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Demographic Variables that Influence the Purchase Decision

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

DEMOGRAPHIC VARIABLES INFLUENCE THE RETAIL PURCHASE FOR TIRES
IN THE UNITED STATES OF AMERICA

A dissertation submitted in partial fulfillment of
the requirements for the degree of
DOCTOR OF BUSINESS ADMINISTRATION

by

Rafael A. Lugioyo

2022

To: Interim Dean William G. Hardin
College of Business

This dissertation, written by Rafael A. Lugioyo, and entitled Demographic Variables Influence the Retail Purchase for Tires in the United States of America, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

George Marakas

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Sumit Kundu, Major Professor

Date of Defense: March 9, 2022

The dissertation of Rafael A. Lugioyo is approved.

Interim Dean William G. Hardin
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Andres G. Gil
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Florida International University, 2022

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DEDICATION

First, I would like to dedicate and thank my mother (Claribel) that made the decision decades ago to leave an island country – Cuba to provide me a better life in the U.S. Knowing that my father (Rafael Angel Lugioyo) was captured as a political prisoner at the cusp of a bloody revolution and giving his life. Even though I never knew him. He was an incredible influence on my life, one that my mother never allowed me to forget. He has always been ever present as I to this day believe he has been my guardian angel in my life. To my two wonderful sons Nicolas A. Lugioyo and Luca C. Lugioyo, know that I love you dearly. I admire and am forever proud of you – both! I want to leave you with an everlasting thirst to continue to better we through education and continue to aspire and dream – because dreams do come through! I am proud to be your dad!

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ABSTRACT OF THE DISSERTATION

DEMOGRAPHIC VARIABLES INFLUENCE THE RETAIL PURCHASE FOR
TIRES IN THE UNITED STATES OF AMERICA

by

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Florida International University, 2022

Miami, Florida

Professor Sumit Kundu, Major Professor

The purpose of this quantitative correlations study is to investigate factors influencing consumer purchase decisions for tires for new entrants' decision-making. This research serves three purposes. The focus will be the role of demographic influences that interact consumers with ethnocentrism and the factors at the actual point of purchase. The author analyzes the direct effect on actual purchase from five (5) factors of gender, age, educational level, income level, and political leaning. The controlling factors of warranty and free tire services are also noted in the model. The sample included 2945 respondents who participated in a survey conducted from August to September 2017. Analysis also included regional national voting patterns and the zip code where the purchases were finally made. Data analysis was conducted using SPSS v26 to include descriptive statistics, binomial logistic regression analysis, and correlations. The findings point towards certain trends in consumer behavior that are directly influenced by demographic characteristics. The data presents a pattern of actual purchase that contradicts the existing literature concerning age, gender, and this study's own initial hypothesis of gender, age, and political party

affiliation. The results of the study, which reflect purchase patterns, should be guided with certain limitations. Tires presumed to be American made or manufactured in the USA quite possibly are made overseas. Furthermore, these implications have strong considerations for the diversification into the American market by foreign investment because the findings demonstrate that demographic factors such as age and gender influence consumer purchase decisions.

Keywords: Demographic Studies, Foreign Direct Investment, Marketing, Branding, Consumer Behavior, and Political Party affiliation.

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CHAPTER I

TIRE INDUSTRY BACKGROUND

As 2016 ended, steady growth in the global automobile industry, particularly the growth of the Chinese automobile market caused a rebound in the global automobile industry (Simsekoglu, 2018). According to Huang and Qian (2018), the rebound in the automobile industry increased global tire shipments by 2%, with an estimate of 1.963 billion units being produced yearly. China's automotive tire output was approximated to 572 million units, accounting for at least 29% of global output (Huang & Qian, 2018). As of 2017, automobile production was projected to grow by 4% globally (Simsekoglu, 2018). Motivated by a possible growth in sales in tires, Tire companies announced a possible increase in tire prices (Hafner et al., 2017). Despite the projected increase in sales of tires, little is known about factors that could influence customer purchase decisions. The lack of clear information on factors that influence customer purchase decisions for tires becomes a lot of challenges for sellers to initiate appropriate strategies targeting certain customers. Given the need for manufacturers to project their sales and make appropriate marketing decisions, it is imperative to understand the different factors that influence customer purchase decisions for tires.

Research suggests significant variations in purchases made by individuals. Researchers such as Huang and Qian (2018) established that different factors could influence consumer purchase decisions for automobiles. Van Tonder et al. (2017) found that demographic characteristics have an essential role to play in influencing consumer purchase decisions. Therefore, to help the tire industry understand the changes in

purchase patterns of tires for different customer segments, the current study seeks to investigate factors that influence the purchase decisions by tire customers (Hafner et al., 2017). Simsekoglu (2018) noted that demographic factors such as age, gender, income, and lifestyle could influence customer purchase decisions in the automobile industry. Huang and Qian (2018) and Simsekoglu (2018) identified a gap in current literature, underscoring that researcher have not investigated how demographic factors such as age, gender, income, and political party affiliation influence customer purchase decisions by consumers for tires in the automobile industry. The intent of this study is to address this gap by conducting quantitative correlational research to investigate the factors that influence purchase decisions by consumers in the automobile industry, including gender, age, income level, educational level., and political party affiliation. Researchers have linked political affiliations, democrat and conservative, to marketing policies whereby conservative are focused on supporting conservative firms and liberals supporting liberal forms (Simsekoglu, 2018). Such attitudes may influence marketing strategies developed by companies. Therefore, in addition to gender, age, income level, educational level, the researcher will discuss the extent to which party-political affiliation influences marketing in the automobile industry.

Background to This Study

Individual choices continually change so do the preferences and intentions to purchase a given brand. Researchers have recently focused on investigating factors influencing consumer purchases that may help manufacturers and business organizations make more informed decisions regarding demand and supply of their products (Huang & Qian, 2018; Simsekoglu, 2018). One of the industries that have been of great focus in the

last two decades since 1990 has been the automobile industry. With at least 25 million automobiles projected to be sold by 2030 (Huang and Qian (2018), companies are conducting research on factors that influence the customer purchase decisions purchase of automobile accessories, especially the tires. Karami et al. (2017) also reported that a surge in automobile sales creates opportunities and challenges for companies to address if they need to remain competitive. As supported by Van Tonder et al. (2017), there is an opportunity to reach more customers with automobiles and the challenge of understanding determinant factors influencing customer purchase decisions.

Previously, researchers such as Karami et al. (2017) have linked demographic factors such as age, gender, and income to purchase decisions. Simsekoglu (2018) also noted that their education level and lifestyle could influence purchase decisions made by customers. While there exists substantive literature on factors influencing customer purchase decisions in the automobile industry, Huang, and Qian (2018) identified a gap in the literature and recommended the need for additional research to understand factors influencing customer purchase decisions for tires supplied by new entrants in the tire market given the frequent changes in customer demographic factors over time. This study aims to add to the current literature new knowledge by conducting quantitative research to investigate factors influencing consumer purchase decisions in tire sectors.

For this study, which was conducted during the summer of 2017, a Chinese State-Owned Enterprise (SOE) wanted to build a USA based manufacturing facility that totaled a \$1 billion (USD) investment (Huang & Qian, 2018). The manufacturing site was to be in South Carolina that was favorable to its tax status and ripe for a foreign direct investment. In August / September 2017 we surveyed distributor(s), dealer(s), and

consumers across the USA as to their perception of what tier 1 through 7 tire brand name(s) they could associate (Karami et al., 2017).

Problem Statement

With the global automobile industry growing rapidly, there is increased opportunity for new entries to the automobile accessories market, like tire manufacturers (Hadi et al., 2017; Yanan & Yang, 2019). However, there is substantial business risk associated with new market entries, and only 13% of firms report their new products meeting profit objectives (Cooper, 2019). Barriers to Entry are an issue in the automobile industry in general, such as product characteristics, organizational strategic factors, and organizational development approaches (Cooper, 2019). Of the drivers of new product success, meeting customer product expectations is among the most critical (Hadi et al., 2017; Karami et al., 2017). However, designing products to suit customer needs is particularly challenging in industries like the automobile tire industry where consumer demands vary by geography, road conditions, weather conditions, and vehicle preferences (Hadi et al., 2017). While drivers of new product success are established generally, there is a gap in literature relating to factors influencing their preferences for automobile tires given the changes in demographic factors (Abbasi Abiyaneh et al., 2016; Hadi et al., 2017; Yanan & Yang, 2019). Further research is necessary to understand customer demographic characteristics influencing consumer purchase decisions for tire brands in the United States, especially demographic (Abbasi et al., 2016; Hadi et al., 2017).

The purpose of this quantitative correlational study is to investigate the impact of demographic factors on consumer purchase decisions for new car tire brands in the United States. The effect of country of origin on consumers' perceptions and purchase

intentions is a common theme in marketing research. This research aims to update the factors influencing consumer purchase as related to demographic variables and political party affiliation. Such research initially drew on the work of social psychology to focus almost exclusively on socially oriented motivations. Theoretical explanations were based on a consumer behavior theory (Michael & Becker, 1973). Regardless of the perspective used, prior research in the field shows the particular importance that brands play as vectors of strategies that consumers use in their decision-making processes (Simsekoglu, 2018).

With no diversification, there is a path for uncertain times where businesses cannot rely on the practices of old. The link between domestic markets used to be the benchmark to assure success abroad (Porter, 1990). That was then, and this is now when intelligence runs on a twenty-four-hour news cycle with trade wars thrown in for an added dimension of insecurity. Literature suggests there are important differences in consumer behavior influenced by demographic characteristics such as age, gender, educational level, and income (Cooil et al., 2007; Crask and Reynolds, 1978; Fisher and Dube', 2005; Lambert-Pandraud et al., 2005; Meyers-Levy, 1988; Meyers-Levy and Maheswaran, 1991). The importance of these is most notable in the use of "up to date" consumer data that segments variables based on change.

Furthermore, the literature seems to exert strong opinions that relate to the influence of gender, age, educational level, income, and political party affiliation on their willingness to purchase (White & Sintov, 2017). For instance, White and Sintov (2017) reported that consumers of varied gender, age, income, and educational level may differ in their propensity to allow these characteristics when purchasing a foreign product. This

is especially noted with durable goods such as tires, which require a notable investment, and have other conditions or perceived factors in the purchase. Moreover, political party affiliation is another important aspect that could influence consumer purchase intentions (Jung & Mittal, 2020). According to Matos et al. (2017), political views can no longer be ignored because political affiliation may contribute to the level of loyalty that consumers have toward a given brand. The researcher sought to investigate the extent to which political affiliation, *republican* or *democrat*, impacts consumer purchase behaviors for new car tire brands.

Purpose

The purpose of this quantitative correlational study is to investigate factors influencing consumer purchase decisions for tires. By conducting the study, the researcher seeks to achieve three objectives. The study will highlight areas of contradiction in existing research that stresses certain factors typifying demographic factors of gender, age, income, education, and level of influence that are likely to steer customer purchase decisions (Wang et al., 2020). Additionally, the study will provide empirical evidence about how demographic factors could predict a group purchasing patterns. The study findings may add to the existing literature on consumer purchasing patterns at the point of purchase by only investigating the influence demographic variables such as gender, income level, educational level, and age influence consumer purchase behavior. Lastly, the research will add to the current literature by exploring how political party affiliation influences consumer purchase behavior.

Few studies have investigated how demographic factors such as age, gender, educational level and income, influence consumer purchase decisions for tires. As a

result, it's unclear what implications may exist for customers purchasing tires, especially concerning factors influencing their purchase behavior. Understanding demographic factors influencing customer purchase behavior will provide additional insights into key variables that affect the purchase of tires by consumers and the approach that manufacturers should adapt based on the results. The study findings may be used to offer insights about how demographic factors influence consumer purchase decisions. The analysis results will provide more details on customer product expectations by demographics, particularly concerning gender, age, educational level, and income, as well as political affiliation.

Significance

The study findings may fill a gap in literature relating to the influence of demographic factors on consumer purchase decisions when purchasing tires from a new or previously established company in the United States (Hadi et al., 2017; Shaik et al., 2015; Abbasi Abiyaneh., Abedi & Ali Ghayoomi, 2016). This project is unique because it addresses a research area that has not previously been fully explored in the literature (Yanan & Yang, 2019). While many studies have investigated the influence of demographic factors on customer purchase decisions, the current literature has inadequately addressed how demographic factors influence customer purchase decisions for new car tire brands when including political affiliation (Abedi & Ali Ghayoomi, 2016). Few studies explore the relationship between customer demographic factors and automobile tire purchasing decisions (Hojnacki et al. et al., 2017; Yanan & Yang, 2019).

The results of this study will provide new information to established automobile tire manufacturers, and new companies looking for an entrance into the tire

manufacturing market, and automobile tire resellers and marketers about customer preferences. The automobile accessories industry is a billion-dollar industry in the United States and understanding customer requirements and preferences will generate business and jobs related to the sale of automobile tires.

Research Question

The following research question guided this exploratory study:

RQ: What demographic variables influence the purchase decision of foreign branded tires when including political party affiliation?

The objective of the research was to examine whether there were any significant differences on consumers' purchase intention of tire purchase based on gender, age groups, education level, political affiliation, and income level. specifically, intention to purchase tire brands manufactured in the USA.

CHAPTER II

LITERATURE REVIEW

Theoretical Framework

Consumer purchase intentions is a fundamental attribute of human behavior. In most cases, the intention to purchase a given product dictates the inherent behavior that an individual has towards a given product (Michael & Becker, 1973). Often, consumer purchase behavior consists of a set of actions that are meant to address consumer needs based on their personalities (Michael & Becker, 1973). In most cases, consumer intentions have a more significant impact on a consumer's ability to purchase given products. Research has established several theories linked to consumer behavior that can be used to predict future purchase patterns, including theory of consumer behavior (Michael & Becker, 1973).

