried about a situation where union members become tools of vested interests.
- 4% maintained their antagonism and based it on two prevalent phenomena, one being the high degree of illiteracy among workers and the second being the immaturity of such social organization and the lack of organizing ability on the part of workers.

In addition to specific responses to the question about labor union activity, many managers added that management was doing for the workers what any prospective union would do for them. Then why bother about unionization? Surprisingly, among these managers were some who had received their advanced education in the United States. What they had observed, first hand, was what they interpreted as union encroachment on managerial authority; now they feared similar challenge in their native country. Therefore, a combination of historical events and managerial attitude reinforced by general cultural paternalistic behavior operates to thwart development and growth of labor unions.

4.5 Internal Managerial Policies

This section was related to top managers' decision making behavior, as perceived by the managerial staff in the firms. It reports data from Item 39 of Questionnaire II.

Almost all managers agreed that the top managers in the firms consulted their subordinate before issuing administrative orders. As one manager in Firm Two noted, the "top man has really changed during the last few years." He gave two reasons for the change. One was that the business had really expanded during this period and the other was that the work is too complex to be handled personally. Firm Two has added new lines of products. Major decisions connected with them have to receive support from the managers who will have to carry them out.

Item 39 relates also to pecuniary motivating policy of the managers. The most prevalent policy was an annual salary increment. This is conventional in nature; there is nothing new in this. However, the compensation policy did not end there. Firms One, Two and Three had a special policy whereby they would compensate, generously, the innovative men in their firm. Cost-saving ideas were among the things which were rewarded. The compensation was not only in monetary terms: shared ownership was considered an even more progressive policy, the same as is done in many American firms. A top-ranking manager who had been generously rewarded for his cost-saving ideas stated that the most important value attached to this was not the monetary value of the shares, but the prestige. Again, it

is noted that Firm One was the leading firm in this case and had set the model for this sort of reward system.⁵

As a tool of the internal communication system, most of the firms had installed a "suggestion system," i.e., a clearly-visible box of some sort for the men to drop in suggestions or even complaints. The effectiveness of this mechanism is in doubt. The fact is that there was no committee to open up the boxes in any of the firms under study. If they ever were opened, it would be by the management; this meant that serious complaints about the managers from the rank-and-file workers against their superiors could be dismissed or not seriously treated.

⁵A design engineer in one of the firms had proposed a modification on one of the appliance items. This modification would have saved the company, over a 10-year period, more than \$10,000. The change in design could be made simply and without much cost. The engineer had gone further in that he had made rough calculations about sales in the next 10 years and had come out with the saving figures. Yet his proposal was neglected and a request to meet with the managing director had been denied him. As a result, he had made arrangements to meet the competing firm, and had offered his ideas. He had been approached to move to the latter and the man was considering seriously the possibility of moving to the competing firm, namely Firm One. The managing director of this firm showed the interviewer a weekly intra-firm publication, a sort of newsletter, that magnified every improvement-oriented move by the employees. It explained what the innovation was and how it would be rewarded and illustrated the picture of the employees who had accomplished something which went from graduating from a sponsored program to college graduation, and successive promotion which had been attributed to the success in such programs. The researcher did not observe similar activity in other organization subjects of this research.

4.6 External Managerial Policies

The question in this section was related to the firms which had expatriates on their payroll (Item 40, Questionnaire II). With the exception of Firm Two which had a number of Japanese engineers for TV assembly, no other firms in the industry employed foreign technicians. The Japanese engineers were there as a part of the joint-venture agreement between Firm Two and the Japanese company for supplying the know-how. The relationship was on a short-run basis and, as such, the firm had not developed sophisticated employee procedures for the few expatriates.

4.7 Marketing Policies

Items 41 and 45 provide the data for this section, which are summarized in Table 18. Note that the managers' response to the question about promotion of particular products is unanimous. More than 62% of the managers consider their firms' sales activity extensive whereas the rest consider it moderate: that is, they simply used the standard promotional media and did not heavily advertise on TV.

But the interesting aspect of the marketing function is that 76% of the respondents indicated that the credit sales policy followed by their firm was extensive and 24% believed it was moderate an even greater proportion than sales promotion. Credit sales is a relatively new

Table 18. Firms' Marketing Policies.

Firm															
Marketing	Identity														
Function		1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
1 - Sales Promotion															
- Extensive		11	7	8	3	6	9	-	-	-	-	8	-	4	56
- Moderate		-	11	1	2	-	-	8	5	7	-	-	-	3	37
- None		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		11	18	9	5	6	9	8	5	7		8		7	
4 - Credit Sale															
- Extensive		11	-	7	5	7	8	8	5	-	2	8	8	6	75
- Moderate		-	17	-	-	-	-	-	-	6	1	-	-	-	24
- None		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		11	17	7	5	7	8	8	5	6	3	8	8	6	

instrument of expanding sales particularly in a traditional Moslem country where interest is contrary to religious practice. Sales promotion is also contrary to some managers' thinking in that some believe that if a product is good, it will sell by itself; for example Firm Seven does not promote its product. The firm sells at lower prices than the competing firms, and thus does not feel it expedient to spend on advertising.

Others consider sales promotion expenditure a waste of money. This attitude is not necessarily traditional if based on belief that the effect of advertising in increasing sales is not sufficient to justify its cost. Nevertheless there remains a residual of traditional attitudes toward business such as passivity with respect to promotion. For example, the father of one of the managers never moved from his chamber in the Bazaar even when this location had lost its important commercial value in an expanding city like Tehran. Nevertheless the great majority of managers exclusively promote and grant credit in the sale of their appliance. This may be imitation of U. S. and Japanese practice in the electrical appliance industry, in which advertising and installment sales are common.

4.8 Information Flow

This section reports data from Items 46, 47 and 48, Questionnaire II. These questions are related to (a) the

degree of flow of information as a way of up-dating managers' knowledgeability, (b) internal communication and (c) indirect information which the managers may receive by visiting trade fairs and exhibitions.

As a measure of internal control, most firms installed a regular reporting system whereby production and sales were reported. But this internal reporting system was limited to these two functions. Other aspects such as cost analysis, employment, etc., were not usually published regularly for control or information purposes.

The computer, which has received a great deal of attention as a means of control, was not used by all firms. Firm Three, a conglomerate with appliance items composing one line of product in its operation, went to the extent of employing someone to supervise its computer installation and operation. The top manager in this firm is a highly educated and dynamic man. He had a very low score on the dogmatism scale, which indicates his openness to new ideas and concepts. Of the 13 firms, three (One, Two and Three) indicated that they were using the computer for their payroll and inventory management. The rest depended on standard traditional methods. Simple machines for calculation purposes were used by all but one firm (Ten).

Item 48 dealt with the flow of information between the firms vis-a-vis the economic framework. The firms were generally aware of their competitors, i.e., who they were, their prices, products and relative size. They were

all members of the Chamber of Commerce, Industry and Mines. Some managers were more active in the Chamber affairs than the others, and these were the men who represented the industry in the Chamber which, in turn, influenced government policy for import quotas and import regulations. It should be noted that imported appliance items are prohibitively taxed, and thus their importing is almost impossible. With the exception of the very well-to-do, few individuals can afford to purchase imported items of this nature.

The Chamber of Commerce, Industry and Mines did not supply any professional information. The information contained in its weekly Newsletter was limited to such items as visits of foreign trade delegations, annual import quotas, etc., which were easily available through the daily news media.

4.9 Frequency of Model Change and Innovation

Table 19 depicts the firms' policy in terms of changing models or engaging in research and development activities.

Of 105 managers interviewed, more than 91 responded positively; i.e., there is a function known as product design in all firms but Four and Ten. Further, some firms change their model annually, some bi-annually and still others irregularly. This alone is a significant finding. But even more significant are the data related to number

Table 19. Product Innovation and Development.

