

BARRIERS TO ENTRY FOR HIGH-GROWTH ENTREPRENEURIAL FIRMS: IMPLICATIONS FOR PUBLIC POLICY IN MANUFACTURER-RETAIL RELATIONS

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ABSTRACT

Barriers to entry are one element of industry structure which bounds entrepreneurial growth. While barriers to entry are typically viewed as the creations of competitors, this study investigates barriers to entry erected by customers to whom high growth entrepreneurial ventures wish to sell. Customer-erected barriers to entry exist in industries characterized by significant customer concentration. These barriers are legitimized and supported by existing federal legislation which was originally designed to encourage fair competition between large and small firms. Instead, the legislation enables practices today which create excessive financial demands that entrepreneurial ventures are unable to meet. Thus entrepreneurial ventures are often denied access and the ability to fairly compete in the first place, or must pursue other slow growth alternatives.

INTRODUCTION

Barriers to entry are one element of industry structure which may block or limit the success of growth-oriented entrepreneurial firms. Relying heavily on Porter's (Porter, 1985) five forces model, a significant body of research has investigated the relationship of industry structure to industry entrance by and success of new growth-oriented firms. The rates of new venture formation and entrance are negatively related to various forms of entry barriers (Dean, Meyer & DeCastro, 1993). In addition, the success of new ventures is found to be related to the interaction between firm strategy and characteristics of industry structure.

Barriers to entry are typically viewed as the creations of industry competitors. Through significant economic investments in such areas as plant to achieve scale, contracts to secure resources, or advertising to establish strong reputation larger incumbents in an industry are seen as diminishing the prospects for the entrance and success of new competition (Ghemawat, 1986; Porter, 1985). Research investigating entrepreneurial dynamics has similarly viewed barriers to entry as those erected by incumbent competition (Dean, 1992; Siegfried & Evans, 1994).

However barriers to entry are also erected by customers to whom entrepreneurial ventures wish to sell. Customer-erected barriers to entry exist in consumer nondurables manufacturing industries characterized by significant concentration among customers, such as food, toys, sporting goods, and software. Often these barriers to entry for a new firm take the form of significant fees charged by retailers as a precondition for initial retail shelf placement of the firm's products. There is no research which has yet investigated the relationship between customer-erected barriers to entry and performance of high growth entrepreneurial firms. This research explores the effects on growth-oriented entrepreneurial manufacturing ventures of barrier-raising policies by the retail trade.

Significant public policy issues underlie this research. The Federal Trade Commission has investigated certain barrier-raising retail practices as a form of restraint of trade. However, no policy change initiatives have resulted from their investigations because the retail trade adheres to the letter of existing legislation. This federal legislation was originally passed to help create conditions where competitors could compete fairly. However, it now results in a market context which places growth-oriented entrepreneurial firms at a disadvantage that does not arise from the workings of competitive forces. The legislation sanctions barriers to entry which prevent new ventures from competing at all by effectively denying them access or by severely limiting the fast growth paths available for them to pursue. Such barriers are conceptually different from competitor-erected barriers because they arise from oligopolistic conditions exogenous to the competitive rivalry within the industry.

This paper proceeds as follows. First, the characteristics associated with high growth entrepreneurial firms are reviewed. These may apply to a variety of industry sectors. The food manufacturing industry is profiled as one in which many growth opportunities have been available, but in which customer-erected barriers to entry have recently developed. Hypotheses are offered which suggest ways in which high growth entrepreneurial firms might be affected. A combination of macro-economic data and primary survey data is used to examine trends and the hypotheses. A review of federal legislation sheds light on how existing public policy supports barrier-raising retail practices which inhibit growth-oriented entrepreneurial effort. Implications of the findings for future public policy initiatives are then discussed.

HIGH GROWTH ENTREPRENEURIAL FIRMS

Interest has surfaced recently in high growth entrepreneurial firms (HGEFs) (Covin & Slevin, 1997; Ireland & Hitt, 1997; Sexton & Smilor, 1997). Growth for entrepreneurial firms is achieved through opening new markets and introducing new products (Lumpkin & Dess, 1996; Schumpeter, 1934). The success of new market and new product efforts for HGEFs rests on the nature of the markets in which the HGEFs intend to compete, and on their competitive strategies for competing in these markets.

Because growth depends on capturing sales in new markets or with new products, new firm sales growth must ordinarily come either from growth in the market or from incumbent competitors. Where markets are not growing rapidly, entrepreneurial firms must take business away from incumbent competitors if they are to grow. Where markets are growing quickly, however, entrepreneurial firms may grow without necessarily stealing incumbents' existing business and precipitating intense competitive reactions. Thus Sexton and Bowman-Upton (1991) hold that the market itself represents a constraint on entrepreneurial firm growth, while Covin and Slevin characterize the nature of markets as "growth enablers" (1997, p. 104).