Michael and Becker's (1973) theory of consumer behavior will inform the current study. Consumer behavior theory outlines several unique variables to everyone, which could influence making purchase decisions (Quandt, 1956). According to Michael and Becker (1973), everyone has a unique model or behavior, implying several factors influencing motivation and purchase behavior (Michael & Becker, 1973). Based on this theory, several variables influence consumer purchase decisions, which are linked to demographic characteristics. The factors include education level, age, gender, family status, employment status, and income level (Michael & Becker, 1973). Michael and Becker (1973) emphasized that the above demographic factors could have a direct influence on consumer purchase decisions. Therefore, the researcher will use consumer

behavior theory' variables such as age, gender, income level, and education level to understand how these demographic factors influence consumer purchase decisions.

1. Gender

Gender represents an important variable when evaluating product consumption (Soh et al., 2017). Studies trying to find a relationship between gender of the consumer and reactions to product brand origin have produced mixed results, it can also be argued that the decision to purchase foreign-made or nationally made products are product specific (Waluya et al., 2019; Westin et al., 2018). Some have found that females and males might respond differently to origin cues depending on country of origin, products and attributes reflected particularly understudy (Waluya et al., 2019). Studies have also found that females provide generally more positive ratings of foreign-made products (Waluya et al., 2019). Studies have found that females are more sensitive and respond more strongly to foreign brand names than males (Waluya et al., 2019; White & Sintov, 2017), therefore argue that females are more willing to purchase foreign products due to perception of product brand name origin.

Research has established significant gender differences in individual shopping behaviors. The benefits of decision-making based on gender differences have been researched and documented by researchers (Simsekoglu, 2018). For instance, it has been established that women play an active role in all decision-making levels to attain the peace and happiness of a family (Hanaysha, 2018). Huang and Qian (2018) also noted that women are more likely to be involved in purchasing practices than men because historically, women have been the major purchase agents for families. Equally, Saritas and Penez (2017) noted that men are primarily self-focused, buying products that only

suit them while, at the same time, women are family-oriented, responding to both individual and family needs.

Nevertheless, despite the well-documented benefits of women's participation in making purchase decisions in many families, the automobile industry, especially the tire sector, has limited literature on the extent to which gender influences purchase decisions (Hanaysha, 2018). Amron (2018) recommended that purchasing decisions considerably vary between men and women when purchasing automobile products. However, Matsumoto et al. (2018) established inconsistency for men and women while examining how demographic characteristics influence consumer purchase decisions for tires.

A multi-disciplinary research approach has concluded that there exist significant differences in consumer purchases. Matsumoto et al. (2018) established that women are susceptible to impulsive buying and display a great sense of loyalty to their brands. Consequently, more brand retailers have used women as their main target group to purchase different products, including tire purchases (Simsekoglu, 2018). Thus far, evidence reviewed suggests that gender could affect consumer purchase decisions for tire products due to varying preferences of brands across the genders (Wang et al., 2017). The findings, therefore, provide the reason for tire manufacturers to focus on gender and how it influences customer purchase decisions for different brands.

Gender is a major demographic factor that researchers have explored to investigate its effects on consumer purchase practices, as it directly relates to other product categories. For instance, investigators have found that decorative automobiles with great music systems attract more females than males (Matsumoto et al., 2018). A comparable study was conducted by Li et al. (2017) who investigated the influence of

gender on automobile purchase in the United States. According to the findings, the researchers established that gender significantly influenced purchase decisions because men would take women alongside when purchasing automobiles, and in most cases, women's choices were preferred (Li et al., 2017). The study results imply that the presence of women during a purchase could sway men into buying certain brands that are cherished by women accompanying those (Li et al., 2017). Thus far, the evidence reviewed suggests that the purchase decisions for automobile accessories such as tires directly link with gender because women tend to influence the entire purchase decisions, including recommending a certain brand.

Despite the above findings, there are inconsistencies in current research relating to the influence of gender on purchase decisions in the automobile industry. As an illustration, Dhanabalan et al. (2018) conducted a study to investigate the influence of gender on buying patterns of fancy automobiles. Converse to previous research findings, Srikanth and BinduMadhavi (2021) established that men and women had an equal level of understanding when purchasing a given brand. Consequently, their final purchase decisions would be informed by the amount of knowledge and information they have concerning a given brand. Similarly, Dahiya and Gayatri. (2018) argued that there are differences in gender preference about the quality that influence consumer purchase decisions. In a qualitative study to investigate factors influencing consumer purchase intentions, Brand et al. (2017) conducted a qualitative study that explored how gender influences purchase decisions on 215 automobile customers. In view of the study findings, the researchers established that quality differences between men and women played an important role in purchase decisions (Brand et al., 2017). Women tend to focus

on quality products rather than men, making them determinant of key purchase decisions; they would prefer to purchase a quality and well-known brand (Simsekoglu, 2018).

Overall, the articles reviewed demonstrate that gender is a key demographic factor that influences consumer purchase decisions. Researchers have established that gender differences in brand loyalty and quality perception have an important role in defining the extent to which a man or a woman would purchase a given brand (Brand et al., 2017; Dahiya & Gayatri, 2018). Researchers have established that women tend to be loyal to their brands and would influence men to purchase such brands considered to be of high quality (Simsekoglu, 2018). With this information, there is a need to investigate how gender affects consumer tire purchase, which may provide manufacturers with information that can be used to make informed decisions regarding product positioning and market segmentation (Matsumoto et al., 2018).

As already discussed, gender has a positive impact on consumer purchase decisions. Current research demonstrates that the shopping experience is an existing activity that women love more than men. As such, they may influence the purchase of cars and tires. According to research conducted by Matsumoto et al. (2018) on a sample of 419 participants, it was established that 60% of the buyers had women accompany them when making a car purchase. The implication is that women have specific preferences, such as fancy tires, which they love their family members, friends, and their colleagues to have, especially when it comes to cars and tires. Therefore, researchers and tire manufacturers need to understand the extent to which gender influences purchase decisions.

2. Age

Age is a demographic variable that is related to certain buyer behaviors when deciding to purchase a product. According to (Dong et al., 2020) older people usually are more conservative, more patriotic and some researchers have found that with increasing age there are favorable attitudes toward domestic products. Younger people are more aware of and open to foreignness because of increased cultural interactions. By contrast, many older adults (Simsekoglu, 2018) matured in relatively isolated US, with a very close niche with a high unlikelihood to interact with nothing other than their local environment (Simsekoglu, 2018). Therefore, Nilasari and Saudi (2019) argued that older people will have a higher propensity to purchase domestic products.

Over the years, it has been viewed that age is a significant factor in marketing. Alongside other demographic factors, including gender and income, researchers have used age to investigate consumer behavior (Komaladewi & Indika, 2017). Matsumoto et al. (2018) noted that age is a key influencing factor to consider when making automobile purchases as preferences and attitude toward brand vary based on age differences. Based on their findings, Dahiya and Gayatri. (2018) found significant differences in consumer purchase behavior predicted by age differences. According to the results, the researcher found that younger consumers tend to spend more money on new products in the automobile industry to maintain high lifestyle standards compared to the older counterparts (Matsumoto et al., 2018). In view of a research conducted by Simsekoglu (2018), age is a key demographic factor that influences purchase decisions. The study findings by McLeay et al. (2018) demonstrated that younger consumers are often less focused on prices thus, more receptive to testing new products and different brands. In

such instances, their purchase decisions are usually instantaneous than older consumers who would prefer taking more time to gather adequate information about a product before purchasing it.

In the automobile industry, researchers have linked age to consumer purchase intentions. Srikanth and BinduMadhavi (2021) conducted a qualitative study to investigate consumer purchase intentions regarding automobile accessories on a sample of 500 individuals. The study results suggested that age influences consumer purchase decisions and their intentions to test new automobile accessories (Srikanth & BinduMadhavi, 2021). In addition, the researcher also found that younger consumers with average income were likely to buy an automobile or its accessories of well-established brands compared to older consumers with stable income (Srikanth & BinduMadhavi, 2021). The study findings also suggested that younger consumers aged 18 to 35 years were inclined to buy new automobiles from different brands than older consumers (Srikanth & BinduMadhavi, 2021). The evidence reviewed indicates that age is a crucial factor influencing consumer purchase decisions in the automobile industry. Consumers from different age groups will have varying attitudes when it comes to the purchase of different brands.

Age determines consumers' attitudes toward brands. In a study to investigate factors that influence consumer purchase decisions based on age, McLeay et al. (2018) investigated a sample of 215 consumers of varying age groups. After conducting the data analysis, the researcher established that younger consumer aged 18 to 45 had different attitudes towards certain brands that differed from those held by older consumers aged 45 to 65 (McLeay et al., 2018). Considering the study findings, McLeay et al. (2018)

concluded that age influences consumer attitudes towards certain brands and the intentions of consumers to purchase the products, especially in the automobile industry where alternative brands exist. Given the past research findings relating to age and its role in dictating consumer attitudes toward a brand (McLeay et al., 2018), a study needs to be conducted to add to the current literature on how age influences consumer purchase decisions. Such findings could provide valuable insights to researchers on how to position and target their tire brands based on age.

Dahiya and Gayatri. (2018) established that younger automobile customers may not spend money purchasing renowned brands because of their weak loyalty compared to older customers whose loyalty has been established over the years. Dahiya and Gayatri. (2018) reported similar results by establishing that customer loyalty to brands differed across age groups reported similar results. In their study, the researcher showed that younger consumers had weak brand loyalty and were open to purchasing any brand that would fit their needs (Dahiya & Gayatri, 2018). On the contrary, Dahiya and Gayatri. (2018) also found that older consumers would prefer buying a given brand since their youthful stage, implying strong brand loyalty. Nilasari and Saudi (2019) also found that brand loyalty differed across age groups. In their study, the researcher sought to establish the extent to which gender influences purchase decisions for automobile industries (Nilasari & Saudi, 2019). Based on the study results, the researchers found that younger consumers aged 18 to 45 years experimented with brands, which made their loyalty to certain brands weaker (Nilasari & Saudi, 2019).

On the other hand, older consumers had developed a strong loyalty over the years and would not like to experiment with different brands, making it impossible for them to

test new brands. The findings, therefore, compel one to conclude that age influences customer purchase decisions. The relationship between age and purchase decisions provides an opportunity for new tire manufacturer companies to conduct a study on how age affects the purchase of car tires.

Researchers have linked age to differences in consumer purchase decisions. For instance, Dong et al. (2020) argued that age plays an important role in determining individuals' attitudes towards a given brand. Dong et al. (2020) also investigated the influence of age on consumer purchase decisions in the automobile industries. Their findings suggested that age influences people's decisions towards certain automobile products due to varying attitudes towards brands (Dong et al., 2020). Younger consumers tend to embrace new automobile brands, while older consumers tend to cherish the long-standing brands that they have trusted over the years. This suggests that age could negatively or positively influence the purchase of automobile accessories, such as tires (Dong et al., 2020). In a different study, McLeay et al. (2018) found that age played an important role in dictating automobile brands that an individual is willing to purchase.

In most cases, young consumers prefer experimenting with new brands due to discounts provided by marketers (Srikanth & BinduMadhavi, 2021) In addition, it was established that younger consumers have weak loyalty to brands in the market, thereby using all brands available based on prices and quality (McLeay et al., 2018). The variations in terms of quality and loyalty influenced by age make it important for researchers to understand how age differences affect consumer purchase decisions, particularly in the automobile and tire sector.

3. Educational level

Educational level is a demographic variable that has been studied as a factor that influences the consumer decision to purchase (Dong et al., 2020). Higher education is often associated with higher income, and consumers with higher education would be more open to purchasing foreign products (Dong et al., 2020). People with a higher level of education tend to be less conservative (Dong et al., 2020). Higher educated individuals tend to have larger and more diverse social networks as well as a wider variety of interactions with different cultures. They are more in contact with more resources and diverse groups (Dong et al., 2020). Therefore, higher educated individuals are more open to foreignness and purchasing foreign products.

Education is another key demographic factor influencing consumer purchase decisions. Researchers have conducted different studies to investigate the extent to which education affects consumer purchase decisions. For instance, McLeay et al. (2018) conducted a qualitative study to investigate factors that influence consumer purchase decisions in the automobile industries. A sample of 215 participants was recruited to take part in the study. Thematic analysis was used to conduct the final research. McLeay et al. (2018) found that level of education influenced consumer purchase decisions. According to the findings, well-educated consumers were more likely to conduct a thorough information search on a product or a brand before making purchase decisions. In this case, they were likely to take more time in making a purchase decision (McLeay et al., 2018).

On the other hand, Brand et al. (2017) established that individuals with low education levels would spend limited time making purchase decisions. In most cases,

they would depend on referrals from friends who made purchases, limiting their timeframe for searching information on a given brand in making their final purchase (Brand et al., 2017). Considering study results, researchers established that education level plays a vital role in influencing consumer purchase decisions for different brands such as tires (Westin et al., 2018).

Jing et al. (2019) also investigated the link between demographic factors and consumer purchase decisions. In their study, a sample of 519 automobile customers were analyzed. Interviews were used to collect data. The investigators found that education level predicted a decision-making process among consumers (Jing et al., 2019). For instance, consumers with low education levels would depend on referrals and information given to them by the automobile dealers to make purchases (Jing et al., 2019). However, consumers with a high level of education would consider searching for information from several sources before making a purchase, lengthening their decision-making process (Jing et al., 2019).