Firm Identity	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of Employees	1440	1700	350	274	134	1000	300	90	105	80	160	350	251
Factors:													
Product Design Function in Firm	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
No. of Employees Engaged in Product Design Function	65	18	10	-	3	4	2	2	5	-	2	3	2
Frequency of Model Change if any	a	a	a	c	c	c	b	c	b	-	c	a	b
R & D Operationality in Firm	9	16	3	-	-	4	5	-	5	-	-	3	-
No. of Employees Engaged in R & D Activities:													
-Engineers	3	3	1	-	-	?	1	-	-	-	-	2	1
-Designers	-	15	2	-	-	-	-	-	-	-	-	1	-
-Technicians	4	-	-	-	-	-	4	-	-	-	-	-	-

a. Annual model change
b. Not disclosed
c. Infrequent model change

of employees in research and development activity in the firms and in product design. Here again, but with stronger emphasis, firms (Firm One and Two) which engaged in both these functions with relatively large staffs set the pattern for the other firms to follow.

When a manager in a relatively big firm was asked why he did not establish a research and development department, he responded that "my firm can ignore such fancy activity; for improving our products, we simply follow what X firm does; we do this by being the first customer of their product where we buy an item and dismantle that item to see what are the new features that the new item has and we simply adopt it; why should we get engaged in an expensive activity while this easy avenue is open to us?" He was asked if he could be sued for doing this. He said that he was aware of legal problems, but thanks to the bureaucracy of the Department of Justice, it would be an expensive experience for the plaintiff.

Summary

In this chapter the organizational subject of this research were discussed and factors which determine the organizational modernity--which is the subject of the next chapter--were analyzed.

CHAPTER V

FINDINGS: THE MODERNITY OF THE ORGANIZATIONS

5.1 Determination of Organizational Modernity

As described in a previous chapter the following organizational attributes were used as criteria of modernity of a manufacturing organization:

I. PLANT EVALUATION

1. Production Units (Plant and Equipment)
2. Existence and Application of Safety Standards
3. Systematic Maintenance Procedures (including Cost Records and Analysis)

II. MANPOWER SYSTEM

4. Evaluation of Skilled Manpower
5. Employee Financing Policy (Education, Health and so forth)
6. Apprenticeship Programs
7. Systematic on-the-job Training

III. ORGANIZATION

8. Delegation of Authority for Employment
9. Use of Committee System as a Tool of Modern Management
10. Availability and Application of "Standard Operating Procedures"
11. Staff Consultation Prior to Decision Making
12. Utilizing Computer for Decision Making
13. Systematic External and Internal Information Channels

IV. MANAGEMENT SALES POLICY

14. Degree of Credit Sales
15. Degree of Sales Promotion

V. INNOVATIONAL POLICY

- 16. Frequency of Model Change
- 17. Research and Development

The reasons for adopting these 17 criteria in determining the modernity of the organizations were given in the first chapter. Described below is the method used for scaling these factors in order to arrive at a measurement of the degree of modernity of the thirteen firms considered.

5.2 Quantification of Organizational Modernity Criteria

For each of the seventeen attributes listed above a ranking was determined by the author by personal observation and by means of the relevant questionnaires. A scale was adopted which ranged from 0 to 3. A brief description of the rating method is as follows:

1. If a firm was totally unaware of the method by which a certain function was carried out according to modern managerial standards and procedures, the firm was considered backward and received a zero rating as related to that particular function.
2. If a firm was aware of the method by which a certain function was carried out according to modern management standards, but did not care to indulge in it or apply it to its firm, the firm was considered non-modern in that particular respect and was rated 1 for that particular function.
3. If a firm was aware of certain modern management methods and procedures of carrying out a function and made an attempt to utilize that method, but was not totally successful or had not yet totally relied on that method for any of a host of reasons, then the firm received a rating of 2 for that particular function.
4. If a firm was aware of the modern methods and procedures of carrying out certain functions, was actually applying it in the organization and there

was a consensus among the managers interviewed that the method was applied successfully without much referral to top management, then the firm was rated 3.

Thus for each attribute a firm could range from zero (backward) to 3 (very modern).

For instance, take the case of "standard operating procedures" which has been used as one criterion of modernity in organizations. If the interviewees expressed total ignorance about this index and its availability in their related organizations, then the firm was rated "0" and considered "backward" in that particular aspect of the over-all organizational functions. However, if the interviewees expressed knowledge about that function, that is, they were aware of its existence but they were not utilizing it in their firm, they were given a score of 1 (non-modern). If, on the other hand, it was found that the related organization had compiled a set of procedures in the form of a manual for a particular area such as purchasing which was designed to replace direct instruction from the managerial personnel, then the firm was considered "modern." Whether it received a rating of 2 or 3 depended upon two considerations: the first was the extent to which it avoided managerial intervention--i.e., its completeness in covering routine or normal problems; the second was the extent--that is the number of areas in which "S.O.P." was being used as production, sales, billing, and so forth. If a firm had S.O.P. in more than

one area and they were complete a score of 3 was assigned; otherwise a score of 2.

This method of scoring was applied to 17 managerial functions and the total scores were summed to determine the over-all modernity score of the related organization. It should be noted that this summation of the scores implies that each of the seventeen attributes have equal weights. This overall score is referred to as the "unweighted" modernity score.

5.3 Weighting the Criteria of Modernity

Since different degrees of importance attached to various functions, within each firm it seems reasonable to suppose that a differentially weighted index of modernity should be used rather than the one adopted in which each of the 17 criteria have equal weights. Two possibilities exist: the weights might be determined by the substantive importance of a particular criteria within each firm or the weights might be determined by their discriminating power. The former requires knowledge in fine detail for each firm. For example, systematic on the job training might be important for large firms but not for small firms. The fact that the latter do not have this practice is no indication of lack of modernity. In short what is "modern" practice would depend not only on the nature of the practice itself but on other circumstances such as the need for the particular practice as

justified by some cost-benefit analysis for the particular firm.

The difficulty of weighting each criteria proportionately to or as some function of their discriminatory power is that thirteen firms are a very small sample--and may reflect specific needs of a particular firm. For example the use of computers might only be justified for a large firm--or R & D might be so construed. Thus a particular factor might have high discriminatory power but may simply reflect the particular needs of a particular firm. Some idea of the discriminatory power is shown by Table 20 where the number of 3, 0 and 1 ratings are summed for each factor for the 13 firms. Criteria in which many firms obtain a 0 or 1 score are obviously more discriminating than criteria in which all the firms obtain a rating of 2 or 3. Several ad hoc weightings were tried, and the results correlated with the dogmatism score. As Table 24 shows in one case typical of the others, the weighted index was inferior to the unweighted index insofar as dogmatism of the firm used as an independent variable is concerned. Nevertheless the problem of the construction of carefully developed measurement of organizational modernity is one which future research should concentrate on. The present index used in this research is only the beginning.

5.4 The Organizational Modernity Matrix

Table 20 presents the scores that each of the 13 firms received on each of the 17 factors defining organizational modernity. Table 21 presents the total organizational modernity score for each firm. With a theoretical range of zero to 51, the organizational modernity scale yielded an actual range of 25 to 51. A score of 51 represents an average factor score of three, hence warrants the overall characterization as "very modern."

Firm One, then, emerges not only as the most modern of the 13 firms but the only one that fully warrants the characterization "very modern." Firm Two, with its total modernity score of 45, is not very far behind.

At the other end is Firm Ten, with a total modernity score of 25. This averages out at around 1.5, which warrants a characterization mid-way between "non-modern" and "modern"--perhaps "slightly" or even "somewhat" modern. Firm Four is almost identical, with its total modernity score of 26.

Table 21. Organizations' Modernity Scores.

<u>Firms</u>	<u>Unweighted Modernity Scores</u>
1	51
2	45
3	39
4	26
5	39
6	30
7	29
8	34
9	42
10	25
11	31
12	41
13	34

Summary

In this chapter organizational modernity findings were reported.

In the sixth chapter managerial dogmatism and organizational modernity will be brought together.

CHAPTER VI
FINDINGS: MANAGERIAL DOGMATISM
AND ORGANIZATIONAL MODERNITY

Findings about managers and organizations will be brought together here to provide evidence or lack of it for the main hypothesis of the research.

6.1 Relationship Between Dogmatism Scale and Organizational Modernity

The individual subject's scores on the Dogmatism Scale as well as the mean of managerial dogmatism scores of the respective firm, appear in Table 22. Table 23 presents the mean dogmatism and total modernity score for each firm.

