**Aalto University
School of Economics**

Does brand origin influence consumer-based brand equity? A study of Finnish consumers' perceptions of premium cars

Marketing

Master's thesis

Juhani Jalkanen

2012

Department of Marketing
Aalto University
School of Economics

A!

Aalto University
School of Economics

DOES BRAND ORIGIN INFLUENCE CONSUMER-BASED BRAND EQUITY?

A STUDY OF FINNISH CONSUMERS' PERCEPTIONS OF PREMIUM CARS

Master´s Thesis
Juhani Jalkanen
08.06.2012
Marketing

Approved in the Department of Marketing ___.___.2012 and awarded the grade

_____

A"

**Aalto-yliopisto
Kauppakorkeakoulu**

VAIKUTTAAKO BRÄNDIN ALKUPERÄMAA BRÄNDIPÄÄOMAAN?

TUTKIMUS SUOMALAISTEN MIELIKUVISTA KOSKIEN LAATUAUTOJA

Pro gradu -tutkielma
Juhani Jalkanen
08.06.2012
Markkinointi

Hyväksytty markkinoinnin laitoksella ___.___.2012 arvosanalla

_____

1. tarkastajan nimi   2.tarkastajan nimi

DOES BRAND ORIGIN INFLUENCE CONSUMER-BASED BRAND EQUITY?
A STUDY OF FINNISH CONSUMERS' BRAND PERCEPTIONS OF
PREMIUM CARS

Objectives of the study

The objective of the study was to discover the relationship between brand origin and consumer-based brand equity. The study included four standard car brands and four premium car brands from four countries, which are recognized for their car production. The study explored the effect of brand origin on brand equity, and the difference in the effect between premium and standard cars. In addition, the impact of gender and product category experience on consumers' perception of premium cars originating in various countries was studied.

Methodology

The empirical data for the study was collected in February 2012 through a quantitative web-based questionnaire, which was targeted at the participants of two marketing courses in Aalto University School of Economics. A total of 102 usable responses were received. The data was analyzed with quantitative statistical methods. Two main analytical methods were Pearson correlation and one-way ANOVA. The cars' brand equity was measured with sum variables for brand quality and brand image. Each sum variable consisted of five variables. Country images of the four countries were measured with sum variables, which consisted of 7 variables. Pearson correlation was used to analyze the correlation between brand equity and country image. One-way ANOVA was used to determine mean value differences between genders, and between respondents with different product category experience.

Results of the study
The study suggests that Finnish consumers evaluate cars from certain countries more favourably than other countries. The results suggest that in some cases premium cars' brand equity is influenced by the image of their origin more than standard cars. It is also suggested that brand origin effect is greater among females than males in the premium car segment.

Keywords
Brand origin, country-of-origin effect, consumer-based brand equity, luxury goods, consumer behaviour

VAIKUTTAAKO BRÄNDIN ALKUPERÄMAA BRÄNDIPÄÄOMAAN? TUTKIMUS SUOMALAISTEN KULUTTAJIEN MIELIKUVISTA KOSKIEN LAATUAUTOJA

Tutkimuksen tavoitteet

Tutkielman tavoitteena oli löytää yhteys brändin alkuperämaan ja brändipääoman välillä. Tutkielmassa tutkittiin neljää tavallista automerkkiä ja neljää laatuautomerkkiä. Valitut automerkit olivat peräisin neljästä maasta, jotka ovat tunnettuja autonvalmistuksestaan. Tutkielmassa tutkittiin brändin alkuperämaan vaikutusta brändipääomaan, ja vaikutuksen eroavaisuutta tavallisten automerkkien ja laatuautojen välillä. Lisäksi tutkielmassa käsiteltiin sukupuolen ja kuluttajan perehtyneisyyden tuotekategoriaan vaikutusta kuluttajan mielikuviin laatuautoista, jotka ovat alkuperältää eri maista.

Tutkimusmenetelmät

Tutkimusaineisto kerättiin helmikuussa 2012 internetpohjaisella kyselykaavakkeella, joka kohdistettiin kahden markkinnoinnin kurssin osallistujiin Aalto-yliopiston kauppakorkeakoulussa. Kyselyyn tuli 102 käyttökelpoista vastausta. Aineistoa käsiteltiin tilastollisilla menetelmillä, joista päämenetelminä käytettiin Pearsonin korrelaatiota ja yksisuuntaista varianssianalyysia. Automerkkien brändipääoma mitattiin brändin koettua laatua ja brändimielikuvaa mittaavilla summamuuttujilla, jotka kumpikin koostuivat viidestä muuttujasta. Vastaajien maamielikuvia neljää maata koskien mitattiin maamielikuva-summamuuttujalla, joka koostui 7 muuttujasta. Pearsonin korrelaatiolla tutkittiin brändipääoman ja maamielikuvan välistä yhteyttä. Yksisuuntaista varianssianalyysia hyödynnettiin sukupuolten ja tuotekategoriaan perehtyneisyyden avulla muodostettujen ryhmien välisten eroavaisuuksien tutkimiseen.

Tutkimuksen tulokset

Tutkielman tuloksena esitetään, että suomalaiset kuluttajat arvoivat tiettyjen maiden automerkkejä suotuisammin kuin toisten maiden automerkkejä. Tutkielmassa ehdotetaan, että tietyissä tapauksissa brändin alkuperämaa vaikuttaa laatuautojen brändipääomaan enemmän kuin tavallisten automerkkien brändipääomaan. Lisäksi havaittiin, että brändin alkuperämaan vaikutus on suurempi naisiin kuin miehiin laatuautoluokassa.

Avainsanat
Brändin alkuperämaa, alkuperämaaefekti, brändipääoma, luksustuotteet, kuluttajan käyttäytyminen

Contents

List of tables and figures

1 Introduction

In a competitive environment a brand comes useful to its owner since a brand can be used to differentiate one's offering from the competition (Keller 2003, 4). Brand building and brand management have become key areas of marketing because a strong brand can be a competitive advantage to its owner (Yasin et al. 2007). When supply and demand define the price of the offering, marketing can be leveraged to increase demand, which in turn may improve both short-term and long-term profitability of the business. (Kotler 2003, 6) A brand is one of the few factors that can bring long-term competitive advantage to a business (Kapferer 2008, 1). Consequently, understanding brands and brand management are essential to marketing.

Brand equity is a central construct in marketing theory. It has been under scrutiny of marketing academia since 1980's (Keller 1993). Brand equity is defined by Keller (1993, 8) as "the differential effect of brand knowledge on consumer response to the marketing of the brand". Farquhar (1989) simplifies brand equity to the added value the brand offers to the consumer. A marketer must understand how brand equity is formed and how it can be leveraged in communication about the offering.

Consumers evaluate brands in the selection process in order to purchase goods on a daily basis. Some brands spread from one country to another and ultimately become global brands whereas some brands remain only locally available within a limited geographic area. Both an increase in global trade and technological development in manufacturing processes, communication and transportation have allowed for a transformation from local to global business environment in which borders between countries are of less importance than previously. In such an environment it is common that a brand originating in one country enters another market in a different country. Then the consumers on the new market are introduced brands of foreign origin. Additionally, manufacturing of goods can be transferred to a lower-cost country. Therefore a brand may have two origins, namely brand origin and country of

manufacture, which are the two elements of country-of-origin construct. Country-of-origin effect is the influence of a brand's origin and country-of-manufacture on a consumer's evaluation of the brand (Samiee 1994). The purpose of this research is to explore the effect of brand origin on consumer-based brand equity.

According to Yasin et al. (2007, 38) those brands originating in a country with favourable image held by consumers "generally find that their brands are readily accepted" whereas brands with less favoured country-of-origin do not. Vigneron & Johnson (2004, 484) notice "little is known about the influence of luxury on the perception of brands". The question about country-of-origin in the context of luxury may arise for example when a consumer evaluates premium and economy car brands. How does a consumer perceive the brand image of a car when the brand origin information is available? What if the country-of-manufacture information would be perceived a bad fit with the brand origin of a premium brand? For example, would the brand image change if an American premium car brand is manufactured in a outside its perceived country-of-origin? Would this deteriorate the perceived quality of the brand? Would the consumer still accept the higher price? On the other hand, does brand origin or country-of-manufacture matter to consumers who buy economy cars? A brand may make heavy investments to emphasize a brand origin that fits well with its brand image while in reality the manufacturing might be in a less favourable location that potentially influences consumers' brand perceptions. The next chapter introduces the research problem.

The key difference between the current research and previous research is special emphasis on Finnish consumers who may be unaware of the origin of the brands they use on a daily basis. This research will look into a new product category where such studies have not been conducted yet. Researchers in the field suggest for future research in which the relationship between COO and brand equity should be studied in product categories such as cars and in new countries. The research has previously taken place for example in USA, Japan, Tunisia.

To the best knowledge of the researcher the current field of research lacks a conceptual framework that could explain the role and effect of brand origin in relation to premium and economy products within a single product class. Buil et al. (2011) propose that country-of-origin may impact brand equity of high involvement products and therefore request further studies in the area. Keller & Lehmann (2006) ask to what extent does country image or equity impact the equity of brands from that country? Jung & Sung (2006) call for more research on country-of-origin and brand equity of brands in different price points.

The objective of the study is to discover the relationship between brand origin (BO) and consumer-based brand equity, which is consumers' perception of a brand's quality, brand image and attitude towards the brand. The study focuses on a group of brands with four different brand origins and two degrees of premiumness. The product category chosen for the study is sedan cars, which are widely available in most parts of the world, not the least in Finland. Each of the four countries, namely USA, Japan, Germany and Italy are represented by two car brands. One of the selected brands in each country can be considered as a premium car brand and the other one a standard car brand.

The research questions are

- does brand origin influence consumer-based brand equity?
- does the impact of brand origin on consumer-based brand equity differ between standard and premium car brands?

The research focuses on exploring the effect of country-of-origin of a brand on consumer-based brand equity. The consumer perspective is specifically chosen due to the importance of understanding which factors influence consumers' evaluation of brands in the ever more increasing variety of local and foreign brands available to consumers. Faircloth et al. (2001) stress the importance of understanding the building blocks of brand equity rather than measuring the financial value of brands. Therefore the research places its emphasis on studying the effect of country-of-origin on consumer-based brand equity.

As a result of defining a research problem that focuses on consumer-based brand equity, financial brand equity and brands' financial valuation are ignored in the research. Keller (1993) defines financial brand equity as a measure for evaluating the brand's financial value for accounting purposes. Such information is necessary in large corporate mergers where brand is sold to another party.

Consumer-based brand equity is a consumer's brand knowledge driven reaction to the marketing activities of a brand. More favourable reaction by the consumer to the marketing activities of the brand, the higher is the brand equity of the brand. Favourable consumer reactions are positive associations with the brand and increasing purchase intent for example. (Keller 1993) According to Kotler (2003, 218) financial brand equity measures the financial value of the brand. Therefore it is different from consumer-based brand equity. Financial brand equity of the world's most valuable brands is measured by Interbrand annually (Aaker & Joachimsthaler 2000, 18).

The study begins with an introduction to the research topic in chapter 1, and the research questions are introduced. Then the literature is reviewed regarding country-of-origin construct in chapter 2, and brand equity in chapter 3. Luxury goods are also discussed in chapter 3. Drawing from the literature, several hypotheses are developed in chapter 4. In order the test the hypotheses, the methodology of the study are presented in chapter 5, and the findings are presented in chapter 6. Chapter 7 concludes the study and discusses managerial implications. In addition, suggestions for future research are made in Chapter 7. Chapter 8 lists the references used in the study.

The next chapter is the literature review where key literature regarding country-of-origin and brand equity are reviewed. The literature review will introduce brand equity theory and present the critique to country-of-origin research.

2   Country of origin

The literature review in this study consists of three themes that are interrelated to each other in addressing the research questions. The literature review begins with country-of-origin (COO) literature. It then continues to review brand literature with an emphasis on brand equity. Luxury goods are discussed in the end of the literature review. The purpose of the next chapter is to present the key theories on country-of-origin.

2.1 Country of origin

The role of country-of-origin in consumer's product evaluations and purchase behaviour has been discussed in more than 400 peer-reviewed academic publications (Usunier 2006). There are various empirical findings and theories resulting from this vast pool of data. For a comprehensive review see Samiee (1994) and Josiassen et al. (2008). On the other hand, country-of-origin research has been criticized of lacking a solid theoretical framework (Thakor & Kohli 1996, Usunier 2006). Although the existence of county-of-origin effect has been generally accepted (Bilkey & Nes 1982), the relevancy of country-of-origin research has been questioned (Samiee 2004, Usunier 2006). The study adopts the general country-of-origin view (Bilkey & Nes 1982, Chattalas et al. 2007), which acknowledges the existence of country-of-origin effect in relation to consumers' product evaluation and purchase behaviour.

The first author to reveal the link between COO and consumers' product evaluation was Schooler (1965). Strong research interest in the field has resulted in widespread empirical findings and various theories that aim to explain the effect of country-of-origin in product evaluation process (Samiee 1994, Josiassen et al. 2008). Both Thakor & Kohli (1996) and Usunier (2006) have specifically criticized lack of a theoretical framework that succeeds in explaining the fundamental relationships in the field of research. Due to the vast interest towards the topic of research there are competing schools of thought, which aim to assure each other about the validity of their theoretical

approach to COO. Despite being generally accepted in the scientific community to contribute to consumers' product evaluation, the relevancy of country-of-origin effect as a field of research has been questioned, and the importance of researching the effect challenged (Samiee 2004, Usunier 2006).

This study adopts the general view (Bilkey & Nes 1982, Chattalas et al. 2007) that COO does influence consumers' product evaluation and purchase behaviour. In order to judge product quality, consumers use intrinsic and extrinsic cues. COO is an extrinsic cue that potentially gives consumers information about the qualities of a product. (Rao and Monroe, 1989)

In the next chapter COO is explained in order to gain a comprehensive picture of the construct. The concept of COO is presented in addition to the reasoning for choosing brand origin (BO) as the summary construct for COO.

2.2   Product origin and brand origin

The origin of a product can be defined in several ways depending on the product's country of design, country of manufacture and origin of the parts. Thakor & Katsanis (1997) define COO of a product as the country where the product has been manufactured. The definition is insufficient due the fact that it ignores the possibility that a product has several stages in the manufacturing process and the stage take place in different countries. Design, manufacturing of the parts and assembly may have been separated geographically to locations that possess competitive advantage in the assigned tasks. In Papadopoulos' (1993) view COO is the country in which the final assembly results in a ready-made product. However, this view fails to acknowledge the stages preceding the final assembly, thus resulting in a vague definition for COO. Another approach to COO considers country-or-origin as the location where the headquarters of a company reside (Johansson et al 1985). COO has been defined also as the location where the design process is conducted (O'Cass & Lim 2001). In conclusion, the COO construct is somewhat subjective to the importance that is put on each stage of creating

a product from raw materials. With an increasing number of global manufacturing and sourcing processes that both small and large companies have set up during recent decades, the complexity of production has resulted in difficulty to unquestionably define the COO of a product.

Similar to defining COO, brand origin has several definitions. Brand origin has been defined as the country of the headquarters (Johansson et al. 1985). Thakor & Kohli (1996) define brand origin as the country to which the brand is associated with and linked by the brand's target group. In such a situation the target group may not have knowledge of the true origin of the brand or the product but there is a country that is generally associated with the brand. As a result, brand origin may differ from the COO taking into account any of its definitions. Some brands have origin that is natural and generally accepted (Al-Sulaiti & Baker 1998). Coca-Cola is world-famous for its American origin (Cai et al. 2004). On the other hand, consumers may struggle to recognize the origin of a brand up until to the situation where consumers associate the brand with a wrong country (Samiee 2005). This study adopts the view by Thakor & Kohli (1996) that brand origin is the country to which consumers link the brand. In this study brand origin is also known as country-of-origin (COO).

The country of origin is even more difficult to define for hybrid products, which are produced of parts originating from several countries. Such products have become increasingly common due to internationalizing business processes and manufacturing and increasing global competition in any industry. (Jaffe & Nebenzahl 2006, 112-115) The production of a hybrid product takes place in several countries. Thus the origin becomes blurred. In such case consumers evaluate the product through the country images of the parts country-of-origin if the origin information is available. A Japanese car brand may have assembly lines in Japan but source parts from China and South Korea. According to Ahmed & d'Astous (1993) definition of a hybrid product, the production takes place in one country but the brand has its origin in another country. The image of both manufacturing country and brand's country-of-origin would be used in consumers' product evaluation. A Japanese car brand that is being manufactured in South Korea illustrates the situation.

Chao (1993) has forecasted significant increase in the number of hybrid products. One company or a group of companies in collaboration increasingly organizes manufacturing of a product in several countries. Thus the number of manufacturing countries equals to the number of country-of-origins. The assumption is supported by Johansson & Nebenzahl's (1986) remark that a product may have several country-of-origins. For example Nokia manufactures mobile phones in many countries in addition to the country-of-origin of Nokia brand and their products have parts produced in a number countries.

2.3   Country image

Country image is developed in consumers' mind as a set of associations linked to a particular country (Aaker 1991, 128). Similarly Bilkey & Nes (1982) define the image of a country as a collection of beliefs about the country and its products held by a consumer. For instance in car category, a consumer evaluates quality, price and design among other features. Han & Terpstra (1988) define country image as general perception by consumers about a country's product quality, technical features and value. Familiarizing oneself with a country's products may help a consumer to develop the country image (Erickson et al. 1984). Country image held by a consumer may consist of both fact-based information about the country and its products and emotional perception of the country or its inhabitants (Papadopoulos & Heslop 2000).

Jaffe & Nebenzahl (2006, 23) have presented the three key characteristics of country image construct. First, a country's image can be excellent in relation to other countries' images in some attributes but not in all attributes. A country may have good image in terms of design or quality control but have only mediocre image in price-to-quality ratio. Secondly, a country's image varies between product categories. In product category A, the image of a country is weak whereas in category B it has superior image to other countries. Last, country image is developing continuously. Country image held by a consumer influences the consumer's evaluation of products from that country. However,

the consumer's perception of a country may change due to exposure to products of the particular country. As a result, country image is re-evaluated and possibly modified by the consumer. Two constructs related to country image are discussed next.

The image of a country held by consumers can act as a halo construct to the country's products. If a consumer has little knowledge of the country's products, the product evaluation is likely to be influenced by the country image. Halo effect takes place when a consumer generalizes his beliefs of a country's products based on the country's image instead of information about the products true qualities or due to lack of such information. (Han 1989). A brand unknown to consumers in another country is likely to be evaluated based on the image of its country-of-origin. Chinese-made car brands for instance are not well known for their features in Europe, thus resulting in evaluation by European consumers according to the country image of China held by the consumers in Europe.

In a situation where a consumer has the possibility of familiarize him with a product and evaluate it, the combination of information and beliefs held by the consumer about the product can work as a summary construct for a country's all products. The consumer generalizes the product evaluation to all products of the country from where the evaluated product originated. (Han 1989) Country image and product evaluation are prone to change according to the new information and experience that consumers gain regarding the country and its products. The experience does not necessarily need to be personal but information shared among consumers and also advertising contributes to the summary construct (Jaffe & Nebenzahl 2006, 39).

2.4   Country-of-origin effect

Country-of-origin effect has received plenty of attention from academics around the world. Usunier (2006) calculated over 400 peer-reviewed articles focusing on country-of-origin effect. These studies look into the topic from various perspectives, including various countries of origin, several product categories, differences in the effect between nations or other demographic factors. To the knowledge of the researcher, brand-origin-

effect has not been studied. The constructs, country-of-origin and brand origin are very similar by definition and considered as the same in this study.

Country-of-origin effect is defined as the influence of a brand's country-of-origin on the perception of the brand and its attributes by consumers (Samiee 1994). Country-of-origin effect may have either positive or negative impact on how the brand is perceived. Additionally, the effect can either cover all brands originating from one country or simply influence the perceptions in fewer or only one product category. (Bilkey & Nes 1982) Consumers' perception of a brand can change due to the country-of-origin, thus having implications to consumer behaviour and ultimately buying intention for the brand. The link between country-of-origin and purchase behaviour has been established in the literature and it has resulted in academic interest towards country-of-origin research (Pappu 2006). The existence of country-of-origin effect is widely accepted (Bilkey & Nes 1982, Han & Terpstra 1988) since country-of-origin has been shown to influence consumers' product perceptions depending on product category and country-of-origin (Al-Sulaiti & Baker 1998)

Consumers base their product evaluations on intrinsic and extrinsic cues about a product. The information is not always comprehensive which forces consumers to base their evaluations on incomplete information that is combined of cues available. Lack of intrinsic cues is likely to lead consumers to base their evaluation on extrinsic cues. (Samiee 1994) Intrinsic cues include such as technical solution applied to the product, size and design. Country-of-origin and price are extrinsic cues (Papadopoulos & Heslop 2000) Such cues are delivered to consumers through various channels but not the least in advertising where cues like country-of-origin can be emphasized.

According to Thakor & Katsanis (1997), consumers perceive country-of-origin to influence product quality. Similarly, O'Cass et al. (2000) found out that consumers' perceptions of brands are influenced by country-of-origin. However, less relative weight is put on country-of-origin cue if other cues such as durability and brand name are available. The strength of country-of-origin effect is determined by consumers' familiarity with the object in evaluation. (Johansson et al. 1985) According to Josiassen

et al. (2008), country-of-origin effect on consumers' product evaluation is stronger when consumers' familiarity with the product is poor.

