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Strategies for U.S. Manufacturers to Defend Home Markets from International Competition

Gabrielle Chan

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STRATEGIES FOR U.S. MANUFACTURERS TO DEFEND HOME
MARKETS FROM INTERNATIONAL COMPETITION

Gabrielle Chan
2013

COLUMBUS STATE UNIVERSITY

STRATEGIES FOR U.S. MANUFACTURERS TO DEFEND HOME MARKETS FROM
INTERNATIONAL COMPETITION

A THESIS SUBMITTED TO THE

HONORS COLLEGE

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR HONORS IN THE DEGREE OF

BACHELOR OF BUSINESS ADMINISTRATION

MARKETING

D. ABBOTT TURNER COLLEGE OF BUSINESS

BY

GABRIELLE CHAN

COLUMBUS, GEORGIA

2018

ABSTRACT

The existing research on ways U.S. manufacturing firms can improve performance is limited to strategies to grow internally with focus on human resource and financial strategies. Therefore, there is little information regarding how the firms can defend themselves from international competition. With the rise of globalization, firms have to compete on an international level while trying to protect their home market. Large firms have more resources such as wealth and capital to conduct international research and strategize to compete with global competition, but small domestic firms have less resources to dedicate to the protection of their business. This research focuses on providing managers of U.S. manufacturing firms with strategies to more efficiently use resources to enhance firm performance and defend against international competition. Managers were asked to complete a short survey regarding the strategies used to protect their home market. Twelve different strategies were identified in the survey and managers were asked to identify the strategies their firm is currently applying and to specify their level of satisfaction with the firm's performance. This data was used to identify how likely a particular strategy was used by the sample firms, the impact of each strategy, and which strategies were statistically significant. Four strategies were identified to have a positive relationship with firm performance along with significance under a five percent p-value: develop an association brand, target foreign markets that consider American products desirable, emphasize "Made in America", and "Other strategies". Based on this analysis, a two by two framework was created to provide managers with strategies to more efficiently use resources to enhance firm performance and defend their home market.

Keywords: manufacturing, international competition, small businesses, defense strategies

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The existing research on ways U.S. manufacturing firms can improve performance is limited to strategies to grow internally with focus on human resource and financial strategies. Therefore, there is little information regarding how the firms can defend themselves from international competition. With the rise of globalization, firms have to compete on an international level while trying to protect their home market. Large firms have more resources such as wealth and capital to conduct international research and strategize to compete with global competition, but small domestic firms have less resources to dedicate to the protection of their business. This research focuses on providing managers of U.S. manufacturing firms with strategies to more efficiently use resources to enhance firm performance and defend against international competition. Managers were asked to complete a short survey regarding the strategies used to protect their home market. Twelve different strategies were identified in the survey and managers were asked to identify the strategies their firm is currently applying and to specify their level of satisfaction with the firm's performance. This data was used to identify how likely a particular strategy was used by the sample firms, the impact of each strategy, and which strategies were statistically significant. Four strategies were identified to have a positive relationship with firm performance along with significance under a five percent p-value: develop an association brand, target foreign markets that consider American products desirable, emphasize "Made in America", and "Other strategies". Based on this analysis, a two by two framework was created to provide managers with strategies to more efficiently use resources to enhance firm performance and defend their home market.

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Technological advancements and the Internet have greatly contributed to the increased opportunities in global information exchange. According to WTO trade statistics, the value of world merchandise exports rose from US\$ 2.05 trillion in 1990 to US\$ 18.26 trillion in 2011,

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2013, p.55). Consequently, this has led to an increase in competition among manufacturers world-wide as companies can now easily access products of a foreign market. Information can be effortlessly found through the Internet and transportation costs have declined due to technological developments such as jet engines and ocean shipping (Hornfels). Companies do not have to only rely on manufacturers close by anymore, they have the availability of the world's market at their fingertips. The United States has been a dominant share of the GDP for decades, with its peak being in the 1980's when the United States held 36% of world GDP share. However, as they are competing more intensely with large and growing firms from foreign markets, the GDP share of the United States has been divided among another notable countries such as Japan and China (IMF, 2018).

Historically, the American manufacturing industry grew phenomenally in the first half of the nineteenth century. A series of tariffs enacted by Congress during the nineteenth century protected manufacturing from foreign competition. Well known technological advances such as Eli Whitney's cotton gin and Henry Ford's technique of mass production with the assembly line aided the United States' continual manufacturing growth. The next wave of domestic manufacturing industry grew tremendously as a result from World War II after the United States'

INTRODUCTION

The rise of international competition can be attributed to the expansion of globalization and world trade after World War II (Horowitz, 2004). In the late twentieth century, innovations in information technology led to another round of rapid expansion of international trade. Technological advancements and the Internet have greatly contributed to the increased opportunities in global information exchange. "According to WTO trade statistics, the value of world merchandise exports rose from US\$ 2.03 trillion in 1980 to US\$ 18.26 trillion in 2011, which is equivalent to 7.3 per cent growth per year on average in current dollar terms" (WTO, 2013, p.55). Consequently, this has led to an increase in competition among manufacturers world-wide as companies can now easily access products of a foreign market. Information can be effortlessly found through the Internet and transportation costs have declined due to technological developments such as jet engines and ocean shipping (Hummels). Companies do not have to only rely on manufacturers close by anymore, they have the availability of the world's market at their fingertips. The United States has been a dominant share of the GDP for decades, with its peak being in the 1960's when the United States held 36% of world GDP share. However, as they are competing more intensely with large and growing firms from foreign markets, the GDP share of the United States has been divided among another notable countries such as Japan and China (IMF, 2018).