Additionally, Xu et al. (2017) found that well-educated consumers would also consider asking their colleagues to help in conducting market research on a given brand while integrating their colleague's experiences before making a final decision to purchase the products. Past evidence on the topic points to the fact that their education level influences decision-making regarding certain brands (Xu et al., 2017). Individuals who have a high education level would gather enough information on a given brand before deciding to purchase it (Xu et al., 2017). Conversely, past research suggests that individuals with low education levels would take a shorter time to make purchase decisions because they depend on dealers' information or referral from friends (Sovacool

et al., 2018). Overall, it is evident that education level could significantly influence consumer purchase decisions, a key variable that new entrants in the tire-manufacturing sector require to make their investment decisions.

4. Income

Consumer income is a demographic variable that is constantly used to predict consumption (Simsekoglu, 2018). As income increases, consumers are likely to increase their consumption and purchases (Lin & 2018). W Huang and Ge (2019), found a significant positive relationship between income and favorable attitudes towards foreign products, mentioning people at different income levels tend to have different values, behaviors, and lifestyles. Therefore, an increase in income will increase customer purchases.

Consumer income level has a direct impact on consumer purchase decisions. Previous research has established a direct link between income and consumer purchase decisions. As an illustration, Westin et al. (2018) conducted a study to investigate factors influencing consumer purchase decisions in the automobile industry. A sample of 915 automobile consumers in the United States were recruited to take part in the study. Data collection was done through interviews and analysis conducted through a thematic approach. The study results suggested that income level dictated their purchase decisions because it influenced their propensity to spend (Westin et al., 2018). Individuals with higher income levels had disposable income to purchase new products or test new brands (Westin et al., 2018). However, individuals with a low-income level had budget constraints that limited their propensity to purchase (Westin et al., 2018). The

implications are that high-income earners will have more disposable income to purchase new automobile products, such as tires, than those with low-income levels.

Lubis (2018) also found that consumer income level influenced their purchase decisions in the automobile industry. The investigators surveyed 1215 car dealers in the United States. Based on their responses, the car dealers noted that most people who spend on fancy vehicles had a significant disposable amount of money for expenditure (Lubis, 2018). In most cases, wealthier individuals would prefer buying different automobile accessories for prestige (Lubis, 2018). On the other hand, individuals with low-income status would find it challenging to purchase additional automobile accessories such as tires, which significantly limited their spending capacity (Vongurai, 2020).

Vongurai (2020), Mukherjee and Ryan (2020) reported similar findings after conducting a qualitative study to investigate the relationship between income and consumer purchase decisions. A sample of 619 consumers in the United States took part in the study. Data collection was done through interviews. The study results suggested that income level among participants influence their decision to make purchases (Mukherjee & Ryan, 2020). Consumers with a higher income level could purchase multiple automobile brands and accessories than those with a limited income level (Mukherjee & Ryan, 2020). Based on study results, it was established that income level plays an important role in influencing consumer purchase decisions (Mukherjee & Ryan, 2020). The higher the level of disposable income a consumer has, the greater the probability the consumer would purchase domestic or foreign brands to substitute their current tire accessories.

One of the main economic direct factors that have a direct influence on consumer behavior is income. According to Srikanth and BinduMadhavi (2021), income affects consumer purchase behavior because it directly influences the quantity of goods purchased and the quality required. In instances where the consumer has a high-income level, there is a possibility that such consumers will prefer luxury products or high-end automobiles. Komaladewi and Indika (2017) argued that a drastic reduction in income is likely to shoot consumer purchase behavior from quality brands to inferior goods. The implication is that a decrease in income reduces a consumer's ability to purchase valuable car tire brands. Matsumoto et al. (2018) also argued that the amount of income available to a consumer would dictate the quality and quantity of car brands and tires to be purchased. In this regard, income becomes a function of consumer purchase or expenditure on expensive car tire brands. Literature on the relationship between income and consumer purchase behavior demonstrates a direct link between the amount of money spent on automobiles and their accessories and consumer income level. A study by Komaladewi and Indika (2017) in the United States to investigate demographic factors influencing the purchase of automobiles established that consumer income level played an important role in dictating the quantity, quality, and the frequency at which consumer would buy the next car accessory. Overall, the articles reviewed demonstrate that income level positively or negatively influences consumer purchase decisions.

In a different study conducted by He et al. (2018) to investigate the influence of income and consumer purchase decisions, a sample of 719 participants from the automobile industry took part in the study. He et al. (2018) found that consumers' amount of income had played an essential role in dictating the type of car brands and tire brands

that consumers would purchase. The findings point to the fact that consumer purchase decisions, especially when choosing to buy car brands and tires in the market, are directly influenced by their income level (He et al., 2018). The higher the income level, the higher the probability that the consumer would purchase well-established brands, signifying a positive linear relationship between the income and consumer purchase decisions (He et al., 2018). The finding also suggests that individuals with high income will love to buy and test new brands in the market compared to those with low-income levels (He et al., 2018).

Family income level directly influences the choice of car or tire brand that an individual can purchase. In most cases, family members whose income level is high would also dictate the type or quality of automobile that a person should purchase because they may offer financial support (Chen et al., 2020). Additionally, family needs may also influence the amount of money an individual can spend on buying major car brands in the market (Chen et al., 2020). In most cases, households with basic needs inadequately satisfied will prefer an average brand of affordable tire to spend more money on a fancy brand only to strain their basic needs (Chen et al., 2020). In this regard, the evidence reviewed suggests that family needs influence the amount of money an individual has for purchases, such as automobiles.

A study conducted by White and Sintov (2017) reported comparable thoughts. In this study, the focus was to establish how income levels influence consumer purchase decisions about the satiation of primary needs (White & Sintov, 2017). In their study findings, the researchers established that the fulfillment of primary needs influence purchase decisions relating to secondary needs, such as tires (White & Sintov, 2017). The

results also implied that families with high-income levels are likely to satisfy their primary needs and have extra money to purchase strong brands of tires in the market compared to families with low-income groups struggling to satisfy their primary needs (White & Sintov, 2017). To this end, the literature reviewed suggest that an individual's income level significantly influences their purchase decisions, especially when basic needs are unsatisfied. Consumers will satisfy primary needs using the available income before purchasing tires for their automobiles.

5. Political Party Affiliation

American society has experienced significant changes as all aspects of life increasingly congregate with political views and affiliations into a single set of overlapping motivations (Hydock et al., 2019). According to Jung and Mittal (2020), political life is no longer distinct from individual or commercial actions. Matos et al. (2017) noted that political views are currently influencing how individuals live, shop, and conduct business. The implication is that corporations are compelled to advocate for social values as well responding to political events. According to Kim et al. (2018), party affiliation is no longer an alternative to understanding a brand's strengths or weaknesses; it is necessary to its acceptance by a particular group of people. Researchers suggest that political party affiliation may affect customer purchase decisions (Hydock et al., 2019; Matos et al. (2017). In this study, political party affiliation will be used to investigate the extent to which it affects consumer purchase decisions for tires when demographic factors are contextualized.

Several brand manufacturers are increasingly seeking to establish emotional connections with their customers regarding marketing and how the target customers

consider themselves a republican or democrat (Matos et al., 2017) Consequently, this type of political affiliation marketing strategy is known as identification-based marketing (Hydock et al., 2019). The aim of applying political party affiliation marketing by marketers is to create a strong bond between their brands and customers as they become an indispensable part of how customers identify with their political party affiliation (Jung & Mittal, 2020), Kim et al. (2018) noted that political party affiliation might constitute brand loyalty among the supporters.

Political Affiliation

The discussions on how politics and political affiliation influence consumers' purchasing behavior and intentions has become critical as scholars seek to understand how such affiliations impact business operations. Jung and Mittal (2020) posited that understanding consumers' political bearing is important in responding to their immediate needs and the opportunity for retailers and wholesalers to approach and appeal to non-politically affiliated consumers. Attracting and retaining consumers whose political ideologies and decisions vary is easier since retailers can monitor and identify their political standings on social media platforms, roadside discussions, and their responses to emerging political discussions. With this in hand, retailers can revitalize and revamp their marketing strategies to retain consumers and ensure that they attract consumers regardless of their political identity and affiliation. Critical to this discussion, Jung, and Mittal (2020) stated, political identity and affiliation influenced consumers' motives, logic, interpretation, and attitude toward a particular product.

Consumers' political affiliation impacts their purchasing of luxury goods and equipment. In a research review, Jung, and Mittal (2020) established that consumers'

political orientation influenced their decision to buy or not to buy a product affiliated with a particular political movement. Accordingly, Jung and Mittal (2020) argued that most consumers were attracted to products associated with a political movement that resonated with them. In earlier research, Kim et al. (2018) investigated how consumers' political ideology and the need to maintain certain status influenced their desire for luxury products. Examining conservatives and non-conservatives, Kim et al. (2018) identified that conservatives' political ideology increased their preference for social stability and maintenance of status compared to liberals. As a result, while consumers affiliated with a liberal political movement, they were likely to purchase luxury products for their own good compared to conservatives for whom identity and status guide their purchase of luxurious goods. Lammers and Baldwin (2018) posted similar results, who sought to identify how political affiliation (conservative vs liberals) influenced consumers' purchasing behavior and purchasing intentions. A systematic review of literature and meta-analysis of nine studies found conservatives to be affectionate, warm, and more likely to associate with liberal tastes.

On the other hand, Lammers and Baldwin (2018) found liberal consumers disagree with the style and products of conservatives. In other findings, Kim et al. (2018) established that conservatives were drawn toward products that displayed hierarchy or dominance compared to liberals, who were preferable to products that displayed or associated with equality. Overall, the scholars and consumers who subscribe to conservative ideology were more drawn and persuaded with expensive and luxurious goods than liberals.

Still, on brand attachment and political identity, Sterling (2018) observed, although complicated, 63% of the consumers preferred goods or products from brands that supported a particular cause. According to Sterling (2018), current issues such as increased cases of gun violence and discussions on climate change have created consumer activism, pushing brands to identify themselves with particular social and political positions. Similar sentiments were shared by Jung and Mittal (2020), who also noted that consumers have become sensitive to brands and tend to identify with brands or products that stood for a particular social or political ideology in recent years. In their review, Hootkin and Chaitin (2019) also reported consumers increased demand for brands to take a stand politically or socially. According to Hootkin and Chaitin (2019), 87% of American consumers believed brands and businesses had the power to influence the society or the political cause of a country. As such, they would identify and purchase from companies that boldly declared their stand.

Ordabayeva et al. (2021) also had similar conclusions that brand activism was taking shape in the current market and was influencing consumer purchasing behavior. However, in terms of political ideology and affiliation, Ordabayeva et al. (2021) found conservative, and liberals engaged in market activism for totally different reasons. For instance, liberal consumers boycotted brands and products that failed to promote equality while conservatives tended to support products provided; it served to enhance status or maintain the status quo. Overall, how attached consumers were to a specific product or how often they purchased it depended on whether the brand shared their political ideology or stood for a particular social cause.

Political affiliation also influences consumer purchasing behavior by impacting their attachment to a particular product. First, Jung and Mittal (2020) asserted consumers were attached to brands whose manufacturers identified with their political identity or subscribed to their political ideology. Next, Chan and Ilicic (2019) investigated how their political affiliation and identity influenced consumers' attachment to a particular brand. Reviewing different studies on political identity and attachment to one specific brand, Chan and Ilicic (2019) noted, political conservatism strongly influenced how attached consumers were to a particular brand. Chan and Ilicic (2019) contended, political conservatism was associated with feelings of uncertainty that influenced consumers to seek alternative security by becoming attached to products from a particular brand.

Regardless of the country of origin, provided the product's manufacturer subscribed to the consumers' political ideology, consumers were likely to develop some form of attachment to that brand. Developing their argument from the findings of Chan and Ilicic (2019), Schmidt (2019), in a quantitative study that included 390 participants, found in addition to cognitive style and demographic characteristics, the political orientation of consumers in the United States impacted their acceptance of the Takaful insurance product. Accordingly, Schmidt (2019) noted that when the product was presented as being from Islam, the number of consumers who showed interest or intention was low. While Schmidt (2019) found consumers of Islamic origin bonding with the Takaful insurance product, the study differed from that of Chan and Ilicic (2019) in that it included other factors such as cognitive style. In this study, political affiliation will be used as an additional variable to determine consumer purchase behavior.

The propensity to purchase American sounding name

This variable represents the likelihood to purchase a foreign product with an American sounding brand name, such as American Flag Toast. Choosing a brand name is fundamentally important for companies (Yang et al., 2019). Several companies worldwide have adopted uses of foreign names, spelling, and pronunciation to enhance perceptions and product attributes (Simsekoglu & Nayum, 2019) and position themselves internationally.

In the context of international business, brand acceptance and recognition can become more complicated by problems of language, nationalism, and cultural differences; Branding contributes to the image and through the brand name, the image can be projected (Priessner et al., 2018). "As markets become globalized, the debate has increasingly focused on how countries can successfully market their country's image to derive competitive advantage" (Priessner et al., 2018). Furthermore, there is a higher propensity to failure if there is not a pretest of the product name among the target population and it may lead to higher levels of product rejection (Priessner et al., 2018).

A propensity to purchase Manufactured in the USA

This variable represents the likelihood to purchase a foreign product Manufactured in the USA, such as American Flag Toast. This tendency is known as ethnocentrism. Sumner (1906) defined ethnocentrism as "the view of things in which one's group is the center of everything, and all others are scaled and rated concerning it. Each group nourishes its pride and vanity, boasts itself superior, exalts its divinities and looks with contempt on outsiders".