Country-of-origin effect differs between product categories (Al-Sulaiti & Baker 1998). A TV set originating from Japan is likely to receive consumer evaluations that are somewhat different from the evaluations of a Japanese car brand. Roth & Romeo (1992) studied that consumers favour products of a country whose country image the consumers associate positively in such attributes that are relevant to the product category in question. Preference for a Japanese car is more likely if the consumer perceptions of Japanese products and the country are relevant to the product category, e.g. quality and durability.

According to Nagashima (1970), product evaluations within a product category vary according to the country-of-origin when the only cue given to consumers is country-of-origin. Both the nationality of the consumers and country-of-origin of the product in evaluation influenced on price-quality perceptions as well as consumer preference. Thus, consumers prefer a product from one country to a similar product from another country (Samiee 1994). Consumers generally prefer products of more developed countries over those of less developed countries (Bilkey & Nes 1982).

Country-of-origin effect is also dependent on the nationality and culture of consumers (Al-Sulaiti & Baker 1998). Han & Terpstra (1998) found out that there is difference in Japanese and American consumers' evaluations. According to Shimp & Sharma (1987), consumers often prefer domestic products. Patriotism and willingness to support domestic manufacturing and trade are usually reasons for this (Jaffe & Nebenzahl 2006, 87). However, there are differences between nations in the preference of domestic products as consumers in some countries are more acceptable to imported goods than others. (Al-Sulaiti & Baker 1998). Consumers' perception of similarities between their own culture and the culture of the country-of-origin influence the perceptions about the country-of-origin (Han 1990).

Country-of-origin effect is strengthened by consumer ethnocentrism in which domestic culture is emphasized at the cost of foreign cultures. Consumers in countries with high ethnocentrism prefer a domestic brand to a foreign equivalent. This can be a result of suspicion towards foreign products. In some cases ethnocentrism is purely irrational if foreign-made goods deliver better performance at similar or lower cost. (Shimp & Sharma 1987). Consumer ethnocentrism is product category specific (Balabanis & Diamantopoulos 2004). According to Klein et al. (1998), consumer hostility towards foreign products may appear. Underlying reasons for such consumer behaviour are usually related to the state of the consumers' home country or the poor relationship between consumers' country and the country-of-origin of the foreign goods.

Demographic and social factors influence the country-of-origin effect. Country images and evaluations of countries' products are influenced by consumers' age, sex, education and income. Women and young people have been found to rate foreign goods more favourably than men and elderly. Generally, consumers with good educational background and income that is above the country average are more positive towards goods of foreign origin. (Wall & Heslop 1986).

Country and national stereotypes contribute to the country-of-origin effect. According to Chattalas et al. (2007) "stereotypes are beliefs about the characteristics, attributes and behaviours of certain groups". Country-of-origin effect is influenced by normative, cognitive and affective factors of national stereotypes (Heslop & Papadopoulos 1993). According to Verlegh & Steenkamp (1999) a cognitive stereotype is utilized when product quality evaluations are based on the country-of-origin cue. As such a consumer may generalize the evaluation of a specific product category to imply overall quality and features of a country's products. An affective stereotype is an emotional association in a consumer's mind regarding a country or a nation. In this case the country-of-origin has emotional and symbolic value to the consumer, and influences the consumer's evaluation and perception of the country's products. Third, normative stereotypes are those social norms that consumers perceive to be linked with countries and nations. A consumer can perceive a social norm to be a must to buy certain products only from domestic suppliers. On the opposite, the consumer may refrain from purchasing goods

with a particular country-of-origin due to a negative stereotype of the country or nation. Figure 1. presents the factors of the country-of-origin effect.

Figure 1. The factors of the country-of-origin effect. Adapted from Chattalas et al. (2007).
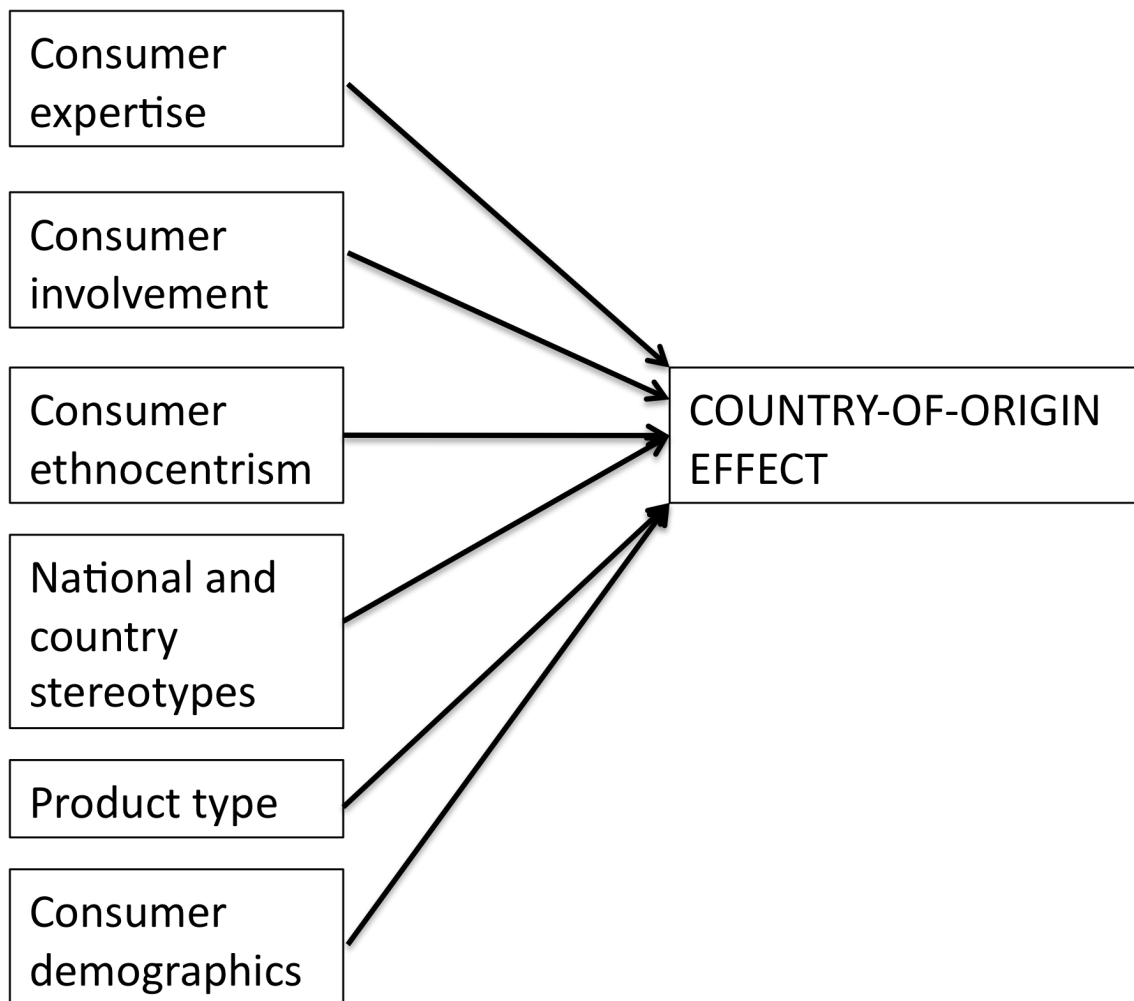
2.5 Critique and challenges of the country-of-origin construct

Country-of-origin effect is one of the fields of research in marketing and consumer behaviour that have received plenty of interest from the academics. It is a controversial research area due to the arguments that either support or question the relevancy of

country-of-origin research. (Bloemer et al. 2007) As discussed earlier, country-of-origin construct has received attention from many researchers in various contexts and under diverse conditions. Practical implications in addition to theoretical contribution to the research literature have been published in hundreds of academic articles (Laroche et al. 2005). Despite the wide array of literature, general consensus regarding the role of country-of-origin effect in consumers' product evaluation has not been reached. Additionally, the existence of country-of-origin effect has been challenged. (Josiassen et al. 2008)

The relevancy of country-of-origin research has been questioned by claiming inexistence of a link between the research and the reality of business (Usunier 2006). According to Samiee et al. (2005), consumers' ability to recognize the country-of-origin of brands is weak. In this light, one could conclude that consumers do not pay much attention to the country-of-origin and it is not relevant to them if they are not able to define the country-of-origin of brands. Josiassen et al. (2008) argue that the case is the opposite since the role of country-of-origin in product evaluation is emphasized if the consumer is unfamiliar with the product. In such a situation country-of-origin acts as an extrinsic cue to the consumer.

According to Usunier (2006), country-of-origin is ever more difficult to define due to increase in multinational companies and their global business practices that involve production in several countries. It is not uncommon to manufacture a car of parts originating in several countries. In addition, design process could have taken place in yet another country, which may differ from the location of the headquarters of brand. In such a situation, consumer pays attention to the brand origin, the country that is associated with the brand in consumers' mind (Samiee et al. 2005). As a result, companies put emphasis on the successful communication of their brand origin to consumers if the brand origin is more favoured by consumers than the country-of-origin (Usunier 2006). The next chapter continues to discuss brands, brand equity and the luxury goods.

3   Brand equity

3.1   Brand

Brands have spread widely in the contemporary world. Brands are ubiquitous in the daily lives of humans yet more are born every day. Especially visible brands are in areas where goods and services are sold to consumers or other parties with capability to exchange money to the brand. Brands are created to represent an object and give meaning or add value to it. Brands are also maintained and developed in order to gain long-term profit from them. For a long time brands have been used to differentiate one's products from a competitor's similar products (Aaker 2003, 3). Attaching a label to a products, thus creating a branded product requires a long-term effort and investment in generating awareness for the brand and building an image for the brand (Kotler 2003, 216).

There are several definitions for the term brand. Aaker (1991, 7) defines brand as a name or symbol attached to a product or service in order to differentiate from competing products or services. The brand communicates the origin of the product. According to Keller (2003, 4) a brand is a product that uses a symbol to add a new dimension to the product in order to be different from the products that fulfil similar needs. The difference may relate to tangible product features e.g. performance or intangible features like the values that the brand represents.

According to Keller (2000, 9-11) brands are useful to both consumers and brand owners, which are often companies or other organizations. Marketers try to attach memorable and favourable associations in consumers' mind to the product by adding a brand to it. Thus marketers create an image for the brand. The brand aims to communicate its features to consumers. This may lower consumers' perceived risk of purchasing the brand. Companies value brands because they offer a means of influencing consumer

behaviour in the form of increased brand loyalty, which would then lead to securing future profits.

Kotler (2006, 249) expands the definition of brand to cover everything that the product or service represents to consumers. According to this view the brands are in consumer's mind. Therefore brands should aim to gain position as consumers' favourite brands. In order to increase its equity the brand should gain loyalty of the consumers. In other words, a loyal consumer chooses the brand among all options as a result of distinctive position in the market and favourite status in consumers' mind.

According to Kapferer (2008, 3) any organization has an opportunity or need for leveraging brands. Brand is a marketing tool in competition of customers against other organizations. The importance of brands in marketing is verified by the view of Kotler & Armstrong (2006, 243), which claims that the most distinctive marketing tool for a marketer is to create and develop brands. Brands can help communicate and build relationships with target groups and influence their consumption habits. Keller (1993) claims that the ability of the brand to influence the behaviour of its target group comes down to the positive or negative associations that the brand generates in the minds of the target group.

Brand is divided into brand identity and brand image. Brand identity is the image of the brand desired by the brand's owner to exist in its target groups' mind. Brand image is a set of associations and beliefs about the brand and its features. (Aaker 1992, Keller 1993) Aaker & Joachimsthaler (2000, 27) describe brand identity as the brand owner's vision of how the target group should imagine the brand. The foundation of a strong brand is distinct and diverse brand image, which comprises of a set of brand associations (Aaker & Joachimsthaler 2000, 40). In order to create a brand the brand owner has to design a brand name, symbol, colour, logo and slogan (Kotler 2003, 216). Brand identity sets the guidelines for the purpose and goal for the brand, and it should be used as basis for developing the brand. (Aaker & Joachimsthaler 2000, 13).

Brand image is a tactical short-term competitive advantage to a company whereas brand equity is strategic advantage that has long-term implications the company. It is used for the basis of solid and stable competitive edge (Aaker & Joachimsthaler 2000, 9). A brand that has high awareness among its target group can retain its customers and increase customer loyalty, which may allow for price premium for the brand (Kotler 2003, 216).

3.2   Brand equity

There are two main approaches to brand equity research (Aaker 1992, Keller 1993). First, the research may focus on the customer-based brand equity, which is "the differential effect of brand knowledge on consumer response to the marketing of the brand" (Keller 1993, 2). Secondly, when the financial value of the brand is investigated the measure is financial brand equity. Due to the two fields of research brand equity studies have implications both to understanding the financial value of brand and developing marketing strategies that leverage brands in order to increase businesses' profitability. The current research focuses on the strategic value of brand equity to marketing, marketing profitability and impact on the brand's target group. Country-of-origin research has used two frameworks to describe the brand equity construct (Ashill & Sinha 2004, Pappu et al. 2006, 2007) by Aaker (1992) and Keller (1993)

Both marketing academics and professionals emphasize the importance of brand equity to firms (Biel 1992, Shocker et al. 1994). The current research adopts the view of Faircloth et al. (2001), which defines brand equity's most important role as the measure for consumer's response upon encountering the brand's marketing activities.

Farquhar (1989) defines brand equity simply as the added value the brand attached to the product. Generally brand equity is defined as the influence the brand has to the consumer that is unique and would not exist without the brand's presence (Keller 1993). According to Keller (2003, 42) such brand equity exists if a group of consumers react to a brand's marketing differently than to marketing of another product that fulfils the

23

same need but does not have a brand attached to it. A brand is the factor that makes one product more appealing to consumers than the other product due to the equity the brand possesses.

According to Aaker's (1991, 15) definition that has been accepted widely in brand literature brand equity is "a set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers". The four dimensions of brand equity are brand awareness, perceived quality, brand associations, and brand loyalty (Buil et al 2001). Research on country-of-origin's effect on brand equity is mostly based on these two models. However, with their brand equity model, Hamzaoui et al. (2011) present a simplified approach to conceptualizing brand equity by taking into account only the main dimensions of brand equity – brand image and brand quality. This model is adopted in this study for its simplistic and still comprehensive nature. Next the brand equity models of Aaker (1991, 15) and Keller (1993) are described in detail.

3.3   Aaker's four dimensions of brand equity

Brand equity is a multi-dimensional construct. The dimensions are presented in figure 2. The dimensions are brand awareness, brand loyalty, perceived quality and brand associations. More favourable and stronger dimensions strengthen the response of the brand's target group to the brand's marketing activities, thus increasing brand equity. On the other hand, low perceived quality, low brand awareness, deteriorating brand loyalty and weak brand associations decrease brand equity of the brand. (Aaker 1991, 15).

Figure 2. Four dimensions of brand equity. (Aaker 1991)
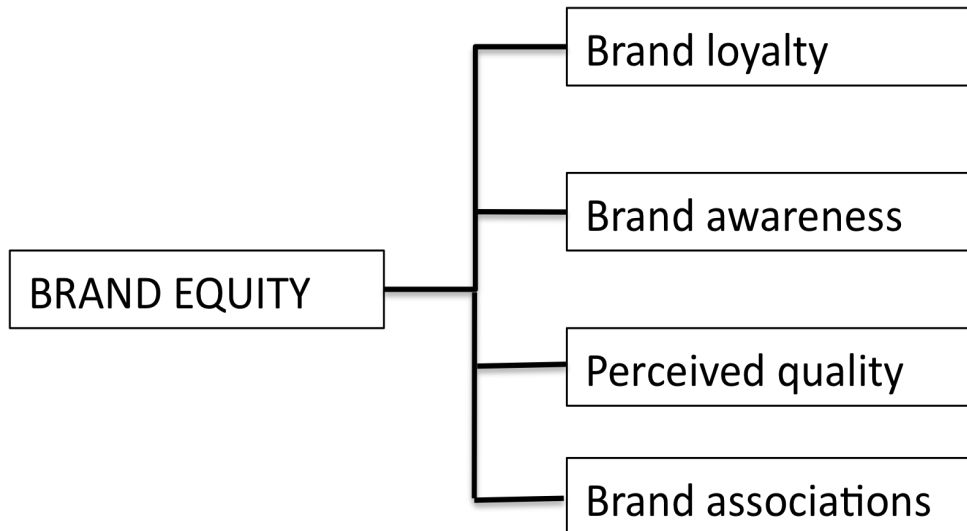
Brand awareness is the ability of consumers to recognize and recall the brand in a certain product category (Aaker 1991, 61). *Brand loyalty* appears both as consumers' attitude and behaviour towards the brand. Aaker (1992) defines brand loyalty as consumers' brand preference and stable brand usage. Brand loyalty can be seen as consumer attitude towards the brands in a way that the brand is the preferred choice among all options (Yoo et al. 2000). *Perceived quality* is the general belief of consumers about the quality and superiority of the brand compared to competing products. *Brand associations* are beliefs, thoughts and images about the brand (Aaker 1991, 109).

3.4 Keller's concept of customer-based brand equity

Keller (1993) has presented a model of customer-based brand equity that is defined as "the differential effect of brand knowledge on consumer response to the marketing of the brand". Therefore it is possible for a brand to possess either positive or negative customer-based brand equity depending on the nature of consumers' reaction to the brand's marketing mix elements. The reaction is to be compared to the reaction that a

competing product's same marketing mix elements receive. More favourable the reaction in comparison, the higher customer-based brand equity. Brand equity is created through consumers' favourable and unique brand associations.

Brand equity builds up of a consumer's brand knowledge that is an associative network model in a consumer's memory. The model consists of brand image and brand awareness. Brand image is a set of associations about a brand, and the associations can be divided into three groups: attributes, benefits, and attitudes. One attribute of a brand is brand origin, and therefore the country-of-origin of a brand can influence the brand image. Uniqueness, favourability and strength of the associations contribute to the formation of brand image.

The other element of brand knowledge is brand awareness. Keller separates brand awareness to two elements: the ability to recall a brand and the ability to recognize it. If a consumer is able to recall and recognize the brand at the moment of selection and purchase of a product, the brand has enjoys brand awareness. In a situation where a consumer is about to purchase a laundry detergent a brand with high brand awareness is likely to be familiar to the consumer. The consumer may, in such case, recall the brand without seeing it already at the stage of planning to purchase a product of the laundry category or recognize it on the shelf.

Brand marketing activities contribute to consumers' brand knowledge. A consumer gains knowledge about a brand through interaction with the brand, and the knowledge of the brand impacts on the brand associations held by the consumer. Brand knowledge contributes to the reaction of the consumer to the brand's marketing activities. When a consumer sees an advertisement by Toyota, the brand image the consumer has about Toyota moderates the effect that the advertisement has in the consumer. If the consumer has strong, favourable and unique associations with Toyota – as a car of high quality and fair price – the consumer may consider purchasing a Toyota. In order to leverage the associations with Toyota in marketing and brand development, marketers can study the nature of the associations and adjust the direction and scale of their marketing mix accordingly.

The brand equity models of Aaker and Keller assume that a favourable brand image increases brand equity. On one hand, Aaker's model brand associations equal to brand image. On the other hand, Keller presents brand image as the other element of brand knowledge that leads to brand equity. The models also recognize brand awareness as an element of brand equity. The models are combined in figure 3.

Figure 3. Brand equity models combined. Adapted from Keller (1993) and Aaker (1991).

Keller (1993)   Aaker (1991)
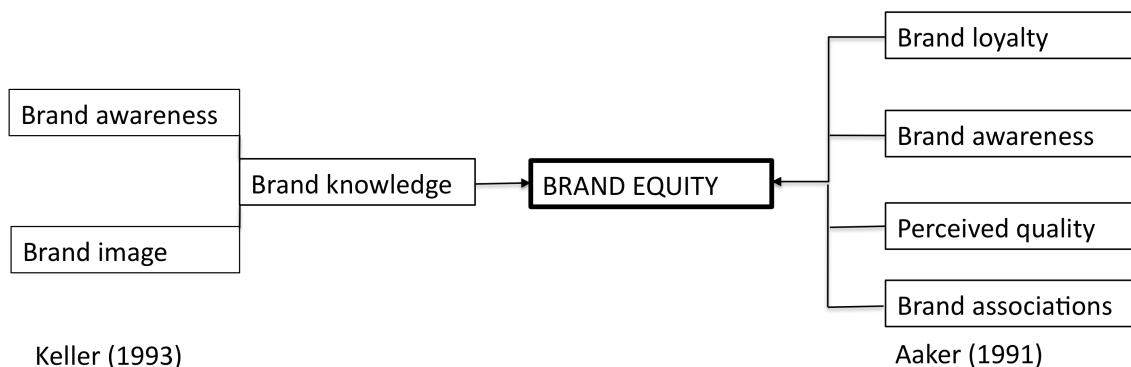
In this research brand equity model of Hamzaoui et al. (2011) is adopted for its simplified nature and fit with the research questions. According to Hamzaoui et al. (2011), the model represents the main dimensions of brand equity, which are brand image and brand quality. The model is shown in figure 4. Both brand image and brand quality can be found in the brand equity models of Aaker and Keller.

