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THE UNIVERSITY OF OKLAHOMA  
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MANUFACTURER'S ATTITUDES REGARDING THE NATIONAL,  
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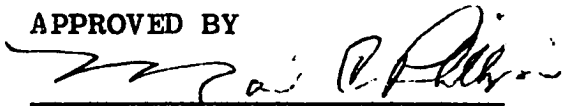

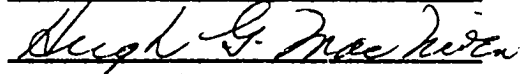

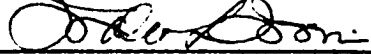
A DISSERTATION  
SUBMITTED TO THE GRADUATE FACULTY  
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degree of  
DOCTOR OF BUSINESS ADMINISTRATION

BY  
DONALD WAYNE HACKETT  
Norman, Oklahoma

1973

A COMPARISON OF SMALL EXPORT AND DOMESTIC ORIENTED  
MANUFACTURER'S ATTITUDES REGARDING THE NATIONAL,  
INTERNATIONAL AND IDEAL MARKETPLACES

APPROVED BY

DISSERTATION COMMITTEE

DISSERTATION

A COMPARISON OF SMALL EXPORT AND DOMESTIC ORIENTED  
MANUFACTURER'S ATTITUDES REGARDING THE NATIONAL  
INTERNATIONAL AND IDEAL MARKETPLACES

The United States has entered a unique period with regard to its position in international trade. In 1971, for the first time since 1888, the United States incurred a deficit (imports exceeded exports) in the merchandise account of its balance of payments. This turnabout marked the beginning of a trend which has continued through the first half of 1973. Most experts agree that the long term solution to the trade deficit involves an increase in exports to offset the rise in imports. One segment of the business community which has not participated to its full potential in export markets is the American small manufacturer. At the same time, little research has been conducted to determine why small manufacturers are reluctant to enter international markets. This study represents an effort to reveal the factors and forces which add to manufacturers' reluctance to participate in overseas business.

The methodology involved an attitudinal comparison of small manufacturers' executive personnel. More specifically, the attitudes of export oriented executives were compared to domestic oriented executives in an attempt to isolate those areas which add to the reluctance of small manufacturers to participate in international business. Ten attitudes were measured and compared to determine if the two respondent groups held significantly different attitudes toward various concepts in the national, international and ideal marketplaces. The concepts were competition, product, channels of distribution, market information, profit, cost of selling, small firms, financing, government and documentation. Data for the study were developed by private interview with thirty six randomly selected Oklahoma manufacturers. Data were organized into a 2 x 3 factorial design and analyzed via analysis of variance and Duncan's New Multiple Range Test.

Significant differences in attitudes between the two respondent groups were found in four conceptual areas. These were profit, channels of distribution, financing, and documentation. The greatest measured difference in attitudes between the two respondent groups was in their perception of the amount of profit to be earned in the international markets. Contrary to domestic oriented manufacturers, export oriented manufacturers believed that international markets offered high profit potential. Another area of reluctance involved the financing of exports. Many domestic firms have cash flow problems which become critical if payments are delayed. These firms expressed a reluctance to enter international business because of the risks they perceived in receipt of payment for goods shipped abroad. Several ancillary findings were made. Many exporting manufacturers were introduced to overseas markets by inquiries for their products, not because of firm strategy. One of the most influential factors in the introduction of domestic manufacturers to overseas markets is the American multi-national which continues to purchase from domestic suppliers after establishing overseas facilities. Interestingly, many of the respondents believed that increases in exports by small firms will be a function of governmental legislation which must be introduced to develop a more favorable climate for exporting.

## ACKNOWLEDGEMENT

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## CHAPTER I

### INTRODUCTION

The United States has long been acknowledged as the pre-eminent industrial power of the world. The utilization of technology, innovation, and marketing expertise by American entrepreneurs and workers has historically been the envy of the world with the result that the "Made in U.S.A." label is synonymous with quality workmanship. In view of American industries' glittering record it still comes as a shock to many individuals when they learn the United States is currently a debtor nation in international trade. The purpose of this chapter is to trace the background and possible causes of the the current trade deficit being experienced by the United States. First the foreign trade activities of the United States are compared with past periods to develop a feel for the magnitude of the problem. Possible causes for the present deficit situation are surveyed with particular emphasis given to the role of attitudes in international trade. This discussion is followed by a purpose statement and explanation of the research limitations.

### Background of the Study

In 1971, for the first time since 1888<sup>1</sup> the United States incurred a deficit (imports exceeded exports) in the merchandise account of the U.S. balance of payments. To the majority of developed nations such an occurrence would have sent reverberations throughout their domestic economies. But, in the United States this news received surprisingly little fanfare in comparison to the significance of the event. The reason for the subdued reaction is not easily explained. Preoccupation with an unpopular war and accompanying domestic strife, coupled with an upcoming election year, certainly diverted attention from the event. A general unawareness of the reliance of the U.S. economy on foreign trade possibly influenced the reaction. It is also conceivable that general confusion concerning international trade statistics and the effect of over a decade of deficits in the U.S. balance of payments created a somewhat sedate attitude concerning international trade among many Americans.

The United States has incurred deficits in the balance of payments account amounting from \$2 to \$3 billion annually since 1960.<sup>2</sup> At first these deficits were deemed temporary

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1 "Trade Deficit in 1971 - First in U.S. Since 1888," Wall Street Journal, January 26, 1972, p. 5.

2 U.S. Department of Commerce, Statistical Abstract of the United States, 1972 (Washington, D.C.: Government Printing Office, 1972), p. 764.

and, in fact, favorable for the good of the over-all world economy due to the then existent international dollar shortage. When the deficit in the balance of payments began to show signs of permanency in 1960, only minimal excitement was generated because the deficit, was then composed largely of controllable components such as foreign aid, military assistance, and private travel which could be reduced if the situation became critical.

One of the least controllable accounts in the balance of payments system is the merchandise account. This account measures the net movement of all tangible goods exported and imported in the United States annually. The deficit which occurred in this account in 1971, and which has recurred in 1972 and in early 1973, serves as an index of the competitive nature of American industry internationally. A deficit in this account is alarming since it indicates a nation's inability to compete successfully in international markets with its domestically manufactured products. Yet, even in light of the hard evidence of the 1971 and 1972 deficits, there has persisted a feeling in some quarters that the U.S. deficit is simply a random occurrence which will turn around as currency realignments are made.<sup>3</sup> However, in view of the trend in the merchandise account since 1964, the deficit was

---

3 "OECD Experts Say U.S. Needs More Time on Payments Problems, Previous Prediction Saw Solution in First Half of 1973," Wall Street Journal, June 15, 1972, p. 25.

easily predictable as a non-random occurrence since the trend toward an eventual deficit was obvious.

Table 1 portrays the statistics relating to the United State's balance of payments for the merchandise account since World War II. From a peak \$6 billion surplus in 1964, there has been a steady decline in the surplus balance culminating in the \$2 billion deficit in 1971. The figures are revealing. The deficit is not due to a fall in total exports; exports increased 114 per cent between 1960 and 1970.<sup>4</sup> Yet exports still did not keep pace with the astounding rise of imports, which increased 170 per cent over the same period.

The United States has entered a period when the demand for imports of raw materials and manufactured goods is at an all time high while, at the same time, competition among exported products in the international marketplace is greater than ever before. The rebuilt Japanese and European economies are capable of manufacturing a wide array of basic and technically advanced products. Strongly supported by their governments and employing sophisticated management and marketing techniques, Japanese and European businessmen are traveling the globe in search of buyers for their products. In the wake of these events, the first U.S. trade deficit in this century has occurred, resulting in mounting concern as

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4 Statistical Abstract, 1972, p. 264.

TABLE 1

DOLLAR AMOUNT OF EXPORTS, IMPORTS, AND NET BALANCE  
IN THE MERCHANDISE ACCOUNT OF THE U.S.  
BALANCE OF PAYMENTS, 1946-1972  
(Millions of Dollars)

Year	Merchandise Account		
	Exports	Imports	Net Balance
1946	11,764	- 5,067	6,697
1947	16,097	- 5,973	10,124
1948	13,265	- 7,557	5,708
1949	12,213	- 6,874	5,339
1950	10,203	- 9,081	1,122
1951	14,243	-11,176	3,067
1952	13,449	-10,838	2,611
1953	12,412	-10,975	1,437
1954	12,929	-10,353	2,576
1955	14,424	- 1,527	2,897
1956	17,556	-12,803	4,753
1957	19,562	-13,291	6,271
1958	16,414	-12,952	3,462
1959	16,458	-15,310	1,148
1960	19,650	-14,744	4,906
1961	20,107	-14,519	5,588
1962	20,779	-16,218	4,561
1963	22,252	-17,011	5,241
1964	25,478	-18,647	6,831
1965	26,438	-21,496	4,942
1966	29,287	-25,463	3,824
1967	30,638	-26,821	3,817
1968	33,576	-32,964	612
1969	36,417	-35,796	621
1970	41,963	-39,799	2,164
1971	42,770	-45,459	-2,689
1972	47,391	-54,355	-6,964

Source: Economic Report of the President, January, 1973,  
Table C-87, p. 293.

to the causes of and possible solutions to the present trade problems.

#### Possible Causes of the Current United State's Trade Deficit

There is no general consensus as to the causes of the present deficit position of the United States, but there are certain occurrences which seem responsible for turning a \$6 billion trade surplus in 1964 into almost a \$7 billion trade deficit in 1972. The obvious cause of the deficit position is more buying than selling in the international market. As a result, there is a growing support in some quarters that the solution to the trade problem involves a departure from current trade practices and re-establishment of the surplus by institution of import quotas and curtailment of foreign investment by American firms.<sup>5</sup> Most observers believe such actions would result in similar quotas being placed on American exports by other countries and eventual destruction of progress toward international free trade. They strongly suggest that the ultimate solution lies in increasing exports to keep pace with rising imports. But why haven't export sales kept pace with imports?

---

<sup>5</sup>The Foreign Trade and Investment Act of 1972, better known as the Burke/Hartke Bill, is a labor sponsored bill before Congress whose principal provisions call for quotas on all U.S. imports, limits on outflow of U.S. investment overseas, and elimination of tax credits for U.S. multinational companies.

Why aren't American goods as competitive as they once were in the international marketplace?<sup>6</sup> High inflation rates, low productivity gains, technological diffusion abroad, activities of multinational companies, and growing management and marketing expertise by international competitors are often cited as causes of present trade difficulties.

### Inflation

A recent Tariff Commission report states that loss of American competitiveness brought about the deterioration in the United States trade balance.<sup>7</sup> The Tariff Commission study revealed that in the post-war period the United States generally suffered less inflation than the industrial countries of Western Europe and Japan, while maintaining productivity increases that equaled or exceeded those abroad. This resulted in a strong position for American goods in international markets. However, the report found this favorable condition changed rapidly beginning in 1965 and concluded that inflation has since been a substantial factor in the loss of United States competitiveness overseas."<sup>8</sup>

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<sup>6</sup>Throughout the study the terms, international, overseas, and abroad, refer to all markets outside the United States.

<sup>7</sup>Tariff Commission Publication 473, Competitiveness of U.S. Industries, a report to the President on Investigation 332-65 under Section 332 of Tariff Act of 1930, April 1972, p. ii.

<sup>8</sup>Ibid.

The report cites three major price series as evidence:<sup>9</sup>

(1) Wholesale prices of U.S. manufactured goods were stable during 1960-1964 but jumped by 12 per cent in 1965-1969, the steepest climb in this price index for any industrial country except Canada.

(2) The index of prices for U.S. industrial raw material actually fell by 3 per cent during 1960-1964 but moved up by 10 per cent during 1965-1969. Other industrial countries straddled the U.S. experience.

(3) The price index for exports of U.S. manufactured goods rose only 1 per cent in 1960-1964 but advanced by 13 per cent in 1965-1969. No other major industrial country except the United Kingdom and Canada had such large increases in their export prices in the last half of the decade.

In the wake of this inflationary spiral, other developed countries made inroads into traditionally American dominated international markets. But other industrialized countries have been undergoing inflation approaching and sometimes exceeding the American rate. Why haven't their export efforts been equally affected? A comparison of wholesale and export prices gives a clue to this paradox. In Figure 1, the percentage increases in the wholesale price index for manufacturers of six countries are compared to subsequent increases in export prices for the years 1960-1969. Of these six industrialized nations only the United States and West Germany posted export price increases concomitant with domestic wholesale inflation rates.

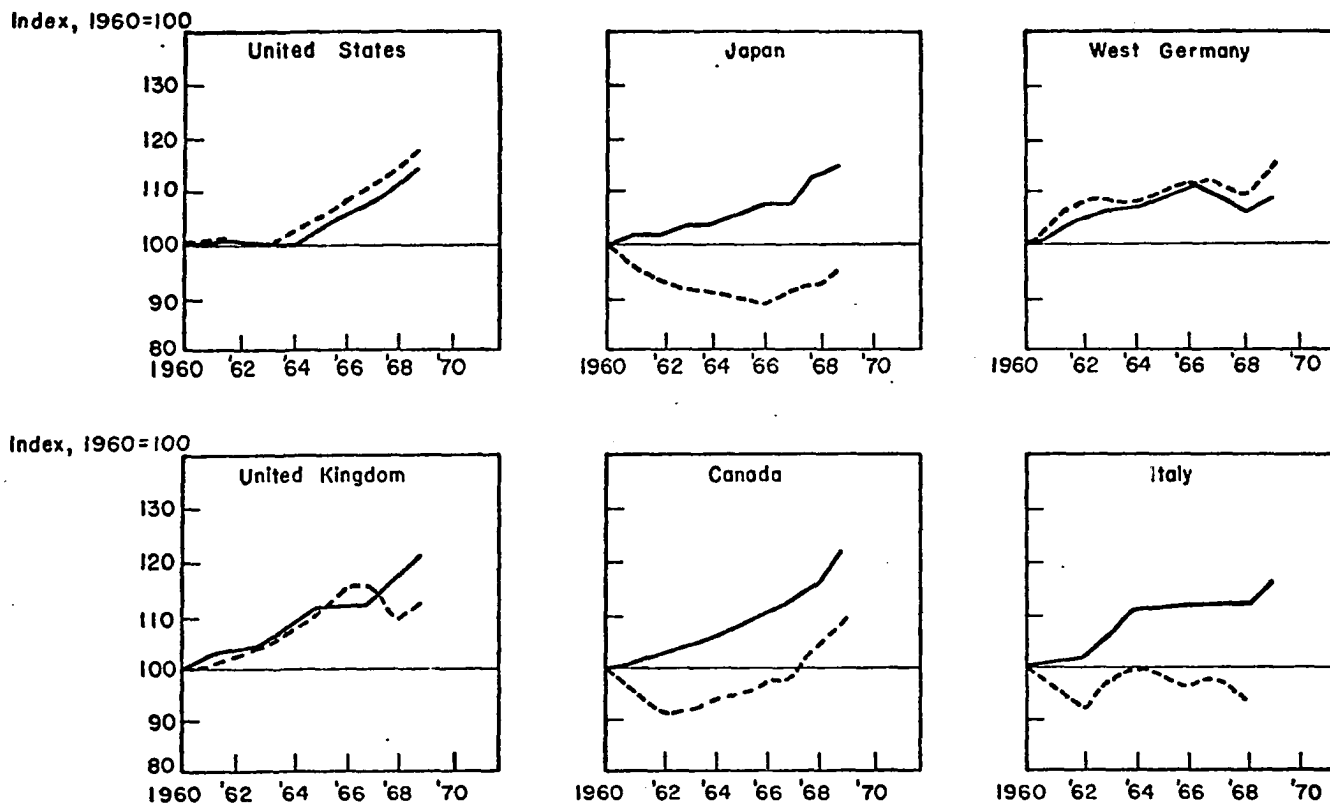
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<sup>9</sup>Ibid.



Figure 1

A Comparison of Wholesale and Export Prices of Six  
Developed Countries For the Period 1960-1969



Index of export prices are on a U.S. dollar basis

— Wholesale Prices      - - - - Export Prices

Source: Tariff Commission Publication 473, Competitiveness  
of U.S. Industries, April 1972.

The conclusion is obvious. Foreign governments, realizing the importance of price in international sales, are successfully keeping their export bound products immune to their domestic inflation.<sup>10</sup> The United States has taken no such precautions, with the result that its export products contain the full measure of domestic inflation. In competition with subsidized international competitors it is not surprising that so many American products have faced difficulties abroad.

#### Changing Characteristics of Foreign Industry

The Tariff Commission report points out another substantial factor affecting United States competitiveness involves a rather subtle change in those characteristics of American industry that are measures of competitive strength.<sup>11</sup> United States export products have traditionally embodied skilled labor, low average product age, product differentiation, and scale economies. The analysis of changes in trade performance from 1960 to 1968 reveals a general weakening in the influence of those characteristics that in the past have contributed to the comparative advantage of the American exports. The reverse is true of imports. New imports are

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<sup>10</sup>U.S. Congress, House, Committee on Sciences and Astronautics, A Metric America, by Daniel V. De Simone, House Report No. 92-716 (Washington, D.C.: Government Printing Office, 1971), p. 66. This government study found that the price of a product is considered the single most important factor in international trade.

<sup>11</sup>Tariff Commission Report 473, p. 135.

increasingly characterized by their need for skilled labor, by a decline in average product age, by an increase in product differentiation, and by a dependence on scale economies and industrial concentration. In the 1960's world markets were successfully penetrated by European and Japanese firms which produced products with these characteristics. Additionally, the management and marketing expertise long associated with American industry has now successfully been adopted by these countries to the extent they can compete in a successful manner in international markets to include the United States.

#### Productivity and Technology

Another government committee, studying labor productivity rates during the years 1960 through 1969, found that coupled with a high U.S. inflation rate since 1965 has been a fall in productivity gains.<sup>12</sup> The rate of productivity gain in U.S. manufacturing for the five year period 1965-1970 was only 2.1 per cent compared to a 3.8 per cent average for the period 1960-1965.<sup>13</sup> Table 2 portrays a comparison of output per manhour for eleven industrialized countries for the period 1965-1970. Japan led all countries whereas the United

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<sup>12</sup>U.S. Congress, Subcommittee on Priorities and Economy in Government, American Productivity, Key to Economic Strength and National Survival, Joint Committee Print (Washington, D.C.: Government Printing Office, 1972).

<sup>13</sup>Sanford Rose, "The News about Productivity is Better Than You Think," Fortune, February, 1972, pp. 98-ff.

TABLE 2

OUTPUT PER MAN HOUR FOR ALL EMPLOYEES IN MANUFACTURING,  
FOR ELEVEN SPECIFIED COUNTRIES 1965 - 70  
(1965 = 100)

Country	1965	1966	1967	1968	1969	1970
Japan	100	111	127	145	167	192
Netherlands	100	106	113	125	136	149
Sweden	100	106	114	126	136	143
Belgium	100	107	115	124	132	138
France	100	106	113	121	130	137
Switzerland	100	105	110	116	128	134
West Germany	100	104	110	118	124	127
Italy	100	105	109	118	122	127
United Kingdom	100	103	106	112	115	119
Canada	100	103	105	111	115	117
United States	100	101	101	106	108	110

Source: Derived from "Comparative Trends in Manufacturing Unit Labor Costs, Eleven Countries, 1960-1970," Monthly Labor Review, August, 1971, Bureau of Labor Statistics, U.S. Department of Labor, pp. 20-25.

States posted the lowest increase.

In a developed economy productivity is closely tied to technological innovation and application. Through the 1950's and early 1960's the United States was unmatched in its ability to create and sell new products. Much of this impetus came from the space program which resulted in advances in computers and micro-electronics. But, at this same time the United States was lagging in technological applications in more basic industries. For example, the Europeans and Japanese rebuilt their steel industries in the postwar period on the basic oxygen concept while the undamaged American steel industry continued with the older open hearth method. Whole industries rebuilt with the latest processes have multiplied productivity gains in postwar Japan and Europe. Thus, in a period when the rate of productivity in the United States dropped to a dismal 2.1 per cent annually, West Germany's growth rate averaged 4.2 per cent<sup>14</sup> a year and Japan's zoomed to 14 per cent annually.<sup>15</sup>

One view concerning loss of United States competitiveness is known as the "technology theory."<sup>16</sup> This theory

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<sup>14</sup>U.S. Department of Commerce, Bureau of International Commerce, Foreign Economic Trends, West Germany, E.T. 72-009, September 6, 1972, p. 2.

<sup>15</sup>U.S. Department of Commerce, Bureau of International Commerce, Foreign Economic Trends, Japan, E.T. 73-002, December 14, 1972, p. 2.

<sup>16</sup>Lewis Beman, "How To Tell Where the U.S. Is Competitive, "Fortune," July, 1972, p. 54.

notes a high correlation between industry expenditures on research and development and its trade position. Advocates of this theory believe that the trading surplus of the United States in years past stemmed from the overwhelming technological superiority of American manufacturing industry. According to figures in the Tariff Commission report, aircraft ranked highest in 1969 on the basis of research and development as a proportion of value added and also ranked near the top on the basis of United States trade performance.<sup>17</sup> Office machinery (this category included computers) allocated 19 per cent of its value added to research and development and chalked up a sizable export surplus. Similar correlations exist for drugs, machinery, and chemicals. Further supporting this theory is the strong correlation between reduced research spending and the technological slowdown which has occurred in the United States. Research and development accounted for only 2.5 per cent of gross national product in 1972, as compared to 3 per cent in 1964. This decrease was the result of research spending which plateaued at \$26 billion annually during this period. The resulting technological slowdown has resulted in the loss of what was considered to be a commanding technological lead for U.S. industry.<sup>18</sup>

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<sup>17</sup>Tariff Commission Report 473, p. 195.

<sup>18</sup>"Making U.S. Technology More Competitive," Business Week, January 15, 1972, p. 44.

Professor Raymond Vernon has another version of this theory which joins the technological process to the marketing concept of the product life cycle.<sup>19</sup> Vernon believes that the product life cycle is discernible in the products that make up our imports and exports. He sees a recurring pattern in which the United States has played the role of an innovator that is gradually forced to relinquish his lead. Vernon's model, which relates entirely to manufacturing, suggests that as a new product becomes established in the U.S. domestic market, it is increasingly exported to other industrial nations. When the foreign markets reach sizable proportions, it becomes worthwhile to manufacture in those countries and slow down exports from the United States. As the production techniques become standardized, labor costs in the foreign manufacturing plants decrease to the point of competing with American made products in third markets as well as on the United States mainland. This theory seems plausible since those industries that constantly generate new products, e.g., chemicals, aircrafts, computers, are all net exporters while those industries with few new products, e.g., steel, textiles, and autos, tend to suffer from growing import competition.

The implications of this theory are that, as the

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<sup>19</sup>Raymond Vernon, Manager in the International Economy (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972), p. 208.

technology gap between the United States and its competitors has diminished, so has the trade surplus which the United States has so long enjoyed. Accordingly, the U.S. can develop a trade surplus only by maintaining technological superiority in the goods it produces.

#### Attitudinal Influences

Perhaps one of the most important reasons for the present deficit situation of the United States lies in a much less obvious source than those mentioned earlier. The seeds for the present situation may have been sown many years ago when the United States, with seemingly inexhaustible natural resources and massive domestic markets, developed business practices and attitudes based almost wholly on the domestic American market. As conditions have changed, this domestic orientation has remained. Thus, the United States finds itself with a large cross-section of its industry still domestically oriented while the rest of the industrialized world is thinking and acting in an international orientation.