6.2 Regression Analysis

The first analysis to be made here is the determination of a simple regression between total organization modernity scores and the mean dogmatism scores of the firms under study. In this analysis, the organizational modernity score is the dependent variable and the mean of managerial dogmatism scores of the individual firms is the independent variable. The result of the regression analysis is shown in Table 24.

As Table 23 shows, the mean dogmatism score of the firm's managers shows positive correlation with

Table 23. Mean Dogmatism Score and Total Organizational Modernity Score for Each Firm.

Scores Firm Identity	Mean Dogmatism Scores of Firms Managers	Organizational Modernity Scores (Unweighted)	Ranks
1	-10	51	1
2	-	45	2
3	12	39	5
4	-29	26	10
5	-11	39	5
6	-34	30	8
7	-10	29	9
8	-	34	6
9	10	42	3
10	-	25	11
11	-17	31	7
12	-13	41	4
13	-	34	6

Table 24. Regression Analysis With Organizational Modernity and Managerial Dogmatism Means of Firms.

Dependent Variable	Coefficient of Dogmatism	Simple Correlation r	Intercept	F Value	Level of Significance
Unweighted Organizational Criteria	0.26423	.444	.197	37.85990	2.698
					Not Significant at .05 level
Weighted Organizational Criteria	0.88915	.379	.144	154.4554	1.843
					Not Significant at .05 level

Table 25. Correlation Matrix I Between Individual Ordinal Characteristics and Organizational Modernity Criteria.

Organizational Modernity Criteria	Age	Education	Firm Size	Dogmatism
1	-.009	.157	0.080	0.222*
2	-.157	.216*	-.088	0.125
3	-.194*	.272 ^o	-.231*	0.096
4	-.163 ⁺	.287 ^o	-.208*	-.133
5	-.156	.159	-.036	-.062
6	-.055	.089	.046	0.280 ^o
7	.078	.020	.075	0.198*
8	.024	.225*	.081	0.059
9	.050	.056	-.102	0.061
10	.008	.282 ^o	.022	0.024
11	.019	.158	.072	0.276
12	-.164 ⁺	.299 ^o	-.248*	-.031
13	-.152	.129	-.255 ^o	-.003
14	.015	-.125	.134	-.199*
15	-.172 ⁺	.006	-.332 ^o	-.037
16	.052	.083	.143	.150
17	.017	.172 ⁺	-.052	.151

+ Significant at .10 level, two-tailed

* Significant at .05 level, two-tailed

o Significant at .01 level, two-tailed

organizational modernity score: the more dogmatic the firm's managers, the higher the organizational modernity score. However, the relationship is not statistically significant at the .05 level. As the Table 24 shows, the variance in the modernity explained in the unweighted and weighted cases are 19.7% and 14.4% respectively.

6.3 Correlation Between Ordinal Individual Items and the 17 Organizational Modernity Factors Scores

In this section numerous interactions will be examined to see the degree to which organizational modernity is explained by "Individual Dogmatism" scores. The analysis here is necessary to uncover some relationship between important individual attributes and each of the 17 factors which were used in measuring total organizational modernity. Relationships between the individual ordinal characteristics and these 17 factors are presented in the simple Correlation Matrix I.

The analysis in Table 2 is a multiple regression analysis with managerial scores on "Dogmatism Scale" as the dependent variable and five independent variables including age, education, place of education, nature of educational background, and religion of the individual managers.

To facilitate the analysis, it was necessary to dichotomize the scores on certain of the independent variables, and therefore, the following breakdown was used:

<u>Educational Background</u>	<u>Place of Education</u>	<u>Religion</u>
Engineer = 1	Iran = 1	Moslem = 1
Non-Engineer = 2	Elsewhere = 2	Non-Moslem = 2

The multiple regression analysis shows, first of all, that dogmatism increases with age, although the relationship is not very significant. It shows also that dogmatism decreases as years of education increase. It is interesting to note that dogmatism scores are much lower for managers who studied abroad in contrast to those who studied in Iran, perhaps indicating that exposure to a wider horizon and other cultures tends to increase managers' open-mindedness.

The contrast between educational backgrounds of the managers is of interest. If managers have engineering educational backgrounds, they are significantly less dogmatic than managers with an educational background other than engineering.

It seems from the present study, although it is limited to one industry, that men with advanced education have a higher propensity to be open-minded (less dogmatic) than do men with less education. In fact "Education has often been identified as perhaps the most important of the influences moving men away from traditionalism toward

Table 26. Regression Run With Managerial Dogmatism as Dependent Variable.

Independent Variable	Mean	Standard Deviation	Simple Correlation With Dogmatism	Regression Coefficient	Standard Error of Regression Coefficient	t Value
Age x_1	40.74	9.89	.114	.167	.255	.655
Years of Education x_2	14.78	2.96	-.330	-2.449	.937	-2.614
Place of Education x_3	1.23	.42	-.266	-13.941	5.976	-2.333
Educational Field x_4	1.51	.50	.342	9.604	5.549	1.731
Religion x_5	1.38	.49	-.029	-6.578	5.019	-1.310
Dependent: Dogmatism	-8.69	26.96				
Equation: Dogmatism = 32.360 = (.167 x_1 -2.2449 x_2 -13.941 x_3 +9.604 x_4 -6.598 x_5)						

Multiple Correlation " R " = .467
Coefficient of Determination R^2 = .218
Standard Error of Estimate 24.433

F Value 5.528 (Significant at .01 level)

Significances of individual independent variables:

Intercept	: 32.360
Age	: Not significant at .05 level, two-tailed
Years of Education	: Significant at .01 level, two-tailed
Place of Education	: Significant at .05 level, two-tailed
Educational Field	: Significant at .01 level, two-tailed
Religion	: Not significant at .05 level, two-tailed

modernity in developing countries."¹ Furthermore, "it turns out that every additional year of school produces three times as much increment in one's modernization score as does a year in the factory."²

Summary

This chapter reported results of interrelating organizational modernity criteria, dogmatism scores and managers' ordinally scaled attributes. The following chapter will conclude the study and will elaborate on some of the issues which could be subjects of further research in this area.

¹Alex Inkeles, "Making Men Modern: On the Causes and Consequences of Individual Change in Six Developing Countries," American Journal of Sociology, 75(1969), p. 212.

²Ibid., p. 216.

CHAPTER VII

SUMMARY AND CONCLUSION

This chapter is composed of three parts. The first part summarizes the entire study and brings different viewpoints and conclusions together. The second part discusses some limitations of the study, and the third part suggests areas and subjects suitable for future research.

7.1 Summary

The main purpose of the research has been to test the following hypothesis:

If managers working in an organization are modern by the accepted standards of psychological modernity literature, then the organization that they manage should be modern according to the accepted standards of organizational modernity literature, or more specifically:

A negative correlation exists between managerial scores on the Dogmatism Scale and organizational scores on modernization measures.

As its measure of individual modernity, the study used Rokeach's Dogmatism Scale (Form E) and applied it to 105 managers drawn from 13 firms representing over 90% of the Iranian appliance industry.

The main finding of the study is negative, i.e., the hypothesis fails to receive support. Other findings are as follows:

1. There is a positive correlation between dogmatism and age; older managers are less open-minded, but this is very weak and not significant at the .05 level.
2. There is a negative correlation between years of education and dogmatism; the more educated a manager, the less dogmatic he is. This is significant at the .01 level.
3. The non-Moslem managers who comprised about 25% of the managerial personnel appear to be more open-minded than the Moslem managers. But this also is merely suggested by the statistical results which are not significant at the .05 level.
4. There is significant correlation between dogmatism and the place of education. Managers who were educated in the West are less dogmatic than those educated in Iran (.05 level).
5. Engineers are less dogmatic than other professionals in the industry (.01 level).

Perhaps the most significant positive finding of this research is the correlation of education with more criteria of organizational modernity than any other factor (See Correlation Matrix I) perhaps due to the impact of being educated abroad. It is surprising that only one of the organization modernity criteria shows a significant negative correlation (as would be called for by the hypothesis). This item is degree of credit sales. Only five other negative correlations were found between dogmatism score

and modernity criteria, none of which were significant at the .10 level. The remaining 11 factors show positive correlations, three of which were significant (.05 and .01 levels). The dogmatism scale is thus not very significantly related to organizational modernity as measured in this research. Education, as measured by the amount, the place and the field is a much better explanatory variable than dogmatism score for the firm's modernity rating. Why should education as measured show significant negative correlation with dogmatism score, but the latter show little or positive correlation with the firm's modernity score?