Historically, the American manufacturing industry grew phenomenally in the first half of the nineteenth century. A series of tariffs enacted by Congress during the nineteenth century protected manufacturing from foreign competition. Well known technological advances such as Eli Whitney's cotton gin and Henry Ford's technique of mass production with the assembly line aided the United States' continual manufacturing growth. The next wave of domestic manufacturing industry grew tremendously as a result from World War II after the United States'

production of aircrafts, vehicles, and weapons during the war. This not only increased the domestic manufacturing sector, but also created numerous jobs for the American people. Workers were able to move up the economic ladder and increase their income without needing high levels of education. Workers were encouraged to move out of family farms and into industrial factories, causing a decrease in agriculture and rural lifestyles. This formed the basis for the large middle class of the United States.

Manufacturing firms use raw materials to produce a finished good, which then can be sold directly to consumers or to other businesses or retailers. This includes physical, mechanical, or chemical transformation of materials or components into new parts (NAICS, 2017). The finished goods can then be assembled along with other parts or sold as final products. About 44% of the domestic manufacturing GDP is comprised of food, chemicals, computers and electronics, and fabricated metal products (NAICS, 2017). In comparison to other nations, if the US manufacturing sector was a country, it would be the eighth largest economy in the world (The Facts About Modern Manufacturing, 2009). This indicates that manufacturing remains as one of the largest and most vital sectors in the United States economy. Nevertheless, there has been a long-standing decline in the share of total employment in the industry (Baily, 2014). A popular theory among research has contributed this decline to the recession during the late twenty-first century. Other theories have included the relative productivity hypothesis and increase usage of technology. As technology becomes more advanced, it has replaced more human labor in sectors all over the economy. At the same time, more technology in the workplace such as industrial robots and additive manufacturing, such as 3D printing, can employ more workers as well. The Congressional Research Service notes that the decline in employment has stimulated congressional interest with many members introducing bills to try to mitigate this

2003, p. 1). Freund from the Peterson Institute of Economics (2017) argues that the single most

problem (Levinson, 2018). Nevertheless, after adjusting for price changes, the quantity of manufacturing value added (GDP) has generally kept pace with the overall economy. This research can be particularly useful to smaller manufacturing firms because they have less resources to conduct market research and perform trial and error with different strategies. In the United States, the industrial landscape is dominated by small firms, which accounts for about 99.7% of jobs (SBA, 2012). While this signifies a strong sense of innovation and entrepreneurship, small firms offer less benefits to their workers and are less likely to export than larger firms (The Facts About Modern Manufacturing, 2012). Small businesses were often viewed as inefficient as it imposes excess costs because of its small size. This results in lower productivity and lower wages for their workers. However, more researchers are now seeing the value of small firms and believe that the contributions of small businesses offset any efficiency losses (Acs, 2012). Small businesses can contribute through improving competition, expanding employment, and spurring production. The federal government began recognizing the importance of small businesses in economic recovery and strength and thus, the US Small Business Administration (SBA) was established in 1953 as an independent agency. This administration further emphasizes the need to protect small business interests to preserve free competitive enterprise and competition in the global marketplace.

STATEMENT OF THE PROBLEM

Reduction in trade barriers such as transportation costs, tariffs, and transaction costs have led to increases in international competition and the expansion of world trade. "Rising global integration is forcing firms to reexamine their global strategies from raw material sourcing and manufacturing to distribution channels and worldwide advertising. Companies are constantly seeking any competitive edge that will give them an advantage over their competitors," (Insch, 2003, p. 1). Freund from the Peterson Institute of Economics (2017) argues that the single most

important change affecting global competition has been the rise of China and they surpassed the United States to become the largest economy in the world in 2014. From 1980 to 2008, China's share of world GDP grew 12% to catch up to the US due to their reduction of trade barriers. The US's share decreased by 2 percent within the same twenty-year period (Bolt, 2018). Domestic firms started looking towards foreign direct investments to build plants and factories to decrease costs. This led to a decrease in domestic manufacturing output and labor, which may also be a contribution to the declining employment in the manufacturing sector. Strategies such as tariffs and quotas have protected domestic economic activity, but with the rise of transportation technology, customers can easily purchase items overseas now that may be more cost effective.

The existing research on manufacturing firms in relation to improving firm performance is primarily focused on strategies to grow their company internally with focus on human resource and financial strategies. In regard to strategic approaches, Miles and Roth (1994) in their research identified three types of strategies used by different types of manufacturers: caretakers, marketeers, and innovators. Each group had placed different emphasis on factors such as price, after-sales service, broad product line, etc. This research is useful for manufacturing firms to identify their position within the industry and note key competitors within the same group. Understanding which firms falls into certain groups can help managers understand the direction of projected growth and see if their position is concurrent with their long-term goals.