The reaction to the trade deficit in 1971 holds a clue to this attitude. As mentioned earlier, the news regarding the trade deficit in 1971 met with little response in comparison to the severe implications involved in such a turn-about. This conceivably occurred because Americans underestimated the significance of international trade in the functioning of the domestic economy in the 1970's. Indeed, a feeling prevails over much of the populace that the



United States is still largely self-sufficient in resources.

The United States is now more reliant on foreign trade than ever before and, with diminishing oil supplies, will become even more dependent on world trade in the future. It is predicted that by 1980 the U.S. will incur a \$20 to \$30 billion trade deficit in its energy needs alone. Additionally, U.S. industry currently relies partially or wholly on other nations for all metal supplies except magnesium and molybdenum. All of our natural rubber, tin, and industrial diamonds; 90 per cent of our nickel, cobalt, chromite, asbestos, and manganese; over half of our tungsten; and 35 per cent or more of our lead, copper, and zinc needs are met through importation.<sup>20</sup> Foodstuffs such as coffee, cocoa, and tea emanate entirely from other lands. Tremendous amounts of manufactured goods are imported into the United States yearly. Between 1965 and 1969 the average annual rate of growth for imported manufactured goods averaged 19.6 per cent. Table 3 shows import categories with an average annual growth rate greater than 20 per cent in 1965-1969.

In view of these import statistics, increased exports hold the key to regaining a trade surplus balance. Exports

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<sup>20</sup>United States Department of Commerce, United States Commodity Exports and Imports as related to Output 1968 and 1969, 1972, p. 5.

TABLE 3

**UNITED STATES IMPORT CATEGORIES WITH AVERAGE ANNUAL  
GROWTH RATES 20 PER CENT OR OVER IN 1965-1969**

Abbreviated Commodity Description	Imports* (Million Dollars)		Average Annual Rate of Growth (Per Cent)
	1965	1969	
Fur clothing and articles	2.0	12.2	56.6
Road motor vehicles and parts	1,004.6	4,883.3	48.5
Electric household equipment	27.4	127.5	46.8
Explosives and pyrotechnic products	9.4	35.2	39.1
Iron or steel castings and forgings	3.4	11.7	36.4
Rubber manufactures, finished	47.0	153.9	34.5
Furniture	59.9	191.9	33.8
Telecommunications apparatus and parts	314.0	1,005.9	33.8
Structures and parts of metal	7.2	22.6	33.3
Nonelectric power-generating machinery	194.6	603.4	32.7
Footwear	159.9	488.2	32.2
Pleasure boats, floating structures	13.6	39.9	31.0
Electric power machinery	67.2	196.0	30.7
Metalworking machinery	63.5	182.7	30.3
Rubber and plastic manufactures, n.e.s.	71.1	201.5	29.8
Electric medical & radiological apparatus	11.2	31.7	29.6
Office machines	136.4	371.8	28.5
Sound recorders and musical instruments	156.6	423.0	28.2
Electric machinery and apparatus, n.e.s.	184.2	495.4	28.1
Paper, paper pulp and articles	16.4	42.5	26.9
Equipment for distributing electricity	35.6	90.4	26.2
Synthetic resins and plastic materials	40.7	99.0	24.9
Synthetic organic dyes	27.1	64.6	24.3
Unworked silver and platinum	69.1	160.3	23.4
Nonelectric machinery & appliances, n.e.s.	270.0	615.9	22.9
Toys, sporting goods, baby carriages	155.4	348.0	22.3
Manufactures of base metals, n.e.s.	92.3	204.4	22.0
Machines for special industries	90.0	199.2	22.0
Household equipment of base metals	33.2	73.3	21.9
Hand and machine tools	39.7	85.4	21.1
Metal containers for storage and transport	5.8	12.4	20.8
Inorganic chemical elements	115.3	245.2	20.8
Glass	56.6	118.7	20.3

\*Imports are general imports. Import categories amounting to less than \$5 million in 1969 are not included.

Source: Imports are official U.S. Department of Commerce statistics; average annual rates of growth were calculated from these data.

are vitally important to the U.S. economy. Historically, export sales were desirable supplements to domestic business for U.S. firms; but as internal markets reach their saturation point, the international market has taken on increased importance for many industries. The importance of exports to a large segment of American business becomes obvious from a perusal of Table 4. Large sections of the agricultural and manufacturing industries are highly dependent on the export market for sales to the point that successful export sales often represent the difference between profit or loss. Yet, this dependence on international markets, and the implications it has for the economic future of the business community is still not fully realized by many segments of our society. The attitude that the United States is self-sufficient has no basis and is far out of date. Concomitant with this fact is the realization that the United States is now entering a period when international trade will become increasingly more important in the lives of every American businessman and consumer.

Many corporations in the United States long ago adopted a strategy placing heavy emphasis on international markets. Singer representatives were selling sewing machines in all parts of the world as early as 1860, and Alfred Sloan led the giant General Motors Corporation overseas in the 1920's.<sup>21</sup>

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<sup>21</sup>Alfred P. Sloan, My Years With General Motors (New York: Doubleday and Co., 1965), p. 313.

TABLE 4

**UNITED STATES MANUFACTURED EXPORTS ACCOUNTING FOR OVER  
10 PER CENT OF DOMESTIC OUTPUT AND AMOUNTING  
TO MORE THAN \$100 MILLION IN 1969**

Product	Exports, 1969 (Million Dollars)	Per Cent of Output
Medicinals and botanicals	245.7	41
Oilfield machinery	241.9	30
Construction machinery and equipment	1,293.5	29
Mining machinery	158.0	28
Special industry machinery	462.1	24
Calculating and accounting machines	167.0	23
Solid state semiconductor devices	345.7	23
Chemical preparations (except salt and fatty acids)	248.7	19
Electric measuring instruments	243.9	19
Aircraft	1,866.4	18
Pumps and compressors	366.8	17
Mechanical measuring and controlling instruments	243.6	17
Electronic computing equipment	785.7	16
Cyclic intermediates	238.1	13
Photographic equipment and supplies	394.2	13
Industrial inorganic chemicals	500.2	12
Motor vehicle parts and accessories, including passenger car bodies	1,713.7	12
Aircraft parts and auxiliary equipment	651.1	12
Farm machinery	429.6	11
Machine tools, metal-cutting types	201.0	11
Industrial organic chemicals	664.8	10

Source: United States Department of Commerce, U.S. Commodity Exports and Imports  
as Related to Output, 1968 and 1969, 1972, p. 2.

But among many manufacturers in the United States there remains a myopic interest in the domestic market with little, if any, interest in world markets. The late President Lyndon Johnson noted this ambivalent attitude when he stated,

Our success in creating and satisfying the demands of our domestic market has brought our country to its present level of high opportunity. Often, however, the very opportunities we found at home caused us to neglect other promising markets overseas. We cannot afford to neglect them for lack of knowledge or interest.<sup>22</sup>

Of major concern to many people interested in international trade has been the widescale reluctance of many small and intermediate sized manufacturers to adopt a marketing strategy which reflects a commitment to international trade. Although there is a dearth of information regarding the amount of exporting by small firms, most experts agree that a small percentage of potential firms are currently exporting. One of the primary reasons for this reluctance is an uncertain attitude regarding the opportunities in international trade for the firm.

Professor A.H. Kizilbash, writing in The Marketing News, states that "his (small manufacturer's) reluctance to seek and sell in foreign markets is largely the result of his own attitude based on fear, ignorance, and inhibiting

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<sup>22</sup>Wall Street Journal, May 17, 1967, p.6.

beliefs."<sup>23</sup> Dr. Kizilbash goes on to explain that much of the blame for poor export performance by small manufacturers has been placed on their lack of resources such as capital, specialized staffs, and research capability but that this reasoning misses the heart of the problem. He states that "small manufacturers perceive the international marketing opportunity and marketplace differently than do managers of larger business concerns" and explains, "this attitudinal difference constitutes the basic problem concerning small manufacturers exports."<sup>24</sup> If greater participation in exporting were made by the small manufacturers of the United States real progress could be made in reversing the current trade deficit.

#### Purpose of the Study

But what is the attitudinal configuration of non-exporting small manufacturers toward the export market? What business functions are of great concern to them? How do their attitudes differ from other small manufacturers who are committed to exporting? This research effort has attempted to answer these and other questions by comparing the attitudes of key executives of firms not currently exporting with those of similar sized firms that are committed

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<sup>23</sup>A.H. Kizilbash, "Small Manufacturers Fear Export Marketing," The Marketing News, Mid-August, 1971, p.

<sup>24</sup>Ibid.

to exporting. More specifically the purpose of the research can be stated as follows:

Specific Purpose: To determine the specific attitudinal differences relating to the domestic, international and ideal markets which are present among selected small Oklahoma manufacturers that export and among those that do not export in the year 1973.

The results of the attitudinal research can be used by those interested in planning training programs, college courses, and export seminars, as well as government and private institutions which are interested in assisting and encouraging private business in export marketing programs.

#### Limitations of the Study

This research effort has been limited by the time and financial resources available to the researcher. The sample survey design has limited the sample population boundaries geographically to include only firms located within the state of Oklahoma. Thus, the findings can only be used to make inferences about firms in this state. For purposes of this study the small firm has been defined as those employing from 20 to 250 persons.<sup>25</sup> Although use of number of employees facilitated the sampling design in determining firm size, it should be pointed out that other variables such as sales and profits are often used in determination

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<sup>25</sup>The Small Business Administration defines a small company as having not more than 250 manufacturing employees.

of firm size. Only manufacturing firms are included in the research, thus eliminating service, processing, and extractive enterprises. Subsidiary manufacturing firms whose parent is headquartered outside the state have been eliminated from consideration due to the travel constraints involved in interviewing headquarters personnel. Additionally, all petroleum and textile oriented companies were excluded because early research indicated that the market characteristics of those industries were such that their inclusion would bias the research findings. Lastly, assumption and methodology always incur some limitation in research. Methodological limitation will be discussed in Chapter 3.

The research hinges on two critical assumptions. The first assumption is that attitudes play a strategic role in the determination of small firms' actions regarding the international market. Behavioral research substantiates that attitudes do, indeed, play an important role in behavior and action patterns. Further discussion of this point is made in Chapter 3. Secondly, the assumption that small firms have characteristics which result in their having different attitudes and action patterns than larger firms in the same industry is important in this research. This assumption seems substantiated by the fact that various institutions, including government, universities, and trade associations, have developed special agencies, programs, textbooks, and committees to deal with the



particular problems of small businesses.

### Organization of the Study

The study is composed of five chapters. This first chapter has served to introduce the study by focusing on the present international trade position of the United States and by surveying possible causes of the current trade deficit. The unique role of attitudes in the United States concerning international business was examined at length as a possible source of the trade deficit. Enumeration of the purpose of the study as the identification of the attitudinal configuration of various small Oklahoma manufacturers was made and the limitations set forth. In Chapter Two, the theoretical and traditional role of the small manufacturer in the American economy is examined. The advantages and limitations of smaller manufacturers in the domestic and export markets are summarized and a survey of prior research pertaining to small manufacturers' export efforts is made. Chapter Three outlines the methodology used in the study. The specific hypotheses to be tested are listed along with a discussion of the research design, sample survey design, and statistical tests used in analyzing the data. In Chapter Four, a detailed analysis of the quantitative data is presented with an interpretation of the significant findings. Ancillary findings are also enumerated and used in supplementing and interpreting the quantitative analysis. In Chapter Five, a summary of the findings

are made along with a discussion of their implication for policy consideration. Recommendations for general and specific policies are proffered along with suggestions for additional research efforts.

## CHAPTER II

### SMALL MANUFACTURING FIRMS IN PERSPECTIVE

The purpose of this chapter is threefold. First, a brief summary of the small manufacturing firm in economic theory develops a suppositional base for further discussion of the small firm. Secondly, the traditional role of the small American manufacturing firm in the domestic and international markets is explored. Lastly, prior research pertaining to the small manufacturer in overseas markets is surveyed.

#### The Small Firm in Economic Theory

The importance of size in business has long been recognized by economists as a primary factor influencing the decision environment in which the entrepreneur operates. Alfred Marshall was one of the first economists to demonstrate this importance and its implications.<sup>1</sup> Utilizing his idea of a "representative firm" and "internal and external economics," he developed the basis of the "economy of scale" concept that was to become so important in micro-economic thought.

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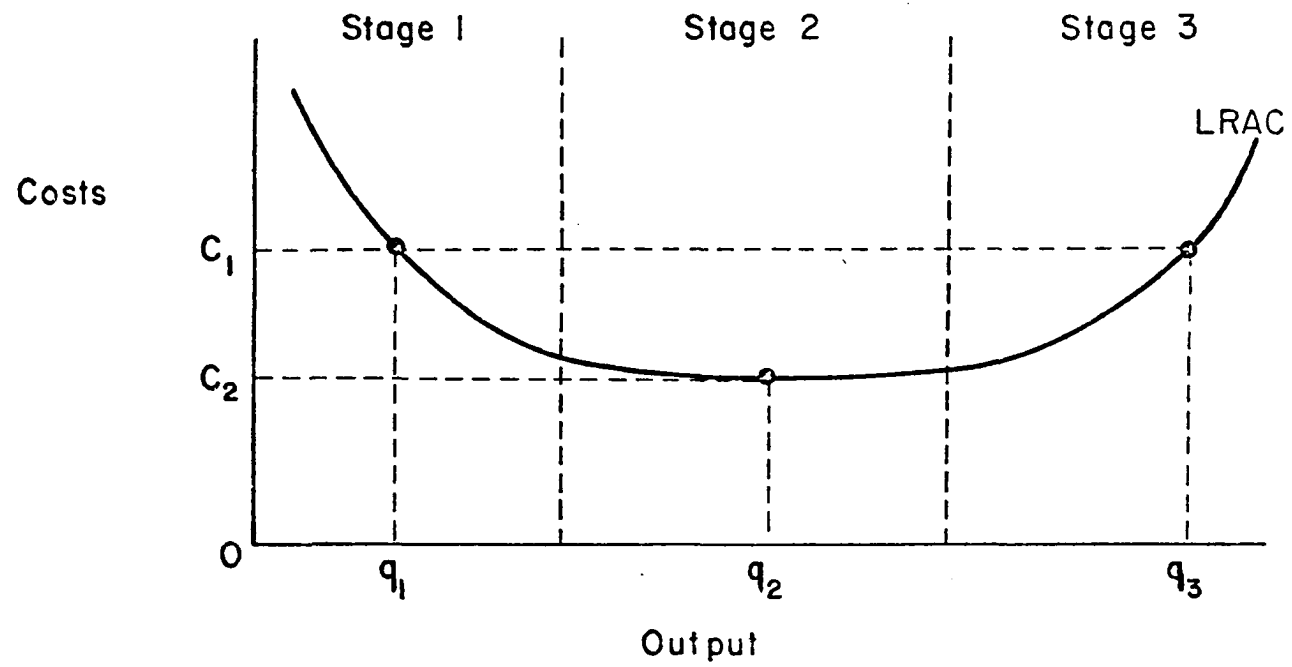
<sup>1</sup>Alfred Marshall, Principles of Economics (London: Macmillan & Co., Ltd., 1938), p. 342.

Modern economic theory treats the "economy of scale" concept from the standpoint of costs in terms of long and short run temporal measures. Economics does not deal with times as a precise chronological or calendar period but rather as short or long run periods. The short run period of production is long enough for the producing unit or firm to vary output within the limits of its capacity to produce, but too short for the firm to vary the capacity itself. The long run is that period of time in which a producer can vary the capacity as well as the output of his plant. The long run period is used here to illustrate the small firm's operating characteristics within any given industry. Figure 2 illustrates the relationship of costs to output in a long run situation.

As the firm increases its capacity or output the short run costs referred to as average total costs (ATC) are displaced to reflect the increase in capacity. If the least cost points of production of each ATC curve at each subsequent output are joined together a saucer shaped long run average cost (LRAC) curve, as shown in Figure 2, results. Three distinct stages occur along the path of this curve. Stage one is known as an increasing returns to capacity situation, where costs per unit decrease as capacity is increased. In stage two there are no particular gains in the form of lower costs from increasing the capacity of the plant, and a constant return to capacity situation is

Figure 2

Returns to Capacity and Long  
Run Costs of the Firm



depicted. Stage three portrays an increase in costs as capacity is increased or a decreasing return to capacity situation.

Although there is no universal law which governs returns to capacity there is a widespread belief among economists that as a firm becomes larger within an industry, it becomes more efficient. For example, if capacity were to be increased in Figure 2 from  $q_1$  to  $q_2$  costs would decrease as shown by the dip in the LRAC curve. Gains in cost reduction result from the increased capacity of the plant. The majority of small manufacturers are thought to be in stage one where costs per unit are high. Economic theory suggests that costs per unit can be lowered through an additional investment in capacity and subsequent movement along the LRAC curve into stage two. But such increases in capacity are only practical if sufficient demand is present to prompt such investment in additional capacity. The small firm often has limited demand which precludes this additional investment and results in the dilemma of high costs associated with small scale operations.

On the other hand, many small firms continue to survive because their competition often falls into stage three or the decreasing returns to capacity stage. Here, costs rise as a result of the diseconomies of scale and inefficiencies associated with massive size. This situation, when output increases from  $q_2$  to  $q_3$ , develops when organizational

and beauracratc inefficiencies offset the economies commensurate with quantity discount purchasing and specialization of labor. Size in this situation actually becomes a handicap with respect to costs, and additional increases in capacity raise costs per unit.

Thus, from an economic theory point of view two important points are made concerning the small manufacturer in long run cost analysis. First, the smaller firm is generally at a cost disadvantage within his industry because his size precludes his taking advantage of the economies of scale. Secondly, this disadvantage in costs can be alleviated only by movement along the LRAC curve through an increased investment in capacity. This movement, however, is often stymied by lack of demand precluding additional investment in plant and equipment. Thus, the real key to lower costs for the small firm rests with an increase in demand, allowing the firm to add greater capacity and gain lower costs per unit.

But, for many small firms concentrating in specialized markets, further increases in domestic demands appears limited. For these firms the opportunities presented in international markets may well provide the catalyst to allow the greater investment in capacity needed to lower costs. These lower costs would benefit both the domestic consumer and the manufacturer by enabling him to lower prices in domestic and overseas markets due to reduced production

costs.

### The Small Firm in the Domestic Economy

In certain industries massive size is natural and possibly even necessary for survival. The automobile, steel, and airplane industries illustrate this point. But, the official policy of the U.S. government has been that competition is desirable and monopoly or near monopoly is undesirable. When the trust movement gathered momentum in the 1880's, the U.S. Congress passed the Sherman Act which was the first and basic law of several anti-trust measures eventually enacted. These laws helped to insure the survival of many smaller manufacturing firms throughout the United States which might otherwise have been absorbed by larger firms.

The small manufacturer has traditionally played the important role of filling the niches in the U.S. economy not served by the larger corporations. The larger corporations in a dynamic economy, supported by huge funds for research and advertising have concentrated on expansion into those markets which offer the greatest potential for long run growth and lucrative profit. Such firms have knowingly bypassed less profitable and limited market segments in their corporate strategies. It is these bypassed segments which serve as profitable markets for the small manufacturer when he capitalizes on his inherent advantages and minimizes his weaknesses due to size.



### Limitations of Small Manufacturers

Most of the disadvantages small firms face emanate from the factor of size alluded to earlier. In small firms executive personnel, of necessity, often perform a variety of tasks crossing several functional areas. Production, marketing and financial decisions may be made by only one or two people. Key people in this size firm find that the majority of their time is devoted to daily operational matters to the detriment of planning. In such an environment small firms are often unable to capitalize on long term opportunities due to a lack of evaluative and planning preparation. In comparison the trend in larger firms is toward greater specialization and planning by key executives.

Another handicap of small manufacturers concerns the financial variable.<sup>2</sup> Most firms, regardless of size, need to borrow at one time or another. When the large firm needs cash it can float a loan or stock issue with relative ease and usually pays moderate interest rates. The small firm often has difficulty in even locating financial sources and frequently pays higher interest rates because of the risk factor. But, heavy costs for loans are only one aspect of costs for the small firm. In every aspect of operation it has difficulty meeting the unit cost figures of giant competitors. The economies of scale discussed

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<sup>2</sup>Alfred Gross, "Meeting the Competition of Giants," Harvard Business Review, May-June 1967, pp. 172-184.

earlier work against them in their purchasing activities. The small firm pays higher prices than the giants for raw materials, machinery, and supplies simply because quantity discounts are not possible in the amount of goods it purchases. Nevertheless, the existence of so many smaller manufacturers is testimony to the fact that these limitations are not fatal. Smaller firms have certain intrinsic advantages which often transcend limitations due to size.

#### Advantages of Small Manufacturers

One of the greatest advantages of the small organization is the flexibility it acquires as a virtue of small size. Market conditions change rapidly in a dynamic economy, resulting in many new opportunities. The smaller firm, with more specialized products and shorter communication channels, can sense and retrieve market information much more quickly than the giant firms because feedback and information channels are short.<sup>3</sup> Under these circumstances the execution of decisions can often be expedited more quickly than in larger organizations.

This flexibility is especially demonstrated in the development of new innovations. Larger firms do well in the improvement of existing products but suffer from a poor track record in innovation of new products. Patent

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<sup>3</sup>H.N. Broom and J.G. Longenecker, Small Business Management (Cincinnati, Ohio: South-Western Publishing Co., 1966), p. 10.

studies show that the majority of major inventions originate with one individual. Jewkes concluded in a study of sixty-one major inventions of the twentieth century that more than one-half were individual inventions.<sup>4</sup> Examples include such products as air conditioning, cellophane, insulin, kodachrome film, the jet engine, and the ball point pen. This trend is especially visible today in the electronics industry, where small firms are leading the way in semi-conductor and bipolar memory application to the mini-computer.<sup>5</sup>

Another advantage of small firms is their ability to personally serve their customers.<sup>6</sup> Customers prefer to deal with key individuals in a firm. Whereas the large manufacturer deals in volume and utilizes multiple levels of hierarchy, the smaller firm is able to offer detailed personal attention to customers. The personal touch can have a tremendous impact in the marketplace. In industries where price and product differences are minimal, the extra attention often creates a differential advantage for the small firm.

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<sup>4</sup>John Jewkes, David Sawers, and Richard Stillerman, The Sources of Invention (London: MacMillan and Co., Ltd., 1958), p. 82.

<sup>5</sup>C. Lester Hogan, President, Fairchild Camera and Instrument Corporation, "American Electronics: Maintaining World Leadership," speech delivered at 1972 International Electronic Devices Convention, Washington, D. C., December 5, 1972. Reported in Vital Speeches of the Day, February 1, 1973, p. 245.

<sup>6</sup>Gross, "Competition of Giants," p. 174.

In summary the unique circumstances of the small manufacturer requires him to shape his marketing strategy to avoid a head-on confrontation with the giants. This is accomplished through a market segmentation policy in which the products of smaller manufacturers are aimed at those markets not serviced by the larger companies. This strategy goes far in minimizing the inherent weaknesses with regard to resources and costs and often results in a marketing strategy which focuses on producing and selling products to original equipment manufacturers (OEM'S). Such a strategy eliminates the need for larger advertising budgets and exploits the small company's advantage of personalized service and flexibility.