Strategies employed by HGEFs may also affect the degree to which they grow. Entrepreneurial strategic posture (Covin & Slevin, 1991) or an entrepreneurial strategy making mode (Dess, Lumpkin & Covin, 1997) include the willingness to be aggressive in pursuing new opportunities, innovation and experimentation, and proactivity by being first among competitors to initiate actions. An HGEF may succeed only so long as its strategy is coaligned with the complexity and demands placed on the firm from the competitive environment (Covin & Slevin, 1997; Dess, et al., 1997).

Ireland and Hitt (1997) extend our understanding of the importance of strategy by empirically examining types of strategies and implementation of strategies in HGEFs. Their study builds on

Bhide (1996), who holds that the key questions every entrepreneur must answer are whether they have the correct strategy and whether they are executing the strategy correctly (i.e. do the right thing, and do the thing right). High quality and low cost strategies are both effective generic strategic approaches when implemented correctly, and HGEFs tend to rely more on a differentiated high quality approach than the low cost approach (Ireland & Hitt, 1997).

To summarize thus far, the opportunity for HGEFs to succeed are enhanced 1) when markets are growing, 2) when they employ the correct strategy which is most often a differentiated high quality approach, and 3) when they implement their strategy successfully.

What kinds of firms are HGEFs and in what kinds of industries do they exist? Much of the popular press seems to focus on technology-based firms as exemplars of entrepreneurial growth. Much of the academic literature retains this orientation as well (e.g. Eisenhardt & Schoonhoven, 1990; Jelinek & Schoonhoven, 1990; Smilor & Feeser, 1991). Conceptual work also references technology-based firms and industries; for example, three of four HGEFs mentioned in the introduction by Covin and Slevin (1997) are technology firms, while both poor performing firms are non-technology. On the other hand, Ireland and Hitt (1997) use the Ewing Marion Kauffman Foundation database of Ernst and Young "Entrepreneur of the Year" winners (Phillips & Dennis, 1997) to study HGEFs. This program recognizes that fast growth entrepreneurial firms exist in a variety of U.S. industries (Ireland & Hitt, 1997). This makes sense, in light of the industry non-specific conclusions drawn above regarding the characteristics of successful HGEFs.

HGEF OPPORTUNITY IN FOOD MANUFACTURING

Food manufacturing (SIC 20) is an industry sector in which there should be ample opportunity for HGEFs to thrive, based on the characteristics described above. The food manufacturing industry in 1992 represented the highest value of manufacturing shipped among all industries tracked by the U. S. Department of Commerce (Table 1). Moreover, the food industry enjoyed the second greatest growth in the value of manufacturing shipped during the previous 25- and 15-year periods. Significant strategic variety exists within the food manufacturing industry, which indicates that firms may either compete successfully as low cost producers or as effective differentiators (Hill, 1988). Anecdotal, exemplars such as Celestial Seasonings, Orville Redenbacher, Pace Pecante Sauce, Smartfood, Snapple and others are indicative of the opportunity for successful HGEF efforts in this industry.

Macro-economic statistics such as these reveal that significant opportunity existed in food manufacturing for HGEFs during this period based on enabling market conditions which would not act as growth constraints. However, closer examination of dynamic changes occurring within the food industry reveal that opportunities for HGEFs to pursue correct strategies or pursue them correctly were significantly and increasingly constrained.

A number of food industry changes during the late 1970s and 1980s led to the increasing use of barrier-raising practices by the retail trade to whom food manufacturing firms largely sell. These changes included the trend toward greater numbers of new products introduced by food manufacturers, the increasing retail investment in MIS systems including UPC scanner technology, and growing pressure on food retailers' net income margins due to increasing operating costs and financial restructurings. During the 1980s the pace of new product introduction activity by food manufacturers skyrocketed, rising from roughly 8,000 new products in 1979 to over 15,000 new