Figure 4. Dimensions of brand equity simplified. (Hamzaoui et al 2011)
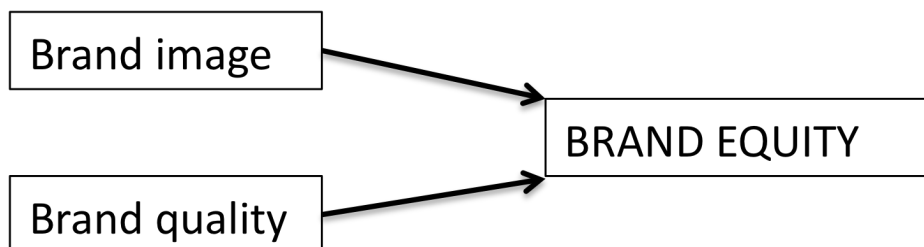
Hamzaoui et al. (2011)

3.5   The importance of brand equity

According to Aaker (1992), brand equity generates value to a firm in several ways. Since brand equity is the differential consumer response to a brand's marketing mix that a competing brand is not able to stimulate with its marketing mix activities, the management and development of brand equity is important to any brand. A brand that receives favourable consumer response to its marketing activities is said to possess brand equity. Therefore the brand owner is motivated to leverage the brand equity in marketing because it is more capable of influencing the actions of its target group than the competitors (Aaker 1992, Keller 1993).

Brand equity is linked with marketing return of investment, since brand equity by definition assumes a more favourable response to marketing activities compared to a competitor's similar activities (Aaker 1992). High brand equity results in stronger and more favourable consumer response to the brand and may generate brand sales (Keller 1993). It is noteworthy that ignoring the brand and brand equity in marketing while focusing in price offers or continuous sales promotion activities may result in a decrease in positive associations with the brand and ultimately lead to declining sales (Aaker 1992).

The second value-generating dimension of brand equity is the possibility of influence the pricing of the brand. A brand that is perceived of high quality may be able to command higher prices than its competition or defend its pricing against the pressure of price decrease. (Aaker 1992) Therefore brand equity may enable a brand to have higher margins than competition and result in a better competitive position.

Thirdly, the elements of brand equity can improve consumer loyalty. Perceived quality, brand awareness and brand associations can strengthen consumer preference. Similarly, the elements may reduce consumers' willingness to consider competing brands. (Aaker 1992) Superior brand quality or brand awareness could lead to consumer preference that results in higher probability for a consumer to choose the brand and lower probability for brand switching.

The impact of country of origin on consumers' product evaluation has been of interest to marketing researchers since the 1960's (Usunier 2006). The country-of-origin of a brand can create associations about the brand since the country-of-origin is linked with production, materials and knowledge that have contributed to creating the brand Aaker (1991). Also Keller (1993) notices the impact of country-of-origin in the brand equity model. The image of the country-of-origin of a brand can influence those brand associations that contribute to the creation of brand equity.

3.6   Luxury goods

Vickers & Renand (2003) argue that in today's consumer society luxury has become an obsession to consumers due the overflow of fine food, high priced cars and luxury holidays, which all are widely available to consumers. According to the researchers, the management of luxury goods marketing has gained importance amongst practitioners. One way to differentiate from the competition is to position a brand in the luxury segment to a distance from non-luxury brands. A measure to position a brand is price. As Piron (2000) puts it, luxury goods involve higher monetary risk - price − than standard goods, which is a result of the level of exclusivity of luxury goods.

According to Vickers & Renand (2003), a luxury brand has something extra to offer on top of the everyday needs of a consumer. However, they argue that "two persons with equal intelligence, and equal frames of reference can have a different opinion on the meaning of luxury" (2003, 462). Therefore two people can perceive luxury in different or contrasting ways. Context is important factor in evaluation of what is considered as luxury.

Alleres (1990, cited in Vickers & Renand 2003) has classified luxury in three levels according socio-economic classes. The hierarchy of luxury goods by Alleres is presented in the figure 5. The degree of accessibility to luxury determines the membership on each level. The bottom class of luxury is called accessible luxury, which is available to the middle-class. Their purchase behaviour of goods belonging to the

lowest luxury class is perceived to be motivated by willingness to achieve a higher social status. The intermediate level luxury goods are only available to those who belong to the professional socio-economic class. On top of the luxury classification is the elite class, which has the opportunity to obtain luxury that is extremely high-priced and offers "the owner exceptional social prestige" (Vickers & Renand 2003, 463). In this study, the selected premium car brands are categorized in the accessible luxury class while the standard car brands are outside the classification of Alleres (1990).

Figure 5. A hierarchy of luxury goods products. Adopted from Alleres (1990, cited in Vicker & Renand 2003).

Social class - Elite	Level 1	Inaccessible luxury
Social class - Professional	Level 2	Intermediate luxury
Middle class	Level 3	Accessible luxury
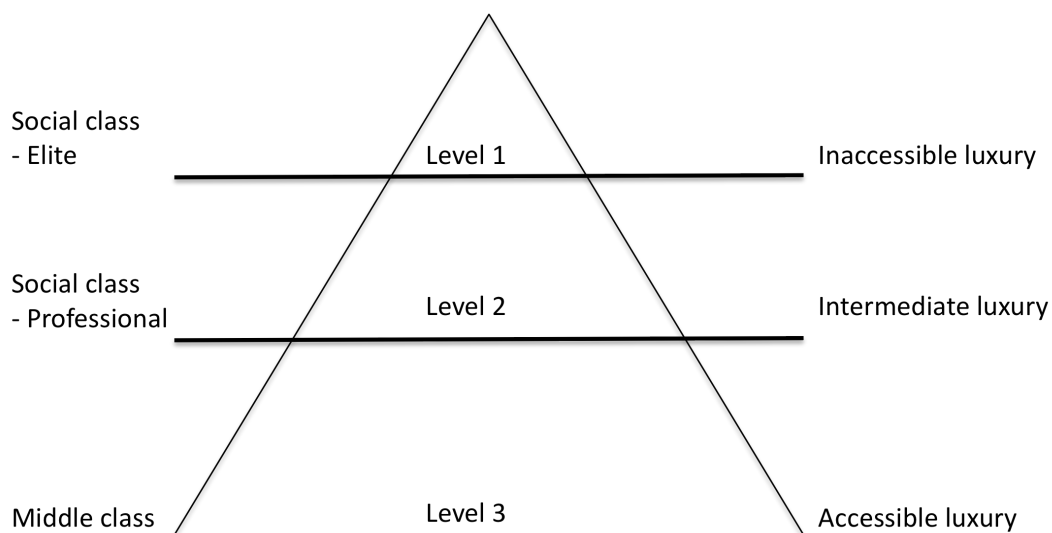
Alleres (1990)

Vigneron & Johnson (2004) argue that by using or displaying a branded luxury goods the owner enjoys esteem on himself that the goods bring, apart from the actual usage value of the functional features of the goods. In addition, luxury goods' price and quality ratio is in the upper extreme of the market. Price of luxury goods is "significantly greater than the products with similar tangible features (Vigneron & Johnson 2004, 486).

Vigneron & Johnson have developed a framework of brand luxury that defines the key elements of luxury construct based on the luxury goods literature (2004). Figure 6. Illustrates the framework of brand luxury index. The framework is a semantic network of five factors explaining "the luxury-seeking consumer's decision-making process" (Vigneron & Johnson 2004, 489). The three factors that reflect non-personal perceptions are conspicuousness, uniqueness and quality. Personal perceptions are perceived extended self and hedonism. The authors acknowledge that the model is expected to result in "different perceptions of the level of luxury for the same brands" between consumer groups and the overall luxury of the brands would be the combination of all perceptions about the brands level of luxury (Vigneron & Johnson 2004, 489).

Figure 6. Framework of brand luxury index. (Vigneron & Johnson 2004)
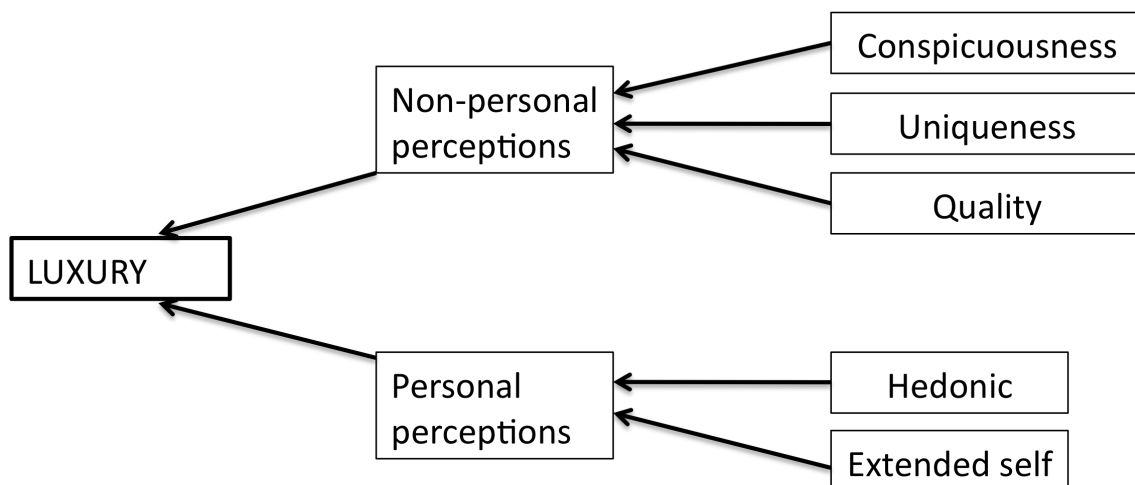
Vigneron & Johnson (2004)

Non-personal perceptions of luxury consist of three elements. Conspicuousness refers to the perception of high price and social status associated with a brand. Since consumers consider reference group influence with public luxury, consumption of luxury brands may act as tool for searching one's status among the reference group (Vigneron & Johnson 2004). A high price that indicates luxury would then appeal to status-focused consumers. Uniqueness, on the other hand, is desired for motives such as improving self-image and social image through representation of individual taste, breaking the rules, or avoiding similar consumption. Consumers value products due to low

availability that makes the goods more unique (Vigneron & Johnson 2004). The third factor is perceived quality, which expected to be high for luxury goods compared with non-luxury goods. Therefore, in order to achieve and maintain the perception of luxury, brands must hold leadership in quality (Vigneron & Johnson 2004).

Personal perceptions of luxury consist of hedonism and perceived extended self. Firstly, hedonism relates to consumer behaviour that is motivated by "personal rewards and fulfilment acquired through the purchase and consumption of products" that offer emotional benefits and possess "intrinsically pleasing properties", instead of pure functionality of the product (Vigneron & Johnson 2004, 491). Secondly, extended self refers to social referencing where a consumer aims to define himself in relation to other people, and the construction of one's self. Since people perceive the ownership of goods to influence the their identity, luxury goods may enhance the perception of self in the case of a materialistic consumer. (Vigneron & Johnson 2004)

3.7 Country-of-origin's influence on consumers' evaluation of luxury goods

Despite the vast variety of luxury goods ranging from various products categories to services, and the role that luxury goods have in global trade and consumer behaviour, the luxury goods market is not as researched and well-known as one would expect (Vickers & Renand 2003). According to Shukla (2011), luxury goods research has not focused on the effect of brand origin on consumers' purchase intentions.

According to the literature (Ahmed & d'Astous 1993; Piron 2000), consumers' evaluation of products that are perceived as luxury goods is more likely influenced by the country-of-origin effect than those products that are perceived as non-luxury goods. However, Aiello et al. (2009) found that in luxury goods, product evaluation and purchase intention are influenced mainly by brand rather than country-of-origin. This indicates that the premium car brands, which are of interest in this study may contain features other than their brand origin that in turn result in strong consumer associations

and favourable evaluation. Chapter 4 discusses the development of the research hypotheses.

4   Hypotheses development

This chapter discusses the hypotheses that are tested in the study. The literature review is conducted in order to find whether the previous research has indicated needs for further assessment in the field of country-of-origin research in the context of luxury goods. Several hypotheses are drawn from the literature and tested with a Finnish respondent group. There are six hypotheses that are explained next.

It is generally accepted that country-of-origin influences consumers' evaluation of products. Han & Terpstra (1998) found out that there is difference in Japanese and American consumers' product evaluations. Both Japanese and American consumers' were influenced by the country-of-origin information. In addition, Josiassen et al. (2008) argue that the role of country-of-origin in product evaluation is emphasized if the consumer is unfamiliar with the product. According to the study, consumers are influenced by the country-of-origin especially in a situation where the consumers are unfamiliar with the product. Drawing from the literature, this study assumes that brand origin influences both premium and standard goods. Therefore the hypotheses H1 and H2 are as follows

> H1: Brand origin of the premium car influences Finnish consumers' perception of the premium car.

> H2: Brand origin of the standard car influences Finnish consumers' product perception of the standard car.

To the knowledge of the researcher, the differential effect of country-of-origin on standard and premium goods has not been studied to large extent. Piron (2002) suggests that premium goods are more affected by their brand origins than standard goods are affect by their brand origins. It is suggested by Piron (2002) that the monetary risk that is involved in purchasing and possessing premium goods is higher than in the case of

standard goods. Thus, consumers would have more strict evaluation of premium goods, and they would be more thorough in including every piece of information – country-of-origin among others – about the goods in order to make their evaluation. Therefore H3 is as follows

H3: Finnish consumers' perceptions of premium cars are more
affected by brand origin than standard car brands. (Piron 2000)

The image of a country that a car brand originates in is assumed to influence consumers' perception of the car brand. The country image would influence the brand's brand equity through the elements of brand equity, brand quality and brand image. The model adapted from Yasin et al. (2007) is presented in figure 7.

Figure 7. Research design.
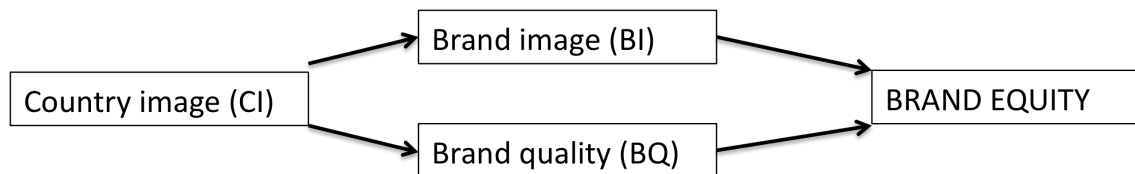
According to Gardyn (2002), gender correlates with the ability to identify luxury in the brand names. The study revealed that males recognize luxury brands better than females. Additionally, genders differed in their reasons to buy luxury goods. Females rate foreign countries' products more positively than males (Wall & Heslop 1986). Hong & Toner (1989) suggest that consumers with less knowledge about the product are more likely to use country-of-origin information as a cue for product evaluation. It is assumed based on the literature (Gardyn 2002) that females are less skilled in identifying premium car brands. This would then result in females using country-of-origin information as a cue for product evaluation rather than the degree of luxury related to the car brand. However, females would not make as large distinction between a standard car and a premium car than males in their evaluation of the car. Therefore the research proposes that gender has an impact on consumers' evaluation of car brands' image and perceived quality.

H4: The effect of brand origin is greater for females than it is for males in the premium car segment.

Eroglu & Machleit (1993, 38) have found "a strong positive link between product class experience and ability to detect interbrand quality differences". Therefore it is suggested that Finnish consumers' experience of cars - measured by the amount of driving annually - influences their evaluations of the car brands selected in this study. Aiello et al. (2009, 327) argue that by engaging consumers in relational and experiential interaction a brand can "extend its capacity to influence perceptions and purchase intentions. Since consumers use country-of-origin information as a cue to evaluate the product, the study assumes that the brand origin effect is applicable to the car category. Therefore this study suggests a relationship between product category experience and consumers' brand perceptions.

H5: Product category experience (i.e. driving experience) influences consumers' evaluation of car brands differentially depending on the brand origin.

Jyotshna & Goodwin (2009) suggest that overseas work exposure influences consumers' purchase intention toward luxury cars in India. Their study shows that 48 % of the respondents agree their overseas work having been a factor in purchasing a luxury car. The exposure to various types of cars from standard to luxury class in the overseas location are then assumed to influence consumer behaviour of those who are exposed. Purchase intention is a combination of several factors that are integrated as a will to purchase an object. Perceived quality and brand image are such factors. Since the respondents were not asked about their intention to purchase a car, this study relies on the respondents' perceptions of the previously mentioned factor that contribute to purchase intention.

In this study it is assumed that the respondents are neither at the stage of purchasing a luxury car or have purchased one, and their work abroad experience is limited.

Therefore it is assumed that Finnish consumers gain international exposure in their travelling abroad. This exposure is then suggested to influence their evaluations of car brands. The respondents were asked to evaluate their annual travel to international destination in their leisure time. The four groups were "no travel abroad", "1-2 times", "3-4 times" and "5 or more times".

H6: Experience in international travel influences Finnish consumers' evaluation of car brands' brand equity dimensions.

Next, chapter 5 introduces the methodology that is used in the study to collect and analyze the data. The analysis aims at testing the hypotheses in order to better understand the relationship between brand origin, brand equity and luxury goods. The research design is explained in addition to describing the data collection technique. Then reliability and validity of the study are discussed in detail. Finally, the respondents are described in the end of the chapter.

5   Methodology

This chapter introduces the research objective again and explains the research questions. Secondly, the research design and sthe data collection methods are described. The methods of data analysis are also described without forgetting to discuss validity and reliability.

The objective of the research is to study the relationship between brand origin and brand consumer-based brand equity. The research aims at answering the questions

- does brand origin influence consumer-based brand equity?
- does the impact of brand origin on consumer-based brand equity differ between standard and premium car brands?

Quantitative research methods were chosen in the study in order to quantify differences between respondent groups and show correlations between two phenomenons. Correlation analysis and one-way ANOVA are examples of quantitative research methods (Nummenmaa 2008, 266). The strength of quantitative research is the opportunity to study respondents' attitudes, behaviour and motivations. Similarly, the respondents' demographics can be used for deeper analysis and comparison between groups (Nummenmaa 2008, 173). Benefits of quantitative research are ease of administration, consistent and formatted data, and straightforward interpretation and analysis of the data. (Malhotra & Birks 2006, 225)

5.1   Data collection

The quantitative study was conducted using a survey questionnaire. Each respondent received the same questionnaire, which yielded a set of data. The data was then available for analysis using quantitative methods. Primary data was collected using the convenience sampling method and a self-administered questionnaire distributed to the

respondents in online format using Webropol online questionnaire platform. According to Hair et al. (2011, 175), convenience sampling focuses on the sample that is most readily available to the study. The sampling method was chosen for its easiness and cost efficiency to collect responses using a student sample. The respondent group was accessed in the study with the help of university staff. Convenience sampling has been used previously in country-of-origin research (See Cai et al. 2004, Biswas et al. 2011). Also systematic sampling has been used previously (Ashill & Sinha 2004). Since the email addresses of all course participants were available to the course lecturers, it was effortless to send to the participants a link to the questionnaire via email. The questionnaire was targeted at students of Aalto University School of Economics on two courses provided by the Department of Marketing. A choice was made to use students as a survey group since it is common in social sciences to use students as survey respondents (Aiello et al. 2009). Peterson (2001) argues that in social sciences the use of a student sample is acceptable since the homogeneity of student samples regarding education and demographics is favourable to the research. Student sample has been previously used to study country-of-origin effect on consumer behaviour (See Cai et al. 2004, Faircloth et al. 2001, Aiello et al. 2009, Ashill & Sinha 2004, Biswas et al. 2011). Certain selection bias is inherent in the sample since the respondents may be different from the general population (Hair et al. 2011, 175). For example, the respondents are students who may not intend to buy a car in the near future. As a result, caution must be used in generalization of the findings.

To give a structure to the survey is the questions were grouped according to themes. The structure of the survey is presented in form of a list of variables in table 1. First, car brands were evaluated with 10 brand attributes, which were based on the literature (Dodds et al. 1991, Lee & Bae 1999), The countries in the study were rated on seven country image attributes (Roth & Romeo 1992). The questions were formulated in the same way and direction in order to avoid confusion or misunderstandings that a reversed question might cause.

Table 1. List of sum variables and variables.

SUM VARIABLE	VARIABLE	SOURCE
Brand quality (BQ)	The car brand is trustworthy. The car brand is sophisticated in its features. The car brand is efficient. The car brand is of high quality. The car brand is valuable to its owner.	Dodds et al. 1991
Brand image (BI)	The car brand is durable. The car brand is reliable. The car brand is prestigious. The car brand has style. The car brand is high performing	Lee & Bae 1999
Country image (CI)	Products of a country are innovative. Products of a country are well designed. Products of a country are respected. Products of a country are exclusive. Products of a country are of high quality. Products of a country require skilled craftsmanship. Products of a country are durable.	Roth & Romeo 1992

In total 102 responses to the questionnaire were received during the two-week time period when the questionnaire was available to the respondents. All responses were fully completed and accepted in the study. The respondents were offered the opportunity to participate in the questionnaire by filling in their answers to the questions online anytime and anywhere. Initially, the lecturers of the courses in a classroom approached the respondents. At the time of opening the questionnaire, the respondents received an email explaining the opportunity and providing them with a direct link to the questionnaire. Those who would choose to answer to the questionnaire were either rewarded with extra credits towards their course evaluation or offered a chance to participate in a lottery to win tickets to cinema. The survey was written in Finnish in order to avoid bias due to differences in language skills within the respondent group. The settings of the online questionnaire were modified so that every question had to be answered in order to avoid incomplete responses. The questionnaire was pretested by

four Finnish-speaking people to make sure that the logic, instructions, flow and the layout of the questionnaire were acceptable in order to minimize bias in the responses due to technical features of the questionnaire. Participation was completely voluntary.

