Does Foreign Direct Investment Theory Reflect Reality: The Case of the American Multinational Food Processors

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Abstract

In this paper hypotheses are derived from the foreign direct investment literature regarding the performance of the multinational food processors. As a group, it is expected that the subject firms will perform poorly in the international environment in comparison to other multinationals. It is also considered whether foreign direct investment theory can help identify strategies that might be used by individual firms to improve their performance. To test the first hypothesis a new index of corporate performance is derived. The second set of hypotheses are tested via comparison to actual firm strategies which were presented by corporate executives in interviews. Operations of the subject firms support both the general industry hypothesis and the more detailed firm-level strategy hypotheses considered in the analysis.
Introduction

Despite the intuitive appeal of basic Foreign Direct Investment (FDI) theory, empirical work has produced results that call into question its predictive validity. This paper seeks to discover whether it is the theory that is flawed or if errors in the design of applied studies have led to inaccurate results. The case of the food processing industry (FP) has been chosen for the analysis.

As first presented by Hymer (1976) and Kindleberger (1969), the theory with which we are concerned states that firms operating in a foreign environment are at a disadvantage vis-à-vis their domestic competitors due to both the geographic and cultural distance at which they must operate. To overcome that disadvantage, foreign firms must have access to an asset not available to local companies. As Caves (1974) has noted, however, "not every...asset keeps its productivity intact when moved across a national boundary." Therefore, not only must the foreign firms have restricted access to one or more resources, either tangible or intangible, but also, that resource must be internationally relevant.

The food processing industry is of particular interest for a test of FDI theory because it differs significantly from the ideal presented. Its products are extremely culturally bound, resulting in a great operating distance between home and host markets. Further, the industry has no obvious advantage. Advantages in technology, as discussed by several authors (see for example Gruber, et al. 1967) are absent. Economies of scale coupled with the early expansion of American and European companies have been considered as an advantage (Kindleberger 1969), but neither is of relevance to the FP. Buckley and Casson (1976) and Horst (1974) have suggested advertising expertise as a countervailing advantage that seems appropriate for the food processing firms. Specific programs and strategies, however, are not easily transferred across national boundaries and so, are not internationally relevant. Also, several advertising firms have opened foreign branches, making their expertise available to local firms as well as foreign. In sum, the FP seems characterized by low product transferability and absence of any
major countervailing advantage -- providing an example that diverges significantly from the theoretical ideal.

Given that divergence, one would predict that the FP is performing poorly abroad. Yet based on empirical analysis, some research has classified the industry as successful (Buckley and Casson 1976), leaving us to wonder if FDI theory accurately reflects reality. Before condemning the theory, however, the design of the empirical studies should be questioned, perhaps revealing the source of the conflicting predictions.

In the first section of this paper, one particular facet of the study design, the proxy used to measure corporate success abroad, will be questioned. The proxy commonly used in past studies of FDI is the percentage of total sales accounted for by foreign operations of the multinational corporations (MNCs), that is current presence in markets abroad (Buckley and Casson 1976, Gruber et al. 1967). Use of such a measure may be traced to the neo-classical economic assumption of earlier work. Caves (1974), for example, wrote "the natural way to approach the problem of explaining the distribution of multinational firms' activities is to start with a model of the profit maximizing firm..." Under that set of assumptions, coupled with the idea of perfect or near perfect information flows, the decision to move abroad as measured by current presence is an adequate proxy for success. For the purposes of this paper, the model of the firm as a constant profit maximizer is thought to be unduly restrictive, possibly leading to bogus conclusions. In his history of the internationalisation of the food processing industry, Horst (1974) concluded that idiosynchratic characteristics of the firms and their founders played a large role in the overseas expansion studied. For more general results, Aharoni (1966), found personal and organizational motives, that may have diverged from economic goals, to be determinants of international expansion. If this is true, then the current presence measure may reflect only firm idiosynchrasies and not actual success.

To overcome that problem, a new index is devised to measure success. Using reported financial statistics, the index compares the foreign and domestic profit margins of multinational firms. It is intended to help gauge adaptation to the international environment using domestic operations as a benchmark. With this index, the success level of the FP will be
re-examined to see if it conforms to theoretically based predictions. Though as a group it is expected that the FP will perform poorly in international markets, it is probable that there is a spectrum of performance levels within the industry allowing another test of FDI theory. In the second section of this report the theory will be used to develop a list of tactics and strategies that can be expected to lead to more successful international operations. These will be compared to actual firm procedures that have been identified through interviews with corporate executives. Unlike other studies that have only identified tactics that are used by corporations (see for example Stopford and Wells 1972, and Baranson 1978) this analysis will be able to correlate specific strategies with successful operations because of the prior development of an index of corporate success. In order to provide a background for both analyses of FDI theory, a review of some relevant facts about the food processors studied will first be given.