The explanation could be that those who have higher education and who go abroad for study have a veneer of modernity and that they are thrown into an organization, when they return, which is imbedded in a basically traditional society. Modernism in the area of thinking cannot break the basic and solid social habits which are traditionally bound.¹

A contributory factor in this case is that there is no motivation for the managers to change their style. In fact, why should they change when there is no relationship

¹Here is an immensely interesting incident which partly clarifies the contradictions between mental framework on one hand and actual attitude on the other hand--not because it represents a general managerial behavior and belief system, which it does not, but because it is illustrative of discrepancy between "modernity" in thinking and "traditionality" in acting. During an interview with a deputy manager, whose dogmatic score was -21 (relatively modern), several times subordinates entered the room and after greeting asked questions and directives about what

between their operations and the profitability of their respective organizations? In this industry, the profitability of operations has very little relationship with their modernity. What contributes to profitability is production techniques and equipment and as Table 20 shows all firms received a rating of 2 or 3 in this aspect. This type of technology transfer is a mere imitation of production techniques in the hope of producing and making profit.

On the other hand, if there existed a real functional relationship between profitability and other aspects of modernity, traditional views could be overridden. But to the extent that these two phenomena--i.e., organizational modernity and profitability--have no functional relationship because of the oligopolistic nature of the industry which is reinforced by the prevailing regulations concerning the entry into the industry by new firms, it is unlikely that traditional views can be overcome. The top manager's main concern is to run the organization and make

seemed routine affairs. The interviewer had noticed that the interviewee had failed to respond to subordinates greeting, which is a sin, and cordially asked the reason. The deputy manager responded, politely, that at times he even completely ignores the workers who greeted him not unintentionally, but intentionally--and this he does for the good and welfare of the firm. Because, he thought, it was through such ignoring of the workers that his status was maintained and discipline enforced. It was important to keep some distance from workers in order to manage the factory well.

a handsome profit. He is traditional when compared with Western style, but he effectively runs the organization. Generally in Western economic organizations, it is necessary to be modern and act modern, otherwise the manager may not be effective in his interpersonal relationships with his subordinates. In the Iranian firm, the manager--despite his thinking and belief system, which is modern--feels that he should act in a traditional manner or else his orders will not be carried out and his status will be diminished and undermined.

Therefore, one explanation for the positive correlation between "Organizational Modernity" scores and "Dogmatism" scores may be that the manager could not act completely "modern" because of the drag of the traditional society surrounding his organization and the fear that behaving in a modern manner may undermine his authority and power and thus render him ineffective in running his organization.

Thus only where modernity criteria influenced the profitability of the firm would we expect that these practices would over-ride the traditional habits and views which dominate the society. And these profitable aspects of modernity must also be profitable in the traditional society--i.e., capable of being exercised without negative effects, such as social sanctions which might affect sales or attitudes of the labor force.

A final note is in order about one of the most important findings, namely, the relationship between education and "Dogmatism" scores. It seems appropriate to suggest that quite likely an effective weapon for widespread modernization is massive education--not just veneer, but intensive education and introduction of western science and technology and adaptable cultural elements.² It seems that the burden of a breakthrough on traditionalism is on education and that it should come in a massive, dedicated and comprehensive form.

7.2 Limitations of the Study

The limitations of a study such as this are numerous. One of the most serious is that the sample may not be representative of the managerial class in Iranian society. Managers in this industry have had more exposure to Western views and technology than may be the general case. It is unlikely that managers in such fields as textiles, carpet weaving or similar activities are as open-minded.

Additionally, a relatively large segment of the managers in the appliance industry were educated abroad--

²In his massive attack on traditionalism in Turkey, Kemal Atta Turk got rid of the church as a bastion of power and influence and as a factor in perpetuating traditionalism. He changed the Turkish alphabet to Latin to facilitate the literacy process, and he secularized many functions previously performed by the priests. It seems that finally the Shah of Iran is moving in that direction, the instrument of which seems to be literacy Corps and emerging compulsory education.

probably higher than in other industries. In fact, it is possible that managers in older industries may be quite dogmatic relative to the appliance industry managers who, in general, tended towards open-mindedness, except, e.g., for managerial personnel in the oil industry in Iran. These managers have had long and fruitful contacts with their Western counterparts primarily because of the requirement and nature of technology and the degree of sophistication of this technology applied to the oil industry. Therefore, replication of some of this research may produce a different result in a different environment. The results should not be generalized to Iranian society.

7.3 Suggestions for Future Research

A society which is experiencing rapid economic growth and is on the threshold of industrialization can provide many new topics for research. A more fertile ground would be the environmental conditions, the degree of monopolistic structure of the industry, the regulations concerning the granting of licenses to prospective firms, the factors within the business community which tend to perpetuate the oligopolistic nature of the markets, the emerging conglomerations in the Iranian industry and business, the coalition between highly influential groups and some traditional business men, the nature of interlocking directorship and the interrelationship of the political and business sectors

in an emerging society. All of these could be investigated in terms of the general problem of modernization.

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APPENDICES

APPENDIX 1

**QUESTIONNAIRE NO. 1 USED IN STUDYING
THE PROFILE OF IRANIAN MANAGERIAL STAFF
IN THE ELECTRICAL APPLIANCE INDUSTRY.**

APPENDIX 1

QUESTIONNAIRE NO. 1 USED IN STUDYING
THE PROFILE OF IRANIAN MANAGERIAL STAFF
IN THE ELECTRICAL APPLIANCE INDUSTRY.

I. Personal Data

- 1) How old is He/She _____
- 2) Sex: a) Male _____
b) Female _____
- 3) Marital Status:
a) Married _____
b) Single _____
c) Divorced _____
If (a),
d) No. of children _____
- 4) Status of Close Relatives
- | | <u>Alive</u> | <u>Deceased</u> |
|--------------|--------------|-----------------|
| a) Father | _____ | _____ |
| b) Mother | _____ | _____ |
| c) Brother/s | _____ | _____ |
| d) Sister/s | _____ | _____ |
| e) Uncle/s | _____ | _____ |
| f) Aunt/s | _____ | _____ |

II. Educational Background

- 5) Years at School:
a) Up to college _____
b) College _____
- If College:
- 6) Where did you go to college:
a) Europe (specify) _____
b) United States of America _____
c) Iran _____
d) Other _____

- 7) What is your Field of Concentration:
- a) Business (specify) _____
 - b) Economics _____
 - c) Social Science (specify) _____
 - d) Engineering (specify) _____
 - e) Law _____
 - f) Mathematics _____
 - g) Other _____
- 8) Did you continue for Specialized Courses:
- a) Yes _____
 - b) No _____
- If Yes:
- 9) How many Fields and Courses: _____
- 10) Do you intend to pursue any program in the near future:
- a) Yes _____
 - b) No _____
- 11) Which foreign language do you know:
- a) None _____
 - b) English _____
 - c) French _____
 - d) German _____
 - e) Other (specify) _____
 - f) Combination of _____
- 12) Have you travelled abroad:
- a) Yes _____
 - b) No _____
- 13) Which country have you been to:
- a) European (specify) _____
 - b) U. S. A. _____
 - c) Other/s _____
- 14) Have you lived abroad:
- a) Yes _____
 - b) No _____
- If yes:
- 15) How many years were you there _____
- 16) In what capacity:
- a) As a student on my own account _____
 - b) As a student on:
 - (1) Government scholarship _____
 - (2) This company's scholarship _____
 - (3) Other firm's scholarship _____
 - (4) Other institution's scholarship _____

17) How frequently do you travel abroad: _____

III. Socio-economic, ethnic and religious background

18) Occupation of the father:

- a) Small merchant _____
- b) Armed forces officer _____
- c) Engineer _____
- d) Doctor _____
- e) Government employee _____
- f) Farmer _____
- g) Skilled laborer _____
- h) Teacher _____
- i) Politician _____
- j) Priest _____
- k) Other _____

19) Years of education of father: _____

20) What was your socio-economic status when you began working:

- a) Upper-upper _____
- b) Upper-middle _____
- c) Middle _____
- d) Upper-lower _____
- e) Lower _____

