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Commerce -- Exports -- U.S. 1989
Moulton, Kirby S.
Strategic implications of the
multinational structure of food # 6514

1989

Strategic Implications of the Multinational Structure of Food Processing and Marketing

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This paper was prepared for the summer meetings of the
American Agricultural Economics Association
Baton Rouge, Louisiana
July 31, 1989

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Commerce -- Exports -- U.S. 304

AAEA 89

#6514

STRATEGIC IMPLICATIONS OF THE MULTINATIONAL STRUCTURE OF FOOD PROCESSING

Handy and MacDonald analyze the characteristics of firms adopting direct exporting or direct foreign investment strategies. They show that firms capable of effective product differentiation tend to utilize direct foreign investment rather than exporting. They conclude that efforts to increase U.S. exports of processed food products will be difficult unless the incentives associated with direct foreign investment can be matched by existing or new export institutions.

Our purposes are to identify some of the strategies, and rationales behind them, that are linked to those discussed by Handy and MacDonald; to describe other considerations that are likely to influence strategies; and to provide guidance to firms in assessing foreign trade opportunities. We are writing to applied economists and laymen who are concerned about evaluating market opportunities but are unfamiliar with more recent developments in trade theory and methodologies.

Implications Derived from Handy and MacDonald

Handy and MacDonald suggested two strategies to improve export incentives: (1) differentiate U.S. processed food commodities from those of competitors; and (2) develop a set of marketing institutions, specific to U.S. products, that would induce U.S. producers to choose exporting over direct foreign investment.

Commodity wide research and export promotions programs implemented through marketing orders, commissions or trade associations may be one such institution that favors exports over direct foreign investment. The programs provide representation in foreign markets, evaluate changing conditions, and seek to differentiate the U.S. (or specific regional) product from that of competitors.

The case studies reported by the Agricultural Issues Center of the University of California assert that industries with a high degree of organization, including cooperative structures, marketing orders and commodity commissions tend to be successful due to collective action in research and marketing. Industries cited include citrus, almond, strawberry and raisin; with the contention that the cling peach industry did relatively well in a declining industry due to organization. In these examples, collusion is permitted in order to achieve certain industry objectives, excluding price collusion or allocation of markets to individual firms. Despite legal restrictions, these structures also serve to increase market power, a consideration which may be critical when either the competitor or the purchaser is an entire government rather than individual firms.

The effects of marketing order decisions have been evaluated by Nuckton, French and King, and Bushnell and King, among others, but with primary emphasis on domestic markets. Moulton, based on an ongoing investigation (1989) of global competition in canned peaches and pears, believes that the promotion program for canned peaches has been effective in supporting a premium price for California peaches relative to those from Greece and South Africa in the Japanese market. It appears that a fruitful line of research is to analyze the impact of such programs on exporting strategies.

The spread of technology through direct foreign investment in low cost producing areas can create problems for U.S. processors without foreign sources of supply. This has occurred in frozen vegetables and processing tomatoes as the result of investments in Mexico. However, the rate of technological change can be used as a protective strategy by industries in some situations. Moulton and Runsten describe the "rush" of technology that allowed the California processed strawberry industry to outdistance the lower cost Mexican industry.

This situation contrasts with that in the frozen vegetable industry and suggests that the type of integration involved in foreign investment is important. In the case of strawberries, investments were made by brokers or small scale processors and the integration was as much vertical as horizontal. The investors were knowledgeable about current technology but unable to keep up with the rapid pace of change stimulated by research investments by the California industry. The major investors in the Mexican frozen vegetable industry were Birds Eye, Green Giant and Campbells. They were at the leading edge of technical change because of their large U.S. operations and could readily extend new technology to their

Mexican operations. The key in this situation was the horizontal integration of production units that facilitated technology transfer.

Explicit assumptions about the ease and speed of adoption of new technologies in different geographic areas have been used in conjunction with quantitative models or estimates. An example of this is the Nelson and Unnevehr study of the international poultry market. The expectation of continued innovation is also key to the assumptions underlying Baldwin and Krugman's model of the market of 16k RAM chips.

Other Strategic Considerations

Foreign sourcing is a strategy that domestic and multinational firms can use to compete against low cost suppliers. Tri Valley Growers, a cooperative processor, purchased canned peaches from Chile to supplement its California supplies and compete more effectively in the institutional market against low priced imports from Greece. Del Monte, a multinational processor, followed a similar strategy using contracted purchases from Chile and Argentina. These actions provided access to low cost products without the necessity of direct investment. Kagome, a diversified food firm in Japan, has used the same strategy, buying tomato paste in Turkey and Chile under long term contracts, to help foreclose entry by foreign competitors into the newly liberalized Japanese market for tomato products. The firm is also investing directly in a California processing plant. We don't know why these firms have chosen different strategies but suggest thar research is needed to explain the rationale for alternative importing strategies.

A direct foreign investment strategy may involve added investment in infrastructure. This will effect the amount of investment required, the length of the payback period and the risks of the investment. Firms considering a direct investment need to look beyond the costs of building or acquiring production facilities to the need for production research, extension programs, power facilities, transport systems and the financing of growers. Evidence of such needs is provided in the case studies reported by the Agricultural Issues Center of the University of California.

Analysis of Markets

The most important strategic decision implied by the changing structure of the multinational food industry relates to market research. At issue is how firms should plan the research that underlies the strategies discussed by Handy and MacDonald and others.

We reviewed thirty-three empirical studies of trade competition recommended by trade specialists or cited in journal articles that we believe covered a broad spectrum of approaches to trade analysis. There was no consensus in these studies concerning the factors which should be considered in the analysis of competition. This is not surprising. One lesson learned from previous research efforts, (see for examples USDA-ERS, Baldwin and Krugman, and Lindsey) is that large scale projects will not necessarily discover all the factors influencing competitiveness.

We are developing a framework to help analysts in planning foreign market research. The conceptual basis for the framework is from economic theory. The factors included are brought together from sources cited here and in other studies and are grouped according to whether their primary impact is on supply, demand, or the environment within which the market operates. We are improving its organization and clarity prior to reporting the results. The work to date reinforces our belief that some sort of planning guide is needed to help industry members account for the complex factors affecting strategic decisions.

Conclusions

Industry-wide organizations such as marketing orders or trade associations may provide the institutional structure cited by Handy and MacDonald as needed to encourage exporting over direct foreign investment. Research is needed to test this assertion. Firms and industries may be able to accelerate the rate of innovation as a defensive strategy to impede its dispersion and protect existing competitive advantage. Firms considering direct foreign investment as a strategy should evaluate whether the nature of the linkage, either vertical or horizontal, facilitates or impedes the transfer of the parent company's technology.

Foreign sourcing is used as a defensive strategy to protect domestic market shares from foreign competition. Firms could be guided in their decisions about importing versus direct foreign investment by research into the nature of firms that choose each strategy.

There are a number of strategies that we have not considered and each needs to be compatible with the structural parameters and strategies that we have discussed. The complexity of our planning framework leads us to conclude that the multinational structure of the food industry has complicated the analyst's job. It has certainly placed a premium on thorough market research as a precursor to strategic decisions.

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