The advantages and limitations of the small manufacturer tend to be magnified in varying degrees when products are marketed internationally. The absence of individuals with expertise in documentation and financing of foreign sales causes problems for the firm. Further reluctance is generated when demand uncertainty in foreign markets is encountered. At the same time, when the decision to export is made, the flexibility and personal services so important to the small manufacturer in the domestic market again work to his advantage in the international market.

#### The Small Firm in the International Market

There is little substantiated information available pertaining to the involvement of small manufacturing firms

in exporting.<sup>7</sup> No census has ever established by size the number of exporting firms. Such a dearth of information makes conclusive statements concerning historical or present trends difficult, if not impossible. However, a recent Department of Commerce Task Force made estimations of the involvement of several business entities in international trade.<sup>8</sup> These estimates are summarized in Table 5.

Of the estimated 38,600 exporting establishments in the United States shown in Table 5, 31,700 are manufacturing firms. This figure represents only 10 per cent of the manufacturing firms in the United States. This in itself seems to represent a rather poor participation rate for American industry in international trade. A closer look at the statistics clarifies the situation as to participation by size of firm. The larger the size of the firm, the greater tendency there is to export. For example, 38 per cent of all establishments with 100 or more employees are estimated to be exporting. This export percentage compares to a total of 29 per cent for those firms employing from 50 to 99 employees and only 5 per cent of those employing less than

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<sup>7</sup>There are, of course, other ways to participate in international markets such as licensing and manufacturing overseas. Throughout this research emphasis is placed on the export function because it usually represents the first step in international involvement.

<sup>8</sup>U.S. Department of Commerce, Domestic and International Business Administration, Task Force Report on Exporting, 1972. (Mimeographed).

TABLE 5

## SCOPE OF INTERNATIONAL TRADING COMMUNITY IN U.S., 1971

Segment: Exporters and Non-Exporters	Estimated Total Establishments	Estimated Exporting Establishments	Estimated Marginal Exporters	Estimated High Potential Non-Exporters
Manufacturers				
100 or more employees	32,000	12,200	2,000+	5,000+
50-99 employees	22,400	6,500	1,000	NA
Less than 50 employees	<u>255,600</u>	<u>13,000</u>	<u>2,000</u>	<u>NA</u>
Sub Total	310,000	31,700	5,000+	5,000+
Combination Export Managers	400-600	400-600	-	-
Export Merchants	4,000+	4,000	-	-
Distributors/ Wholesalers/Retailers	70,000	1,500	-	1,000+
Farm Products Distributors	<u>10,000</u>	<u>1,000</u>	<u>-</u>	<u>-</u>
Total	394,400+	38,600+	5,000+	6,000+

Sources: U.S. Department of Commerce, Domestic and International Business  
Administration, Task Force Report on Exporting, 1972, (Mimeographed)

50 employees. But even these figures possibly do not give a complete picture of the real involvement of United States manufacturers in foreign markets.

The export numbers shown in Table 5 are based on the fact that a manufacturer made at least one export shipment in the last year. Many of those shown as exporters are only marginally involved in export markets and have developed no real commitment to international trade. For example, the Census Bureau's 1969 Survey of the Origin of U.S. Exports found there were 10,660 manufacturing establishments with 100 or more employees exporting more than \$25,000 annually. If \$25,000 or less of export sales can be considered marginal participation, some 2,000 large manufacturing establishments can be considered marginal exporters.

From these figures it seems evident that there are a great many potential exporters in the United States of all sizes. In excess of 275,000 manufacturing establishments are not now considered exporters. Many of these firms have exportable products but little knowledge or interest in export markets. Opinion Research Corporation found that 90 per cent of the non-exporting firms they contacted in one study had absolutely no interest in selling their products abroad.<sup>9</sup>

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<sup>9</sup>Opinion Research Corporation, "Businessmen's Awareness Toward Exporting and Exporting Promotional Efforts," September, 1971. As reported in the Commerce Department's, Task Force Report on Exporting, 1972. (Mimeographed).

However, interest in exporting appears to be increasing. An estimated 508 business firms became new exporters in 1971, and 515 more registered as exporters in 1972. At the same time, if the trade deficit balance is to be turned around, there must be a greater commitment to international trade by present exporters and a greater participation by other firms. In view of the potential role smaller firms could play in this turnaround, there has been surprisingly little research concerning the small manufacturer and exporting. Following is a review of previous research concerning the small manufacturer in export markets.

Previous Research Concerning Small  
Manufacturers Export Practices

The research effort concerning the activities and attitudes of small manufacturers with respect to export marketing has been extremely limited until only the last few years. In 1970 Kizilbash investigated the export efforts of selected small firms with respect to their overseas objectives.<sup>10</sup> Pinney attempted to identify the necessary conditions which must exist before a small firm will engage in

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<sup>10</sup>A.H. Kizilbash, "A Study of Export Marketing Objectives and Practices of Selected Small Manufacturers with Particular Reference to Their Use of Combination Export Firms" (unpublished Ph. D. dissertation. University of Nebraska, 1970).



foreign trade.<sup>11</sup> Cruger chaired a government committee designed to recommend courses of action which would encourage export by smaller manufacturers.<sup>12</sup> Parzych analyzed the impact of various government acts influencing export by small firms.<sup>13</sup> Both Layton<sup>14</sup> and Palubinskas<sup>15</sup> have researched the behavioral aspects of exporting.

Kizilbash's study was concerned primarily with the export objectives and practices of selected small manufacturers and especially with a comparison of those using Combination Export Managers (CEM) to those who utilize their own export department. Eighteen manufacturers and nine CEM's in the states of Nebraska, Kansas, and Missouri were non-randomly chosen to participate in the research. Kizilbash

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<sup>11</sup>James K. Pinney, "The Process of Commitment to Foreign Trade: Selected Smaller Indiana Manufacturing Firms" (unpublished Ph. D. dissertation, Indiana University, 1968).

<sup>12</sup>U.S. Department of Commerce, American Foreign Trade-- A National Policy, report of the National Export Expansion Council's Small Business Advisory Committee, Frank M. Cruger, Chairman, (Washington, D.C.: Government Printing Office, 1971).

<sup>13</sup>Kenneth M. Parzych, "An Analysis of Export Trade under the Webb Pomerene Act of 1918" (unpublished Ph. D. dissertation, University of Connecticut, 1970).

<sup>14</sup>R. A. Layton and D. C. Dunphy, "Export Attitudes, Management Practices and Marketing Skills," Study sponsored by Export Development Council for the Australian Department of Trade, August, 1970. (Mimeographed).

<sup>15</sup>Feliksas Palubinskas and Michael R. Granat, "Small Firms Can't Cut Red Tape, Balk at Exporting Because They're Small," The Marketing News, April, 1972, p. 5.

found the respondents often lacked a commitment to foreign trade and had limited export objectives. The export objectives listed in order of highest frequency as enumerated by the respondents were as follows:<sup>16</sup>

- (1) Find markets for excess production.
- (2) Improve reputation as a global company by exporting.
- (3) Fill orders when received.
- (4) Offset declining U.S. sales.
- (5) Maximize market coverage.

He concluded the sampled small manufacturers had only a limited commitment to export operations and few had developed long run interests or strategies. He recommended manufacturers give greater consideration to a more permanent role in exporting for their firms as well as a greater commitment to existing overseas marketing activities.

In a later article Kizilbash called for increased attitude research concerning export activities by small firms.<sup>17</sup> In a personal interview with Dr. Kizilbash he reiterated his view that attitude is one of the key catalysts involved in the export decision by smaller manufacturers.<sup>18</sup>

Pinney's research work was an attempt to identify the

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<sup>16</sup>Kizilbash, "Export Marketing Objectives," p. 231.

<sup>17</sup>A. H. Kizilbash, "Small Manufacturers Fear Export Marketing," Marketing News, Mid-August, 1971. p. 7.

<sup>18</sup>A. H. Kizilbash, private interview held during meeting of the Southwest Social Sciences Association, Dallas, Texas, March, 1972.

set of necessary conditions which must exist before a smaller firm will engage in and become committed to foreign trade. He non-randomly selected seven firms in Indiana employing from 52 to 1,000 employees who appeared committed to international marketing. Utilizing a case approach analysis, he came to the following conclusions concerning the product characteristics necessary prior to small firms adopting exporting as a firm strategy. The product:<sup>19</sup>

- (1) Must be a highly complex capital equipment product of
- (2) High value per pound resulting from
- (3) Expensive product research and development.

Pinney also explored the management characteristics of firms to determine if there were traits or special action patterns which might be representative of export oriented management. The following characteristics were noted as appearing most often in a firm's management:<sup>20</sup>

- (1) Management possessed highly technical degrees in engineering or other related fields.
- (2) Management gave strong personal support to the foreign trade function.
- (3) Upper management often performed the foreign sales function including the traveling requirements.
- (4) Significant emphasis was placed on direct personal selling internationally with at least two trips abroad made annually by management.

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<sup>19</sup>Pinney, "Commitment to Foreign Trade," p. 323.

<sup>20</sup>Ibid., p. 324.

- (5) The overseas' trips constituted the major component of the foreign market information retrieval system.
- (6) Management was usually young at the time the firm became committed to foreign trade and was broadly exposed to foreign environments through travel, education, or reading publications of a cosmopolitan nature.

The study concluded with the recommendation that these substantiated propositions be submitted to further investigation using adequate sampling techniques in order to provide the scientific evidence preferred by the author.

Parzych's study was concerned with an examination of the impact of the Webb Pomerene Export Act of 1918 on small manufacturing firms' export practices. This act represented an early government attempt to enhance the export capability of the nation's small manufacturers by providing legal exemption from certain provisions of the Sherman Anti-Trust and Clayton Acts for firms aspiring to coordinate their export sales program. The legislative intent of the Webb Pomerene Act was to enable small export oriented firms to realize sufficient cost reducing and trade creating benefits from association participation as a means of intensifying their international competitive position. Such monopolistic practices as the imposition of common export sales terms, the market allocation of export business among participating firms, and the establishment of export price maintenance policy became legal functions of the registered Webb Pomerene trade associations.

Parzych's findings revealed that the legislative objectives of the Webb Pomerene Act have not been met. Along with a sizable incidence of dissolutions among registered associations has been only minimal representation of small firms; in fact, he found the principal benefactors of the act to be the highly concentrated oligopolistic industries. Parzych recommended repeal of the Webb Pomerene Act on the grounds it had failed to achieve the legislative intent of encouraging small firms' participation in international markets.<sup>21</sup>

Government has also expressed interest in the needs of small firms active in the export market. In 1971 at the request of then Secretary of the Commerce, Maurice Stans, a report was prepared under the direction of Mr. Frank Cruger of the Small Business Advisory Committee of the National Export Expansion Council.<sup>22</sup> This report, which received the attention of President Nixon, consisted of a summary of findings and recommendations for courses of action which would encourage export from smaller manufacturers.<sup>23</sup>

The committee found that a domestic market preoccupation, basic to the problem of American exports, still exists

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<sup>21</sup>Parzych, "Webb Pomerene Act," p. 218.

<sup>22</sup>U.S. Department of Commerce, American Foreign Trade.

<sup>23</sup>Mr. Cruger noted in a letter to the author that this report was brought to the attention of the President by then Secretary of the Commerce, Maurice Stans.

after two hundred years of America's existence and after extensive promotional efforts by the Department of Commerce, local and state Chambers of Commerce, banks and trade associations. The council estimated that 90 per cent of United States manufacturers do not participate in exporting.<sup>24</sup> At the same time they noted that not all firms are qualified to export; therefore, the council set forth several qualifying conditions for successful exporting. Potential exporters they write:<sup>25</sup>

- (1) Must manufacture products of superior technological or design quality, useful and usable in the intended market, and priced realistically.
- (2) Must have production capability of more than enough for the domestic market to satisfy the increased demand.
- (3) Must engage in sustained sales effort with support at all levels, recognizing essential differences in export sales procedures.

The committee also explored the possible causes for the lack of export effort by many manufacturing firms. Their findings as to why many firms that qualify as potential exporters yet do not export are as follows:<sup>26</sup>

- (1) No income tax incentives or tax rebates

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<sup>24</sup>Ibid., p.10.

<sup>25</sup>Ibid., p. 11.

<sup>26</sup>Ibid.

- (2) Differences of language
- (3) Strange company names
- (4) No foreign contacts: "the right people to see"
- (5) Unknown foreign competition
- (6) Unknown foreign industrial or consumer environment for their product: Measurements, specifications, legal questions, design, power sources, techniques of use.
- (7) No overseas sales organization
- (8) Expenses of travel
- (9) Doubts about collection of receivables
- (10) Increased capital requirements
- (11) Different money
- (12) No foreign banking connections
- (13) Strange documents and paper work
- (14) Unfamiliar overseas shipping
- (15) Unfamiliar business terms (proforms, C.I.F., F.A.S., etc.)
- (16) No trained personnel to handle these matters
- (17) Increased fixed overhead of an export department
- (18) Lack of awareness of available assistance from government agencies
- (19) Lack of awareness of export profits.

The research committee formulated an action plan designed to attract and activate small manufacturers with potential for export. They recommended that the attention of manufacturers could best be gained by appealing to the profit motive

through concentration on tax benefits concomitant with a new concerted effort involving every agency of government with responsibilities in international trade as well as all trade associations, transport companies, financial institutions, and other business organizations concerned with the strength of American small business. Specific recommendations included in the report are summarized in Table 6.

Since the report, actions have been taken on a number of the recommendations. The Revenue Act of 1971 allows American manufacturers to create a Domestic International Sales Corporation (DISC) for the purpose of deferring taxes on export sales. In 1972 the Commerce Department underwent a reorganization in an attempt to combat the growing trade deficit and to assist manufacturers in exporting.<sup>27</sup> One aspect of this reorganization involved the development of The Export Assistance Masters' Program. This program united the Commerce Department's Business Service Field Officers and various universities in an effort to enlist qualified candidates for Masters in Business Administration degrees to make export studies for small firms interested in international markets.<sup>28</sup> Additionally, there has also been a redirection of the U.S. State Departments overseas. Prodded

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<sup>27</sup>"Commerce Department Mobilizes To Cut the Trade Deficit," Business Week, November 18, 1972, pp. 64-65.

<sup>28</sup>"Campus Export Research Program Attracts Wide Company Interest," Commerce Today, June 26, 1972, p. 44.



TABLE 6

SUMMARY OF RECOMMENDATIONS OF THE SMALL BUSINESS ADVISORY  
COMMITTEE OF THE NATIONAL EXPORT EXPANSION COUNCIL

- 
- 1) A statement of national export policy by the President for total public attention.
  - 2) Passage of legislation offering tax incentives on export profits for qualified businesses primarily engaged in export and to individuals employed by those businesses.
  - 3) Immediate revision of Federal Reserve and commercial bank financing procedures to make the U.S. competitive in the world markets; and enlargement of Export-Import Bank funds and programs for the same urgent and realistic purpose.
  - 4) A sustained educational campaign explaining the basic details of initial export effort to activate the great mass of small businesses not now so engaged.
  - 5) Activation of the nation's Combination Export Managers, banks, shipping companies, airlines, and labor.
  - 6) Re-direction and upgrading of Department of Commerce literature, overseas staffs, research, and business services.
  - 7) Re-direction of the Small Business Administration and the Federal Credit Insurance Association toward education, activation, and competitive policies.
  - 8) Creation of Inland Foreign Trade Zones to expedite assembly operations, containerization, and transshipment of joint cargoes of small businesses and to relieve congestion of coastal sea-ports, airports, truck and rail terminals.
  - 9) Standardization and reduction of the international documents and paper work involved in foreign trade.
  - 10) Pursuit of agreements with foreign countries reducing actual and artificial trade barriers, commensurate with the theory of "free trade."
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Source: U.S. Department of Commerce, American Foreign Trade A National Policy, Report of National Export Expansion Council's Small Business Advisory Committee. Frank M. Cruger, Chairman (Washington, D. C.: Government Printing Office, 1971), p. 7.

by the U.S. deficits, many foreign service professionals have been sent to special trade seminars. More importantly, all foreign embassies have received the directive that officers will be evaluated on the basis of their concern for United States business.<sup>29</sup>

Another major study undertaken for the Australian Department of Trade concentrated on firm characteristics to determine a firm's potential as an exporter. The conclusions of this study are unique in that they place great importance on managerial attitude and style as a predictor of export potential as opposed to product characteristics. The authors state:<sup>30</sup>

It is apparent to us that it is not industry nor product process, not labor intensity which is really important in determining whether or not a company will export. Instead, the attitudes, insights, and experiences of the executive group, sustained by corporate tradition are of prime importance.

A qualitative listing of the attitudes and attributes of non-exporters and exporters were established by the researchers. This listing is shown in Table 7. Here again, a major study focused on attitudes in the hope of providing clues and possible solutions to the reluctance of small firms

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<sup>29</sup>"World Trade: A U.S. Ambassador's New Business Role," Commerce Today, December 16, 1972, p. 38.

<sup>30</sup>R. A. Layton and D. C. Dunphey, "Export Attitudes, Management Practices and Marketing Skills," cited in U.S. Department of Commerce, Task Force Report on Exporting, 1972, p. 41.

TABLE 7

ATTRIBUTES OF EXPORTING ESTABLISHMENTS VS.  
NON-EXPORTING ESTABLISHMENTS

Exporting Establishments	Non-Exporting Establishments
1. High growth rate	1. Low growth rate
2. Marketing oriented	2. Production oriented
3. Planning	3. Non-planning
4. Some tendency to lower labor costs	4. Some tendency to higher labor costs
5. Better organized	5. Less well organized
6. More levels of control	6. Fewer levels of control
7. Purposeful management style: Plans ahead Stable and committed to planning Sets clear goals Market oriented strategies Profit oriented	7. A drifting management style: Not involved in planning No one with prime responsibility in planning Less likely to set goals Firm centered strategies Production oriented
8. Delegation of decision making	8. Chief executive totally involved
9. Younger executive team	9. Older executive team
10. Higher level of education of executive team	10. Lower level of education
11. Wider product range; perhaps a higher level of innovation	11. More likely to custom make products
12. More likely to have products in the early stages of the product life cycle	12. Narrow product range
13. More likely to have introduced products in the last three years	13. Less likely to have introduced products in the last three years
14. Smaller exporters more promotion conscious	14. Less promotion conscious
15. More likely to use low or premium pricing	15. More likely to price at industry level
16. More likely to see "after-sales service" as important	16. Less likely to see "after-sales service" as important

to participate in exporting.

Another attitude study is currently underway by Palubinskas and Granat. They conducted a mail survey of five hundred executives of small companies in the greater Los Angeles area in an attempt to determine those characteristics which differentiate exporters from non-exporters and to discover some of the specific factors mitigating for or against exporting by a small company. Of the 500 questionnaires 135 or 27 per cent of the total mailing were found to be usable in the research.

The researchers have published tentative conclusions concerning their research.<sup>31</sup> First, as a general comparison, the researchers found that the non-exporter does not regard exporting as having a particularly good potential for additional sales and profits. Secondly, the sampled firms feel that small size places them at a distinct disadvantage in exporting with respect to financing, market information, and ability to cope with export red tape. The authors suggest the solution to the export problems of small manufacturers lies in the use of an intermediary agent to handle their export program.

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<sup>31</sup>Palubinskas, "Small Firms," p. 5. Dr. Palubinskas confirmed by letter that these conclusions are only tentative pending further analysis of the data.

### Summary

In summary, one can detect an increased research interest concerning the small manufacturer and international trade in the period since 1970. The researchers all agree on the point that there should be greater participation in exporting by small establishments. Most conclude that small size is a disadvantage and places some limitations on the firm's export efforts. But there is disagreement over the most efficient manner of targeting potential export firms. The Cruger study strongly suggests product characteristics as the key predictor whereas the Layton study places greater emphasis on attitudes and attributes of management for spotting export potential. Pinney's study takes each into consideration on an almost equal basis. Although the research undertaken in this study focuses on both areas, greater emphasis is placed on investigation of the comparison of attitudes of exporters and non-exporters. It is felt that such a comparison, done under statistically reliable sampling techniques will yield significant findings to complement and clarify existing research as well as to act as a catalyst for further research in this timely and important area.

## CHAPTER III

### METHODOLOGY

The purpose of this chapter is to explain the methodology used in this research effort. First, a justification of attitudinal research is made followed by an enumeration of the hypotheses tested. The development of the Semantic Differential testing instrument used in the research effort is also discussed along with an explanation of the sample survey design. Included is a description of the sampling procedures used in the data collection. Lastly, the research design and statistical analysis used in the research are explained.

#### Rationale for Attitudinal Research

Attitudinal research has occupied a place of keen interest in the social sciences for many years; indeed, the concept of attitude is indispensable to researchers in the behavioral areas of psychology, sociology, and education. In recent years the techniques developed by researchers in the social sciences have been adopted and refined by investigators in other fields as the interdisciplinary approach to education and research has gained in popularity.

The extension of attitude research into the marketing field is only logical since psychological variables play a key role in the explanation of buying and selling behavior.

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explaining certain actions.

Early attitude studies were concerned with determining the relationship between attitudes and behavior. In 1934, La Piere conducted a study in which he theorized that knowledge of attitudes did not, in fact, enable one to predict subsequent behavior.<sup>2</sup> Beginning on the West Coast, he contacted various hotels, cabins, and boarding houses across the United States to determine if they would accept an Asian couple as overnight guests. The majority of replies were negative; however, when La Piere subsequently presented the Asian couple in person at the same establishments throughout the continent, accommodations were rarely refused. La Piere concluded that a knowledge of attitudes did not allow prediction of behavior but that constraints including fear, embarrassment, and situational circumstances can act as buffers between attitudes and behavior.

Rokeach has conducted several studies on beliefs, attitudes, and values. He contends that behavior results from the activation of at least two interacting attitudes, one concerning the attitude toward an object and the other concerning the attitude toward a situation.<sup>3</sup> How a person will behave toward an object within a given situation will

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<sup>2</sup>R. T. La Piere, "Attitudes vs. Actions," Social Forces, XIII (1934), p. 230.

<sup>3</sup>Rokeach, Attitudes, p. 126.



depend on two things; (1) the particular predispositions (feelings) activated by the attitude object and (2) the predispositions elicited by the situation. Thus, according to Rokeach, a person's behavior must always be mediated by at least two types of attitudes, one activated by the object and the other by the situation.

In the present research effort, an attempt was made to measure only attitudes toward objects or concepts. Since the attitude measures completed by each participant were collected in the firm's environment, it is anticipated that situational influences were also at work. No attempt was made to predict behavior from the attitude findings. The objective was to develop an attitude profile for each respondent at a particular time and toward a particular concept. It was anticipated that a comparison of these profiles would give insight into the motivation behind certain businessmen's actions.

### Hypotheses

As stated earlier, the purpose of this research was to measure the attitudes of exporting and non-exporting small manufacturers toward the domestic, international, and ideal marketplaces with reference to particular marketing concepts. The specific null hypotheses tested were as follows:

#### Competition Hypotheses

- (1) There are no significant differences in the attitudes of domestic- and export-oriented small manufacturing executives with respect to competition in national, international, and ideal markets.

- (2) There are no significant differences in the attitudes of domestic- and export-oriented small manufacturing executives with respect to competition in the international market.
- (3) There are no significant differences in the attitudes of domestic oriented small manufacturing executives with respect to competition in the national and international markets.

#### My Product Hypotheses

- (4) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to their product in national, international, and ideal markets.
- (5) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to their product in the international market.
- (6) There are no significant differences in the attitudes of domestic oriented small manufacturing executives with respect to their product in the national and international markets.