The only channel for answering the questionnaire was to log in online and use the answering tool by Webropol. Answering was made easy since in order to start the process, it only required a click to the link distributed via email to the course participants. The target for responses to the questionnaire was set at 100. The target was exceeded with 2 responses with a total of 102 responses. Since the questionnaire was made available to everyone with a public link to the questionnaire, the response rate can be only estimated. There were approximately 150 course participants. Therefore the response rate is estimated to be 68 %.

Sedan cars is a suitable category for studying country-of-origin effect and brand equity because cars are goods that the target group of the research have knowledge of either through personal experience or at least discussions with other people. Cars are commonly used as means of transportation in Finland. Therefore it is fair to assume that a Finn would have general information about car brands and have formed an image of the most common car brands.

The brands selected are available in Finland and known by Finnish consumers, which expected to result in valid responses. Thus, the selection of brands fulfils the basic requisites presented in earlier research: availability to consumers and consumer brand awareness (Parameswaran and Yaprak, 1987). However, Lexus has significantly lower presence on the Finnish highways than the other brands (Tilastokeskus 2012). The numbers of cars under the brands studied in the research are presented in table 2.

Table 2. Passenger cars by make in Finland in 2010 (Tilastokeskus 2012)

RANKING IN FINLAND	BRAND	NUMBER OF CARS
1	TOYOTA	363 592
2	VOLKSWAGEN	291 954
3	FORD	226 000
13	BMW	82 465
15	FIAT	75 949
20	CHRYSLER	28 603
28	ALFA ROMEO	6 924
38	LEXUS	2 005

The reason for choosing the four countries, namely USA, Germany, Japan and Italy in the research is straightforward since the countries contribute 28 % of world's car production (OICA 2012). Production quantities are presented in table 3. In addition to the countries being reputable for their car production, the countries are able to cater the market with car brands in different price categories from economy to luxury brands. All four countries produce both standard and premium car brands, which is important to answering the research questions.

Table 3. Passenger car production in the world in 2011 (OICA 2012)

COUNTRY OF ORIGIN	CARS PRODUCED IN 2011	MARKET SHARE
Germany	5,871,918	10%
Italy	485,606	1%
Japan	7,158,525	12%
USA	2,966,133	5%
Total	59,929,016	100%

Brands and countries selected for the empirical research are presented in table 4. Each country's car industry is represented by both a standard car brand and a premium brand. The difference between a standard car brand and a premium car brand is made on the retail sales price difference in Finland. While it is difficult to determine exactly where the line between a standard car and a premium car is in this study, it is fair to separate

the brands into the two groups based on the retail value of a family-sized sedan car. It is assumed that standard cars would retail for around €30 000 in Finland while the retail price of premium cars is assumed to start from €40 000. Hence the definition of a premium car in the research is fairly broad. Lee & Hwang (2011) define BWM and Lexus as luxury brands. Similarly, Alfa Romeo and Chrysler are considered as luxury car brands in this research. It is acknowledged in this study that the perception of luxury and the amount of luxury a brand contains are contextual and depend on the person that is concerned (Vigneron & Johnson 2004).

Table 4. Countries and car brands in the research.

COUNTRY	STANDAND BRAND	PREMIUM BRAND
Germany	Volkswagen	BMW
Italy	Fiat	Alfa Romeo
Japan	Toyota	Lexus
USA	Ford	Chrysler

5.2   Data analysis

The methodology used in this study include a web-based questionnaire that is targeted to Finnish consumers, a correlation analysis to determine whether there is a correlation between the variables, and an ANOVA test to determine whether there are differences in answers between respondent groups in their evaluation of country images or brand equity dimensions.

According to Karjaluoto (2007), Pearson correlation is the most commonly used correlation in statistical analysis. In statistical analysis, correlation can be used when the aim of the research is to study

1. the simultaneous existence of two phenomena
2. a relationship between the two variables
3. causality between the two variables (Nummenmaa 2008, 265)

Correlation describes linear relationship of two variables. Direction and strength of the relationship are described by correlation coefficient (r) ranging from -1 to 1. If $r < 0$, correlation between variables is negative. An increase in the value of one variable is observed while the other variable decreases. If $r = 0$, there is no correlation between the variables. If $r > 0$, there is a positive correlation between the variables. The strength of the correlation is the value of r. If $r = 1$, the correlation is fully linear. If r has a value near 1, the correlation is strong and positive. A variable always has $r = 1$ with itself. (Nummenmaa 2008, 268; Karjaluoto 2007) If $r >= 0.5$, it is said that the correlation is strong (Nummenmaa 2008, 278).

One-way ANOVA is suitable for comparing means of different respondent groups in the study. It is used to compare the relationship between an independent variable and one or many dependent variables (Karjaluoto 2007). The assumptions for one-way ANOVA are as follows

1. Measurement of the independent variable at least on nominal scale and the dependent variables on interval scale
2. The sample is normally distributed
3. Group variances are equal
4. Group size is more than 20
5. Group sizes are equal (Nummenmaa 2008, 182)

According to Nummenmaa (2008, 182), small exceptions from the assumptions are not critical to the analysis although the risk of false acceptance of the hypothesis increases. The null hypothesis assumes that mean values are equal between groups. One-way ANOVA shows if the means of the independent variable are statistically significantly unequal in different variable categories. F-test explains the probability that the hypothesis of equal means between groups can be rejected. Values F and p describe statistical significance. If $p < 0.05$, the null hypothesis should be rejected.

5.3   Validity and reliability

The validity of the research and reliability of the results are evaluated in this chapter. According to Malhotra and Birks (2006, 140) validity is achieved if a measurement is an accurate representation of characteristics that exist in a phenomenon that is being studied. Validity tests if a scale developed for the study reflects the nature of a phenomenon as it truly is.

The other measure is reliability, which relates to the consistency of the results of a study if run multiple times. A reliable research scale should result in similar outcome every time it is conducted if the research setting remains unchanged. In other words, a reliable research has minimal random and consistent results in every repetition of the study. (Malhotra and Birks 2006, 140)

In this study, several actions have been taken in preparation of the survey and at the time of conducting the study in order to minimize the risk of sacrificing validity. Most importantly, the survey is based on the existing literature and scales that have been tested and used in similar research previously. The researcher also tested manually the technical functionality of the web-based survey tool and its suitability for the purpose before starting to collect survey responses.

To ensure the reliability of the survey responses, the questionnaire was prepared with care. Finnish language was used to minimize the risk of misinterpretation of the survey questions. Some of the key wordings of the brand attributes in the survey were of similar nature in English, but in Finnish the words had unique meanings, which led to lower risk of misinterpretation. For example, it was better to translate *durable* and *reliable* into *kestävä* and *käyttövarma* respectively to avoid translation problems that would put reliability at risk. Finnish translations were carefully selected after a deep investigation into the literature.

5.4   Description of the respondents

The questionnaire received 102 answers in total, and the answers were all complete. Out of the 102 respondents, 37,3 % (38) was male whereas 62,7 % (64) was female. Table 5 illustrates the ratio between male and female respondents in the questionnaire.

Table 5. Respondents' age and gender.

AGE	Frequency	Percent	GENDER	Frequency	Percent
20-24	58	56.9	Male	38	37.3
25-29	40	39.2	Female	64	62.7
30+	4	3.9			
Total	102	100	Total	102	100

Average age 24.1

The age of the respondents ranged from 20 years to 43 years at the time of data collection. The biggest age groups were 22 (17,6 %) and 25 (16,7 %) years. Average age of the respondents was 24,1 years. It is no surprise that the respondents were relatively young since the responses were gathered from university students.

The respondents were asked how many times a year they would travel abroad for leisure. The respondents are divided into groups according to their travelling in table 6. While only 2 % of the respondents declared that they would not travel abroad for leisure at all within a period of one year, the majority of the respondents (47,1 %) would travel abroad 3 to 4 times a year. The second biggest group of respondents (44,1 %) would travel 1-2 times a year outside Finland. Only 6,9 % of the respondents travel 5 or more times a year abroad for leisure.

Table 6. Respondents' annual travelling abroad.

ANNUAL TRAVEL ABROAD	Frequency	Percent
0	2	2.0
1-2	45	44.1
3-4	48	47.1
5 or more	7	6.9
Total	102	100

The respondents were asked to estimate how many kilometres they personally drive a car in a year. Table 7. presents the respondents in groups according to their annual driving. A group representing 10,8 % of the respondents do not drive a car at all. The majority of the respondents drive a car very little since 36,3 % would drive less than 1000 kilometres in a year. The second biggest group (26,5 %) would drive a car 1000 kilometres and up to 4999 kilometres a year. Only 13,7 % of the respondents drives more than 10 000 kilometres a year. To conclude the respondents driving habits, they do not drive much annually. It can be speculated that the young average age of the respondents, student status and location of their studies in a major city influence the driving habits of the respondents.

Table 7. Respondents' annual driving.

ANNUAL DRIVING	Frequency	Percent
0 km	11	10.8
Less than 1000 km	37	36.3
1000-4999 km	27	26.5
5000-10000 km	13	12.7
More than 10000 km	14	13.7
Total	102	100

In general, the survey population is not generalizable to the total population in Finland since the ratio between genders is imbalanced, and the average age of the respondents is well below the average age in Finland. The relatively young average age of the survey population is due to the sampling technique that involved using university students as the survey respondents. Interestingly, 47,1 % of the respondents estimated to travel abroad for leisure from three to four times a year although they are students. Since the

large majority of the respondents travel abroad annually, the question regarding their travelling provided useful information. The respondents also drive a car to some extent, however their mileage is not very high. Experienced drivers who drive more than 5000 kilometres a year represent 26,7 % of the respondents. These respondents possibly have more experience in driving, and more knowledge about car brands in general. The next chapter discusses the findings.

6   Findings

This chapter presents the findings regarding the hypotheses developed in chapter 4. The hypotheses were tested using correlation analysis and one-way ANOVA. First, the key findings are discussed. Secondly, additional analysis is presented to elaborate further on the findings.

6.1   Hypotheses tests

Hypothesis 1 and hypothesis 2 propose that brand origin influences brand equity of a premium car (H1) and a standard car (H2). The results suggest that Finnish consumers evaluate cars from certain countries more favourably than other countries. Japanese and German car brands received the highest mean values for brand quality and brand image. While premium car brands BMW and Lexus were the brands with highest brand equity, a standard German car brand Volkswagen had third highest scores. American and Italian cars received less favourable evaluation in general. Hence, hypotheses 1 and 2 are supported.

Hypothesis 3 suggests that Finnish consumers' perception of a premium car is more influenced by brand origin than the perception of a standard car. The findings suggest a positive and statistically significant correlation between brand origin and brand equity of certain premium car brands. The respondents' perception of Alfa Romeo's quality and brand image were found to strongly correlate with the respondents' evaluation of Italy's country image. To the contrary, an Italian standard car Fiat did not show strong correlation between its brand quality or brand image and the image of Italy. In other words, Alfa Romeo's brand equity dimensions have much stronger correlation with Italy's country image than Fiat does. Similarly, the brand image and the perceived quality of Chrysler correlate with the country image of the USA more strongly than

Ford does. Therefore it is suggested the country image of the USA may influence positively the image of Chrysler. Drawing from this evidence, hypothesis 3 is supported.

Hypothesis 4 proposes that the effect of brand origin is greater for females than it is for males in the premium car segment. There is only a small and statistically significant difference in the brand origin effect between standard and premium car segments among male respondents in the case of Italian cars. However, there is a large but not statistically significant difference in the brand origin effect between American car segments among male respondents. On the other hand, females' evaluation of premium cars is more correlated with the country-of-origin of the premium cars than with standard cars. This suggests that the brand origin effect is greater among the female respondents than males in premium car segment. Hypothesis 4 is therefore supported.

Hypothesis 5 assumes a relationship between Finnish consumers' product category experience – measured as the annual driving experience – and the consumers' evaluation of car brands' quality and brand image. The results suggest that German and Japanese premium cars receive better evaluations for their brand quality from respondents who drive more and are expected to have better product category knowledge as opposed to those who do not drive a car. Alfa Romeo and Chrysler's brand quality perception deteriorates, as the respondents become more experienced drivers. Similarly, Alfa Romeo and Chrysler's brand image evaluations are lower for drivers than non-drivers. Therefore it is suggested that annual driving experience improves the perceptions of Japanese and German premium cars, but Italian and American cars fail to convince regular drivers about their brand quality. Hypothesis 5 is supported.

Hypothesis 6 assumes that experience of international travel influences Finnish consumers' evaluation of car brands. One-way ANOVA was conducted using the amount of international travel annually as an indicator of exposure to different types of cars. However, the analysis showed no statistically significant results. The conclusion is that the amount of international travel does not influence Finnish consumers' evaluation of car brands quality or brand image. This suggests that consumers are used to various

types of cars ranging from economy to standard and premium classes in Finland. Therefore consumers do not gain any new knowledge regarding car brands due to their international travel. Hypothesis 6 is not supported.

6.2 Additional analyses

6.2.1 Familiarity with the brands

The respondents' familiarity with the brands in the study is relevant information to the evaluation of the validity of their answers. In the study the respondents are asked to evaluate 8 car brands on brand image and brand quality attributes, and their perceptions of four countries are studied. The data set is then analyzed to find correlations in attribute values between brands and countries of origin. To evaluate if the respondents have assumed the correct country-of-origin for each brand, their knowledge of country-of-origin of car brands is studied. Therefore the first question in the questionnaire tested the respondents' ability to recognize the country-of-origin of the eight car brands.

Question 1. in the questionnaire *Which of the following countries do you associate with each car brand?* is deliberately formulated using word 'associate' according to Thakor & Kohli's (1996) definition of brand origin: "the origin of a brand is that geographic location that consumers associate with the brand". The respondents were given a list of eight countries to choose from for each brand. The list of countries included some of the world's largest car manufacturers: France, Germany, Italy, Japan, South-Korea, Spain, Sweden and USA. Table 8. illustrates the respondents' ability to recognize car brands' origin. The answers are divided into three categories: the respondents who recognized the correct brand origin, the respondents who recognized a wrong brand origin and the respondents who announced their lack of knowledge about the correct brand origin.

Table 8. Respondents' ability to recognize brand origins of car brands.

Car brand	Correct BO	Wrong BO	Doesn't know
Volkswagen	95.1	2.9	2.0
Toyota	94.1	4.9	1.0
BMW	92.2	5.9	2.0
Chrysler	87.3	8.8	3.9
Alfa Romeo	85.3	7.8	6.9
Ford	71.6	21.6	6.9
Fiat	67.6	26.5	5.9
Lexus	43.1	41.2	15.7
Mean	79.5	15.0	5.5

The results show that the car brands can be grouped into three according to the percentage of correct answers for brand origin. German brands and Toyota form group 1. In the study, car brands that originate in Germany are Volkswagen and BMW. On average, the respondents recognized German cars' origin best. Of all brands, Volkswagen was associated with Germany by 95,1 % of the respondents, and BMW 92,2 %. Only 2,9 % of the respondents associated a wrong country-of-origin with Volkswagen and 5,9 % with BMW. The respondents were confident of their ability to recognize country-of-origin of German cars since only 2 % admitted to not knowing the origin of Volkswagen and 2 % for BMW. In addition, Toyota's origin was the second best recognized with 94,1 % of the respondents answering 'Japan'. Only 1 % of the respondents said that they would not know the origin of Toyota, and 4,9% associate a wrong country of origin.

Group 2 includes Chrysler and Alfa Romeo, whose origins were recognized by 87,3 % and 85,3 % of the respondents. The rate of incorrect answers for brand origin is higher than group 1. Chrysler's origin was associated with a wrong country by 8,8 % of the respondents and Alfa Romeo's origin by 7,8 %. Moreover, the respondents had some difficulty recognizing the origin of the car brands in group 2 since 6,9 % said they would not know the origin of Alfa Romeo and 3,9 % for Chrysler.

Group 3 is formed of the brands that were least associated with the correct brand origins. More than a quarter of the answers for Ford and Fiat were misguided, while the most difficult brand to associate with its true origin was Lexus. Ford was associated with USA by 71,6 %, Fiat with Italy by 67,6 % and Lexus with Japan only by 43,1 % of the respondents. While Ford and Fiat were incorrectly associated with a country by 21,6 % and 26,5 % of the respondents, Lexus caused confusion among the respondents the most with its 41,2 % rate of incorrect association and 15,7 % of the respondents not knowing the origin at all. It may well be that Lexus, although available in Finland, is not a very familiar car brand to Finnish consumers. In short, the majority of the respondents recognized the correct country of origin for each brand with the exception of Lexus. The conclusion is that the respondents' answers regarding Volkswagen, Toyota, BMW, Chrysler, Alfa Romeo are based on the assumption of the correct country of origin, whereas answers regarding Ford, Fiat and Lexus might be biased due to the respondents associating the brands with an incorrect country of origin. Next the respondents' perceptions of premium and standard car brands are investigated.

6.2.2   Perceptions of the car brands

The questionnaire measures Finnish consumers' perception of 8 car brands on two dimensions: brand quality and brand image BI. The dimensions are the key elements of consumer-based brand equity that is in the focus of this study. Each dimension is measured using a sum variable - BQ_brand_x and BI_brand_x respectively - to determine the overall perception regarding a car brand. The overall perception represents brand equity of the car brand.

Brand quality of each brand is measured on a five-item-scale that was developed by Dodds et al. (1991). The sum variable is the mean of five variables illustrated in table 9. Similarly, brand image of each brand is measured on a five-item-scale that was developed by Lee & Bae (1999). As with brand quality, the sum variable for brand image is the mean of five variables illustrated in table 9. In other words, brand quality and brand image scores were obtained by averaging the answers to the measurement

items. The items were measured using a 5-point Likert scale ranging from 1 = "totally disagree" to 5 = "totally agree".

Table 9. List of sum variable items.

SUM VARIABLE	VARIABLE	SOURCE
Brand quality (BQ)	The car brand is trustworthy. The car brand is sophisticated in its features. The car brand is efficient. The car brand is of high quality. The car brand is valuable to its owner.	Dodds et al. 1991
Brand image (BI)	The car brand is durable. The car brand is reliable. The car brand is prestigious. The car brand has style. The car brand is high performing	Lee & Bae 1999

The results show that Finnish consumers' perception of car brands differ between brands. Eight car brands were selected for the study: BMW, Volkswagen, Alfa Romeo, Fiat, Lexus, Toyota, Chrysler and Ford. BMW had the highest mean rating for both brand quality (4.61, SD = 0.488) and brand image (4.37, SD = 0.600). Thus, BMW has the highest brand equity of all brands in the study. BMW had a very strong brand quality perception among the respondents since in addition to BMW, only Lexus' brand quality (4.05, SD = 0.738) was above 4. Lexus had also the second highest brand image (3.92, SD = 0.644). Volkswagen had nearly as good brand quality score (3.86, SD = 0.687) and its brand image (3.78, SD = 0.573) was the third highest in the study. Alfa Romeo had its brand quality (3.72, SD = 0.768) and brand image (3.53, SD = 0.796) scores only slightly above Toyota, which had the best brand quality (3.60, SD = 0.703) and brand image (3.51, SD = 0.587) scores of all standard cars in the study. Despite being classified as a premium car brand in the study, Chrysler had lower brand quality (3.56, SD = 0.783) and brand image (3.47, SD = 0.767) scores than Toyota. Second to last in brand quality (3.16, SD = 0.740) and brand image (3.13, SD = 0.659) was Ford, followed by Fiat with brand quality (2.62, SD = 0.696) and brand image (2.62, SD = 0.657) scores that were the lowest of all car brands studied. The scores are presented in table 10.

Table 10. Brand quality and brand image means.

Country	Exclusivity	Brand	Sum variable	Mean	Std. Deviation	N
Germany	Premium	BMW	BQ_BMW_x	4.61	.488	102
			BI_BMW_x	4.37	.600	102
	Standard	Volkswagen	BQ_Volkswagen_x	3.86	.687	102
			BI_Volkswagen_x	3.78	.573	102
Italy	Premium	Alfa Romeo	BQ_AlfaRomeo_x	3.72	.768	102
			BI_AlfaRomeo_x	3.53	.796	102
	Standard	Fiat	BQ_Fiat_x	2.62	.696	102
			BI_Fiat_x	2.62	.657	102
Japan	Premium	Lexus	BQ_Lexus_x	4.05	.738	102
			BI_Lexus_x	3.92	.644	102
	Standard	Toyota	BQ_Toyota_x	3.60	.703	102
			BI_Toyota_x	3.51	.587	102
USA	Premium	Chrysler	BQ_Chrysler_x	3.56	.783	102
			BI_Chrysler_x	3.47	.767	102
	Standard	Ford	BQ_Ford_x	3.16	.740	102
			BI_Ford_x	3.13	.659	102

According to the results, the respondents' perception of car brands originating from certain countries is higher than car brands from other countries. Figure 8. shows that Japanese and German car brands received the highest mean values for brand quality and brand image. While premium car brands BMW and Lexus were the brands with highest brand equity, a standard German car brand Volkswagen had third highest scores. Alfa Romeo, Toyota and Chrysler had similar scores for brand quality and brand image. Ford and Fiat had the lowest mean values in brand quality and brand image.