Priessner et al. (2018) introduced the concept of consumer ethnocentrism, which studies consumer behavior with marketing implications. Consumer ethnocentrism has two main characteristics: it results from the love of one's country and fear of harmful effects that imports can cause, and the intention of not buying foreign products (Wang et al., 2020). For an ethnocentric consumer, it is not an issue of economic value but an issue of moral and personal values (Wang et al., 2020). While consumer ethnocentrism, national identity, and economic nationalism all reflect a level of "discrimination against foreign products" (Lin & 2018), the underlying reason is a domestic preference rather than negativity towards any country. Therefore, this discrimination is expected to affect all foreign products.

Due to the awareness of the "made in" label, the consumer's propensity to purchase foreign products will test the relationship between the demographic variables (gender, age, educational level, and income) and the propensity to purchase Manufactured in the USA.

CHAPTER III

RESEARCH MODEL AND HYPOTHESES

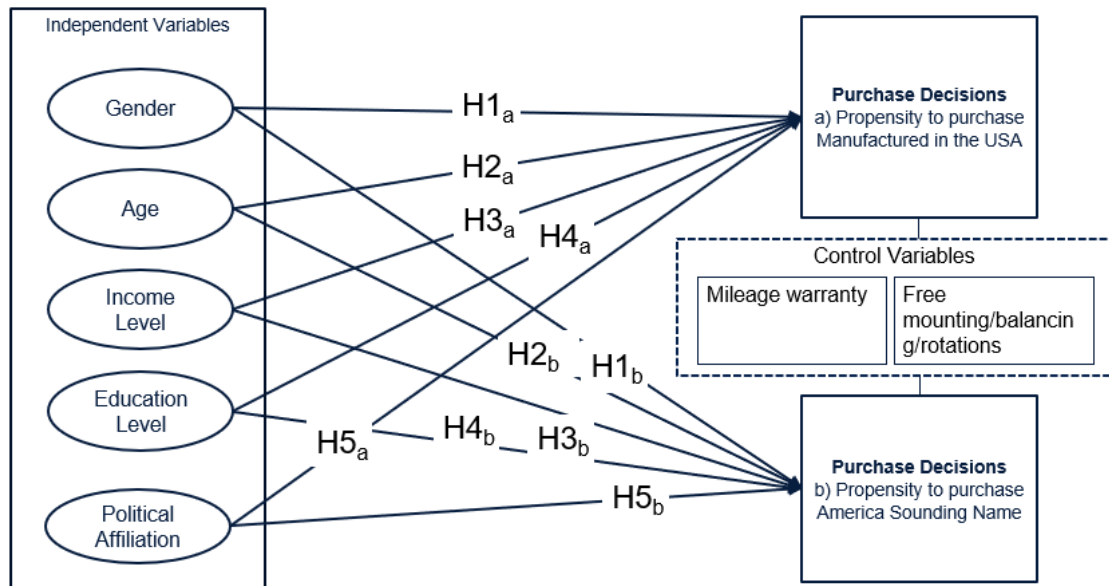
Research Model

The theoretical framework used to guide the formulation of the research question informed the research model for this study. In particular, the study is based on consumer behavior theory. The consumer behavior theory is based on the premise that the consumer purchase decision process is a rational decision process that entails evaluating possible factors that could influence the intention to purchase a given brand (Matsumoto et al., 2018). In particular, the main variables that affect customers' purchase decisions include demographics characteristics, such as age, income, education, gender, and political affiliation (Matsumoto et al., 2018). In line with the purpose of this study, which is to investigate demographic factors that influence consumer purchase decisions for tires.

A summary of the research model is presented in Figure 1 below.

Figure 1

Research model



Research Hypotheses

The first variable to be used in this study is gender. Previous research has established a direct link between genders and consumer purchase decisions. For instance, Simsekoglu (2018) noted that women were considered family purchase agents, and their preferences were likely to influence the purchase of households' goods, including cars and tires. The researcher expected gender to play a significant role in influencing consumer purchase decisions for buying tires manufacturers in the United States because of age influencing perceptions towards a product and customer loyalty. The following hypotheses were developed:

H1a: Females have a lower propensity than males to purchase tires if they are manufactured in the USA.

H1b: Females have a lower propensity than males to purchase tires if they have a strong American sounding name.

The second variable used from the theory is age. According to the theory, age is a key demographic factor that could influence consumer purchase behavior. For instance, Matsumoto et al. (2018) used consumer behavior theory to investigate influencing consumer intentions to purchase organic food. The researcher found that age predicted the desire for youth and older people to consume organic food, especially among the elderly. Simsekoglu (2018) also found that age predicted the purchase of luxury cars in the United States. Westin et al. (2018) conducted a study to investigate the influence of age on customer purchase behavior in the fashion industry. The study findings revealed that age influenced customer purchase behavior as younger individuals focused on trending predictions compared to adults. The previous studies reveal that age could influence customer purchase decisions (Waluya et al., 2019; Wang et al., 2020). In view of previous literature, Therefore, it was expected that age would positively influence consumer purchase decisions in the current study regarding the purchase of tires. Consequently, it was hypothesized that:

H2a: Higher the age the higher the propensity to purchase if manufactured in the USA.

H2b: Higher the propensity to purchase a strong American-sounding name.

The third variable derived from the consumer purchase theory is the education level. Research has established that educational level influences knowledge base that consumers can use to make decisions (Waluya et al., 2019). As such, a consumer with a higher education level is likely to dedicate more time to research before purchasing a

given brand than those with a low education level, which mostly depends on dealers' information (Matsumoto et al., 2018). Vongurai (2020) also conducted a study to investigate predictors of customer purchase behavior in the automobile industry. After analyzing data, Yanan and Yang (2019) established that education was a major predictor of customer purchase behavior for automobiles given that young customers focused on getting trendy products compared to the elderly. Similar results were also reported in a study conducted by Srikanth et al. (2021) on factors influencing customer purchase behavior for electronic products. After conducting the analysis, the investigator found that education level played an important role in predicting customer purchase behavior. Educated customers took more time to conduct the market before making a purchase. Thus, it is expected that education level would influence customer purchase decisions, and the following hypotheses were developed:

H3a: Higher the educational level the lower the propensity to purchase if manufactured in the USA.

H3b: Higher the educational level the lower the propensity to purchase a strong American-sounding name.

Income level was another variable adopted from the consumer behavior theory to predict factors influencing customer purchase decisions in this study for tires manufactured in the United States. Previous researchers have linked income level to purchase decisions because the stability of income influences the money individuals are willing to spend (Simsekoglu, 2018; Srikanth et al., 2021). Srikanth et al. (2021) also established that income level was important in predicting customer purchase decisions. The level of income an individual had predicted the amount of money available for

purchases. Therefore, it was expected that income level would influence consumer decision to buy tires manufactured in the United States. The following hypotheses were formulated:

H4a: The higher the income the lower the propensity to purchase if manufactured in the USA.

H4b: The higher the income the lower the propensity to purchase a strong American-sounding name.

The fifth hypothesis will test whether a political party affects customer purchase decisions. Huang and Qian (2018) noted a gap in literature with respect to political party affiliation and the need to provide how it influences purchase decisions by consumers for tires in the automobile industry.

H5a: People in blue states (in the 2016 election) have a lower propensity than people in red states to purchase if manufactured in the USA.

H5b: People in blue states (in the 2016 election) have a lower propensity than people in red states to purchase a strong American sounding name.

Using the above variables, a research model was developed to guide the study. The research model has independent and dependent variables. The independent variables include gender, age, income level, and education level. The dependent variable purchase decision is measured both by “Purchase if manufactured in the USA” and “Purchase if a strong American sounding name”. A summary of the model is presented Figure 1 below.

CHAPTER IV

METHODOLOGY

Research Methodology and Design

This is a quantitative study utilizing secondary data, the research framework, and the designed questionnaire instrument was composed of Marketplace Insights. The researcher will employ a non-experimental quantitative study with a correlational design to determine if there are relationships between the independent variables of (1) gender, (2) age, (3) education level, (4) income, and (5) political party affiliation, and the dependent variables of (1) purchasing a tire made in the U.S and (2) with a strong American sounding brand name. The researcher will also control for two variables: mileage warranty and free mounting/balancing/rotations.

A nonexperimental quantitative methodology with a correlational design is most appropriate for specific reasons. First, the study includes numerical data that are analyzed to test hypotheses (McCusker & Gunaydin, 2015). Second, the choice of a nonexperimental quantitative method with a correlational design ensures research objectivity as the researcher is separated from the research participants (McCusker & Gunaydin, 2015). Third, there is no manipulation of independent variables; thus, this study is a nonexperimental quantitative method with a correlational design (McCusker & Gunaydin, 2015). Additionally, a nonexperimental quantitative method with a correlational design is the correct design for the current study because the objective is to identify and evaluate the relationship between the dependent variables, and the independent variables.

A quantitative research methodology uses numerical data that allows for statistical analyses, helps reduce biases, and is based on an objectivity paradigm (Bowers, 2017). Quantitative research measures include statistical, mathematical, or numerical analyses of data collected through questionnaires and surveys or by the manipulation of pre-existing statistical data using computational techniques. A qualitative approach is not appropriate because the study did not focus on exploring a phenomenon or establishing a theory, model, or definition (Allwood, 2012). Due to the nature of the research questions posed, binary logistic regression is the best fit for data analysis for this study. Binary logistic regression analysis is used to predict a dichotomous dependent variable, purchasing a tire made in the U.S and with a strong American sounding brand name. In this case, based on independent variables, gender, age, education level, income, and political affiliation (Mertler & Vannata, 2013). Additionally, binary logistic regression analysis also determines the overall fit and the relative contribution of each of the predictors to the total variance explained (Mertler & Vannatta, 2013). In binary logistic regression, covariates may be added to the model to control for the effects they may have. In the model, two covariates were considered: (1) mileage warranty and (2) free mounting/balancing/rotations.

A quantitative approach for the present study is appropriate because the research questions ask about the significance of a variable in relation to an event or action. Quantitative research is most appropriate for determining causality or correlation, which is the goal of the present research (Sukamolson, 2007).

The survey was conducted on behalf of a consulting project conducted in August/September 2017. The questionnaire was administered in August/September 2017

and was deployed as an e-mail survey to opt-in for recent tire consumers with an on-line instrument. The sampling was taken from a database composed of 13,000 MPI MetroScan. The sample size was 2,945. The dropout-inflated sample size of 2,945 (n=3,534) was chosen to accommodate and anticipate dropouts. This research uses the sample surveyed to conduct the below study.

Dropout Rate	Sample Size NInflated	Expected Dropouts
20%	2,945	534

Study variables

The independent variables include age, gender, education level, and income level. The dependent variable includes customer purchase decisions. The study had two control variables, including (1) mileage warranty and (2) free mounting. Mileage warranty is used as a control variable and according to www.tirebuyer.com, it is defined as the manufacturer guarantee that for the specified number of miles of usage the tires will not wear out. If the tires wear out before reaching the specified number of miles the manufacturer will refund in proportion to miles used. According to a survey made with more than 3,000 customers of tires, mileage warranty is perceived as a quality factor when buying a tire (Saritas & Penez, 2017).

Free mounting, balancing, and rotation variable is used as a control variable and according to www.tirebuyer.com; mounting is the act of putting tires onto the wheels, and the wheels into the vehicle's axis. Balancing is a term used when the wheel's center of gravity is identical to the axis of rotation, and Tire rotation is to change the position of each of the tires on the vehicle periodically. The recommendation usually is every 5,000

miles. Both variables are important factors that consumers consider when purchasing tires, therefore, the study will control for both factors.

