Industrial Purchase among Saudi Managers: Does Country of Origin Matter?

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Received: September 10, 2013    Accepted: October 1, 2013    Online Published: January 22, 2014
doi:10.5539/ijms.v6n1p116      URL: http://dx.doi.org/10.5539/ijms.v6n1p116

Abstract

The country of origin or where a given product was designed or assembled has been found to be influential in several consumer studies. With the differentiation between the country of assembly and the country of design, the aim of this study was to examine the effect of country of origin (COO) factors on the purchasing decisions made by purchasing Saudi managers in Saudi Arabia. The study identifies COO for two types of products, machine tools and component parts. Using convenience sampling method, a pilot-tested questionnaire survey was sent out by email to 531 industrial managers responsible of the machine tools purchasing and components parts in Saudi Arabia with a response rate was 62 %, the author presents findings on purchasing managers' perceptions of industrial products sourced from a total of 18 countries. The findings of this study revealed that COO is a significant and major factor in Saudi managers' purchase decisions with respect to industrial products. This study provides Saudi perspectives and insights on the ongoing debate regarding the role of country of origin in our increasingly globalized world. The study is timely in view of the continued pace of globalization, with most multinationals outsourcing their production in one or more countries. The results should be of interest to a variety of organizations involved in industrial products, including designers, manufacturers, buyers and other stakeholders.

Keywords: COO, globalization, industrial purchase, Saudi Arabia

1. Introduction

There is a plethora of international marketing literature which examines the role of country of origin (COO) image as a significant covariate of product or service brand image (Alsughayir & Abbas, 2012; Al-Sulaiti & Baker, 1998; Li et al., 2000). A number of researchers have demonstrated that people from a given country tend to share similar beliefs regarding people in other countries; such beliefs inevitably have a bearing on their perceptions of the products from those countries (Kaynak & Cavusgil, 1983; Saydan, 2013). The COO construct is generally understood, in marketing literature, to be “the country where a given product is made” (Benny, 2008, p.42), or “the country of manufacture or assembly” (Bilkey & Nes, 1982, p.79).

Researchers have demonstrated, in various studies, that COO can have a significant influence on consumer purchase behavior with respect to foreign products. For instance, the majority of consumers are thought to utilize COO to encapsulate specific product-related attributes (Alsughayir & Abbas, 2012; Sanyal & Datta, 2011; Benny, 2008; Davidson et al., 2003; Hamin & Elliott, 2006; Lin & Chen, 2006; Papadopoulos & Heslop, 2002; Phau & Suntornmond, 2006). Specifically, consumers have been found to positively evaluate products whose COO has a high manufacturing reputation, irrespective of the actual performance of the specific products (Papadopoulos & Heslop, 2002). For instance, this could be one explanation why German-made cars tend to receive positive evaluation among consumers, given the country’s strong manufacturing reputation.

Over the last two decades, the government of the Kingdom of Saudi Arabia has instituted major reforms in the country's economy (CIA: The World Fact book, 2009). The structural changes have been aimed at improving the country's trading performance and global competitiveness. Saudi policymakers have tried to ensure that the country is repositioned in the global economy as a key player and a desirable investment destination (CIA: The World Fact book, 2009). As a result, the reforms have generated significant opportunities for foreign trade and investment in Saudi Arabia. For instance, the country’s business activities in the period between the year 2000
According to the data reported by Saudi Arabian Monetary Agency, which is responsible for reporting imports, between 1968 and 2012, the country’s imports averaged 96,364 Million SAR. Imports reached an all-time high level of 222,985 Million SAR in December of 2005 and a record low of 2,578 Million SAR in December of 1968 (Saudi Arabian Monetary Agency, 2012). In 2012, however, Saudi Arabia recorded a 6% rise in imports from 191,477 Million SAR in the third quarter to 203,637 Million SAR in the fourth quarter. Its key imports tend to be: machinery, mechanical and electrical appliances (27 percent accounting for of the total imports), chemicals and related goods (9 percent); vegetables were (6 percent); transport equipment and parts thereof (16 percent), and finally as for the base metals, it was (13 percent). The country imports are depending on different countries such as Republic of China (13 percent of total imports), USA (12.6 percent), Dutch land (7 percent) and finally Japan around (6 percent) of the total imported items. Saudi’s other import partners include: United Arab Emirates, South Korea, France and Italy (Saudi Arabian Monetary Agency, 2012).