Figure 8. Brand quality and brand image means.
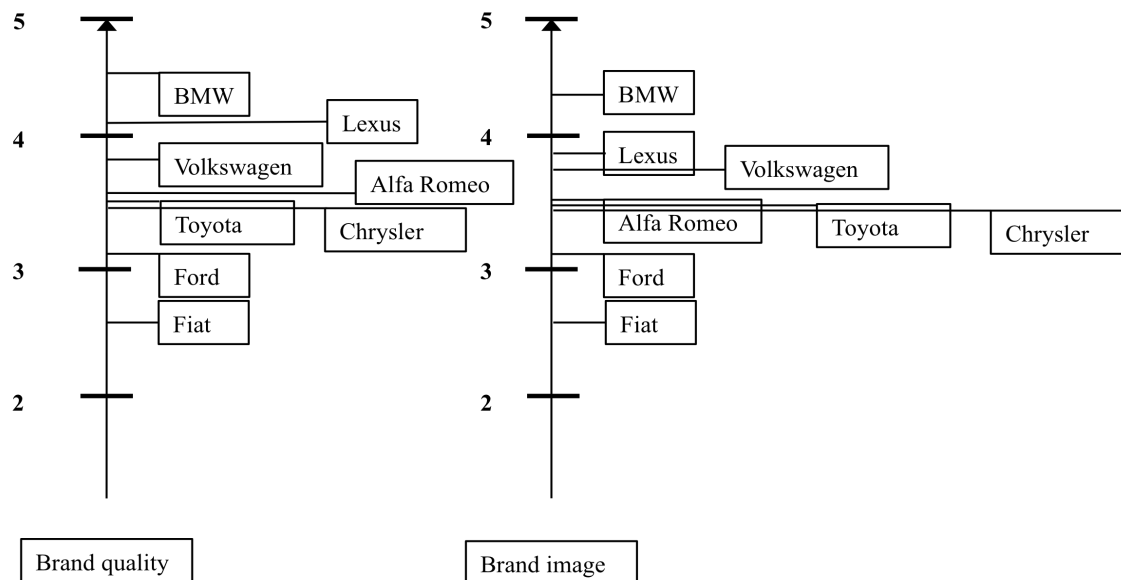
It is noteworthy that the original classification of brands into two categories in table 10 - premium and standard brands - is somewhat consistent with the findings of overall brand equity. Only Volkswagen had higher brand equity than Alfa Romeo and Chrysler, which had slightly lower brand equity than Toyota. Overall brand equity ranking is led by BMW and Lexus, while Fiat is has the lowest overall score. Three premium car brands form top3; the first (BMW), second (Lexus) and fourth (Alfa Romeo) on overall brand equity score are premium cars. The ranking is presented in table 11.

Table 11. Overall brand equity score.

Brand	Sum variable	Mean	Overall brand equity score	Rank
BMW	BQ_BMW_x	4.61	4.49	1
	BI_BMW_x	4.37		
Volkswagen	BQ_Volkswagen_x	3.86	3.82	3
	BI_Volkswagen_x	3.78		
Alfa Romeo	BQ_AlfaRomeo_x	3.72	3.62	4
	BI_AlfaRomeo_x	3.53		
Fiat	BQ_Fiat_x	2.62	2.62	8
	BI_Fiat_x	2.62		
Lexus	BQ_Lexus_x	4.05	3.99	2
	BI_Lexus_x	3.92		
Toyota	BQ_Toyota_x	3.60	3.56	5
	BI_Toyota_x	3.51		
Chrysler	BQ_Chrysler_x	3.56	3.52	6
	BI_Chrysler_x	3.47		
Ford	BQ_Ford_x	3.16	3.15	7
	BI_Ford_x	3.13		

The following chapter presents the respondents' perception of the countries in the study. The countries represent origins of the car brands, which were discussed in this chapter.

6.2.3   Country images

The respondents' perception of the four car-producing countries is measured by sum variable CI. The sum variable consists of a seven-item-scale that was developed by Roth & Romeo (1992). The variables contributing to country image are presented in table 12. As with measuring the sum variables, country image scores were obtained by averaging the answers to the measurement items. The items were measured using a 5-point Likert scale ranging from 1 = "totally disagree" to 5 = "totally agree".

Table 12. Country image sum variable.

SUM VARIABLE	VARIABLE	SOURCE
Country image (CI)	Products of a country are innovative. Products of a country are well designed. Products of a country are respected. Products of a country are exclusive. Products of a country are of high quality. Products of a country require skilled craftsmanship. Products of a country are durable.	Roth & Romeo 1992

Country image mean values are presented in Table 13. Germany had the highest country image score (4.18, SD = 0.577) followed by Japan (3.90, SD = 0.567). Italy's country image score (3.46, SD = 0.829) is far from the scores of Germany and Japan, but very close to USA (3.42, SD = 0.717). It is visible in the results that countries were in two groups according to their country image scores. Germany and Japan had country images above and below four, while Italy and USA were much lower.

Table 13. Country image means.

Country	Sum variable	Mean	Std. Deviation	N
Germany	CI_Germany_x	4.18	.577	102
Italy	CI_Italy_x	3.46	.829	102
Japan	CI_Japan_x	3.90	.567	102
USA	CI_USA_x	3.42	.717	102

According to the literature, country-of-origin influences consumers' product evaluation. Finnish consumers' perception of the origins of the brands selected in the study was clear. There are countries that Finnish consumers perceive more favourably than other countries. This suggests that there is a correlation between country images and brand equity dimensions. The next chapter discusses the correlation in detail.

6.2.4   Correlation analysis

In order to determine whether there is link between Finnish consumers' perception of car brands and the brands' origins, a correlation analysis is conducted. First, the Kolmogorov-Smirnov test is run to confirm the validity of the data. The test is used to test probability distribution of selected variables and determine if the variables are normally distributed. The test assumes a null hypothesis that the variables to be tested are normally distributed. If the significance level is higher than 0.05 ($p > 0.05$), a variable is considered normally distributed. The assumptions of using Pearson correlation are that the variables are normally distributed, and there are more than 100 observations. (Nummenmaa 2008, 143)

As explained earlier, 102 responses to the questionnaire were received. Kolmogorov-Smirnov test shows that the sum variables BQ, BI and CI are not normally distributed. The results of the normality tests are shown in Appendix E. In total 22 sum variables were tested using Kolmogorov-Smirnov normality test. Variables BQ_Chrysler_x, BI_Alfa_Romeo_x, BI_Chrysler_x, BI_Fiat_x, BI_Lexus_x, CI_Italy_x, CI_Japan_x and CI_USA_x were normally distributed. Hence it is assumed that 14 variables are not normally distributed. All 22 variables, however, are accepted for further analysis using Pearson correlation analysis.

Statistical analysis was conducted using Pearson correlation in order to examine the correlation between country image and the dimensions of brand equity, brand quality and brand image. According to Karjaluoto (2007), Pearson correlation is the most commonly used correlation in statistical analysis. The analysis was run using SPSS to determine the correlation coefficients between country images and their premium and standard car brands' brand equity dimensions. Mean values of variables BQ and BI for each car brand are presented in table 14. Similarly, the mean values of country image items are presented in table 15.

Table 14. Mean values of brand equity sum variable items for each car brand.

		Alfa Romeo		Fiat		Chrysler		Ford		Lexus		Toyota		BMW		Volkswagen	
	Variable	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Brand quality BQ	Trustworthyness	3.22	1.068	2.69	.890	3.48	.909	3.45	.961	3.94	.806	4.05	.948	4.52	.656	4.24	.925
	Sophistication	3.66	.906	2.75	.917	3.50	.993	3.21	.937	4.03	.928	3.74	.911	4.60	.649	3.95	.849
	Efficiency	3.97	.861	2.69	.912	3.65	.886	3.27	.946	4.02	.890	3.54	.930	4.68	.583	3.78	.875
	Quality	3.75	1.105	2.63	.900	3.67	.988	3.27	.966	4.23	.878	3.75	.884	4.73	.529	4.10	.802
	Value	4.01	1.029	2.32	.869	3.53	1.050	2.61	.869	4.05	.969	2.91	.924	4.55	.740	3.23	.889
	Durability	2.89	1.043	2.65	.930	3.34	.850	3.40	.915	3.72	.813	3.91	1.025	4.22	.791	4.18	.825
	Reliability	3.01	1.085	2.83	.934	3.50	.898	3.50	.865	3.80	.809	4.04	.807	4.28	.807	4.25	.681
Brand image BI	Prestige	4.21	.926	2.13	.792	3.41	1.084	2.46	.840	4.23	.884	2.60	.824	4.52	.728	2.90	.885
	Style	4.11	.932	2.31	.856	3.44	1.199	2.59	.883	4.01	.943	2.84	.920	4.53	.640	3.25	.979
	Performance	3.43	1.067	3.18	1.009	3.66	.939	3.72	.948	3.85	.872	4.18	.801	4.29	.828	4.33	.749
	Mean	3.62		2.62		3.52		3.15		3.99		3.56		4.49		3.82	

Table 15. Mean values of country image items.

Variable		Germany		Italy		Japan		USA	
		Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Country image CI	Innovativeness	4.33	.788	2.91	.976	4.46	.685	3.46	.930
	Design	3.95	.849	4.06	.910	3.79	.825	3.49	.853
	Respected brands	4.51	.700	3.56	1.095	4.07	.824	3.59	.948
	Exclusiveness	3.37	1.107	3.91	1.045	3.14	.944	3.07	1.007
	Quality	4.37	.744	3.28	1.084	3.93	.926	3.44	.896
	High craftmanship	4.22	.698	3.65	1.001	4.03	.826	3.50	.876
	Durability	4.47	.592	2.86	1.034	3.87	.852	3.42	.906
Mean		4.18		3.46		3.90		3.42	

Pearson correlation is calculated using SPSS software for sum variables BQ, BI and CI. The results are presented in table 16. for BQ and table 17. for BI. First, the results for correlation between brand quality sum variables of the 8 car brands and country image sum variables of the four countries are discussed.

According to the analysis, there is a statistically significant correlation in between country images and brand quality perceptions. All statistically significant correlations are positive. The country image of Italy correlates strongly with the brand quality perception of Alfa Romeo ($r = 0.563$, $p < 0.01$), BMW ($r = 0.471$, $p < 0.01$), Chrysler ($r = 0.460$, $p < 0.01$), Fiat ($r = 0.243$, $p < 0.05$) and Ford ($r = 0.219$, $p < 0.05$). Country image of Japan correlates with the brand quality perception of Toyota ($r = 0.400$, $p < 0.01$), BMW ($r = 0.323$, $p < 0.01$), Volkswagen ($r = 0.276$, $p < 0.01$), Ford ($r = 0.242$, $p < 0.05$), Chrysler ($r = 0.207$, $p < 0.05$) and Lexus ($r = 0.205$, $p < 0.05$). Country image of Germany correlates with the brand quality perception of BMW ($r = 0.494$, $p < 0.01$), Volkswagen ($r = 0.445$, $p < 0.01$), Toyota ($r = 0.346$, $p < 0.01$), Lexus ($r = 0.213$, $p < 0.05$) and Ford ($r = 0.209$, $p < 0.05$). Finally, country image of USA correlates with the brand quality perception of Chrysler ($r = 0.572$, $p < 0.01$), Ford ($r = 0.284$, $p < 0.01$), BMW ($r = 0.281$, $p < 0.01$), Alfa Romeo ($r = 0.242$, $p < 0.05$) and Fiat ($r = 0.224$, $p < 0.05$). A strong correlation ($r > 0.5$, $p < 0.01$) was between Italy and the brand quality of Alfa Romeo, and between USA and Chrysler.

Table 16. Pearson correlation between brand quality and country image.

Sum variable		BQ_AlfaRomeo_x	BQ_BMW_x	BQ_Chrysler_x	BQ_Fiat_x	BQ_Ford_x	BQ_Lexus_x	BQ_Toyota_x	BQ_Volkswagen_x
CI_Italy_x	Pearson Correlation	.563**	.471**	.460**	.243*	.219*	.077	-.074	-.105
	Sig. (2-tailed)	.000	.000	.000	.014	.027	.441	.462	.292
CI_Japan_x	Pearson Correlation	.159	.323**	.207*	.056	.242*	.205*	.400**	.276**
	Sig. (2-tailed)	.110	.001	.037	.579	.014	.039	.000	.005
CI_Germany_x	Pearson Correlation	.137	.494**	.139	.009	.209*	.213*	.346**	.445**
	Sig. (2-tailed)	.169	.000	.163	.926	.035	.032	.000	.000
CI_USA_x	Pearson Correlation	.242*	.281**	.572**	.224*	.284**	.004	.134	.035
	Sig. (2-tailed)	.014	.004	.000	.024	.004	.967	.179	.727

**. Correlation is significant at the 0.01 level (2-tailed).   *. Correlation is significant at the 0.05 level (2-tailed).

There is also a statistically significant correlation in between country images and brand images. All statistically significant correlations are positive. The country image of Italy correlates with the brand image of Alfa Romeo ($r = 0.590$, $p < 0.01$), BMW ($r = 0.391$, $p < 0.01$), Chrysler ($r = 0.385$, $p < 0.01$), Fiat ($r = 0.271$, $p < 0.01$) and Ford ($r = 0.266$, $p < 0.01$). The image of Japan correlates with the brand image of Toyota ($r = 0.411$, $p < 0.01$), Volkswagen ($r = 0.367$, $p < 0.01$), Lexus ($r = 0.276$, $p < 0.01$), BMW ($r = 0.255$, $p < 0.01$) and Alfa Romeo ($r = 0.220$, $p < 0.05$). The image of Germany correlates with the brand image of BMW ($r = 0.512$, $p < 0.01$), Volkswagen ($r = 0.476$, $p < 0.01$), Lexus ($r = 0.317$, $p < 0.01$) and Toyota ($r = 0.317$, $p < 0.01$). Finally, The country image of USA correlates with the brand image of Chrysler ($r = 0.469$, $p < 0.01$), Ford ($r = 0.307$, $p < 0.01$), Alfa Romeo ($r = 0.297$, $p < 0.01$), BMW ($r = 0.287$, $p < 0.01$) and Fiat ($r = 0.210$, $p < 0.05$). A strong and statistically significant correlation ($r > 0.5$, $p < 0.01$) was found between the images of Italy and Alfa Romeo, and Germany and BMW.

Table 17. Pearson correlation between brand image and country image.

Sum variable		BI_AlfaRomeo_x	BI_BMW_x	BI_Chrysler_x	BI_Fiat_x	BI_Ford_x	BI_Lexus_x	BI_Toyota_x	BI_Volkswagen_x
CI_Italy_x	Pearson Correlation	.590**	.391**	.385**	.271**	.266**	.119	-.078	.004
	Sig. (2-tailed)	.000	.000	.000	.006	.007	.232	.434	.965
CI_Japan_x	Pearson Correlation	.220*	.255**	.137	-.017	.188	.276**	.411**	.367**
	Sig. (2-tailed)	.026	.010	.168	.868	.058	.005	.000	.000
CI_Germany_x	Pearson Correlation	.166	.512**	.066	-.082	.177	.317**	.317**	.476**
	Sig. (2-tailed)	.095	.000	.512	.411	.075	.001	.001	.000
CI_USA_x	Pearson Correlation	.297**	.287**	.469**	.210*	.307**	.059	.150	.113
	Sig. (2-tailed)	.002	.003	.000	.034	.002	.554	.133	.256

**. Correlation is significant at the 0.01 level (2-tailed).   *. Correlation is significant at the 0.05 level (2-tailed).

Statistically significant correlations were found between country images and brand quality perceptions, country images and brand images, and also between country images. The direction of the statistically significant correlations was always positive. To conclude, there is a relationship between brand equity sum variables BQ and BI, and country image sum variable CI. However, a correlation between two variables does not automatically mean that there is a causality between the variables i.e. one variable would influence the other variable (Nummenmaa 2008, 265). Next, the correlations are interpreted.

In order to answer the research questions related to the influence of brand origin on brand equity, Pearson correlations are used to determine whether there is a relationship between the constructs. Brand origin has been defined as the location that the target group of the brand associates with the brand (Thakor & Kohli 1996). It was shown earlier in the study that the majority respondents associated each car brand with the correct country of origin with one exception. The origin of one car brand, Lexus, was incorrectly identified or unknown to as many as 56,9 % of the respondents. It is concluded that the respondents were able to draw a link between the right brand and the country. Therefore it is assumed that the respondents based their perceptions of the brands on correct information i.e. Toyota's origin in Japan had potential to influence Toyota's brand through Japan's country image rather than the image of USA. Table 18. shows the comparison of correlation coefficients between premium and standard car brands.

Table 18. Comparison of correlations between standard and premium car brands.

Variable	Premium brand	Standard brand	Difference in correlation	Variable	Premium brand	Standard brand	Difference in correlation
CI_Italy_x	BQ_AlfaRomeo_x .563**	BQ_Fiat_x .243*	0.320	CI_Italy_x	BI_AlfaRomeo_x .590**	BI_Fiat_x .271**	0.319
CI_Japan_x	BQ_Lexus_x .205*	BQ_Toyota_x .400**	-0.195	CI_Japan_x	BI_Lexus_x .276**	BI_Toyota_x .411**	-0.135
CI_Germany_x	BQ_BMW_x .494**	BQ_Volkswagen_x .445**	0.049	CI_Germany_x	BI_BMW_x .512**	BI_Volkswagen_x .476**	0.036
CI_USA_x	BQ_Chrysler_x .572**	BQ_Ford_x .284**	0.288	CI_USA_x	BI_Chrysler_x .469**	BI_Ford_x .307**	0.162

**. Correlation is significant at the 0.01 level (2-tailed).   *. Correlation is significant at the 0.05 level (2-tailed).

Four countries and 8 car brands were studied to investigate differences in the influence of brand origin on premium and standard car brands' equity. Two Italian car brands, premium-class Alfa Romeo and standard Fiat, are analyzed first. Statistical analysis showed that there is a strong and statistically significant correlation between Alfa Romeo's brand quality and the country image of Italy ($r = 0.563$, $p < 0.01$). Alfa Romeo's brand image had even stronger significant correlation with Italy ($r = 0.590$, $p < 0.01$). On the other hand, the correlation between the perceived quality of Fiat and the country image of Italy ($r = 0.243$, $p < 0.05$) was much lower than Alfa Romeo. Similarly, Fiat's perceived brand image had a weak statistically significant correlation with the country image of Italy ($r = 0.271$, $p < 0.01$). The difference between Alfa Romeo and Fiat's correlations with the country image of Italy for brand quality was 0.320, and for brand image 0.319. In other words, Alfa Romeo's brand equity dimensions have much higher correlation with Italy's country image than Fiat. Those respondents who gave high ratings to Italy also rate Alfa Romeo more favourably than Fiat. This suggests that Italy's country image may contribute more favourably toward Alfa Romeo's brand equity that Fiat.

Statistical analysis revealed statistically significant correlations between Chrysler's perceived brand quality and the country image of the USA ($r = 0.572$, $p < 0.01$) and Chrysler's brand image and the country image of the USA ($r = 0.469$, $p < 0.01$). On the other hand, Ford had correlations with its perceived brand quality and the image of the USA ($r = 0.284$, $p < 0.01$), and with brand image and the image of the USA ($r = 0.307$, $p < 0.01$). Chrysler had stronger correlation with the image of USA than Ford for both brand quality and brand image. The differences were 0.288 for brand quality and 0.162 for brand image. The brand image and perceived quality of Chrysler correlate with the country image of the USA more strongly than Ford does. Therefore it is suggested the country image of the USA may influence positively the image of Chrysler. Especially Chrysler's brand quality correlation is strong and significant with the image of the USA. This suggests that the quality perceptions of goods manufactured in the USA are transferred to Chrysler's brand equity through the brand's perceived quality.

The analysis showed that BMW had a statistically significant correlation between its brand quality (r = 0.494, p < 0.01) and the country image of Germany. Also, the brand image of BMW strongly correlated with the image of Germany (r = 0.512, p < 0.01). Very similar to BMW, Volkswagen's brand quality correlated with the image of Germany (r = 0.445, p < 0.01). Volkswagen's brand image correlated with the image of Germany (r = 0. 476. P < 0.01). The differences between correlations in brand equity dimensions are small, and no suggestions are made regarding the differential influence of brand origin between premium and standard car brands from Germany. BMW had 0.049 higher correlation between its brand quality and country image of Germany than Volkswagen. Similarly, the difference in the brands' correlations between the brand image of BMW and the brand image of Volkswagen with the country image of Germany was only 0.036. Both premium and standard car brands from Germany are evaluated equally favourably. This suggests that consumers perceive the brands to be equal in brand equity dimensions.

Japanese premium car brand Lexus had a statistically significant correlation (r = 0.205, p < 0.05) between its perceived brand quality and the country image of Japan. Lexus had also a statistically significant weak correlation (r = 0.276, p < 0.01) between its brand image and the image of Japan. Correlations of Toyota, a standard car brand from Japan, contrast the results of other countries in the study. Toyota had stronger statistically significant correlations between its perceived brand quality and the image of Japan (r = 0.400, p < 0.01), and between its brand image and the image of Japan (r = 0.411, p < 0.01). The findings are opposite to those of Italy and USA. The reason for Japanese premium car's weak correlation with the country image of Japan could be the lack of knowledge about Japan as the origin of Lexus. The majority of the respondents did not recognize Lexus' country-of-origin.