21) What is your socio-economic status now:

- a) Upper-upper _____
- b) Upper-middle _____
- c) Middle _____
- d) Upper-lower _____
- e) Lower _____

22) What is your religion:

- a) Islam:
 - (1) Suni _____
 - (2) Shiate _____
- b) Christian (specify) _____
- c) Jewish _____
- d) Zoroastrian _____
- e) Other _____

23) How do you consider your religion orientation:

- a) Strong _____
- b) Moderate _____
- c) Weak _____

24) Do you consider yourself belonging to a specific Tribe:

- a) Yes (specify) _____
- b) No _____

IV. Mobility Patterns

- 25) Who founded the firm:
- a) Myself _____
 - b) My father _____
 - c) My brother _____
 - d) My relative (specify) _____
 - e) My boss _____
 - f) Other (specify) _____
- 26) Membership in Professional Organizations:
- a) Engineers Society _____
 - b) There is no Society for my profession _____
 - c) Other (specify) _____
- 27) Are you active in Politics:
- a) Yes _____
 - b) No _____
- 28) Employment history
- a) Began work in same firm in year _____
 - (1) Title at beginning _____
 - (2) Title now _____ [If same as (1),
Why: _____]
 - (3) Years of service _____
 - b) Began work in other private firms:
 - (1) Competitor of this firm _____
 - (2) Supplier of this firm _____
 - (3) Customer of this firm _____
 - (4) Years of Service _____
 - c) Began work in government:
 - (1) Government corporation _____
 - (2) Other agency (specify) _____
 - (3) Years of service _____
 - d) Previously self-employed _____ (years)
- 29) What do you think are the constituents of success:
- a) Promotion depends on one's personal professional achievements _____
 - b) Promotion depends on one's education _____
 - c) Promotion depends on one's (a) and (b) _____
 - d) Promotion depends on one's relationship with the boss _____
 - e) Other _____

V. Motivation to enter Business

- 30) Initial motivation as to this particular firm:
- a) Notice opportunity to establish firm _____
 - b) Bought the firm _____

- c) Inherited the firm _____
 d) Other _____
- 31) Motives that seem to motivate you most as a businessman: Rate in order of importance to manager as: 1, 2, ...
 - Achievement motive _____
 - Self independence motive _____
 - Income _____
 - Help to society _____
 - Other _____
- 32) Additional motivation to continue in this business:
 a) Why this firm:
 (1) Excellent secure income opportunity _____
 (2) Knowledge of the art _____
 (3) Because of great potential growth of firm _____
 (4) Have no other alternative as good as this _____
 (5) I like it _____
 (6) Other _____
 b) Had/was in other business and shifted to this _____
- 33) Have you considered other careers:
 a) Such as:
 (1) In other business (identity) _____
 (2) In government _____
 (3) Other _____
 b) If yes in (a), why did you not follow these other careers:
 (1) Not enough attractive opportunity _____
 (2) Not as good as my present job _____
 (3) Luck (sheer chance of timing and opportunity) _____
 (4) Other _____
- 34) If you become sick who can handle your job as well as yourself on a long term basis:
 a) My deputy _____
 b) None of the employees in the firm _____
 c) Other _____
- 35) Do you consider it useful to own more than one firm:
 a) Yes _____
 b) No _____
- 36) Do you own other companies:
 a) Yes _____
 b) No _____

If yes:

- 37) How many companies do you own:
 a) Partly owned _____
 b) Totally owned _____
- 38) What is/are the Co/Co.s engaged in as compared to this firm:
 a) Producing complementary products _____
 b) Supplying the co.'s product and/or retirement _____
 c) They are this co.'s customer _____
 d) They are a part of a conglomerate _____
 e) Other _____

If No to question No. 36:

- 39) Can you operate more than one firm:
 a) Yes _____
 b) No _____

VI. Perception of the firm

- 40) How do you consider your firm's success compared to other firms in this industry:
 a) Very successful _____
 b) Moderately successful _____
 c) Not successful _____
 d) Other _____
- 41) What are the criteria according to which you judge as above (rate in order of importance as: 1, 2, 3, ...)
 - Sale _____
 - Expansion _____
 - Considerable amount of retained earnings _____
 - Other _____
- 42) What are the constituents of success:
 (rate in order of importance as: 1, 2, 3,...)
 - Being able to excel and succeed _____
 - Considerable amount of profit _____
 - Considerable expansion in firm's operations _____
 - Other _____
- 43) What do you think are reasons for above (question No. 42): (rate in order of importance as: 1, 2, 3, ...)
 a) Internal factors:
 - Efficient management _____
 - Financial strength _____
 - Sound employee relations _____
 - Other _____

b) External factors:

- Constant increase in consumer demand _____
- Aggressive marketing _____
- Effective public relations _____
- Government tariff protection _____
- Other _____

VII. Manager's Conception of his role in Iranian Society

44) What do you conceive of your role in society:
(rate in order of importance as: 1, 2, 3, ...)

- To provide income for my family _____
- To provide jobs for people _____
- To contribute to the industrialization of the country _____
- Other _____

45) Who do you think should provide employment for people:

- a) Government _____
- b) Private sector _____
- c) A reasonable combination of (a) & (b) _____
- d) Unemployed person himself _____
- e) Other _____

46) If many people are unemployed who do you think is primarily responsible for this:

- a) Unemployed themselves _____
- b) Government _____
- c) Private sector _____
- d) Foreign competition _____
- e) Political and social institutions _____
- f) Other _____

VIII. Manager's Conception of the Iranian Government Role

47) As related to this industry: (rate in order of importance as: 1, 2, 3, ...)

- Government should provide protection from foreign competition _____
- Government should provide adequate and efficient technical assistance _____
- Government should provide financial and monetary incentives for industry to expand _____
- Government should prevent disruption of work _____
- Other _____

- 48) As related to economy: (rate in order of importance as: 1, 2, 3, ...)
- Government should provide employment opportunities _____
 - Government should provide political and economic stability _____
 - Government should abstain from any act that may increase production cost unjustifiably _____
 - Government should contribute more funds to W.S.I.O. _____
 - Government should limits its operations and let private enterprise do most of operations and provide employment _____
 - Other _____
- 49) How do you believe should the government provide funds for building hospitals, schools and other social institutions:
- a) Primarily through income tax _____
 - b) Primarily through sales tax, and/or customs tariff _____
 - c) Primarily through reducing military outlay _____
 - d) Other (specify) _____

IX. Manager's Conception of Ownership and Workplace

- 50) If a man owns a firm, should he have the right to dismiss any employee:
- a) Yes _____
 - b) No _____
- If yes:
- 51) Why do you think he has such right:
- a) Because he provides the necessary means _____
 - b) Because his judgement is best _____
 - c) Other (specify) _____
- If No to Question No. 50:
- 52) Why do you think he does not have such right:
- a) Because it is inhumane _____
 - b) Because legal framework limits his action _____
 - c) Because his judgement may be subjective _____
 - d) Other _____
- 53) Do you think all workers should be provided with insurance such as accident, old age, sickness, physical disability, etc.:
- a) Yes _____
 - b) No _____

If Yes:

- 54) Who should defray the cost:
- a) Government _____
 - b) Relevant employer _____
 - c) Worker himself _____
 - d) A reasonable combination of
 - (1) a & b _____
 - (2) a & c _____
 - (3) b & c _____
 - (4) a, b & c _____
 - e) If (d) who should pay the most _____
 - f) Other _____

If No to Question No. 53:

- 55) Why do you think so: _____
- 56) When hiring an employee what do you consider most important:
- a) His religion _____
 - b) His relationship to top manager _____
 - c) Whether he has relatives in the firm _____
 - d) Ability and professional evidence _____
 - e) Other _____
- 57) Do you believe labor unions should be allowed to function:
- a) Yes _____
 - b) No _____
- 58) Why do you believe they should not be allowed to function:
- a) They are unnecessary _____
 - b) They are disruptive _____
 - c) They become tools of vested interests _____
 - d) Other _____
- 59) Do you believe there should be provisions in labor law for workers to abstain from supplying their services for justifiable reasons:
- a) Yes _____
 - b) No _____
- If No:
- 60) Why do you believe there should be no such provision: _____
- 61) Do you believe government should encourage competition in industries where it may have positive welfare effect:
- a) Yes _____
 - b) No _____