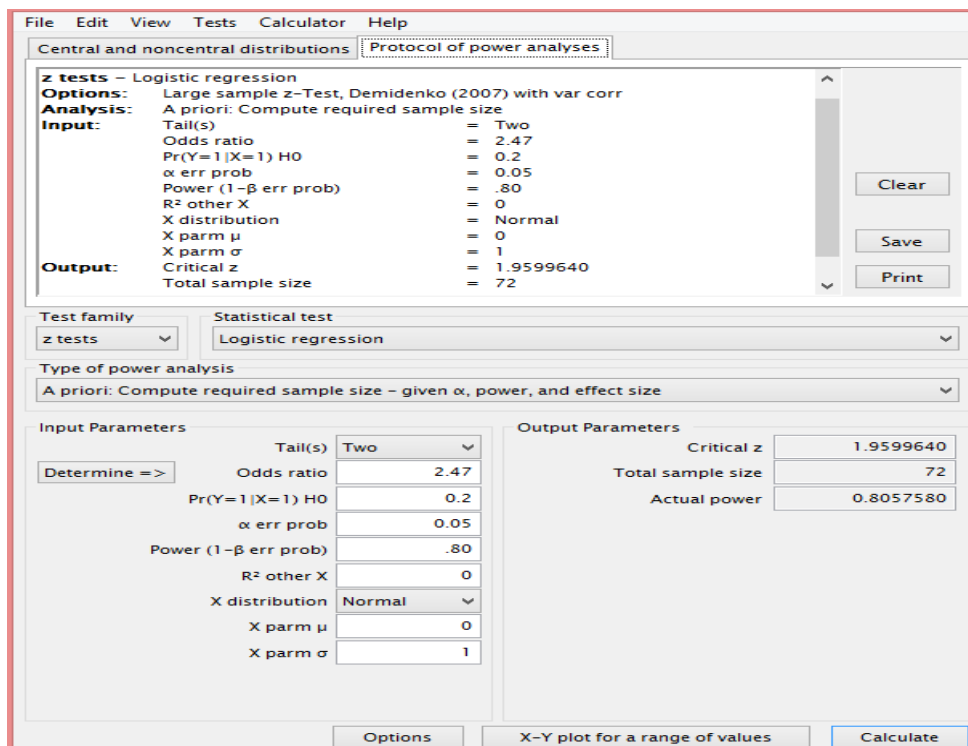
Population and Sample Size

A priori power analysis was conducted using G*Power to determine the required minimum sample size for the study. Four factors were considered in the power analysis: (1) significance level, (2) effect size, (3) the power of the test, and (4) statistical technique. The significance level, also known as Type I error, refers to the chance of rejecting a null hypothesis given that it is true (Haas, 2012). Most quantitative studies make use of a 95% confidence level because it adequately provides enough statistical evidence of a test (Creswell & Poth, 2017). The effect size refers to the estimated measurement of the relationship between the variables being considered (Cohen, 1988). Cohen (1988) categorizes effect size into small, medium, and large. Berger, Bayarri, and Pericchi (2013) purported that a medium effect size is better as it strikes a balance between being too strict (small) and too lenient (large). The power of the test refers to the probability of correctly rejecting a null hypothesis (Sullivan & Feinn, 2012). In most quantitative studies, an 80% power is usually used (Sullivan, & Feinn, 2012). The statistical test to be used for this study is binomial logistic regression. A binomial logistic regression attempts to predict the probability that an observation falls into one of two categories of a dichotomous dependent variable based on one or more independent variables that can be either continuous or categorical. This technique was the best fit for the study since the dependent variables were dichotomous and the researcher wished to measure the likelihood of tire purchase. The calculation of a minimum sample size for logistic regression requires previous knowledge such as the expected odds ratio (effect

size), a proportion of observations in either group of the dependent variable, and the distribution of each independent variable (Faul, Erdfelder, Buchner, & Lang, 2009; Berman & Silvers, 2016). If these are not known, it is best to use an estimate to determine the appropriate sample size. Using G*Power, the minimum sample size was computed by utilizing a medium effect size of $OR = 2.47$, based on the categorization of effect sizes by Chinn (2000) who categorized odds ratio into small ($OR = 1.44$), medium ($OR = 2.47$), and large ($OR = 4.25$). To conduct binary logistic regression to detect a medium effect size of $OR = 2.47$, at the 5% level of significance, with 80% power, a minimum sample size of at least 72 is required (Figure 2). This study utilized a sample size much greater than the minimum sample size need to achieve 80% statistical power.

Figure 2.

*G*Power Sample Size Calculation for Binary Logistic Regression*



Software utilized to analyze is SPSS v23. This study developed the research model by reviewing the existing literature in study. The data were analyzed to explain the relationships among the variables by employing descriptive and inferential statistical analysis.

The data was first downloaded as an Excel spreadsheet. Next, the dataset was imported using the statistical software suite Statistical Package for the Social Sciences (SPSS) version 23. The data was cleaned by examining the dataset for missing data (Field, 2013). If a value was missing, the entire case was removed from the analysis (listwise deletion). In listwise deletion, a case is dropped from an analysis because it has a missing value in at least one of the specified variables. The analysis was only run on cases which have a complete set of data.

Descriptive statistics of the data for the predictor and dependent variables were reported. Frequency and percentages summary were obtained for categorical variables while the measure of central tendencies of means and standard deviations and minimum and maximum values will be conducted for continuous demographic variables, such as age.

To address the research questions, binary logistic regressions were conducted. The significance of gender, age, education level, and education level were assessed while controlling for mileage warranty and free mounting/balance rotations. The following models were tested:

- Intention to purchase if made in USA = $b_0 + b_1 \text{ Gender} + b_2 \text{ Mileage warranty} + b_3 \text{ Free mounting/balancing/rotations}$

- Intention to purchase if American sounding name = $b_0 + b_1 \text{ Gender} + b_2 \text{ Mileage warranty} + b_3 \text{ Free mounting/balancing/rotations}$
- Intention to purchase if made in USA = $b_0 + b_1 \text{ Age} + b_2 \text{ Mileage warranty} + b_3 \text{ Free mounting/balancing/rotations}$
- Intention to purchase if American sounding name = $b_0 + b_1 \text{ Age} + b_2 \text{ Mileage warranty} + b_3 \text{ Free mounting/balancing/rotations}$
- Intention to purchase if made in USA = $b_0 + b_1 \text{ Education Level} + b_2 \text{ Mileage warranty} + b_3 \text{ Free mounting/balancing/rotations}$
- Intention to purchase if American sounding name = $b_0 + b_1 \text{ Education Level} + b_2 \text{ Mileage warranty} + b_3 \text{ Free mounting/balancing/rotations}$
- Intention to purchase if made in USA = $b_0 + b_1 \text{ Income Level} + b_2 \text{ Mileage warranty} + b_3 \text{ Free mounting/balancing/rotations}$
- Intention to purchase if American sounding name = $b_0 + b_1 \text{ Income Level} + b_2 \text{ Mileage warranty} + b_3 \text{ Free mounting/balancing/rotations}$
- Intention to purchase if made in the USA = $b_0 + b_1 \text{ Political party winner for state (Blue v. Red)} + b_2 \text{ Mileage warranty} + b_3 \text{ Free mounting/balancing/rotations}$
- Intention to purchase if American sounding name = $b_0 + b_1 \text{ Political party winner for state (Blue v. Red)} + b_2 \text{ Mileage warranty} + b_3 \text{ Free mounting/balancing/rotations}$

However, prior to conducting binary logistic regression, there were assumptions that must be met. These include (1) linearity between the continuous independent variables and the

logit transformation of the dependent variable, (2) absence of multicollinearity, and (3) absence of significant outliers (Laerd Statistics, 2019). Linearity was tested using the Box-Tidwell procedure (Laerd Statistics, 2019). Multicollinearity was tested by calculating variance inflation factors (VIF) and any VIF over 9 will be considered evidence of multicollinearity (Laerd Statistics, 2019). Standardized residuals were calculated to test for outliers. Any residual over 2.0 was considered an outlier (Laerd Statistics, 2019). Once the assumptions were tested, to explore the research questions, the independent variables of (1) gender, (2) age, (3) education level, (4) income level, and (5) political party were each entered in SPSS as separate models. The dependent variables (a) intention to purchase if made in the USA and (b) intention to purchase if a strong American sounding name were entered as separate dependent variables. Significance was assessed at the 5% level, thus any p-value less than or equal to 0.05 were deemed significant.

CHAPTER V

DATA ANALYSIS AND RESULTS

Assumption Testing

Separate Binary logistic regressions were conducted to address the study's hypotheses stated earlier. Since the aim was to isolate the effect of gender, age, education level, income level, and political party affiliation on the dependent variables likelihood to purchase if made in United States or having a strong American sounding name brand, separate regression models were tested. The presence of other independent variables in the model when conducting binary logistic regression may affect other variables. Although the effect might be small, the purpose was to analyze each independent variable separately, without the influence of other variables. Thus, separate models were tested, one for each independent variable.

Prior to conducting a binary logistic regression, there were assumptions that were tested. These included linearity between the continuous independent variables (age and income) and the logit transformation of the dependent variables, absence of multicollinearity, and absence of significant outliers (Laerd Statistics, 2019). Linearity was tested using the Box-Tidwell procedure (Laerd Statistics, 2019). Linearity of the continuous variables (age and income) with respect to the logit of the dependent variables was assessed via the Box-Tidwell (1962) procedure. A Bonferroni correction was applied using all four terms (two covariates, one independent variable, and the constant term) in the model resulting in statistical significance being accepted when $p < .0125$ ($.05/4 = .0125$) (Tabachnick & Fidell, 2014). Based on this assessment, all continuous independent variables were found to be linearly related to the logit of the dependent

variable. Multicollinearity was tested by calculating variance inflation factors (VIF) and any VIF over 9 will be considered evidence of multicollinearity (Laerd Statistics, 2019). All VIFs were below 9, thus no violations of this assumption. Standardized residuals were calculated to test for outliers. Only cases with standardized residuals within -3 and +3 were included in the analysis. What now follows are the results of the statistical analysis which included descriptive statistics of the sample as well as the results of binary logistic regression.

Results

Descriptive statistics showed an even split amongst respondents 50% were female, and 50% being male. Most of the respondents were in the age range 18-34 (48.7%), followed by a range of 35-54 (40.6%), and the smallest number of respondents was 55 & up (10.7%). Education level results showed that 20.4% had less than a college education, and 79.5% with some college or more. Income level descriptive data showed that most of the respondents had an income level in the range of \$50-75k (25.2%). The second-largest group of respondents had an income level in the range of \$75-100K (22.2%), followed by the \$35-50k range (19.3 %), \$100-150K (14.6%), less than 35k (12.9%) and the smallest number of respondents had an income level is greater than \$150k (5.7%). Party affiliation among the respondents according to zip code utilized from the purchasing data showed that 53.5% were democrat and 32.6% were republican according to national regional voting data. Additional information is depicted in Table 1.

Table 1*Descriptive statistics*

Variable	<i>N</i>	%
Gender		
Female	1477	50.0%
Male	1478	50.0%
Age*		
18-23	240	8.1
24-29	553	18.7
30-34	645	21.8
35-39	506	17.1
40-44	275	9.3
45-49	221	7.5
50-54	200	6.8
55-59	161	5.4
60-64	95	3.2
65-69	36	1.2
70-74	17	.6
75 & older	6	.2
Education level		
Less than college	600	20.3
Some college or more	2352	79.6
Income*		
<\$35K	382	12.9
\$35-50K	569	19.3
\$50-75K	744	25.2
\$75-100K	657	22.2
\$100-150K	432	14.6
\$150K+	171	5.8
Party		
Democrat	1581	53.5
Republican	964	32.6
Mileage warranty		
Checked	1842	62.3
Not checked	1113	37.7
Free mounting, balance, and rotations		
Checked	1244	42.1
Not checked	1711	57.9
Manufactured in USA		
Checked	894	30.3
Not checked	2061	69.7
Strong American sounding brand name		
Checked	549	18.6

Variable	<i>N</i>	%
Not checked	2406	81.4

* Although both age and income were measured at the nominal level of measurement, it was treated as interval for ease of interpretation in regression. Age had 12 categories, thus, ranged from 1 to 12 and income had six categories ranging from 1 to 6. Increasing values represents increasing levels of age and income levels.

Hypothesis 1: Gender

Hypothesis 1a is that females have a lower propensity than males to purchase tires if they are manufactured in the USA. This hypothesis was tested via binomial logistic regression while controlling for mileage warranty and free mounting/balancing/rotations. The overall logistic regression model consisting of gender and covariates was statistically significant, $\chi^2(3) = 164.054, p < .001$. The model explained 7.5% (Nagelkerke R²) of the variance in propensity to purchase if made in the U.S.A. Although the model was significant in predicting likelihood of tires if they are manufactured in the USA, the predictor of gender was not found to be significant, after controlling for mileage warranty and free mounting/balancing/rotations, ($B = -.218, p = .082, OR = 0.805$). Thus, the hypothesis was not supported (See Table 2). Mileage warranty ($p < .001$), and free mounting ($p < .001$) were significant predictors which led to the overall model being significant. However, the hypothesis regarding gender was not supported.

Table 2.

Results of logistic regression with gender predicting propensity to purchase tires if manufactured in the USA.

Predictor	B	S.E.	Wald	df	p	OR	95% C.I. for OR	
							Lower	Upper
Mileage Warranty	-.597	.083	51.466	1	<.00	.551	.468	.648
Free mounting	-.898	.087	106.083	1	<.00	.407	.344	.483
Gender Female v. Male	.143	.082	3.015	1	.082	1.154	.982	1.356
Constant	-.218	.078	7.734	1	.005	.805		

a. Variable(s) entered on step 1: Gender_Q1.

Hypothesis 1b is that females have a lower propensity than males to purchase tires if they have a strong American sounding name. This hypothesis was tested via binomial logistic regression while controlling for mileage warranty and free mounting/balancing/rotations, The logistic regression model was statistically significant, $\chi^2(3) = 365.847$ $p < .001$. The model explained 19.1% (Nagelkerke R²) of the variance in propensity to purchase if they have a strong American sounding name. After controlling for mileage warranty and free mounting/balancing/rotations, gender was found to be significant ($B = -.394$, $p < .001$, $OR = 0.674$). Females have a lower likelihood than males to purchase tires if they have a strong American sounding name Thus, the hypothesis was supported (See Table 3).

Table 3.

Results of logistic regression with gender predicting propensity to purchase tires if they have a strong American sounding name

Predictor	<i>B</i>	<i>S.E.</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% C.I. for OR	
							Lower	Upper
Mileage Warranty	-1.452	.105	191.741	1	<.001	.234	.191	.288
Free mounting	-1.323	.121	118.883	1	<.001	.266	.210	.338
Gender_(Female v. Male)	-.394	.104	14.315	1	<.001	.674	.550	.827
Constant	-.183	.086	4.509	1	.034	.833		

a. Variable(s) entered on step 1: Gender_Q1.

Hypothesis 2: Age

Hypothesis 2A is that the higher the age the higher the propensity to purchase if manufactured in the USA. This hypothesis was tested via binomial logistic regression while controlling for mileage warranty and free mounting/balancing/rotations. The logistic regression model was statistically significant, $\chi^2(3) = 202.421$, $p < .001$. The model explained 9.2% (Nagelkerke R²) of the variance in propensity to purchase if manufactured in the USA. After controlling for mileage warranty and free mounting/balancing/rotations, age was found to be significant ($B = .117$, $p < .001$, $OR = 1.124$). Increasing age results in an increased likelihood of purchase if manufactured in the USA. Thus, the hypothesis was supported (See Table 4).

Table 4.

Results of logistic regression with age predicting propensity to purchase tires if they are if manufactured in the USA

Predictor	<i>B</i>	<i>S.E.</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% C.I. for OR	
							<i>Lower</i>	<i>Upper</i>
Mileage Warranty	-.692	.085	65.610	1	<.001	.500	.423	.592
Free mounting	-.952	.088	116.474	1	<.001	.386	.325	.459
Age	.117	.018	40.961	1	<.001	1.124	1.085	1.165
Constant	-.674	.107	39.672	1	<.001	.510		

a. Variable(s) entered on step 1: Age Interval.

Hypothesis 2B is that the higher the age the higher the propensity to purchase a strong American-sounding name. This hypothesis was tested via binomial logistic regression while controlling for mileage warranty and free mounting/balancing/rotations. The logistic regression model was statistically significant, $\chi^2(3) = 358.379$, $p < .001$. The model explained 18.7% (Nagelkerke R²) of the variance in propensity to purchase a strong American-sounding name. After controlling for mileage warranty and free mounting/balancing/rotations, age was found to be significant ($B = -.063$, $p = .011$, $OR = 0.939$). Increasing age results in a decreased likelihood of purchase of a strong American-sounding name. Thus, the hypothesis was supported (See Table 5).

Table 5.

Results of logistic regression with age predicting propensity to purchase tires if strong American-sounding name

Predictor	<i>B</i>	<i>S.E.</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% C.I. for EXP(B)	
							Lower	Upper
Mileage Warranty	-1.431	.106	183.262	1	<.001	.239	.194	.294
Free mounting	-1.325	.121	119.291	1	<.001	.266	.209	.337
Age	-.063	.025	6.497	1	.011	.938	.894	.985
Constant	-.064	.133	.236	1	.627	.938		

a. Variable(s) entered on step 1: Age Interval.

Hypothesis 3: Education Level

Hypothesis 3A is that the higher the educational level the lower the propensity to purchase if manufactured in the USA. This hypothesis was tested via binomial logistic regression while controlling for mileage warranty and free mounting/balancing/rotations. The logistic regression model was statistically significant, $\chi^2(3) = 167.494$, $p < .001$. The model explained 7.7% (Nagelkerke R²) of the variance in propensity to purchase if manufactured in the USA. After controlling for mileage warranty and free mounting/balancing/rotations, education level was found to be significant ($B = -.271$, $p = .006$, $OR = 0.762$). Compared with less than a college education, those with a college education has a decreased likelihood of purchase if manufactured in the USA. Increasing education levels result in a decreased likelihood of purchase if made in the USA. Thus, the hypothesis was supported (See Table 6).

Table 6.

Results of logistic regression with education level predicting propensity to purchase tires if made in the USA.

Predictor	<i>B</i>	<i>S.E.</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% C.I.for EXP(B)	
							Lower	Upper
Mileage Warranty	-.593	.083	51.042	1	<.001	.553	.470	.650
Free mounting	-.890	.087	104.378	1	<.001	.411	.346	.487
Education (College v. less)	-.272	.099	7.520	1	.006	.762	.627	.925
Constant	.065	.107	.369	1	.543	1.067		

a. Variable(s) entered on step 1: Education2_cat.

Hypothesis 3B is that the higher the educational level the lower the propensity to purchase a strong American-sounding name. This hypothesis was tested via binomial logistic regression while controlling for mileage warranty and free mounting/balancing/rotations. The overall logistic regression model was statistically significant, $\chi^2(3) = 276.177$, $p < .001$. The model explained 14.3% (Nagelkerke R²) of the variance in propensity to purchase a strong American-sounding name. Although the model was significant in predicting likelihood of tires with a strong American-sounding name, the predictor of education level was not found to be significant, after controlling for mileage warranty and free mounting/balancing/rotations, ($B = 0.148$, $p = .242$, $OR =$

1.160). Thus, the hypothesis was not supported (See Table 7). Mileage warranty ($p < .001$), and free mounting ($p < .001$) were significant predictors which led to the overall model being significant. However, the hypothesis regarding education level was not supported.

Table 7

Results of logistic regression with education level predicting propensity to purchase tires if strong American-sounding name

Predictor	B	S.E.	Wald	df	p	OR	95% C.I. for	
							EXP(B)	
							Lower	Upper
Mileage Warranty	-1.286	.100	166.588	1	<.001	.276	.227	.336
Free mounting	-1.051	.111	90.188	1	<.001	.350	.281	.434
Education (College v. less)	.148	.127	1.369	1	.242	1.160	.905	1.486
Constant	-.550	.128	18.372	1	.000	.577		

a. Variable(s) entered on step 1: Education2_cat.

Hypothesis 4: Income Level

Hypothesis 4A is that the higher the income the lower the propensity to purchase if manufactured in the USA. This hypothesis was tested via binomial logistic regression while controlling for mileage warranty and free mounting/balancing/rotations. The logistic regression model was statistically significant, $\chi^2(3) = 167.053$, $p < .001$. The model explained 7.7% (Nagelkerke R²) of the variance in propensity to purchase if manufactured in the USA. After controlling for mileage warranty and free

mounting/balancing/rotations, income was found to be significant ($B = -.069$, $p = .018$, $OR = 0.934$). The higher the income level, the less the propensity to purchase if manufactured in the USA. Thus, the hypothesis was supported (See Table 8).

Table 8

Results of logistic regression with income level predicting propensity to purchase tires if manufactured in the USA

Predictor	<i>B</i>	<i>S.E.</i>	Wald	<i>df</i>	<i>P</i>	<i>OR</i>	95% C.I. for EXP(B)	
							Lower	Upper
Mileage Warranty	-.608	.083	53.008	1	.000	.544	.462	.641
Free mounting	-.902	.087	107.050	1	.000	.406	.342	.481
Income	-.069	.029	5.636	1	.018	.934	.882	.988
Constant	.087	.124	.495	1	.482	1.091		

a. Variable(s) entered on step 1: Income Interval.

Hypothesis 4B is that the higher the income the lower the propensity to purchase a strong American-sounding name. This hypothesis was tested via binomial logistic regression while controlling for mileage warranty and free mounting/balancing/rotations. The overall logistic regression model was statistically significant, $\chi^2(3) = 352.455$, $p < .001$. The model explained 11.2% (Nagelkerke R²) of the variance in propensity to purchase a strong American-sounding name. Although the model was significant in predicting likelihood of tires with a strong American-sounding name, the predictor of income level was not found to be significant, after controlling for mileage warranty and

free mounting/balancing/rotations, ($B = .032, p = .385, OR = 1.032$). Thus, the hypothesis was not supported. Table 9 depicts this information. Mileage warranty ($p < .001$), and free mounting ($p < .001$) were significant predictors which led to the overall model being significant. However, the hypothesis regarding income level was not supported.

Table 9

Results of logistic regression with income level predicting propensity to purchase tires if strong American-sounding name

	<i>B</i>	<i>S.E.</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% C.I. for <i>OR</i>	
							Lower	Upper
Mileage warranty	-1.465	.105	194.482	1	<.001	.231	.188	.284
Free mounting	-1.340	.121	122.364	1	<.001	.262	.206	.332
Income	.032	.036	.754	1	.385	1.032	.961	1.108
Constant	-.458	.150	9.302	1	.002	.633		

a. Variable(s) entered on step 1: Income Interval.

Hypothesis 5: Political Party

Hypothesis 5A is that people in blue states (in the 2016 election) have a lower propensity than people in red states to purchase if manufactured in the USA This hypothesis was tested via binomial logistic regression while controlling for mileage warranty and free mounting/balancing/rotations. After controlling for mileage warranty and free mounting/balancing/rotations, political parties were not found to be significant ($B = -.061, p = .465, OR = 0.941$). Thus, the hypothesis was not supported (See Table 10).

Table 10

Results of logistic regression with political party predicting propensity to purchase tires if manufactured in the USA

Predictor	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	<i>p-value</i>	<i>OR</i>
Mileage Warranty	-.579	.084	47.906	1	<.001	.560
Free mounting/balancing/rotations	-.880	.088	100.935	1	<.001	.415
Political party winner for state (Blue v. Red)	-.061	.083	.533	1	.465	.941

Hypothesis 5B is that people in blue states (in the 2016 election) have a lower propensity than people in red states to purchase a strong American sounding name. This hypothesis was tested via binomial logistic regression while controlling for mileage warranty and free mounting/balancing/rotations. After controlling for mileage warranty and free mounting/balancing/rotations, political parties were found to be significant ($B = 0.206, p = .039, OR = 1.228$). Therefore, the hypothesis was supported because people in blue states were more likely to purchase (See Table 11).

Table 11

Results of logistic regression with political party predicting propensity to purchase tires if strong American sounding name

Predictor	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	<i>p-value</i>	<i>OR</i>
Mileage Warranty	-1.256	.101	156.125	1	<.001	.285
Free mounting/balancing/rotations	-1.044	.112	87.590	1	<.001	.352
Political party winner for state (Blue v. Red)	.206	.100	4.247	1	.039	1.228

Test for including Political Affiliation as a demographic variable

To assess if any of the demographic variables of age, gender, income, or education level moderate the relationship between Intention to purchase if made in USA or strong sounding American name and political party winner for state, interaction terms were included, and the following models tested:

- Intention to purchase if made in the USA = $b_0 + b_1$ Political party winner for state (Blue v. Red) + b_2 Mileage warranty + b_3 Free mounting/balancing/rotations + Gender + Age + education level + Income + Gender*Political + Age*Political + education level*Political + Income*Political
- Intention to purchase if American sounding name = $b_0 + b_1$ Political party winner for state (Blue v. Red) + b_2 Mileage warranty + b_3 Free mounting/balancing/rotations + Gender + Age + education level + Income + Gender*Political + Age*Political + education level*Political + Income*Political

Regarding Intention to purchase if made in the USA, there was a significant interaction between income and political party ($B = -0.151, p = .043$). There were no other interaction terms that were significant. This suggests that income moderates the relationship between Intention to purchase if made in the USA and political party winner of the state. This information is provided in Table 12.

Table 12*Variables in the Equation*

	<i>B</i>	<i>S.E.</i>	Wald	<i>df</i>	<i>p.</i>	<i>OR</i>	95% C.I. for OR	
							Lower	Upper
mileage warranty	-.735	.095	60.468	1	.000	.479	.398	.577
free mounting	-.956	.097	97.374	1	.000	.384	.318	.465
Gender	.072	.148	.237	1	.626	1.075	.804	1.436
Age	.142	.030	22.237	1	.000	1.152	1.086	1.222
Education	-.389	.163	5.687	1	.017	.678	.492	.933
Income	.069	.054	1.595	1	.207	1.071	.963	1.192
democrat	.278	.360	.597	1	.440	1.320	.653	2.671
Gender by democrat	-.037	.189	.039	1	.843	.963	.665	1.396
Age by democrat	-.060	.040	2.233	1	.135	.942	.871	1.019
Education by democrat	.329	.232	2.009	1	.156	1.390	.882	2.192
Income by democrat	-.151	.071	4.550	1	.033	.860	.749	.988
Constant	-.557	.276	4.078	1	.043	.573		

a. Variable(s) entered on step 1: Gender * democrat, Age * democrat, Education * democrat, Income * democrat.

Regarding Intention to purchase an American sounding name, there were no significant interaction terms. Thus, neither of the demographic variables of age, gender,

income, or education moderate the relationship between Intention to purchase an American sounding name and political party winner of the state. This information is provided in Table 13.

Table 13

Variables in the Equation

	<i>B</i>	<i>S.E.</i>	Wald	<i>df</i>	<i>p</i>	<i>OR</i>	95% C.I.for EXP(B)	
							Lower	Upper
mileage warranty	-1.143	.111	106.160	1	.000	.319	.257	.396
free mounting	-1.040	.122	73.003	1	.000	.353	.278	.449
Gender	-.489	.193	6.416	1	.011	.614	.420	.895
Age	-.083	.042	3.912	1	.048	.920	.847	.999
Education	-.151	.217	.489	1	.485	.860	.562	1.314
Income	.011	.073	.022	1	.881	1.011	.875	1.168
democrat	-.178	.441	.163	1	.686	.837	.352	1.987
Gender by democrat	.144	.236	.374	1	.541	1.155	.727	1.835
Age by democrat	.017	.054	.101	1	.751	1.017	.915	1.131
Education by democrat	.372	.293	1.613	1	.204	1.451	.817	2.576
Income by democrat	-.038	.090	.182	1	.669	.962	.808	1.147
Constant	.104	.351	.087	1	.768	1.109		

a. Variable(s) entered on step 1: Gender * democrat, Age * democrat, Education * democrat, Income * democrat.