#### Channels of Distribution Hypotheses

- (7) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to the channels of distribution in the national, international, and ideal markets.
- (8) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to the channels of distribution in the international market.
- (9) There are no significant differences in the attitudes of domestic oriented small manufacturing executives with respect to the channels of distribution in the national and international markets.

### Market Information Hypotheses

- (10) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to market information in the national, international, and ideal markets.
- (11) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to market information in the international market.
- (12) There are no significant differences in the attitudes of domestic oriented small manufacturing executives with respect to market information in the national and international markets.

### Profit Hypotheses

- (13) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to profit in the national, international, and ideal markets.
- (14) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to profit in the international market.
- (15) There are no significant differences in the attitudes of domestic oriented small manufacturing executives with respect to profit in the national and international markets.

### Cost of Selling Hypotheses

- (16) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to cost in the national, international, and ideal markets.
- (17) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to cost in the international market.

- (18) There are no significant differences in the attitudes of domestic oriented small manufacturing executives with respect to cost in the national and international markets.

#### Small Firms Hypotheses

- (19) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to small firms in the national, international, and ideal markets.
- (20) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to small firms in the international market.
- (21) There are no significant differences in the attitudes of domestic oriented small manufacturing executives with respect to small firms in the national and international markets.

#### U.S. Government's Role Hypotheses

- (22) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to the U.S. government's role in the national, international, and ideal markets.
- (23) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to the U.S. government's role in the international market.
- (24) There are no significant differences in the attitudes of domestic oriented small manufacturing executives with respect to the U.S. government's role in the national and international markets.

#### Financing of Operations Hypotheses

- (25) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to financing of operations in the national, international, and ideal markets.

- (26) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to financing of operations in the international market.
- (27) There are no significant differences in the attitudes of domestic oriented small manufacturing executives with respect to financing of operations in the national and international markets.

#### Documentation Hypotheses

- (28) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to documentation in the national, international, and ideal markets.
- (29) There are no significant differences in the attitudes of domestic and export oriented small manufacturing executives with respect to documentation in the international market.
- (30) There are no significant differences in the attitudes of domestic oriented small manufacturing executives with respect to documentation in the national and international markets.

#### The Semantic Differential

The Semantic Differential (SD) is a scaling technique devised by Osgood, Suci, and Tannenbaum for the purpose of quantifying the psychological meanings of things.<sup>4</sup> Since its development, the method has been used in a number of different ways by researchers. Mindak was the first to apply the Semantic Differential to marketing research.

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<sup>4</sup>Charles Osgood, George Suci, and Percy Tannenbaum, The Measurement of Meaning (Urbana: University of Illinois Press, 1957).

Since that time, the technique has become one of the most popular instruments for use in measurement of consumer attitudes toward brands, products, and company images.<sup>5</sup>

The popularity of the Semantic Differential results from its flexibility. It is not a standardized test but, rather, a technique which can be adapted to the specific needs of the researcher. It is also a quick and efficient means of quantifying the direction and intensity of group attitudes toward a particular concept. The technique avoids stereotyped responses and allows for individual frames of reference. The Semantic Differential also eliminates problems of question phrasing, ambiguity, and interviewer bias.

The Semantic Differential (SD) consists of pairs of antonyms (adjectives or phrases) separated by a response continuum. Kerlinger notes that the first step in construction of the SD instrument is the selection of concepts to be rated by the bipolar adjectives.<sup>6</sup> The concepts used in this research effort were chosen according to their relevancy to the research subject. These concepts were as follows: Competition, My Product, Channels of Distribution, Market Information, Profit, Cost, Small Firms, Government, Financing, and Documentation. Each of these concepts is

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<sup>5</sup>William Mindak, "Fitting the Semantic Differential to the Marketing Problem," Journal of Marketing, XXV (April, 1961), 28.

<sup>6</sup>Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart, and Winston, Inc., 1964), p. 567.

explained in the following sections.

The Concept of Competition--Small firms often fear that giant firms will invade their markets. In talks with groups of small businessmen the view was expressed that even if overseas markets did exist for their products, eventually larger U.S. or foreign competition would absorb such markets. This concept was included on the Semantic Differential to determine if this view is widely held among smaller firms.

The Concept of My Product--The characteristics of a product often determine whether it can be exported successfully. Although all the respondents in the sample were potential exporters, this concept was included to determine how the manufacturers view their product in the international as well as the national market.

The Concept of Channels of Distribution--The lack of expertise regarding export channels is often mentioned as a reason for the reluctance of small firms to enter exporting. The inclusion of this concept showed whether the lack of knowledge of middlemen and institutional channels is a reason for the reluctance of many small firms to engage in exporting.

The Concepts of Market Information, Financing, and Documentation--The tentative findings of Palubinskas indicated that the principal disadvantage incurred by small firms in exporting lay in their inability to cope with the

financing, information, and red tape involved in exporting.<sup>7</sup> These concepts were included to measure the intensity of manufacturers' attitudes toward these concepts.

The Concept of Profit--The Small Business Advisory Committee's Report recommended that attention to export markets could best be gained through concentration on the profit motive. This concept was included to determine whether differences in profit according to markets are perceived by the respondents.

The Concept of Cost--Cost of sales is vitally important to small manufacturers. The cost concept was included on the measurement instrument to determine what role costs play in the attitudes of small manufacturers with regard to various markets.

The Concept of U.S. Government's Role--Because of its regulatory role, the government plays an important part in export markets. Parzych found that existing legislation encouraging small firms to export products has not been successful.<sup>8</sup> Since government plays such a crucial role in the international trade, this concept was included to determine the positive or negative attitudes small industry holds with regard to the U.S. government's role in the national, international, and ideal marketplaces.

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<sup>7</sup>Palubinskas and Granat, "Small Firms," p. 5.

<sup>8</sup>Parzych, "Export Trade," p. 237.



The Concept of Small Firms--There has been much written about the small firm's place in the American economy. Some experts feel that small firms should concentrate exclusively on local markets. This concept was included to determine how a general sample of small business entrepreneurs regard the role of small firms with respect to markets.

Kerlinger notes that the second step in the construction of a Semantic Differential testing instrument is the selection of the appropriate adjective pairs or phrases.<sup>9</sup> The adjectives chosen for this instrument were developed from a pretest list and existing lists used by other researchers. Initially, twelve sets of bipolar adjectives were developed for each concept; this number was later reduced to eight per concept as a result of pretesting the instrument. The number of rating spaces used between bipolar adjectives varies and is dependent upon the type of respondent, the experimental design, and nature of the study. From a measurement point of view the more spaces, the better, since reliability increases as the number of spaces is increased up to a certain point. However, Nunnally found that reliability starts to decline if more than seven rating points are used.<sup>10</sup> Green and Rao concluded that little additional

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<sup>9</sup>Kerlinger, "Foundations," p. 569.

<sup>10</sup>J. Nunnally, Psychometric Theory (New York: McGraw-Hill, Inc., 1967), p. 521.

information is gained beyond six rating points on the continuum.<sup>11</sup> Seven rating points were used to separate the bipolar adjectives on the instrument developed for this study. This resulted in a balanced scale. A scale is balanced when there is an equal number of spaces on either side of the indifferent or neutral space. The bipolar adjectives were randomly placed on the instrument to avoid position bias with respect to positive and negative responses. A copy of the completed instrument is included in Appendix A.

#### Sample Survey Design

The sample survey design chosen for this research effort was intended to gain the greatest possible measurement precision under the limitations imposed by the practicality of the situation. Commensurate with these objectives, the sample size was determined and stratified random sampling techniques were used to determine which respondents would be interviewed. The population universe was limited in several ways to gain the greatest possible insight into the hypotheses tested. The following parameters were used in defining the population:

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<sup>11</sup>P.E. Green and V. R. Rao, "Rating Scales and Information Recovery--How Many Scales and Response Categories to Use"? Journal of Marketing, XXXIV (July, 1970), p. 33.

- (1) The potential participant must be a manufacturing firm engaged in the manufacture of a product and employing between 20 and 250 employees.
- (2) The potential respondent must be headquartered in the state of Oklahoma.
- (3) The potential respondent must not be engaged in the petroleum or Oklahoma petroleum related industries. Additionally, no potential respondents engaged in the textile or clothing manufacturing industries were allowed in the sample.

The specification of manufacturing firms is meant to exclude all extractive, processing, and service businesses. The exclusion of firms with fewer than 20 employees was an attempt to eliminate craft and seasonal manufacturers. However, this in no way was meant to imply that very small firms should not consider exporting. The petroleum and textile manufacturers were eliminated after early research had indicated that the characteristics of these industries were such that their inclusion would bias the research findings. Petroleum related industries have been exporting for many years because their customers are involved in the worldwide search for energy resources. This movement of the market overseas is not true of most industries. An opposite situation has occurred in the textile industry. Because it is a labor intensive industry, American textile manufacturers have little export potential at this time; and were not included in the sample population. A total of 280 firms in Oklahoma met the parameters of the study

and was used as the sample population.<sup>12</sup>

#### Sample Size Determination

The fundamental characteristic to be determined from the sample was the attitude of Oklahoma manufacturers toward exporting. An attitude is a variable that is not readily amenable to quantification in comparison to variables such as age or income and, as such, cannot be used in the determination of sample size. Following accepted procedure in such cases, an evaluation of proxy variables was conducted which determined that the number of employees would likely result in differences in attitudes toward exporting. Employee numbers were subsequently used as the proxy variable in the determination of sample size. The formula for sample size as developed by Hansen was used in this study.<sup>13</sup>

The determination of sample size requires a decision as to the amount of error the researcher is willing to accept from the sample statistics along with a specification of the level of confidence required. For this study a

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<sup>12</sup>Information on firms was obtained from the Oklahoma Industrial Development and Park Department, Oklahoma Directory of Manufacturers and Products, 1972 (December, 1972).

<sup>13</sup>Morris H. Hansen, William N. Hurwitz, and William G. Madow, Sample Survey Methods and Theory (New York: John Wiley & Sons, Inc., 1953), p. 127.

a confidence level of 95 per cent was established with an error rate not to exceed 10 per cent. With the error rate and confidence level specified, the sample size could be calculated. The coefficient of variation was calculated by dividing the sample standard deviation (S) by the sample mean ( $\bar{x}$ ). Based on the above data, it was determined that a sample of 33 was needed to meet the requirements of a confidence level of 95 per cent and an error rate of less than 10 per cent. The formula and calculations for sample size are shown in the Appendix.

#### Stratification of the Sample

The purpose of a sample survey design is to maximize the amount of information collected under established restrictions or costs. Simple random sampling, the basic sampling design, often provides a good estimate of population quantities at low cost. When random sampling is combined with another sampling procedure, stratification, the resulting sample can increase the reliability of the sample results for a given cost. Stratified random sampling results when the population elements are separated into mutually exclusive groups called strata and random numbers are taken from each strata. The proportional drawing of samples from each strata insures equal representation of each group in the sample while still achieving random sampling.

Strata definition is the first step in stratification

sampling. In this design the population was first stratified according to the export or non-export activities of the firms and, secondly, according to firm size as determined by the number of employees. Table 8 portrays the results of the stratified random sample survey design.

Sampling theory suggests that, if units are to be selected at random from within each strata, the best allocation of the sample within the strata is in proportion to the size of stratum.<sup>14</sup> The total sample size of 33 was first divided proportionally according to the firm's activities with regard to exporting. Fifty-five per cent of the sampling population was classified as non-exporters or domestic-oriented firms and forty-five per cent as exporters. This would have resulted in 18 domestic and 15 export firms being chosen. However, since the sample sizes of each stratum were so close, eighteen of each were sampled to expedite the analysis, giving a total sample size of 36. Stratified sampling among the domestic and international firms was based on proportions according to employee numbers. Table 8 shows the number of firms randomly sampled within each stratum

#### Collection of the Data

A pretest administration of the Semantic Differential was conducted using respondents in the area who were not

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<sup>14</sup>Ibid, p. 40.

TABLE 8

STRATIFIED RANDOM SAMPLE BASED ON DOMESTIC OR  
EXPORT ORIENTATION OF FIRMS AND EMPLOYEE SIZE

FIRM CATEGORY	Classification- Number of Employees	Number of Firms	Sample Size Based on Number of Employee
Exporting Firms	(20-49)	49	7
	(50-99)	41	6
	(100-250)	36	5
	(Total)	<u>126</u>	(Total) <u>18</u>
Non-Exporting Firms	(20-49)	74	9
	(50-99)	37	4
	(100-250)	43	5
	(Total)	<u>154</u>	(Total) <u>18</u>
	Grand Totals	280	36

included in the survey. Pretesting resulted in the modification of the research instrument including the addition and deletion of several sets of bipolar adjectives. As a result of the pretest, it was determined that 45 minutes would be needed for respondents to complete the research instrument.

A table of random numbers was used to select the manufacturing firms to be interviewed. Once the sample was chosen, a letter was sent to the president of each firm explaining in general terms the nature of the research. This was followed by a phone call requesting his cooperation in the study. All the firms contacted agreed to participate in the study. Efforts were made to personally interview the chief executive officer of each firm, but in those circumstances where such arrangements could not be made, another key person in the organization was interviewed. Appendix C contains a list of the positions of each of the respondents interviewed and the type of product manufactured by his firm.

Since random sampling was used in the survey design, the geographical location of the respondents was dispersed throughout the State of Oklahoma with the industry concentration in Oklahoma and Tulsa counties resulting in a greater number of participants from these two areas. Figure 3 illustrates the geographical dispersion of the 36 sampled firms along with an indication of their domestic (D) or export (E)



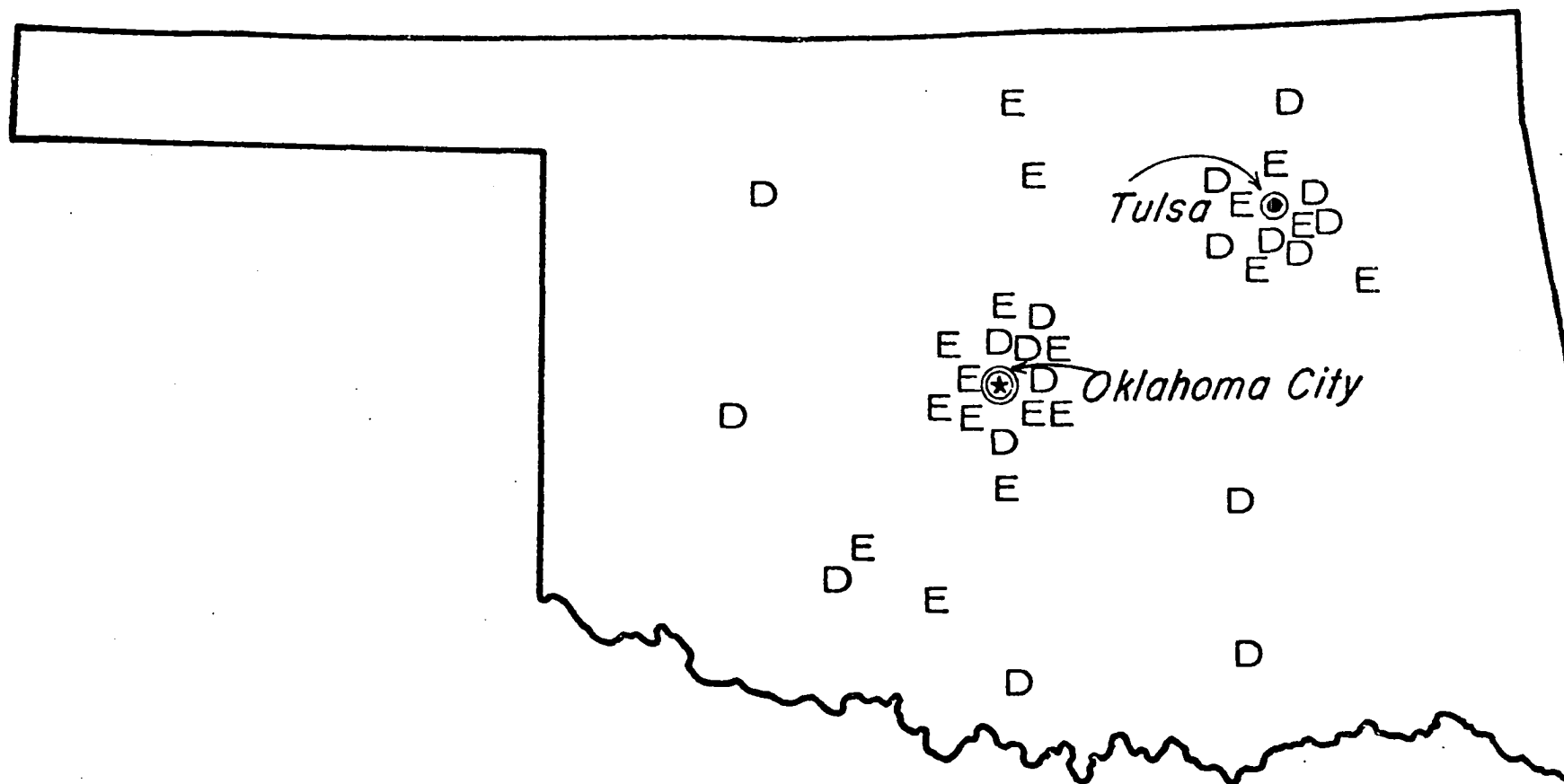


Figure 3: Geographical distribution of Domestic-Oriented (D) and Exporting (E) firms chosen for the study

orientation.

### The Research Design

The research design allows the researcher to test hypotheses in a systematic and controlled fashion. Often in research only one dependent variable is being measured but that variable may be affected by two or more independent or experimental variables. Factorial analysis of variance designs permit the researcher to evaluate the individual and/or combined effects of two or more independent variables upon the dependent variable. Thus, information obtained from factorial designs is usually more complete than that obtained from a series of single factor experiments. This is true because factorial analysis of variance experiments permit the evaluation of interaction effects among the independent variables. An interaction effect is an effect attributable to the combination of two or more independent variables above and beyond that which can be predicted when the variables are considered singly.

The design of a factorial experiment involved selection of the dependent and independent variables to be analyzed. The dependent variable was measured by giving numerical values to the ten concepts enumerated in the hypotheses. These were as follows: Competition, My Product, Channels of Distribution, Market Information, Profit, Cost, Small Firms, Government's Role, Financing, and Documentation. The independent (treatment) variables are often referred

to as factors. The dimensions of a factorial experiment are indicated by the number and levels of factors included in the design. A 2 x 3 factorial design was utilized in this research. There were two factors, one having two levels and the other three. The factors in this study were the respondent groups (factor A) classified according to their domestic or export orientation and the markets (factor B) classified according to national, international, or ideal dimensions. Two levels of factor A and three levels of factor B were involved.

The factorial analysis of variance design is depicted schematically in Table 9. In the schema  $a_1$  and  $a_2$  designate the levels of factor A and  $b_1$ ,  $b_2$ , and  $b_3$  designate the levels of factor B. In a 2 x 3 factorial experiment there are six possible combinations of treatments. Level  $a_1$  may be used in combination with each of the three levels of factor B and level  $a_2$  may also be used in combination with these same three levels of factor B. For example, the cell labeled  $ab_{22}$  represents the situation whereby an export oriented small manufacturing executive is evaluating the international marketplace.

The analysis of variance of a 2 x 3 factorial design results in three F values. These results are two main effects, A and B, and an interaction effect between two independent variables (A x B). The main effect of A represents a comparison between the group means for  $a_1$  the

TABLE 9

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENTAL DESIGN  
WITH DESIGNATED FACTORS AND FACTOR LEVELS

		Levels of Factor B (Markets)		
		National b <sub>1</sub>	International b <sub>2</sub>	Ideal b <sub>3</sub>
Levels of Factor A (Respond- ent Groups)	a <sub>1</sub> Domestic Oriented Manufacturer	ab <sub>11</sub>	ab <sub>12</sub>	ab <sub>13</sub>
	a <sub>2</sub> Export Oriented Manufacturer	ab <sub>21</sub>	ab <sub>22</sub>	ab <sub>23</sub>

domestic firm, and  $a_2$ , the international firm, averaged over three levels of B. Similarly, the main effect of B represents a comparison of the means for  $b_1$ , the national market,  $b_2$ , the international market, and  $b_3$ , the ideal market, averaged over two levels of A. The interaction effect is the reciprocal effect of the factors A and B working together; or, to put it another way, the (A x B) interaction is an examination of the interaction of all levels of factor A with all levels of factor B.

For example, if the concept of profit was found to have three significant F values (A, B, and A x B), the results would be interpreted in the following way. A significant A main effect indicates that the two respondent groups  $a_1$  and  $a_2$  have significantly different attitude toward the concept of profit. A significant B main effect indicates that the two groups of respondents,  $a_1$  and  $a_2$ , have different attitudes about the profitability of the three markets, i.e., the domestic, international, and ideal marketplaces. A significant A x B interaction effect would mean that the differences in attitude among the two respondent groups toward the profitability of the three markets is dependent upon the markets and the profitability concept. In other words, differences in the attitudes of groups  $a_1$  and  $a_2$  with respect to profitability is influenced by the type of market being considered.

### Comparison of Individual Means

It should be stressed that two of the three hypothesis tested for each concept involved a comparison of only two group means. These pairs of means were compared in order to examine more specific relationships. First, it was desired to compare the attitudes of the domestic and export-oriented manufacturers with respect to the international market for each concept. Next, a comparison was made of domestic manufacturers' attitudes toward the national and international market.

Significant analysis of variance results indicate that the means being compared differ significantly. At the same time, the ANOVA results do not indicate specific differences among the means. There is a variety of methods useful in locating specific differences among means. For making the multiple comparisons in this study, Duncan's New Multiple Range Test was used in those cases where there was a significant A x B interaction effect. In those instances where the A x B interaction effect was not significant, no further calculations were made and the null hypothesis could not be rejected.

In comparison to the Scheffe, Tukey, and Newman-Keuls, the Duncan's New Multiple Range Test has been shown to be applicable to a relatively broad class of situations while still remaining more conservative than other individual a

priori tests.<sup>15</sup> In this test the means to be compared are arranged in the order of magnitude. A standard error of the mean is developed and multiplied by significant studentized ranges developed by Duncan.<sup>16</sup> The resulting values, called the shortest significant ranges, are then used to make multiple comparisons of the means. A detailed description of Duncan's technique is included in the Appendices.

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<sup>15</sup>B. J. Winer, Statistical Principles in Experimental Design (New York: McGraw Hill Book Company, 1971), p. 201.

<sup>16</sup>D. B. Duncan, "Multiple Range and Multiple F Tests," Biometrika, XI (1955), 1. Tables are also found in Allen E. Edwards, Experimental Design in Psychological Research (New York: Holt, Rinehart, and Winston, Inc., 1950), p. 430.

CHAPTER IV  
STATISTICAL ANALYSIS AND FINDINGS CONCERNING THE  
ATTITUDES OF EXPORT AND DOMESTIC ORIENTED  
MANUFACTURERS TOWARD MARKETS

This chapter is concerned with the presentation of the statistical and qualitative findings pertaining to the attitudinal data generated by the field research. The first part gives a discussion relating to the acceptance or rejection of the null hypotheses. All hypotheses were concerned with the ten concepts measured in the study. Factorial analysis of variance and Duncan's New Multiple Range Test were used in analyzing the data. Following the hypotheses results is a presentation of the ancillary findings of the research effort.