The reforms in Saudi Arabia’s economy have ensured that buyers can now choose from a range of products sourced from a variety of countries. In view of the wide choice available, does COO influence Saudi buyers' evaluation of a given product? The effects of COO have been thoroughly researched in consumer behavior literature; in addition, some studies have also reported the effects of COO in a business-to-business industrial context (Moradi & Zarei, 2012; Kaynak & Cavusgil, 1983). Due to the nature of industrial purchasing, which is considered to be more formal and rational, research examining the effects of COO on buying agents would make a significant contribution towards the knowledge base on decision-making in this context. A selection of studies on the effects COO (Alsughayir & Abbas, 2012; Abdoli et al., 2012; Peterson & Jolibert, 1995; and Bilkey & Nes, 1982) all seem to conclude without making any strong generalizations on the role of COO.

Peterson and Jolibert (1995) conducted a meta-analysis of COO effects based on 52 articles; they concluded that "…country of origin effects is only somewhat generalizable" (p. 1). Peterson and Jolibert (1995) attributed this conclusion to several possible factors including the diversity of research methods employed in the various studies, the continued lack of clarity about the construct itself and the different ways in which the construct has been operationalized. The researchers further maintain that additional empirical research, in a variety of contexts, would be beneficial due to the gaps in knowledge on the effects of COO. In addition, Papadopoulos and Heslop (1993) observed that the majority of research on this theme has been undertaken in a small selection of countries. Both Papadopoulos and Heslop (1993) and Ahmed and d’Astous (1996) emphasise the need for further research to be conducted on COO effects in previously unexplored cultural contexts. Such new studies are likely to enhance our knowledge and understanding of the subject. A comparison of Turkish consumers found differences in their perceptions of products manufactured in countries other than Turkey or the United States (Yapirak, 1988). Krishnakumar (1974) also found significant differences in the attitudes of Indian students compared to Taiwanese students towards British products. Indian students had a higher opinion of products of British origin than their Taiwanese counterparts.

Although COO studies are valuable when they focus on different countries, Heslop et al. (1998) argue for the need to explore and identify within country differences too. Their study of French and English speaking Canadians found differences in the attitudes of the two sub-cultures towards products from developed versus less developed regions. Apart from within country differences among sub-cultures, cross-national differences have also been observed in consumer behavior studies. In their research of COO effects, Ahmed and d'astous (1996) observed cross-national variations leading them to question the value of manufacturing products in a country with a negative COO status. Another important dimension in this theme is the country of domicile. Nebenzahl et al. (1997) pointed out that the purchaser’s country of residence will influence their perception of a product’s COO. Abbas (2010) recently observed that previous studies on industrial purchase behavior have been focused on developed countries. Since culture has an impact on research findings, Abdoli et al. (2012) argue that caution must be exercised when applying the findings of studies conducted in a developing country context. In fact, findings from a developed country are not necessarily applicable (Abbas, 2013) to a developing country context. In view of the importance of country of domicile on COO effects, the current study will provide some insights in the context of Saudi Arabia, a less developed country.

The current study, reported in this paper, will contribute towards filling the identified gap—the need for COO studies focused on developing countries. The research investigates the country of origin perceptions of Saudi purchasing managers in relation to machine equipment and it is component. Saudi purchasing agents' attitude towards the two types of industrial products from a range of 18 developed, newly industrialized and industrializing countries, were investigated with implications identified.
2. A Review of Literature

The relationship between the consumers’ purchasing behavior and COO image has become even more important in view of increasing globalization (Abbas, 2013). However, the definition of the COO effects is still highly contested (Sauer et al., 1991). Abbas (2013) put forward the definition of a COO effect to represent the influence of generalizations and attitudes held regarding a country on an individual’s perceptions of the products or brands made in that country.

A distinction between consumer attitude towards the country associated with a given product and the actual country where the product is manufactured is advocated by Nebenzahl et al. (1997). The rational is that this distinction is not made by most studies on country of origin, although MNCs are more relaying on outsourcing their production. Whereas this might be the case in relation to industrial purchasing, there are a clear exceptions in the consumer behavior literature: a number of studies have indeed made this distinction, either in terms of design assembly or origin-manufacture. Recently, Tse and Gorn (1992), by investigating the power of the information for both COO and the brand, investigated the tacit COD country of design and COM country of manufacture, with an empirical research included consumers' evaluation of stereo equipment. These findings meet with Hamin and Elliott (2006), when investigating the power of effecting COO on the quality perceptions of different products, state that most consumers use country of origin as a symbol reflecting product attributes.

The globalized nature of the production process of many products, in recent years, has made it more important to have specific research which distinguishes between country of design, assembly and country of manufacture. For instance, Ahmed and d'Astous (1996) incorporated multiple dimensions in their study, such as country of design, country of assembly, brand, price, and warranty provisions. They employed these multiple dimensions in their study of consumers’ evaluation of the quality of automobiles, shoes and VCR equipment. The study’s results, reported in another paper (Ahmed & d'Astous, 1996) concluded that consumers do make a distinction between country of production and country of design. Other researchers further argue that the country of production (assembly) and the country of origin are two completely different dimensions which should be treated as such (Lee & Schaninger, 1996). Nebenzahl et al. (1997) subsequently put forward four perspectives of country image, namely home country, country of manufacture, country of design, and COO. This kind of distinction has significant merit in view of the way manufacturing of products such as automobiles, for instance, is undertaken (Santucci, 1997).

From a consumer behavior perspective, there are several dimensions which influence how people or a particular country is perceived. While Papadopoulos et al. (1989) point to people’s cognition the ability of their countries to produce high level of goods quality, Parameswaran and Pisharodi (1994) argue that it is the overall product offerings associated with a country that will determine consumers’ COO attitudes. There is a debate on whether or not COO attitudes will continue to be an essential element in buyer behavior in view of the increasing globalization of the world (Papadopoulos & Heslop, 1993). Several studies have identified purchase decisions as being linked to a country's political, economic and cultural features (Alsughayir & Abbas, 2012; Baugh & Yaparak, 1993; Parameswaran & Pisharodi, 1994). This means that a negative COO is likely to result if a country is perceived to have unsophisticated technologies, weak market and economic structures and negatively perceived cultural characteristics. Roth’s (1995) study revealed the importance of market environment characteristics, including the level of the individualism of cultural, the power for cultural distance, and regional socio-economics in the formation of buyers’ COO perceptions of a foreign brand. The study suggested that its results are generalizable and can be equally applied to product categories. It should therefore be no surprise when buyers perceive less risk and more higher quality perception for goods that made in developed countries more than goods that associated with developing countries (Nes & Bilkey, 1993).

Any country-specific characteristics will help develop an environment in which companies will become efficient in certain areas, which leading to competitive success market (Santucci, 1997). This point has been expressed also by Papadopoulos et al. (1990) state that the level of a country’s industrialization will influence buyers’ perceptions of it as a COO. However, Porter’s (1990) study concluded that other dimensions such as competences, agent situation, demand situation, and the relevant or supporting a field of the industries in a country may all account for the variations in a country’s image. In spite of having positive attitudes towards a specific country's products, buyers may still decide not purchase from that country if they have negative perceptions about the country itself (Nebenzahl et al., 1997). For instance, Danish exports reportedly dropped by 21.5% (Jordan Times, 2012) due to a backlash of Muslims refusing to buy Danish products following the decision by Danish newspapers to print offensive cartoons which negatively portrayed the Muslim prophet “Muhammad–SAW”.

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Roth and Romeo (1992) argued that buyers relate their knowledge of a country’s reputation in the production of goods and services to the actual product or services, when it comes to formation of their COO perceptions. This will lead risk-averse buyers to inevitably have negative perceptions of country of origin towards products sourced from countries they are unfamiliar with. Consequently, multinational corporations, whose production is increasingly located in industrializing or newly industrialized countries, ought to bear the business implications of such a decision in mind as buyers continue to negatively evaluate products from such countries (Johansson et al., 1994). According to the comparative study by Wood and Darling (1992), respondents ranked products from Russia lower than those manufactured in Western Europe, Scandinavia and Japan. More recently, Alsughayir and Abbas (2012) found that consumers in Saudi Arabia perceived developed countries to produce goods of higher quality, with countries such as the USA being rated highly at creating the impression of manufacturing high quality goods.

Although products manufactured in former communist countries have previously been associated with more negative perceptions (Alsughayir & Abbas, 2012; Wood & Darling, 1992), the rapid political changes in these countries are likely to lead to changes in social attitudes which will in turn translate into more positive attitudes towards their products (Nebenzahl et al., 1997). This view seems to be supported by Ahmed and d’Astous (1996) state that providing additional or new information to consumers can reduce the COO effects on perceptions. The researchers went further to suggest that newly industrialized countries can mitigate the negative consumer perceptions through implementation of strategies such as the provision of attractive warranties on products.

The type of product will also determine the level of COO effects on purchase behavior. Although buyers might be able to buy a simple item such as a T-shirt manufactured in a developing country, they are unlikely to be as willing to purchase more complex pharmaceutical or electronic products such as drugs or cameras (Papadopoulos & Heslop, 1993).

3. Conceptualization and Research Hypotheses

In this research, country of origin was taken to mean the country named on a product’s "made in" label. The study used "country of assembly -COA", "quality" and "country of design - COD" as the key variables for measuring COO effects. In differentiating between the COA and COD, the research measured the perceived quality factor, that expressed in terms of the product’s technology, the level of space used by the good and how easy it is to operate and maintain the product. Dzever (1996) as well as Dzever and Jaussaud (1997) highlighted, from their studies in Asia-Pacific region, that the trend in miniaturization was increasingly regarded as a quality indicator among many purchasers of industrial products. Industrial purchasers are more likely to associate compact products with latest technology as well as high quality. Therefore, this research incorporated a variable “space utilized”, which captured data on the amount of storage or operational space associated with the product.

One of the implications of country image perceptions is that in cases where a buyer may be unfamiliar with a given product, the country image perceptions will affect brand and product perceptions (Nebenzahl et al., 1997). In determining one’s perceptions of product quality, Abdoli et al. (2012) found that buyers’ are more preferable to depend on brand information comparing with the information of the COO. Abbas (2013) somewhat disagreed, pointing to brand information as being more important than COO. As earlier identified, complexity in international sourcing has significantly increased to the extent that a product’s design, production and assembly may occur in more than three countries. A product may be designed in a different place where had been made (Chao, 1993). This adds to the complexity, necessitating the importance of differentiate between where the product have designed and where it assembled.

In order to enhance the perceived quality of their products, some manufacturers have been known to strategically locate their production facilities in developed countries and subsequently emphasizing the “made in” name as the country of origin (Ahmed & d’Astous, 1996). A part from the COO, the brand of the product plays an important role too. However, when it comes to the manufacture of industrial products, industrializing countries tend to receive more favorable evaluations as countries of assembly than when they are simply countries of design (Abbas, 2010). Corporate purchasers were also more willing to buy goods were assembled in a recent industrializing country provided it was designed in a more developed countries. Alsughayir & Abbas (2012) argued that a well-designed product can mitigate against most of the issues associated with poor product assembly.

In view of the foregoing discussion, a set of four hypotheses were developed for investigation in the current research and these are presented below.

**H1:** The country of design (COD) for machine instruments is a significant factor of quality assessment for buying Saudi managers. These assessments are perceived to be highest as for developed countries, meanwhile
less for recent industrialized countries and less more for industrializing countries.

**H2:** The country of design (COD) for component parts is a significant factor of quality assessment for buying Saudi managers. These assessments are perceived to be highest as for developed countries, meanwhile less for recent industrialized countries and less more for industrializing countries.

**H3:** The country of assembly (COA) for machine instruments is a significant factor of quality assessment for buying Saudi managers. These assessments are perceived to be highest as for developed countries, meanwhile less for recent industrialized countries and less more for industrializing countries.

**H4:** The country of assembly (COA) for component parts is a significant factor of quality assessment for buying Saudi managers. These assessments are perceived to be highest as for developed countries, meanwhile less for recent industrialized countries and the less more for industrializing countries.

4. Methodology

The results reported in this paper are based on a nationwide polit tested and pilot tested survey conducted in Saudi Arabia in 2013. Using convenience sampling method, the questionnaire survey was sent out by email to industrial manager responsible of the machine tools purchasing and components parts in Saudi Arabia. The sample of the study was drawn from Profile Direct and Saudi Chamber of Commerce databases of staff responsible for purchasing decisions in the manufacturing sector. In this study, components were deemed to include all discreet components which form part of the machine tools when assembled into a complete tool. Data were collected on key variables using a five point likert scale.

Data from the completed questionnaires were subsequently statistically analyzed using SPSS version 20 using both descriptive and inferential statistics. Respondents from 18 newly developed, industrialized and newly industrialized countries were surveyed for their country of origin perceptions. The initial survey was sent out by email to a sample of 531 participants, together with a covering letter regarding the study’s objectives. A reminder was sent out two weeks later in order to enhance the response rate. The survey received 328 useable questionnaires, representing a response rate of 62% which was deemed to be adequate.

5. Results

5.1 Country of Design

This research investigated Saudi COO Perceptions of two products, which is machine tools and it is component parts. Two sets of questions were paused in order to examine respondents’ COO attitudes towards the two products. In order to test Hypothesis 1, subjects “Saudi managers” were required to rate their perceived quality of machine tools designed in the countries specified in Table 1. Hypothesis 2 was tested primarily by asking respondents to rate their perceived quality of component parts have been designed in the countries mentioned in Table 1. The Wilcoxon signed ranks test showed significant differences (p-values < 0.001) in the respondents’ perceived quality ratings of products designed in developed countries ranked as a newly industrialized, and newly industrializing countries.

Products designed in developed countries were given a higher perceived quality score than those from newly industrialized countries. Similarly, products from newly industrialized countries were a given higher perceived quality score than those from newly industrializing countries. The findings suggest that the product design country of origin is a key factor in Saudi purchasing managers’ decisions when sourcing both component parts and machine tools.

<table>
<thead>
<tr>
<th>Developed countries</th>
<th>Recently industrialized countries</th>
<th>Recently industrializing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan, France, USA, Italy, Germany, United Kingdom, Switzerland</td>
<td>Singapore, Hong Kong, South Korea, Taiwan</td>
<td>Philippines, Russia, Brazil, India, Thailand, Mexico</td>
</tr>
</tbody>
</table>

Two-way analysis (Friedman) of variance was used to determine whether or not respondents rated some countries within each category of countries higher than others. The analysis examined whether or not there was a significant difference in the way purchasing managers rated the individual countries within each category. The analysis showed that there are significant differences (with p-values < 0.001) in the way respondents ranked the individual countries through each category of countries as shown in Table 1.

As shown in Table 2 the rank sums for each country in each of the three categories where displayed in the
histogram in Figure 1, 2 and 3 tendency for subjects to rank countries based on the industry level of countries. The variations in rank sums amongst the countries within the category for newly industrializing countries were minimal. India had the highest score for COA and expected quality for machine equipment and for expected quality and country of design (COD) or component parts, while Russia was rated lowest. Italy was rated the lowest in the developed countries category.

Table 2. Two-way analysis (Friedman) of variance, country of design and perceived quality for machine equipment's

<table>
<thead>
<tr>
<th>Developed countries</th>
<th>Recently industrialized countries</th>
<th>Recently industrializing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Rank sum</td>
<td>Country</td>
</tr>
<tr>
<td>USA</td>
<td>9008.5</td>
<td>South Korea</td>
</tr>
<tr>
<td>Japan</td>
<td>801.5</td>
<td>Taiwan</td>
</tr>
<tr>
<td>UK</td>
<td>837.5</td>
<td>Singapore</td>
</tr>
<tr>
<td>Germany</td>
<td>1011.5</td>
<td>China</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1222.0</td>
<td>China</td>
</tr>
<tr>
<td>France</td>
<td>683.5</td>
<td>Brazil</td>
</tr>
<tr>
<td>Italy</td>
<td>657.5</td>
<td>Russia</td>
</tr>
<tr>
<td>USA</td>
<td>9008.5</td>
<td>China</td>
</tr>
<tr>
<td>Japan</td>
<td>801.5</td>
<td>Brazil</td>
</tr>
<tr>
<td>UK</td>
<td>837.5</td>
<td>Russia</td>
</tr>
<tr>
<td>Germany</td>
<td>1011.5</td>
<td>Mexico</td>
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<tr>
<td>Switzerland</td>
<td>1222.0</td>
<td>Philippines</td>
</tr>
<tr>
<td>France</td>
<td>683.5</td>
<td>Thailand</td>
</tr>
<tr>
<td>Italy</td>
<td>657.5</td>
<td></td>
</tr>
</tbody>
</table>

p-value 0.000

5.2 Country of Assembly

In order to test Hypothesis 3, respondents were required to rate their perceived quality of machine tools assembled in the countries specified in Table 1. Hypothesis 3 was tested primarily by asking respondents to rate their perceived quality of component parts of the machine where assembled in the countries specified in Table 1. The Wilcoxon signed ranks test showed significant differences (p-values < 0.001) in the respondents' perceived quality ratings of products assembled in developed countries, newly industrialized, and newly industrializing countries.

The findings suggest that the product country of assembly is a key factor in Saudi purchasing managers’ decisions when sourcing both component parts and machine tools. Two-way analysis (Friedman) of variance results are presented in Tables 3 and 4, with p-values (0.001), revealed that there are some significant differences amongst the countries within each the three blocks of countries.
Table 3. Two-way analysis (Friedman) of variance, country of design and perceived quality for component parts

<table>
<thead>
<tr>
<th>Developed countries</th>
<th>Newly industrialized countries</th>
<th>Newly industrializing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Rank sum</td>
<td>Country</td>
</tr>
<tr>
<td>USA</td>
<td>1069.0</td>
<td>South Korea</td>
</tr>
<tr>
<td>Japan</td>
<td>762.0</td>
<td>Taiwan</td>
</tr>
<tr>
<td>UK</td>
<td>902.0</td>
<td>Singapore</td>
</tr>
<tr>
<td>Germany</td>
<td>1001.0</td>
<td>China</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1179.0</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>787.5</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>632.5</td>
<td></td>
</tr>
</tbody>
</table>

p-value 0.000        p-value 0.008        p-value 0.041

The newly industrializing countries category had the least within group statistical differences with machine tools assembled in Brazil again being perceived, by respondents, to have a higher quality score than the rest in the category. Italy was rated the lowest amongst developed countries in terms of the perceived quality associated with the country of assembly category. This was also the case with the ratings for perceived quality associated with the country of design.

Table 4. Two-way analysis (Friedman) of variance, expected country of assembly and expected quality for machine equipment

<table>
<thead>
<tr>
<th>Developed countries</th>
<th>Newly industrialized countries</th>
<th>Newly industrializing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Rank sum</td>
<td>Country</td>
</tr>
<tr>
<td>USA</td>
<td>992.5</td>
<td>South Korea</td>
</tr>
<tr>
<td>Japan</td>
<td>700.0</td>
<td>Taiwan</td>
</tr>
<tr>
<td>UK</td>
<td>831.0</td>
<td>Singapore</td>
</tr>
<tr>
<td>Germany</td>
<td>1000.0</td>
<td>China</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1149.5</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>741.5</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>632.5</td>
<td></td>
</tr>
</tbody>
</table>

p-value 0.000        p-value 0.001        p-value 0.033

An analysis of Tables 2 and 3 compared to Tables 4 and 5 reveals that newly industrialized countries were ranked higher as countries of assembly than as countries of design, for the machine equipment's and it is component parts for this machine. These findings are consistent with those of Ahmed and d'Astous (1995).
Table 5. Two-way analysis (Friedman) of variance, expected quality and country of assembly for component parts

<table>
<thead>
<tr>
<th>Country</th>
<th>Developed countries</th>
<th>Newly industrialized countries</th>
<th>Newly industrializing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank sum</td>
<td>Country</td>
<td>Rank sum</td>
</tr>
<tr>
<td>USA</td>
<td>1062.0</td>
<td>South Korea</td>
<td>605.0</td>
</tr>
<tr>
<td>Japan</td>
<td>761.5</td>
<td>Taiwan</td>
<td>670.0</td>
</tr>
<tr>
<td>UK</td>
<td>901.0</td>
<td>Singapore</td>
<td>499.5</td>
</tr>
<tr>
<td>Germany</td>
<td>1000.0</td>
<td>China</td>
<td>600.2</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1130.5</td>
<td>Philippines</td>
<td></td>
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<tr>
<td>France</td>
<td>699.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>620.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

p-value 0.000          p-value 0.002          p-value 0.008

6. Implications of This Study

This study found that purchasing managers from Saudi Arabia ranked the perceived quality of machine parts and component equipment from more developed countries to be higher than those sourced from newly industrialized and newly industrializing countries. COO perceptions still appear to play an important role in the decision making of the purchasing managers surveyed. However, it is vital to further explore the implications of these findings, four of which are outlined below.

First, it is essential to consider the impact of time on COO perceptions. It is likely that Japan, for instance, would not have been rated so high had this study been undertaken thirty of more years ago. The implication here for purchasing managers is that COO perceptions change over time due to changes in the way a country’s developmental journey as well as how it is externally perceived overall. A previously negative COO perception can turn into a positive one when time is factored into the definition of this construct. For instance, two decades ago, Smith’s (1993) study showed that African and Latin American products were perceived by respondents to be comparable with countries were ranked higher than those from Europe. The question arising from this first implication is: how can a country’s COO perceptions change over time? According to Johansson et al. (1994), countries like Japan worked hard to shake off their image as a source of poor quality and cheap products by placing more emphasis on quality systems. Alongside Japan, others like South Korea and Taiwan also adopted strategies such as penetration pricing, low value-added products, medium-quality while slowly working towards entering the market for high quality, higher priced and technologically more complex products (Papadopoulos & Heslop, 1993). This process of transforming perceptions takes time to accomplish. Purchasing decision makers therefore need to be aware that companies with a lower COO image are increasing collaborating with others in order to enhance their perceived quality of design and product quality.

Another important consideration is the use of global quality control standards such as ISO 9000 accreditation which is essential for companies to be able to compete internationally. The interesting question is whether or not the advances in accreditation and use of internationally recognized quality control standards will eliminate perceived quality differences such as those observed in this study.

Secondly, there is a risk factor associated with the sourcing of industrial products. As a way of mitigating this risk, it is logical for purchasing managers to source their industrial products from countries with an existing reputation for manufacturing industrial products. Aspects such as the degree of a country’s industrialization as well as environmental characteristics will determine the buyers’ country of origin perceptions. This means that the amount and type of information available to a purchasing manager will be a key determinant of their perception of the COO and their purchase decision. Due to the associated levels of risk, buyers tend to have negative COO perceptions of products sourced from a country they have no previous experience of (Johansson et al., 1994).

Thirdly, previous research found that labeling of regions also influenced COO perceptions of products from a particular region. Hamin and Elliott (2006) found that goods from Asia were assessed more positively than those from Africa, Latin America and Western Europe. This may partly be due to the positive reputation of countries like Japan, which other Asian developing countries can take advantage of in order to mitigate negative COO perceptions.

Instead of utilizing the regional approach, the current study used the stage of industrialization to classify the
countries. This findings show that there were within category country by country differences between newly industrialized and newly industrializing countries. The newly industrialized countries, which include Singapore, Hong Kong, South Korea, and Taiwan, may have been benefited by the ‘Japan-effect’, i.e. the effect of the reputation for Japan's as high quality products.

Finally, Saudi purchasing managers distinguish between a product’s country of design and the country of assembly. The importance of such a distinction is heightened by the effects of globalization. When it comes to the purchase of machine tools and component parts, newly industrialized countries were ranked higher as countries of assembly than as countries of design in the current study. Buyers may be more willing to buy goods collecting in a newly industrialized country provided in a developed country was designed. This means that a product is more likely to be deemed to be of a higher quality by virtue of its country of design because buyers are paying less tension about where it is assembled. As a result, industrializing countries are increasingly engaged in collaborative ventures with global market players in order to enhance the design and global competitiveness of their product. The resultant products are subsequently promoted using their country of design, where this finds to be in a developed one, more than the industrializing country of manufacture.

7. Limitations of This Study

The main limitation of the study is that instead of observing the actual behavior and decision making process of purchasing managers, a questionnaire survey was used for the primary data collection. Furthermore, it may not be possible to extrapolate the results to the general population since the sample size was selected following a convenient sampling approach and the response rate was 62%. In addition, the study was conducted only in Riyadh and so does not necessarily reflect the attitudes of consumers in other Saudi Arabian cities. Although this is a potential short-coming, it is not unique to this study but rather common to nearly all studies of this nature. As such, the findings of the study make a valuable contribution to the COO studies, especially by providing a distinction between country of assembly "COA" and country of design "COD".

8. Conclusions

The importance of examining COO aspects in a variety of cultural contexts has been highlighted in the literature. As a result, the current study was aimed at providing perspectives on the COO perceptions of purchasing managers towards industrial purchases of machine tools and component parts, in the context of Saudi Arabia. The study focused on goods were designed and assembled in developed country, and newly industrializing countries. Although there is an ongoing debate regarding the relevance of the concept of COO in the current globalized world, the findings of the current study suggest that COO perceptions are still relevant to the decision making process of industrial purchasing managers in Saudi Arabia. Decision makers’ attitudes and perceptions towards a country will influence their buying decision making of industrial tools and components. The findings of the research upheld all four hypotheses set out in this study. The country of design "COD" and country of assembly "COA" both have an influence on decision-makers’ perceptions of a product. The perceived quality of machine equipment's and it is component parts from countries where ranked as more developed was higher than those industrializing countries where recently industrialized or called newly industrialized countries. The study also showed country by country variations within each of the three groups of countries examined. In addition, newly industrialized countries were ranked higher as countries of assembly than as countries of design. This suggested that it may be beneficial for countries with a negative COO image to work in partnership with companies whose design capabilities can be delivered from a country with a higher COO profile.

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