2. The Food Processing Firms

As defined by the Standard Industrial Classification scheme, the food processing industry is considered to include a broad range of manufacturers producing goods as diverse as chicken feed, dressed beef and canned enchilladas. In order to decrease the variation in industry attributes so as to simplify the analysis a more narrow definition was used. To be included within the subject group, firms had to manufacture primarily consumer recipe products. That is, a significant portion of the firm's output had to be destined for human use and include more than two ingredients. Therefore, canners of fruits, vegetables or meats are not included in the subject group. In addition, beverage and confectionary firms were excluded because of the different market characteristics for high-sugar foods. Since the topic of study was the success of firms in the international environment, a randomly selected minimum of ten percent of sales accounted for by foreign subsidiaries was also necessary for inclusion. Sixteen firms were found to fulfil those requirements (Table I).

This narrow definition of the industry allows control of several exogenous and endogenous factors that might bias the analysis. For example, the degree of integration of the sixteen firms is similar. In general the subject companies have not integrated backwards into farming due to both the relatively well developed markets for agricultural products...
### Table I
Food Processors Included In Study Group

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Common Brand Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beatrice Foods</td>
<td>Dannon (recently sold) LaChoy</td>
</tr>
<tr>
<td>Borden*</td>
<td>Borden, Cremora</td>
</tr>
<tr>
<td>Campbell Soup</td>
<td>Campbell, Pepperidge Farm, Godiva</td>
</tr>
<tr>
<td>Carnation</td>
<td>Carnation</td>
</tr>
<tr>
<td>Consolidated Foods</td>
<td>Sara Lee</td>
</tr>
<tr>
<td>CPC International</td>
<td>Skippy, Thomas', Hellmann's</td>
</tr>
<tr>
<td>General Foods</td>
<td>Birds Eye, Tang, Jell-O</td>
</tr>
<tr>
<td>General Mills</td>
<td>Betty Crocker, Gold Medal</td>
</tr>
<tr>
<td>H. J. Heinz</td>
<td>Heinz, Ore-Ida</td>
</tr>
<tr>
<td>International Multifoods</td>
<td>Kretschmer, Robin Hood</td>
</tr>
<tr>
<td>Kellogg</td>
<td>Kellogg's</td>
</tr>
<tr>
<td>Kraft</td>
<td>Kraft, Breyers, Sealtest</td>
</tr>
<tr>
<td>Nabisco**</td>
<td>Nabisco, Nabs</td>
</tr>
<tr>
<td>Pillsbury</td>
<td>Pillsbury Best</td>
</tr>
<tr>
<td>Quaker Oats</td>
<td>Quaker, Aunt Jemima, Furry</td>
</tr>
<tr>
<td>Standard Brands**</td>
<td>Fleischmann's, Royal Gelatin</td>
</tr>
</tbody>
</table>

*Borden has extensive chemical operations abroad, making it the only company that had substantially different product mix foreign and domestically. Therefore, the food division was the only part of the company considered in this analysis. All numbers refer only to the food division. For other firms, corporate data was used.

**Since the completion of this work Nabisco and Standard Brands merged to form Nabisco Brands. In this analysis, however, they are considered separately.
and the legal restriction imposed on land ownership in the United States and abroad. This particularly allows avoidance of confusion from firms that have operations abroad that are used as a source of input for United States businesses and not as a base for sales to the local population. Level of technological development is also consistent across firms, as is susceptibility to government intervention such as price control. Most important, the market conditions of the firms are similar. Most product areas included a few large firms along with several smaller regional brands. Close substitutes for most products can also be made in the home kitchen; so individuals can be considered as competitors. This assertion about market structure was substantiated in interviews with firm executives. Control of industry characteristics permits the development of a single hypothesis as to how the FP should perform in the international environment.

3. Expectations of Food Processor Performance

As mentioned, the food processing industry seems an unlikely candidate for success in international markets. First, it is saddled with an extremely culturally bound product. As George Orwell once wrote, "I think it could be plausible argued that changes in diet are more important than changes in of dynasty or even religion." One would assume therefore, that local businessman are more in touch with local tastes than foreign competitors and so, have a relatively strong advantage. To overcome this, firms based in foreign markets must have access to a countervailing advantage.

Advantages in technology, particularly proprietary information produced through corporate research and development (R&D) has been discussed by many authors (Kindleberger 1969, Buckley and Casson 1976). Where information does not flow freely and patents or trade secrets preclude widespread production of a good, indigenous firms may be unable to gain access to necessary information to ensure effective competition. In order to maintain long term profitability, multinational firms often need access to a stream of innovations to maintain their information monopoly or oligopoly (Buckley and Casson 1976).

In the food processing industry, a technological advantage does
does not appear. As one executive interviewed put it, "there has been essentially nothing new in the food industry for the past two thousand years." While that may be an exaggeration, the list of products shown in Table II, chosen by the trade magazine Progressive Grocer as being unusually "ingenious, innovative, and intriguing", does not contain many striking advances in product technology. Table III provides a list of foods considered "substantially different in form, technology, or ingredients..." by R.D. Buzzell and R.E.M. Nourse in their analysis of innovation in the food processing industry. The list seems to support the contention of an OECD report that "...most successful 'new' products have really just been 'old' ones presented in a more convenient form." (OECD Observer, 1980). R&D expenditures in the industry are small, only one-fifth of that of the chemical industry as a percentage of sales (Business Week, 1979).