Test of Hypotheses

In the analysis of variance tables the F value is shown at the 95 per cent confidence level for all main and interaction effects unless otherwise indicated. The tabled F value needed for significance of the A main effect is 3.94 with 1 and 102 degrees of freedom for the B effects and A x B effects with 2 and 102 degrees of freedom, the F value must exceed 3.09 for significance. In those situations where the A x B interaction effect was significant, further comparison of individual means was made using Duncan's Multiple Range



Test. In the tables showing the multiple range comparisons, underscoring at the bottom of the tables indicates the relationship of the means. Any two means underscored by the same line do not differ significantly.

#### Test of Hypotheses Concerning the "Competition" Concept

The results of the analysis of variance are presented in Table 10. A significant B main effect was found but the A main effect and the A x B interaction were not significant. The non-significant A x B interaction effect indicated that any differences in the two groups' attitudes toward competition were not affected or influenced by the market types. Likewise, the non-significant A main effect indicated that there was no significant difference between the two groups' attitudes with respect to the concept of competition.

The significant B main effect revealed that the two respondent groups perceived a difference in competition among the three market classifications,  $b_1$ ,  $b_2$ , and  $b_3$  (Table 11). It should be noted at this time that significant B main effects were found in the analysis of variance of all ten concepts. This is because the factor B in the research design encompassed the national, international, and ideal market classification. Since the ideal market represented a utopian or perfect state, the responses to this market classification were considerably more positive than those of the other two which resulted in consistently significant difference among respondents' scores. The

TABLE 10  
ANALYSIS OF VARIANCE OF TWO RESPONDENT GROUPS'  
ATTITUDES TOWARD MARKETS WITH RESPECT TO  
THE CONCEPT OF COMPETITION

Source of Variation	Sum of Squares	d.f.	Mean Square	F
A: Manufacturers	0.078	1	0.078	0.176
B: Markets	206.400	2	103.200	232.371*
A x B: Manufacturers x Markets	0.304	2	0.152	0.342
Error: Within Treatments	<u>45.300</u>	<u>102</u>	0.444	
Total	252.082	107		

\*Significant beyond the .001 level.

TABLE 11

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENT PRESENTING MEAN  
VALUES RELATING TO MANUFACTURERS ATTITUDES TOWARD MARKETS  
WITH RESPECT TO COMPETITION

Levels of Factor A (Manufacturers)	Levels of Factor B (Markets)			
	National $b_1$	International $b_2$	Ideal $b_3$	Total
$a_1$ Domestic Oriented Manufacturers	4.116	4.102	7.0	15.218
$a_2$ Export Oriented Manufacturers	3.914	4.143	7.0	15.057
Total	8.030	8.245	14.0	

statistical analysis results in the rejection of hypothesis 1 but the researcher could not reject null hypotheses 2 and 3. From these findings, it was concluded that export and domestic oriented firms have similar attitudes about the competition in various markets and as such it is not a determining force in their decision to export.

#### Test of Hypotheses Concerning the "My Product" Concept

Analysis of the data relating to the concept of the manufacturer's product resulted in a significant A and B main effect but a non-significant A x B interaction effect (Table 12). The non-significant A x B interaction effect indicated that the attitudes of the respondents toward their products is independent of the market classification. Distinct differences existed between the attitudes of the two groups toward their products. This was indicated by the significant F value for factor A. The export manufacturers saw their products in a much more positive manner than the domestic oriented manufacturers. Since all the respondents products were deemed exportable, it appears that many of the domestic oriented manufacturers were not aware of the positive reception their product might receive in international markets. The significant B main effect denoted a difference between the two groups' attitudes concerning their product in the various markets. The high mean value for the ideal market shown in Table 13 indicated that in the respondents' views their products are far from

TABLE 12  
ANALYSIS OF VARIANCE OF TWO RESPONDENT GROUPS  
ATTITUDES TOWARD MARKETS WITH RESPECT TO THE  
CONCEPT "MY PRODUCT"

Source of Variation		Sum of Squares	d.f.	Mean Square	F
A:	Manufacturers	2.71	1	2.71	7.06*
B:	Markets	64.16	2	32.08	83.53*
A x B:	Manufacturers x Markets	2.07	2	1.03	2.68
Error:	Within Treatments	<u>39.17</u>	<u>102</u>	0.384	
Total		108.11	107		

\* Significant beyond the .05 level.

TABLE 13

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENT PRESENTING MEAN  
VALUES RELATING TO MANUFACTURERS ATTITUDES TOWARD MARKETS  
WITH RESPECT TO THE CONCEPT "MY PRODUCT"

Levels of Factor A (Manufacturers)	Levels of Factor B (Markets)			
	National $b_1$	International $b_2$	Ideal $b_3$	Total
$a_1$ Domestic Oriented Manufacturers	5.275	4.983	7.00	17.258
$a_2$ Export Oriented Manufacturers	5.552	5.656	7.00	18.208
Total	10.827	10.639	14.00	

ideal and can be improved. Thus, from the statistical analysis, null hypothesis number four was rejected but null hypotheses 5 and 6 could not be rejected.

#### Test of Hypotheses Concerning the "Channels of Distribution" Concept

The statistical analysis of the "channels of distribution" concept resulted in significant F values for the A and B main effects and the A x B interaction effect. The significant A x B interaction effect (Table 14) indicate that differences in attitudes of the two manufacturing respondent groups with respect to channels of distribution are influenced by the type of market classification. Table 15 portrays the group and total mean scores for the channel concept.

Because of the significant A x B interaction Duncan's New Multiple Range Test was made for individual comparison of means with the results shown in Table 16. The letter D at the head of the columns represents domestic oriented firms, and the letter E, export oriented firms. The markets are designated by i for international, n for national, and I for ideal. Thus, E<sup>i</sup> stands for an export oriented manufacturer's attitude toward the international market with respect to a certain concept. Note from Table 16 that the domestic and export oriented manufacturers' attitudes (hypothesis 8) with regard to channels of distribution in the international market are significantly different.

TABLE 14

ANALYSIS OF VARIANCE OF TWO RESPONDENT GROUPS' ATTITUDES  
TOWARD MARKETS WITH RESPECT TO THE CONCEPT  
"CHANNELS OF DISTRIBUTION"

	Source of Variation	Sum of Squares	d.f.	Mean Square	F
A:	Manufacturers	12.594	1	12.594	26.75*
B:	Markets	131.370	2	65.690	139.50*
A x B:	Manufacturers x Markets	20.187	2	10.093	56.80*
Error:	Within Treatments	<u>48.028</u>	<u>102</u>	0.470	
	Total	212.179	107		

\* Significant beyond the .05 level.



TABLE 15

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENT PRESENTING MEAN  
VALUES RELATING TO MANUFACTURERS ATTITUDES TOWARD MARKETS WITH  
RESPECT TO THE CONCEPT "CHANNELS OF DISTRIBUTION"

Levels of Factor A (Manufacturers)	Levels of Factor B (Markets)			
	National $b_1$	International $b_2$	Ideal $b_3$	Total
$a_1$ Domestic Oriented Manufacturers	5.400	3.355	7.00	15.755
$a_2$ Export Oriented Manufacturers	5.546	5.257	7.00	17.803
Total	10.946	8.612	14.00	

TABLE 16

DUNCAN'S NEW MULTIPLE RANGE TEST\* APPLIED TO DIFFERENCES  
BETWEEN TREATMENT MEANS (R=6) FOR THE CONCEPT  
"CHANNELS OF DISTRIBUTION"

	(1) $D^i$	(2) $E^i$	(3) $D^n$	(4) $E^n$	(5) $E^I$	(6) $D^I$	(7) Shortest Signifi- cant Ranges = .01 level
Means	3.35	5.25	5.40	5.54	7.0		
3.35		1.90	2.05	2.19	3.65	3.65	$R_2 = .791$
5.25			.15	.29	1.75	1.75	$R_3 = .817$
5.40				.14	1.60	1.60	$R_4 = .835$
5.54					1.46	1.46	$R_5 = .848$
7.00						0	$R_6 = .859$
	$D^i$	$E^i$	$D^n$	$E^n$	$E^I$	$D^I$	

\*Any two treatment means not underscored by the same line are significantly different.

$D^n$  - Domestic oriented manufactures' mean score concerning the national market.

$D^i$  - " " " " " " " international market.

$D^I$  - " " " " " " " ideal market.

$E^n$  - Export " " " " " " " national market.

$E^i$  - " " " " " " " international market.

$E^I$  - " " " " " " " ideal market.

Additionally, a comparison of columns 1 and 3 (hypothesis 9) shows that domestic oriented firms regard channels in domestic markets in a significantly more positive manner than channels in international markets. As a result of this statistical analysis, null hypotheses 7, 8, and 9 were rejected.

This consistently different attitude among respondents concerning channels of distribution appears to be one of the more important findings of the research effort. Indeed, domestic firms view international channels in a way which might be interpreted as one of mistrust and uncertainty. The fact that export oriented firms (columns 2 and 4) see no significant difference in channels in the two markets suggests that the lack of information concerning international channels has precipitated a reluctant attitude among domestic firms concerning this concept.

#### Tests of Hypotheses Concerning the "Market Information" Concept

The market information concept was included to determine if the respondents perceived the concept of market information differently. The results of the analysis of variance presented in Table 17 show that only the F value for the B main effect was significant. The non-significant A main effect and A x B interaction effect indicated that there were no differences between the two respondent groups' perceptions of the market information concept and that any

TABLE 17  
ANALYSIS OF VARIANCE OF TWO RESPONDENT GROUPS' ATTITUDES  
TOWARD MARKETS WITH RESPECT TO THE CONCEPT OF  
"MARKET INFORMATION"

Source of Variation		Sum of Squares	d.f.	Mean Square	F
A:	Manufacturers	0.002	1	0.002	0.003
B:	Markets	199.040	2	99.520	159.41*
A x B:	Manufacturers x Markets	0.681	2	0.340	0.545
Error:	Within Treatments	63.680	102	0.624	
Total		263.403	107		

\* Significant beyond the .05 level.

differences between their attitudes toward market information was independent of the market classifications. Again, the significant B main effect showed that the two respondent groups held different attitudes toward market information among the three market classifications. As a result of these analyses, null hypothesis number 10 was rejected but null hypotheses 11 and 12 could not be rejected. As shown by Table 18 the information from the ideal market ranked highest indicating that information concerning actual markets leaves something to be desired. The information on national markets not surprisingly ranks as the next most positive with international market information ranked most negatively by both respondent groups. The lack of significant differences concerning this concept revealed that the respondents' attitudes toward market information were very much alike and because of this fact does not appear to be a major stumbling block toward the involvement of small firms in international markets.

#### Test of Hypotheses Concerning the "Profit" Concept

One of the most important findings of the research involved the profit concept. The significant A, B, and A x B effects in conjunction with the studentized range test resulted in the rejection of all three null hypotheses (Table 19). The individual and cumulative means are presented in Table 20. The significant A x B interaction effect indicated that differences between the attitudes held by the

TABLE 18

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENT PRESENTING MEAN  
VALUES RELATED TO MANUFACTURERS ATTITUDES TOWARD MARKETS WITH  
RESPECT TO THE CONCEPT OF "MARKET INFORMATION"

Levels of Factor A (Manufacturers)	Levels of Factor B (Markets)			
	National $b_1$	International $b_2$	Ideal $b_3$	Total
$a_1$ Domestic Oriented Manufacturers	4.948	3.621	7.00	15.569
$a_2$ Export Oriented Manufacturers	4.768	3.830	6.85	15.448
Total	9.716	7.451	13.85	

TABLE 19

ANALYSIS OF VARIANCE OF TWO RESPONDENT GROUP'S ATTITUDES  
TOWARD MARKETS WITH RESPECT TO THE CONCEPT OF  
"PROFIT"

Source of Variation		Sum of Squares	d.f.	Mean Square	F
A:	Manufacturers	18.63	1	18.63	40.13*
B:	Markets	168.31	2	84.15	181.26*
A x B:	Manufacturers x Markets	20.87	2	10.43	22.47*
Error:	Within Treatments	47.35	102	0.4642	
Total		263.40	107		

\* Significant beyond the .05 level.

TABLE 20

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENT PRESENTING MEAN  
VALUES RELATING TO MANUFACTURERS ATTITUDES TOWARD MARKETS  
WITH RESPECT TO THE CONCEPT OF "PROFIT"

Levels of Factor A (Manufacturers)	Levels of Factor B (Markets)			
	National $b_1$	International $b_2$	Ideal $b_3$	Total
$a_1$ Domestic Oriented Manufacturers	4.463	3.088	7.00	14.551
$a_2$ Export Oriented Manufacturers	4.908	5.135	7.00	17.043
Total	9.371	8.223	14.00	



two respondent groups are a function of markets, i.e., the market classification greatly influenced the respondents' attitudes toward profit. As a result of the significant A x B interaction effect, a multiple range test was conducted on the group means. The results are shown in Table 21. Whereas the domestic and export oriented firms saw no difference between the profits to be realized in the national market (columns 2 and 3), they perceived significant differences toward profit in the international market (columns 1 and 4). In addition there were differences between the two groups' attitudes (columns 1 and 2) concerning the profits to be made national and international markets.

In summary the export oriented firms seem to be convinced of the profitability of international markets and hold a positive attitude concerning profit in these markets. On the other hand, the domestic firms see less profit possibility in international markets and hold rather negative attitudes toward them. The implications for these findings could be important. In a free enterprise economy firms tend to move into markets which they regard as profitable. A great number of United States small firms have already discovered the profitability of foreign markets. Thus, according to historical precedent, when the uninvolved firms become convinced of profit opportunities abroad, they will react by entering these markets. Under these

TABLE 21

DUNCAN'S NEW MULTIPLE RANGE TEST APPLIED TO DIFFERENCES  
BETWEEN TREATMENT MEANS (R=6) FOR THE CONCEPT  
OF "PROFIT"

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	D <sup>i</sup>	D <sup>n</sup>	E <sup>n</sup>	E <sup>i</sup>	D <sup>I</sup>	E <sup>I</sup>	Shortest Significant Ranges = .001
Means	3.08	4.46	4.90	5.30	7.0	7.0	
3.08		1.38	1.82	2.22	3.92	3.92	R <sub>2</sub> = .7859
4.46			.44	.84	2.54	2.54	R <sub>3</sub> = .8117
4.90				.40	2.10	2.10	R <sub>4</sub> = .8296
5.30					1.70	1.70	R <sub>5</sub> = .8429
7.00						0	R <sub>6</sub> = .8438
	D <sup>i</sup>	D <sup>n</sup>	E <sup>n</sup>	E <sup>i</sup>	D <sup>I</sup>	E <sup>I</sup>	

\* Any two treatment means not underscored by the same line are significantly different.

D<sup>n</sup> - Domestic oriented manufacture's mean score concerning the national market.  
D<sup>i</sup> - " " " " " " " " international market.  
D<sup>I</sup> - " " " " " " " " ideal market.  
E<sup>n</sup> - Export " " " " " " " " national market.  
E<sup>i</sup> - " " " " " " " " international market.  
E<sup>I</sup> - " " " " " " " " ideal market.

circumstances the task of institutions concerned with encouraging export among small firms becomes one of assisting the firm in discovering profitable markets abroad.

#### Test of Hypotheses Concerning the "Cost" Concept

The analysis, as shown in Table 22, indicated that there was statistically significant A and B main effects concerning cost but a non-significant A x B interaction effect. The non-significant interaction effects mean that any differences in attitude between the two respondent groups with respect to cost were not a function of, or related to market classification. The significant F value for factor A indicated distinct differences in the attitudes of the respondent groups toward cost. Along the same line, the significant B main effect showed that the same respondents saw no differences in cost with respect to markets. These findings are somewhat surprising since it had been determined earlier that there were no significant differences in the way the export and domestic oriented firms viewed the costs of selling in the international and national markets. At the same time, even though the respondents did not differ in their attitude scores concerning costs, it should be noted that both groups scored the cost concept in a very negative manner (Table 23). These negative responses can be interpreted to mean that both groups viewed the cost of selling products as a major expense item both nationally and internationally, and as such is of major concern in

TABLE 22

ANALYSIS OF VARIANCE OF TWO RESPONDENT GROUP'S ATTITUDES  
TOWARD MARKETS WITH RESPECT TO THE CONCEPT OF "COST"

Source of Variation		Sum of Squares	d.f.	Mean Square	F
A:	Manufacturers	3.99	1	3.99	9.28*
B:	Markets	316.21	2	158.11	367.78**
A x B:	Manufacturers x Markets	2.27	2	1.13	2.63
Error:	Within Treatments	43.85	102	0.429	
Total		366.32	107		

\*Significant beyond the .05 level

\*\*Significant beyond the .001 level

TABLE 23

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENT PRESENTING MEAN  
VALUES RELATING TO MANUFACTURERS ATTITUDES TOWARD MARKETS  
WITH RESPECT TO THE CONCEPT OF "COST"

Levels of Factor A (Manufacturers)	Levels of Factor B (Markets)			
	National $b_1$	International $b_2$	Ideal $b_3$	Total
$a_1$ Domestic Oriented Manufacturers	3.302	2.880	7.00	13.182
$a_2$ Export Oriented Manufacturers	3.755	3.580	7.00	14.335
Total	7.057	6.460	14.00	

their business decision making.

### Test of Hypotheses Concerning the "Small Firm" Concept

The small firm concept was included in the questionnaire because some small manufacturers have voiced the opinion that small manufacturing firms do not belong in international markets. The findings of the research did not support this contention, however. The statistical analysis presented in Table 24 shows a significant B main effect but non-significant A and A x B effects.

The non-significant F value for factor A indicated no statistical differences in the respondent group's attitudes toward small firms. The row mean scores presented in Table 25 show that the domestic oriented firms gave small firms a slightly less positive rating than did the export-oriented firms. The F value for the B main effect was statistically significant. The column mean scores in the table indicated that the small firms were viewed in a more positive manner in the national than in the international market. In fact, the column total score of 10.02 recorded for the small firm in the national market was the highest score for the national and international markets recorded in the research. The export oriented firms recorded a mean score of ( $\bar{X}=5.12$ ) relating to small firms in the domestic market which indicated a very optimistic attitude concerning the domestic market.

Overall, the findings indicated that the manufacturers were optimistic regarding small firms. Nationally they

TABLE 24  
ANALYSIS OF VARIANCE OF TWO RESPONDENT GROUPS' ATTITUDES  
TOWARD MARKETS WITH RESPECT TO THE CONCEPT  
OF "SMALL FIRMS"

Source of Variation		Sum of Squares	d.f.	Mean Square	F
A:	Manufacturers	1.150	1	1.150	2.56
B:	Markets	132.740	2	66.370	147.95*
A x B:	Manufacturers x Markets	0.710	2	0.350	0.78
Error:	Within Treatments	45.760	102	0.448	
Total		180.360	107		

\* Significant beyond the .05 level.

TABLE 25

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENT PRESENTING MEAN  
VALUES RELATING TO MANUFACTURERS ATTITUDES TOWARD MARKETS  
WITH RESPECT TO THE CONCEPT OF "SMALL FIRMS"

Levels of Factor A (Manufacturers)	Levels of Factor B (Markets)			
	National $b_1$	International $b_2$	Ideal $b_3$	Total
$a_1$ Domestic Oriented Manufacturers	4.900	4.206	6.85	15.956
$a_2$ Export Oriented Manufacturers	5.122	4.602	7.00	16.724
Total	10.022	8.808	13.85	



saw the small firm as a dynamic and vital entity. In overseas operation, while they saw the small firm as less powerful than larger firms, they still regard them in an optimistic way. Thus, the findings did not support the contention that reluctance of many manufacturers to enter exporting is due to their belief that small firms have no place in foreign markets. Null hypothesis 19 was rejected but null hypotheses 20 and 21 could not be rejected.

Test of Hypotheses Concerning "U.S. Government's Role" Concept

The analysis of variance results for testing this concept is presented in Table 26. Significant A and B main effects were calculated but the A x B interaction was not significant. This non-significant interaction effect can be interpreted to mean that any differences between the two respondent groups' attitudes toward the U.S. government's role as it affects their firms is not a function of market classifications.

The significant factor A (row) mean squares as shown in Table 27 indicated that the two respondent groups had different attitudes toward the role of the U.S. government. The domestic oriented firms saw the government in a less favorable manner than the export oriented manufacturers. A highly significant F value was computed for the B main effect. This meant that the respondents saw a difference in the U.S. government's role in the three market

TABLE 26

ANALYSIS OF VARIANCE OF TWO RESPONDENT GROUPS' ATTITUDES  
TOWARD MARKETS WITH RESPECT TO THE CONCEPT OF  
THE "U.S. GOVERNMENT'S ROLE"

Source of Variation	Sum of Squares	d.f.	Mean Square	F
A: Manufacturers	2.880	1	2.880	4.47*
B: Markets	322.160	2	161.080	249.84**
A x B: Manufacturers x Markets	3.420	2	1.710	2.65
Error: Within Treatments	97.620	102	0.957	
Total	426.080			

\*Significant beyond the .05 level.

\*\*Significant beyond the .01 level.

TABLE 27

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENT PRESENTING MEAN  
VALUES RELATING TO MANUFACTURERS ATTITUDES TOWARD MARKETS  
WITH RESPECT TO THE CONCEPT OF "ROLE OF U.S. GOVERNMENT"

Levels of Factor A (Manufacturers)	Levels of Factor B (Markets)			
	National $b_1$	International $b_2$	Ideal $b_3$	Total
$a_1$ Domestic Oriented Manufacturers	3.130	3.088	7.00	13.218
$a_2$ Export Oriented Manufacturers	3.950	3.253	7.00	14.203
Total	7.080	6.341	14.00	

classifications. The column mean totals in Table 27 showed that government efforts in international markets were perceived as less favorable than those of the government domestically. However, it should be noted that the government's efforts in both areas received low ratings. As a result of these analyses, null hypothesis 22 was rejected but null hypotheses 23 and 24 could not be rejected.

#### Tests of Hypotheses Concerning the "Financing" Concept

Statistical analysis relating to the finance concept showed it to be another of the more important findings of the research effort since significant findings resulted in the rejection of all three null hypotheses (Table 28). The significant A x B interaction indicated that differences in manufacturers' attitudes toward financing were influenced by the type of market being considered. Table 29 contains the means pertaining to each respondent group's attitudes according to market classification.

Because a significant A x B interaction did occur, the cell means were compared using Duncan's New Multiple Range Test as shown in Table 30. Examination of the results reveals that the domestic and export oriented firms (columns 1 and 2) saw a significant difference in the financing function in international markets. Likewise, the domestic oriented firms saw a significant difference in the national and international markets with regard to finance. On the other hand, the export oriented firms saw no difference in

TABLE 28

ANALYSIS OF VARIANCE OF TWO RESPONDENT GROUPS'  
ATTITUDES TOWARD MARKETS WITH RESPECT TO THE  
CONCEPT OF "FINANCING"

Source of Variation		Sum of Squares	d.f.	Mean Square	F
A:	Manufacturers	5.830	1	5.830	8.62*
B:	Markets	183.860	2	91.930	135.90*
A x B:	Manufacturers x Markets	16.400	2	8.200	12.12*
Error:	Within Treatments	69.000	102	0.676	
Total		275.090	107		

\* Significant Beyond the .05 level.