If No:

62) Why do you think so: _____

63) Other possible comments: _____

APPENDIX 2

QUESTIONNAIRE NO. 2 USED IN STUDYING

ORGANIZATION AND ADMINISTRATION IN

THE IRANIAN ELECTRICAL APPLIANCE INDUSTRY

APPENDIX 2

QUESTIONNAIRE NO. 2 USED IN STUDYING
ORGANIZATION AND ADMINISTRATION IN
THE IRANIAN ELECTRICAL APPLIANCE INDUSTRY

Name of the firm _____ Date _____

Name of the interviewee _____

Position (Title) of the interviewee _____

I. Background Information

1) When was the firm established _____

2) Form of Ownership:	<u>at inception</u>	<u>now</u>
a) Single proprietorship	_____	_____
b) Partnership	_____	_____
c) Corporation	_____	_____

3) If ownership form in (2) different, why:
a) Expansion _____
b) Other _____

4) Number of employees of the firm:
a) At the beginning _____
b) Now _____

5) Number of different products produced/producing:
a) At the beginning _____
b) Now _____

II. State of the Art

6) How does manager evaluate his plants and equipment compared to American, European, or Japanese firm in same industry:
a) As good as theirs _____
b) Better than theirs _____
c) Not as good as theirs _____
d) Other _____

- 7) How does manager evaluate his raw materials compared to American, European, or Japanese firms in same industry:
- a) As good as theirs _____
 - b) Better than theirs _____
 - c) Not as good as theirs _____
 - d) Other _____
- 8) State of equipment:
- a) Identify most important equipment
 - (1) In the production line _____
 - (2) In transportation _____
 - (3) Office _____
 - (4) Other _____
 - b) Age of the most important equipment _____
- 9) What is the origin of the most important equipment:
- a) Germany _____
 - b) Japan _____
 - c) U. K. _____
 - d) U. S. A. _____
 - e) Other _____
- 10) Maintenance services of the equipment:
- a) Has much difficulty _____
 - b) Has little difficulty _____
 - c) Has no difficulty _____
 - d) Other _____
- 11) How is maintenance of equipment performed:
- a) Keeps full-time maintenance crew for all electrical and mechanical maintenance which is done routinely according to a time schedule _____
 - b) Hires maintenance service for normal preventive maintenance _____
 - c) Hires maintenance when equipment breaks down _____
 - d) Keeps stock of critical replacement parts _____
 - e) Buys parts when needed (i.e., machine breaks down) _____
 - f) Other _____
- 12) Maintenance cost and record:
- a) What is the percentage of down time of equipment due to repair and maintenance (i.e., equipment failure) _____
 - b) Are records kept of maintenance cost by machine:
 - (1) Yes _____
 - (2) No _____
 - c) If Yes, for how many years _____
 - d) Other _____

- 13) Process and Plant design:
- a) Plant design was based upon product and process flow _____
 - b) Plant was acquired and product flow and layout adjusted to plant _____
 - c) Other _____
- 14) If most important equipment is/are relatively old why doesn't manager procure better equipment:
- a) Because of no need for them _____
 - b) Because of no serious competition _____
 - c) Because of unavailability of funds _____
 - d) Other _____

III. State of the Plant Structure

- 15) Process, plant & product
- a) How old is plant structure _____
 - b) How is it maintained: _____
 - (1) Keeps normal plant maintenance force which does all routine maintenance _____
 - (2) Hires maintenance service when needed _____
 - c) Other _____
- 16) How does manager rate Company's plant and equipment with company's competitors:
- a) As good as competitor's _____
 - b) Better than competitor's _____
 - c) Not as good as competitor's _____
 - d) Other _____
- 17) Plant safety and equipment safety:
- a) Safety standard well observed _____
 - b) Safety standard moderately observed _____
 - c) Safety standard not observed _____
 - d) Other _____

IV. Administrative & Technical Staff and Skilled Workers

- 18) Distribution of employees in terms of occupational engagement:
- a) Number of technical staff (Eng. & Accts.) _____
 - b) Number of management staff _____
- 19) Number of technical and managerial staff with college degrees:
- a) Technical staff _____
 - b) Managerial _____
- 20) How many years of experience are required of each technical and managerial staff: _____
- 21) Number of foremen in the firm: _____

- 22) How many years of experience required of foremen: _____
- 23) What is the average length of employment of skilled workers with the firm: _____
- 24) In general, how does manager rate company's technical and administrative staff compared to company's competitors:
- a) As good as competitor's _____
 - b) Better than competitor's _____
 - c) Not as good as competitor's _____
 - d) Other _____
- 25) If (a) and (b) in Question 24, why:
- a) More training, more experience, more education _____
 - b) More training, more experience, more education _____
 - c) Other _____
- 26) If (c) in Question No. 24, what is he doing to remedy the situation:
- a) On the job training _____
 - b) Evening course _____
 - c) Other _____
- 27) How does manager rate company's skilled workers:
- a) As good as competitor's _____
 - b) Better than competitor's _____
 - c) Not as good as competitor's _____
 - d) Other _____

V. Employment Practices

- 28) Labor practices:
- a) Is there a union in the firm:
 - (1) Yes _____
 - (2) No _____

If Yes:
 - b) Is union active:
 - (1) Yes _____
 - (2) No _____

If No:
 - c) If there is no union, why: _____

29) General fringe benefits:

- a) Does he finance employees' education: _____
 Yes (1) Staff members _____
 (2) Workers _____
 (3) Staff and workers _____
- b) Discourages workers' continued education: _____
- c) Does he have an operative hospitalization scheme:
 (1) Yes _____
 (2) No _____
- If No:
- d) Why:
 (1) Workers' social insurance takes care of them _____
 (2) Employees are self-supporting _____
 (3) Other _____
- e) Is there an operative loan scheme:
 (1) Yes _____
 (2) No _____
- f) Do employees have a tea-break:
 (1) Yes _____
 (2) No _____

30) Staff hiring practice:

- a) Authority for employment vested in:
 (1) Top manager _____
 (2) Functional department _____
 (3) Other _____
- b) When employing new personnel:
 (1) Relationship with top manager most important _____
 (2) Education and skills of the new employee most important _____
 (3) Other _____

31) Workers grievance solution:

- a) Labor-management committee resolves conflict _____
- b) Labor law resolves conflict _____
- c) Other _____

32) Worker's training program:

- a) Is there an apprenticeship scheme:
 (1) Yes _____
 (2) No _____
- b) Is there a systematic training program for workers:
 (1) Yes _____
 (2) No _____
- c) Does management send workers to foreign countries for training purposes:
 (1) Yes _____
 (2) No _____

33) Organizational design:

a) Are there people with organizational titles:

(1) Yes _____

(2) No _____

b) Are duties really defined:

(1) Yes _____

(2) No _____

c) Are there staff assistance to the boss:

(1) Yes _____

(2) No _____

d) Are there operational committees:

(1) Yes _____

(2) No _____

If Yes:

e) What committees are there:

(1) Personnel _____

(2) Finance _____

(3) Production _____

(4) Sale _____

(5) Other _____

f) Does committee meet:

(1) Regularly _____

(2) As occasions demand _____

34) Availability of staff assistance:

a) Does manager depend on staff assistance:

(1) Extensive _____

(2) Moderate _____

(3) Not at all _____

b) Staff availability to people with organizational title:

(1) Extensive _____

(2) Moderate _____

(3) Not at all _____

c) Number of staff assistants: _____

d) Staff assistants services used in departments: _____

35) Organizational structure:

a) Are there written "standard operations procedures":

(1) Yes _____

(2) No _____

If No:

b) How are operations carried out:

(1) According to daily instruction from manager _____

(2) According to functional departments authority and responsibility _____

(3) Other _____

36) Crucial subordinate:

- a) Whom does the manager believe is most important to him:
 - (1) His assistant _____
 - (2) Other (specify) _____
- b) Who is the man in terms of relationship:
 - (1) Brother _____
 - (2) Other (specify) _____

37) Are there periodic production plans according to following:

- a) Weekly _____
- b) Monthly _____
- c) Quarterly _____
- d) Other _____

VI. Internal Managerial Policies

38) Manager's administrative policies:

- a) Directs and issues orders without consulting subordinates as a general policy _____
- b) Consults subordinates before ordering _____
- c) Motivates employees to take initiative through:
 - (1) Committee system _____
 - (2) Pays bonus in addition to salary _____
 - (3) Annual salary increment _____
 - (4) Other _____
- d) Encourages employees to think and recommend through:
 - (1) Suggestion system _____
 - (2) Direct communication to top manager _____
 - (3) Other _____

VII. External Managerial Policies

39) Employment of expatriates:

- a) Does he employ foreign experts:
 - (1) Yes _____
 - (2) No _____

If Yes:

- b) Is employment because of:
 - (1) Partnership _____
 - (2) Joint venture _____
 - (3) For technical assistance only _____
 - (4) Other _____
- c) Does he utilize indigenous consultancy services:
 - (1) Yes _____
 - (2) No _____
- d) Why: _____

VIII. Marketing Policies

40) Sales promotion:

- a) Extensive sales promotion _____
- b) Moderate sales promotion _____
- c) No sales promotion _____

41) Sales management:

- a) Is there a sales manager
 - (1) Yes _____
 - (2) No _____
- b) What is top sales officer's rank in organization:
 - (1) Equal to production manager _____
 - (2) Below production manager _____
 - (3) Other _____
- c) Does the firm have its own sales force:
 - (1) Yes _____
 - (2) No _____

If No:

- d) How sales are made:
 - (1) To commissioners _____
 - (2) Other _____

42) Are there sales plans according to the following:

- a) Weekly _____
- b) Monthly _____
- c) Quarterly _____
- d) Other _____

43) Are there systematic raw material purchasing plans:

- a) Weekly _____
- b) Monthly _____
- c) Quarterly _____
- d) Other _____

44) Credit sales policies:

- a) Extensive credit sales _____
- b) Moderate credit sales _____
- c) Strictly cash sales _____

IX. Information Flow System

45) General information flow:

- a) Does he attend trade fairs in foreign countries:
 - (1) Yes _____
 - (2) No _____
- b) Does he subscribe to foreign techno-managerial journals:
 - (1) Yes _____
 - (2) No _____

If Yes, how many and what country of origin:

c) Annual business visits to foreign countries:

- (1) Yes _____
 (2) No _____

d) Does he use foreign consultants:

- (1) Yes _____
 (2) No _____

If Yes:

e) Does he have any preference in terms of nationality:

- (1) Americans _____
 (2) British _____
 (3) French _____
 (4) Japanese _____
 (5) Other _____

f) In what area are consultants mostly used:

- (1) Production _____
 (2) Advertising _____
 (3) Accounting and Finance _____
 (4) Engineering _____
 (5) Economics _____
 (6) Management _____
 (7) Other _____

46) Internal information flow:

a) Regular reporting system:

- (1) Production _____
 (2) Sales _____
 (3) Employment _____
 (4) Cost analysis _____
 (5) Other _____

b) Regular management seminar: _____

c) Does the firm utilize any computer:

- (1) Yes _____
 (2) No _____

If Yes:

d) What kind of computer is utilized:

- (1) Simple desk computer _____
 (2) Medium electric computer _____
 (3) Advanced electric computer _____
 (4) Other _____

47) External information flow:

a) Officer's reports on the state of economy _____

b) Officer's report on the state of industry _____

c) Does firm know who competitors are:

- (1) Yes _____
 (2) No _____

d) Is there a trade association:

- (1) Yes _____
 (2) No _____

If Yes:

- e) Position of the firm in the trade association:
 (1) Firm enjoys leading position _____
 (2) Other _____

- f) Does trade association supply information:
 (1) Yes _____
 (2) No _____

If Yes:

- g) Nature of information:
 (1) Generally insignificant _____
 (2) Technical information _____
 (3) Inter-firm non-technical information _____
 (4) Other _____

X. Product Innovation & Development

- 48) Frequency in model innovation:
 a) Is there a formal structure whose function is product design:
 (1) Yes _____
 (2) No _____

If Yes:

- b) How many people are active in such unit: _____
 c) How important are they in eyes of management: _____
 d) Other _____

- 49) Does the firm change models:
 a) Yes _____
 b) No _____

If Yes:

- 50) Frequency in changing model: _____

- 51) Does firm discontinue products:
 (1) Yes _____
 (2) No _____

If Yes:

- 52) How many products have been discontinued: _____

XI. Research and Development Activities

- 53) Is there an operational R & D unit in the firm:
 a) Yes _____
 b) No _____

If Yes:

54) How extensive is it:

- a) Number of engineers _____
- b) Number of designers _____
- c) Other _____

55) Any further comment by the manager:

APPENDIX 3

DOGMATISM SCALE

APPENDIX 3

DOGMATISM SCALE

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1 I agree a little	-1 I disagree a little
+2 I agree on the whole	-2 I disagree on the whole
+3 I agree very much	-3 I disagree very much

- 1) _____ The United States and Russia have just about nothing in common.
- 2) _____ The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.
- 3) _____ Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.
- 4) _____ It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.
- 5) _____ Man on his own is a helpless and miserable creature.
- 6) _____ Fundamentally the world we live in is a pretty lonesome place.

- 7) _____ Most people just don't give a 'damn' for others.
- 8) _____ I'd like it if I could find someone who would tell me how to solve my personal problems.
- 9) _____ It is only natural for a person to be rather fearful of the future.
- 10) _____ There is so much to be done and so little time to do it in.
- 11) _____ Once I get wound up in a heated discussion I just can't stop.
- 12) _____ In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.
- 13) _____ In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.
- 14) _____ It is better to be a dead hero than a live coward.
- 15) _____ While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein or Beethoven or Shakespeare.
- 16) _____ The main thing in life is for a person to want to do something important.
- 17) _____ If given a chance, I would do something of great benefit to the world.
- 18) _____ In the history of mankind there has probably been just a handful of great thinkers.
- 19) _____ There are a number of people I have come to hate because of the things they stand for.
- 20) _____ A man who does not believe in some great cause has not really lived.
- 21) _____ It is only when a person devotes himself to an ideal or cause that life becomes meaningful.
- 22) _____ Of all the different philosophies which exist in the world there is probably only one which is correct.
- 23) _____ A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.

- 24) _____ To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.
- 25) _____ When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.
- 26) _____ In times like these, a person must be pretty selfish if he considers primarily his own happiness.
- 27) _____ The worst crime a person could commit is to attack publicly the people who believe in the same things he does.
- 28) _____ In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp, than by those in the opposing camp.
- 29) _____ A group which tolerates too much difference of opinion among its own members cannot exist for long.
- 30) _____ There are two kinds of people in this world; those who are for the truth and those who are against the truth.
- 31) _____ My blood boils whenever a person stubbornly refuses to admit he's wrong.
- 32) _____ A person who thinks primarily of his own happiness is beneath contempt.
- 33) _____ Most of the ideas which get printed nowadays aren't worth the paper they are printed on.
- 34) _____ In this complicated world of ours the only way we can know what's going on is to rely on leaders and experts who can be trusted.
- 35) _____ It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.
- 36) _____ In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same on one's own.
- 37) _____ The present is all too often full of unhappiness. It is only the future that counts.

- 38) _____ If a man is to accomplish his mission in life,
it is sometimes necessary to gamble "all or
nothing at all."
- 39) _____ Unfortunately, a good many people with whom I
have discussed important social and moral pro-
blems don't really understand what's going on.
- 40) _____ Most people just don't know what's good for them.

APPENDIX 4

PRODUCTS OF THE APPLIANCE INDUSTRY UNDER STUDY

APPENDIX 4
PRODUCTS OF THE APPLIANCE INDUSTRY UNDER STUDY
(US \$1 = RIALS 75)

Product	Year	1964	1965	1966	1967	1968	1969	1970
Refrigerator		9,360,880	1,880,070	19,832,670	29,545,430	32,310,920	37,273,350	38,511,930
Water-Heater		5,840,410	5,549,700	4,836,760	7,852,610	11,941,570	14,110,820	10,969,080
Cooler		360,000	1,560,000	2,276,000	4,846,340	9,419,530	9,422,520	15,903,000*
Gas Stove		1,186,000	2,575,440	4,338,200	5,182,670	5,798,560	7,943,330	6,296,030**
Television		---	---	---	---	8,263,640	19,918,470	30,813,680
Radio and Radi-gram		---	---	---	---	9,697,910	4,520,150	5,499,420

* Data unavailable

** Data for 1970 were based on the first quarter of the year and that is why they are deflated (such as water-heater and gas stove) and inflated (such as cooler). Source: crude data collected from the Central Bank of Iran, Tehran, July, 1970.