Though product innovation does not seem particularly important, it may be that it is process technology that provides MNCs with its countervailing advantage. Freezing, dehydration, and condensation, for instance, as well as the more recent extrusion processing and retort packaging are all import processes in the industry. Historically, however, those developments have diffused throughout the industry, leaving few technological advantages. The rapid entry of new brands of freeze dried coffee after introduction of the initial entrant provides an example of the quick spread of production techniques.

Ability to innovate in advertising is another type of R&D set forth by Buckley and Casson (1976) as a potential advantage for MNCs. In interviews with industry executives, however, it was found that little advertising is actually done internally, particularly not by the home office for foreign subsidiaries. Neither are American advertising firms hired to create programs from the United States. Rather, the subsidiaries contracted with local advertising service firms, though those are often subsidiaries of American companies abroad. This brings out two points. First, advertising is not an internal firm advantage, that is, it is not transferred from headquarters to subsidiaries within the corporation primarily due to a realization that specific campaigns do not transfer across national boundaries (Ricks et al. 1974). Internalization
Table II
Some New Food Products Introduced Circa 1978

Microwave-compatible pancakes
Cough candy lollipops
Sangria-flavoured soft drink
Quarter-pound hot dog
Turkey kielbasa sausage
Pizza-flavoured sticks
Yogurt bran bread
100% fat-free candy
Soft drink concentrate in aerosol can
Kosher bubble gum balls
Frozen yogurt bars
Spoonable cheese spread
Canned egg custard
Flavoured grits
Powdered Worcester sauce
Jalapeno pepper jelly
Honey jelly
Carbonated soft drink powder
Smoke-flavoured salt
Asceptically packaged milk
Rice bread
Fructose sweeteners
Frozen quiche
Powdered isotonic beverage mix
Powdered cocktail mix
Pre-moulded cranberry jelly

Table III
Products Introduced During 1945-1965

Vitamin-enriched breakfast cereals
Breakfast cereals with freeze-dried fruits
Instant oatmeal
Dehydrated Flaked potatoes
Instant-blending flour
Frozen dinners and specialities
Dehydrated potato specialities
Synthetic orange drink concentrates
Orange juice concentrate
Boil-in-bag frozen vegetables
Liquid diet foods
Polyunsaturated (corn oil) margarines
Soft margarine
Unsalted, frozen margarine
Instant dessert and pudding mixes
Pre-cooked rice
Packaged rice specialities
Extruded dry pet foods
Semi-moist meat pet foods
Vegetable-oil coffee lighteners
Dry salad dressing mixes
Freeze-dried Soluble coffee

Found in: R.D. Buzzell and R.E.M. Nourse Product Innovation in Food Processing
is considered an additional requirement for a countervailing advantage in FDI literature (Dunning 1980). Second, the existence of subsidiaries of American advertising firms in foreign countries indicates that the expertise is available to local as well as foreign competitors and so, would not give the MNCs a restricted advantage. For those two reasons, it seems we can dismiss advertising as the basis a countervailing advantage in the food processing industry.

There has also been the theory, set forth by Kindleberger (1969) that imperfections in factor input markets may lead to vertical integration across national boundaries. As mentioned before, however, food processors included in this study are not vertically integrated, either backwards into farming or forwards into retailing. A limited number of companies are involved in special contract purchasing for particular varieties of agricultural products for a part of their output, but this is a small percentage of the subject group. Further, that function is not correlated with success as described below.

The last advantage that may be applicable is economy of scale. This could conceivably present a barrier to entry of new domestic firms, leaving companies from more developed markets, such as the United States, free to operate without local competition. Capital expenditures in the food processing industry is small in comparison to others such as mining or machinery production. Also, American food processors frequently acquired local firms during their international expansion; so clearly, local firms do exist.

What is left then is a series of small advantages. For instance, most of those executives interviewed felt that the managers in the MNCs were superior to those in local firms, due to the extensive training and professionalism of developed country executives who were used to train host country managers recruited locally. Many stated, however, that they were beginning to be troubled by a high turnover rate among foreign nationals who were moving to domestic firms. That movement, along with improved managerial training available in many countries, suggests that any advantage accruing from managerial expertise is decreasing. A dedication to quality control by United States companies was suggested by executives as a comparative advantage. Extensive regulation by the United States government for the past fifty years has probably spurred
the development of quality control procedures that are appreciated by consumers in other countries, but the extent of that advantage can be questioned. First, it is often said that Americans have an unusual preoccupation with cleanliness, leading to an overestimation of its importance by American managers. Further, the added cost of quality control might discourage consumers who are not particularly attuned to food purity. Last, one executive stated that the firm's biggest problem in international management is overcoming resistance to quality control and machine maintenance in certain countries. So, even the actual level of quality in some countries may be questioned.

In a case study of Nestle, Nichols (1977) identified what he felt to be four firm advantages. Three of those, R&D, quality control and process advantage have already been discussed, and in the case of the subject firms dismissed. The fourth factor, gains from the coordination of production and distribution that can ensure constant supplies for buyers, should be considered as well. In order to gain from that coordination, the companies would have to be able and willing to transfer products between subsidiaries in the case of shortfalls. Intra-corporate transfers are low in the industry, however, due to both difficulties in shipping many types of processed foods and recipe differences among markets. The coordination of purchasing for inputs may also provide MNCs with an advantage of better quality or price. In the case of the food processors though, a large portion of inputs are purchased on local markets or arranged by local management since commodity markets are relatively efficient.

