

The Effect of Reshoring on Purchase Behavior

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Reshoring is a strategy that returns manufacturing to its home country, usually for cost and logistical reasons. Earlier studies indicate that consumers' attitudes of quality are related to where the product is manufactured. Also, reshoring may influence the product's environmental footprint. The purpose of this study is to examine the effects of product quality and environmental impact as a result of reshoring on the consumers' purchase preferences and willingness to pay a price premium. The study evaluates United States and Germany consumer's product preferences for reshored products.

INTRODUCTION

Reshoring of once offshored manufacturing is a newer phenomenon, driven by the eroding competitiveness of former low-labor cost countries compared to advanced economies in North America or middle European countries (Fratocchi et al., 2013, p. 5). Over time, off-shoring strategies tended not to deliver the cost savings promised and were also relatively inflexible to volatile environmental conditions (Accenture, 2011, p. 5). These combined conditions resulted in reshoring operations from foreign locations back to a domestic location (Fratocchi et al., 2013, p. 5). In the recent past, Ellram, Tatem, and Petersen (2013) observed that supply chain scholars did not focus on reshoring. Reshoring is an important sourcing strategy in international business as it changes the product's country of origin. Therefore, reshoring has the ability to not only affect costs and flexibility but also to influence the purchase behavior of consumers, (Samantha Kumara & Canhua, 2009, p. 344).

After the negative customers reactions evoked by the off-shoring movement (Schweiger et al., 1997), the question arose as to how the customers' behavior might be affected by reshoring. Samantha Kumara (2009, p. 344) stated that the understanding of consumer behavior in relation to the perception of country of origin (COO) provides important considerations for strategic decisions in marketing and consumer behavior.

There are a few empirical studies evaluating the factors of reshoring on any product category. However, there are no studies that explicitly examine the consumers' purchase intent in the evaluation of

reshored products. Therefore, this research intends to identify and investigate the country of origin effects on consumers' product judgment in a cross-national study.

This study investigates if product quality and environmental improvements from reshoring actions affect consumer behavior. The independent variables include the country of origin dimensions; perceived quality improvements and reduced environmental impact. In this study the moderating variable is nationality using German and the United States (US) consumers. The dependent consumer behavior variables are purchase intent and willingness to pay a price premium (WTP).

The number of business enterprises reconsidering their sourcing strategy is constantly growing. Thirty-four percent of larger US manufacturers considered reshoring in 2012 (Simchi-Levi, 2012). For example, Caterpillar invested \$120 million in a new plant in Victoria, Texas, instead of continuing its production in Japan (Simchi-Levi, 2012). But reshoring is not just an American phenomenon. In Germany, around three percent (approximately 570 companies per year) of industrial enterprises reshored their operations. The result is that for every third offshored operation, there was one repatriated between 2007 and 2009 (Kinkel and Maloca, 2009). These numbers clearly illustrate the topical relevance. Although the literature shows evidence for the phenomena and investigates reasons, it has not taken into account the perspective of the consumers. However, research has demonstrated that "Made in" labels affect consumers' product evaluation and purchase behavior (Li et al., 2000).

HYPOTHESIS DEVELOPMENT

Over the last two decades, many North American and European companies have experimented with off-shoring to reduce costs to become more efficient and gain strategic advantage (Aron & Singh, 2005, Fratocchi et al., 2013, p. 5). Developed countries, like the US, shifted large numbers of domestic jobs into Mexico. Over time, China became the off-shoring focus. In more recent times, Bangladesh and Vietnam have partially supplanted China as China's currency began to appreciate (Fine, 2013, p. 6). US domestic apparel manufacturing, in particular, suffered from the off-shoring because off-shoring combined low labor rates with more favorable trade agreements prompted by the US Congress. Through the 1990s, over 40% of apparel purchased in America was produced domestically. In the twenty-first century, it became less than 3% (Berdine et al., 2008; Datta & Christoffersen, 2005).

However, off-shoring strategies have not necessarily led to competitive advantages. Borgmann, Klostermeyer, and Lüdi (2000), Aron and Singh (2005) and Leibl et al., (2009) critically questioned the benefits of off-shoring when wide differences occurred between estimated savings and those achieved. Manufacturers began to recognize that many of the factors forming the basis of their off-shoring decisions drastically changed over the years. Component price, transportation costs, commodity costs and in-country labor rates had dramatically increased over time resulting in diminished cost savings. Greater volatility affects many different variables, from energy to material input prices and exchange rates (Accenture, 2011, p. 5).

Reshoring is the reverse of the previously implemented off-shoring strategy (Fratocchi et al., 2013, p. 5). The progression toward reshoring has experienced a two year lag following off-shoring decisions (Dachs, Kinkel & Waser, 2006).

Location matters not only to the company, but also to some consumers. By understanding the dynamics of how consumers respond to country of origin related information, producers can make more informed choices about the risks and benefits of location decisions like off-shoring or reshoring. The first content analysis of the origin of a product was conducted by Schooler (1965). His findings show the country of origin of a product can have an effect on a consumer's opinion of the product. Papadopoulos and Heslop (1993) redefined country of origin as a multidimensional image of multiple places, when a product may be manufactured in one country but designed, assembled, branded in another country. Papadopoulos and Heslop's (1993) experiments have shown that country of origin was found to be statistically related to consumer product evaluations or choices. In order to assess the possible effects of a location decision on consumers' perceptions of the product, a number of other content analyses have replicated these results (Al-Sulaiti & Baker, 1998; Kaynak & Kara, 2002; Li & Murray, 2000; Paswan,

Kulkarni, & Ganesh, 2003; Samantha Kumara & Canhua, 2009; Schweiger, Otter, & Strebinger, 1997; Zhang, 1997).

In general, country of origin refers to the 'Made in' product image (Nagashima, 1977, Papadopoulos & Heslop, 1993). Schweiger et al., (1997, p. 5) explain the relationship between country of origin and consumer perception where the label "Made in..." is an information chunk, which substitutes for other pieces of information, which the consumer would otherwise need to evaluate the product. Another way of describing product-country effect is to view products as a bundle of attributes, such as material content, country of origin, and price. In this case, units of product information "cues" which have nothing to do with the physical properties of the product (intrinsic cues), are referred to as extrinsic cues, an example being country of origin (Olson & Jacoby, 1972). Papadopoulos and Heslop (1993, p. 117) concluded that consumers establish feelings, attitudes, and intentions toward the product based on these intrinsic and extrinsic cues. This research investigates three attributes influencing product choice; those being quality, environmental impact, and culture.

Quality

The consumer's dependency on information cues refers to the consumer's reliance on country of origin information in order to judge the quality of a product (Schooler, 1965). Papadopoulos and Heslop (1993) speculated that consumers in more developed countries tend to regard most products made in less developed countries as being of lower quality. If the manufacturing location chosen is impaired by such a poor quality image, this can affect the consumer's assumptions of quality and the purchase intent. In a worst case scenario, such a reaction can lead to a decline in expected financial return, thus more than offsetting the cost savings realized (Schweiger et al., 1997). Therefore, this could give a competitive advantage to companies that reshore manufacturing to industrialized nations like the US or Germany. Papadopoulos and Heslop's (1993) analysis of several studies supports this assumption. Relative to the views of respondents in the studies, products made in the US were perceived to be highest in quality, products from West Germany or Japan were perceived next highest in quality, and products from other North European countries were next in ranking. A more recent study by Elliott and Cameron (1994) is more distinct with the prime objective to test consumers' responses to the proposition: "Do consumers prefer the local product over the import when price and quality are comparable?" The study was based on 400 respondents from an industrialized country. The findings of their study support the notion that consumers have a general preference for locally made products. Particularly, when the price and quality of the locally made product is equivalent or better, consumers have a strong preference for that product.

Because reshoring shifts production from abroad back to local manufacture, the following hypotheses are posited.

H1 - Consumers, in the United States ($H1_{US}$) and Germany ($H1_{Ger}$), who perceive a high level of quality improvement, are more likely to prefer reshored products over products produced abroad than consumers who perceive a low improvement in product quality.

A study by Miškolci (2011), conducted in the Czech Republic, went a bit further with the objective to investigate consumers' WTP for food quality improvement. The results indicated that 60–70 % of participants stated a WTP for the guaranteed food quality and quality improvements. Furthermore, they are willing to pay an average price premium of 11% for the quality improvement and up to 15% for the guaranteed food quality. Even though this study is focused on food quality, the results might also be applicable for product quality in general. Therefore, the perceived quality improvement resulting from reshoring could have a direct effect on consumers' WTP as hypothesized.

H2 - Perceived quality improvement influences consumers' WTP in the USA ($H2_{US}$) and in Germany ($H2_{Ger}$). (WTP conditions include a willingness to pay no premium ($H2a$), a willingness to pay a moderate premium ($H2b$), and a willingness to pay high premium ($H2c$.)

Environmental Impact

Over time, the growing social concern for sustainability has been recognized and incorporated in marketing decisions (Murphy & Laczniak, 1991). Sustainability consists of three dimensions: environment, society, and economy (United Nations General Assembly, 2005). Besides the economic concerns mentioned, reshoring addresses the environmental dimension as well. Gray et al (2013, p. 30) asserted “. . . that regulations that consider the whole supply chain, such as carbon labeling, will favor reshoring.” The off-shoring process has increased the distance that goods travel until they reach the final market, and therefore, off-shoring has increased the volume of greenhouse gas emissions generated by transportation (Cadarsó et al., 2010). For example, imported apparel could have greater transportation emissions via truck or ship instead of lower-emitting options such as trains (Desai, Nassar, & Chertow, 2012, p.61). Because reshoring places manufacturing closer to the final market destination, reshoring decreases the product’s environmental impact.

According to Kinnear and Taylor (1973), there exists a positive relationship between environmental concerns and environmentally friendly products. Reshoring’s sustainable approach would affect purchase behavior, because environmentally safe purchases addresses the consumer’s concern about environmental issues. Many researchers have investigated such an environmental orientation as a variable of consumers’ purchase behavior (Amyx et al., 1994, pp. 341–342).

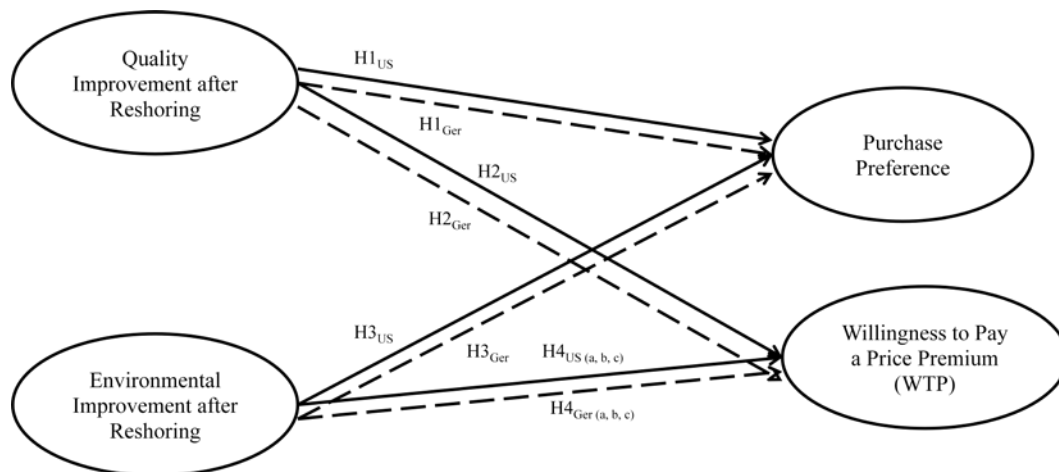
Considering the environmental impact in a more current context, this study proposes the following hypotheses.

H3 - In the US ($H3_{US}$) and in Germany ($H3_{Ger}$), consumers who perceive a high level of environmental improvement from reshoring are more likely to prefer reshored products than consumers who perceive a low improvement.

A multinational study (USA, UK, France, Germany, India, China, Brazil) indicated that approximately 50% of the respondents would be more inclined to choose products from a company that invested in alternative energy or took some other action be environmentally conscientious (Bonini et al., 2008). In regards to petroleum companies, an additional quarter of respondents said they would even pay a slight premium for environmentally friendly products. In terms of food and beverages, the majority of the respondents claimed to be willing to pay more for food and drinks from companies that address consumers’ concerns about health and the environment like waste, pollution, packaging impact, and global warming. The following hypothesis proposes:

H4 - Environmental improvement as a result of product reshoring influences consumers’ WTP in the US ($H4_{US}$) and Germany ($H4_{Ger}$).

FIGURE 1
RESHORING’S INFLUENCES ON CONSUMER BEHAVIOR



Culture

Despite the wide-range of literature on country of origin effects, a theoretical framework for understanding its effects across cultures is lacking (Maheswaran, 1994).

Notwithstanding the diminishing barriers between developed countries, cultural differences are some of the most prevalent factors between countries which influence marketing strategies. Even though culture does not determine the individual behavior of each person within a country, culture-specific factors influence the weight given to the country of origin in product evaluations (Klein, Ettenson, & Morris, 1998).

The cultural dimension study by Hofstede (1980) shows, for example, that the national characteristics of Germany differ from those of the United States. Hofstede and Bond (1988) report strong differences between the two nations regarding uncertainty avoidance, as well as moderate differences regarding power distance and masculinity/femininity. Because different cultures and backgrounds cause dissimilar perceptions among consumers, Gürhan-Canli and Maheswaran (2000) found that country of origin effects vary across cultures on the basis of the diverse cultural patterns present in different countries. Therefore, culture can have a significant impact on how consumers perceive or react to reshoring strategies.

Consumer characteristics vary among nationalities and consequently influence product perceptions. It is hypothesized that nationality influences purchase preferences and willingness by the consumer to pay a price premium.

H5 - Nationality moderates the relationship between product quality improvement after reshoring and consumers' (1) purchase preference and (2) willingness to pay a price premium.

This hypothesis explores the impact of nationality, between US and German consumers, upon consumer purchase preferences and their willingness to pay a price premium after improving product quality and the environmental impact resulting from reshoring.

RESEARCH METHOD

This study is a 2 (high quality vs. low quality) x 2 (high environmental vs. low environmental impact) x 2 (United States vs. Germany) between subject full factorial design. The independent variables are product quality improvement, environmental impact improvement, and nationality. Product quality and environmental impact improvements were manipulated, while nationality was measured. The dependent variables were purchase preference and willingness to pay a price premium (WTP).

To test the hypotheses, an experimental booklet was produced that manipulated the dependent variables, identified the moderator variable, and measured the dependent variables. An English language scenario in combination with an English language questionnaire were created and examined for wording and face validity of the questions by an English speaking marketing researcher. Back translation procedures suggested by Malhotra, Agarwal, and Peterson (1996) were employed to ensure translation integrity and to meet the requirements of a cross-national study.

The reshoring experience of the American manufacturer GE which reshored its assembling line for the GeoSpring water heater in 2011 (Fishman, 2012) combined with a description of product quality by Garvin (1984) was used to ensure realism. Besides the reshoring effort, the booklets' scenarios included no brand information and were generically phrased to avoid perceptions of specific brands or industries.

To operationalize the treatments of improvement in quality and environmental impact after reshoring, the improvement of quality (high/low) and environmental improvement (high/low) were presented in four different scenarios. The manufacturing facility that was depicted was recently moved from a location abroad to the headquarter nation. A fictional press release illustrated the performance of the new facility compared to the previous foreign production.

Quality was manipulated by creating contrasting quality improvements of a reshored production line where high was 25% and low was 5%. The high quality scenario portrayed manufacturing operations which improved the product quality as a result of employing highly skilled workers and an extremely

effective production line having fewer errors and a high detection rate of flaws. Consistent with Garvin's (1984) eight dimensions of quality, the product was described with a high degree of improvement concerning reliability, durability and features. In the low quality improvement situation, the production line was described as slightly more advanced with minimal reduction of manufacturing errors and flaws, while the product features and durability were portrayed as unchanged compared to the products as manufactured abroad.

Finally, improvement in environmental impact was manipulated through emissions, energy sources, and carbon footprint. The high improvement scenario described a highly regulated manufacturing facility with a drastic reduction in greenhouse gas emissions and mostly powered by renewable energies. The low improvement scenario depicted the production line as slightly advanced regarding environmental issues compared to the foreign production line.

Manipulation checks were included to ensure that the treatment of the independent variables, product quality and environmental impact, were effective. Specifically, items were employed in the research instrument that asked subjects to evaluate the improvement regarding quality and environmentalism.

The independent variable of nationality is a moderator, which is measured based on two questions in the questionnaire. For the cross-national comparison of the results, the first question refers to the participant's nationality and the second, in case that person was born outside of the United States or Germany, refers to the time spent in either country.

Six questions were employed to measure consumer purchase preference and WTP. The first dependent variable of this study was consumer preference. With a seven point Likert format response, the following question measured the consumer's purchase preference towards the reshored product: "I prefer the products of the American plant (or German plant) over the products previously made in the foreign factory."

For WTP, the survey listed the five different price premiums. The price premiums given began with no WTP (0%) and increased incrementally by 5% until the premium reached 20%. The valuation question was: "I prefer the reshored product and would be willing to pay a price premium of X%." WTP was measured by a seven-point Likert format response.

RESULTS AND ANALYSES

The subjects were 504 students from undergraduate business courses at a midwestern university in the United States and two southwestern universities in Germany. A seven-point Likert type response scale was used in the questionnaire. The students in the sample received the English or German questionnaire, according to their country of residence. The final sample consisted of 409 native students and was split with 201 participants from the United States (116 males and 85 females), and 208 from Germany (113 males and 95 females). Most American participants, 88.6%, were between 16 and 26 years old. The German students on the other hand were slightly older with 93.7% of the sample between 18 and 26 years old. Finally, 99% of the German subjects were business majors as opposed to 93% of the American subjects.

To test the hypotheses, MANOVA as well as ANOVA were used to assess mean differences of the product purchase preference towards reshored products and WTP among the four product quality and environmental improvement scenarios (high quality and high environmental improvement, high quality and low environmental improvement, low quality and high environmental improvement, and low quality and low quality improvement).

Two ANOVAs were performed to test the following hypotheses.

H1 - Consumers who perceive a high level of quality improvement are more likely to prefer reshored products over products produced abroad than consumers who perceive a low improvement in product quality.

H3 - In the US ($H3_{US}$) and in Germany ($H3_{Ger}$), consumers who perceive a high level of environmental improvement from reshoring are more likely to prefer reshored products than consumers who perceive a low improvement.

Study participants from the United States exhibited no significant preference difference between products with high versus low quality product improvement ($\bar{x}_{US (High Quality Improvement)}=5.63$, $\bar{x}_{US (Low Quality Improvement)}=5.29$, $p=.103$). German participants generated similar results ($\bar{x}_{Ger (High Quality Improvement)}=4.97$) ($\bar{x}_{Ger (Low Quality Improvement)}=4.94$, $p=.811$). Hence, $H1_{US}$ and $H1_{Ger}$ were not supported, which suggests that, based on the subjects in this study, quality improvements do not influence the consumer's preference towards reshored products.

The study further identified a main effect of environmental improvement on US consumers' product preferences. In the low environmental improvement group, the mean product preference response was 5.24 while the high group was 5.67. The difference was significant ($F=4.803$, $p<.045$) and $H3_{US}$ was supported. However, the German mean product preference response was 4.84 in the high environmental improvement group, and a reversed result of 5.05 for the low group. No significance ($p=.310$) was found for German respondents and $H3_{Ger}$ was not supported.

The impact on WTP as a result of perceived quality improvement (H2) and environmental improvement (H4) was assessed using MANOVA as follows.

H2 - Perceived quality improvement influences consumers' WTP in the US ($H2_{US}$) and in Germany ($H2_{Ger}$).

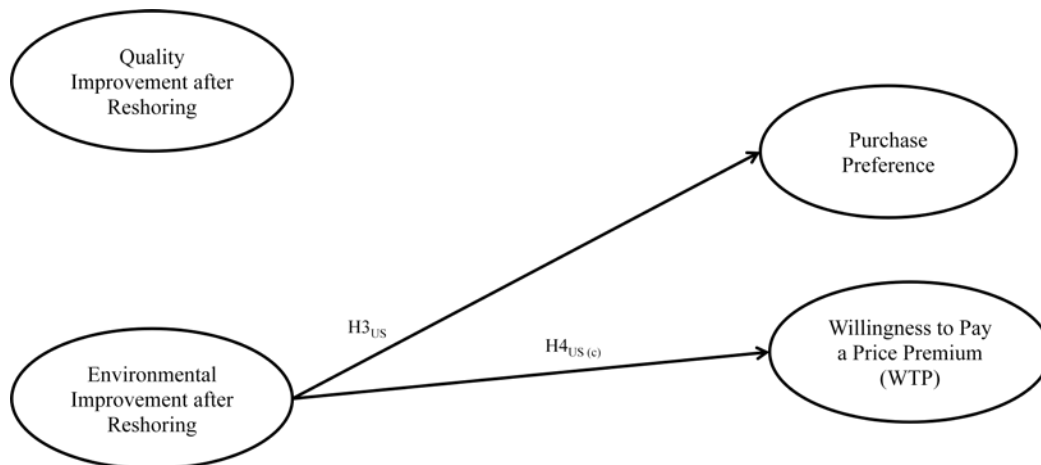
H4 - Environmental improvement as a result of product reshoring influences consumers' WTP in the US ($H4_{US}$) and Germany ($H4_{Ger}$).

Note: WTP choices were the willingness to pay no price premium (H2a), a moderate price premium (H2b), or a high price premium (H2c).

In the case of the US sample, the MANOVA identified a main effect of environmental improvement upon WTP ($p=.049$) and thus $H4_{US}$ was supported. A further analysis of US consumers indicated that only $H4_{US-c}$ was supported. This indicates that consumers appeared willing to pay higher premiums for reshored products that demonstrated a more favorable environmental impact. The hypothesized positive relationship between environmental improvement and WTP for the German sample was not significant ($p=.426$) and $H4_{Ger}$ was not supported. Similarly, the level of perceived quality improvement had no significant influence on WTP in either country ($p_{US}=.102$; $p_{Ger}=.656$). Hence, $H2_{US}$ and $H2_{Ger}$ were not supported.

Figure 2 presents the only hypotheses that were supported. A reduction in environmental impact resulting from reshoring led to a purchase preference in US consumers, and US consumers indicated a willingness to pay a price premium for reduced environmental impact.

FIGURE 2
NON-SIGNIFICANT RELATIONSHIPS REMOVED



Moderating Effect of Nationality

Some inter-country differences occurred in the evaluations of preference and WTP. The combined purchase preference mean for US and German subjects was respectively 5.45 and 4.95 ($p < .001$). The one case where the data indicated a significant difference was in the willingness to pay a high premium. US consumers were more willing than German consumers to pay a high price premium ($p < .02$).

Detailed t-test analyses of the moderator effect of nationality on preference and WTP in regards to quality improvement and environmentalism were performed and the following observations were statistically significant.

- US consumers' preference for products with high quality improvements was greater than German consumer preference ($\bar{x}_{US} = 5.64$, $\bar{x}_{Ger} = 4.97$, $p < .002$).
- US consumers expressed a greater willingness to not pay a premium for products with high quality improvement than German consumers ($\bar{x}_{US} = 5.27$, $\bar{x}_{Ger} = 5.85$, $p < .014$).

In all other price premium categories with high product improvement, there were no significant differences between US and German consumers. In situations of low quality improvement the following significant differences were observed.

- US consumers' WTP a moderate premium (15%) with low quality improvement was higher than German consumers ($\bar{x}_{US} = 3.11$, $\bar{x}_{Ger} = 2.47$, $p < .002$).
- US consumers' WTP a high premium (20%) for products with low quality improvement was higher than German consumers ($\bar{x}_{US} = 2.51$, $\bar{x}_{Ger} = 1.94$, $p < .004$).

In all other price premium categories with low product improvement, there were no significant differences between US and German consumers.

The following observations regarding environmental improvement were significant.

- US consumers' preference for products associated with high environmental improvement is higher than German consumers ($\bar{x}_{US} = 5.67$, $\bar{x}_{Ger} = 4.82$, $p < .001$).
- US consumers' WTP a moderate premium (15%) for products with high environmental improvement was greater than German consumers' ($\bar{x}_{US} = 3.28$, $\bar{x}_{Ger} = 2.73$, $p < .013$).
- US consumers' WTP a high premium (20%) for products with high environmental improvement was greater than German consumers' ($\bar{x}_{US} = 2.78$, $\bar{x}_{Ger} = 2.12$, $p < .002$).

No other significant differences between US consumers' and German consumers' WTP relative to environmental improvement were observed.

DISCUSSION AND IMPLICATIONS

The objectives of this study were to investigate if product quality and environmental improvements from reshoring actions affected consumers' purchase preference and WTP. The study also investigated the moderating effect of national origin.

Quality improvement had no significant effect on purchase preference or the WTP. Quality seems to be an inherent aspect, and consumers expect a certain quality standard regardless of the country of manufacturing. Voinea and Filip (2011) suggest that twenty-first century consumers address quality by trusting producers to provide products that meet their expectations. The present study presented the foreign plant's production quality as standard, which implies it met consumers' expectations. Therefore, quality might not be considered for the purchase decision, since expectations were generally met regardless of quality improvement.

However, the results are in conflict with the study of Elliott and Cameron (1994), who found that there is a general preference towards the local product and a strong preference if the locally made product is of superior quality. A possible explanation for the insignificant influence of quality level could be found in the questionnaire phrasing. The Elliott and Cameron (1994) study referred to explicit product categories and named comparable manufacturing countries like Korea, Japan or Brazil. In this study, the scenarios were generically phrased and did not portray comparisons with production in an explicit country like Korea or Japan. Another explanation could be the increased shift of consumer attention towards brands along with the rising importance of a product's country of brand versus its country of manufacture. With the growing influence of globalization and multinational manufacturing strategies, companies focus on marketing the brand instead of the country of manufacture. Currently, a brand name with a strong association to superior product quality has the ability to render the country of manufacturing irrelevant (Aoun, 2012). The current study avoided brand attitudes by phrasing the survey so that it remained brand neutral.

Similar reasons can be named for the contradiction with the Miškolci (2011) study in regards to WTP. The Czech Republic study reported a willingness to pay a moderate premium for food quality improvement. Since this study did not focus on any specific product category, the findings of Miškolci (2011) are not comparable.

Ambivalent results were shown regarding the environmental component of the study. The hypothesis of a positive relationship between the environmental improvement as a result of product reshoring and consumers' preference and WTP was not supported for Germany. Regardless of the treatment level of environmental improvement, German participants agreed somewhat to prefer the reshored product. The mean for the low treatment group was even slightly higher (5.049) than that of the high group (4.842). One interpretation would be that German consumers value even small improvements in regards to the environmental impact of a product and that exaggeration has a negative impact on consumers' purchase behavior.

A study conducted by the Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (2010) (BMU) gives some explanation as to why no significance was found in terms of WTP. Even though the concern from young adults for environmental issues increased, one of the in-depth reports BMU reports indicated significant declines in environmental behavior. One of the main barriers is the price aspect of environmentally friendly products. Another study (Bonini & Oppenheim, 2008) supports the theory that price is the largest barrier to buying green products. Especially in regards to more expensive items like televisions, consumers expect a return on the price premium paid for a product. The current study indicates that consumers perceive only small benefits from environmentally friendly products, and the higher premiums of these products to be too high for the benefits received.

These analyses support the hypothesis that, in the US, the environmental improvement from a reshored product has an impact on consumers' willingness to pay a high premium (15-20%). Given the positive relationship between the degrees of environmental impact from the product's reshoring and the consumers' willingness to pay a high premium, it can be concluded that reshoring yields favorable returns.

Partially significant results were identified in the analysis of the impact of the respondent's nationality on the effect of product quality improvements and environmental impact on consumer purchase preference and WTP. Mean consumer product preferences between nationalities in the cases of high product quality improvement and high environmental improvement were significant. No significance was found for WTP in the no premium or moderate premium scenarios. Nationality moderated WTP in the low and high environmental improvement scenarios with a high price premium.

Since there is no consistency in the results, it is difficult to interpret the findings. However, this study support the need for further research of cross-national differences in the concerning the impact of product quality improvements and the environmental footprint of a product.

LIMITATIONS AND FUTURE RESEARCH

The purpose of this study was to examine the effects of product quality and environmental impact as a result of reshoring on the consumers' purchase preferences and willingness to pay a price premium. Some theoretically sound hypotheses were supported yet many were not. The lack of hypothesis support may be due to limitations of the study.

The limitations of this study may have contributed to the fact that there were few significant results. Perhaps the most important limitation was from the generically phrased scenarios. Also, given that no specific product category was identified, the degree of the consumers' product involvement was more than likely low. Future researchers should examine whether consumers' perceptions of the product's quality and environmental impacts differ for specific product categories. This may help marketers to understand whether the product category moderates the reshoring effect.

A limitation of the methodology was the student sample. Therefore, it is not definite whether or not the results of this analysis are representative and whether or not the findings are generalizable. As stated earlier, this limitation could be the reason for the insignificant results. Finally, the study is limited to the comparison of only two industrial nations, US and Germany. The conclusions based on the analysis cannot be generalized regarding differing nationalities.

A further starting point for future research can be found in the significant positive effect of environmental improvement on US consumers' willingness to pay a high price premium. A possible extension would be to test defined environmental aspects.

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