Note: Although the above figures which are supposed to reflect the monetary value of the product of the industry are the only one accessible, they seem to be highly unrealistic in terms of the overall productivity of the industry.

APPENDIX 5

(PERSIAN TRANSLATION OF DOGMATISM SCALE)

دلیل تفکر نسبت به مسائل اجتماعی

دلیل مطالبی راجع به طرز تفکر عموم نسبت به بعضی مسائل مهم اجتماعی و شخصی بصورت جملات مشخص ویا کلی تدوین شده است . بهترین جواب بهره‌ای از این مسائل نظر شخص شما است . چنانچه مطالعه خواهید نمود نکات مختلف وگاهی متضاد جمع‌آوری شده اند . ممکن است شما احساس کنید که با بعضی از آنها کاملاً موافقید درحالی‌که با بعضی دیگر کاملاً مخالف هستید و در عین حال نسبت به نکاتی دیگر نمیتوانید بطور مطمئن اظهار عقیده نمائید ولی مهم آنست که ده کثیری از مردم عیناً مثل شما فکر میکنند و در موارد مختلف عقیده‌ای نظیر شما دارند .

لطفاً در حاشیه سمت راست برای هر سؤال با جملاتی که نوشته شده است نظر خود را بصورت ذیل منعکس نمائید و با گذاردن یکی از ارقام درجه مخالفت یا موافقت خود را اعلام فرمائید :

۱ + قدری موافقم ۱ - قدری مخالفم

۲ + بطور کلی موافقم ۲ - بطور کلی مخالفم

۳ + کاملاً موافقم ۳ - کاملاً مخالفم

- ۱ - ایالات متحده آمریکا و اتحاد شوروی هیچگونه وجه مشترکی باهم ندارند .
- ۲ - عالیترین شکل دولت دموکراسی است و عالیترین شکل دموکراسی مهارتست از دولتی که توسط باهوشترین افراد اداره شود .
- ۳ - گرچه آزادی بیان برای تمام گروهها يك هدف با ارزشی است ولی متأسفانه لازمست آزادی بعضی گروههای سیاسی را محدود نمود .

- ۴- این کاملاً طبیعی است که انسان آشنائی بیشتر با عقایدی داشته باشد که به آنها معتقد است تا عقایدی که با آنها مخالف می باشد .
- ۵- انسان چنانچه بخواهد فقط بخود متکی باشد موجودی بیچاره و مظلوم است .
- ۶- طی الاصول دنیائی که مادر آن زندگی میکنند جایی تنها و غم انگیز است .
- ۷- اکثر مردم اهمیتی بدیگران نمیدهند .
- ۸- بدم نمی آید چنانچه فردی را پیدا کنم که بمن بگوید چگونه مسائل شخصی خود را حل نمایم .
- ۹- این کاملاً طبیعی است که انسان از آینده وحشت داشته باشد .
- ۱۰- در حالیکه کارهای زیادی باید انجام داد و قتل لازم برای آن خیلی کم است .
- ۱۱- وقتی عمیقاً در بحث شدیدی وارد شدم نمیتوانم آنها را تمام کنم .
- ۱۲- موقع بحث مطالب اغلب لازم می بینم که مطالب را چندین مرتبه تکرار کنم تا مطمئن شوم که همه چیز مفهوم شده است .
- ۱۳- در یک بحث گرم چنان در مطالبی که میخواهم بگویم فرق می بینم که فراموش میکنم بمطالبی که دیگران میکنند گوش کنم .
- ۱۴- بهتر است که انسان قهرمان مرده باشد تا زنده ای ترسو .
- ۱۵- در حالیکه مایل نیستم حتی بخودم نیز اعتراف کنم آرزوی قلبی من آنست که مردی بزرگ نظیر ایشاتین یا بتیون داشته باشم .

- ۱۶- مهم در زندگی آنست که انسان مایل باشد کار مهمی انجام دهد .
- ۱۷- چنانچه فرصتی بمن داده شود کاری که برای جهان مفید باشد انجام خواهم داد .
- ۱۸- در تاریخ بشر احتمالا تعداد متفکران بزرگ از تعداد انگشتان دست تجاوز نکرده است .
- ۱۹- همدای هستند که من از آنها به علت اعتقاداتی که دارند نفرت دارم .
- ۲۰- انسانی که به يك موضوع معين ايمان راسخ ندارد حقیقتا زندگی نکرده است .
- ۲۱- فقط هنگامی که انسان خود را وقف اید آل یا طریقه بنامه زندگی معنسی خواهد داشت .
- ۲۲- از تمام فلسفه‌های کدر جهان وجود دارد احتمالا فقط یکی از آنها درست است .
- ۲۳- شخصی که به علل مختلف، ابراز اشتیاق میکند ممکن است آدم متلون المزاجی باشد .
- ۲۴- مصالحه نمودن با مخالفان سیاسی خطرناک است زیرا این عمل معمولا منتج به خیانت به عقاید خود شخص میشود .
- ۲۵- وقتی مسئله اختلافات مذهبی مطرح میشود باید دقت کنیم که با افرادی که هم عقیده نیستند مصالحه ننمائیم .

- ۲۶- در چنین شرائطی اگر شخص صرفاً به شادی خود فکر کند باید کاملاً شخصی خود خواه باشد .
- ۲۷- بدترین جرمی که ممکن است شخص بنماید عبارتست از اینکه به اشخاصی که با او درموردی هم عقیده‌اند ظناً حمله کند .
- ۲۸- در چنین اوقاتی اغلب لازم می‌آید که انسان در مقابل عقایدی که از طرف افراد یا گروه‌های موجود در اردوگاه خودش عنوان میشوند حالت دفاعی بخود گیرد تا اینکه از عقاید افراد گروه مخالف نگران باشد .
- ۲۹- گروهی که اختلاف عقیده‌ای به‌شخص را بین اعضای خود تحمل نمی‌نماید مدت مدیدی دوام نتواند داشت .
- ۳۰- دو نوع انسان میتوان در این جهان پیدا نمود یکی آن نوع که طرفدار حقیقت و نوع دیگر آنکه مخالف حقیقت است .
- ۳۱- وقتی می‌بینیم شخصی با سرسختی از اعتراف به اینکه اشتباه میکند سرپیچی نمی‌نماید خون من بجوش می‌آید .
- ۳۲- انسانی که صرفاً به خوشحالی خود فکر میکند درواز انسانیت است .
- ۳۳- اکثر عقایدی که این روزها چاپ میشوند حتی ارزش کاغذی را که روی آن چاپ شده‌اند ندارند .

- ۳۴- در این جهان پیچیده مانتها را می که بتوان از آنچه میگذرد اطلاع حاصل نمود اتکا به دانش متخصصانی است که میتوان به آنها اعتماد کرد .
- ۳۵- اغلب صلاح در این است که قضاوت نسبت به وقایع جاری را موکول به شنیدن عقاید افرادی نمود که مورد احترام انسان هستند .
- ۳۶- در دراز مدت بهترین طریقه زندگی آنست که انسان دوستان و آشنایانی که با او همذوق و هم عقیده هستند انتخاب نماید .
- ۳۷- زمان حال اغلب سرشار از ناخشنودی ناست تنها آیند هاست که مهم میباشد .
- ۳۸- چنانچه انسان بخواهد وظیفه خود را در زندگی انجام دهد اغلب لازم میآید تصمیماتی بگیرد که جنبه " همه چیز یا هیچ چیز " دارند .
- ۳۹- متأسفانه عده زیادی از مردم که با آنها مسائل مهم اجتماعی و اخلاقی را مطرح نمودام حقیقتاً از آنچه میگذرد اطلاعی ندارند .
- ۴۰- اکثر مردم اصلاً نمیدانند که چی برای آنها خوبست .

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