TABLE 29

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENT PRESENTING MEAN  
VALUES RELATING TO MANUFACTURERS ATTITUDES TOWARD MARKETS  
WITH RESPECT TO THE CONCEPT OF "FINANCING"

Levels of Factor A (Manufacturers)	Levels of Factor B (Markets)			
	National $b_1$	International $b_2$	Ideal $b_3$	Total
$a_1$ Domestic Oriented Manufacturers	4.962	3.087	6.970	15.019
$a_2$ Export Oriented Manufacturers	4.794	4.650	6.950	16.394
Total	9.756	7.737	13.920	

TABLE 30

DUNCAN'S NEW MULTIPLE RANGE TEST\* APPLIED TO DIFFERENCES BETWEEN  
TREATMENT MEANS (R=6) FOR THE CONCEPT OF "FINANCING"

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	D <sup>i</sup>	E <sup>i</sup>	E <sup>n</sup>	D <sup>n</sup>	D <sup>I</sup>	E <sup>I</sup>	Shortest Significant Ranges: = .001
Means	3.08	4.65	4.79	4.96	6.95	6.97	
3.08		1.57	1.71	1.88	3.84	3.89	R <sub>2</sub> = .9487
4.65			.14	.28	2.31	2.32	R <sub>3</sub> = .9799
4.79				.17	2.17	2.18	R <sub>4</sub> = 1.0014
4.96					1.99	2.01	R <sub>5</sub> = 1.0175
6.95						.02	R <sub>6</sub> = 1.0306
	D <sup>i</sup>	E <sup>i</sup>	E <sup>n</sup>	D <sup>n</sup>	D <sup>I</sup>	E <sup>I</sup>	

\*Any two treatment means not underscored by the same line are significantly different.

D<sup>n</sup> - Domestic oriented manufactures' mean score concerning the national market.

D<sup>i</sup> - " " " " " " " international market.

D<sup>I</sup> - " " " " " " " ideal market.

E<sup>n</sup> - Export " " " " " " " national market.

E<sup>i</sup> - " " " " " " " international market.

E<sup>I</sup> - " " " " " " " ideal market.

the financing of international or national sales (columns 2 and 3). These results indicated that domestic firms harbor attitudes concerning overseas financing which are not consistent with documented facts. Therefore, educational and promotional efforts should emphasize that international finance functions do not differ markedly from domestic functions.

#### Test of Hypotheses Concerning the "Documentation" Concept

The last concept tested and another which ranked among the more important involved the documentation concept. Significant F values for the A and B main effects, as well as the A x B interaction effect, resulted in the rejection of all three null hypotheses concerning this concept (Table 31).

The factor A (row) mean scores for each respondent group are presented in Table 32. The lower cell scores of  $a_1$  indicated that the domestic oriented manufacturing respondents viewed documentation in a much more negative manner than did the export oriented manufacturers. The main effects F value associated with factor B was also significant. These scores indicated that the domestic and export oriented manufacturers perceived a difference in documentation according to market classifications.

The significant A x B interaction effect showed that differences between the respondents toward documentation were influenced and dependent on market type. This



TABLE 31

ANALYSIS OF VARIANCE OF TWO RESPONDENT GROUPS' ATTITUDES.  
TOWARD MARKETS WITH RESPECT TO THE  
CONCEPT OF "DOCUMENTATION"

Source of Variation		Sum of Squares	d.f.	Mean Square	F
A:	Manufacturers	2.930	1	2.930	7.85*
B:	Markets	348.020	2	174.010	466.47**
A x B:	Manufacturers x Markets	3.690	2	1.840	4.93*
Error:	Within Treatments	38.050	102	0.373	
Total		392.690	107		

\*Significant beyond the .05 level.

\*\*Significant beyond the .01 level.

TABLE 32

SCHEMATIC PRESENTATION OF 2 x 3 FACTORIAL EXPERIMENT PRESENTING MEAN  
VALUES RELATING TO MANUFACTURERS ATTITUDES TOWARD MARKETS  
WITH RESPECT TO THE CONCEPT OF "DOCUMENTATION"

Levels of Factor A (Manufacturers)	Levels of Factor B (Markets)			
	National $b_1$	International $b_2$	Ideal $b_3$	Total
$a_1$ Domestic Oriented Manufacturers	4.540	2.185	7.00	13.725
$a_2$ Export Oriented Manufacturers	4.681	3.031	6.98	14.692
Total	9.221	5.216	13.98	

significant interaction allowed further analysis of the group with a multiple range test (Table 33). An inspection of this table showed a significant difference in attitudes of the domestic and export oriented firms (columns 1 and 2) with respect to documentation in the international market. The fact that documentation scored the lowest of all concepts indicated that both groups perceived current documentation requirements in a very negative way. The domestic oriented firms were especially resistive to the documentation requirements of foreign markets. This signifies an area of great concern to the domestic firms and has probably added to their reluctance to enter international markets. Additionally, the domestic firms' attitudes appear to be based on fact since the export oriented firms gave the documentation concept the most negative rating of any concept included in the study. As a result of the statistical analyses all null hypotheses related to the documentation concept were rejected.

In light of these findings it appears that simplification of documentation requirements involved with overseas selling should be given top priority by those agencies concerned with the encouragement of greater participation by small firms in the international market place.

#### Summary of Major Findings

From the quantitative analyses presented in the previous sections a myriad of findings have been proffered..

TABLE 33

DUNCAN'S NEW MULTIPLE RANGE TEST\* APPLIED TO THE DIFFERENCES  
BETWEEN TREATMENT MEANS (R=6) FOR THE CONCEPT OF  
"DOCUMENTATION"

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	D <sup>i</sup>	E <sup>i</sup>	D <sup>n</sup>	E <sup>n</sup>	E <sup>I</sup>	D <sup>I</sup>	Shortest Significant Range = .001
Means	2.18	3.03	4.54	4.68	6.98	7.0	
2.18		1.10	2.36	2.50	4.80	4.82	R <sub>2</sub> = .7045
3.03			1.30	1.44	3.74	3.76	R <sub>3</sub> = .7276
4.54					2.44	2.46	R <sub>4</sub> = .7436
4.68					2.30	2.32	R <sub>5</sub> = .7555
6.98						.02	R <sub>6</sub> = .7653
	D <sup>i</sup>	E <sup>i</sup>	D <sup>n</sup>	E <sup>n</sup>	E <sup>I</sup>	D <sup>I</sup>	

\* Any two treatment means not underscored by the same line are significantly different.

D<sup>n</sup> - Domestic oriented manufactures' mean score concerning the national market.  
D<sup>I</sup> - " " " " " " " " international market.  
D<sup>I</sup> - " " " " " " " " ideal market.  
E<sup>n</sup> - Export " " " " " " " " national market.  
E<sup>i</sup> - " " " " " " " " international market.  
E<sup>I</sup> - " " " " " " " " ideal market.

A summary of these findings is presented in Table 34. In order to clarify the findings, the following summary focuses on those findings which have the greatest implications for the research objectives. The thrust of this research effort has been to identify those areas or concepts in which export and domestic-oriented firms hold significantly different views. The underlying assumption was that those concepts in which the two respondent groups differed represented the areas which contribute most greatly to the small manufacturers' decision to export or not export his products to international markets.

Four of the ten concepts used in the questionnaire were viewed in a significantly different way by the two groups of respondents. These included the Channels of Distribution, Profit, Financing, and Documentation concepts. In some cases the attitudes of domestic firms seemed valid and as such efforts should be made to solve the problem rather than changing the manufacturers' attitude. Documentation fits into this category. In other areas domestic firms' attitudes seem to be due to lack of expertise and knowledge of an area resulting in an uncertain or negative attitude. This is also the case concerning channels, financing, and profit. More specific recommendations pertaining to the significant findings are made in Chapter Five.

TABLE 34

SUMMARY OF FINDINGS OF THE 2 x 3 FACTORIAL EXPERIMENT AND  
DUNCAN'S MULTIPLE RANGE TEST TOWARD TEN CONCEPTS

Concept	Significant Factor A	Significant Factor B	Significant A x B Interaction	Significant $D^i$ vs $E^i$	Significant $D^n$ vs $D^i$
1. Competition		x			
2. My Product	x	x			
3. Channels of Distribution	x	x	x	x	x
4. Market Information		x			
5. Profit	x	x	x	x	x
6. Cost of Selling	x	x			
7. Small Firms		x			
8. U.S. Government's Role	x	x			
9. Financing of Sales	x	x	x	x	x
10. Documentation	x	x	x	x	x

\*(x) indicates significance at .05 level.

### Profile Analysis

Profile analysis of the respondents' attitudes consisted of graphically plotting the respondents' mean rating scores on a semantic space. This graphing procedure created a map or picture of each group's attitudes. Analysis of the comparative responses for each concept assisted in a more detailed analysis of the strength and intensity of each group's attitudes toward the concept. The profile analysis shown in Appendix E is intended to further explain the statistical results and should not be used in lieu of the statistical analysis.

### Ancillary Findings

In any research effort serendipitous findings are made which serve to supplement the specific research objectives. The findings presented below are of this type and as such are primarily of a descriptive and qualitative nature. No attempt has been made to quantify these findings, rather they were either observed or mentioned so often in the course of the interview that the author felt their substance was important enough to include in the research findings.

#### Domestic Oriented Firm Findings.

It may seem superfluous to discuss the international trade experiences of domestic oriented firms. However, most of those firms in the sample classified as domestic oriented have exported their products at one time or

another. For the most part, their export experiences have not been pleasant. Documentation, language, and payment problems often caused expensive delays which ultimately resulted in monetary losses. Several firms have been the victim of export agents who made great promises but failed to deliver, while still others have become disenchanted over what they feel are unfulfilled promises made by government representatives. As a result many of the manufacturers classified as domestic oriented feel that their efforts and resources are more productive in home markets.

A certain amount of ethnocentrism was noted among the domestic-oriented respondents as evidenced by subtle racial and ethnic slurs. Although not often shown openly, it appears that some participants view the world outside the continental United States as composed of dishonest and poverty ridden countries that have no need for their products. Often when asked about the demand for a firm's product overseas, the respondent would reply that there is little demand for his product overseas because it is a labor saving device and most other countries are labor intensive. However, further questioning would usually develop the fact that little or no market research has been done to support this notion. This ethnocentric attitude represents a restrictive trait in that it encourages narrow-mindedness and inflexibility toward international markets.



### International Trade Experience of Export Oriented Firms

The majority of firms included in the export-oriented group initially began export sales without actively soliciting overseas business. In most cases inquiries were received from foreign companies or American multinational corporations requesting information and prices on the firm's products. Subsequent orders made the firm aware of overseas opportunities. From that point, the strategies and activities of these firms have taken many different paths. The obvious characteristic one notes from observing this group of firms is the wide disparity in their commitment to export markets.

The most successful firms have integrated an international strategy into their firm's long range plans. Such a strategy often includes a trade off of higher domestic return on investment in order to direct company energies and resources toward building a foreign operation. This trade off in profits is made deliberately because the firm sees a saturation point in the U.S. market for its product and looks to international areas for future growth. Such firms are typified by executive personnel who make annual trips abroad to build and improve their distribution channels. Specialists have been designated on a part or full time basis to expedite foreign operations and the chief executive officer often invests a disproportionate amount of time and effort in foreign sales functions.

In sharp contrast to the committed export-oriented firm described above, is the firm which exports (often quite heavily) yet is still not committed to international business. These "arms length" firms appreciate overseas business but regard them as temporary "gravy sales" which are supplementary to domestic operations. Rather than become involved in the marketing and financial decisions commensurate with export sales, they prefer to hire external agents to do their selling. The use of such agents is often desirable but frequently results in the manufacturers' involvement diminishing to little more than order taking. In such cases the manufacturer knows little about product users or even where his product is sold. Under such circumstances it becomes exceedingly difficult to evaluate the firm's overseas operations. Firms are often unaware of missed opportunities, and surprising circumstances often develop. For example, one firm with almost 20 per cent of its sales occurring in overseas markets has only one distributor for all of Europe except in the Scandanavian countries. In those countries individual agents were instituted years ago and no attempt has been made to replace them even though sales are very poor. Another firm refused to accept a valid order from a Mexican firm because a French distributor managed all overseas sales!

The desire to do business by proxy is especially noticeable in financing. One of the respondent firms will

not begin processing of an overseas order until it receives full payment while shipments and generous payment terms are extended to all domestic customers. In this type firm an international strategy has most often never been developed and the policies and procedures pertaining to export sales have been developed in a haphazard and ad hoc fashion.

Upper management does little foreign travel and tends to see international operations as highly volatile and uncertain business areas. Foreign operation responsibilities are often shared by a number of individuals in the firm which tends to discourage the development of specialists. It may be said that this type firm has been dragged into international operations and is even now reluctant to exploit the opportunities available to it in the export market.

#### Role of American Multinationals in Small Firms' Export Efforts

One of the most controversial subjects now being discussed and researched by businessmen involves the effect of multinational corporations on the domestic economy, especially with respect to jobs. Although this topic was not in the purview of the present research effort, there is at least circumstantial evidence which sheds light on this subject. The American multinational corporation plays a significant, positive role in the export programs of the respondent firms in this study. This happens for several

reasons. Rarely are the multinationals and small firms in direct competition, but rather a symbiotic relationship often occurs. When the larger firms move overseas, they continue to buy from the smaller firms because they are trusted suppliers. Through its association with overseas business, the small firm often acquires other customers while gaining in expertise and experience. The American multinational not only serves as a valued customer for the small manufacturer, but also as a conduit to international involvement. The implication here is very subtle. We are now in the genesis of policy development for American business abroad. One of the questions that must be answered is whether the domestic regulatory philosophy will be carried forward to cover international business or whether a unique set of circumstances dictates a different policy for the international business climates. The Burke-Hartke Bill, now before Congress, represents an extension of the former philosophy in that it would allow the government to restrict the expansion of firms overseas much as it has under its anti-trust policies domestically.

#### Federal Laws and Agencies

One of the federal government's first efforts to encourage export by small firms resulted in the passage of the Webb-Pomerane Act in 1918. As discussed earlier, this legislation never resulted in the attainment of the objectives set by Congress and is now largely neglected

legislation. The last special legislation designed to assist small manufacturers in international markets was the Revenue Act of 1971 which provided that special export corporations--Domestic International Sales Corporations (or DISC)--could be set up by domestic corporations in order to qualify for special tax rates on profits made through foreign sales. Of the eighteen export oriented firms included in the sample, only three have instituted the DISC and one of these is inactive. This low participation rate has occurred even though all participants had heard of the legislation and most had researched its possible use by their firm. Why the poor participation rate? Many manufacturers feel that the costs of implementing and operating the DISC would far exceed possible tax savings. Additionally, they mistrust and fear the DISC treatment of tax deferral. The respondents also feel that the government might call for the deferred taxes at some future date and place them in a liquidity crisis. As a result, most small manufacturers feel that the legislation was really designed for the giant firms and is of little value to their operations.

Another problem frequently mentioned by the export oriented group as well as some members of the domestic oriented group involves the lack of national policy concerning international trade. It was noted that governmental agencies were insensitive to manufacturers' problems

and slow in offering solutions. The delay in adaption of the metric system of weights and measures was often mentioned in this regard. An almost complete lack of coordination and purpose among government agencies was cited as particularly frustrating. Complacency and delays among customs, agricultural, and other federal employees are apparently commonplace. One problem which frequently occurs involves transactions in which prototypes or damaged items are delayed while regulations concerning duties are determined. Regardless of who is right or wrong in these circumstances, several respondents were highly critical of the government's inability to expedite the solution of such delays and were frustrated over a beauracracy which seems insensitive and unaware of the priorities and needs of private enterprise. However, the Department of Commerce field office in Dallas was complimented frequently as providing personal and helpful assistance.

Another criticism of the current procedures, not surprisingly, involved current documentation requirements for overseas sales and shipments. Documentation is regarded as prohibitive to begin with but a somewhat unique problem is that documentation requirements and costs are the same for all transactions regardless of the monetary value of shipments. Since most small firms' shipments average under \$500, the fixed documentation costs represent a significant expense to them. Most repondents' firms

are of the opinion that overseas shipments represent far too much duplication and inefficiency and recommend streamlining of the system to include abbreviated forms and costs for smaller shipments.

In summary, certain statements might be made concerning the ancillary findings. American firms do not become involved in foreign sales by design but rather are drawn into these markets initially by demand for their products. One of the most influential agents is the American multinational firm which continues to buy from domestic suppliers even after they move abroad. The degree of commitment the various firms may have to export sales appears to lie on a long continuum. The domestic oriented firms are uncommitted to export primarily because they see greater opportunities in the domestic market. The most successful of the export oriented group view the international area as an integral part of their firm's strategy while others within this group see foreign sales as only supplementary to domestic operations. The U.S. Government's involvement in international trade efforts received criticism on several fronts. Primarily, criticism revolved around their failure to provide meaningful and precise legislation which would assist the small manufacturers and the lack of national policy for U.S. international trade.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

The purpose of this research study was to identify those areas of the business environment which historically have contributed to the reluctance of small manufacturers to enter export markets. In conjunction with this emphasis has been the objective of evaluating the small firm's total environment in relation to international markets. These data are being sought as an attempt to answer more fundamental questions concerning the legitimacy of small firms' foreign trade activities and the roles of various other institutions in such activities. This chapter lists the conclusions drawn from the research findings and enumerates recommendations based on these findings. It should be noted that not all conclusions and recommendations pertain exclusively to small firms, but rather to U.S. business firms in general since many of the forces being considered affect both large and small firms equally.

#### Conclusions

Much of the present trade deficit and particularly the poor record of small firms in international markets can be attributed to environmental influences. There is no question that many small manufacturing firms in the United States have proven they can successfully export to foreign



markets. At the same time the full export potential of this group has not been realized. The vast majority of small manufacturers are not presently participating in international trade to any appreciable degree. The poor participation record of this group would appear to be influenced by a number of institutions including government, trade organizations, higher education, and the manufacturers themselves.

### Manufacturers

The manufacturers have not always pursued foreign markets with the zeal and vigor necessary to be successful. Most of the respondents in this study have received inquiries from foreign markets concerning their products; however, all too often these inquiries have not been followed up with aggressive selling techniques. In many cases they have gone unanswered! Other firms investigating foreign markets have allowed one or two events to permanently discourage further efforts into what appear to be profitable opportunities. In such instances, small firms must accept full responsibility for their actions.

The reluctance of many business firms to export their products can be at least partially explained by the results of this study. Most small firms feel they have a competitive product which would be competitive in foreign markets. They show no fear of open competition but lack sufficient information to begin exporting. Although

information on foreign markets is not all that it could be, it is not the determining factor in their reluctant attitude. Surprisingly, the cost factor does not play a determining role in the decision to export even though firms are very concerned about costs.

The four areas of marketing which represent the greatest concern to domestic firms in export marketing are channels, financing, documentation, and profit. Channels of distribution cause many uncertainties to arise among domestic oriented firms since they characteristically have little expertise and few resources to invest in the channel area. Financing is another area of concern because cash flow is a major problem to most small firms. If cash receipts from foreign sales are slow in arriving, cash flow problems become even more important. Documentation responsibilities require some specialized knowledge which few small firms possess. The time and expense regarding documentation adds to any firm's reluctance to export. At the same time, of all the areas which add to reluctance, none is as important as attitudes regarding profits. Domestic oriented firms are not convinced that profitable markets await them overseas, and until they become convinced little headway will be made in gaining greater international participation from this group. All promotional campaigns and other efforts including possible legislative action should take this fact into consideration.

It would seem appropriate to discuss conclusions regarding the characteristics of export oriented firms. Three major characteristics typify the successful export oriented small manufacturing firm.

First, and probably most important, is management's attitude regarding foreign markets. Whereas experience and even knowledge of a foreign language are valuable assets, they are by no means prerequisites for entering international markets. Business firms which are growth minded, dynamic, and willing to pursue opportunities in the face of unfamiliar environments, and uncertain consequences are usually successful exporters. Entering export markets is a learning process. The inflexible individual finds heuristic operations frustrating, while the open-minded manager appears to thrive on the challenges and finds overseas expansion invigorating.

The second characteristic of successful export oriented firms is their long run commitment to foreign markets. Most exporting firms had no premonition of instant success when they entered foreign markets. Instead they have carefully integrated their international plans into their overall long range corporate plans and objectives. Decisions pertaining to international markets have often involved a tradeoff of immediate profit for growth in international operations. Successful managements pay careful attention to the development and maintenance of the channel structure and often invest a disproportionate amount

of time and effort in the firm's international affairs.

The last point concerns the product characteristics of successful export firms. Although some of the products are highly sophisticated, the majority of the respondents' products fall within a category representative of most standard manufactured products. It is possible that current studies in this area have placed much too stringent qualifications on potential exportable products. In fact, it seems that the current literature suffers from a "product myopia" when it states that "exportable products must be highly complex products of high value resulting from extensive product research and development." While it is true that much of American's export strength lies in such goods, it is misleading to place such strict qualifications on potential exports. Many of the respondents' goods sell in foreign markets because they embody superior quality and workmanship. Others sell readily simply because the host-country market is too small to support a local manufacturer of the product. Many manufactured products of the everyday variety sell to U.S. multinationals which prefer to buy from American suppliers. Thus every effort should be made in the promotional literature to refrain from excluding products as potential exports because they are not technologically intensive.

### Government Influence On Small-Firm Exports

The federal government must share the responsibility for the poor exporting record of small business firms because it has failed to provide the leadership necessary to create an environment conducive to exporting. The research findings indicate that respondent firms regard government efforts in international business affairs as being much less effective than domestic efforts. Foremost among the neglected areas is the lack of a dynamic national trade policy. Foreign governments often assist their businesses with tax incentives, subsidies, and tariff considerations while the United States government's policies often contradict the international trade plans of U.S. firms.

Small business strongly opposes programs in which the government becomes active in the actual business transactions; but, at the same time, it feels that the unlimited resources of government could be used in a variety of ways to create a more desirable climate for export. The Trade Reform Act of 1973, submitted to Congress by President Nixon, is a step in the right direction since it gives the President the authority to deal with unfair trade practices and unreasonable trade barriers raised against American exports by other countries. It fails, however, to place the importance of international trade in proper perspective and does not contain a strongly worded commitment to international trade.

Pinpoint legislation to deal with the more micro type problems does not seem to be forthcoming from the government. Since 1971 export expansion bills have been introduced in every session of Congress by Senators Tower, Magnussen, and Inouye but have either died in committee or been defeated. These bills would have (1) created a special trade corps to assist U.S. firms domestically and abroad, (2) provided funds to local and state government for the encouragement of exports, and (3) provided training programs to train new and potential exporters in the export problems of documentation, currency, and transportation. The failure of the U.S. Congress to support these bills indicates that foreign trade problems are given a rather low priority at a very crucial time.

The federal government has been inconsistent in mobilizing its vast resources to assist in cutting the trade deficit via greater exports. While the Department of Commerce has greatly increased its activities in this area with new and innovative programs, other agencies and departments with responsibilities in this area are slow to react.

State governments have also been slow to recognize that increased business for companies within their political jurisdiction generates new jobs and income. Although many states have international programs, they often are so small that little more than housekeeping duties are

performed. States can do much to fill information gaps through the sponsorship of trade fairs, trade missions, and publication of export-import directories.

#### Forming of Trade Associations

Spurred by the 1971 trade deficits, professional trade associations are becoming active in the encouragement of export expansion by small manufacturers. In October of 1972 the United States Chamber of Commerce announced an agreement to serve as the Washington Administration office of the National Federation of Export Management Companies (FEMCO). The primary purpose of FEMCO is to increase U.S. exports, especially among small and medium sized companies. The organization is composed of export management companies throughout the United States and assist manufacturers in expanding into profitable world trade without the financial risks and complications involved in setting up their own export departments.