In conclusion, the findings suggest that Italian and American premium car brands may benefit from their origins more than standard car brands from the respective countries. Pearson correlations were found to be strong and statistically significant, implying a relationship between brand equity dimensions, brand quality and brand image, and country image. On the other hand, no difference between premium and standard cars

from Germany was found. The findings regarding Japanese car brands are contradictory. However, it is possible that the weak correlation between Lexus' brand equity dimensions and the country image of Japan is a result of the respondents' difficulty to identify Lexus as a Japanese brand. The next chapter discusses the differences in brand perceptions between different respondent groups.

6.2.5   One-way ANOVA with gender as an independent variable

This chapter focuses on analyzing the impact of gender on consumers' perceptions of premium and standard cars. The aim of the research is to better understand the influence of brand origin on car brands' brand equity. Therefore is relevant to study if the respondent demographics influence the dimensions of brand equity of car brands, and if there is a difference between premium and standard cars. One-way ANOVA is used to analyze differences between the groups in their brand perceptions. Pearson correlations are then analyzed to determine relationships between country images and brand perceptions. All statistically significant results are reported in table 19.

Variable BQ_AlfaRomeo_x yielded statistically significant results (p = 0.002). Female respondents rate Alfa Romeo's brand quality higher (3.90) than male respondents (3.42). Similarly, variable BI_AlfaRomeo_x showed statistically significant results (p = 0.06). Female respondents rated Alfa Romeo's brand image significantly higher (3.69) than male respondents (3.25). Since females rate Alfa Romeo higher than males in both dimensions of brand equity, the results suggest that gender influences consumer perceptions of the Italian premium car Alfa Romeo's brand quality and image.

Variable BQ_BMW_x showed statistically significant results (p = 0.020). Females have more favourable perception of BMW's brand quality (4.70) than males (4.47). The difference, however, is small and no further conclusions are drawn about the influence of gender on BMW's brand quality perception.

Variable BQ_Chrysler_x showed statistically significant results (p = 0.000). Female respondents rated Chrysler's brand quality higher (3.80) than males (3.16). Similar

finding is evident in variable BI_Chrysler_x, which also yielded statistically significant results (p = 0.000). Chrysler's brand image is rated higher by females (3.70) than males (3.08). The results suggest that females perceive Chrysler more favourably than males in general. It seems that gender is linked with the evaluation of the American premium car Chrysler.

Variable BQ_Ford_x showed statistically significant results (p = 0.020). Ford's brand quality was rated higher by females (3.29) than males (2.94). The difference is rather small and no further conclusions can be made.

Variable BQ_Fiat_x yielded statistically significant results (p = 0.006). Fiat's brand quality was rated higher by females (2.76) than males (2.37). Variable BI_Fiat_x resulted in statistically significant findings (p = 0.001). The brand image of Fiat was perceived by females to be higher (2.78) than males (2.34). The results suggest that females have more favourable perception regarding Fiat's quality and brand image. The finding is in line with the other results. In general, females tend to have more favourable perception of premium cars than males. The statistically significant results show that Alfa Romeo and Chrysler's brand equity dimensions, brand quality and brand image, are perceived higher by females than males.

Table 19. One-way ANOVA with gender as an independent variable.

	Descriptives					**One-way Anova**				
Sum variable	**Group**	**N**	**Mean**	**Std. Deviation**		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
BQ_AlfaRomeo_x	Male	38	3.42	.693	Between Groups	5.590	1	5.590	10.346	.002
	Female	64	3.90	.758	Within Groups	54.031	100	.540		
	Total	102	3.72	.768	Total	59.621	101			
BQ_BMW_x	Male	38	4.47	.523	Between Groups	1.279	1	1.279	5.603	.020
	Female	64	4.70	.449	Within Groups	22.822	100	.228		
	Total	102	4.61	.488	Total	24.101	101			
BQ_Chrysler_x	Male	38	3.16	.662	Between Groups	9.765	1	9.765	18.740	.000
	Female	64	3.80	.755	Within Groups	52.108	100	.521		
	Total	102	3.56	.783	Total	61.873	101			
BQ_Fiat_x	Male	38	2.37	.641	Between Groups	3.547	1	3.547	7.814	.006
	Female	64	2.76	.692	Within Groups	45.388	100	.454		
	Total	102	2.62	.696	Total	48.935	101			
BQ_Ford_x	Male	38	2.94	.753	Between Groups	2.948	1	2.948	5.628	.020
	Female	64	3.29	.706	Within Groups	52.390	100	.524		
	Total	102	3.16	.740	Total	55.338	101			
BQ_Lexus_x	Male	38	4.12	.632	Between Groups	.281	1	.281	.514	.475
	Female	64	4.01	.796	Within Groups	54.673	100	.547		
	Total	102	4.05	.738	Total	54.954	101			
BQ_Toyota_x	Male	38	3.62	.611	Between Groups	.019	1	.019	.038	.845
	Female	64	3.59	.758	Within Groups	49.941	100	.499		
	Total	102	3.60	.703	Total	49.960	101			
BQ_Volkswagen_x	Male	38	3.83	.501	Between Groups	.064	1	.064	.135	.715
	Female	64	3.88	.780	Within Groups	47.583	100	.476		
	Total	102	3.86	.687	Total	47.647	101			
BI_AlfaRomeo_x	Male	38	3.25	.756	Between Groups	4.640	1	4.640	7.809	.006
	Female	64	3.69	.779	Within Groups	59.412	100	.594		
	Total	102	3.53	.796	Total	64.052	101			
BI_BMW_x	Male	38	4.28	.574	Between Groups	.487	1	.487	1.360	.246
	Female	64	4.42	.612	Within Groups	35.813	100	.358		
	Total	102	4.37	.600	Total	36.300	101			
BI_Chrysler_x	Male	38	3.08	.698	Between Groups	9.041	1	9.041	17.921	.000
	Female	64	3.70	.717	Within Groups	50.451	100	.505		
	Total	102	3.47	.767	Total	59.492	101			
BI_Fiat_x	Male	38	2.34	.627	Between Groups	4.664	1	4.664	11.965	.001
	Female	64	2.78	.623	Within Groups	38.977	100	.390		
	Total	102	2.62	.657	Total	43.641	101			
BI_Ford_x	Male	38	2.98	.706	Between Groups	1.347	1	1.347	3.167	.078
	Female	64	3.22	.618	Within Groups	42.520	100	.425		
	Total	102	3.13	.659	Total	43.867	101			
BI_Lexus_x	Male	38	3.96	.659	Between Groups	.080	1	.080	.191	.663
	Female	64	3.90	.639	Within Groups	41.853	100	.419		
	Total	102	3.92	.644	Total	41.933	101			
BI_Toyota_x	Male	38	3.54	.472	Between Groups	.049	1	.049	.141	.709
	Female	64	3.50	.648	Within Groups	34.712	100	.347		
	Total	102	3.51	.587	Total	34.761	101			
BI_Volkswagen_x	Male	38	3.77	.429	Between Groups	.003	1	.003	.008	.928
	Female	64	3.78	.647	Within Groups	33.158	100	.332		
	Total	102	3.78	.573	Total	33.161	101			

In order to evaluate the differential effect of brand origin on male and female respondents' evaluation of cars, another correlation analysis is conducted. The analysis focuses solely on those brand sum variables that were found differing in mean values between male and female respondents using one-way ANOVA. This limits the analysis to Italian and American brands since there are statistically significant differences between genders in their mean values for the brands originating in the countries. The correlation between male respondents' evaluation of cars and countries is presented in table 20.

Table 20. Correlations between male respondents' evaluation of cars brands and countries.

Variable	Premium brand	Standard brand	Difference in correlation	Variable	Premium brand	Standard brand	Difference in correlation
CI_Italy_x	BQ_AlfaRomeo_x	BQ_Fiat_x	0.105	CI_Italy_x	BI_AlfaRomeo_x	BI_Fiat_x	0.080
	.617**	.512**			.581**	.501**	
CI_USA_x	BQ_Chrysler_x	BQ_Ford_x	0.430	CI_USA_x	BI_Chrysler_x	BI_Ford_x	0.447
	.699**	0.269			.723**	0.276	

**. Correlation is significant at the 0.01 level (2-tailed).   *. Correlation is significant at the 0.05 level (2-tailed).

There is a statistically significant correlation between male respondents' perception of Italy and Italian cars. The correlation between the perceived quality of Alfa Romeo and the country image of Italy (r = 0.617, p < 0.01) was found statistically significant. Similarly, the correlation between the perceived quality of Fiat and the country image of Italy (r = 0.512, p < 0.01) was found statistically significant. The same applies for the brand image of Alfa Romeo (r = 0.581, p < 0.01) and Fiat (r = 0.501, p < 0.01). Alfa Romeo correlates only slightly (0.08) more. This suggests that male respondents' evaluation of Italian cars is the same regardless of the segment. On the other hand, the brand quality of Chrysler correlates strongly (r = 0.699, p < 0.01) with the image of the USA, while Ford does not (r = 0.269, p > 0.05). Similarly, the correlation between the brand image of Chrysler (r = 0.723, p < 0.01) and the USA exceeds Ford's correlation with the USA (r = 0.276, p > 0.05). Ford's correlations are not statistically significant. The findings are mixed. There is only a small and statistically significant difference in the brand origin effect between car segments among male respondents in the case of

Italian cars. However, there is a large but not statistically significant difference in the brand origin effect between American car segments among male respondents.

Table 21. Correlations between female respondents' evaluation of cars brands and countries.

Variable	Premium brand	Standard brand	Difference in correlation	Variable	Premium brand	Standard brand	Difference in correlation
CI_Italy_x	BQ_AlfaRomeo_x	BQ_Fiat_x	0.457	CI_Italy_x	BI_AlfaRomeo_x	BI_Fiat_x	0.491
	.501**	0.044			.563**	0.072	
CI_USA_x	BQ_Chrysler_x	BQ_Ford_x	0.246	CI_USA_x	BI_Chrysler_x	BI_Ford_x	-0.013
	.506**	.260*			.290*	.303*	

**. Correlation is significant at   *. Correlation is significant at the 0.05 level (2-tailed).

The correlation between female respondents' country images and brand ratings are analyzed next. Table 21. presents the correlation coefficients between Italy, the USA and the brands originating in these countries. There is a statistically significant correlation between female respondents' perception of Italy and Italian cars. The correlation between the perceived quality of Alfa Romeo and the country image of Italy ($r = 0.501$, $p < 0.01$) was found statistically significant. However, the correlation between the perceived quality of Fiat and the country image of Italy ($r = 0.044$, $p > 0.05$) was not statistically significant. The brand image of Alfa Romeo correlates significantly with Italy ($r = 0.563$, $p < 0.01$) but Fiat's image does not ($r = 0.072$, $p > 0.05$). Alfa Romeo correlates more with the image of Italy than Fiat among female respondents. This suggests that female respondents' evaluation of Italian cars differs between segments. Females may associate Italy with Italian premium cars but not with standard cars. The perceived brand quality of Chrysler correlates strongly ($r = 0.506$, $p < 0.01$) with the image of the USA, while Ford does less so ($r = 0.260$, $p < 0.05$). The correlation between the brand image of Chrysler ($r = 0.290$, $p < 0.05$) and the USA is lower than Ford's correlation with the image of the USA ($r = 0.303$, $p < 0.05$). The results suggest that the brand origin effect is greater among the female respondents than males in premium car segment. Females' evaluation of premium cars is more correlated with the country-of-origin of the premium cars than with standard cars. The exception is Ford's brand image, which correlates more with the image of the USA than Chrysler's brand image does.

To sum up, the findings are mixed regarding male respondents. There is only a small statistically significant difference in the brand origin effect between standard and premium car segments among male respondents in the case of Italian cars. However, there is a large but not statistically significant difference in the brand origin effect between American car segments among male respondents. On the other hand, females' evaluation of premium cars is more correlated with the country-of-origin of the premium cars than with standard cars. This suggests that the brand origin effect is greater among the female respondents than males in premium car segment.

6.2.6 One-way ANOVA with annual driving experience as an independent variable

Hypothesis 5 proposes that product category experience influences consumers' evaluation of car brands differentially depending on the brand origin. Therefore it is suggested that Finnish consumers' experience of cars - measured as the amount of driving annually - influences their evaluations of the car brands selected in this study. All statistically significant results are presented in tables 22 and 23.

Table 22. One-way ANOVA with annual driving as an independent variable.

Descriptives				One-way Anova					
Sum variable	N	Mean	Std. Deviation		Sum of Squares	df	Mean Square	F	Sig.
BQ_AlfaRomeo_x 0 km	11	3.49	.729	Between Groups	9.217	4	2.304	4.435	.002
Less than 1000 km	37	4.06	.634	Within Groups	50.403	97	.520		
1000-4999 km	27	3.75	.683	Total	59.621	101			
5000-10000 km	13	3.31	.777						
More than 10000 km	14	3.33	.930						
Total	102	3.72	.768						
BQ_BMW_x 0 km	11	4.27	.728	Between Groups	3.202	4	.801	3.716	.007
Less than 1000 km	37	4.78	.322	Within Groups	20.898	97	.215		
1000-4999 km	27	4.67	.324	Total	24.101	101			
5000-10000 km	13	4.37	.752						
More than 10000 km	14	4.56	.424						
Total	102	4.61	.488						
BQ_Chrysler_x 0 km	11	3.31	.575	Between Groups	10.486	4	2.622	4.949	.001
Less than 1000 km	37	3.94	.764	Within Groups	51.387	97	.530		
1000-4999 km	27	3.56	.702	Total	61.873	101			
5000-10000 km	13	3.18	.831						
More than 10000 km	14	3.13	.678						
Total	102	3.56	.783						
BQ_Fiat_x 0 km	11	2.93	.313	Between Groups	3.383	4	.846	1.801	.135
Less than 1000 km	37	2.71	.801	Within Groups	45.551	97	.470		
1000-4999 km	27	2.61	.733	Total	48.935	101			
5000-10000 km	13	2.49	.514						
More than 10000 km	14	2.26	.579						
Total	102	2.62	.696						
BQ_Ford_x 0 km	11	3.38	.583	Between Groups	2.617	4	.654	1.204	.314
Less than 1000 km	37	3.24	.758	Within Groups	52.722	97	.544		
1000-4999 km	27	3.09	.893	Total	55.338	101			
5000-10000 km	13	3.28	.513						
More than 10000 km	14	2.83	.602						
Total	102	3.16	.740						
BQ_Lexus_x 0 km	11	3.44	.726	Between Groups	6.969	4	1.742	3.522	.010
Less than 1000 km	37	3.95	.834	Within Groups	47.985	97	.495		
1000-4999 km	27	4.24	.524	Total	54.954	101			
5000-10000 km	13	4.35	.713						
More than 10000 km	14	4.17	.586						
Total	102	4.05	.738						
BQ_Toyota_x 0 km	11	3.38	.583	Between Groups	1.340	4	.335	.668	.616
Less than 1000 km	37	3.53	.783	Within Groups	48.620	97	.501		
1000-4999 km	27	3.73	.786	Total	49.960	101			
5000-10000 km	13	3.71	.413						
More than 10000 km	14	3.59	.620						
Total	102	3.60	.703						
BQ_Volkswagen_x 0 km	11	3.60	.704	Between Groups	3.997	4	.999	2.220	.072
Less than 1000 km	37	3.66	.879	Within Groups	43.650	97	.450		
1000-4999 km	27	4.04	.512	Total	47.647	101			
5000-10000 km	13	4.06	.411						
More than 10000 km	14	4.03	.391						
Total	102	3.86	.687						

Table 23. One-way ANOVA with annual driving as an independent variable.

Sum variable		N	Mean	Std. Deviation		Squares	df	Square	F	Sig.
BI_AlfaRomeo_x	0 km	11	3.27	.393	Between Groups	12.611	4	3.153	5.945	.000
	Less than 1000 km	37	3.95	.711	Within Groups	51.441	97	.530		
	1000-4999 km	27	3.50	.709	Total	64.052	101			
	5000-10000 km	13	3.12	.742						
	More than 10000 km	14	3.06	.962						
	Total	102	3.53	.796						
BI_BMW_x	0 km	11	4.09	.659	Between Groups	4.561	4	1.140	3.485	.011
	Less than 1000 km	37	4.61	.454	Within Groups	31.739	97	.327		
	1000-4999 km	27	4.33	.474	Total	36.300	101			
	5000-10000 km	13	4.03	.966						
	More than 10000 km	14	4.34	.473						
	Total	102	4.37	.600						
BI_Chrysler_x	0 km	11	3.31	.509	Between Groups	12.023	4	3.006	6.142	.000
	Less than 1000 km	37	3.91	.754	Within Groups	47.469	97	.489		
	1000-4999 km	27	3.27	.736	Total	59.492	101			
	5000-10000 km	13	3.03	.725						
	More than 10000 km	14	3.21	.557						
	Total	102	3.47	.767						
BI_Fiat_x	0 km	11	2.91	.394	Between Groups	3.273	4	.818	1.966	.106
	Less than 1000 km	37	2.74	.696	Within Groups	40.368	97	.416		
	1000-4999 km	27	2.59	.683	Total	43.641	101			
	5000-10000 km	13	2.38	.671						
	More than 10000 km	14	2.34	.546						
	Total	102	2.62	.657						
BI_Ford_x	0 km	11	3.22	.510	Between Groups	.938	4	.234	.530	.714
	Less than 1000 km	37	3.23	.708	Within Groups	42.929	97	.443		
	1000-4999 km	27	3.09	.682	Total	43.867	101			
	5000-10000 km	13	3.03	.647						
	More than 10000 km	14	2.99	.630						
	Total	102	3.13	.659						
BI_Lexus_x	0 km	11	3.35	.391	Between Groups	4.789	4	1.197	3.127	.018
	Less than 1000 km	37	3.94	.648	Within Groups	37.143	97	.383		
	1000-4999 km	27	3.96	.626	Total	41.933	101			
	5000-10000 km	13	4.20	.678						
	More than 10000 km	14	4.00	.608						
	Total	102	3.92	.644						
BI_Toyota_x	0 km	11	3.11	.493	Between Groups	2.516	4	.629	1.892	.118
	Less than 1000 km	37	3.50	.605	Within Groups	32.245	97	.332		
	1000-4999 km	27	3.59	.635	Total	34.761	101			
	5000-10000 km	13	3.72	.520						
	More than 10000 km	14	3.53	.475						
	Total	102	3.51	.587						
BI_Volkswagen_x	0 km	11	3.36	.320	Between Groups	3.985	4	.996	3.313	.014
	Less than 1000 km	37	3.66	.607	Within Groups	29.175	97	.301		
	1000-4999 km	27	3.92	.598	Total	33.161	101			
	5000-10000 km	13	4.03	.547						
	More than 10000 km	14	3.91	.390						
	Total	102	3.78	.573						

Variable BQ_AlfaRomeo_x yielded results on statistically significant level (p = 0.002). Alfa Romeo's perceived brand quality was highest among those respondents who drive less than 1000 kilometres annually. They rated Alfa Romeo's brand quality higher (4.06) than the respondents who drive 5000 – 10 000 kilometres annually (3.31). Also those who drive more than 10 000 kilometres in a year rated Alfa Romeo's quality poorly (3.33). The results suggest that Alfa Romeo's brand quality perception among those who do not drive a car is better because they have less information about Alfa Romeo's quality than those who are experienced in the product category.

Variable BQ_BMW_x showed statistically significant (p = 0.007) results. The respondents who do not drive a car rated BMW's brand quality lower (4.27) than those who drive 1000 – 5000 kilometres in a year (4.67). The results indicate that some driving experience results in improved knowledge about BMW's quality. Therefore it is suggested that in order to appreciate BMW's quality, one should have some knowledge about driving.

Variable BQ_Chrysler_x showed statistically significant (p = 0.001) results. The respondents who drive less than 1000 kilometres annually rate Chrysler's quality most favourably (3.94) while the brand quality perception is the lowest among those who drive more than 10 000 kilometres. The results indicate that Chrysler's quality perception deteriorates as consumers gain more experience about driving. It may be that Chrysler does not perform expectedly in brand quality.

Variable BQ_Lexus_x yielded results that were statistically significant (p = 0.010). Brand quality rating is the highest among those who drive 5000 – 10 000 kilometres (4.35), while the lowest rating is given by the respondents who do not drive a car (3.44). The results suggest that Lexus' quality is higher than it is perceived to be, since the quality rating improves with driving experience. Lexus may not have succeeded in communicating its qualities to consumers in Finland.

Variable BI_AlfaRomeo_x showed statistically significant results (p = 0.000). Alfa Romeo's brand image was highest among those who drive more than 10 000 kilometres in a year. On the other hand, those with less driving experience, who only drive less than 1000 kilometres annually, rated Alfa Romeo's brand image the highest (3.95). The results suggest that Alfa Romeo's brand image does not reflect the brand's performance in reality, but the brand has been successful in building a strong image for the brand.

Variable BI_BMW_X showed statistically significant results (p = 0.011). BMW's brand image was rated highest among those who drive less than 1000 kilometres in a year (4.61). The respondents with 5000 – 10 000 kilometres of driving annually rated BMW's brand image the lowest (4.03). This suggests that BMW's brand image is strong among those who have little knowledge of driving a cars, and therefore possibly little information about car brands. However, BMW has succeeded in building a favourable image in consumers mind. The brand image may not realize in practice as the low rating with higher driving experience indicates.

Variable BI_Chrysler_x showed statistically significant results (p = 0.000). Chrysler's brand image was rated the highest by those with less than 1000 kilometres of driving annually (3.91). The rating was the lowest among drivers with 5000 – 10 000 kilometres of driving (3.03). This suggests that consumers associate positive attributes with Chrysler, however the image quickly deteriorates as consumers gain knowledge about the product category.