In summary, the food processing industry is characterised by a culturally bound product, placing it at a great disadvantage vis-a-vis local firms and no major countervailing advantage. This leads to the hypothesis that food processors should not perform well in foreign markets.

4. Testing The Actual Performance of Food Processors

Despite the hypothesis generated in the previous section, that FP should not perform well abroad, some studies have suggested that they are actually successful (Buckley and Casson 1976). That conclusion has been based on measures of current presence in the international market.
The history of the food processing industry has shown, though, that several of the companies moved abroad for reasons not considered rational in the economic sense (Horst 1974). Several firms, including Campbell's and Nabisco have seen major losses due to the sale or dissolution of foreign operations (Business Week 1981, Sales Management 1967, Advertising Age 1977). Further consolidation of the foreign businesses of the food processors might occur, suggesting that current presence is not an adequate proxy for long term success.

4.1 Development of a New Index of Success

To overcome that problem, another index was developed to estimate the performance of the multinational companies. Ideally, one would want to measure the return on the opportunity cost of resources in use by foreign operations to see if the continuance of such operations are justified. Unfortunately, a problem arises in trying to measure the value of resources employed. That measurement should properly include special management training needed for subsidiaries, a fraction of product and process R&D, as well as investment in plant and equipment. Robbins and Stobaugh (1973) have also mentioned the value of a parent's guarantee of a loan made to the subsidiary as an intangible that should properly be included in a valuation of investment. As noted by those authors, the worth or cost of several of the factors is elusive and so, they are frequently omitted from investment calculations.

Due to restriction of available data, therefore, a second-best measurement must be chosen. Usually, return on an available investment value, such as plant and equipment costs, are used (Robins and Stobaugh 1973). While that approximation is adequate in some industries, particularly in those with high capital costs, low R&D, and costless product transfer across national boundaries, it is not acceptable for the food processing industry which has a high level of intangible assets.

Instead, reported financial data were used to measure foreign and domestic profit margins. In that way, a ratio can be used to compare performance in foreign markets to domestic performance which is used as a benchmark. This should correct for any investment values that are allocated incorrectly between the foreign and domestic figures or that were not allocated at all. If a return on investment index were used, it
would be the following:

\[
\frac{\text{turnover}_{\text{int'l}} \times \text{profit margin}_{\text{int'l}}}{\text{Investment}_{\text{int'l}}} = \frac{\text{return on investment}_{\text{int'l}}}{\text{return on investment}_{\text{dom}}}
\]

\[
\frac{\text{turnover}_{\text{dom}} \times \text{profit margin}_{\text{dom}}}{\text{Investment}_{\text{dom}}}
\]

If we assume that the sales per unit of investment are the same for both international and domestic operations, then the index above can reduce to a ratio of profit margins. A problem that remains is the systematic underestimation of profitability for rapidly growing firms. This is due to high initial fix cost expenditures such as for R&D and marketing that are needed to build a brand franchise. (For a general discussion of this effect, see van Breda 1981.) To correct for this a compensatory factor of five percent of sales growth for international operations was added to the numerator and a comparable figure for domestic operations was added to the denominator. The final index used is:

\[
\frac{\text{profit}_{\text{int'l}} + 0.05 \text{ sales change}_{\text{int'l}}}{\text{Sales}_{\text{int'l}}}
\]

\[
\frac{\text{profit}_{\text{dom}} + 0.05 \text{ sales change}_{\text{dom}}}{\text{Sales}_{\text{dom}}}
\]

Use of this index presupposes that reported financial data accurately reflect the benefits generated by the different operations. In particular, transfer pricing, which is often thought to distort profit data, must not be expected to affect profit figures. The food processing industry allows the acceptance of that proposition. The low level of intra-corporate transfers in the industry suggests that the figures provided in corporate reports approximate the true value of the operations. This unusual aspect of the food processing industry permits the use of the index above, but its transfer to studies of other industries cannot be suggested.

It is expected that firms should require approximately the same profit margin in their foreign subsidiaries as in their domestic in order to maintain operations abroad. Kindleberger (1969) asserted that corporations must receive a higher return on their investment abroad than they do in their home market due to higher costs of
operating at a distance. Return, however, should be a function of the risk characteristics of the business and it is on that that the ratio is expected to depend. The firms in the subject groups have approximately the same product mix in international and domestic operations, but the appropriate measurement of risk would include several aspects of the market environment. Through the use of a control group, it is thought that this, and other, possible biases in the index will be corrected. For that purpose, a group of thirty, randomly selected multinationals from other industries were chosen as a control group. When it is considered whether the food processors are performing poorly, it will be against that control group that their performance level will be judged.

4.2 Testing The Hypothesis

Index values were calculated for both the study and the control group for the years 1975 through 1979 and then averaged to give a single value for each firm. For the food processors, the mean value of the index is 0.80 ± 0.068; for the control group, the mean value is 1.0 ± 0.067. The means of the two groups are statistically different at the 0.02 level of significance. So, as expected from the theory, the food processors are performing less well in the international environment than the majority of firms included in the control group.