#### Institutions of Higher Education and Foreign Trade

There is currently a rather widespread belief that collegiate schools of business administration have failed to provide the type of training which is conducive to international business. This statement seems substantiated by the fact that only one of the eighteen respondents involved in international trade had received any type of formal training in international business. Most universities offer only theoretical courses in international economics with

the exception of one introductory course in international business. A recent report by a distinguished committee of business educators stated:<sup>1</sup>

It is time for rigorous re-examination and imaginative extrapolation of present relationships between education and business. . . . Internationally oriented education for business, a youngster in American higher education, faces great challenges. For the most part, schools of business have not responded adequately to the changing patterns of global enterprise. The relatively few outstanding programs and institutions need to be augmented and multiplied several fold. The nascent scholarship and research in this area needs to be broadened and deepened. Most important of all, faculties and institutions facing the challenge of educating businessmen for a global future need new capabilities, strengths, and commitments.

The lack of an international orientation is especially lacking in the non-coastal areas of the United States. An attitude is prevalent in these geographic areas that international business curricula belong only in eastern or coastal universities. Yet great amounts of manufactured good, agricultural products, and raw materials are exported from interior regions of America. All areas of the United States are now involved in some type of international

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<sup>1</sup>"Internationalizing Management Education, A Summary", Report by the Advisory Committee on Business and International Education of the United States National Commission for UNESCO.



commerce, and the development of curricula concerning international business programs would seem to be of major priority to collegiate schools of business.

### Recommendations

The trade problems of the United States are such that they will continue into the foreseeable future. Indeed, with the energy crisis and growing shortages in natural resources it is very likely that government agencies will focus on international business and trade during the 1970's. Under such circumstances both immediate and long-term solutions are necessary to deal with the overall trade problems. It is particularly important that "ends" and "means to ends" are not confused in searching for solutions. The United States could end its trade balance deficit immediately if it wished to erect prohibitive trade barriers to foreign imports. However, in the long run, such a solution could result in chaos and crisis in world trade markets. The following recommendations embody both short and long-range solutions concerning the current trade problems of manufacturing firms in general and small manufacturing firms in particular.

### Recommendations For Government

It is recommended that the federal government assume a position of leadership in creating an environment which would be regarded by small businessmen as more conducive to

international trade by adopting a national foreign trade policy which recognizes that government and business must cooperate in international trade to meet the worldwide challenges which now confront American industry and government. Specifically it is recommended that:

(1) Legislation be passed which modifies the current tax treatment of export sales which fall within the purview of DISC legislation. The DISC is not oriented to the needs of small business firms because of its expensive and complex features. Consideration should be given to the elimination of separate incorporation requirements for small firms and to the replacement of the deferral tax concept with a more simplified tax structure. Additionally, research into other tax treatments which encourage export expansion should be continued.

(2) Regional trade centers should be created to service the needs of small- and medium-sized export oriented firms. Included in these centers' activities would be the following:

a) Housing of a trade development corps of trade experts to personally assist new and experienced firms in the analysis of foreign markets and other export activities. The Corps should be a blend of experienced business personnel (retired) and internationally oriented personnel with Master of Business Administration degrees. Emphasis must be on personal and continuous assistance.

b) Act as an information center and clearinghouse for all information relevant to international business to include receipt and relay of market leads from abroad.

c) Development of educational and training programs to train new and existing exporters in matters pertaining to exporting with particular emphasis on documentation, channel structures, and financing of overseas sales.

d) Housing of an "ombudsman" type officer whose primary duty would be to expedite and facilitate the solution of firms' export-import problems with other government agencies.

e) Development of promotional programs to encourage greater participation of business firms in export activities.

Such promotional activities should always be designed to fulfill the needs of potential exporters. Based on this study, it is recommended that advertising efforts be made to stress profitability of markets. Personal interaction between government officials and businessmen should be emphasized since selling ideas such as exporting is akin to selling what is often termed an "unsought good" in marketing literature. Life insurance and encyclopedias are often placed in this category. Successful selling of such product types involves heavy reliance on a push blend promotional effort emphasizing face-to-face or personal sales activity. Personal attention to problem areas including documentation, financing, and channels should also be emphasized. Ad hoc activities including mass mailouts of literature and

newspaper and magazine advertising campaigns should be used only to supplement personal promotion campaigns.

(3) Continued emphasis should be given to a re-direction of U.S. foreign embassies toward a role which gives priority to business related needs for information and assistance. The key to such a re-direction would be the reorganization of the various embassy attaches under direction of a commercial attache officer. Special efforts should be made to acquire embassy personnel with business backgrounds. The development and adequate staffing of embassy libraries with information on host country markets and American manufacturers could prove beneficial to host country and visiting American businessmen.

(4) A governmental organization should be considered which would orchestrate all government agencies including the Department of Commerce, State, Agriculture, and Treasury in regard to international trade problems. Top priority should be given to simplification and international standardization of export document requirements. It is recommended that a study be made of the feasibility of adopting a short form document for small-dollar shipment. Additionally, studies should be made of the desirability of redirecting the Small Business Administration into an export oriented role along with the feasibility of placing customs agencies directly under the jurisdiction of the Department of Commerce.

(5) There should be a conversion to the metric system of weights and measures as soon as thorough studies of possible implementation plans are completed. The United States is now the only developed country in the world still utilizing the English pound system. The problems commensurate with this situation in international trade are steadily becoming more acute and are resulting in loss of export sales.

(6) There should be an expansion of state government international programs devoted to encouragement of export expansion through:

- a) Upgrading of state government international agencies, staff, and research and business services.
- b) Institution of state government tax incentives on exported products.
- c) Promotion and sponsorship of trade show, seminars, and import-export directories.

#### Recommendations for Higher Education

Collegiate schools of business should carefully review the existing international business environment and, based on the research, devise programs and curricula commensurate with the needs of American industry. Specifically, there should be:

(7) Development of curricula which focus on functional training but with theoretical and liberal rounding in international affairs. Most colleges now possess most

of the required expertise to develop programs based on an inter-disciplinary approach. Most needed are business oriented instructors who possess the theoretical and pragmatic background so necessary in international business courses.

(8) Higher education should have continued participation in federal programs designed to develop and promote programs of export expansion. Innovative programs such as the Masters Export Assistance Program is a good example of a program which combines government, education, and business to further export activities.

#### Recommendations for Manufacturers

The success of export expansion programs ultimately depends on the business world itself. Businessmen are urged to investigate foreign markets for profitable opportunities. Specifically it is recommended that:

(9) Those firms which are not now exporting are encouraged to begin an investigation of international business. A number of starting points are available. A preliminary visit with the Department of Commerce can be helpful. Banks and transportation companies often can provide additional information and an experienced Combination Export Management (CEM) firm should be contacted. Possibly the best source of information lies in the expertise available from members of the International Trade Clubs which are active in most larger cities.

(10) Above all, firms interested in international business are urged to make foreign participation a long range goal for their business firm. Firms which use international markets as "dumping grounds" for excess production or as "gravy sales" will probably be unsuccessful abroad. Successful international business entails planning and hard work with very little of the glamor so commonly associated with its activities.

(11) Membership in international and foreign trade clubs is encouraged. The dissemination of information, new ideas, and solutions to present problems is often found within such organizations. Additionally, the programs of most clubs offer a method of keeping abreast of activities and happenings of interest to international businessmen.

#### Recommendations for Trade Associations and Other Institutions

(12) It is recommended that organizations such as FEMCO place much greater emphasis in the dissemination and distribution of information pertaining to a CEM's role in international marketing.

(13) Financial institutions, including quasi-government and private institutions, are urged to place greater effort in the dissemination of information pertaining to financial tools and procedures in international operations.

#### Areas for Additional Research

Analysis of the ten marketing concepts in this study

has answered many questions concerning the original hypotheses. However, as is the case with most research the quantitative and qualitative findings also indicated areas which deserve further research.

First, this research was limited geographically to the state of Oklahoma. It is anticipated that this research effort will be duplicated in other states to determine whether the findings are universal among small manufacturing executives or if they are unique to Oklahoma businessmen. It is also anticipated that additional behavioral research will be forthcoming to determine if personality characteristics such as ethnocentrism and authoritarianism play a part in the decision to participate in foreign markets. Such correlations would be of value to institutions interested in the encouragement of export expansion.

The question concerning channel structure for firms new to export needs further research. Many of the respondents are unhappy with current arrangements with export agents and CEM's, while others seem very satisfied. Criteria involved in channel selection and development would be a most worthwhile research project.

The relationship between multinational firms and smaller domestic firms was alluded to several times in the study. An investigation of the magnitude of this relationship and its implications for legislative policy is



especially needed at this time when the effect of multinational activities on the domestic economy are being so thoroughly researched.

This study devoted little attention to the effects of inter-company cooperation in foreign markets. However, for the small business, cooperation between firms for foreign market operations appears to offer a reasonable structure to assist in the reduction of costs and expenses inherent in international activities. A study concerning the feasibility of such cooperative efforts in light of present anti-trust legislation could provide the foundation for a whole new innovative approach to world trade.

Lastly, there is growing belief among observers of international business that future American success overseas will be jeopardized unless government and business begin to cooperate on strategic international planning. This cooperation between business and government is a common procedure among our international competitors. A study concerning the feasibility, implications, and effects of a foreign policy which emphasizes United States Government/Business strategic planning could also prove beneficial to small business firms.

## BIBLIOGRAPHY

- Alderfer, E. B. and Michl, H.E. Economics of American Industry. New York: McGraw-Hill Book Company, 1957.
- Blough, Roy. International Business: Environment and Adoption. New York: McGraw-Hill Book Co., 1966.
- Brewster, Kingman, Jr. Antitrust and American Business Abroad. New York: McGraw-Hill Book Company, 1958.
- Broom, H.N. and Longenecker, J.G. Small Business Management Cincinnati: South Western Publishing Co., 1966.
- Edwards, Allen L. Experimental Design in Psychological Research. New York: Holt, Rinehart and Winston, Inc., 1950.
- Fram, Eugene. Small Business Marketing. New York: Oceana Publications, Inc., 1968.
- Green, Paul E., and Tull, Donald S. Research for Marketing Decisions. Second Edition. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1970.
- Hansen, Morris H., Hurwitz, William N., and Madow, William G. Sample Survey Methods and Theory. New York: John Wiley & Sons, Inc., 1953.
- Hess, John M., and Cateroa, Phillip R. International Marketing. Homewood, Ill.: Richard D. Irwin, Inc., 1966.
- Hibdon, James E. Price and Welfare Theory. New York: McGraw-Hill, 1969.
- Hughes, G. David. Attitude Measurment for Marketing Strategies. Glenview, Ill.: Scott, Foresman and Company, 1971.
- Jewkes, John, Sawers, David, and Stillerman, Richard. The Sources of Invention. London: MacMillan and Company, Ltd., 1958.
- Kaplan, A.D.H. Small Business: Its Place and Problems. New York: McGraw-Hill Book Co., Inc., 1948.

- Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1964.
- Kollat, David T., Blackwell, Roger D., and Engel, James F. Research in Consumer Behavior. New York: Holt, Rinehart, and Winston, Inc., 1970.
- Marshall, Alfred. Principles of Economics. London: Mac-Millan & Company, Ltd., 1938.
- Miracle, Gordon E., and Albaum, Gerald S. International Marketing Management. Homewood, Ill.: Richard D. Irwin, Inc., 1970.
- Nunnally, J. Psychometric Theory. New York: McGraw-Hill, Inc., 1967.
- Osborn, Richard C. Effects of Corporate Size on Efficiency and Profitability. Urbana: University of Illinois Bulletin, Volume 48, Number 7, August, 1950.
- Olson, Charles J., and Ellis, Roy C. Export or Die. Chicago: Dartnell, 1966.
- Osgood, Charles E., Suci, George J., and Tannenbaum, Percy H. The Measurement of Meaning. Urbana: University of Illinois Press, 1957.
- Rokeach, Milton. Beliefs, Attitudes and Values. San Francisco: Jossey-Bass Inc., 1968.
- Roob, Franklin R. Strategic Planning for Export Marketing. Scranton, Penn.: International Textbook Company, 1966.
- Root, Frankling R., Kramer, Roland L., and d'Arlin, Maruice. International Trade and Finance. Cincinnati: South-Western Publishing Company, 1966.
- Sloan, Alfred. My Years With General Motors. New York: Macfadden Books, 1965.
- Stuart, Robert Douglass. Penetrating the International Market. New York: American Management Association, Inc., 1965.
- Vernon, Raymond. Manager In The International Economy. Englewood, Cliffs, N.J.: Prentice-Hall, Inc., 1972.

Winer, B.J. Statistical Principles in Experimental Design.  
New York: McGraw-Hill Book Company, 1971.

## GOVERNMENT SOURCES

- Layton, R. A. and Dunply, D.C. "Export Attitudes, Management Practices and Marketing Skills Study sponsored by Export Development Council for the Australian Department of Trade, Washington D.C. 1970.
- Madden, Carl H., ed. Exporting to Latin America: Problems and Opportunities for U.S. Small Business. (Small Business Administration Research Report, Number 147.) College of Business Administration, LeHigh University, Bethlehem, Penn. 1963.
- McKenna, Joseph P., and Boyle, Stanley E. The Participation of Missouri Firms in Export Trade. (Small Business Administration Research Report 222.) St. Louis University, (School of Commerce and Finance.)
- Nightingale, Edmund A., and Harper, Donald V. Opportunities and Problems for Small Business in Foreign Trade Via the St. Lawrence Seaway. (Small Business Administration Research Report Number 224.) Research Division, School of Business Administration, University of Minnesota, Minneapolis, 1964.
- Stekler, H.O. Profitability and Size of Firm. (Small Business Administration Research Report 198.) The Institute of Business and Economic Research, University of California, Berkeley, California, 1963.
- Small Business Administration, Office of Management Assistance. Export Marketing For Smaller Firms. Washington D.C.: Government Printing Office, 1971.
- U.S., Congress. House. Committee on Science and Astronautics. A Metric America, by Daniel V. De Simone. Washington, D.C.: Government Printing Office, 1959.
- U.S., Congress, Joint Economic Committee, American Productivity: Key to Economic Strength and National Survival. Report of the Subcommittee on Priorities and Economy in Government. Joint Committee Print, Washington, D.C.: Government Printing Office, 1972.

U.S., Congress, Statistical Abstract of the United States, 1972. Washington, D.C.: Government Printing Office, 1972.

U.S. Department of Commerce. America Foreign Trade--A National Policy. A Report of the National Export Expansion Councils Small Business Advisory Committee. Washington, D.C.: Government Printing Office, 1971.

U.S., Department of Commerce. Bureau of International Commerce. Foreign Economic Trends, West Germany, ET 72-009. Washington, D.C.: Government Printing Office, 1972.

U.S., Department of Commerce. Bureau of International Commerce. Foreign Economic Trends, Japan, E.T. 73-002. Washington, D.C.: Government Printing Office, 1972.

U.S., Department of Commerce, Domestic and International Business Administration. "Task Force Report on Exporting," Washington D.C., 1973. (Mimeographed)

U.S., Department of Commerce. United States Commodity Exports and Imports as Related to Output 1968 and 1969. Washington, D.C.: Government Printing Office, 1972.

United States Tariff Commission. Competitiveness of U.S. Industries, Tariff Commission Publication 473. Washington, D.C., Government Printing Office, 1972.

## PERIODICALS

- Adams, David. "Selecting and Researching Foreign Markets." Management Controls, April, 1970, pp. 77-ff.
- "A Metric America: Time For Decision." Commerce Today, August 9, 1971, pp. 4-9.
- Axelrod, Joel N. "Attitude Measures that Predict Purchase." Journal of Advertising Research, VIII (March, 1968), pp. 3-18.
- Bain, Joe. "Economics of Scale, Concentration and the Condition of Entry in Twenty Manufacturing Industries." American Economic Review, XLIV, No. 1 (1954), pp. 15-39.
- Bauer, David, and Kuniyoski, Fujiwara. "The Price of U. S. Exports." The Conference Board Record, March, 1973, pp. 19-23.
- Beman, Lewis. "How to Tell Where the U. S. is Competitive." Fortune, July, 1972, pp. 54-ff.
- Brinton, James E. "Deriving an Attitude Scale from Semantic Differential Data." Semantic Differential Techniques. Edited by James G. Snider and Charles E. Osgood. Chicago: Aldine Publishing Co. Inc., 1969.
- "Business Leaders Ask New Export Incentive." Commerce Today, April 5, 1971, pp. 4-10.
- "Campus Export Research Program Attracts Wide Company Interest." Commerce Today, June 26, 1972, p. 44.
- "Commerce Department Mobilizes to Cut the Trade Deficit." Business Week, November 18, 1972, pp. 64-65.
- "Comparative Trends in Manufacturing Unit Labor Costs, Eleven Countries, 1960-1970." Monthly Labor Review, August, 1971, p. 10.
- "Co-op Selling: Will It Work For Exporters?" Business Abroad, March, 1968, pp. 11-17.

- Donnelly, James H. Jr. "Attitudes Toward Culture and Approach to International Advertising." Journal of Marketing, XXXIV (July, 1970), pp. 60-68.
- Dun & Bradstreet. How to Get Started in Exporting -- A \$204 Billion Market. (Business Series No. 5). New York: Dun & Bradstreet, 1967.
- Duncan, D. B. "Multiple Range and Multiple F Tests." Biometrika, XI (1955), pp. 1-10.
- Green, P. E., and Rao, V. R. "Rating Scales and Information Recovery." Journal of Marketing, XXXIV (July, 1970), p. 33.
- Gross, Alfred. "Meeting the Competition of Giants." Harvard Business Review, May-June, 1967, pp. 172-184.
- Hughes, David G. "Selecting Scales to Measure Attitude Change." Journal of Marketing Research, XXI (February, 1967), pp. 84-89.
- Hyson, Charles D., and Strout, Alan M. "Impact of Foreign Aid on U. S. Exports." Harvard Business Review, January-February, 1968, pp. 63-71.
- Kerby, Joe Kent. "Semantic Generalization in the Formation of Consumer Attitudes." Journal of Marketing Research, IV (August, 1967), pp. 314-17.
- Kizilbash, A. H. "Small Manufacturers Fear Export Marketing." Marketing News, Mid-August, 1971, p.7.
- Kraus, Howard F. "Iron Curtain Trade Relieves Supersaturation Pains." Industry Week, January 8, 1973, pp. 34-ff.
- La Piere, R. T. "Attitudes vs. Actions." Social Forces, XIII (July, 1934), p. 230.
- Leighton, David S. "The Internationalization of American Business - The Third Industrial Revolution," Journal of Marketing, XXXIV (July, 1970), pp. 60-65.
- Levitt, Theodore. "Marketing Myopia." Harvard Business Review, July-August, 1960, pp. 45-56.
- "Making U. S. Technology More Competitive." Business Week, January 15, 1972, pp. 44-49.



- Messick, Samuel J. "Metric Properties of the Semantic Differential." Semantic Differential Technique. Edited by James G. Snider and Charles E. Osgood. Chicago: Aldine Publishing Company, Inc., 1969.
- Mindak, William. "Fitting the Semantic Differential to the Marketing Problem." Journal of Marketing, XXV (April, 1961), 28-ff.
- Morgan, Frank. "Little Buys & Trade: Export Manageing Firms Help Small Businesses Gain Markets Abroad." The Wall Street Journal, September 8, 1965, p. 1.
- Nagashima, Akira. "A Comparison of Japanese and U.S. Attitudes Toward Foreign Products." Journal of Marketing, XXVIII (January, 1970) pp. 68-74.
- Palubinskas, Feliksas, and Granat, Michael R. "Small Firms Can't Cut Red Tape, Balk at Exporting Because They're Small." The Marketing News, Journal of Marketing, 197, pp. 3-24.
- Rose, Sanford. "The News About Productivity Is Better Than You Think." Fortune, February, 1972, pp. 98-ff.
- Vernon, Raymond. "Antitrust and International Business." Harvard Business Review, September-October, 1968, pp. 78-86.
- Wall Street Journal. "Trade Deficit in 1971--First in U.S. Since 1888." January 26, 1972.
- Wall Street Journal. "OECD Experts Say U.S. Needs More Time on Payments Problems." June 15, 1972.
- "World Trade: A U.S. Ambassador's New Business Role." Business Week, December 16, 1972, p. 38.

## MISCELLANEOUS SOURCES

Bellins, Paul F. "An Evaluation of Combination Export Management Firms." Unpublished doctoral dissertation, New York University, 1966.

Hogan, Lester C. "American Electronics: Maintaining World Leadership." Speech delivered at 1972 International Electronic Devices Convention in Washington, D.C., December 5, 1972.

Kizilbash, A.H. "A Study of Export Marketing Objectives and Practices of Selected Small Manufacturers with Particular Reference to Their Use of Combination Export Firms." Unpublished doctoral dissertation, University of Nebraska, 1970.

Kizilbash, A.H. Professor of International Business, Northern Illinois University, Interview in Dallas, Texas, March, 1973.

Stiles, Carmen. Director of Dallas Office, U.S. Department of Commerce, Interview in Dallas, Texas, April, 1972.

National Industrial Conference Board Managing International Business. Policies and Problems in Piggyback Exporting, (Study No. 3) New York: National Industrial Conference Board, 1968.

Parzych, Kenneth M. "An Analysis of Export Trade Under the Webb-Pomerene Act of 1918." Unpublished doctoral dissertation, University of Connecticut, 1970.

Pinney, James K. "The Process of Commitment to Foreign Trade: Selected Smaller Indiana Manufacturing Firms." Unpublished doctoral dissertation, Indiana University, 1968.

**APPENDIX A**

**THE QUESTIONNAIRE**

## INTERVIEW GUIDE

(For Interviewers Use Only)

- 1) Name of Firm \_\_\_\_\_
- 2) City \_\_\_\_\_
- 3) What per cent of your total sales are sold in foreign markets?
  - \_\_\_\_\_ a. None
  - \_\_\_\_\_ b. 1 to 5 per cent
  - \_\_\_\_\_ c. 5 to 25 per cent
  - \_\_\_\_\_ d. 25 to 50 per cent
  - \_\_\_\_\_ e. More than 50 per cent

## DOMESTIC FIRMS

- 4) Have you ever considered exporting your product?
  - \_\_\_\_\_ Yes
  - \_\_\_\_\_ No
 If yes, what happened to discourage you from exporting?
- 5) Are you considering exporting in the future?
  - \_\_\_\_\_ Yes
  - \_\_\_\_\_ No
 If yes, why?
 

If no, what do you think would need to change prior to considering exporting?

## EXPORTING FIRMS

- 6) When did you first consider exporting? \_\_\_\_\_ Year.  
What were the circumstances?
- 7) How long a time period evolved from the time you first considered exporting until you actually sold a product overseas?
- 8) What types of assistance do you think are needed to increase export sales among small and intermediate sized firms?
- 9) Is there anything else you would like to elaborate on in reference to this area?

## INSTRUCTIONS

The purpose of this study is to measure the attitudes you hold concerning various concepts by judging these concepts against a series of descriptive scales. In taking this test, please make your judgments on the basis of what these things mean to YOU. At the top of each page of this survey you will find a subject to judge. Under each major subject area you will find different concepts to be judged and beneath that concept a set of scales. You are to rate each concept for the major subject area on each of these scales in order.