Table 1
SIC Category Data

Category	SIC	Value of Shipments 1992	Δ Value of Shipments 1967-92	Δ Value of Shipments 1977-92	Δ Small Mfg Estabs 1967-92	Δ Small Mfg Estabs 1977-92
Food	20	407	323	214	-7535	-4149
Transportation	37	399	331	232	2853	461
Chemical	28	305	263	187	-491	-611
Machinery	35	259	210	137	12626	4138
Electronics	36	217	n/a*	n/a*	n/a*	n/a*
Fabric. Metal	34	167	132	77	6235	1939
Printing	27	166	145	117	22715	12034
Petroleum	29	150	128	115	260	3
Prim. Metal	33	138	92	35	199	-441
Instruments	38	135	n/a*	n/a*	n/a*	n/a*
Paper	26	133	112	81	90	-379
Rubber	30	114	101	74	4536	1221
Lumber	24	82	70	42	-2071	-1325
Apparel	23	72	50	32	821	-64
Textile	22	71	51	30	58	-386
Stone, Glass	32	63	48	27	734	-1140
Furniture	25	44	36	27	1333	1245
Misc	39	40	31	20	3346	108
Tobacco	21	35	30	26	-100	-71
Leather	31	10	5	2	-437	-308

* Category data not captured prior to 1987

items per year by 1987 (Hapoenu, 1989), and finally to a record 26,000 new items introduced in 1996. Where supermarkets typically only carry about 21,000 items, competition for shelf space is fierce and results in an extremely high rate of new product failure (Anthony, 1996; Booz, Allen & Hamilton, 1965). Retailers learned that many new products actually sold no better than the items that had been replaced on their shelves, and thus sought ways to minimize their costs associated with stocking and restocking thousands of failed new items.

At the same time increasing investment by the retail trade in MIS systems allowed retail chain buyers to better scrutinize the margin contributions made by each item carried in their stores. The 1980s diffusion of UPC checkout scanning capabilities, standards for which were first approved in 1973, enabled retailers to better understand how to manage shelf space allocations among both existing and new items and to correlate manufacturers' new product test market experiences with their own internal data. A significant change in the bargaining power relationship between manufacturer and retail buyer occurred with the advent of retail MIS, increasingly favoring retailers who for the first time possessed more accurate, timely, and chain-relevant market data than did manufacturers.

Finally, declining profit margins were a significant problem for retailers during the 1980s. Increasing labor and energy costs resulted in average net income for food retailers dropping to a low of 1.12 percent in 1986 (Erickson, 1987). Investments in MIS technology and in larger store formats increased industry-wide, and a series of leveraged buyouts by supermarket chains (e.g. Kroger, Safeway) also added debt service requirements onto an otherwise narrow margin business. These trends put pressure on retail chains to find ways to enhance revenue and cash flow.

Together, these dynamic changes affecting food retailers prompted the widespread adoption of practices which raise barriers in a discriminatory fashion. Most often these barriers to entry take the form of fees charged by retailers as a precondition for initial retail shelf placement of new products (termed "slotting fees"). Charges of as much as \$50,000 per new item per chain, or for a new line of items \$250,000–500,000 per market or \$10–12 million nationwide, are required for initial retail distribution. Industry-wide slotting allowances add almost ten billion dollars per year in revenue for the supermarket retail trade (Zimmerman, 1996). Other preconditions for new products often demanded by retailers include: free new products delivered to all their stores; commitments to advertise in a chain's weekly circular and to participate in off-shelf display programs involving additional cash payments; and agreement to a "failure fee" contract guaranteeing additional cash payments and that the manufacturer will buy back any unsold new product (at the retail price) if it is not selling quickly enough after 90–120 days (Greenwald, 1996). The effect of these practices for retailers is to increase cash flow from manufacturers willing and able to pay, and to offset both the opportunity cost of lost sales and the operating expense associated with new product failure.

These practices have a differential effect on large and small manufacturers. Large, established manufacturers have the cash flow, staying power, and reputation supporting price increases to weather huge initial distribution costs. But the effect of these practices for growth-oriented entrepreneurial ventures is to throw up insurmountable barriers to entry. Few new ventures in the food manufacturing sector can raise sufficient capital initially to buy their way onto supermarket shelves in any reasonably-sized market. Moreover, because manufactured food products typically sell for a low price per unit, multi-market distribution is generally required in order to develop a sufficient volume of business to cover the corporate overhead required for a growth-oriented venture and its investors. The cost of entry into multiple markets is even more prohibitively expensive for new ventures.

Earlier it was concluded that successful HGEFs depend on growth markets, correct strategy, and correct implementation of strategy. The food manufacturing sector is the largest manufacturing sector in the U.S. economy and has traditionally experienced the nearly the greatest growth among all sectors. However, food manufacturing HGEFs are not even afforded the opportunity to compete because of barriers to entry erected by prospective customers. New food manufacturers cannot even get into the market in the first place, at which point correct strategy or correctly-implemented strategy becomes a moot issue. Without the opportunity to even get to the market, food manufacturing HGEFs are now prevented from employing a strategy and attempting to implement it. Because the opportunity for entrepreneurial venture growth in food manufacturing is constrained by these barriers, smaller ventures desiring growth but unable to achieve it will have exited the industry.