Before concluding this analysis, one last bias, that is the effect of price controls, should be checked. Due to the perception of FP products as essential, it may be that the subject firms are more likely to face price controls than are the control group of firms. If this is the case, foreign profit levels could be expected to be less than those in the United States. Unlike the case in which domestic competitors can drive out inefficient foreign firms through price competition, the existence of price controls would lower profits to all firms and perhaps preclude effective competition. Interviews indicated that this was not a significant problem for subject firms, but a comparison was still made to another industry that is severely affected by price controls, the pharmaceutical manufacturers. Almost every major market for ethical drugs has some form of price control, but need that cause an overwhelming affect on the success index? As calculated for a group of thirteen multinational
pharmaceutical companies, the average index level was found to be 0.95 ± 0.023. The difference between the means of the food and the ethical drug producers is statistically significant at the 0.02 level. 

These simple and straightforward comparisons indicate that the American-based multinational food processors are not performing as well abroad as are other MNCs and point to an expected decline in the international operations of the food processing industry. Fewer investments abroad and dissolution of some existing operations in foreign countries will probably be seen in the food industry in the future.

5. Testing FDI Theory with Corporate Strategies

Despite the fact that the food processing firms as a group are performing poorly, there remains a wide variation in the level of success in international environments as calculated by the index derived above. Though exact values could not be considered perfect indicators of a firm's ability to adapt to the international environment because of data errors, the spread was sufficient to permit the identification of three groups of performers, high, medium and low. The existence of the performance groups allowed a second test of the theory to be made.

The FDI theory used in the previous chapter to develop a gross expectation of FP performance can also be used to develop a more detailed picture of strategies and structures that should be effective in the international arena. After those specific strategies are identified, actual corporate strategies as found in interviews with executives of nine of the subject firms will be compared to see if the theoretically derived strategies are indeed associated with the most successful firms.

To reiterate briefly, the FDI theory discussed assumes that local competitors have an advantage over foreign firms because of their proximity to the market. To overcome their disadvantage, foreign companies must have access to some asset, either tangible or intangible, which is not available to local firms and can be used to improve the competitive position of the firm. Given that framework, foreign companies have two ways of increasing their ability to compete - decrease the added costs of operating at a distance or increase the importance of any countervailing advantages.
5.1 Strategies to Reduce Firm/Market Distance

In the food processing industry the basis of a strong disadvantage for multinationals is the culturally bound nature of the products. The problem of producing a food that is not acceptable in the target markets could be reduced through the production of less culturally dependent products. This would include foods that are less complex and processed and those that are not the final food to be served, but rather a component of a recipe that cooks can tailor to suit their own tastes.

Also, the use of product testing techniques prior to their introduction might help to ensure that products better suit local preferences. Such research might point to other areas of product development which the firm might pursue as well.

As Kotler (1980) has noted, successful product development requires a series of testing and modification stages in order to properly integrate market tastes. The establishment of R&D facilities closer to foreign markets should improve the acceptability of the foods sold. The decentralization of some corporate functions in order to decrease barriers to cross-national product transfers might be a third strategy available to the food processors.

Cultural, political and legal distances could also be limited through the decentralization of other decision-making authority. Specifically, local management in successful companies should have greater input into product concept, development and marketing decisions than those in the less successful firms. Pricing strategies could be placed in the hands of subsidiary managers as differences in product recipes preclude transnational arbitrage when prices vary among countries.

In summary, four strategies have been identified that should help the multinational food processors to decrease their distance, in regard to culture, politics and legal systems. These are: the production of simple foods, use of market tests, decentralization of R&D facilities, and decentralization of some decision-making authority to local managers.
5.2 Strategies to Strengthen Firm Advantages

In addition to decreasing firm/market distances, an increased reliance on subsidiary managers would also result in more efficient utilization of the high quality management to which the food processors reportedly have access, thereby developing one of the countervailing advantages of the firms. Further strengthening of that resource could be expected to arise from the participation of top level management in training overseas executives in order to transfer useful managerial skill. As well, company experts could be identified in particular areas and used to train inexperienced managers. Transferring expertise from top level management and company experts to new personnel and then effectively using those recruits through decentralization of decision-making is one technique for strengthening a countervailing advantage of the firms.

Another reported advantage of the food processing firms is their high quality control standards. If that actually is an asset, one would expect management to seek tight control of the production function, suggesting a low level of joint ventures and licensing among the successful companies (Stopford and Well 1972). Joint ventures also necessitate the inclusion of the needs and interests of local partners in the decision-making process. Such a collaboration may interfere with corporate decentralization which assumes that subsidiary managers will act in the best interest of the corporation. Joint ventures with local partners might seem an efficient means of gaining information about market tastes and conditions, but the use of local nationals as managers can effect the same end without relinquishing control.

5.3 Comparison of Theoretically-Derived and Actual Strategies

Information of actual firm strategies gathered in interviews with executives of eight multinational food processors and in a search of public literature will now be discussed and compared to the strategies hypothesized as effective. If there is a correlation between the use of the theoretically-derived strategies and success, further support for foreign direct investment theory will be found.

The first hypothesis presented was that the production of simple foods is a means of gaining access to foreign markets because those face lower cultural barriers. Executives of the most profitable firms
stated that, for the most part, their foods were simple, low cost-per-serving items that could be purchased by most consumers. Boullion cubes are an example of that kind of food; though not a meal themselves, they can be added to commonly used foods to improve their tastes or add variety which is often lacking in developing countries. That type of product allows purchasers to alter the product to suit their culture rather than requiring purchasers to change their preferences which takes a long time, or requiring product adaptation which is costly and difficult. The experience of Campbell in Brazil illustrates the importance of product adaptability. Following the Campbell withdrawal from that market, it was reported that, "Brazilian housewives seemed to prefer the dehydrated products of competitors...which they use as a soup starter but still add their own flair and ingredients." (Business Week 1981)

That strategy of allowing foods to be tailored to local need was used during the early stages of Quaker expansion. Though the oatmeal was essentially the same everywhere, package directions and suggested recipes differed to take into account cultural preferences. It was suggested that the product be eaten raw in Scandinavia as is the custom there and in certain countries where large breakfasts are not usual, the product was sold to be used in soup or as a soft drink.

Still it is unclear if the cause of success for these products is their simplicity or their low cost which makes them available to a larger market. While support is found for the hypothesis, further work should be done before it is taken as valid.

The second strategy that was suggested as a means to decrease firm distance from the market was the use of pre-marketing product tests. The extent to which products are tested prior to introduction varies greatly both within and among firms. As was expected, the most successful companies tested all products while the less successful ones were not consistent in that regard. Executives of the high and middle performance firms were all able to provide examples of products tested and procedures used; some of the managers of the less successful firms were unable to provide an example. That might mean that the poor performers did not emphasise testing or alternatively, that the managers of those companies
were not aware of things being done in the field. Because those poor performers had highly centralized operations though, with most requests being channelled through headquarters, it would seem that it is the emphasis that varies among firms.

No company used a strictly defined testing procedure. Depending on the type of product and the country, techniques used differed. In cases where products were transplanted from the United States or some other existing market, the items might first be imported for limited distribution. Because the manufacturing technology did not change radically with recipe changes needed to suit local tastes, small batches of variant recipes were relatively simple to produce for market testing. The limited distribution could be used to gauge potential sales levels and to test for the appropriate recipe.

In other cases, more extensive research is done, particularly if a new product is to be introduced. Questionnaires are a popular method of discovering consumer preference. Limitations on television advertising and other techniques commonly used in the United States preclude the use of many methods developed in the food processors' domestic market.

Examples were found in the literature of extensive market studies by even the least successful firms. For instance, prior to entering the Australian market, Nabisco spent more than one year testing 150 products in 12,000 home interviews in order to choose 21 crackers and cookies to sell in that market (Advertising Age 1977). In the German market, Nabisco also tested products prior to their introduction, but were still forced to close that operation in 1977 (Advertising Age 1977). Of course there is no indication as to how the results of the tests were included in Nabisco's decision-making process. The counter-example of testing by an unsuccessful firm, however, does suggest that while careful market testing may be necessary to succeed in international markets, its use is not sufficient to ensure high performance.

Decentralization of R&D facilities was considered to be a third potential strategy that would improve the performance of the food processors. Taste variations across national boundaries, the hypothesized reason for the decentralization, had been considered by all companies visited. Executives interviewed stated that some or all of their recipes
are altered prior to introduction in new markets. Also, all firms visited had developed at least one product specifically for operations abroad. Calculating the level of foreign R&D activity in the food industry was difficult because, as one executives put it, "It's hard to tell what is R&D and what is a few bakers stirring more almonds into the fudge." Despite this ambiguity, it was clear that the least successful firms did not have significant R&D abroad; in fact, executives of both low level firms visited stressed the excellence of their American R&D facilities and those facilities' ability to tackle any problem anywhere.

At the present time, the size and location of foreign research and development operations are changing. The most successful firms had R&D abroad and were expanding the number and size of those operations. Among the middle level group, all had some overseas R&D capability, with two in the process of testing the utility of those projects and considering expansion, but still stressing the importance of American facilities to their international operations. One of the least successful firms, once again as judged by the index developed above, have recently completed restructuring their operations and the executive interviewed stated that one of the most important facets of the new system is the availability of the American R&D facility for development of products for foreign markets.

The most successful firms had more extensive, regional facilities that could develop products from the beginning through their final form. Some of those facilities were identified as having particular expertise and all firm subsidiaries could gain access to all R&D laboratories regardless of region. Coordination was performed by headquarters personnel. In the most successful firm, priorities for development were set through a process involving both headquarters and subsidiary inputs. Corporate and subsidiary offices each technically owned fifty percent of each facility.

It is unclear how the least successful firms adapt recipes for foreign markets. Laboratories in the United States are used, but executives could provide no further insights as to how Americans are able to devise appropriate foods for other cultures. Some general impression, such as less salty or more sweet, seems to be introduced into product design, but a comment by a manager of a Nabisco subsidiary which was closed three years later may indicate the adequacy of that
arrangement, "The American were always coming up with new product suggests, often food that not even animals here would touch" (Advertising Age 1977).