However, the previous research mentioned above does not provide firms with information concerning which strategies they should consider implementing and which strategies they should not. With this research, we are aiming to provide useful information to managers of manufacturing firms, especially those who may not have resources to conduct research to help

improve their firm performance. Managers can use the results in this study to focus on strategies that are effective and eliminate strategies that do not have a significant impact on their firm.

METHODOLOGY

To survey and study the strategies employed by manufacturing firms in the United States, questionnaires were provided to managers at a number of Precision Machined Product Association (PMPA) events. The PMPA is an international trade association that represents the interests of manufacturing firms. The members of PMPA include manufacturing firms from a wide variety of industries including automotive, aerospace, furniture, medical, etc. (Information on Company: PMPA). Members can attend PMPA events in order to connect with other firms or share best practices. The surveys were provided at these events because the PMPA represents a wide variety of industries. Therefore, it would provide us with a more diverse perspective of how the firms defend their home markets from international competition. Managers were asked to identify the strategies their firm is currently applying and specify their level of satisfaction with their firm's performance. Respondents were requested directly to complete the survey and because this study had high relevance to their firms, we had a high response rate. The respondents were able to ask questions if clarifications were needed and examples were also provided on the survey. Overall, our sample consisted of 106 small and medium sized manufacturing firms. Determining the standards of what is considered a small, medium, or large manufacturing firm is based on each manufacturing sector. For example, soft drink manufacturers can have up to 1250 employees or less to be considered a small business according to the SBA, but bottled water manufacturers can only have 1000 or fewer employees to be classified as a small business (Electronic Code of Federal Regulations, 2018).

The information collected was used to identify how likely a particular strategy is used by the sample firms and the impact of the strategy on the firm's performance. With the data collected,

an independent t-test was conducted to identify the performance impact of each strategy. We also identified statistical significance for each strategy under a .05 significance level. Additionally, the percentages of firms in our sample that utilize each strategy was identified.

The dependent variable for this study was "perception of firm performance". Due to the fact that we were unable to obtain financial information about each company, we could not objectively measure firm performance. However, research has shown that subjective measures of performance such as perception correlate well with objective/actual measures of performance (Dess & Robinson, 1984). The perception of firm performance was measured using three 10-point scales from 1 = very dissatisfied to 10 = very satisfied. The satisfaction of firm performance was based on sales, profitability, and overall performance.

The independent variable was the firms' strategies used to address foreign competition. Managers were asked to select one or more strategies that they employed in their firms to improve performance. These are our hypotheses in our study, more information pertaining to each of the strategies are below.

H1: Firms that **developed an association brand** had higher levels of firm performance than those that did not.

H2: Firms that **outsourced manufacturing and focused on marketing** had higher levels of firm performance than those that did not.

H3: Firms that **targeted foreign markets that consider American products as more desirable** had higher levels of firm performance than those that did not.

H4: Firms **emphasized "Made in America"** had higher levels of firm performance than those that did not.

H5: Firms that **focused on being a low price provider** had higher levels of firm performance than those that did not.

H6: Firms that **focused on specialized product needs of customers** had higher levels of firm performance than those that did not.

H7: Firms that **targeted customers with tight delivery needs** had higher levels of firm performance than those that did not.

H8: Firms that **focused on markets where foreign supplier have a negative image** had higher levels of firm performance than those that did not.

H9: Firms that **found applications where technical reliability is crucial** had higher levels of firm performance than those that did not.

H10: Firms that **focused on products with higher transportation costs** had higher levels of firm performance than those that did not.

H11: Firms that **emphasized products where labor is a small portion of total costs** had higher levels of firm performance than those that did not.

H12: Other strategies

STRATEGIES

Managers were asked to identify all the strategies used to protect their firm from foreign competition. Below are each of the strategies that were given in the survey (not including "other" option) and how they may have an impact on firm performance.

Develop an association brand

Some companies choose to promote different product lines through a different brand name, while some choose to promote the different products within the same brand name. The latter strategy is known commonly as umbrella or association branding. Under a strong or positively perceived brand name, the introduction of new products reduces some risk for consumers and can increase initial sales. There is uncertainty and risk with new products and even more with a new brand. Therefore, a multiproduct firm can use its brand name to promote

trust and quality to consumers (Wernerfelt, 19889; Erdem, 1998). Umbrella branding does not necessarily guarantee good quality in a product. Rather, it signals to consumers that products within the same brand have the same quality (Miklos-Thal, 2012). However, if one product in the brand has bad quality or has a malfunction, it is reflected throughout even unrelated products. Moreover, there have been empirical evidence found that “consumers who are loyal to the brand in the leading product category show a higher probability to be loyal to that same brand in another (extension) category compared to those consumers who are not loyal in the leading category,” (Silberhorn, 2012, p. 1). Customers can transfer not only the perception of quality from one product to another within the same brand, but also experience, knowledge, and loyalty.

However, some studies have discussed the limitations of which companies can successfully use umbrella branding for their product line. Eric Ramusen (2016) in his research challenged that while umbrella branding can leverage reputation across different products, it can only be done by a firm with a monopoly in the market. Monopolies would be able to capture the market by using umbrella branding on its product line.

For companies who already have separate product lines or are considering on expanding, understanding the perception of quality by their customers is one of the vital factors to consider before implementing umbrella branding. Companies can find this knowledge from product reviews, surveys, online polls, etc. Umbrella branding only working well with monopolies have research to back up the theory, but the general consensus amongst researchers is that the product has to have a positive quality perception to be able to transfer onto another product, even if unrelated.