Hypothesis 1: During the 1980s small food manufacturers experienced a higher rate of industry exit than small manufacturers in other industries.

New firm births represent a significant source of job growth (Acs, 1996; Birch, 1979; Kirchoff & Phillips, 1991), and this is also true for high growth entrepreneurial ventures (Kirchoff & Acs, 1997; Phillips & Kirchoff, 1988). Because opportunities for HGEFs in food manufacturing are constrained by barriers, we would expect to see less job creation and more job destruction (Davis, Haltiwanger & Schuh, 1996; Kirchoff & Acs, 1997) occurring within small firms in this industrial sector.

Hypothesis 2a: During the 1980s small food manufacturers experienced a lower rate of job creation than small manufacturers in other industries.

Hypothesis 2b: During the 1980s small food manufacturers experienced a higher rate of job destruction than small manufacturers in other industries.

Many growth-oriented ventures will have remained in the food manufacturing industry throughout this period and into the 1990s. This may have occurred because they already had local, regional, or national distribution of a selection of products at the time the barrier-raising retail practices became more widely adopted. However, such firms confront the same barriers to further growth which new firms confront for initial entry. High growth channels of distribution may be closed off, and thus these surviving firms may have turned to alternative lower-growth paths. Surviving firms may also have experienced diminished performance as a consequence of having to pay slotting fees and meet other demands in order to continue growth, or as a consequence of pursuing lower growth paths. Furthermore, it is expected that the combination of pursuing slower growth paths and possibly paying some amount of slotting fees by surviving firms will result in diminished ability to fund growth-building business activities such as advertising or research and development.

Hypothesis 3: There will be a positive relationship between the incidence of retailer barrier-raising practices and the pursuit of alternative distribution channels by small food manufacturing firms.

Hypothesis 4: There will be a negative relationship between the incidence of retailer barrier-raising practices and the performance of small food manufacturing firms.

Hypothesis 5: There will be a positive relationship between the incidence of retailer barrier-raising practices and decreasing growth-building activities.

METHOD

Data Sources

Three data sources were used in this research. First, a series of qualitative interviews were conducted with presidents of five small food manufacturing firms; each of these firms either sells products through retail supermarket chains and would like to grow by selling more in this channel, or does not yet sell through these chains but would also like to grow more by doing so. These interviews reinforced the validity of the proposed hypotheses and provided richness which further informs the results.

Secondary data was also examined to better understand macro-economic trends related to small manufacturers in the food industry. One of the challenges in examining trends discussed in this paper is the need to do so over an extended period of time. As Phillips and Dennis (1997) imply, public databases which provide historical data on small enterprises as far back as the 1970s are

not widely-available. Two sources were used in this study. The Census Bureau's quinquennial Census of Manufactures provides historical data on manufacturing establishments employing fewer than twenty people, and for this study therefore spans from 1977-1992 in order to cover the entire decade of the 1980s. In addition, job creation and destruction data, as described and made available by Davis et al. (1996), were examined for the same period of time. These are longitudinally-constructed data aggregated up to 2-digit SIC sector level from plant-level detail in the Longitudinal Research Database at the Center for Economic Studies.

Finally, a mail survey was sent to an anonymous stratified random sample of members of the National Federation of Independent Business (NFIB) who are self-classified as belonging to the food manufacturing industrial sector. Stratified sampling was used to better match the NFIB sample to the universe of small food manufacturing establishments as evidenced in the 1992 Census of Manufactures. Surveys were sent to 750 NFIB members, and 55 surveys were returned representing a 7.3 percent response rate. This is significantly lower than NFIB's customary response rate for its Small Business Economic Trends monthly survey (Phillips & Dennis, 1997). However, NFIB also sends a reminder notice in its mailing, and its questionnaire is significantly shorter. In addition, a recent independent survey of food manufacturers indicates that forty percent of manufacturers believe "slotting fees are still too touchy to be publicly acknowledged" because of potential retail trade sanctions (Partch & De Santa, 1997, p.13).

The firms responding to the mail survey averaged nearly twelve years old and had 74 employees. Self-reported annual revenues averaged into the \$1-5 million category, and these respondents described their firms as being in the growth stage of development on average. Micro-level data are not available from either Census or NFIB to compare the representativeness of the received responses to the universe of small food manufacturing firms. A simple comparison of 4-digit SIC code membership reveals no substantial differences from the Census database. However, no comparisons can be made to non-respondents, and the small size of the sample suggests a note of caution.

Variables

Industry Exit. Census of Manufactures data does not provide entrances and exits separately, and only provides comprehensive statistics every five years. Industry exit is thus measured as net change in manufacturing establishments with fewer than twenty employees during the period 1977-1992.

Job Creation and Destruction. Job creation and destruction data from the Davis et al. (1996) study are based upon data which tracks changes in individual manufacturing plants longitudinally. Job creation is the percentage increase in jobs created in a sector due to plant births and reopened plants; job destruction is the percentage increase jobs lost in a sector due to plants shut down permanently or indefinitely. Births and shutdowns occur in plants of all sizes and ages in a sector, so this data does not specifically reflect gross small or new firm job flows. However, rates of job creation and destruction are significantly higher and more volatile for both smaller and younger plants compared to larger and older plants (Davis, et al., 1996). Thus this data proxies the level and variability of job creation and destruction rates for small manufacturers.

Incidence of Retailer Barrier-Raising Practices. Mail survey respondents were asked to describe the frequency with which they encounter slotting allowances and other advance new distribution

requirements when introducing new products. A 5-point response scale was used, with anchors ranging from never (1) to always (5).

Pursuit of Alternative Distribution Channels. Survey respondents were asked the extent to which their firms have been focusing efforts more on selling through distributors and foodservice channels of distribution instead of selling directly to supermarkets. These options are lower volume, lower growth alternatives to sales directly to supermarket chains. A 5-point response scale was used for each option, with anchors ranging from strongly disagree (1) to strongly agree (5). The mean of the responses to the two options provided was used.

Performance. NFIB members are generally privately held, and in addition this survey was anonymous; therefore, detailed financial information was not available. Firm performance is thus measured by the subjective assessment of respondents about their firm's performance. The measure uses responses to three performance-related question items. One item, based on Dess and Robinson (1984), asked for an assessment of the percent of ideal performance being achieved, where ideal performance equated to 100 percent. Two other items build on the tradition of strategy as competitive advantage leading to enhanced performance. These items, assessing growth and overall performance relative to competitors on a 7-point agreement scale, were then interpolated into a 0-to-100 range equivalent. West and Meyer (Forthcoming) employed an identical measure with a high degree of internal reliability among top managers within a firm, and a similar measure was used by Lumpkin and Dess who noted that "subjective measures of performance can be consistent with objective measures" (1995, p. 1394). The overall measure used for each firm is the average of the ratings of the three items. The mean for the firm performance measure in this study is 67.8.

Growth-Building Activity. Respondents were asked to rate the extent to which advertising, promotion, research and development, and ability to raise capital are more difficult to engage in. A 5-point response scale was used for each option, with anchors ranging from strongly disagree (1) to strongly agree (5). The mean of the responses to the options was used.

Control Variables. Two control variables are used: prior sales orientation, and firm size. Small food manufacturers who are already selling to channels of distribution other than direct to supermarket retailers will be less apt to experience the difficulties of slotting allowances and other barriers. Each respondent was asked to indicate the percent of the company's sales historically generated in the alternative channels of distribution. Company size may affect overall profitability and the resources available to pay slotting fees, and is thus used as a control. It is measured using the natural log of the number of employees reported by the respondents.

RESULTS

Hypothesis 1 stated that small food manufactures will demonstrate a higher rate of industry exit than small manufacturers in other industry sectors. Table 2 indicates a very different pattern of changes in small food manufacturing from that experienced in the total manufacturing economy over the last quarter century. Table 2 shows that the correlation between small food manufacturers and total small manufacturers during the 25-year period is negative and significant; there is no correlation during the most recent 15-year period of declines in small food establishments with continued increases of total small establishments. Table 1 (earlier) further shows that the food manufacturing sector experienced the greatest net loss in small manufacturers of all sectors. Thus there is strong support for Hypothesis 1.

Table 2
Small Manufacturing Establishments

Year	Food	Total
1967	19,004	198,542
1972	15,860	202,721
1977	15,618	236,914
1982	11,449	230,426
1987	10,895	238,131
1992	11,469	256,874

Correlation, 1967-92 - 0.79, $p < .05$

Correlation, 1977-92 - 0.18, n.s.

Hypotheses 2a and 2b stated that, compared to other industries, job creation rates would be lower and job destruction rates would be higher for small food manufacturers. Table 3 shows job creation and destruction rates for food manufacturing compared to similar rates for total manufacturing in the U.S. during the years 1977-92. The mean job creation rate for food manufacturing of 1.28 percent during this period is significantly lower than the mean job creation rate for all manufacturing ($t = -3.33, p < .01$). The mean job destruction rate for food manufacturing of 4.26 percent during this period is significantly higher than the mean job destruction rate for all manufacturing ($t = 1.53, p < .10$). Hypotheses 2a and 2b are both supported, therefore.

Hypothesis 3 stated that encounters with retailer barrier-raising practices will be positively related to small food manufacturers' pursuit of alternative methods of product distribution. Table 4 presents results of the regression analysis. Pursuit of other channels of distribution is strongly related to encounters with retailer barriers to entry, after controlling for the effects of company size and prior distribution channel experience ($F = 14.90, p < .0001$). Hypothesis 3 is strongly supported.

Hypothesis 4 proposed that performance of small food manufacturers will be negatively related to encounters with retailer barrier-raising practices. Performance is significantly and negatively related to encounters with retail barrier-raising practices ($F = 2.90, p < .10$). Hypothesis 4 is supported.

Hypothesis 5 held that small food manufacturer encounters with retail barrier raising practices will be positively associated with declines in growth-building activities and investments made by the firm. There is again strong support for this hypothesis ($F = 6.42, p < .05$).

DISCUSSION AND POLICY ISSUES ON BARRIERS TO ENTRY

The macro-economic data and firm-level relationships reported in the previous section demonstrate a compelling decline in growth opportunities for entrepreneurial ventures in the largest manufacturing sector in the U.S. economy. Over the last fifteen years, the number of small food manufacturers has declined dramatically, job creation rates at the plant level are mired at levels well below national averages, and job destructions rates at plants shutting down are at levels significantly higher than national averages.

Table 3
Job Creation & Destruction Rates

Year	Food Mfg Job Creation	Total Mfg Job Creation	Food Mfg Job Destruction	Total Mfg Job Destruction
1977	1.53	2.03	3.30	2.73
1978	1.15	1.43	2.64	2.07
1979	0.55	1.06	2.18	1.86
1980	0.36	0.67	1.73	1.19
1981	0.44	0.61	2.12	1.89
1982	1.96	1.60	4.69	3.29
1983	1.68	2.31	4.09	4.37
1984	1.37	1.38	2.69	2.10
1985	0.95	1.19	2.56	2.77
1986	2.05	2.04	2.98	3.29
1987	1.75	2.09	2.82	2.89
1988	0.55	1.00	2.93	2.36
1989	2.78	2.99	6.59	2.37
1990	1.32	1.81	19.63	1.56
1991	1.27	1.17	3.20	2.83
1992	0.71	0.65	4.09	3.24
Mean	1.28	1.50	4.26	2.55
(sd)	(0.67)	(0.67)	(4.26)	(0.79)
T-test	- 3.33, $p < .01$		1.53, $p < .10$	

Regression tests demonstrate that independent food manufacturers increasingly look for alternative channels of distribution when they encounter these barriers to entry. Closed out of access to the mass market distribution outlets which supermarkets represent, to survive these manufacturers have turned to more fragmented methods of distribution which constrain the possibility for rapid growth.

Confronting retailer barriers to entry also degrades the financial performance of growth-oriented food manufacturers, making continued growth even more challenging. Those firms which survive in this inhospitable environment have several uncomfortable directions from which to choose. They can meet retailers' requested terms and charges in order to gain access to a larger volume business, but the financial resources required for this approach are substantial. Firms may attempt to raise capital to do so, but this is difficult for consumer products and where access to channels of distribution is limited (Howse, 1985). Raising capital just to overcome entry barriers will also erode existing shareholder value. Instead of taking this approach, in order to fund entry costs these firms may cut expenditures in other areas that are important for growth-oriented firms, such as advertising or new product R&D. These are areas which work in favor of the differentiated quality approach that most HGEFs use as a successful strategy. Thus if growth-oriented ventures do pay the fees charged by retailers and select a successful type of strategy, the implementation of that strategy will be compromised. The third possibility is that these firms resign themselves to pursuing a lower volume business through alternative channels of distribution.

Table 4
Regression Analysis Results (t-values in parentheses)

Dependent Variable:	Pursuit of other distribution	Firm performance	Decrease in growth activity
Independent Variable			
Incidence of barriers to entry	.571 (3.860)***	-.271 (-1.704)*	.411 (2.533)**
Control Variables			
Prior sales orientation	-.157 (-1.083)	.405 (2.711)**	.081 (.509)
Company size	.052 (.356)	.212 (1.330)	-.018 (-.115)
Adj. R2	.278	.146	.107
F (3, 33)	5.49***	3.22**	2.44*
F Change	14.90***	2.90*	6.42**

* p < .10; ** p < .05; *** p < .01

With unit volume growth more limited in taking this approach, sufficient growth in cumulative profits will also be difficult and will take much longer to achieve. Thus eventual ability to afford entry into high growth channels of distribution is in no way assured.

Interviews with presidents of growth-oriented food manufacturing firms reveal that retail entry barriers they have encountered have forced them to seek slow growth paths. Sales through distributors, direct mail sales to specialty food and gourmet stores, and foodservice (restaurant) channels of distribution are sought. Each of these is a fragmented, complex, and relatively low volume channel of distribution. One manufacturer sought direct supermarket distribution for its products in a new market by going only to those independent grocery stores which did not charge slotting allowances (a very small percentage of the market). In order to develop a consumer following the manufacturer supported this toehold of business by offering store-level marketing and promotional programs, which are less cost-efficient than marketwide program such as broadcast advertising. The combination of limited distribution and inefficient market support has led to a small sales volume which is not very profitable. Chains in the market still want slotting fees and other consideration for letting the manufacturer onto their shelves.

Retail-erected barriers to entry are conceptually different from competitor-erected barriers to entry in two important respects. First, retailer-erected barriers are those created outside the sphere of fair competition. No actions which food manufacturing competitors take may directly affect the impact of these barriers, as might be the case for competitor-erected barriers such as scale or the creation of reputation. Growth-oriented firms may defeat the advantage of a competitor's scale through effective differentiation, higher quality, or a number of similar dimensions. But here incumbent food manufacturers are insulated from the threat of new entrants as a result of forces exogenous to the ways and means of competing in food manufacturing. Second, retail-erected barriers are only created through the exercise of oligopoly power possessed by the retail trade. While nationwide no one food retail chain enjoys significant market power, on a local or regional basis a small set of retail chains always enjoys such power. In most major U. S. cities and regions,

three to five retail chains will account for between fifty and eighty percent of all retail food sales. Retail chains are able engage in barrier-raising practices because there are no high growth alternatives for manufacturers wishing to sell to the mass market. The issue boils down to the use of market power creating unfair competition, which "flies in the face of practices aimed at maximizing the customer appeal of product offerings" (Partch & De Santa, 1997, p. 12).

Federal antitrust legislation originally came into being to ensure that consumers interests were not compromised as a result of anti-competitive markets created through the actions of oligopolies and monopolies. The 1890 Sherman Act aimed to outlaw anti-competitive combinations and certain predatory practices; it was followed in 1914 by the Clayton Act which was subsequently amended in 1936 by the Robinson-Patman Act. Generally, the focus of this legislation has been to ensure that market power is either not created, such as through mergers and acquisitions, or that where an element of market power exists it is not used to discriminate among buyers or sellers. The Robinson-Patman provision of the Clayton Act focuses specifically on discriminatory pricing and promotional allowances between sellers and buyers (Holmes, 1996). Sections of this act prohibit charging different prices or offering different allowances to competing purchasers for similar goods, and make it illegal for purchasers to accept payments or allowances not available to all purchasers (Scherer & Ross, 1990).

Two conclusions may be drawn by a review of key court cases and precedents developed in the application of Robinson-Patman. First, the law is considered in the context of manufacturer practices aimed at buyers (Holmes, 1996). The history of industrial America is one in which scale and scope developed at the producer level early on, and—with a very few exceptions—has only recently developed at the retail level. Thus litigation under this provision has dealt with producers unfairly discriminating against purchasers of their products or services. Though slotting allowances and other practices were originally and are still designed and implemented by the retail trade, the focus of inquiries by the FTC has been on whether manufacturers pay proportionally equal amounts to their customers (Greenwald, 1996), and whether these payments effectively raise costs for their manufacturing competitors (Scherer & Ross, 1990).

Second, because of the presumed direction of discriminatory practices at the time (from producer to purchaser), providing equal access to prices and terms for competing purchasers was the focus of the law when written. In fact, Robinson-Patman came into being specifically to help smaller, independent grocers compete with A&P Company, who received special prices and terms from Borden and other large producers that not available to smaller retailers (Holmes, 1996; Scherer & Ross, 1990). Robinson-Patman came into being in order to support the "virtues of smallness," at a time when price and allowance program differences resulting from market power from manufacturers lessened competition (Lowenstein, 1997). Today, the issue for entrepreneurial firms is that equal terms demanded of all manufacturers by a concentrated and powerful retail trade injure the "vigor of competition" (Scherer & Ross, 1990, p. 512).

Regulatory authorities have not substantively considered the issue because the Congressional legislation to date provides no legal basis for doing so. Robinson-Patman considers the source of anti-competitive conditions to rest with manufacturers, and considers differences in these practices for different purchasers as the root of the problem. The language of the legislation provides no basis for considering purchasers as a source of anti-competitive conditions, nor for considering similarity or equality in their practices as the root of the problem. Whether manufacturers treating

similar purchasers differently, or purchasers treating different manufacturers the same, both conditions arise from positions of market power and serve to unfairly limit competition.

IMPLICATIONS FOR PUBLIC POLICY

Just as it was argued at the outset that HGEFs are possible in many types of industries, the dynamic within the food manufacturing sector examined in this paper may be also generalized more broadly. This dynamic may be generalized to other industries where there has been a significant increase in the concentration and market power of the retail trade to whom manufacturers sell. This includes toys, sporting goods, software, and hardware, among others. In these industries retail chains such as Toys 'R Us, Sports Authority, Circuit City, and Home Depot account for an increasing percentage of total retail volume. There is evidence that slotting fees and other new distribution requirements are also requested of manufacturers who sell to chains such as these. As in food, the only alternatives for HGEFs seeking to compete are to pursue the fragmented independent retailers and other low volume channels.

There is another somewhat insidious effect which results from the denial of access of HGEFs to mass market channels of distribution. By being able to gain entry to these distribution channels in the past, HGEFs have been able to better demonstrate the competitive potential of their respective business concepts. In many cases this has led to IPOs and acquisitions which further accelerate the growth of the business. Celestial Seasonings was acquired by Kraft, Pace Pecante Sauce was acquired by Campbell's, and Smartfood was acquired by Frito Lay. For the larger manufacturing competitors, these acquisitions represented better opportunities than many of their internally-developed ventures. However, as a consequence of barriers to entry to HGEFs today, the wellspring of proven creative and higher volume business for larger manufacturers is drying up.

Arguments to modify public policy regarding retailer-erected barriers to entry must be rooted in the ability to improve the public welfare. Not only are entrepreneurs denied the ability to compete in this case, consumers are denied exposure to a broader selection of products from which to make choices. Substantive new product activity will increasingly rest with large incumbent manufacturers, and innovative alternatives will find fewer outlets to reach the public. Furthermore, Table 1 indicates that job destruction in shutdowns has exceeded job creation in startups over the period in question. This is in marked contrast to macro-economic trends, explored elsewhere (Acs, 1996; Birch, 1979), which expose new venture job creation activity as a key source of national employment growth. If retailer-erected barriers to entry affect other industries in the same way as the food manufacturing industry has been affected, it may result in net job losses on a broader basis as well.

Three possible public policy solutions suggest themselves. First, incentives may be provided to the retail trade to encourage a greater volume of business with entrepreneurial ventures. There are two drawbacks to this proposal. Slotting fees and other conditions currently requested by the retail trade are very lucrative; it is hard to imagine tax or other incentives afforded by public policy initiatives which would match the dollar value to the retail trade of programs currently in effect. Moreover, past efforts to legislate set asides and other similar programs for small business have been fraught with bureaucratic red tape and system abuses.

Second, public policy might be used to encourage large manufacturers to fund a pool from which HGEFs might draw in order to meet retailer requirements for mass market distribution. Such a policy would informally recognize the competitive role which large manufacturers play in

this dynamic by virtue of paying the fees and charges which are requested by retailers. In addition, participating manufacturers might be provided options or rights to invest in HGEFs which draw on the pool when those HGEFs seek expansion funding or acquisition partners.

Finally, the cleanest but most controversial solution would be to further amend the Robinson-Patman provisions of the Clayton Act. Presumably, modifications would need to address issues of market power and diminished competition using a more contemporary view that such a context may be created by purchasers as well as by sellers, and by equality of promotional allowances as by differences. The language incorporating these ideas would be difficult to draft, and would no doubt precipitate great debate among industry players, economists, and legislators. A more simplified approach might simply be to prohibit any kind of payments, charges, programs, and promotions as a condition of gaining retail distribution. The effect would be twofold. HGEFs would be able to get to market and implement a strategy without having to overcome insurmountable financial barriers. The retail trade would need to develop more sophisticated procedures for evaluating the potential of new products for their stores, and would need to become more efficient in their operations to offset losses in revenue currently generated by their practices today.

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