As expected, the maintenance of R&D facilities outside of the United states is associated with successful performance.

Differences arose also, in channels used for R&D requests. This relates to the strategy of decentralized decision-making which was hypothesized to decrease firm/market distance and to strengthen a countervailing advantage through the efficient use of high quality personnel. Whether it was for modifications of existing products or for new product design, the ability of subsidiary managers to request R&D directly from laboratory personnel was correlated with international success. No company left total control of R&D in the hands of local managers. The more successful firms maintained channels from both headquarters and subsidiaries to the R&D facilities. Unsuccessful firms, on the other hand, forced any requests from subsidiary managers up through the corporate hierarchy to vice presidents who approved all requests that were allowed to be transmitted to R&D personnel.

Firms that let subsidiary managers make direct requests generally had some limitation as to how far from the current product lines a local manager could stray without higher level approval. In general, extensions of existing product lines were allowed, but major changes in product lines were approved at headquarters. In firms that did not limit requests, the capital budgeting procedure was used to ensure that product lines did not change radically without headquarters approval. That is, production of a new food usually requires capital in excess of that allocated without a formal budget proposal. If such a proposal were submitted, executives said, the subsidiary managers were expected to present strong evidence showing adequate market potential.

One middle success firm had given its German subsidiary complete control over product choice and initial development, leading it to introduce products that were not manufactured by any American company, let alone the parent. Other subsidiaries of this firm had limited chance to innovate, particularly those in the Far East. The executive interviewed realized that the German subsidiary was more successful because of its freedom and said, "Perhaps if we were a bit more clever, we would have a few more products that appeal to the Philippines..." It might
be that the greater cultural similarity between headquarters personnel and that of the German subsidiary, than between headquarter and Far Eastern management, facilitated that delegation of responsibility.

Information gathered on companies other than those interviewed may help to understand the resistance of unsuccessful firms to increasing local input into product design decisions. While some companies pay lip-service to product adaptation for local markets, their emphasis may actually be on altering consumer preferences. A comment about Lee Bickmore, former president of Nabisco is relevant, "He is a one-worlder, but it's not so much world government that interests him as the tendency for people all over the world to adopt the same tastes and the same consumption habits." (Forbes 1968) An industry analyst, discussing Campbell, which has lost substantial amounts in international endeavors stated, "In its evangelistic certainty that its products are good for everyone, Campbell makes little effort to tailor its flavors to foreign tastes." (Sales Management 1967)

As was expected, it was found that companies that are more willing to adapt products to local conditions and those that give subsidiary management a greater role in product choice decisions are more successful. The decentralization of pricing decisions should be expected to have the same outcome.

Control of pricing decisions by local managers of food processors is feasible because cross-national product arbitrage is precluded because of recipe and packaging differences. The decentralization of pricing decisions would enable companies to make further use of local managers and would provide them with more flexibility in dealing with market competitors.

Interview information is ambiguous on this point. All executives responded that pricing decisions were made in the field. What appears to be different among firms is the amount of flexibility the local managers are given. In general, the less successful firms set specific total sales and profit goals for the subsidiaries. One executive from a low level firm responded, "Pricing principles are designed here and are executed in the field," indicating that subsidiary managers have little input into the development of financial goals, and therefore, to some extent pricing. The more successful firms, on the other hand, stressed
the importance of setting goals with the local people in planning sessions. During those, headquarters and subsidiary staff would negotiate not only sales and profit figures, but an entire list of financial goals. That process allowed local managers a forum in which they could explain the pressures or needs of their own market.

Decentralization of the locus of decision-making in the successful firms did not lead to a fragmented structures. As Fayerweather (1969) has written, organizations can be both decentralized and unified. Tasks assigned to level management led to adequate control through a socialization process, which transferred information between headquarters and subsidiaries in a way that supports the hypothesis that successful firms will strengthen a countervailing advantage with the effective utilization of in-house management skills.

In both of the most successful companies, the executives spoke of their careful screening of foreign personnel prior to recruitment. Then, those executives spent substantial amounts of time with the new personnel, training them in "Macro-strategies" including both corporate objectives and management skills. Headquarters executives travel extensively in order to perform that task. The managers interviewed from those successful firms both used the word "trust" when describing the reason behind that intensive training; Given those firms' decentralized structures, trust was considered essential to maintain control. The terms "Macro-strategy" and "Global Strategy" used by those executives described general skills and objectives; it was stressed that details should not be dictated by headquarters to subsidiaries.

The development of these mentor relationships were used to transfer managerial expertise to a large number of employees, thereby strengthening the firm management. The identification of in-house experts, the other hypothesized method to strengthen that countervailing advantage was found in the most highly rated company. For instance, Latin American executives had developed skills in dealing with high rates of inflation because of the long history of hyper-inflation there. When that problem spread to several other countries, a South American executive was sent to other company operations to teach the techniques that had been developed to deal with high rates of inflation. This strategy both
aided internal information transfer and made the local executives feel that headquarters personnel regarded them as important.