Target foreign markets that consider American products desirable

With the rise of globalization and the use of online retailing, consumers have numerous options for a certain product and must conduct their own research to find the best value with

their purchase. One way that buyers can assume quality is by looking at where a product is made. The 2017 Statista Made-In-Country-Index placed the United States as the tenth overall in how positively products made in a country is perceived (Biagi, 2017). Because the U.S. places in the top ten for quality and has the second highest manufacturing GDP of the world, numerous countries look to the United States for products that can be trusted. Selecting foreign markets that desire American products for targeting allows the product to have an advantage over products made in other countries.

Firms that wish to implement this strategy will need to find specific markets that find their products desirable. This can be done by examining literature pertaining to the specific industry or hiring a market research company to gather information. Firms will also have to do extensive research on the cultures and customs of the foreign market. It would be most effective to change marketing styles dependent on each region to develop the most value to customers. This, however, would be costlier than using one mass marketing technique. There of course are many other factors that will determine whether a company will succeed in marketing towards a foreign market, but this specific targeting technique gives an advantage for firms trying to compete with other foreign companies.

Emphasize “Made in America”

Besides the international benefit of selling American made products, emphasizing the “Made in America” label can also be advantageous domestically. Emphasizing national pride in the domestically manufactured products can translate to pride for consumers who buy the products. The “Made in America” label not only promotes the U.S. economy, but it also tells consumers that a company is providing jobs for people within the United States instead of outsourcing to another country for cheaper labor. For ethnocentric consumers, they believe that purchasing imported products hurts the domestic economy, can cause loss of jobs within the US,

and is considered unpatriotic (Shrimp & Sharma, 1987). Ethnocentrism is a belief that one's own culture or group is superior than all others. Furthermore, ethnocentric individuals believe that their culture is the correct way of living. The feeling of buying American goods for some consumers gives the individual a sense of pride and patriotism. Moreover, Shrimp & Sharma (1987) stated that "highly ethnocentric customers are probably most prone to biased judgments by being more inclined to accentuate the positive aspects," (p. 287). Although ethnocentrism may not always be a positive attribute in this increasingly diverse and integrated environment, companies can use this advantage to target certain consumers.

A Gallup poll in 2013 records that 45% of Americans stated that they recently made an effort to buy products made in the United States. From the same poll, 64% of Americans stated that they would be willing to pay more to buy a product that was manufactured in the United States. However, the amount that each person would be willing to pay may not be substantial.

The term "emphasizing" may be different to each company. For some firms, it may be making the country of origin label bigger. For other firms, it may be highlighting "Made in U.S.A." in their advertisements and have it become one of their key selling values. This would be up to the discretion and budget of individual firms. Firms can identify which of their customers that they currently have prefer American products or try to acquire new customers who may have the same values. This strategy would require individual market research and firms can use systems such PRIZM or the CETSCALE from the 1987 Shrimp and Sharma study, which aims to measure consumer ethnocentrism. Firms would also have to comply with laws regarding what qualifies as being "Made in America" vs. "Designed" or "Assembled".

Focus on being a low-price provider

Being a low-cost provider is attractive to buyers, but it is hard to sustain competitive advantage with this strategy. There are numerous price conscious buyers in the market who are

always looking for the best deals. Whenever people are shopping, one of the first things to consider is the price. However, being a low-cost provider is an easily replicable strategy and only provides thin profit margins. When another company is able to produce at an even lower cost, price sensitive customers will most likely switch companies unless there is another value of staying at the company. Additionally, a lower cost may be perceived as lower value in consumer's eyes. Walmart, the biggest retailer in the world, relies on being the low-cost provider for consumers. It is successful due to its efficient supply chain, but it is difficult for others to sustain the same type of strategy.

Focus Executing a low cost/low price strategy requires very precise budget allocation and planning, but the benefits include gaining share of the market, and being more attractive to wholesale buyers. This can increase the chances of being seen by consumers and gaining broader distribution. However, having other values to deter customers from switching is very important as well. Values can include reward systems, convenience, range of products, etc. Having higher switching costs can help low cost providers retain customers when faced with competitors of the same strategy.

Outsourcing manufacturing and focus on marketing

Some of the most profitable companies in the United States (such as Apple) outsource at least part of their manufacturing to other countries. Although it was mentioned earlier that "Made in the USA" can be beneficial to the company, there are numerous benefits to outsourcing, mainly lowering costs. With reliable manufacturing partners, companies can see benefits such as cost/asset reduction, access to skilled labor, and third-party design. Additionally, outsourcing allows owners to focus on brand management and design. Firms can use local employees to focus on marketing because workers in the U.S. know their home market well. Manufacturing overseas with a reliable partner can generate the same product results as domestic

manufacturing, but marketing in the U.S. allows familiarity and better understanding of the market.

A study by Monroe M. Bird (1973) asked presidents of small manufacturing companies to name the most important project they would assign to a research team if they access to one. The data revealed that the number one research project was concerning marketing problems. Some of the presidents expressed problems with forecasting success or understanding the target market. If firms can outsource their manufacturing overseas, they can devote more resources into a marketing team for their company.

Focus on markets where foreign suppliers have negative image

In the United States, there are generational differences in how consumers perceive products made in different countries. The 2013 Gallup poll showed that older Americans aged 65 and up are much more likely to actively search for products made in the United States than younger Americans aged 18-29. Furthermore, there were notable differences with race and place of living, with whites and those living in rural areas having greater inclination towards U.S. made products. However, having a positive image of American made goods does not necessarily imply a negative image towards foreign goods. Through research, manufacturers can target markets within the United States and find out who or where has a more negative image of foreign suppliers.

This strategy is in conjunction with emphasizing "Made in America", but if firms do not wish to pursue that strategy due to costs, physical image, etc., they can still target similar markets of consumers with ethnocentrism tendencies.

Focus on products with high transportation costs relative to value

Products that have high transportation costs do not only have to relate to weight. It can also be due to expensive shipping packaging or strict guidelines. Domestic manufacturers

focusing on products with high transportation costs provides the implication that international competitors would have even higher costs due to long-distance shipping and import tariffs. This causes the foreign product to sell at a higher price than the product of a domestic manufacturer. By focusing on products that require higher transportation costs, it helps ensure that the domestic manufacturer will have lower prices than international competitors. This strategy may help increase the demand for the domestic manufacturer's product and consequently drive out the international competitor.

Emphasize products where labor is a small portion of total costs

Labor costs include wages, benefits, and payroll taxes paid by the employer. Cutting down on labor costs does not only include downsizing, but also reducing employee turnover, cross training, reducing overtime, or outsourcing.

The United States has the fourth highest wage levels in the world according to the OECD. Therefore, it is safe to conclude that most countries have lower wages and probably lower labor costs relative to the United States. By focusing on products that have low labor costs, manufacturing firms can be more competitive with price because the cumulative wage gap compared to other countries would lessen. With lower labor costs, the price of the product would decrease and be more appealing to customers.

Target customers with tight delivery needs

International shipping is not only costlier, but also usually takes more time than domestic transportation. Customers who need their orders delivered quickly may resort to domestic companies because they know that the chance of getting their delivery on time is higher than ordering from an international manufacturer. With experience, manufacturers can identify customers or potential customers that have tight delivery needs and adjust their marketing strategies to target them.

Focus on specialized product needs of customers

Customers who buy the same product may all have different sets of needs and reasons as to why the product was bought. There are also some customers who have the resources to request specialized products that fit their needs. Therefore, some companies spend more money to customize products or services in order to receive more money on a custom order. Other companies focus on niche marketing to identify groups of customers who have different needs and change their strategy, product, and/or product packaging to satisfy the needs. Specialization is costlier than mass marketing, but the company's message or advertisements would reach a more attentive audience.

Find applications where technical reliability is critical

Technical reliability is crucial for optimal and efficient performance. If customers rely on international manufacturers, any technical support may have to suffer from time zone differences. Hours of operation may not coincide, which can lead to delays in work and frustration for the managers and employees. Doing business internationally can also result in misunderstandings due to language barriers or different practices in customs. Additionally, if manufacturers need to help a customer in person with machinery, it would be faster and less costly to travel domestically than internationally. Being able to help a customer in a timely and cost-efficient manner is crucial for customer relationship management and service.

RESULTS

Using the information gathered from the surveys, the data was entered based on strategy, how often it was used, and how that strategy correlated with the firm performance satisfaction. An independent sample t-test was conducted using a .05 significance level. The strategies were all measured against the null hypothesis of "Firms that _____ did not have higher levels of firm performance than those who did not." We also noted any strategies that were significant

at a .01 level. Two asterisks indicate a one percent significance while one asterisk indicates a five percent significance. Positive or negative impact on firm performance for each of the significant strategies are indicated by + (positive) or - (negative).

Dependent variable: Overall Performance								
<u>Significance</u>	<u>Impact</u>	<u>Strategies:</u>	<u>n₀</u>	<u>n₁</u>	<u>\bar{x}_0</u>	<u>\bar{x}_1</u>	<u>t-value</u>	<u>p-value</u>
**	+	Str_Umbrella	100	6	16.84	23.33	3.010	0.003
		Str_Outsource	80	26	16.73	18.69	1.650	0.102
**	+	Str_Target	86	20	16.56	20.00	2.679	0.009
*	+	Str_MadeinUSA	84	22	16.55	19.73	2.558	0.012
**	-	Str_lowPrice	78	28	18.08	14.79	-2.903	0.005
		Str_UniqueProd	10	96	17.20	17.21	0.005	0.996
**	-	Str_Delivery	50	56	18.64	15.93	-2.694	0.008
		Str_Foreignness	78	28	16.72	18.57	1.591	0.115
		Str_TechRel	38	68	17.74	16.91	-0.763	0.447
		Str_Transport	92	14	17.00	18.57	1.029	0.306
		Str_Labor	74	32	17.19	17.25	0.054	0.957
*	+	Str_Other	88	18	16.68	19.78	2.293	0.024

n_0 = the number of sample firms that did not practice the strategy

n_1 = the number of sample firms that did practice the strategy

\bar{x}_0 = the mean of perception of firm performance from n_0

\bar{x}_1 = the mean of perception of firm performance from n_1

From the t-test data, all of the strategies were categorized into a two by two matrix with “perception of firm performance” being the dependent variable. Strategies were separated by how likely practiced and significance from t-test. If 50% or less of the sample firms practiced the strategy, it would be in the “least likely practiced” column. If more than 50% of the firms practiced the strategy, it would be in the “most widely practiced” column. Statistically significant strategies were placed based on a .05 or .01 significance level and all else were placed in the “not statistically significant” row. The percentage that each strategy was practiced by the sample

firms were also included, along with significance of level, and whether it had a negative or positive relationship with firm performance.

Description of Firm Performance
Percentage of Firms that Practiced the Strategy

0%	Least Likely Practiced	50%	Most Widely Practiced	100%
<ul style="list-style-type: none"> • Target foreign markets that consider American products desirable (19%) (-) ** • Emphasize "Made in America" (21%) (+) * • Other strategies (17%) (+) * • Focus on being low price provider (26%) (-) ** 				<ul style="list-style-type: none"> • Focus on specialized product needs of customers (53%) (-) **
<ul style="list-style-type: none"> • Outsources manufacturing and focus on marketing (25%) (+) • Focus on markets where foreign suppliers have negative image (26%) (+) • Focus on products with high transportation costs relative to value (13%) (+) • Emphasize products where labor a small portion of total costs (30%) (+) 				<ul style="list-style-type: none"> • Focus on specialized product needs of customers (91%) (+) • Find applications where technical reliability is critical (64%) (-)

(x%) = Percent of firms in the sample that practiced a particular strategy

(+/-) = Positive or negative relationship between a particular strategy and SME performance

* = $p \leq .05$; ** = $p \leq .01$

Small U.S. Manufacturers

Dependent Variable: Perception of Firm Performance

Percentage of Firms that Practiced the Strategy

0%	Least Likely Practiced	50%	Most Widely Practice	100%
	<ul style="list-style-type: none"> Target foreign markets that consider American products desirable (19%) (+)** Emphasize "Made in America" (21%) (+) * Other strategies (17%) (+) * Focus on being low price provider (26%) (-)** 			<ul style="list-style-type: none"> Focus on specialized product needs of customers (91%) (+) Find applications where technical reliability is critical (64%) (-)
	<ul style="list-style-type: none"> Outsource manufacturing and focus on marketing (25%) (+) Focus on markets where foreign suppliers have negative image (26%) (+) Focus on products with high transportation costs relative to value (13%) (+) Emphasize products where labor a small portion of total costs (30%) (+) 			

(x%) = Percent of firms in the sample that practiced a particular strategy

(+/-) = Positive or negative relationship between a particular strategy and SME performance

* = $p \leq .05$; ** = $p \leq .01$

DISCUSSION

From the t-test conducted, six strategies were determined to be statistically significant. The important strategies to note in this research are strategies that are least likely practiced by firms and are statistically significant. Four out of the five statistically significant strategies had a positive relationship with firm performance.

It was important to include the percentage of strategies practiced by our sample firms because it allows firms to see which strategies were widely used in the industry. This also helps with identifying which approach was commonly used by competitors and whether or not a firm's practices are unique, or similar to others.

Strategies that were widely used but not statistically significant should also be noted because this allows firm to recognize the impact of their strategy and whether or not they should focus their resources elsewhere.

Develop an association brand (6%) (+) **

This strategy is the least likely used by the sample manufacturing firms but falls under a one percent significance value. A reason why firms may not use this strategy often may be due to the risk associated with having multiple products under a brand name. As previously mentioned, one bad association with a product in a consumer's mind can transfer to another product within the brand, even if the products are unrelated. This can result in negative word of mouth or declining overall sales in the company. In order for umbrella branding to work, all the products under the brand have to connect on a common value (Hilpern, 2013). Companies with adequate resources can try umbrella branding if they have developed a quality reputation in their products. There is possibility that the marketing department of a firm may struggle with additional products and cause confusion (Hilpern, 2013). The most important success factor is if consumers perceive high quality in existing products. A strong parent brand does not guarantee success if

the quality of the extension does not match consumer expectations (Erdem, 1998). However, umbrella branding is a much easier way for firms with high quality products already in the market. Rather than having an entirely new brand, firms can save money and promote the same values of their company to new products. Although there may be risks involved, firms with adequate marketing resources can try umbrella branding to defend their home markets from international competition by using a company name that their customers recognize and trust.

Target foreign markets that consider American products desirable (19%) (+) **

This strategy had a positive impact on firm performance, and it may be because defending the home market is not only about protecting, but also being assertive and taking action. Domestic manufacturing firms are often concerned with protecting their home market, but they should also explore targeting foreign markets that find American products desirable. By promoting products to foreign markets, firms can increase their brand awareness and revenue, which can be invested back into the company and help grow market share. Each firm would have to do research on which foreign markets are the most feasible for their specific industry. Firms may only look at markets that have a growing demand for goods they produce when branching out into international activities. However, it is beneficial to include this factor when considering entry into international markets. This strategy gives a guaranteed advantage to firms when they enter into a foreign market because consumers would already have a positive perception of their products just because of where it is made.