The results of the analysis of political parties suggest that purchasing a tire if it has a strong sounding American name may be influenced by the consumer's political party affiliation (democratic or republican state). The results depicted in Table 11 above suggest that blue states (i.e., democratic) were more likely to purchase tires if the brand had a strong American sounding name. Thus, one can logically deduce that trends in political views may influence purchasing behavior of customers. This study utilized a tire survey that was conducted in 2017. Political views have slightly changed since 2016. According to Gallup tracking, there were 19 blue states in 2017: (1) California, (2) Connecticut, (3) Delaware, (4) Hawaii, (5) Illinois, (6) Maryland, (7) Massachusetts, (8) Minnesota, (9) New Jersey, (10) New Mexico, (11) New York, (12) Oregon, (13) Rhode Island, (14) Vermont, (15) Washington, (16) Colorado, (17) Maine, (18) Michigan, and (19) Virginia. In 2021, democrats have full control of the legislative and executive branch in 15 states. This change in political parties from 2016 to 2020 may suggest a change in the purchasing behavior of customers when purchasing American sounding or made brands. Further studies should consider the individual's party identification instead of using the customer's state of residence. The geographical location of an individual may not accurately predict their political party.

Hypotheses Results

Table 12

Hypotheses	Citation/Construct	Supported/Not Supported
H1a: Females have a lower propensity than males to purchase tires if they are manufactured in the USA.	Simsekoglu (2018) consumer behavior theory – gender economic man theory behavioral theory approach	Not Supported
H1b: Females have a lower propensity than males to purchase tires if they have a strong American sounding name.	Simsekoglu (2018) consumer behavior theory – gender economic man theory behavioral theory approach	Supported
H2a: Higher the age the higher the propensity to purchase if manufactured in the USA.	Matsumoto et al. (2018) consumer behavior theory - age	Supported
H2b: Higher the age the higher the propensity to purchase a strong American-sounding name.	Matsumoto et al. (2018) consumer behavior theory - age	Supported
H3a: Higher the educational level the lower the propensity to purchase if manufactured in the USA.	Matsumoto et al. (2018) consumer behavior theory - education	Supported
H3b: Higher the educational the lower propensity to purchase if strong American-sounding name.	Matsumoto et al. (2018) consumer behavior theory - education	Not Supported
H4a: Higher the income the lower the propensity to purchase if manufactured in the USA.	Srikanth & Bindu Madhavi, (2021) consumer behavior theory – income	Supported
H4b: Higher the income the lower the propensity to purchase a strong American-sounding name.	Srikanth & Bindu Madhavi, (2021) consumer behavior theory – income	Not Supported
H5a: People in blue states (in the 2016 election) have a lower propensity than people in red states to purchase if manufactured in the USA.	Matsumoto et al. (2018) consumer behavior theory	Not Supported
H5b: People in blue states (in the 2016 election) have a lower propensity than people in red states to purchase a strong American sounding name.	Matsumoto et al. (2018) consumer behavior theory	Supported

CHAPTER VI

DISCUSSION AND CONCLUSION

The research findings examined relationships among demographic independent variables (IV); (gender, age, educational level, income, and party affiliation) and the propensity to purchase tires based upon the selection of one of the dependent variables, Strong American Sounding Name and Manufactured in the USA. While both dependent variables are similar in that they measure the propensity to purchase a tire, they differ in that the reason to purchase is not the same. Two specific reasons for purchase examined in the study were (1) purchase if made in the United States, and (2) purchase if the brand had a strong American sounding name. Based on the binomial logistic regression analysis, it was found that 6 out of 10 hypotheses were supported with respect to either Strong American Name or Manufactured in the USA. Of the 3 IV's H1b (female) gender, H2a (higher) age, and H3a (higher) education were supported. Those hypotheses not having any correlation with the dependent variables Strong American Sounding Name or Manufactured in the USA are H1a, H3b, H4b, and H5a.

Regarding the dependent variable Strong American Name, 3 out of 5 hypotheses were supported:

- H1b: Females have a lower propensity than males to purchase a car tire brand with a strong American sounding name.
- H2b: The higher the age, the higher the propensity to purchase a car tire brand with a strong American sounding name.
- H5b: People in blue states (in the 2016 election) have a lower propensity than people in red states to purchase a strong American sounding name.

Whereas, the dependent variable Manufactured in the USA, I was able to prove 3 of the 5 hypotheses put forth in this study:

- H2a: The higher the age, the higher the propensity to purchase a car tire brand if manufactured in the USA
- H3a: The higher the educational level, the lower the propensity to purchase a car tire brand if manufactured in the USA
- H4a: The higher the income, the lower the propensity to purchase a car tire brand if manufactured in the USA.

Thus, H2a higher age was associated with greater likelihood to purchase tires, H3a, higher education was associated with lower likelihood to purchase tires, and H4a higher income was associated with lower the propensity to purchase a car tire. H1a females do not have a lower propensity to purchase tires based upon Manufactured in the USA. This is compounded by the fact revealed through descriptive statistical analysis in the crosstab table (Appendix Table 1), a minuscule difference between males and females being less than 1 subject. Manufacturers through their own research understand that women have overtaken men in tire purchase decisions. The importance of how women research tire buying, what they look for and expect with regards to brand(s) and pricing is of greater importance to tire manufacturers., especially manufacturers entering a foreign market via an FDI.

A foreign company entering the American market will need to consider the age of the consumer will have a direct influence at the point of purchase. The higher the age of the consumer, the higher the propensity to purchase if Manufactured in the USA and

Strong American Sounding Name is slightly significant albeit the null hypothesis not rejected.

Furthermore, gender points to the fact that females have a lower propensity than males to purchase if Strong American Sounding Name. Whereas, both education (lower propensity) and age (higher propensity) thus having an inverse effect with respect to Manufactured in the USA. This concludes that tire manufacturers who seek to diversify into the American market should devote their marketing strategies and efforts to elevating and maintaining their brand attributes to align with the expectations of consumers they want to target. In a global marketplace, these variables are unconfounded by the fact that most tires are manufactured in foreign countries, yet consumers based on their demographic attributes will embrace foreignness to varying degrees to the benefit of those willing to adapt their brands.

Discussion

The first variable to be investigated was gender. Under this variable, the alternative and null hypotheses were formulated. The researcher found that females have a lower propensity to purchase car tires manufactured in the United States. However, the researcher did not establish females had a propensity to buy car tires with an American solid-sounding name. The findings are consistent with previous literature on the topic. For instance, White and Sintov (2017) established that gender directly influenced customer purchase decisions for automobile products. Yang et al. (2019) also reported that gender significantly influenced purchasing decisions whereby females like fancy automobiles and would influence their friends, family members, or colleagues to own such brands.

However, the researcher did not establish women having a lower propensity to purchase car tire brands than men do if the brand had a strong-sounding name. The findings are consistent with previous researchers such as Wang et al. (2020) who found that gender played an insignificant role in determining consumer purchase decisions as far as the brand's origin is contextualized. However, important to emphasize is that the researchers established a statistically significant relationship between gender and consumer purchase decisions. In this case, the researcher used the study findings to conclude that gender differences define consumer tastes and preferences regarding a given brand and the desire to buy it.

Researchers also sought to establish the extent to which age influenced consumer purchase decisions for car tire brands manufactured in the United States. The study findings revealed that age played an important role in influencing consumer purchase decisions for American-sounding brands. The results are supported by current literature, which suggests that age is a key demographic factor influencing consumer preference and choice for different brands in the market. Westin et al. (2018) also established that younger consumers were less likely to be loyal to brands compared to older consumers who remained loyal to certain brands throughout. Age also influences consumer purchase decisions because it directly affects an individual lifestyle, choices, and test of various products.

Education level was another variable that the researchers sought to establish how it influences consumer purchase decisions. According to the findings, education level predicted consumer purchase decisions because the more knowledgeable a person is, the higher their chances of making wiser decisions. Previous researchers supported the

results, such as Wang et al. (2017) who found that education level influences consumer purchase decisions for automobile products because highly knowledgeable individuals would spend more time looking for information on different sources on a brand before making final purchase decisions. Vongurai. (2020) also reported that education level influences consumer purchase decisions because consumers with higher education levels are better positioned to scrutinize information from various sources about a given brand regarding its features and performance before making an actual purchase. Therefore, the study findings are supported by previous research that has linked education level to consumer purchase decisions.

The next demographic variable to be examined was income level. The study findings demonstrated that income level determines consumer ability to spend. In particular, the researcher established that consumers with a higher income level would find it easy to purchase new brands in the market compared to consumers with limited sources of income. Westin et al. (2018) also reported that income level significantly influences consumer purchase decisions because the amount of money available must be allocated based on family needs. Therefore, the researcher concluded that income level is a key demographic factor influencing consumer purchase decisions for car tires.

The last variable to be examined was political party affiliation. The study's findings show that people in blue states (in the 2016 election) have a lower propensity than people in red states to purchase a strong American sounding name. Concluding what Huang and Qian (2018) said, continued research is needed. The polarized political climate is a factor that can no longer be ignored when determining consumer purchase decisions.

Conclusions and Limitations

The purpose of this quantitative correlational study was to investigate factors influencing consumer purchase decisions for tires. The researcher sought to underscore the extent to which demographic factors such as age, gender, income level, and education level influence consumer purchase decisions for new tire brands. To achieve the study objectives, the researchers adopted a quantitative research methodology. Secondary data was collected and analyzed. Based on the study findings, the researcher established a statistically significant relationship between demographic factors such as age, gender, income level, educational level, political party affiliation and consumer purchase decisions for new tire brands. Given the study findings, it is recommended that new tire manufacturers should focus on consumer demographic factors such as age, gender, income level, and education level when marketing their tire brands.

Given the study methodologies and procedures adopted, the following were some of the limitations of the study. The first limitation relates to the research methodology adopted. In this study, the researcher used a quantitative research methodology. According to Waluya et al. (2019), quantitative research methodologies are used when the intent of the research is to collect numerical data on a given study phenomenon. The use of numerical data prevents researchers from collecting primary data from participants. Quantitative research methodology may be limited in its pursuit of statistical relationships, which can lead to researchers overlooking broader themes and relationships between variables. The investigator was unable to explain the cause-effect relationship between the study variables given the focus on the use of numerical to provide a statistical relationship between the study variables. No causal relationships between the

variables could be assessed in such a design, as there was no manipulation of the independent variables. In future studies, researchers should replicate the current study using literature research methodologies such as qualitative and mixed methods approach. Qualitative and mixed methods will help researchers to collect both numerical and nonnumerical data to enhance the data analysis process, including explaining the cause-effect relationship between customer purchase decisions and demographic variables.

The second limitation of the study relates to secondary data used. In this study, only secondary data was collected to analyze the relationship between demographic variables such as age, gender, education level, income level, and consumer purchase decisions. Secondary data, although sometimes reliable, fail to capture first-hand information from participants making it challenging to investigate the phenomenon in its status. Future research should involve primary data collection for which the purpose is to analyze the factors which may lead to purchasing products. Collecting data from participants offers an opportunity to use up-to-date information to analyze a study phonon, thereby minimizing the longitudinal problems caused by secondary data documented over a long period.

Additionally, the current study focused on analyzing how demographic factors influence customer purchase decisions in general. Investigating the topic from a general perspective would limit the understating of how each of the demographics factors influence customer purchase decisions when studied independently. Future research may consider narrowing the study focus to investigating how each of the demographic factors individually influence customer purchase behavior. For instance, future research should focus on how customer psychological factors influence their purchase behaviors or the

extent to which psychological factors influence the predictive relationship between customer purchase decisions and demographic factors.

Future studies could involve the stratification of price based on factors such as discount coercion through rebate incentives. Moreover, additional research would be needed to determine covariate variables that encompass recommendations made by friends or salespeople. The data supports these, and other configurations based on the question sampling for additional studies. It would be useful to gather further knowledge at the triggering purchasing points, shopping behaviors, and the choices made. The importance of manufacturers understanding that women are decision makers and there is a greater need in keeping them as customers. Reasons why they may select one brand over another, the store they choose to make their purchase, and lastly whether price is a factor when considering advice from a salesperson or friend. Additionally, a supportive aspect to this study would be to include a mixed method approach and add a qualitative study which includes four focus groups that were done in conjunction with the quantitative survey.

The research supports a further replication study across other durable goods such as televisions, refrigerators, washers, and or dryers, which would confirm and solidify the results which were obtained here. This example of further demographic influences and behaviors in purchasing in America would provide a stable path to tread for direct foreign investment in non-normal times and diversification of the company's portfolio.

Surprisingly, from the date of this study utilizing regional voting patterns according to political party affiliation it did not yet demonstrate the political climate that has led to further polarization across the U.S., today. The study findings failed to

establish political party as a variable with a predictive relationship that exists between the other demographic factors and customer purchase decisions or behaviors. Therefore, leading the author to believe that further study along the lines of political party affiliation could be a significant factor, and enhance this study and the socioeconomic enslavement theory. Perhaps, political parties may have an effect on the relationship between purchasing a particular brand and various other demographics. More research is required to address this.

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APPENDIX

Background to This Study

For this study which was conducted during the summer months of August/September 2017 a Chinese State-Owned Enterprise (SOE) wanted to build a USA based manufacturing facility which totaled a \$1 billion (USD) investment. The manufacturing site was to be in South Carolina that was favorable to its tax status and ripe for a foreign direct investment. In August / September 2017 we surveyed distributor(s), dealer(s), and consumers across the USA as to their perception of what tier 1 through 7 tire brand name(s) they could associate. Most named brands were:

- 1) Tier 1 encompasses Michelin, Goodyear, and Bridgestone tire(s), and as such are considered the top manufacturers on a worldwide scope.
- 2) Tier 2 encompassed 97% of distributors/dealers which stated that they carried a brand within this tier group, and the most named brands within that category were Firestone, Hankook, Cooper and General. Interestingly, Goodyear brand(s), sizes and types at times were also listed as a tier 2 brand.
- 3) Tier 3 encompassed 83% of distributors/dealers which stated they carried a brand within this tier group and most named brands were Kelly, Hankook, and Uniroyal.
- 4) Tier 4 encompassed 44% of distributor(s)/dealer(s) which stated as having inventory however, there was no brand that significantly stood out.
- 5) Tier(s) 5 through 7 encompassed 36% of distributor(s)/dealer(s) which stated as having inventory however, there was no brand that significantly stood out.