So, the decentralized operations of the more successful firms were still marked by control through a socialization procedure. As hypothesized joint ventures, which were thought to decrease the level of control, were little used among successful firms. Every firm visited for this analysis followed the policy of placing local nationals in subsidiary management positions where possible. If it was believed that there was insufficient talent within a country, the firms attempted to put third country nationals from a culture similar to that of the target market into the jobs. Another technique used to gain management knowledgable about local conditions was to acquire local companies and retain existing management. These two strategies are used to get information needed rather than establishing joint ventures.

In most cases, the high performance firms were interested in joint ownership only if local legislation required it. Those interviewed stated that the control was difficult as local partners had different needs and interests from the corporation. Joint ownership, however, was preferable to licensing or other form of contractual agreement. Those arrangements were considered only if the market was very small. As expected, quality assurance associated with the company brand was so important to the corporation that executives wanted to ensure proper production. They felt this was more easily done internally.

One executive from a successful firm mentioned that the type of manager needed in most subsidiaries was different from that needed for joint ventures. Subsidiary managers had to be independent and willing to make choices alone. In a joint venture situation, the executive stressed, the representative of the foreign interest had to have a more conciliatory style. Though managers for joint ventures had been found within the existing corporate structure, they were on the fringe of the corporate culture and it was difficult to move them throughout the system.

Executives of the low performance firms stated that their companies currently had policies of entering new countries through joint ventures only. When asked the reason for that strategy, the executives replied that they felt it was the best way to develop expertise about the local operating environments. As those firms did not allow their own local management to make decisions that would utilize their knowledge about
the local environment it seems unclear what will be done with the joint venture management. Among the medium performance firms, there did not seem to be a set policy, but in cases where distribution systems or culture were seen as radically different from those of the United States, a bias toward joint ventures existed. As expected fewer joint ventures were used in high success than in medium or low success firms.

5.4 Summary of Strategic Analysis

Two types of strategies were derived using the framework of foreign direct investment theory -- those that decreased firm/market distance and those that strengthened a countervailing advantage of the firm. In order to decrease distance, it was hypothesized that firms could produce simple foods that were more universally acceptable, use pre-market testing, decentralize research and development facilities, and give local management greater control over product and pricing decisions. Qualified support was found for the first strategy because simple foods were associated with success, but it might also be that the lower price of the goods was the cause of acceptance. Pre-market testing was more common in the successful firms than in those that were performing poorly, but cases of low performers using extensive testing led to the conclusion that it was a necessary, but not sufficient determinant of success. Decentralized research and development facilities and greater management control were found to be clearly associated with success among the multinational food processors.

Efficient utilization of management and control over production through limited use of joint ventures were the strategies hypothesized to aid firms in strengthening their countervailing advantages. For the former strategy, two techniques were used among the successful firms, the identification of in-house experts and the transfer of information through mentor relationships developed between headquarters and local personnel. Successful firms had fewer joint ventures than the other companies studied giving support to that hypothesis as well.

6. Conclusion

Using existing theory on foreign direct investment, this analysis derived hypotheses regarding the expected performance level of food
processing firms in the international environment and regarding strategies likely to improve the level of firm success. As expected the food processors were not performing well abroad and it is anticipated that there will be a reduction in that industry's operations abroad in the future.

Support was found for four of the six strategies outlined as most useful and the other two were given partial support. The strategies were divided into two groups, those to decrease firm/market distance and those to strengthen firm countervailing advantages. That dichotomy is set forth in the foreign direct investment literature and seems a useful framework in which to analyze the operations of multinationals.

As actual operations of the food processing multinationals were consistent with both analyses performed, that is, that as a group they would be performing poorly and that some strategies could explain the variance in firm performance, it is the conclusion of this paper that FDI theory as considered, has predictive validity. Further work may be done to see if these results are applicable to other industries.
Notes

1. There is an even more basic problem in many of the applied studies of Foreign Direct Investment. That is, the choice of the subject group, often some set of large companies such as the Fortune 500. In those analyses the effect of industry concentration level, picked up by the restrictions of the subject set, may confound certain results. While the amount of overseas business done by the Fortune 500 automobile manufacturers, a highly concentrated industry, may be an adequate proxy for level of internationalization in the entire industry, we must wonder about the adequacy of that value in an industry such as food processing which is less concentrated. It is commonly thought that level of international business is correlated with firm size. Firm size is for the most part only a measure of industry concentration or some type of firm advantage, but we may also think that firm size leads to overseas expansion for other reasons. For example, a company that has saturated its home market may seek to grow by moving into new foreign markets despite the fact that such a move is not rational in the economic sense. If such is the case in the food industry, then the measurement of industry international operations which includes only Fortune 500 firms would give an over-estimation of actual investment abroad by the entire industry. The use of current presence abroad as a proxy for success may then overestimate that level for unconcentrated industries with a few large firms.

2. Actually that would be a rather strict neo-classical view of corporations that assumes constant profit maximization with no short term deviations. The more Darwinian view of companies that states they must be profit maximizers else they would be competed out of the market allows for short-term suboptimal behavior that would also suggest that a current presence measure would not be a good proxy for ability to maintain operations in the long run.

3. Significant portion was determined to be approximately 40% of sales.

4. An example of United States restrictions on farm size would be the California water distribution legislation.

5. The pharmaceutical industry index value should also have a downward bias due to transfer pricing distortion caused by price controls in most markets abroad.
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