Emphasize "Made in America" (21%) (+) *

Even though every poll produces different results, the consensus is that there is a substantial percentage of Americans who prefer American made goods. There is little reason to believe that there would be considerable consequences in emphasizing "Made in America". The categories with the highest concern about domestic manufacturing include appliances and

furniture for all generations and U.S. regions (Miller & Washington, 2014). Emphasizing “Made in America” is perhaps one of the least costly ways to improve firm performance because it only requires an additional sticker or line in an advertisement. Some consumers may not specifically look for where a product is made, but if “Made in America” is emphasized, consumers would easily identify a domestic manufacturer. The biggest reported reasons to buy American products were to support the United States, followed by helping keep jobs, doing good for the U.S. economy, having better quality products, and not trusting foreign products. 64 percent of Americans say they would even pay a premium for American made products (Gallup, 2013). Whether that is a reality in practice is not known, but there is reason to believe that emphasizing “Made in America” can help improve firm performance.

Focus on being low price provider (26%) (-) **

Although this is the most widely practiced statistically significant strategy, it had a negative relationship with performance. This strategy can generate help generate demand, but it is difficult to be a low-cost provider when competing with countries that have lower wage levels and regulations. It can be successful with a precise financial strategy in certain industries where there are highly price sensitive consumers. Domestically, choosing a low-cost strategy is difficult for sustaining competitive advantage. It is the easiest strategy for competitors to copy and the profit margins can be very thin. To firms who do practice being the low-price provider, it may be useful to find provide additional value to customers instead of just the low price alone. That way, customers would have more reasons to choose the company and the switching costs would be higher.

Impact

Through an analysis of significance and frequency, twelve strategies were categorized to help managers easily understand which strategies to employ to increase firm performance and

CONCLUSION

Limitations and Future Research

This study was conducted with managers of small domestic manufacturing firms through questionnaires provided to members of PMPA, and thus, had a limited scope within the entire target population. We could not identify specific respondents to the surveys or gather demographics about all the attendees. Although our sample included a variety of industries, all the samples were taken at events by the same association. Therefore, it is only partially representative of the population. There is a low number of firms in some of the strategic groups on the table on page 19. We need additional data collection to ensure that there is a sufficient sample size (≥ 30) represented in each of the group.

The sample was a nonprobability sample because the study was exploratory in nature. We did not account for inflated Type I error in our analysis. Gathering more information from our sample firms would allow us to run more statistical analyses such as regression models to identify interactions of the strategies and the overall power of the model.

Because "Other Strategies" was statistically significant and had a positive relationship with firm performance, future research can include an exploration as to what exactly those strategies were and whether these strategies would be helpful to other manufacturers.

A limitation of the dependent variable should also be noted, since only perception of firm performance was measured and not actual objective performance. However, previous research does suggest that perception/subjective measures of performance correlate well with objective measures of performance (Dess & Robinson, 1984).

Impact

Through an analysis of significance and frequency, twelve strategies were categorized to help managers easily understand which strategies to employ to increase firm performance and

which strategies to eliminate. Of the twelve strategies, four were identified to have a positive difference in firm performance along with significance at a .05 or .01 level: develop an association brand, target foreign markets that consider American products desirable, emphasize “Made in America”, and “Other strategies”. This research was done to help domestic manufacturers, who may not always have many resources to conduct their own research, to easily identify strategies that could be used to help improve firm performance. Additionally, firms can allocate their resources better by focusing less on strategies that had lesser impact on performance. This research also helps firms focus on manufacturing instead of spending time and money to figure out which strategies would help increase performance. Furthermore, there is little existing research on strategies to help domestic manufacturers defend their home market and thus, this study can encourage more research to be done in this area.

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Bird, M. M. (1973). Major Problem Areas as Perceived by Presidents of Small Manufacturing Firms: A Case Study. *Academy of Management Journal*, 16(3), 510-515.

<https://ezproxy.scholar.umich.edu:2441/login?url=https://www.jstor.org/stable/259011>

Bolt, Jutta, Robert Inkelaar, Werner de Jong, Jan van Zanden (2018). "Rebasing Maddison": New Income Comparisons and the Scope of Long-run Economic

Development". Maddison Project Database, version 2018. Retrieved from

<https://www.rug.nl/ggk/economics/maddison-database/maddison-project-database-2018>

Dess, G. G., & Robinson, R. B. (1984). Measuring organizational performance in the absence of objective measures: The case of the microcomputer firm and comparison to a control unit. *Strategic Management Journal*, 5(2), 261-271.

<https://www.jstor.org/stable/258677>

REFERENCES

- Acs, Z. J. (2012). *Are Small Firms Important? Their Role and Impact*. Springer Science Business Media, LLC. Retrieved from <https://www.springer.com/us/book/9780792384151>
- Autor, D., Dorn, D., Hanson, G., Pisano, G., & Shu, P. (2016). Foreign Competition and Domestic Innovation: Evidence from U.S. Patents. *National Bureau of Economic Research Research*. Retrieved from <https://www.nber.org/papers/w22879>
- Baily, M. N., & Bosworth, B. P. (2014). *US Manufacturing: Understanding Its Past and Its Potential Future*. *Journal of Economic Perspectives*, 28(1), 3-26. Retrieved from <https://doi.org/10.1257/jep.28.1.3>
- Biagi, L. (n.d.). The Statistics Portal. Retrieved from <https://www.statista.com/page/Made-In-Country-Index>
- Bird, M. M. (1973). Major Problem Areas as Perceived by Presidents of Small Manufacturing Firms: A Case Study. *Academy of Management Journal*, 16(3), 510-515. <https://ezproxy.columbusstate.edu:3115/10.2307/255011>
- Bolt, Jutta, Robert Inklaar, Herman de Jong and Jan Luiten van Zanden (2018). "Rebasing 'Maddison': New Income Comparisons and the Shape of Long-run Economic Development". Maddison Project Database, version 2018. Retrieved from <https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2018>
- Dess, G. G., & Robinson, R. B. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. *Strategic Management Journal*, 5(3), 265-273. doi:10.1002/smj.4250050306xx