Note: Major brands primarily market their flagship brands, however, they also market well known house brands, i.e., Kelly is built by Goodyear, Uniroyal is built by Michelin.

For the SOE it was important to understand the US market, and with it the variety of brand(s), size(s)/type(s), and most importantly the tier group(s), and where their own brand Manufacturing, launching, and positioning a brand are factors that a company must be careful in their undertaking. What follows is a top-down approach as to the distribution model within the U.S. understanding how, what (brands), how, and to whom they market/distribute. This also provides the SOE insight where to best position a new brand for the company and achieve desirable sales goals.

National Distribution Strategy

The distribution strategy was also important to analyze to best determine sell-in strategy along with calculations, assumptions, and preliminary volume estimates. A two-prong approach was utilized to best position the brand going forward. These were:

Targeted channel(s) of distribution

Targeted account(s) with respect to volume.

Targeted channel(s) of distribution: According to the Rubber Manufacturers Association (RMA) 2017. The following list represents the only channels of passenger tire distribution in the US.

	Passenger %	Light Truck %
a. National dealer(s)	40.2	41.8
b. Regional dealer(s)	12.1	17.9

c. Local dealer(s)	13.8	20.7
d. General merchandiser	13.4	3.3
e. Company owned outlet(s)	14.2	12.9
f. Other	6.2	3.4

Understanding these fact(s) our approach was to target the top three dealer(s)/distributor(s) channels utilizing the following rationale:

- (1) These channels are largely served by wholesaler(s) which provide a lower cost to service.
- (2) Passenger tire represents 66%, and light truck tire represents 80.4% of tire volume going through these channels.

Note: Reasons why not to utilize General Merchandiser, Company owned outlets are that it would require a national footprint of warehouses, and the investment would not consider owning company stores to provide controlled distribution, respectively.

Targeted account(s) with respect to volume: According to the RMA 2017, and targeted channel(s) would represent nearly 164M units.

	Total Tire Units (000)
a. National dealer(s)	97,200
b. Regional dealer(s)	30,950
c. <u>Local dealer(s)</u>	<u>35,400</u>
Total	163,500

Utilizing these data points. We established the following variables:

- a. number of locations,

- b. outlet(s) served per location,
- c. estimated tires per day, addressable market,
- d. penetration rate of addressable market.

We further established a volume target goal of 6 million units by pursuing the following:

- a. Large wholesalers
- b. Large retailers with wholesale operations
- c. Large retailers

Marketing via wholesaler(s):

Considering that within the US market there are 77 wholesaler(s) that own/operate 780 wholesale centers. Wholesaler(s) control an estimated 121 million replacement units as the first point of shipment from tire manufacturers. Assuming a 3.6% penetration rate within these channels would result in 4.4 million units which would equal 1.8% of the US replacement market share.

Marketing via large retailers with wholesale operation(s):

Utilizing these data points. We established the following variables:

- a. Within the US market there are 35 retailer(s)/wholesaler(s) that own and operate 139 wholesale tire centers.
- b. Retailer(s) with wholesale operations sell an estimated 21.7 million replacement tire units annually.

Assuming a 3.6% penetration rate within these channels would result in 790K total units.

Marketing via large retailer(s):

- a. Within the US market there are 21 large retailer(s) that own and operate 3,271 retail locations.

- b. Large retailer(s) that do not wholesale, control an estimated 23 million replacement tire units.

Assuming a 3.6% penetration rate within these channels would result in 850K total units. The goal for the SOE was to achieve 6 million replacement units as a market penetration and establish a manufacturing foothold in the US market.

Provenance of The Famous Tire Brands

I am certain that one has asked himself or herself what is behind these recognized tire brand names. These companies spend and have invested fortunes to promote their brands and the names of their respective companies. These companies and the priceless capital affixed to reputation, pedigree, history and traditions are in many cases century old. At the turn of the former century coupled with the industrial initiatives the rubber industry was at its dawn. In many such cases these companies were led by its founders and were private enterprises. I would like to take you down the path of what led to some of the most famous names in the tire industry today.

Michelin (French) - brothers Andre and Edouard Michelin taken over by them from their grandfather in 1832.

Pirelli (Italian) – founded by Giovanni Battista Pirelli

Bridgestone (Japanese) – founded by Shojiro Ishibashi and important to note that as he was thinking broadly of an international business and a name that would be universally accepted. He literally inverted his last name “Ishibashi” meaning stone bridge and transformed it into what is known today – Bridgestone.

BFGoodrich – founder Benjamin Franklin Goodrich. This company was later bought out by Michelin during the late 1980's and still today considered a strong brand name amongst off the road enthusiasts.

The Kelly Springfield Tire Company – founder Edwin S. Kelly considered the oldest brand in the U.S., was bought out in the 1920's by Goodyear and it wasn't until the start of the 2000's that it was completely folded into Goodyear Tire & Rubber Company.

Cooper Tire & Rubber - founder Ira J. Cooper this and the former were 2 of the most well-known U.S. brands which held an enormous wholesaler following. It was bought out in March of 2021 by the Goodyear Tire & Rubber Company.

Metzeler – founder Robert Friedrich Metzeler. This brand has an immense following in the motorcycle segment of the tire industry.

Dunlop Tires – founder John Boyd Dunlop and considered one of the eminent innovators within the industry. Today, Goodyear Tire & Rubber has distribution rights to the brand and manufacturing. Whereas, Sumitomo Tire owned by Sumitomo Bank of Japan has rights to distribute where Goodyear does not.

Companies and brands of the latter part of the 20th century:

Mickey Thompson – founder Mickey Thompson (race car driver)

Maragoni – founder Mario Marangoni

Companies where 1st may contribute to some confusions are Goodyear Tire & Rubber Company, Kleber and Barum.

Goodyear Tire & Rubber Company – Charles Goodyear was not the founder but considered as the 1st to vulcanize rubber dying 40 years before the initial start of the

company bearing his name. The industrialist Frank Seiberling forever emblazoned the Goodyear name providing tribute to his achievements.

Kleber – named after Jean-Baptiste Kleber, an associate and commander within Napoleon’s army taking part in the revolution. Hence his name was taken from the very street where the company was founded on Kleber Avenue and became the brand name. Today, Kleber is owned, manufactured, and distributed by Michelin.

Barum – founded as a Czech company and bearing the 1st two letters of the name Bata, Rubena and Mitas, all famous industrialists from the European continent and the 20th century. Today, Barum is owned, manufactured, and distributed by Michelin.

Gods and Heroes – Hercules, Achilles, and Apollo

Brands with fictitious or historic names and images are usually those Asian companies which were attempting to gain a foothold into the European markets.

Achilles – Indonesian based company aligning their company name and brand with the Greek hero and warrior of the Trojan War.

Aeolus – Chinese based company choosing “ruler of the winds and son of Poseidon” who according to mythological legend resided on the Aeolian islands. Whereby, Odysseus was able to sail through the seas in safety.

Apollo – Indian based company choosing to elect the son of Zeus and Leto both mythical gods. Representing beauty, light, music, life, death, truth and lastly order. Also noting that he was a patron of the arts and prose and was a muse’s guide.

Fenix – founded in Luxemburg producing under contract supply agreement with an Indonesian based manufacturer. Choosing to name their brand after the legendary bird and symbol of the sun. According to mythological beliefs, it flew every 500 years and

took the path from either Saudi or India towards Egypt. It is understood as legendary tales are told that he burned and was reborn from the ashes.

Hercules - founded in Findlay, Ohio and considered the oldest private brand in the U.S., took its name from Greek mythology. It was Hercules who promised Atlas to bear the weight of holding the sky only if Atlas would bring solely the golden apples. Something that was merely a coincidence was that Hercules Tire & Rubber Company in its infancy partnered with the Atlas Rubber company.

Names derived from Craftsmen: Norsemen, Vikings & Warriors

The initial discussion was the conveyance of industrialists that were legendary and provided their namesake to both company and brands, i.e., Michelin, Pirelli, Dunlop. Those that derived their names from famous inventors within the rubber industry, i.e., Goodyear Tire & Rubber Company. Individuals that were famous patriots and war heroes as in Kleber, mythical names from the Greek tradition, i.e., Apollo, Achilles, and Hercules brand(s). A notable mention in this category is the Belgian company founded by Jos Delcroix and Paula Donkers. Having two private brand(s) that also link them to Roman mythology and their portfolio of product(s) and brand(s),

Fortuna - (goddess – which in mythology offers guidance and direction to human destinies. Her image being portrayed with the wheel thus, enabling the connection as the symbol and patron to the tire manufacturer(s)).

Minerva – (goddess – has legend has it she is revered by doctors, artists, and those within the crafts. Minerva limousines once competed with Rolls Royce as the luxury vehicles of its time during the 19th & 20th century. Herein, the company founded

in Belgium wanted to reflect and give homage to the Roman goddess and the luxury brand brandishing her name on the automotive brand.

Mitas - Czech based and founded. Perhaps, a more complex intertwining of its mythological roots. The very first syllable can be attributed from Michelin the 2nd, was acquired from the structural company Veritas, a Czech/Michelin concern. Veritas, which is derived from Latin, is the Roman personification of truth.

Names derived from Geography.

Many brands derive their name recognition from the country, region, or city they originate or are founded. Here is a sampling of some:

Avon – founded in Great Britain and within the banks of a cloth mill named Avon Mills. Later being bought in 1885 by the creators of the tire brand that is known today. Avon was later bought by the Cooper Tire & Rubber Company which as mentioned above is now owned by The Goodyear Tire & Rubber Company.

Debica – founded in the Polish town bearing its name 84 years ago. Considered at its time one of the largest investments made by the Second Polish Republic. The factory itself was within the Central Industrial District.

Fulda - founded in the German town of Fulda and known for its architectural design in the baroque style.

Gislaved – founded in the Swedish town and now owned by the German manufacturer Continental.

Nokia – founded in the south of Finland and today is an iconic brand and best known for its winter tire bearing the same brand name.

Yokohama – founded in Japan and was the result of where it originated the company which created it – Yokohama Cable Manufacturing.

Westlake – founded and derives its name from the Chinese city of Hangzhou where West Lake is one of many tourist attractions.

Maloya – founded in Switzerland and named after one of the most famous Alpine passes that reside between Switzerland and Italy.

Vredestein – founded in The Netherlands. The name Vredestein is synonymous with a farm from the region of Loosduinen. In 1909 Emile Louis Constant Schiff purchased and commenced the manufacturing of rubber. Still a conversational piece of lore for this very prominent Dutch brand. It is now owned by the Indian firm Apollo.

Sava – founded in Slovenia and derives its name from the 2nd largest river after the Danube River within the Balkan region.

Hankook – founded in South Korea and simply stated meaning “South Korea”.

Whereas brands align their existence byway of local patriotism or parochial underpinnings. The following brand:

Hoosier – founded in the U.S. and deriving its namesake from Indiana. It’s also a stalwart brand and known for its racing capabilities.

Names that express Progress, Speed, Acceleration, Innovation and merely a play on words

Pace – founded in China and is synonymous with speed or the reference to “pace car”. It’s also drawing a connotation to safety in the American culture of racing.

Nexen – founded in South Korea and the abbreviation of the brand itself “Next Century Tires”.

Accelera – founded in Indonesia and synonymous with the word to accelerate or acceleration.

The Chinese firms are attempting to raise the bar in manufacturing and messaging. Here are 3 such cases:

Wanli – brand founded in China by South China Tire meaning “kilometer”.

Sonar – brand founded in China and coming from an expression “speed resistant tire”.

Linglong – brand founded in China and name in Mandarin have connotations to being “wise”, “excellent”, in addition to “fast”.

In summation, the importance of a name for a company, and the brand is very essential to the overall calculus of an FDI. The ethos of the above brands mentioned have parochial, regional, national, and mythological underpinnings. Brands no one can argue are an important part of modern society. Brands have penetrated every aspect of our daily lives: economic, social, cultural, sporting, as well as religious. Hence, in strategic brand management both business and brand are intertwined. Branding and the decisions made are a determination of the business model itself. Many of the companies mentioned above remunerate their executives on three criteria: sales, profitably, and brand equity.

This undertaking was no small task especially considering the amount of the investment of \$1B (USD).

VITA

RAFAEL A. LUGIOYO

Born, Habana, Cuba

1983 – 1991 United States Marine Corps – Captain

Camp Lejeune, North Carolina

1988 – 1994 The Kelly Springfield Tire Company

Cumberland, Maryland

(a subsidiary of The Goodyear Tire & Rubber Company)

1994 – 1996 Laramie Tire Corporation

Norristown, Pennsylvania

(Purchased by Sumitomo Tire a subsidiary of Sumitomo

Bank)

1996 – 1999 Major Tire Corporation

Miami, Florida

2000 – 2006 Tire Distributor, Inc.

Miami, Florida

(Purchased by Private Equity firm FDG & Associates and Hercules Tire & Rubber

Company)

2006 – 2014 Hercules Tire & Rubber Company

Findlay, Ohio

(Purchased by American Tire Distributors)

2014 – 2015 American Tire Distributors

Charlotte, North Carolina

2016 – present Southeastern Investments, LLC

New Ellenton, South Carolina

B.A. Political Science minor in English

Florida State University

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