Variable BI_Lexus_x yielded statistically significant results (p = 0.018). Lexus' brand image was highest among the drivers with 5000 – 10 000 kilometres of annual driving. The lowest score was given by non-drivers (3.35). This indicates that Lexus has not been able to position itself as a premium car brand in Finland. Those who do not have experience in driving, and presumably in cars in general, have little understanding of Lexus.

Variable BI_Volkswagen_x showed statistically significant results (p = 0.014). Volkswagen's brand image is highest among respondents who drive annually 5000 – 10

000 kilometres. The lowest brand image perception is among non-drivers (3.36). Since also those with the highest annual driving experience rate Volkswagen high on brand image (3.91), the results suggest that Volkswagen could improve its brand image among non-drivers and those with little driving experience. Those who have experience in the category already favour the brand.

In conclusion, German and Japanese premium cars receive better evaluations for their brand quality from respondents who have product category knowledge as opposed to those who do not drive a car. Alfa Romeo and Chrysler's brand quality perception deteriorates when the respondents are more experienced drivers. Similarly, Alfa Romeo and Chrysler's brand image evaluations are lower for drivers than non-drivers. German cars' brand image is generally high. However, Volkswagen receives the most favourable evaluation from those with driving experience.

6.2.7   One-way ANOVA with annual international travel as an independent variable

One-way ANOVA was conducted using the amount of international travel annually as an indicator of exposure to different types of cars. The exposure would then influence consumers' evaluation of car brands as suggested previously in the hypotheses develoment chapter. However, the analysis showed no statistically significant results. The conclusion is that the amount of international travel does not influence Finnish consumers' evaluation of car brands quality or brand image. This suggests that consumers are used to various types of cars ranging from economy to standard and premium classes in Finland. Therefore consumers do not gain any new knowledge regarding car brands due to their international travel.

Table 24. One-way ANOVA with annual international travel as an independent variable.

Sum variable	Group	N	Mean	Std. Deviation		Sum of Squares	df	Mean Square	F	Sig.
Descriptives					**One-way Anova**					
BQ_AlfaRomeo_x	0	2	3.60	.566	Between Groups	.412	3	.137	.228	.877
	1-2	45	3.74	.772	Within Groups	59.208	98	.604		
	3-4	48	3.68	.805	Total	59.621	101			
	5 or more	7	3.91	.609						
	Total	102	3.72	.768						
BQ_BMW_x	0	2	4.70	.424	Between Groups	.076	3	.025	.104	.958
	1-2	45	4.59	.481	Within Groups	24.025	98	.245		
	3-4	48	4.64	.525	Total	24.101	101			
	5 or more	7	4.60	.346						
	Total	102	4.61	.488						
BQ_Chrysler_x	0	2	2.90	1.273	Between Groups	1.328	3	.443	.717	.544
	1-2	45	3.59	.773	Within Groups	60.545	98	.618		
	3-4	48	3.54	.817	Total	61.873	101			
	5 or more	7	3.80	.462						
	Total	102	3.56	.783						
BQ_Fiat_x	0	2	3.00	.283	Between Groups	1.041	3	.347	.710	.548
	1-2	45	2.70	.684	Within Groups	47.894	98	.489		
	3-4	48	2.53	.735	Total	48.935	101			
	5 or more	7	2.57	.547						
	Total	102	2.62	.696						
BQ_Ford_x	0	2	3.90	.141	Between Groups	3.481	3	1.160	2.193	.094
	1-2	45	3.32	.705	Within Groups	51.858	98	.529		
	3-4	48	3.03	.777	Total	55.338	101			
	5 or more	7	2.91	.515						
	Total	102	3.16	.740						
BQ_Lexus_x	0	2	4.10	.990	Between Groups	1.447	3	.482	.883	.453
	1-2	45	3.92	.817	Within Groups	53.507	98	.546		
	3-4	48	4.17	.671	Total	54.954	101			
	5 or more	7	4.11	.576						
	Total	102	4.05	.738						
BQ_Toyota_x	0	2	3.60	.566	Between Groups	1.560	3	.520	1.053	.373
	1-2	45	3.64	.705	Within Groups	48.399	98	.494		
	3-4	48	3.63	.685	Total	49.960	101			
	5 or more	7	3.14	.830						
	Total	102	3.60	.703						
BQ_Volkswagen_x	0	2	3.30	1.273	Between Groups	1.767	3	.589	1.258	.293
	1-2	45	3.88	.663	Within Groups	45.880	98	.468		
	3-4	48	3.91	.639	Total	47.647	101			
	5 or more	7	3.49	.979						
	Total	102	3.86	.687						

Table 25. One-way ANOVA with annual international travel as an independent variable.

	Descriptives					One-way Anova				
Sum variable	Group	N	Mean	Std. Deviation		Sum of Squares	df	Square	F	Sig.
BI_AlfaRomeo_x	0	2	3.50	.141	Between Groups	.255	3	.085	.130	.942
	1-2	45	3.55	.722	Within Groups	63.797	98	.651		
	3-4	48	3.49	.900	Total	64.052	101			
	5 or more	7	3.69	.682						
	Total	102	3.53	.796						
BI_BMW_x	0	2	4.30	.424	Between Groups	.280	3	.093	.254	.858
	1-2	45	4.42	.547	Within Groups	36.019	98	.368		
	3-4	48	4.35	.665	Total	36.300	101			
	5 or more	7	4.23	.559						
	Total	102	4.37	.600						
BI_Chrysler_x	0	2	2.90	1.273	Between Groups	1.496	3	.499	.843	.474
	1-2	45	3.56	.680	Within Groups	57.996	98	.592		
	3-4	48	3.39	.830	Total	59.492	101			
	5 or more	7	3.60	.783						
	Total	102	3.47	.767						
BI_Fiat_x	0	2	2.70	.424	Between Groups	1.784	3	.595	1.392	.250
	1-2	45	2.76	.680	Within Groups	41.857	98	.427		
	3-4	48	2.49	.663	Total	43.641	101			
	5 or more	7	2.54	.341						
	Total	102	2.62	.657						
BI_Ford_x	0	2	3.70	.424	Between Groups	2.108	3	.703	1.649	.183
	1-2	45	3.25	.627	Within Groups	41.759	98	.426		
	3-4	48	3.03	.663	Total	43.867	101			
	5 or more	7	2.94	.772						
	Total	102	3.13	.659						
BI_Lexus_x	0	2	4.20	1.131	Between Groups	.264	3	.088	.207	.891
	1-2	45	3.88	.640	Within Groups	41.668	98	.425		
	3-4	48	3.95	.623	Total	41.933	101			
	5 or more	7	3.94	.830						
	Total	102	3.92	.644						
BI_Toyota_x	0	2	3.70	.141	Between Groups	1.432	3	.477	1.404	.246
	1-2	45	3.53	.632	Within Groups	33.329	98	.340		
	3-4	48	3.55	.562	Total	34.761	101			
	5 or more	7	3.09	.380						
	Total	102	3.51	.587						
BI_Volkswagen_x	0	2	3.40	.283	Between Groups	1.964	3	.655	2.057	.111
	1-2	45	3.87	.553	Within Groups	31.196	98	.318		
	3-4	48	3.78	.566	Total	33.161	101			
	5 or more	7	3.34	.660						
	Total	102	3.78	.573						

The next chapter draws conclusions of this study and discusses the limitation of the current research. Suggestions for future research in the field of brand origin and luxury goods are also made.

7 Conclusions

According to Keller (2009), some companies enjoy high value and wealth due to the competitive advantage that is generated by their luxury brands and the brands' strong images. The initial results of this study suggest that Finnish consumers evaluate cars from certain countries more favourably than other countries. Japanese and German car brands received the highest mean values for brand quality and brand image. American and Italian cars received less favourable evaluation in general. The findings also suggest a positive and statistically significant correlation between brand origin and brand equity of certain premium car brands. The respondents' perception of Alfa Romeo's quality and brand image were found to correlate with the respondents' evaluation of Italy's country image. To the contrary, an Italian standard car Fiat did not show strong correlation between its brand quality or brand image and the image of Italy. In other words, Alfa Romeo's brand equity dimensions have much stronger correlation with Italy's country image than Fiat does. Similarly, the brand image and perceived quality of Chrysler correlate with the country image of the USA more strongly than Ford does. In conclusion, it is suggested that brand origin influences consumers' evaluation of cars, and especially premium cars' brand equity is influenced by the perceived image of its origin.

Also gender influences consumers' evaluations of brands in the premium car segment. Females' evaluation of premium cars is more correlated with the country-of-origin image than with their evaluation of standard cars. This suggests that the brand origin effect is greater among females than males in the premium car segment. Additionally, the results suggest that German and Japanese premium cars receive better evaluations for their brand quality from the respondents who are experienced drivers as opposed to those who do not drive a car. Therefore it is suggested that annual driving experience improves the perceptions of Japanese and German premium cars, but Italian and American cars fail to convince regular drivers about the brands' quality. No evidence

was found to support the relationship between international travel experience and consumers' evaluation of car brands.

There are managerial implications that result from this study. Aiello et al. (2009, 326) describe brand as a representative of the memory of a firm, "which encompasses all the investments, research activities and process technologies or innovations the firm carries out over time". Therefore it is imperative to the firm to guard and nurture its brand with all necessary means. Managers responsible for the brands included in this study can apply the leanings of the research to their brand management practice and gain valuable consumer insights into the brand origin effect, which in turn may help the managers to develop a competitive brand strategy. After all, brands have an impact on consumer behaviour.

The managerial implications are directed to brand managers and other decision-makers who guard and nurture premium brands. Firms should consider that Finnish consumers evaluate cars from certain countries more favourably than cars from other countries. Logically, the brands that have the privilege of originating in a country with a favourable image should seek ways to enhance the awareness of its origin among the target group. Marketing mix offers numerous ways to take on this challenge. As a result, a brand may succeed in improving its brand quality perception and brand image, if some positive associations about its origin would be attached to the brand. Second, it is suggested that brand origin influences consumers' evaluation of cars, and especially premium cars' brand equity correlates with the image of its origin. Firms behind premium cars should look into this in two ways. If the image of the country-of-origin is favourable to the brand, the origin could be leveraged in building the brand stronger. However, the country can be associated with unfavourable attributes that the brand should not be associated with. Then it would be wiser to steer away from any strategy that focuses on the brand origin. Third, it is suggested that the brand origin effect is greater among females than males in the premium car segment. Premium car marketers should put a special emphasis on communicating their brand origin to potential female buyers. Fourth, it is suggested that annual driving experience improves the perceptions of Japanese and German premium cars while Italian and American cars do not. The

makers of premium cars originating in Italy and the USA should focus on improving their brand quality.

Some suggestions for future research are made. First, it would be important to gain insight into the effect of brand origin on financial brand equity - the monetary value of a brand - in order to build better marketing and brand strategies for global brands. Instead of being discreet about the brand's origin - the model Nokia applies to its brand strategy in order to draw less attention to its origin in Finland (Piron 2000) - brand strategy can leverage brand origin in order to gain more favourable consumer evaluation. Second, as previously discussed, too little research attention has been put on understanding the luxury goods market. More specifically, in this field of research the comparative effect of brand origin on premium and standard brands is inadequately studied. Special attention should be given to measuring the differential effect of brand origin on goods with varying degree of premiumness. It would be useful to study whether the learnings from car category are applicable in other product categories. Similarly, it would prove helpful to global brand managers to know if brand origin influences Finnish consumers' brand perceptions the same way as other nations. The researcher agrees with Shukla's (2011) comment that it would be useful to study the country-of-origin effect between premium and standard goods in two different types countries at the same time, both in developed and emerging economies. Additionally, the results of this study are binding with time. The study should be reiterated with the same respondent group in the future in order to find if the respondents' perceptions have changed.

The study is not without limitations. Consumers evaluate brands through cues to determine the features, quality and other relevant attributes that are relevant to them. Brand origin is only one of the cues that offer information about the brand to the consumers. This study focuses solely on brand origin effect on consumer-based brand equity. Since the overall evaluation of a brand is a combination of pieces of information, focusing on only one factor may lead to difficulty determining the most important factors that influence brand perceptions. In the future, more advanced quantitative methods should be applied to study the combined effect of brand attributes on the dimensions of brand equity.

8 References

Aaker, David A. (1991). Managing Brand Equity. Free Press, New York, N.Y.

Aaker, David A. (1992). The Value of Brand Equity. Journal of Business Strategy, 13(4), 27-32.

Aaker, David A. & Joachimsthaler, Erich (2000). Brand Leadership. Free Press, New York, N.Y.

Ahmed, Sadrudin & d'Astous, Alain (1993). Cross-national Evaluation of Made-in Concept Using Multiple Cues. European Journal of Marketing. 27(7), 39-52.

Aiello, Gaetano & Donvito, Raffaele & Godey, Bruno & Pederzoli, Daniele & Wiedmann, Klaus-Peter & Hennings, Nadine & Siebels, Astrid & & Chan, Priscilla & Tsuchiya, Junji & Rabino, Samuel & Ivanovna, Skorobogatykh Irina & Weitz, Bart & Oh, Hyunjoo & Singh, Rahul (1993). An International Perspective On Luxury Brand And County-of-Origin Effect. Journal of Brand Management. 16, 323-337.

Alleres, Danielle (1990). Luxe-Strategies Marketing. Economica. 1.

Al-Sulaiti, Khalid I. & Baker, Michael J. (1998). Marketing Intelligence & Planning. 16(3), 150-199.

Ashill, Nicolas J. & Sinha Ashish (2004). An Exploratory Study into the Impact of Components of Brand Equity and Country of Origin Effects on Purchase Intention. Journal of Asia-Pacific Business. 5(3), 27-43.

Balabanis, George & Diamantopoulos, Adamantios (2004). Domestic Country Bias, Country-Of-Origin Effects, and Consumer Ethnocentrism: A Multidimensional Unfolding Approach. Journal of the Academy of Marketing Science. 32(1), 80-95.

Biel, Alexander L. (1992). How Brand Image Drives Brand Equity. Journal of Advertising Research. 32(6), 6-12.

Biswas, Kohinoor & Chowdhury, MKH. & Kabir, H. (2011). Effects of Price and Country of Origin On Consumer Product Quality Perceptions: An Empirical Study in Bangladesh. International Journal of management. 28(3), 659-674.

Bloemer, Joseé & Brijs, Kris & Kasper, Hans (2009). The COO-ELM Model: A Theoretical Framework For the Cognitive Processes underlying Country of Origin Effects. European Journal of Marketing. 43(1), 62-89.

Buil, Isabel & de Chernatony, Leslie & Martínez, Eva (2011). Examining the Role of Advertising And Sales Promotions in Brand Equity Creation. Journal of Business Research. In press.

Cai, Yi & Cude, Brenda & Swagler, Roger (2004). Country-Of-Origin Effects on Consumers' Willingness To Buy Foreign Products: An Experiment in Consumer Decision Making. Consumer Interest Annual. 50, 98-105.

Chao, Paul (1993). Partitioning Country of Origins Effects: Consumer Evaluations of a Hybrid Product. Journal of International Business Studies. 24(2), 291-306.

Chao, Paul (1998). Impact Of Country-Of-Origin Dimensions on Product Quality and Design Quality Perceptions. Journal of Business Research. 42(1), 1-6.

Chattalas, Michael & Kramer, Thomas & Takada, Hirokazu (2008). The Impact of National Stereotypes on The Country of Origin Effect. A Conceptual Framework. International Marketing Review. 25(1), 54-74.

Ericksson, Gary M. & Johansson, Johny K. & Chao, Paul (1984). Image Variables in Multi-Attribute Product Evaluations: Country of Origin Effects. Journal of Consumer Research. 11(2), 694-699.

Eroglu, Sevgin A. & Machleit, Karen A. (1993). Effects of Individual and Product-specific Variables on Utilising Country of Origin as a Product Quality Cue. International Marketing Review. 6(1).

Faircloth, James B. & Capella Louis M. & Alford, Bruce L. (2001). The Effect of Brand Atti-tude and Brand Image on Brand Equity. Journal of Marketing Theory and Practice. 3(9), 61-75.

Farquhar, Peter (1989). Managing Brand Equity. Marketing Research. 1(3), 24-33.

Gardyn, R., (2002). Oh the good life. American Demographics. 31–35.

Hair, Joseph F. Jr. & Wolfinbarger Celsi, Mary & Money, Arthur H. & Samouel, Phillip & Page, Michael J. (2011). Essentials of Business Research Methods. 2nd edition.

Han, Min C. (1989). Country Image: Halo or Summary Construct? Journal of Marketing Research. 26(2), 222-229.

Han, Min C. (1990). Testing the Role Of Country Image In Consumer Choice Behaviour. European Journal of Marketing. 24(6), 24-39.

Han, Min C. & Terpstra, Vern (1988). Country-Of-Origin Effects for Uni-National And Bi-National Products. Journal of International Business Studies. 19(2), 235-255.

Hong, Sung-Tai & Toner, Julie F. (1989). Are There Gender Differences In the Use of Country-Of-Origin Information In the Evaluation Of Products? Advances in Consumer Research. 16, 468-272.

Jaffe, Eugene D. & Nebenzahl, Israel D. (2006). National Image & Competitive Advantage: The Theory and Practice of Place Branding. 2nd Edition. Copenhagen Business School Press, Copenhagen.

Johansson, Johny K. & Douglas, Susan P & Ikujiro, Nonaka (1985). Assessing the Impact of Country-of-Origin on Product Evaluations: A New Methodological Perspective. Journal of Marketing Research. 12(4), 388-396.

Johansson, Johny K. & Nebenzahl, Israel D. (1986). Multinational Production: Effect on Brand Value. Journal of International Business Studies. 7(3), 101-126.

Josiassen, Alexander & Lukas, Bryan A. & Whitwell, Gregory J. (2008). Country-of-Origin Contingencies: Competing Perspectives on Product Familiarity and Product Involvement. International Marketing Review. 25(4), 423-440.

Jung & Sung (2006). Consumer-based Brand Equity. Comparisons Among Americans and South Koreans In the USA and South Koreans In Korea. Journal of Fashion Marketing and Management. 12(1), 24-35.

Jyotshna & Goodwin (2009). The IUP Journal of Brand Management, 6 (3-4), 88-103.

Kapferer, Jean-Noël (2008). New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term. 4th Edition. Kogan Page, London.

Karjaluoto, Heikki (2007). SPSS opas markkinatutkijoille. University of Jyväskylä School of Business and Economics. Working paper no. 344.

Keller, Kevin L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. Journal of Marketing. 57(1), 1-22.

Keller, Kevin L. (2003). Strategic Brand Management: Building, Measuring, and Managing Brand Equity. 2nd Edition. Prentice Hall, New Jersey.

Keller, Kevin L. & Lehmann, Donald R. (2006). Brands and Branding: Research Findings And Future Priorities. Marketing Science. 25(6), 740-759.

Keller, Kevin L. (2009). Managing the Growth Tradeoff: Challenges And Opportunities In Luxury Branding. Brand Management. 16(5-6), 290-301.

Klein, Jill & Ettenson, Richard & Morris, Marlene (1998). The Animosity Model of Foreign Product Purchase: An Empirical Test In the People's Republic of China. Journal of Marketing. 62(1), 89-100.

Kotler, Philip (2003). A Framework for Marketing Management. 2nd Edition. Prentice Hall, New Jersey.

Kotler, Philip & Armstrong, Gary (2006). Principles of Marketing. 11th Edition. Prentice Hall, New Jersey.

Laroche, Michel & Papadopoulos, Nicolas & Heslop, Louise A. & Mourali, Mehdi (2005). The Influence of Country Image On Consumer Evaluation of Foreign Products. International Marketing Review. 22(1), 96-115.

Lee, Jee H. & Hwang, Johye (2011). Luxury Marketing: the Influences of Psychological and Demographic Characteristics On Attitudes Toward Luxury Restaurants. International Journal of Hospitality Management. 30, 658-669.

Levy, Sidney J. & Kotler, Philip (1969). Beyond Marketing: The Furthering Concept. Cali-fornia Management Review.7(2), 67-74.

Lim, Kenny & O'Cass, Aron (2001). Consumer Brand Classifications: An Assessment of Culture-of-Origin versus Country-of-Origin. Journal of Product and Brand Management. 10(2), 120-136.

Malhotra, Naresh & Birks, David (2006). Marketing Research: An Applied Approach. 2nd Edition.

Nagashima, Akira (1970). A Comparison of Japanese And US Attitudes Toward Foreign Pro-ducts. Journal of Marketing. 34(1), 68-74.

Nummenmaa, Lauri (2008). Tilastolliset menetelmät. 4th edition.

OICA (2012) http://oica.net/category/production-statistics/ Visited 21.5.2012.

Papadopoulos, Nicolas (1993). What Product and Country Images Are and Are Not. Product Country Images, Harworth Press, New York, New York, 3-38.

Papadopoulos, Nicolas & Heslop, Louise A. (2000). A Cross-national and Longitudinal Study of Product-Country Images with a Focus on the U.S. and Japan. Marketing Science Institute. Report No. 00-106.

Pappu, Ravi & Quester, Pascale G. & Cooksey Ray W. (2006). Consumer-Based Brand Eq-uity And Country-Of-Origin Relationships: Some Empirical Evidence. European Journal of Marketing. 40(5), 696-717.