Electronic Code of Federal Regulations. (2018, November 16). Retrieved from

https://www.ecfr.gov/cgi-bin/text-idx?SID=b919ec8f32159d9edaaa36a7eaf6b695&mc=true&node=pt13.1.121&rgn=div5#se13.1.121_1201

Erdem, T. (1998). An Empirical Analysis of Umbrella Branding. *Journal of Marketing Research (JMR)*, 35(3), 339–351. Retrieved from

<http://ezproxy.columbusstate.edu:2048/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=938694&site=eds-live&scope=site>

Freund, C., & Sidhu, D. (2017). *Global Competition and the Rise of China*. Peterson Institute for International Economies. Retrieved from <https://piie.com/publications/working-papers/global-competition-and-rise-china>

Gallup, Inc. (2013, April 30). Patriotism, Jobs Primary Motivations for 'Buying American'. Retrieved from <https://news.gallup.com/poll/162110/patriotism-jobs-primary-motivations-buying-american.aspx>

Hilpern, K. (2013). How to manage your profile as an umbrella brand. *Marketer (1743-5528)*, (88), 39–42. Retrieved from <http://ezproxy.columbusstate.edu:2048/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=87572169&site=eds-live&scope=site>

Horowitz, S. (2004). Restarting Globalization after World War II. *Comparative Political Studies*, 37(2), 127-151. doi:10.1177/0010414003260980

Hummels, D. (n.d.). Transportation Costs and International Trade Over Time. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.395.5379&rep=rep1&type=pdf>

- IMF. (2018, October). World Economic Outlook. Retrieved from <https://www.imf.org/external/datamapper/PPPSH@WEO/OEMDC/ADVEC/WEOWORLD>
- Information on Company: PMPA. (n.d.). Retrieved from <https://www.pmpa.org/forms/MemberDirectory/viewMemberDirectory>
- Insch, G. S. (2003). The Impact of Country-of-Origin Effects on Industrial Buyers' Perceptions of Product Quality. *Management International Review (MIR)*, 43(3), 291–310. Retrieved from <http://ezproxy.columbusstate.edu:2048/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bft&AN=510299305&site=eds-live&scope=site>
- Levinson, M. (2018). *U.S. Manufacturing in International Perspective*. Congressional Research Service. Retrieved from <https://fas.org/sgp/crs/misc/R42135.pdf>
- Miklós-Thal, J. (2012). Linking reputations through umbrella branding. *Quantitative Marketing & Economics*, 10(3), 335–374. Retrieved from <https://doi.org/10.1007/s11129-012-9118-7>
- Miller, J. G., & Roth, A. V. (1994). A Taxonomy of Manufacturing Strategies. *Management Science*, 40(3), 285-304. doi:10.1287/mnsc.40.3.285
- Miller, R. K., & Washington, K. (2014). Part Iii: Behavioral Analyses: 16. Buying American-Made. *Consumer Behavior*, 104–107. Retrieved from <http://www.rkma.com/2017consumerbehaviortoc.pdf>
- (NAICS) North American Industry Classification System 2017. (2017). US Census Bureau. Retrieved from <https://www.census.gov/eos/www/naics/>

Rasmusen, E. B. (2016). Leveraging of Reputation through Umbrella Branding: The Implications for Market Structure. *Journal of Economics & Management Strategy*, 25(2), 261–273. Retrieved from <https://ezproxy.columbusstate.edu:3115/10.1111/jems.12145>

SBA: Frequently Asked Questions about Small Businesses. (2012). Small Business Administration. Retrieved from <https://www.sba.gov/category/advocacy-navigation-structure/faqs>

Shrimp, T. A., & Sharma, S. (1987). Ethnocentrism: Construction and Validation of the CETSCALE. *Journal of Marketing Research*, 24(3), 280-289. Retrieved from <https://www.jstor.org/stable/3151638>.

Silberhorn, N., & Hildebrandt, L. (2012). Does umbrella branding really work? Investigating cross- category brand loyalty. Retrieved from http://sfb649.wiwi.hu-berlin.de/papers/pdf/SFB649DP2012-028.pdf?origin=publication_detail

The Facts About Modern Manufacturing (8th ed.). (2009). Washington, D.C.: Manufacturing Institute. Retrieved from http://www.themanufacturinginstitute.org/~//media/D45D1F9EE65C45B7BD17A8DB15AC00EC/2009_Facts_About_Modern_Manufacturing.pdf

WTO. (2013). Trends in International Trade. Retrieved from https://www.wto.org/english/res_e/booksp_e/wtr13-2b_e.pdf

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STRATEGIES FOR U.S. MANUFACTURERS TO DEFEND HOME MARKETS
FROM INTERNATIONAL COMPETITION

By

Gabrielle Chan

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