Here is how you are to use these scales:

If you feel that the concept is VERY CLOSELY RELATED to one end of the scales, you should place your check-mark as follows:

Strong \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Weak

or

Strong \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Weak

If you feel that the concept is QUITE CLOSELY RELATED to one or the other end of the scales (but not extremely), you should place your check-mark as follows:

New \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Old

or

New \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Old

If the concept seems ONLY SLIGHTLY RELATED to one side as opposed to the other side (But is not really neutral), then you should check as follows:

High \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Low

or

High \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Low

The direction toward which you check, of course, depends upon which of the two ends of the scale seem most characteristic of the thing you are judging.

If you consider the concept to be NEUTRAL on the scale, both sides of the scale EQUALLY ASSOCIATED with the concept, then you should place your check-mark in the middle space:

Safe \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ Dangerous

PLEASE DO NOT LOOK BACK AND FORTH through the items. Do not try to remember how you checked similar items earlier in the test. MAKE EACH ITEM A SEPARATE AND INDEPENDENT JUDGMENT. Work at fairly high speed through this test. Do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" about the items, that we want. On the other hand, please do not be careless, because we want your true impressions.

# NATIONAL, INTERNATIONAL, AND IDEAL MARKETS\*

## COMPETITION Involved in This Market is

	Extremely	Very	Slightly	Neutral	Slightly	Very	Extremely	
Stable								Changeable
Decreasing								Increasing
Strong								Weak
Large Firms								Small Firms
Unbeatable								Beatable
Sophisticated								Unsophisticated
Few Firms								Many Firms
Dishonest								Honest

## MY PRODUCT in This Market

Usual							Unusual
New							Old
Not Competitive							Competitive
Adequate							Inadequate
Sellable							Not Sellable
Technically Advanced							Technically Backward
Needs Alterations							Needs No Alterations
would be in Great Demand							Would Have Little Demand

## CHANNELS OF DISTRIBUTION in This Market

Many Middlemen							Few Middlemen
Worthless							Valuable
Good							Bad
Simple							Complex
Reliable							Unreliable
Well Established							Not Well Established
Inefficient							Efficient
Disreputable							Reputable

\* The complete questionnaire for each market was obtained from every respondent.

**Total Dollar PROFIT in This Market**

### Selling COST Involved In This Market

### The Role of SMALL FIRMS (Less Than 250 Employees) in This Market

Active	Passive
Important	Unimportant
Good	Good
Successful	Unsuccessful
Can Compete With	Can't Compete With
Longer Future	Lower Future
Profitable	Unprofitable
Weak	Strong
Decreasing	Increasing

## PRESENT ROLE OF U. S. GOVERNMENT in This Market

	Extremely	Very	Slightly	Neutral	Slightly	Very	Extremely	
Wise								Foolish
Unsuccessful								Successful
Clear								Hazy
Helpful								Not Helpful
Efficient								Inefficient
Adequate								Inadequate
Good								Bad
Idealistic								Realistic

## FINANCING AND COLLECTIONS for This Market

Generally Complex							Generally Simple
Adequate							Inadequate
Easy to Find							Difficult to Find
Undependable							Dependable
Expensive							Inexpensive
Safe							Risky
Good							Bad
Unimportant							Important

## PAPERWORK (DOCUMENTATION) Involved in This Market

Adds to Efficiency							Detracts from Efficiency
Simple							Complex
Reasonable							Unreasonable
Much Red Tape							Little Red Tape
Inexpensive							Expensive
Increasing							Decreasing
Valuable							Worthless
Light							Heavy



**APPENDIX B**

**SAMPLE SIZE CALCULATION**

TABLE 35

CALCULATION OF SAMPLE SIZE FOR  
OKLAHOMA SMALL MANUFACTURERS

Firm Category Number of Employees	Number of Firms X	X <sup>2</sup>
1. (20-49)	126	15,876
2. (50-99)	76	5,776
3. (100-250)	78	6,084
3	280	27,736

$$\bar{X} = 93.3$$

$$(\sum X)^2 = 78,400$$

$$s = \frac{\sum X^2 - (\sum X)^2/n}{n - 1} = 28.3$$

$$N = 280$$

$$K = 2$$

$$D = \pm .10$$

$$V = s/\bar{X} = .30$$

$$n = \frac{K^2 NV^2}{ND^2 + K^2 V^2} = 33$$

Where: n Sample size      s Standard deviation of Sample  
 N Universe      V Coefficient of Variation  
 $\bar{X}$  Sample Mean      D Level of Accuracy Required  
 K Number of Standard deviations associated with  
 a ninety-five per cent confidence level.

**APPENDIX C**

**ENUMERATION OF RESPONDENTS BY FIRM POSITION  
AND PRODUCT CLASSIFICATION**

TABLE 36

**ENUMERATION OF RESPONDENTS BY FIRM POSITION  
AND PRODUCT CLASSIFICATION**

Export Firms		Domestic Firms	
Position	Type Product	Position	Type Product
President	Electronic Test Equipment	President	Fishing Equipment
President	Power Pumps and Compressors	V.P. Sales	Machine & Industrial Filters
President	Centrifugal Pumps	Exec.V.P. Operations	Pumps, Towers, Antennas
V.P. Marketing	Industrial Rollers & Guiding Equipment	President	Milling Equipment
Export Manager	Road Building Equipment	President	Medical Equipment
V.P. Marketing	Tying Machinery Used in Packaging	President	Auto Air Conditioners
V.P. Marketing	Winches,	President	Steel Buildings
President	Electric Controls	President	Horse & Stock Trailers & Vans
President	Road Building Attachments	President	Hydraulic Cranes
President	Hydraulic Cranes	President	Traffic Signals
V.P. Sales	Meteorological & Telemetry Systems	President	Farm Equipment
President	Pumps & Temperature Controls	President	Hay Loaders, Elevators
Export Manager	Farm & Industrial Trenchers	President	Welding Equipment
President	Hydraulic Sidebooms for Tractors	V.P. Marketing	Safety & Temp. Gauges
President	Frequency Determining Crystals - Watch Industry	President	Electronic Test Equipment
President	Gas Compressor	President	Industrial Loaders & Farm Equipment
President	Processing & Packaging Machinery	President	Hot Water Htr. & Boilers
President	Farm Feed Grinder Mixer	President	Medical Equipment

**APPENDIX D**

**DUNCAN'S MULTIPLE RANGE TEST**

### DUNCAN'S MULTIPLE RANGE TEST

Duncan's Multiple Range Test is an excellent test procedure to test the differences between means after an analysis of variance has been calculated. For purposes of illustration of the test, the means relating to the concept of channels of distribution from actual research data are used. The first step in applying the multiple range test is to arrange the means in order to magnitude. In the table below D stands for domestic oriented firm and E for export oriented firm. The markets are represented by i for international, n for national and I for ideal. For example,  $E^i$  stands for an export oriented manufacturer attitude of the international market.

Means of Respondents Relating to the Concept  
Channels of Distribution

Means	$D^i$	$E^i$	$D^n$	$E^n$	$D^I$	$E^I$	Shortest Significant Ranges
	3.35	5.25	5.40	5.54	7.0	7.0	.001
3.35		1.90	2.05	2.19	3.65	3.65	$R_2 = .7914$
5.25			.15	.29	1.75	1.75	$R_3 = .8175$
5.40				.14	1.60	1.60	$R_4 = .8354$
5.54						1.46	$R_5 = .8489$
7.00						0	$R_6 = .8599$

The standard error of a single mean is computed as given by

$$s\bar{X} = \frac{s}{\sqrt{n}}$$

Where  $s$  is the square of the within treatment mean square of the analysis of variance and  $n$  is the number of observations on which each of the means is based. In the

present case  $s = \sqrt{.4708} = .686$  and  $n = 18$ . Then

$$s\bar{X} = \frac{.686}{\sqrt{18}} = .1617$$

Duncan has devised tables which give the significant studentized ranges for his multiple range test for several levels of significance. Here the  $\alpha = .001$  is tested. To do so, the Duncan table of Significant Studentized Ranges for  $\alpha = .001$  is entered and the ranges for  $K = 2, 3, 4, 5, 6$  means for 102 degrees of freedom are found to be 4.894, 5.055, 5.166, 5.249, 5.317 respectively. Each significant studentized range is then multiplied by the standard error of the mean resulting in the shortest significant ranges as recorded in column (7) of the above table. These ranges are then compared to the differences in means. The differences between pairs of means are tested in the order of largest minus smallest, largest minus the second smallest and so on until the second largest is subtracted from the largest. When the difference between a range of means exceeds the corresponding shortest significant, the means are significantly different. The means in the table which

do not differ significantly are underscored. Thus at the end of the comparison any two means underscored by the same line do not differ significantly. To to put it another way, any two means not underscored by the same line do differ significantly. In the above test, the means concerning the attitudes of domestic and export oriented firms with respect to the international market according to the concept of channels of distribution do differ significantly. Likewise a test of the hypotheses concerning the comparison of the attitudes of the domestic firm toward the international and domestic market show a significant difference.

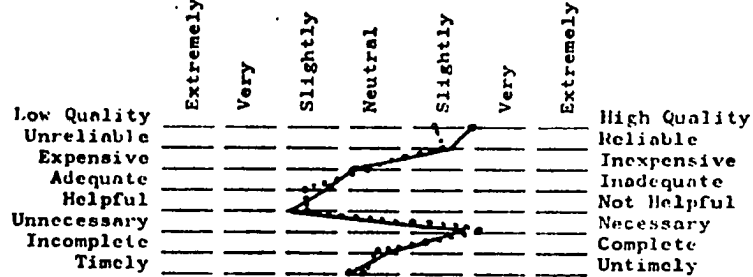
Duncan's multiple range test is based on the concept of protection levels. A two mean protection level is given by  $1 - \alpha$ . Thus the probability we will wrongly declare two of the means above significantly different when they are in fact equal is  $1 - .001 = 99.9$  per cent. The k mean protection level of the multiple range test is  $(1 - \alpha)^{K-1}$ . In the illustration above and all the tests in the study with  $K = 18$  means and  $\alpha = .001$  the K mean protection level is  $(1 - .001)^{18-1} = 98.1$  per cent which is the minimum probability of making no erroneous statements about significant differences.



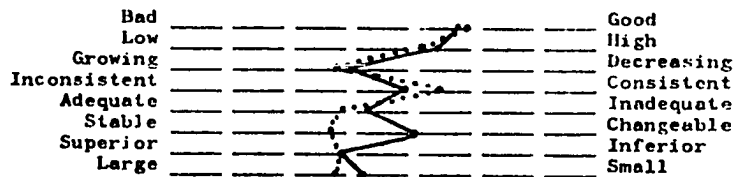
**APPENDIX E**  
**PROFILE ANALYSIS OF DATA**



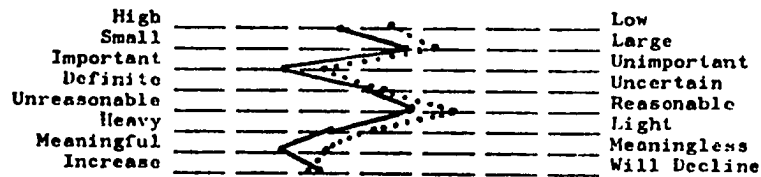
## MARKET INFORMATION for This Market is



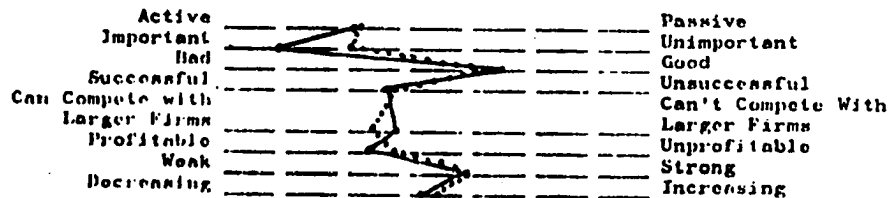
## Total Dollar PROFIT in This Market



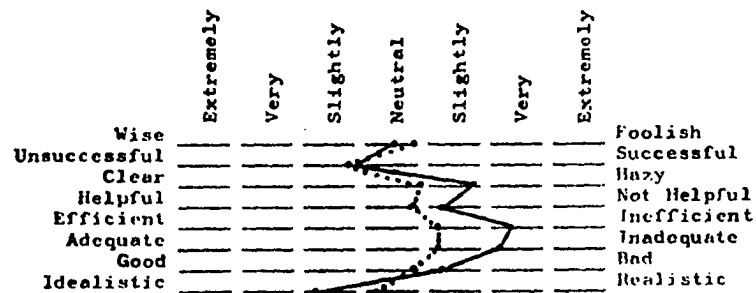
## Selling COST Involved In This Market



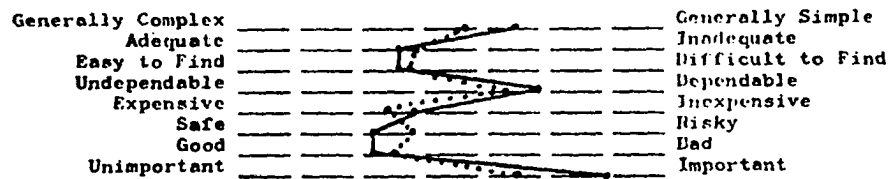
## The Role of SMALL FIRMS (Less Than 250 Employees) in This Market



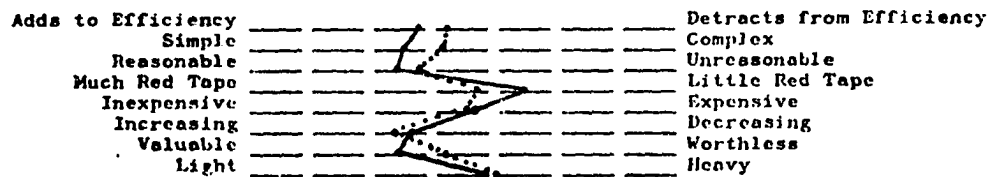
## PRESENT ROLE OF U. S. GOVERNMENT in This Market



## FINANCING AND COLLECTIONS for This Market



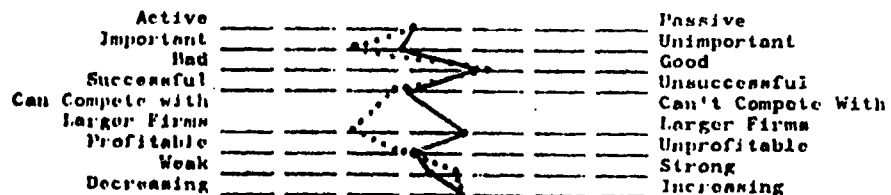
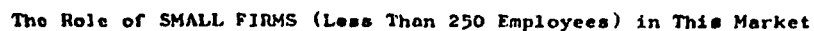
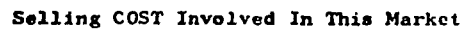
## PAPERWORK (DOCUMENTATION) Involved in This Market



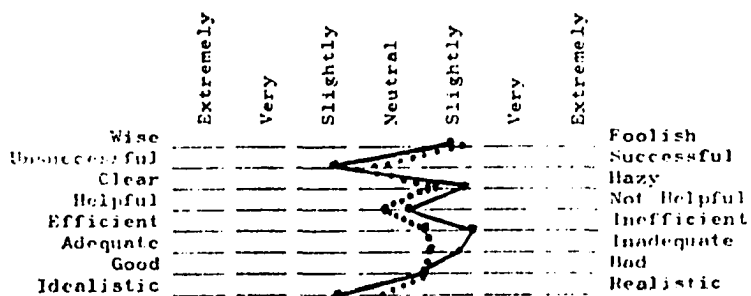
Domestic Firms —————

Export Firms .....





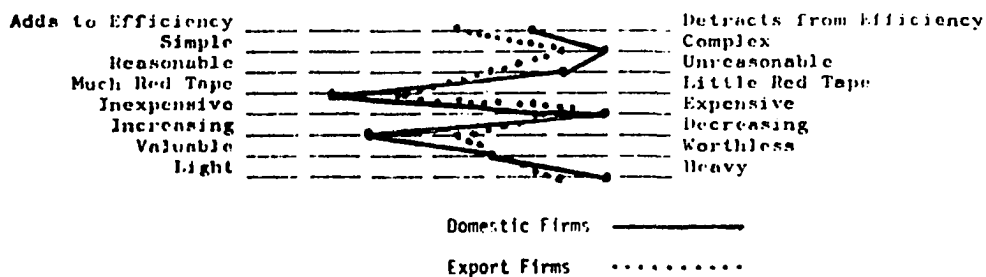
## PRESENT ROLE OF U. S. GOVERNMENT in This Market



## FINANCING AND COLLECTIONS for This Market

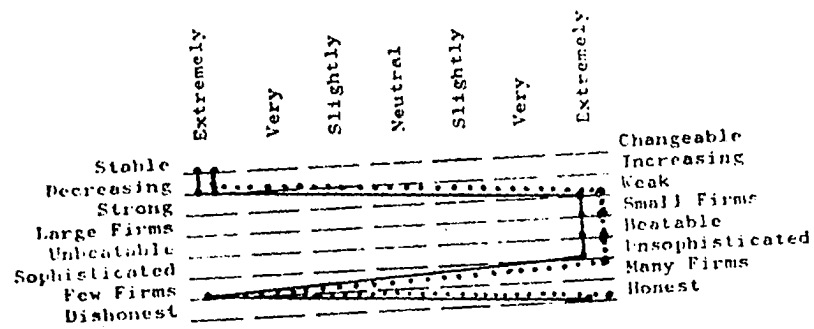


## PAPERWORK (DOCUMENTATION) Involved in This Market

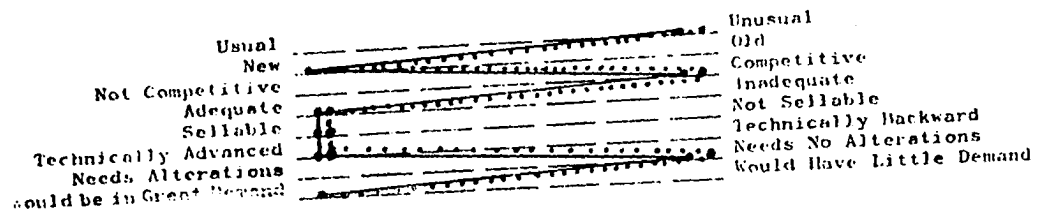


# IDEAL MARKET

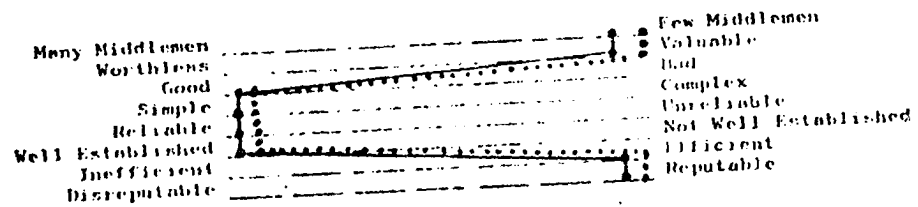
COMPETITION Involved in This Market is



MY PRODUCT in This Market

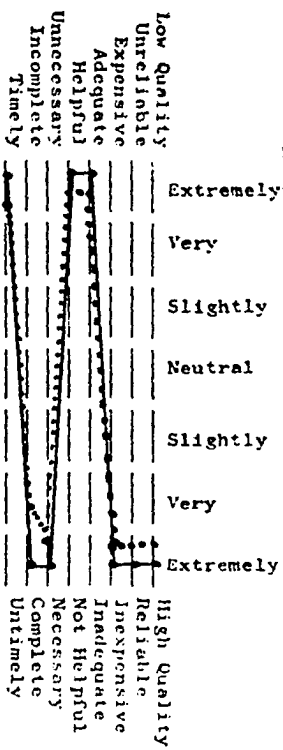


CHANNELS OF DISTRIBUTION in This Market

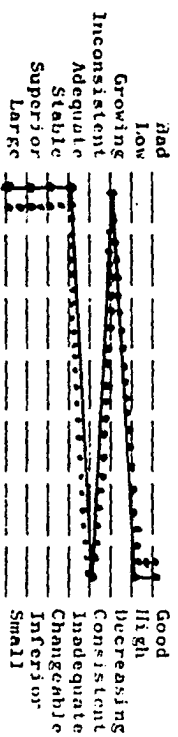




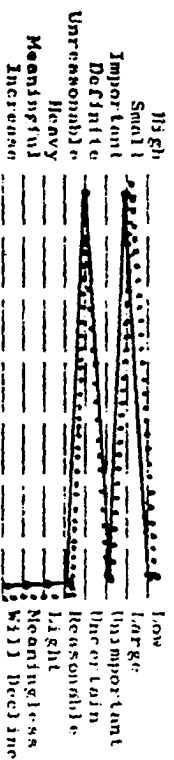
## MARKET INFORMATION for this Market is



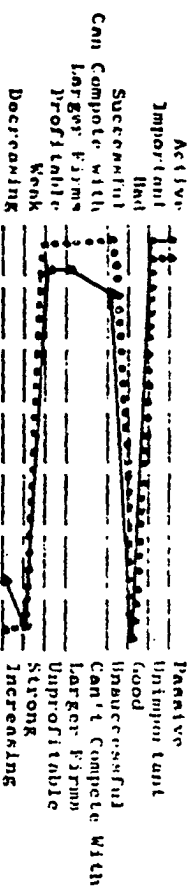
## Total Dollar PROFIT in This Market



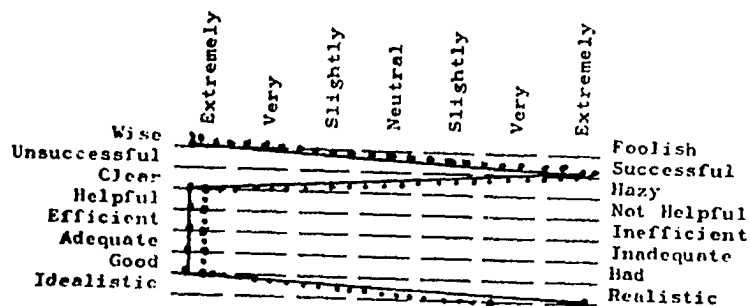
## Selling COST Involved in This Market



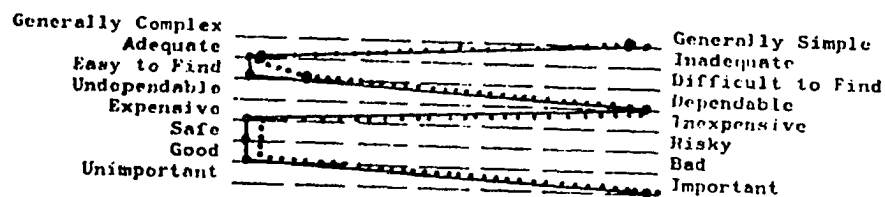
## The Role of SMALL FIRMS (Less Than 250 Employees) in This Market



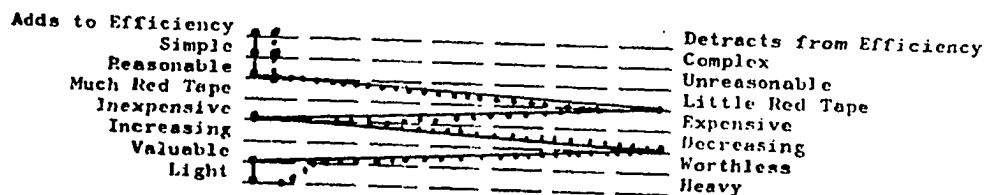
## PRESENT ROLE OF U. S. GOVERNMENT in This Market



## FINANCING AND COLLECTIONS for This Market



## PAPERWORK (DOCUMENTATION) Involved in This Market



Domestic Firms —————

Export Firms .....