Pappu, Ravi, Quester, Pascale G. & Cooksey Ray W. (2007). Country Image and Consumer-Based Brand Equity: Relationships and Implications for International Marketing. Journal of International Business Studies. 38, 726-745.

Peterson, R. A. (2001) On the use of college students in social science research: Insights from a second-order meta-analysis. Journal of Consumer Research. 28(3), 450-461.

Rao, Akshay & Monroe, Kent (1989). The Effect of Price, Brand Name, And Store Name on Buyers' Perception of Product Quality: An Integrated Review. Journal of Marketing Research. 26, 351-357.

Roth, Martin S. & Romeo, Jean B. (1992). Matching Product Category And Country Image Perceptions: A Framework For Managing Country-Of-Origin Effects. Journal of Interna-tional Business Studies. 23(3), 477-497.

Samiee, Saeed (1994). Customer Evaluation of Products in a Global Market. Journal of International Business Studies. 25(3), 579-604.

Samiee, Saeed & Shimp, Terence & Sharma, Subhash (2005). Brand Origin Recognition Ac-curacy: Its Antecedents and Consumers' Cognitive Limitations. Journal of International Business Studies. 36, 379-397.

Schooler, R. (1965). Product Bias in Central American Common Market. Journal of Marketing Research. 2(4), 394-397.

Shimp, Terence & Sharma, Subhash (1987). Consumer Ethnocentrism: Construction and Validation of the CETSCALE. Journal of Marketing Research. 24(3), 280-289.

Shocker, Allan D. & Srivatava, Rajendra K. & Ruekert, Robert W (1994). Challenges and Opportunities Facing Brand Management: An Introduction to the Special Issue. Journal of Marketing Research. 31(2), 149-158.

Shukla, Paurav (2011). Impact of Interpersonal Influences, Brand Origin And Brand Image On Luxury Purchase Intentions: Measuring Interfunctional Interactions And a Cross-National Comparison. Journal of World Business. 46, 242-252.

Thakor, Mrugank V. & Katsanis, Lea P. (1997). A Model of Brand And Country Effects On Quality Dimensions: Issues And Implications. Journal of International Consumer Marketing. 9(3), 79-99.

Thakor, Mrugank V. & Kohli, Chiranjeev S. (1996). Brand Origin: Conceptualization and review. Journal of Consumer Marketing.13(3), 27-42.

Tilastokeskus (2012).
http://194.157.221.15/markkinointijarjestelma/taulujulkaisu/tulosta_tilasto.asp?tjid=542
&kieli= Visited 21.5.2012.

Usunier, Jean-Claude (2006). Relevance in Business Research: the Case of Country-Of-Origin Research in Marketing. European Management Review. 3, 60-73.

Verlegh, P.W.J. & Steenkamp, J-B.E.M. (1999). A Review and Meta-analysis of Country-of-Origin Research. Journal of Economic Psychology. 20, 521-546.

Vickers, J.S. & Renand, F. (2003). The Marketing of Luxury Goods: An Exploratory Study – Three Conceptual Dimensions. The Marketing Review. 3(4), 459-478.

Vigneron, Franck & Johnson, Lester W. (2004). Measuring Perceptions of Brand Luxury. Brand Management. 11(6), 484-506.

Wall, Marjorie & Heslop, Louise A. (1986). Consumer Attitudes Toward Canadian-Made Versus Imported Products. Journal of the Academy of Marketing Science. 14(2), 27-36.

Yasin, Norjaya M. & Noor, Mohd N. & Mohamad, Osman (2007). Does Image of Country-of-Origin Matter to Brand Equity? Journal of Product & Brand Management. 16(1), 38-48.

Yoo, Boonghee & Naveen, Donthu & Suongho Lee (2000). An Examination of Selected Marketing Mix Elements and Brand Equity. Journal of the Academy of Marketing Science. 28(2), 195-211.

Appendix A. Questionnaire in English.

1. Which of the following countries do you associate with each car brand? A country may be associated with several brands.
2. The car brand is trustworthy.
3. The car brand is sophisticated in its features.
4. The car brand is efficient.
5. The car brand is of high quality.
6. The car brand is valuable to its owner.
7. The car brand is durable.
8. The car brand is reliable.
9. The car brand is prestigious.
10. The car brand has style.
11. The car brand is high performing.
12. Products of a country are innovative (benefiting from latest technology and advanced skills).
13. Products of a country are well designed.
14. Products of a country are respected.
15. Products of a country are exclusive.
16. Products of a country are of high quality.
17. Products of a country require skilled craftsmanship.
18. Products of a country are durable.
19. Your gender?
20. Your age?
21. How many times on average in a year do you travel abroad for leisure?
22. Estimate how many kilometres you personally drive a car annually?

Appendix B. Kysymyspatteristo.

1. Minkä seuraavista maista ensisijaisesti yhdistät kuhunkin automerkkiin? Maa voi edustaa useampaa automerkkiä.

2. Automerkki on luotettava.

3. Automerkki on ominaisuuksiltaan kehittynyt.

4. Automerkki on suorituskykyinen.

5. Automerkki on laadukas.

6. Automerkki tuo haltijalleen lisäarvoa.

7. Automerkki on kestävä.

8. Automerkki on käyttövarma.

9. Automerkki on hienostunut.

10. Automerkki on tyylikäs.

11. Automerkki toimii hyvin ja täyttää tehtävänsä.

12. Maan tuotteet ovat innovatiivisia (hyödyntävät uusinta teknologiaa ja kehittynyttä osaamista).

13. Maassa valmistetut tuotteet ovat hyvin suunniteltuja (design).

14. Maan tuotemerkkejä arvostetaan.

15. Maassa valmistetut tuotteet ovat eksklusiivisia.

16. Maassa valmistetut tuotteet ovat korkealaatuisia.

17. Maassa valmistetut tuotteet ovat taidokkaasti valmistettuja.

18. Maassa valmistetut tuotteet ovat kestäviä.

19. Sukupuoli?

20. Minkä ikäinen olet? Merkitse vain luku esim. "25".

21. Kuinka monta kertaa vuodessa keskimäärin matkustat ulkomaille vapaa-ajallasi?

22. Arvioi itse henkilöautolla ajamiesi ajokilometrien määrä vuodessa?

Appendix C. Questionnaire responses.

1. Minkä seuraavista maista ensisijaisesti yhdistät kuhunkin automerkkiin? Maa voi edustaa useampaa automerkkiä.

Vastaajien määrä: 102

	Espanja	Etelä-Korea	Italia	Japani	Ranska	Ruotsi	Saksa	Yhdysvallat	En osaa sanoa	Yhteensä	Keskiarvo
Alfa Romeo	4	0	87	0	0	0	2	2	7	102	3,51
BMW	0	0	0	0	1	0	94	5	2	102	7,07
Chrysler	0	0	3	1	3	0	2	89	4	102	7,75
Fiat	2	1	69	5	12	4	3	0	6	102	3,82
Ford	1	0	1	1	6	3	10	73	7	102	7,58
Lexus	1	3	3	44	1	0	1	33	16	102	6
Toyota	0	1	1	96	0	1	1	1	1	102	4,11
Volkswagen	0	0	0	1	0	2	97	0	2	102	6,99
Yhteensä	8	5	164	148	23	10	210	203	45	816	5,85

2. Automerkki on luotettava

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseenkin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseenkin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Alfa Romeo	7	21	24	43	7	102	3,22
BMW	0	1	6	34	61	102	4,52
Chrysler	0	17	31	42	12	102	3,48
Fiat	4	48	27	22	1	102	2,69
Ford	2	16	30	42	12	102	3,45
Lexus	0	2	30	42	28	102	3,94
Toyota	0	10	13	41	38	102	4,05
Volkswagen	0	8	10	34	50	102	4,24
Yhteensä	13	123	171	300	209	816	3,7

3. Automerkki on ominaisuuksiltaan kehittynyt

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Alfa Romeo	1	8	35	39	19	102	3,66
BMW	0	2	3	29	68	102	4,6
Chrysler	3	10	40	31	18	102	3,5
Fiat	7	35	38	20	2	102	2,75
Ford	2	24	33	37	6	102	3,21
Lexus	1	4	24	35	38	102	4,03
Toyota	1	11	20	52	18	102	3,74
Volkswagen	1	5	18	52	26	102	3,95
Yhteensä	16	99	211	295	195	816	3,68

4. Automerkki on suorituskykyinen

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Alfa Romeo	0	6	21	45	30	102	3,97
BMW	0	1	3	24	74	102	4,68
Chrysler	1	8	34	42	17	102	3,65
Fiat	5	46	29	20	2	102	2,69
Ford	2	21	34	37	8	102	3,27
Lexus	1	3	24	39	35	102	4,02
Toyota	0	18	24	47	13	102	3,54
Volkswagen	0	9	25	47	21	102	3,78
Yhteensä	9	112	194	301	200	816	3,7

5. Automerkki on laadukas
Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Alfa Romeo	4	10	24	34	30	102	3,75
BMW	0	0	4	20	78	102	4,73
Chrysler	2	11	27	41	21	102	3,67
Fiat	7	44	33	16	2	102	2,63
Ford	2	20	39	30	11	102	3,27
Lexus	0	3	21	28	50	102	4,23
Toyota	0	13	16	56	17	102	3,75
Volkswagen	0	6	10	54	32	102	4,1
Yhteensä	15	107	174	279	241	816	3,76

6. Automerkki tuo haltijalleen lisäarvoa
Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Alfa Romeo	2	9	14	38	39	102	4,01
BMW	1	1	6	27	67	102	4,55
Chrysler	3	13	34	31	21	102	3,53
Fiat	17	44	33	7	1	102	2,32
Ford	10	35	43	13	1	102	2,61
Lexus	2	6	15	41	38	102	4,05
Toyota	5	30	39	25	3	102	2,91
Volkswagen	2	19	41	34	6	102	3,23
Yhteensä	42	157	225	216	176	816	3,4

7. Automerkki on kestävä

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Alfa Romeo	10	25	39	22	6	102	2,89
BMW	0	3	14	43	42	102	4,22
Chrysler	1	13	47	32	9	102	3,34
Fiat	8	43	29	21	1	102	2,65
Ford	1	15	40	34	12	102	3,4
Lexus	0	4	40	39	19	102	3,72
Toyota	1	11	19	36	35	102	3,91
Volkswagen	0	4	15	42	41	102	4,18
Yhteensä	21	118	243	269	165	816	3,54

8. Automerkki on käyttövarma

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Alfa Romeo	8	26	34	25	9	102	3,01
BMW	0	3	11	42	46	102	4,28
Chrysler	0	13	40	34	15	102	3,5
Fiat	4	40	29	27	2	102	2,83
Ford	0	15	31	46	10	102	3,5
Lexus	0	4	33	44	21	102	3,8
Toyota	0	6	13	54	29	102	4,04
Volkswagen	0	1	11	52	38	102	4,25
Yhteensä	12	108	202	324	170	816	3,65

96

9. Automerkki on hienostunut

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Alfa Romeo	1	5	14	34	48	102	4,21
BMW	0	2	8	27	65	102	4,52
Chrysler	2	21	32	27	20	102	3,41
Fiat	22	49	27	4	0	102	2,13
Ford	10	47	34	10	1	102	2,46
Lexus	0	7	15	28	52	102	4,23
Toyota	8	39	41	14	0	102	2,6
Volkswagen	4	30	43	22	3	102	2,9
Yhteensä	47	200	214	166	189	816	3,31

10. Automerkki on tyylikäs

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Alfa Romeo	1	8	9	45	39	102	4,11
BMW	0	1	5	35	61	102	4,53
Chrysler	5	19	30	22	26	102	3,44
Fiat	14	53	25	9	1	102	2,31
Ford	9	41	36	15	1	102	2,59
Lexus	1	5	18	46	32	102	4,01
Toyota	5	34	38	22	3	102	2,84
Volkswagen	3	20	38	31	10	102	3,25
Yhteensä	38	181	199	225	173	816	3,38

11. Automerkki toimii hyvin ja täyttää tehtävänsä

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Alfa Romeo	4	16	31	34	17	102	3,43
BMW	1	2	12	38	49	102	4,29
Chrysler	2	8	32	41	19	102	3,66
Fiat	2	28	32	30	10	102	3,18
Ford	2	8	28	43	21	102	3,72
Lexus	1	2	35	37	27	102	3,85
Toyota	1	1	16	45	39	102	4,18
Volkswagen	1	0	11	42	48	102	4,33
Yhteensä	14	65	197	310	230	816	3,83

12. Maan tuotteet ovat innovatiivisia (hyödyntävät uusinta teknologiaa ja kehittynyttä osaamista)

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Italia	6	32	32	29	3	102	2,91
Japani	0	2	5	39	56	102	4,46
Saksa	0	3	11	37	51	102	4,33
Yhdysvallat	0	21	23	48	10	102	3,46
Yhteensä	6	58	71	153	120	408	3,79

13. Maassa valmistetut tuotteet ovat hyvin suunniteltuja (design)

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Italia	2	4	15	46	35	102	4,06
Japani	0	6	29	47	20	102	3,79
Saksa	0	5	24	44	29	102	3,95
Yhdysvallat	2	10	34	48	8	102	3,49
Yhteensä	4	25	102	185	92	408	3,82

14. Maan tuotemerkkejä arvostetaan

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Italia	2	22	15	43	20	102	3,56
Japani	0	6	13	51	32	102	4,07
Saksa	0	2	6	32	62	102	4,51
Yhdysvallat	2	12	27	46	15	102	3,59
Yhteensä	4	42	61	172	129	408	3,93

15. Maassa valmistetut tuotteet ovat eksklusiivisia

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Italia	1	12	18	35	36	102	3,91
Japani	2	27	34	33	6	102	3,14
Saksa	2	24	30	26	20	102	3,37
Yhdysvallat	5	25	38	26	8	102	3,07
Yhteensä	10	88	120	120	70	408	3,37

16. Maassa valmistetut tuotteet ovat korkealaatuisia.

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Italia	2	27	29	28	16	102	3,28
Japani	0	10	17	45	30	102	3,93
Saksa	0	3	7	41	51	102	4,37
Yhdysvallat	1	14	37	39	11	102	3,44
Yhteensä	3	54	90	153	108	408	3,76

17. Maassa valmistetut tuotteet ovat taidokkaasti valmistettuja

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen ki eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin samaa mieltä	Yhteensä	Keskiarvo
Italia	2	12	27	40	21	102	3,65
Japani	0	4	21	45	32	102	4,03
Saksa	0	1	13	51	37	102	4,22
Yhdysvallat	1	9	44	34	14	102	3,5
Yhteensä	3	26	105	170	104	408	3,85

## 18. Maassa valmistetut tuotteet ovat kestäviä.

Vastaajien määrä: 102

	1 täysin eri mieltä	2 jokseen kin eri mieltä	3 ei samaa eikä eri mieltä	4 jokseen kin samaa mieltä	5 täysin eri mieltä	Yhteensä	Keskiarvo
Italia	9	31	31	27	4	102	2,86
Japani	0	7	23	48	24	102	3,87
Saksa	0	0	5	44	53	102	4,47
Yhdysvallat	1	16	34	41	10	102	3,42
Yhteensä	10	54	93	160	91	408	3,66

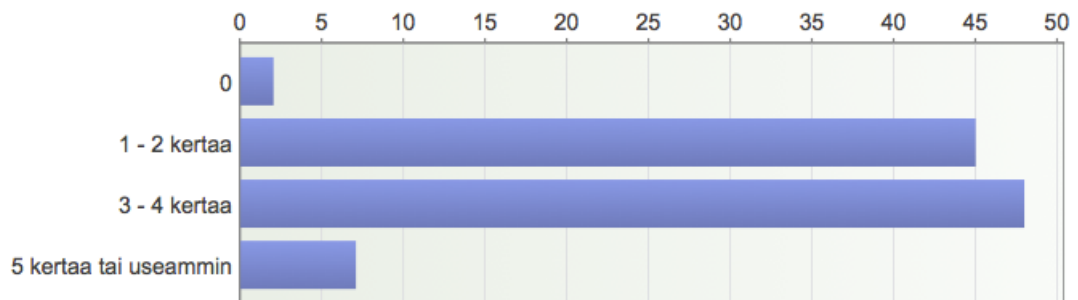## 19. Sukupuoli?

Vastaajien määrä: 102
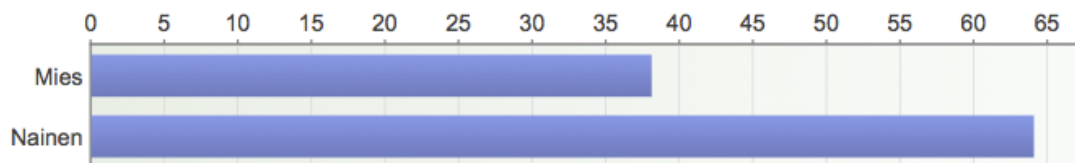
20. Minkä ikäinen olet? Merkitse vain luku esim. "25"
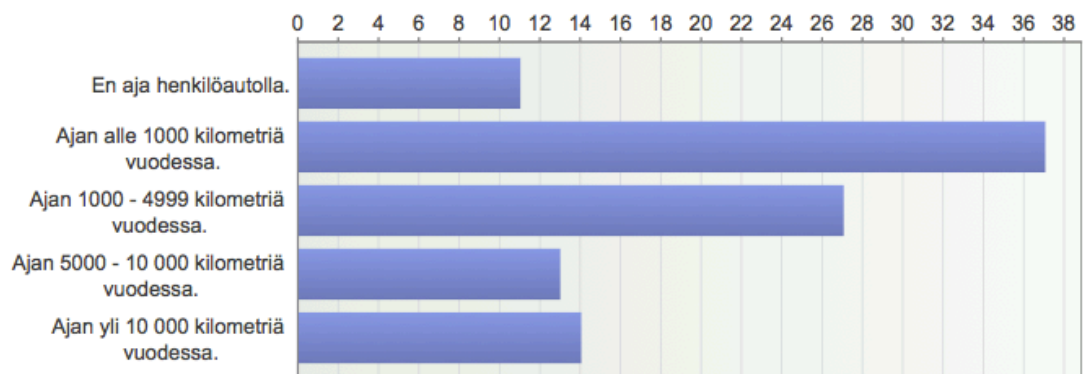
Vastaajien määrä: 102

21. Kuinka monta kertaa vuodessa keskimäärin matkustat ulkomaille vapaa-ajallasi?

Vastaajien määrä: 102

22. Arvioi itse henkilöautolla ajamiesi ajokilometrien määrä vuodessa.

Vastaajien määrä: 102

Appendix D. Pearson correlation matrix.

Correlations

		BQ_AlfaRomeo_x	BQ_BMW_x	BQ_Chrysler_x	BQ_Fiat_x	BQ_Ford_x	BQ_Lexus_x	BQ_Toyota_x	BQ_Volkswagen_x	BL_AlfaRomeo_x	BL_BMW_x	BL_Chrysler_x	BL_Fiat_x	BL_Ford_x	BL_Lexus_x	BL_Toyota_x	BL_Volkswagen_x	CI_Italy_x	CI_Japan_x	CI_Germany_x	CI_USA_x
BQ_AlfaRomeo_x	Pearson Correlation	1	.480**	.406**	.256**	.275**	.205*	.149	.818**	.451**	.297**	.002	.007	.224*	.175	.122	.056	.563**	.159	.137	.242*
	Sig. (2-tailed)		.000	.000	.010	.005	.038	.134	.000	.000	.002	.818	.379	.224	.078	.122	.578	.000	.110	.169	.014
	N	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102

(full matrix of Pearson Correlation / Sig. (2-tailed) / N values for all row variables: BQ_AlfaRomeo_x, BQ_BMW_x, BQ_Chrysler_x, BQ_Fiat_x, BQ_Ford_x, BQ_Lexus_x, BQ_Toyota_x, BQ_Volkswagen_x, BL_AlfaRomeo_x, BL_BMW_x, BL_Chrysler_x, BL_Fiat_x, BL_Ford_x, BL_Lexus_x, BL_Toyota_x, BL_Volkswagen_x, CI_Italy_x, CI_Japan_x, CI_Germany_x, CI_USA_x)

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Appendix E. Test of normality using Kolmogorov-Smirnov test.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
BQ_AlfaRomeo_x	.126	102	.000	.965	102	.009
BQ_BMW_x	.215	102	.000	.774	102	.000
BQ_Chrysler_x	.078	102	.128	.977	102	.067
BQ_Fiat_x	.097	102	.019	.970	102	.019
BQ_Ford_x	.098	102	.018	.980	102	.121
BQ_Lexus_x	.128	102	.000	.933	102	.000
BQ_Toyota_x	.138	102	.000	.955	102	.002
BQ_Volkswagen_x	.152	102	.000	.931	102	.000
BI_AlfaRomeo_x	.086	102	.058	.975	102	.048
BI_BMW_x	.146	102	.000	.876	102	.000
BI_Chrysler_x	.080	102	.105	.977	102	.078
BI_Fiat_x	.082	102	.092	.985	102	.309
BI_Ford_x	.099	102	.015	.978	102	.090
BI_Lexus_x	.079	102	.121	.965	102	.009
BI_Toyota_x	.090	102	.042	.981	102	.147
BI_Volkswagen_x	.090	102	.039	.982	102	.192
CI_Italy_x	.078	102	.128	.976	102	.060
CI_Japan_x	.078	102	.129	.980	102	.118
CI_Germany_x	.096	102	.020	.954	102	.001
CI_USA_x	.071	102	.200[*]	.980	102	.118

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction