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**Investigating Factors Affecting the Purchase of Domestic Products in Iran:  
An Ethnocentrism Approach**

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**Abstract:**

The economic growth of countries in today's highly competitive environment requires the attention to domestic products. In this regard, many countries are continuously striving to provide sustainable economic development with the support of the domestic industry by employing a variety of solutions, especially with emphasis on marketing solutions. Using an ethnocentrism approach, this study examines factors affecting the purchase of domestic products in Iran. The review of the literature shows that so far no coherent research has been done on the modeling of consumer purchasing behavior in relation to domestic home appliances products. Therefore, this study can provide new marketing insights for policy makers at a macro level, taking into account a complete list of variables influencing domestic purchasing decisions. The population consisted of consumers of home appliances products in Tehran. Using Cochran's formula and convenience sampling method, 384 consumers were determined as the sample. Data analysis was carried out using structural equation modelling and SmartPLS software. The results show consumer ethnocentrism has a positive effect on the consumers' attitude toward and buying intention of domestic products. The perceived cost, perceived quality, image of the country of origin, and brand trust play a mediating role in the relationship between consumer ethnocentrism with attitude towards and intention to purchase domestic products. Perceived product necessity has a moderating role in the relationship between consumer ethnocentrism with mentioned mediator variables, but perceived economic threat has no moderating role on this relationship. In the home appliance market in Iran, conditions such as complex economic factors, the introduction of new technologies, continuous competitive changes and etc. have led marketing managers to fail to easily make the suitable decisions about the sustainable improvement of domestic product purchases. Therefore, the results of this study can promote the knowledge of managers about the key factors affecting the purchase of home appliances in the Iran by creating a thorough scientific view, so that marketing managers can make effective decisions in choosing appropriate marketing strategies in competitive markets.

**Keywords:** *Domestic Products, Consumer Ethnocentrism, Intention to Purchase, Home Appliance Industry*

**Introduction**

In today's highly competitive world and the efforts of countries to plunder other countries, what can save a country's economy is the full support of the people of that country from its domestic products. The severe competition in the home appliance industry that is due to the general need of households to choose one of the available brands of the market and the need

to support domestic products has led to the consideration of consumer ethnocentrism and moderating and mediating factors in this area.

Among the factors affecting the purchase of domestic products in a country, the good quality of domestic products, reasonable price, etc. can be mentioned. In this regard, consumer ethnocentrism is one of the key factors that can play an important role in choosing effective strategies in this area. From a nationalistic point of view, buying foreign products – as it does not help the local economy - is considered to be "immoral" and "illegal" (El Banna et al., 2017). Nationalist consumers tend to be too much patriotic and independent of foreign cultures (El Banna et al., 2017). The impact of ethnocentrism on consumer attitudes and purchase intention has been investigated by many psychologists and marketers (Burton, 2002; Laroche, Chung, & Clarke, 1997; Luedicke, 2011; Ouellet, 2007; Papadopoulos et al., 2008; Swift, 1999). Ethnocentrism plays an important role in predicting and explaining consumer decision-making process (El Banna et al., 2017).

Previous marketing studies indicate that there are many factors involved in consumers buying of domestic products. Earlier marketing studies have examined the effect of some mediator variables including the mental image of the country-of-origin, perceived quality of the product, perceived price of the product, and brand trust in the relationship between the ethnocentrism and intention to purchase and attitude towards domestic products. The image of country-of-origin is defined as the positive or negative mentality of the consumer from the producing country (Yunus, 2016). Previous studies conducted on the effect of the image of country-of-origin suggest that this image has a direct effect on the purchase intention (Yunus, 2016). Perceived quality is defined as consumer's overall evaluation of the brand based on the internal (performance and durability) and external (brand) signals; thus, quality is the overall superiority of a product or service (Asshidin et al., 2016). According to Chen (2012), trust means that customers expect the suppliers of goods and services (brand owners) to be reliable and can be trusted in meeting their obligations. Brand trust can be measured through the ability of the brand to fulfil the promises it has made (Dehdashti, 2014).

Moreover, many variables in this relationship can be considered as moderator variables that, based on their importance, the two variables of perceived product necessity and perceived economic threat have been chosen in this research. Researchers have described two moderator variables in the relationship between ethnocentrism and consumer attitudes toward foreign products. These moderator variables are perceived product necessity and perceived economic threat. Perceived product necessity is that how essential foreign products are (Shankarmahesh, 2006). Perceived economic threats is a threat that domestic industry workers are exposed to and include concerns about decreased income and losing jobs (for one's own, close relatives and other fellow citizens) caused by importing and purchasing imported products. Shimp and Sharma (1995), Shankarmahesh (2006), and Hosseini et al. (2015) have defined these two variables as moderator variables in the relationship between ethnocentrism and purchase intention of and attitude towards domestic products.

The definition of the relationship between consumer ethnocentrism and moderator variables that influences the protection of Iranian domestic products can help marketing managers in the home appliance industry so that they can choose the best marketing strategies in competitive markets. Accordingly, this paper seeks to identify the factors affecting the purchase of domestic products in Iran; a nationalist approach is used in this study to identify these factors and take the necessary steps in determining the required strategies.

## **Literature review and hypothesis development**

### **Supporting domestic products**

Disregard for domestic products and the prevalence of foreign goods consumption impose irreparable damage to the structure of the country's economy. Accordingly, competition between domestic and foreign products is growing rapidly in the global markets, and Iran, as

a developing country, is no exception (Bahmani, 2012). In the current marketing context, nationally identified consumers are more likely to regard national interests as the duty to their country to protect its economy by supporting domestic products against foreign products (Wang et al., 2018). On the other hand, the creation of labels for the COO, supporting domestic products, may have a negative impact on international trade (Korecka, 2019). In our country, support for the production and consumption of domestic products has always been a priority in economic and trade policies; hence, one of the usual ways to encourage the use of domestic products is to stimulate patriotic feelings towards the consumption of domestic products. Despite the high emphasis on the role of patriotic feelings in consumption of domestic products, they have not been hitherto evaluated coherently and scientifically, and the plans and promotions carried out in this area have been apparently based on non-scientific evidence. This is while, that in many countries, many quantitative and scientific studies have been conducted on the role of ethnocentrism feelings in purchasing and consuming domestic products, direct and indirect consequences of them, and evaluations of them (Haghighi & Hosseinzadeh, 2009). In this research, two variables of attitude toward and the intention to buy domestic products are considered as two dimensions of the variables of supporting domestic products. The attitude of people towards consuming a product is one of the most important presupposing of the prediction and interpretation of the consumer choice between different products and services. Attitude is defined as a physiological structure that reflects the readiness of individuals in actions or reactions in a particular way (Voon et al., 2011). A person's purchase intention depends on the purchase-related attitudes and mental norms of that person. Among the many questions about consumer behaviour, the most difficult one is why the consumer is doing a certain purchase; such a question has rarely a simple and clear answer. However, it is very important to know what makes exactly one to purchase product (Asshidin et al., 2016). The concept of purchase intention is a reflection of the consumer's predictable behaviour in deciding to buy in the future. Purchase intention is one of the variables used in routine research programs. Specifically, purchase intention is a prediction of the consumer's purchasing behavior that will significantly help to configure this attitude (Asshidin et al., 2016).

### **Consumer ethnocentrism**

For the first time, Sumner (1906) presents a formal definition of ethnocentrism as follows: a particular attitude to phenomena in such a way that one considers one's group as the centre of all phenomena and refers to all other phenomena with respect to that (El Banna et al., 2017). In consumer psychology, Shimp and Sharma (1987) originally conceptualized CE as “the beliefs held by consumers about the appropriateness, indeed the morality, of purchasing locally-made products instead of foreign-made products” (Prince et al., 2019). It is agreed that consumer ethnocentrism impacts negatively on consumers' purchase intention toward foreign products (Karoui & Khemakhem, 2019). Consumer ethnocentrism expresses a tendency towards the products produced domestically and tends to avoid the purchase of foreign products. Because of their national prejudices and loyalty to the country, nationalist consumers are reluctant to use products and services of foreign companies and prefer domestic products (Hosseini et al., 2015).

The attitude towards buying a product is defined as a person's general assessment of whether or not to accept the purchase of that product (Dehdashti Shahrokh et al., 2011). In studies by Sharma et al. (1995), Zarkada-Fraser & Fraser (2002), it has been shown that consumer ethnocentrism leads to a negative attitude toward foreign products (Shankarmahesh, 2006). Jane et al. (2015) in a study concluded that consumer ethnocentrism has a positive and significant relationship with attitudes towards domestic products and a negative and significant relationship with foreign products (Poursalimi, 2016). Sah & Quan (2005), Wang & Chen (2004), Shankarmahesh (2006), Ranjbarian & Gholizadeh (2009) and Poursalimi et

al. (2016) have also addressed this issue in their studies. Accordingly, the first hypothesis as follows:

*H<sub>1</sub>: Consumer ethnocentrism has an impact on attitude towards domestic products in Iran.*

The concept of purchase intention is a reflection of the consumer's predictable behavior in deciding to buy in the future. Purchase intention is one of the variables used in routine research programs. Specifically, purchase intention is a prediction of the consumer's purchasing behavior that will significantly help to configure this attitude (Asshidin et al., 2016). Consumer purchase intention refers to the likelihood of consumers' intention to buy some specific products (Yunus et al., 2016). The relationship between consumer ethnocentrism and the intention to purchase domestic products has been supported in the studies conducted by Han (1988) and Herche (1992). Studies conducted by Klein et al. (1998) and Suh & Kwon (2002) have found that there is a negative relationship between consumer ethnocentrism and the intention to buy foreign products (Shankarmahesh, 2006). Gianelin et al. (2010), Tang & Lee (2013), Dehdashti et al. (2011), and Dehdashti et al. (2014) have also addressed this issue in their studies. Thus, the second hypothesis is as follows:

*H<sub>2</sub>: Consumer ethnocentrism has impact on the intention to buy domestic products in Iran.*

### **Mediator variables in the relationship between consumer ethnocentrism and supporting domestic products**

Perceived price is defined as a price to which the customer can access by referring the product's price to the prices of other products. From the perspective of the consumer, the price is something that is lost to obtain a product (Pieri & Lotfizadeh, 2015). Shankarmahesh (2006) and Herrmann et al. (2007) investigated this issue in their research. Thus, the third hypothesis is as follows:

*H<sub>3</sub>: Perceived cost (price) has a mediating role in the relationship between consumer ethnocentrism and attitude towards domestic products in Iran.*

Olsen et al. (1993) and Shankarmahesh (2006) have pointed out in their research that perceived cost has a mediating role in the relationship between consumer ethnocentrism and the intention to buy domestic products in Iran. Hence, the fourth hypothesis is as follows:

*H<sub>4</sub>: Perceived cost (price) has a mediating role in the relationship between consumer ethnocentrism and the intention to buy domestic products in Iran.*

The image of country-of-origin is a sign of external communication used by consumers to predict the price, quality, and intention to buy a product (Brenner, 2013). The image of country-of-origin leads to a cognitive-emotional process that takes shape in the mind of the consumer. The image of country-of-origin is known as a sign of quality (Brenner, 2013). Brenner (2013), Tsai et al. (2013), Kipnis et al. (2012) and Shankarmahesh (2006) have investigated this issue in their studies. The fifth hypothesis is as follows:

*H<sub>5</sub>: The image of country-of-origin has a mediating role in the relationship between consumer ethnocentrism and the attitude towards buying domestic products in Iran.*

Han (1988) concluded in his empirical study that the image of country-of-origin functions as the mediator between consumer ethnocentrism and the intention to purchase domestic products (Shankarmahesh, 2006). The impact of country-of-origin is important to the extent that the place of production influences consumers of the product. Therefore, the image of country-of-origin is an important factor affecting consumer purchase intention (Yunus et al., 2016). In a study entitled "The Influence of Country-of-origin on Consumer Purchase Intention: The Mobile Phones Brand from China," Yunus et al. (2016) concluded that the image of country-of-origin has a positive impact on the purchase intention. Shankarmahesh (2006) also argue that the image of country-of-origin has a mediating role in the relationship between consumer ethnocentrism and the intention to buy domestic products in Iran. Therefore, the sixth hypothesis is as follows:

*H<sub>6</sub>: The image of country-of-origin has a mediating role in the relationship between consumer ethnocentrism and the intention to buy domestic products in Iran.*

Olsen et al. (1993) have identified perceived quality, empathy, costs, and accountability as mediators in the relationship between consumer ethnocentrism and the intention to buy imported products (Shankarmahesh, 2006). Khatkhat & Shah's (2011) hypotheses have shown that there is a positive relationship between the quality of products and the attitude of consumers towards foreign products. Products produced in developed countries have not only good in appearance, but also good quality (Asshidin et al., 2016). Shankarmahesh (2006) also states that perceived quality has a mediating role in the relationship between consumer ethnocentrism and the attitude toward buying domestic products in Iran. Thus, the seventh hypothesis is as follows:

*H<sub>7</sub>: Perceived quality has a mediating role in the relationship between consumer ethnocentrism and attitude towards the purchase of domestic products in Iran.*

The relationship between variables indicates that perceived quality is a good predictor of purchase intention. This means that in the purchase process, consumers' emphasis is on the quality, whether these products are domestic or foreign. However, this finding does not support previous studies indicating that perceived quality is not a major factor in the intention to buy American and local products. Moreover, in one of the studies conducted by Ageel (2012), the researcher has found that quality of the product is the most important factor influencing the intention of Saudi women to buy Luxury fashion products (Asshidin, 2016). Shankarmahesh (2006) argue that perceived quality has a mediating role in the relationship between consumer ethnocentrism and the intention to buy domestic products in Iran. Thus, the eighth hypothesis is as follows:

*H<sub>8</sub>: Perceived quality has a mediating role in the relationship between consumer ethnocentrism and the intention to buy domestic products in Iran.*

Many scholars have argued that trust is a prerequisite for a successful business because consumers are often hesitant to buy unless they trust the intended seller and company (Dehdashti, 2014). Brand trust can be measured by the brand's ability to fulfil promises it has made. Therefore, it is important to meet the obligations, rights, and promises owed to customers. In fact, if a brand does not meet the quality expected by customers, they will lose their trust in it and will choose another brand (Kim et al., 2008; Dehdashti et al., 2013). Dehdashti et al. (2013) and Azizi (2014) have also investigated this issue. Accordingly, the ninth hypothesis is as follows:

*H<sub>9</sub>: Brand trust has a mediating role in the relationship between consumer ethnocentrism and the attitude toward buying domestic products in Iran.*

Brand trust, brand awareness, the perceived value of the product, and perceived risk of the product have a significant effect on consumer purchase intention (like the findings of Wang et al., 2011; Walsh et al., 2012; Dehdashti, 2013). Bhattacharjee (2002), Kim et al. (2008), Sichtmann (2007), Dehdashti et al. (2013) and Azizi (2014) have also discussed this issue. Thus, the tenth hypothesis is as follows:

*H<sub>10</sub>: Brand trust has a mediating role in the relationship between consumer ethnocentrism and the intention to buy domestic products in Iran.*

### **Moderator variables in the relationship between consumer ethnocentrism and supporting domestic products**

Sharma et al. (1995) have described two moderating variables in the relationship between consumer ethnocentrism and consumer attitude towards foreign products. These two variables are perceived product necessity and perceived economic threat. Perceived product necessity is that how essential foreign products are (Shankarmahesh, 2006). Authors stated that the impact of consumer ethnocentrism on the attitude towards foreign products should be relatively strong (in a negative sense) for perceived product necessity. The above hypotheses

were supported by their Korean equivalents. The perceived economic threat is an important concept, while sharma described it as a moderator variable. Authors also have supported the moderating effect of perceived economic threat. In other words, consumer ethnocentrism is mainly affected by the products which threaten domestic economy (Shankarmahesh, 2006). Dehdashti (2010) shows that people of the society have a relatively low degree of nationality and perceived product necessity moderates the impact of consumer ethnocentrism on attitude towards import. Studies conducted by Brenner (2013), Shankarmahesh (2006), Lee et al. (2016), Javalgi et al. (2005) and Makanyeza et al. (2016) also support this finding. Thus, the eleventh hypothesis is as follows:

**H<sub>11</sub>:** *Perceived product necessity has a moderating role in the relationship between consumer ethnocentrism and attitude towards domestic products.*

Similarly, Sharma et al. (1995), Shankarmahesh (2006), and Dehdashti (2013) concluded that perceived necessity has a moderating role in the relationship between consumer ethnocentrism and the intention to buy domestic products. Therefore, the twelfth hypothesis is as follows:

**H<sub>12</sub>:** *Perceived necessity has a moderating role in the relationship between consumer ethnocentrism and the intention to buy domestic products.*

About the relationship between consumer ethnocentrism and perceived economic threat, Sharma et al. (1995) concluded that perceived economic threat does not determine consumer ethnocentrism but rather moderates it (Annette et al., 2013). The positive moderating role of perceived economic threat is functional in the relationship between consumer ethnocentrism and attitude towards domestic products both for Iranian and foreign retailers (Hosseini et al., 2015). Sharma et al. (1995), Shankarmahesh (2006), Olsen et al. (1993), Hosseizadeh (2007), and Hosseini et al. (2015) have also found a positive relationship between perceived economic threat and consumer ethnocentrism. Accordingly, the thirteenth hypothesis is as follows:

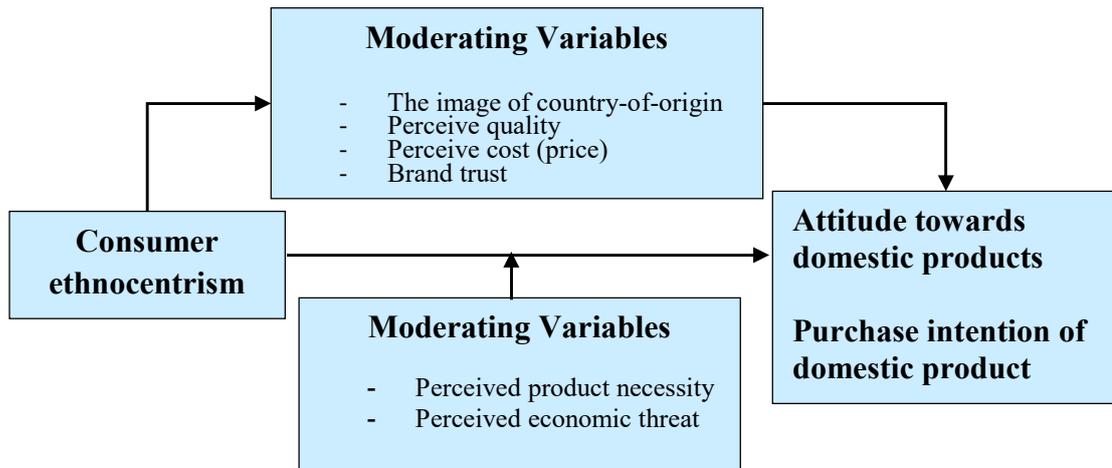
**H<sub>13</sub>:** *Perceived economic threat has a moderating role in the relationship between consumer ethnocentrism and attitude towards domestic products.*

Sharma et al. (1995) and Shankarmahesh (2006) argue that perceived economic threat has a moderating role in the relationship between consumer ethnocentrism and the intention to buy domestic products. Thus, the fourteenth hypothesis is as follows:

**H<sub>14</sub>:** *Perceived economic threat has a moderating role in the relationship between consumer ethnocentrism and the intention to buy domestic products.*

Given the relationship between consumer ethnocentrism as the independent variable and supporting domestic products as the dependent variable, as well as the variables of the image of country-of-origin, perceived quality, perceived price (cost) and brand trust as mediator variables, and perceived product necessity and perceived economic threat as moderator variables in the relationship between the independent and dependent variables, the research model is illustrated as follows. Figure 1 shows the conceptual model of the research.

Figure 1: Conceptual Model



(Source: Shankarmahesh 2006; Ding 2013; Brenner 2013)

## Methodology

### Population and sampling method

The target area for distributing and completing questionnaires is the metropolis of Tehran. The reason for choosing Tehran is that, because of the economic and social characteristics of Tehran metropolis, goods and consumers are very diverse compared to other cities in Iran. Investigations show that most home appliance retailers are located in the Jomhuri Avenue and Amin Hozour Intersection. Therefore, many of the research questionnaires were distributed and collected in-person in the mentioned areas. Considering the unlimited statistical population, the sample size was calculated using the Cochran's formula as follows:

$$n = \frac{z^2 p(1-p)}{d^2} = 384$$

Z is the normal value of the standard unit, which in the confidence level of 95% is equal to 1.96. P is the ratio of the attribute in the population, that if not available, it can be considered as 0.5. In this case, the variance reaches its maximum value. q is the percentage of people who do not have that attribute in the population ( $q = 1-P$ ). d is the value of the allowable error which can be 0.01 and 0.05 that, considering the confidence level of 95% , is equal to 0.05. n is the sample size that, based on the formula, was estimated to be 384 subjects. Finally, according to the statistical population of the study, convenience sampling method was used to select the statistical sample members. Therefore, by referring to home appliance retailers in the Jomhuri Avenue and Amin Hozour Intersection in Tehran, the questionnaires were distributed in-person (some questionnaires were also distributed electronically) among the respondents and then were collected during the next visit.

### 3.2. Variables measurement

In this research, data collection was performed using library and field methods. In the first step, a library method was used to investigate theoretical literature and empirical background; hence, referring to scientific resources, especially international databases, studies related to the subject of the research were identified and the theoretical and empirical framework of the research was formulated. In the second step, a field method was used to collect the required data through completing the questionnaires.

The questionnaire used in this research has three parts. The first part, in addition to including the title of the research, has explained the purpose of the research, the reason for collecting

the data using a questionnaire, and the necessity of the close cooperation of the respondents in completing the questionnaire. The second part includes demographic characteristics such as age, gender, marital status, education, and income level. The third part contains specific questions about the independent and dependent variables of the research. 58 questions have been considered to measure perceived product necessity, consumer ethnocentrism, the image of country-of-origin, brand trust, economic threats, perceived quality, perceived price (cost), intention to purchase domestic products and attitude towards domestic products. The sources used for the questions of these variables are given in Table 1. The scale used in the questions of the questionnaire is a five-point Likert scale including "strongly disagree," "disagree," "neither agree nor disagree," "agree," and "strongly agree."

*Table 1: Structure and resources of the questionnaire.*

<b>Variable</b>	<b>Number of the questions</b>	<b>Resources</b>
<b>Consumer ethnocentrism</b>	17	Sepehr and Kafashpour, 2012
<b>Purchase intention of domestic products</b>	3	Negouyan et al., 2013
<b>Attitude towards domestic products</b>	3	Kumar et al., 2009
<b>The image of country-of-origin</b>	13	Zein and Yasin, 1997
<b>Perceive quality</b>	3	Negouyan et al., 2013
<b>Perceive cost (price)</b>	3	Negouyan et al., 2013
<b>Brand trust</b>	8	Azizi, 2014
<b>Perceived product necessity</b>	3	Javalgi et al., 2005; Lee et al., 2016
<b>Perceived economic threat</b>	5	Lee et al., 2016

#### **Data analysis methods**

For data analysis, in the first step, the normal distribution of the data was examined based on the Kolmogorov-Smirnov test (Bruce et al., 2003). The Kolmogorov-Smirnov test is a non-parametric statistical test. Additionally, for distributional adequacy, the Kolmogorov-Smirnov test compares the cumulative probabilities of the values in the data set with the cumulative probabilities of the same values in a certain theoretical distribution (Hassani and Silva, 2015). Then, because of the non-normal distribution of data, Spearman test was used to measure the correlation coefficient between the main variables of the research.

After determining the distribution of data, structural equation modelling method with partial least squares approach has been used to analyse the data. Structural equation modelling is one of the most complex statistical methods and makes it possible to evaluate the simultaneous impact of several variables on each other. About such conditions as 1) violation of the distribution of data from normal statistical distribution 2) existence of moderator variables in the model 3) existence of complex conceptual model with a relatively high number of questions and variables, the SmartPLS2 software was used in this research. Moreover, given that the conceptual model of the research has moderator variables, two models were designed in the software space: 1) the main model without interference and the presence of moderating variables in it; and (2) the model for examining the effect of moderator variables of perceived product necessity and perceived economic threat. Before using the structural model, it is, first, necessary to verify the accuracy of the measurement model, in which the relationship between the latent and observed variables is examined. There are several methods for assessing the fit of measurement model; but, the method used in this study to examine the fit of measurement model includes three criteria of convergent validity, divergent validity, and reliability (analysis of factor loadings, Cronbach's alpha coefficient, and composite reliability). Convergent validity refers to a relatively strong correlation between the question and the main variable, and for having an acceptable value, the Pearson correlation coefficient should be greater than 0.4 (Mohammad Beige et al., 2014). Divergent validity indicates that

the research model structures should be more correlated with their questions than with the questions of other structures (Holland, 1999). In the divergent validity part, the difference between the indices of a structure is compared with the indices of other structures. To evaluate the divergent validity of the measurement model, Fornell and Larcker criterion has been used.

After assuring the good fit of the measurement model, in the next step, the structural model is used to test the relationship between the variables based on the research model and, finally, to conclude about the confirmation and rejection of the hypotheses. Structural Equation Modelling is a highly effective multivariate analysis technique of the multivariate regression family and extension of a general linear model which provides the researcher with the opportunity to test a set of regression equations simultaneously (Hooman, 2005). Structural Equation Modelling is one of the strongest and most appropriate methods of analysis in behavioural and social science research; the reason is that many topics in the field of humanities and social sciences are multivariate and cannot be analyzed by bivariate methods of analysis. Structural equation modeling is based on the analysis of covariance structures and, as one of the main methods for analyzing complex data structures and one of the new methods for analyzing causal relationships, is used to analyze various variables and, in a theory-based structure, shows the simultaneous effects of variables on each other (Ghasemi, 2010). In addition, the use of structural equation modeling has many other important advantages the most important of which are the estimation of multiple relationships, the ability to measure hidden variables, calculation of measurement errors, the ability to examine the linearity effect and the test of non-real relationships between the constructs of the research model (Gye-Soo, 2016). Finally, it is worth mentioning that for the implementation of the statistical methods SmartPIS software has been used.

## Results

### Demographic characteristics of the respondents

Results related to the demographic characteristics of the respondents are shown in Table 2.

*Table 2: Demographic characteristics of the respondents*

Demographic characteristics	Variable	No.	%
Sex	Male	203	63.25
	Female	147	36.75
Age	Under 30	148	37
	31-40	116	29
	41-50	104	26
	Above 51	32	8
Marital status	Single	179	32.25
	Married	271	67.75
Education	Diploma and lower	47	11.75
	Associate degree	21	5.25
	Bachelor's degree	204	51
	Master's degree and higher	128	32
Income level	Less than 300 USD	23	5.75
	300-500 USD	138	34.5
	500-800 USD	116	29
	More than 800 USD	123	30.75

As Table 2 shows, 36.75% of the respondents are female, and 63.25% are male. Regarding age, 148 (37%) of the subjects are under 30, 116 (29%) are between 31 and 40 years old, 104 (26%) are between 41 to 50 and 32 (8%) is above 51. Regarding marital status, 179 (32.25%) of the subjects are single, and 271 (67.75%) are married. 11.75% of respondents have a diploma and lower degrees, 25.5% have associate degrees, 51% have bachelor's degrees, and 32% have master's degree and higher. Regarding income, 5.75% of the subjects earn less than one million toman, 34.5% earn between one and two million, 29%, between two and three million and 30.75% have more than three million toman.

To test the research hypotheses, first, the normal distribution of data is examined using Kolmogorov-Smirnov test; hypothesis testing is performed using the structural equation modeling; and, finally, the fit index of the whole conceptual model of the research is estimated.

### Kolmogorov-Smirnov test

The Kolmogorov-Smirnov test has been used to examine the claims on the distribution of data in a quantitative variable. In this test, the null hypothesis represents the claim that the data distribution is normal. In this test, if the decision criterion (significance level) is less than 5%, the null hypothesis is rejected; this means that data cannot follow a specific distribution, such as normal, Poisson, exponential, or uniform (Hassani and Silva, 2015). The results of this test are shown in Table 3.

Table 3: Results of Kolmogorov-Smirnov test and correlation coefficients

Variables	1	2	3	4	5	6	7	8	9
Consumer ethnocentrism	1								
Image of country-of-origin	0.683**	1							
Perceived quality	0.576**	0.471**	1						
Perceived cost	0.575**	0.47**	0.476**	1					
Brand trust	0.673**	0.715	0.571**	0.457**	1				
Attitude towards domestic products	0.546**	0.542**	0.582**	0.519**	0.622**	1			
Purchase intention of domestic products	0.533**	0.532**	0.543**	0.502**	0.582**	0.72*	1		
Perceived product necessity	0.634**	0.72**	0.477**	0.449**	0.71**	0.499**	0.485**	1	
Perceived economic threat	0.621**	0.692**	0.551**	0.438**	0.72**	0.585**	0.544**	0.719**	1
Mean	3.704	3.52	3.83	3.72	3.43	4	4	3.06	2.95
Standard deviation	0.7	0.86	0.79	0.75	0.85	0.82	0.85	1.104	1.06

\* P<.05; \*\*P<0.01

According to the results of Table 3, as the significance level of testing the correlation between the research variables is smaller than the error level of 0.05, it can be concluded that there is a significant correlation between these variables.

### Validity and reliability of the questionnaire

The complete structural equation modelling consists of the two components of measurement model and structural model. Before testing the conceptual model of the research, it is first necessary to ensure the accuracy of the measurement model. In the measurement, the relationship between the latent and observed variables is investigated. There are several ways for examining the fit of the measurement model, but the method that comprehensively examines the fit of measurement model involves the use of partial least squares method in which, to examine the fit of measurement models, three criteria of structure validity, diagnostic validity, convergent validity, and reliability are used. Structure validity means the measurability of the variables of the research by questions of the questionnaire and using the confirmatory factor analysis method. Table 4 shows the results of this method including factor loadings and Student's t-values.

Table 4: Results of the confirmatory factor analysis

Latent variable	Observed variable/ question	Factor Loadings	Student t-value	Significance level
<b>Perceived necessity</b>	The use of home appliances is essential for doing daily works.	0.875	54.29	Less than 0.05
	When one of the home appliances is broken, it is difficult to do daily works.	0.859	49.22	Less than 0.05
	For the purchase of the necessity home appliances, even if you do not have enough money, you have to borrow money from friends, acquaintances and other people.	0.853	39.77	Less than 0.05
<b>Consumer ethnocentrism</b>	Iranian consumers should always buy Iranian home appliances instead of foreign appliances.	0.768	27.2	Less than 0.05
	Only those foreign home appliances should be imported that are not manufactured in Iran.	0.788	31.8	Less than 0.05
	The purchase of Iranian home appliances helps the employment of Iranian employees.	0.706	18.8	Less than 0.05
	When purchasing home appliances, the first and foremost priority should be given to the Iranian home appliances.	0.831	58.3	Less than 0.05
	Buying foreign home appliances is an anti-Iranian act.	0.809	37.4	Less than 0.05
	Buying foreign home appliances is not right as it can make Iranian workers get fired from their jobs and destroy domestic production.	0.762	29.12	Less than 0.05
	A real Iranian should always buy Iranian home appliances.	0.768	27.27	Less than 0.05
	We have to buy Iranian home appliances, not allowing other countries to gain wealth through us.	0.783	31.08	Less than 0.05
	Iranian home appliances are always the best option to buy.	0.69	18.23	Less than 0.05
	Foreign home appliances should be exchanged or rarely bought unless they are necessary.	0.77	27.16	Less than 0.05
	Iranians should not buy foreign appliances because they damage Iranian businesses and lead to increased unemployment.	0.79	31.9	Less than 0.05
	Some restrictions should be applied to the import of all foreign appliances.	0.704	18.8	Less than 0.05
	Although buying Iranian home appliances may impose more cost on me, I prefer to support the Iranian home appliance industry.	0.828	57.5	Less than 0.05
	Foreigners should not be allowed to offer their home appliances in our markets.	0.798	33.6	Less than 0.05
	Huge duties should be imposed on foreign appliances to reduce their import into Iran.	0.748	27.2	Less than 0.05
We should buy only those foreign appliances that we cannot produce in Iran.	0.689	18.14	Less than 0.05	
Iranian consumers who buy foreign appliances are responsible for the unemployment of their compatriots.	0.829	57.4	Less than 0.05	
When I buy expensive home appliances, I always pay attention to its country-of-origin.	0.837	38.68	Less than 0.05	
To ensure that I buy the highest quality home appliances, I always pay attention to the country-of-origin of brand or product.	0.851	46.9	Less than 0.05	
When it comes to deciding what home appliances to buy, some information about the country-of-origin of the product and the brand is very important to our selection.	0.909	92.9	Less than 0.05	

<b>Image of country-of-origin</b>	When purchasing home appliances, I look for the label "Made in ...".	0.827	34.5	Less than 0.05
	Country-of-origin information in inexpensive home appliances is less important than that of expensive ones.	0.84	41.3	Less than 0.05
	When buying household appliances that have a high risk of using and operating, one should pay attention to the country-of-origin information of the product.	0.898	76.1	Less than 0.05
	To purchase the best available product among a range of home appliances (e.g., buying a refrigerator among the refrigerators available in the market), I will look for the country-of-origin information in those products.	0.833	37.9	Less than 0.05
	I have found that country-of-origin of home appliances determines their quality.	0.841	41.9	Less than 0.05
	When I buy new home appliances, their country-of-origin is the first information being considered by me.	0.902	72.5	Less than 0.05
	To purchase home appliances approved by my family and friends, I attach importance to country-of-origin of the product.	0.837	38.1	Less than 0.05
	When I have little information about home appliances, I will look for the country-of-origin information to make a better decision.	0.839	42.5	Less than 0.05
	When buying home appliances with relatively low risk, one should look for the product's country-of-origin.	0.9	82.06	Less than 0.05
	When I purchase an inexpensive home appliance, the product's country-of-origin will be less important.	0.893	76.6	Less than 0.05
<b>Brand trust</b>	Foreign home appliances meet my expectations.	0.841	60.1	Less than 0.05
	I trust in foreign home appliances.	0.841	51.1	Less than 0.05
	Foreign home appliances never disappoint me.	0.829	46.6	Less than 0.05
	Foreign home appliances meet my satisfaction.	0.83	65.5	Less than 0.05
	Foreign home appliances should be honest in addressing my concerns.	0.831	49.5	Less than 0.05
	I can rely on foreign home appliances to solve my problems.	0.82	42.2	Less than 0.05
	Foreign home appliances will do anything to meet my satisfaction.	0.82	44.03	Less than 0.05
	The foreign home appliance will compensate for some created problems.	0.819	42.12	Less than 0.05
<b>Economic threats</b>	Economic problems are mainly due to the overwhelming number of foreign competitors.	0.874	60.58	Less than 0.05
	The local economy is affected by foreign competitors.	0.742	26.07	Less than 0.05
	Foreign competitors are damaging my business/work.	0.806	61.32	Less than 0.05
	My job security is heavily influenced by foreign competitors.	0.868	56.35	Less than 0.05
	My family/my close friends have been damaged by foreign competitors.	0.789	29.63	Less than 0.05
<b>Perceived</b>	Domestic home appliances have a stable quality.	0.797	37.1	Less than 0.05

<b>quality</b>	Domestic home appliances are well manufactured.	0.821	35.8	Less than 0.05
	Domestic home appliances have an acceptable quality standard.	0.852	55.3	Less than 0.05
<b>Perceived cost (price)</b>	Domestic home appliances have a reasonable price.	0.845	48.06	Less than 0.05
	Domestic home appliances are well worth the money paid.	0.867	37.03	Less than 0.05
	Domestic home appliances are good products for the price paid.	0.885	64.6	Less than 0.05
<b>Purchase intention of domestic products</b>	I will intend to buy domestic appliances only if they are available in the supplying stores.	0.837	41.08	Less than 0.05
	I will recommend domestic appliances to friends or relatives.	0.907	74.1	Less than 0.05
	Even if there are foreign products of the same quality and price, I will buy home appliances.	0.759	29.7	Less than 0.05
<b>Attitude towards domestic products</b>	I prefer domestic home appliances to foreign ones.	0.865	49.1	Less than 0.05
	Domestic home appliances have a higher quality than the foreign ones.	0.841	42.6	Less than 0.05
	If I have the right to choose, I will prefer domestic home appliance to the foreign ones.	0.824	44.6	Less than 0.05

Values greater than 0.4 and 0.5 are considered as acceptable range for the acceptance of factor loadings (Richard & Huff, 1988; Hulland, 1999). In this research, the standard value for factor loading is considered to be 0.5. The results of Table 4 show that in all the items the values of the factor loadings are greater than the standard level of 0.5, indicating a strong and appropriate relationship between the obvious and the latent variables. Moreover, in all items, t-values are in the range of 1.96 and the significance level is less than 0.05. Therefore, it can be concluded that the questions can measure the variables and the questionnaire has a generally acceptable validity.

In addition, to structuring validity, the discriminant validity has also been investigated. Reliability was also evaluated based on the Cronbach's alpha coefficient. The partial least squares method offers a criterion more modern than the Cronbach's alpha coefficient, called composite reliability, which the structuring reliability is not calculated in absolute terms but based on the correlation between the constructs. In this research, composite reliability index is for the measurement of convergent validity (Davoudi & RezaZadeh, 2013). The results related to the evaluation of different indices of validity and reliability are shown in Table 5.

*Table 5: Diagnostic Validity, Convergent Validity, and Reliability*

<i>Variable (Construct)</i>	<i>Average Variance Extracted (AVE)</i>	<i>Composite reliability (CR)</i>	<i>Cronbach's alpha coefficient</i>
<i>Consumer ethnocentrism</i>	0.592	0.96	0.957
<i>Image of country-of-origin</i>	0.744	0.974	0.971
<i>Perceived product quality</i>	0.678	0.863	0.763
<i>Perceived product price</i>	0.724	0.887	0.81
<i>Brand trust</i>	0.685	0.945	0.934
<i>Attitude towards domestic products</i>	0.711	0.881	0.797
<i>Purchase intention of domestic products</i>	0.724	0.912	0.871
<i>Perceived economic threat</i>	0.667	0.909	0.874
<i>Perceived product necessity</i>	0.743	0.897	0.828

Diagnostic validity will be established if the Average Variance Extracted is higher than the critical value of 0.5. There are also three prerequisites for the realization of the convergent validity which are as follows: 1) composite reliability should be higher than 0.7; 2) the average variance extracted should be higher than 0.5, and 3) the value of the composite reliability should be higher than the average variance extracted. If the value of the composite reliability for each construct is more significant than 0.7, it can be said that the measurement model has a good internal consistency, while the value of 0.6 implies the lack of reliability. Finally, a standard amount of 0.7 has been considered by experts for the Cronbach's alpha coefficient (Davoudi & RezaZadeh, 2013). Therefore, according to Table 5 and the standard values for the intended indicators, it can be concluded that diagnostic validity, convergent validity, and reliability are established for all the variables of consumer ethnocentrism, the image of country-of-origin, perceived product quality, perceived product price, brand trust, attitude towards domestic products, and purchase intention of domestic products, and the measurement models of the research generally have a desirable situation.

In the divergent validity, the correlation of the model structures with their related indices is compared to the correlation with other structures of the model. This is achieved by comparing the AVE root of each construct with the values of the correlation coefficients among the constructs. Table 6 shows the results of divergent validity.

*Table 6: The results of divergent validity*

<b>Constructs</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>Consumer ethnocentrism</b>	0.76								
<b>Image of country-of-origin</b>	0.73	0.86							
<b>Perceived product quality</b>	0.62	0.52	0.82						
<b>Perceived product price</b>	0.65	0.49	0.51	0.85					
<b>Brand trust</b>	0.76	0.74	0.6	0.52	0.82				
<b>Attitude towards domestic products</b>	0.65	0.59	0.64	0.55	0.63	0.84			
<b>Purchase intention of domestic products</b>	0.63	0.58	0.6	0.53	0.62	0.72	0.85		
<b>Perceived product necessity</b>	0.63	0.72	0.47	0.44	0.71	0.49	0.48	0.81	
<b>Perceived economic threat</b>	0.62	0.69	0.55	0.43	0.72	0.58	0.54	0.71	0.86

Table 6 gives the possibility of comparing the research constructs with their questions and other constructs. For example, the first column, which is related to the construct of consumer ethnocentrism, correlates 0.76 (76%) with its questions. This value is greater than the values at the bottom of the column which shows the degree of correlation between the construct of consumer ethnocentrism and other constructs. This is also correct for other columns and, thus, it can be verified the research questionnaire has an appropriate divergent validity.

#### **Estimation of the conceptual model**

The research model was tested using partial least squares method. Figures 2 and 3 show the research model and its latent and observed variables in the form of reflective measurement models.

Figure 2: Path coefficients and values of R<sup>2</sup>

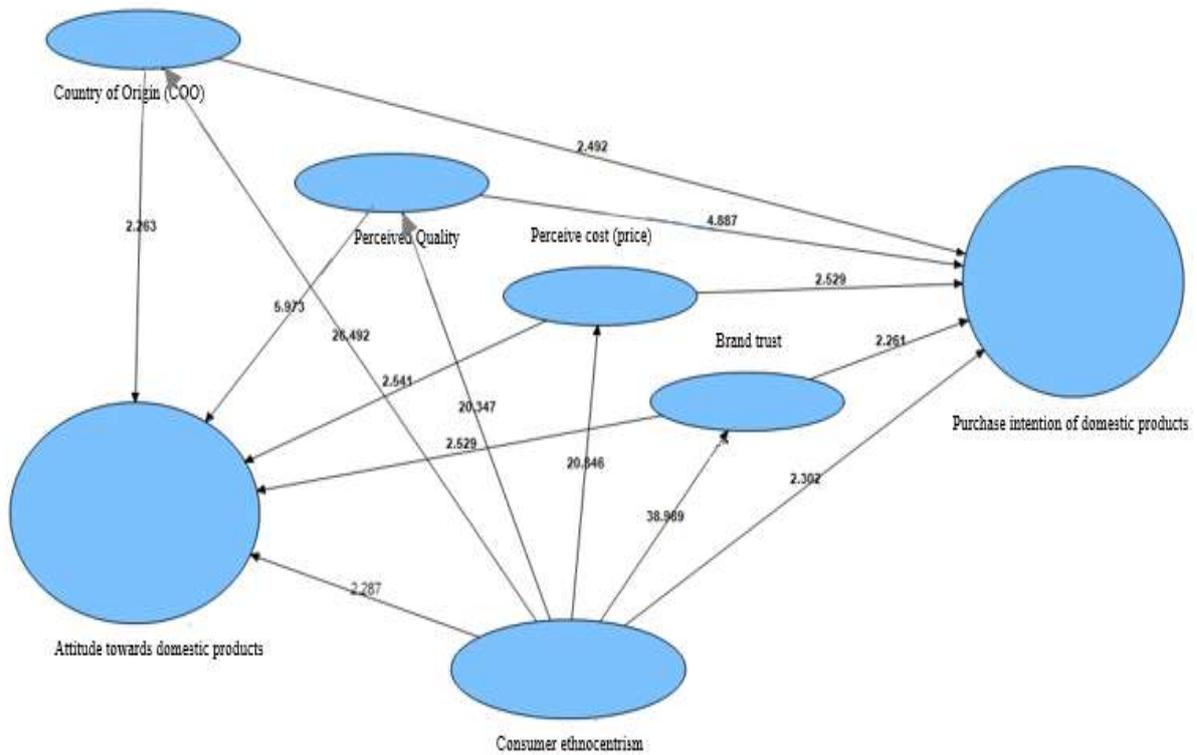
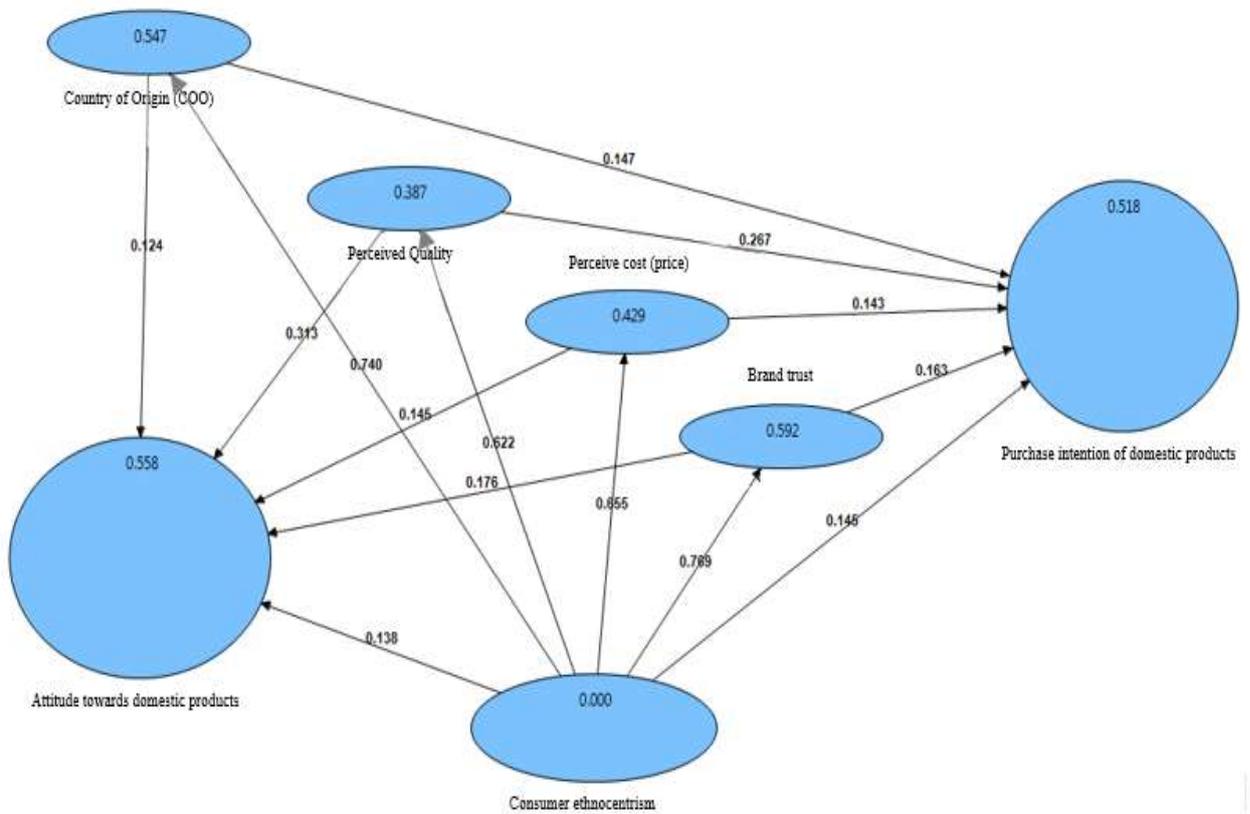


Figure 3: Values of t-students



Before examining the results of the hypotheses testing, first, the fit of the structural model is evaluated based on the results of the partial least squares method. One of the most important criteria for determining the fit of the structural model is the criterion of the coefficient of determination ( $R^2$ ).  $R^2$  is a criterion that shows the effect of an exogenous variable on an endogenous one and its value is calculated only for the endogenous constructs of the model. In the case of exogenous constructs, the value of this criterion is zero. Three values of 0.19, 0.33 and 0.67 are considered as a criterion value for weak, moderate and robust  $R^2$  values respectively (Gye-Soo, 2016). Based on figure 2,  $R^2$  values for the endogenous variables of the image of country-of-origin, perceived product quality, perceived product price, brand trust, attitude towards domestic products, and purchase intention of domestic products are equal to 0.547, 0.387, 0.429, 0.591, 0.558, and 0.518 respectively and, hence, acceptable and desirable. In other words, they have a relatively strong structural relationship that confirms the fit of the model.

The second criterion for examining the structural model is the  $f^2$  effect size. Kwon (1988) introduced the criterion of effect size to determine the severity of the relationship between the latent variables of the model. Using this criterion, one can measure the effect size of an exogenous variable on an endogenous variable in structural equation modeling. This criterion is only applicable to the models that have endogenous variables that affect them more than one exogenous variable (Vaezi et al., 2016). The results of this criterion are shown in Table 7.

Table 7:  $F^2$  coefficients of the variables

<i>Independent variable</i>	<i>Dependent variable</i>	<i>F<sup>2</sup></i>
<i>The image of country-of-origin</i>	Attitude towards domestic product	0.01
<i>Perceived product quality</i>		0.124
<i>Perceived product price</i>		0.027
<i>Brand trust</i>		0.02
<i>The image of country-of-origin</i>	Purchase intention of the domestic product	0.015
<i>Perceived product quality</i>		0.085
<i>Perceived product price</i>		0.023
<i>Brand trust</i>		0.017

\*The results of the table are based on figures 2 and 3.

The values of 0.02, 0.15, and 0.35 for  $f^2$  respectively indicate the small, medium and large effect size of a construct on another one (Vaezi et al., 2016). According to Table 7 and  $f^2$  criterion, the research constructs show the relative suitability of the effect of independent variables on the dependent ones as well as the desirable predictive power of the model for this construct. Therefore, all the criteria for measuring the structural model show the structural model's goodness of fit.

The general model includes both the measurement model and the structural model and, by confirming its fit, the fit test will be completed in a model. To evaluate the general model fit, there is only one criterion called goodness of fit (GOF). The GOF criterion was developed by Tenenhaus et al. (2004) and is calculated according to the formula shown in Table 8. Three values of 0.01, 0.25 and 0.36 have been introduced as weak, moderate and strong values for GOF. Table 8 shows the results of this criterion.

Table 8: Overall fit results of the model with GOF criterion

$GOF = \sqrt{\overline{Communalities} \times \overline{R^2}}$	$\overline{Communalities}$	$\overline{R^2}$
0.592	0.694	0.505

The mean value of communalities is 0.694, and the mean value of  $R^2$  is equal to 0.505. According to the following formula, the value of GOF is 0.592 that, according to the mentioned classification, indicates the strong fit of the overall research model.

## Results of the hypotheses testing

### Testing direct hypotheses

After examining the normal distribution of variables, and the validity and reliability of the questionnaire, the research hypotheses were tested using structural equation modeling. Table 9 shows the results of the path coefficient and the significance of the general coefficients of the research model.

Table 9: The results of testing direct hypotheses

Hypothesis	Independent variable	Dependent variable	Path coefficient	Student t-value	Significance level
H <sub>1</sub>	Consumer ethnocentrism	Attitude towards domestic products in Iran	0.138	2.287	Less than 0.5
H <sub>2</sub>	Consumer ethnocentrism	Purchase intention of domestic products in Iran	0.145	2.302	Less than 0.5

According to Table 9, it can be concluded that since t-value is greater than 1.96, the impact of consumer ethnocentrism on attitude towards domestic products in Iran is, with the beta coefficient of 0.138 and the probability of 95%, is significant. The positive beta coefficient between the variables (0.138) means that with an increase in the standard deviation of consumer ethnocentrism, the attitude toward domestic products in Iran will increase by a standard deviation of 0.138. Therefore, according to the analysis conducted statistically, the hypothesis that consumer ethnocentrism affects the attitude toward domestic products in Iran is significant with 95% probability. Additionally, as the calculated t-value is greater than 1.96, the effect of consumer ethnocentrism of the purchase intention of domestic products in Iran, with the beta coefficient of 0.145 and 95% probability, is significant. The positive beta coefficient between the variables (0.145) means that with an increase in the standard deviation of consumer ethnocentrism, the purchase intention of domestic products in Iran will increase by a standard deviation of 0.145. Therefore, according to the analysis conducted statistically, the hypothesis that consumer ethnocentrism affects the purchase intention of domestic products in Iran is significant with 95% probability.

### 4.5.2. Testing mediator hypotheses

When multivariate regression analysis (structural equation modelling) is used, it is possible to calculate not only the direct effect of variables but also the indirect effect of variables on each other. The third to tenth hypotheses are related to the mediator variables of the research. Using t-value (to confirm these hypotheses t-value should be greater than 1.96), the effect size of these variables is calculated by the following formula.

(Path coefficient of the mediator and dependent variable) × (path coefficient of the mediator and independent variable) = indirect effect

Moreover, the Sobel test (to confirm the hypothesis, the absolute value of the Sobel test should be greater than 1.96) has been used for further verification. Also, to determine the severity of the effect of the perceived product price on the relationship between the independent and dependent variables, VAF (variance accounted for) value, which ranges from zero to one, can be used. The closer this value is to one, the higher will be the impact of the mediator variable (Akbari et al., 2015). Table 10 shows the results of the examination of the indirect hypotheses.

*Table 10: The results of the indirect (mediator) hypotheses*

	Independent variable	Mediator variable	Dependent variable	The relation between independent and mediator variables		The relation between the mediator and dependent variables		Direct effect	Indirect effect	Sobel test (z)	VAF test
				Path coefficient	T value	Path coefficient	T value				
<b>H<sub>3</sub></b>	Consumer ethnocentrism	Perceived price	Attitude towards domestic products	0.655	20.48	0.145	2.54	0.138	0.094	0.524 (2.524)	0.407
<b>H<sub>4</sub></b>	Consumer ethnocentrism	Perceived price	Purchase intention of domestic products	0.655	20.846	0.143	2.529	0.148	0.093	2.066 (2.066)	0.387
<b>H<sub>5</sub></b>	Consumer ethnocentrism	Image of country-of-origin	Attitude towards domestic products	0.74	26.492	0.124	2.263	0.138	0.091	2.25	0.405
<b>H<sub>6</sub></b>	Consumer ethnocentrism	Image of country-of-origin	Purchase intention of domestic products	0.074	26.492	0.147	2.492	0.145	0.108	2.479	0.428
<b>H<sub>7</sub></b>	Consumer ethnocentrism	Perceived quality	Attitude towards domestic products	0.622	20.347	0.313	5.973	0.138	0.194	5.77	0.585
<b>H<sub>8</sub></b>	Consumer ethnocentrism	Perceived quality	Purchase intention of domestic products	0.655	20.846	0.143	2.529	0.145	0.094	2.62	0.39
<b>H<sub>9</sub></b>	Consumer ethnocentrism	Brand trust	Attitude towards domestic products	0.769	38.98	0.176	2.529	0.138	0.135	2.92	0.49
<b>H<sub>10</sub></b>	Consumer ethnocentrism	Brand trust	Purchase intention of domestic products	0.769	38.989	0.163	2.261	0.145	0.125	2.259	0.46

As shown in Table 10, t-value in both paths (the relationship between the independent variable and the mediator variable, and the relationship between the mediator variable and the dependent variable) is greater than 1.96 for the variables of all hypotheses.

Given that in all variables, t-value in the relationship between the three variables of independent, dependent and mediator is greater than 1.96, the hypotheses are confirmed. As the obtained Sobel values have been greater than the absolute value of 1.96, it can be confirmed at the confidence level of 95% that the mediator variables influence the relationship between the independent and dependent variables. VAF value, which is between zero and one, actually measure the ratio of the indirect effect on the total effect. For example, regarding this value for the third hypothesis, about 40% of the total effect of consumer ethnocentrism on the attitude towards domestic products is indirectly explained by the mediator variable of the perceived product price.

#### 4.5.3. Testing moderator hypotheses

The eleventh to fourteenth hypotheses are considered as moderators. In this research, as the moderator variables of the perceived economic threat and perceived product necessity are measured by some questions in the questionnaire, and are quantitative and reflexive, the multiplicative approach is used for the estimation of the moderating effects. This approach has the following preconditions that are available in this research: 1) the moderator and independent variables should be spatial; 2) the measurement model of both independent and moderator variables should be reflexive. Figure 4 shows the standardized factor loading coefficients and t-value coefficients of the structural research model (with moderator variables).

Figure 4: Standardized factor loading coefficients of the structural research model (with moderator variables)

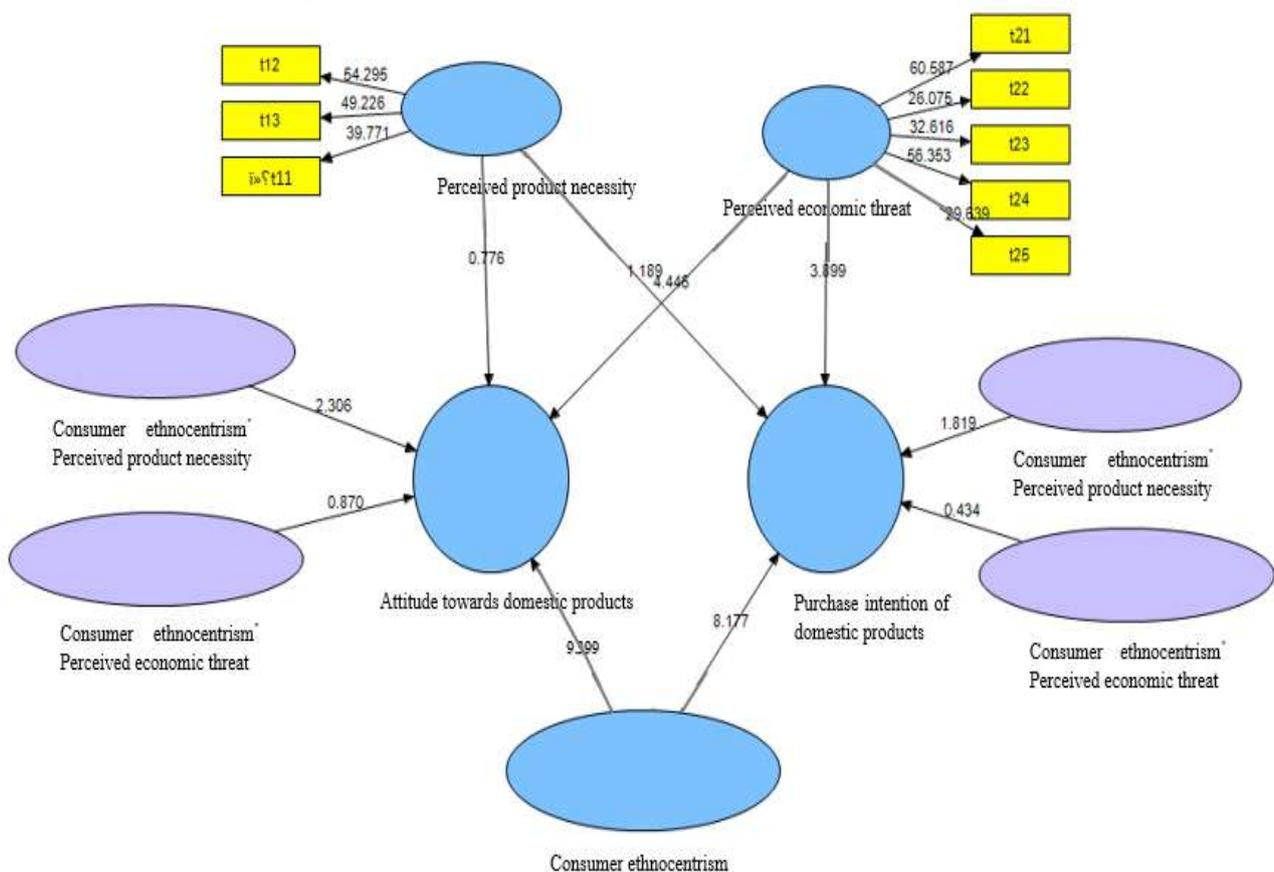
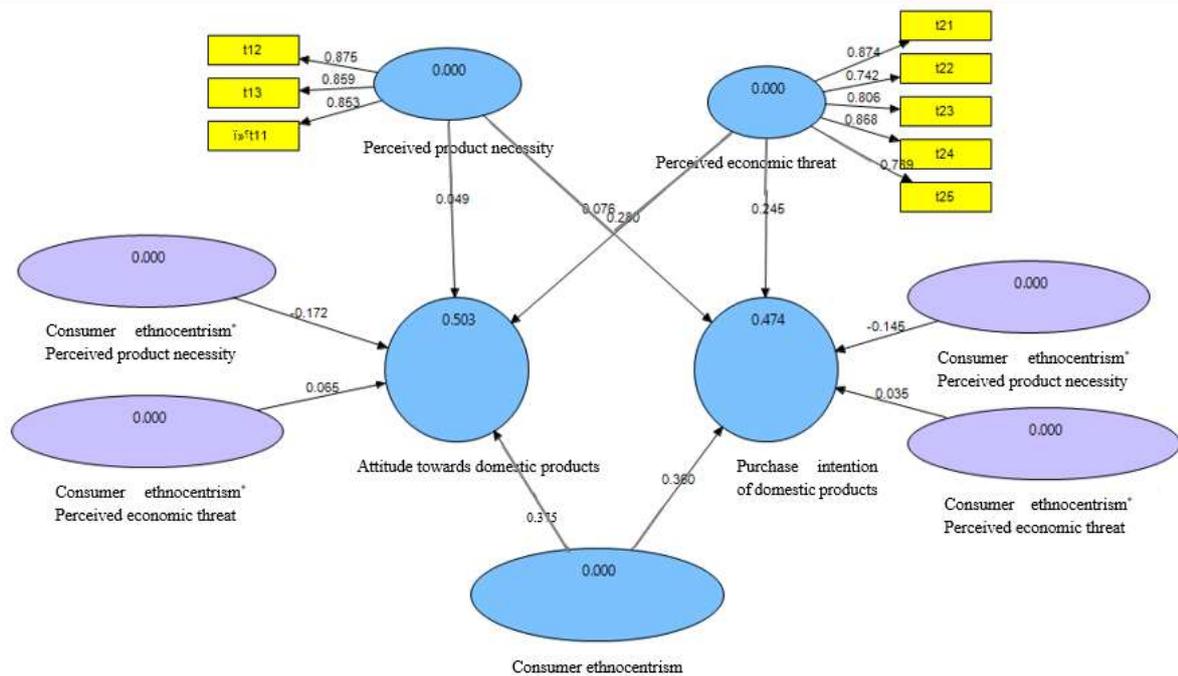


Figure 5: T-value coefficients of the structural research model (with moderator variables)



About figures 4 and 5, after examining t-value and determining the relation or non-relation between the independent, moderator and dependent variables, the intensity of the effect or the moderating power of the variable is examined using the following formula:

$$f^2 = \frac{R^2_{model-with-moderator} - R^2_{excludedmodel-with-out-moderator}}{1 - R^2_{model-with-moderator}}$$

Regarding the obtained value of  $f^2$ , it can be said that the intensity of the effect of the moderator variable is in an optimal level. Table 11 shows the results related to the evaluation of the moderator hypotheses.

Table 11: Results of the moderator variables

Independent variable	Moderator variable	Dependent variable	Path coefficient	t-value	F <sup>2</sup> index
Consumer ethnocentrism	Perceived product necessity	Attitude towards domestic products	-0.172	2.306	0.167
Consumer ethnocentrism	Perceived product necessity	Purchase intention of domestic products	-0.145	1.819	0.02
Consumer ethnocentrism	Perceived economic threat	Attitude towards domestic products	0.065	0.87	-
Consumer ethnocentrism	Perceived economic threat	Purchase intention of domestic products	0.035	1.434	-

As shown in Table 11, as t-value between the created moderator variable and the attitude towards domestic products is greater than 1.96, it can be said that, with 95% probability, perceived product necessity has a moderating role in the relationship between consumer ethnocentrism and attitude towards domestic products. Regarding the obtained  $f^2$  value, the effect severity of the moderator variable is desirable. Moreover, as t-value between the created variable of perceived product necessity and purchase intention of domestic products is greater than 1.64, it can be stated that, with 95% probability, perceived product necessity has a moderating role in the relationship between consumer ethnocentrism and purchase

intention of domestic products. Regarding the obtained  $f^2$  value, it can be said that the effect severity of the moderator variable is at a low level. Also, as shown in Table 11, as t-value between the created variable of perceived economic threat and attitude towards domestic products is lower than 1.64, it can be stated that perceived economic threats do not have a moderating role in the relationship between consumer ethnocentrism and attitude towards domestic products. Additionally, as t-value between the created moderator variable and purchase intention of domestic products is lower than the borderline of 1.64, it can be stated that perceived economic threats do not have a moderating role in the relationship between consumer ethnocentrism and purchase intention of domestic products.

## **Discussion**

Consumption ethnocentrism had a positive and significant effect on the attitude toward domestic products and, thus, the first hypothesis was confirmed. The results of this part are in line with the results of the studies conducted by Sisses et al. (2003), Rirdouno et al. (2005), Suh and Kwon (2002), Wang and Chen (2004); Shankarmahesh (2006), Tong and Lee (2013), Jane et al. (2015), Ranjbarian and Gholizadeh (2008), Hosseini et al (2015) and Poursalimi et al. (2016). Consumer ethnocentrism had a positive and significant effect on the purchase intention of domestic products and, thus, the second hypothesis was confirmed. This result is in line with the results obtained by Han (1988), Herche (1992), Klein et al. (1998), Suh and Kwon (2002), Shankarmahesh (2006), Jianlin et al. (2010), Tong and Lee (2013), Dehdashti et al (2011) and Dehdashti et al (2014).

The third hypothesis showed that perceived cost (price) has a mediating role in the relationship between consumer ethnocentrism and attitude toward domestic products in Iran and, thus, the third hypothesis was confirmed. This result is consistent with the findings of Shankarmahesh (2006) and Herman et al. (2007). The fourth hypothesis showed that consumer ethnocentrism, through the mediating role of perceived cost, can positively and significantly affect the purchase intention of domestic products and, thus, the fourth hypothesis was also confirmed. The results of this hypothesis are in line with the findings of Olsen et al. (1993) and Shankarmahesh (2006). The results of the fifth hypothesis state that consumer ethnocentrism, in addition to its direct impact on the attitude towards domestic products, can have indirect effects through the image of country-of-origin. The results of this hypothesis are in line with the results of Shankarmahesh (2006), Kipnis et al. (2012), Brenner (2013) and Tsai et al. (2013). Based on the results, consumer ethnocentrism, in addition to its direct impact on the purchase intention of domestic products, can have indirect effects through the image of country-of-origin and. Thus, the sixth hypothesis is also confirmed. The findings of this hypothesis are consistent with the findings of Shankarmahesh (2006) and Yunus et al. (2016). According to the results of the research, consumer ethnocentrism, in addition to its direct impact on the attitude towards domestic products, can have an indirect effect on the variable of perceived quality. Thus, the seventh hypothesis was also confirmed. The result is in line with the findings of Shankarmahesh (2006) and Asshidin et al. (2016). The results also showed that consumer ethnocentrism, in addition to its direct impact on the purchase intention of domestic products, can have indirect effects through the variable of perceived quality. Therefore, the eighth hypothesis is also confirmed. The result of this hypothesis is in line with the findings of Shankarmahesh (2006) and Asshidin et al. (2016). The results showed that consumer ethnocentrism, in addition to its direct impact on the attitude toward domestic products, can have an indirect effect through the variable of brand trust and, thus, the ninth hypothesis was confirmed. The results of this hypothesis are in line with the results of Dehdashti et al. (2014) and Azizi (2014). According to the coefficients, consumer ethnocentrism, in addition to its direct impact on the purchase intention of domestic products, can have an indirect impact on brand trust and, thus, the tenth hypothesis was also

confirmed. The results of this hypothesis are in line with the results of Bhattacharjee (2002), Sichtmann (2007), Kim et al. (2008), Azizi (2014), Dehdashti et al. (2013).

According to the results, the eleventh hypothesis was also confirmed the results of which are in line with the results of Javalgi et al. (2005), Shankarmahesh (2006), Brenner (2013), Lee et al. (2016) and Makanyeza et al. (2016). Furthermore, based on the results, perceived necessity has a moderating role in the relationship between consumer ethnocentrism and the purchase intention of domestic products and, thus, the twelfth hypothesis is also confirmed. These results are in line with the results of Sharma et al. (1995), Shankarmahesh (2006) and Dehdashti (2013). According to the results, the thirteenth hypothesis was rejected, meaning that perceived economic threat does not have a moderating role in the relationship between consumer ethnocentrism and the attitude towards domestic products. These results contradict the results of Olsen et al. (1993), Sharma et al. (1995), Shankarmahesh (2006), Hosseinzadeh (2007) and Hosseini et al. (2015). Finally, the fourteenth hypothesis was rejected, meaning that perceived economic threat does not have a moderating role in the relationship between consumer ethnocentrism and the purchase intention of domestic products; these results contradict Sharma et al. (1995) and Shankarmahesh (2006). The reason why the thirteenth and fourteenth hypotheses are rejected is that Iranian home appliance consumers do not seem to have enough information on how the purchase of domestic products will affect their country's economy and reduce the unemployment rate. Another reason can also be the xenophilic spirit of the Iranians (Mohammadian, 2012).

### **Conclusion, recommendations and limitations**

Pointing to the negative emotions of consumers for buying foreign products, Shimp and Sharma (1987) were the first who introduced the concept of ethnocentrism in the area of consumer decision-making (Tasurru and salehudin, 2014). Previous marketing studies point out that there are many factors involved in consumers' purchase of domestic products. The present study investigated the role of some mediator variables (such as the image of country-of-origin, perceived product quality, perceived product price, and brand trust) and moderator variables (such as perceived product necessity and perceived economic threat) in the relationship between consumer ethnocentrism and purchase intention of and attitude towards domestic products. According to the results of the research, it is recommended that authorities stimulate the consumers' ethnocentrism through increasing their culture and establishing a constructive interaction between governmental institutions and domestic producers, as well as the support of domestic media and press which can lead to the consumers' support for domestic products. Household appliance manufacturers have to redouble their efforts in decreasing the final price of their products in order to make the consumers, especially nationalist consumers, buy domestic products. To implement marketing strategies and identify consumer purchasing behaviour, marketing managers can help to improve the level of consumer support for domestic products by understanding the concept of ethnocentrism and its effective factors. Given the mediating role of perceived product price in the relationship between consumer ethnocentrism and the two variables of attitude towards and purchase intention of domestic products, domestic producers have to attract consumers intention to their products through an appropriate and competitive pricing. Additionally, manufacturers should raise consumers' awareness of the quality of their products to make them judge their products not merely based on the price of the product. Economic enterprises must be diligent in improving the quality and pricing of their products and establish a suitable platform for communication with consumers in order to attract their confidence. Given the results and the mediating role of the image of country-of-origin in the relationship between consumer ethnocentrism and the two variables of attitude towards and purchase intention of domestic products, domestic producers are required to make more effort to revive the image of themselves and the country's economy. The standard institution should

be more serious in monitoring the quality of domestic products and, by identifying environmental and management barriers to the improvement of quality, provide the manufacturing companies with necessary information and technical services. The government has to force manufacturers to increase the quality of their products, compile with standards and obtain quality certificates. Considering demographic factors and providing their products to these groups of people based on the features such as high quality and good price, and using market segmentation and targeted advertising, companies can increase their market shares among these consumers. Manufacturers should be more careful about improving the quality of consumers' essential goods; the government also has to provide the manufacturers of essential goods with more subsidies. Instead of emphasizing the domesticity and nationality of their products in their advertising, domestic manufacturers have to emphasize the quality of their products in order to make a positive contribution to consumers' purchase intention. Increasing consumer's trust in the brand through fulfilling the promise of the company regarding the products and services, timely handling of their complaints and criticisms, and implementing public relations programs, such as participation in charity and public activities are recommended. It is suggested that as much as possible goods that are necessary for the daily life of the people be produced in good quality and at an appropriate price, so that nationalists will no longer have to buy foreign goods contrary to their wishes. It is suggested that relevant authorities seek to enhance ethnocentrism through appropriate educational and promotional programs and introducing high-quality domestic products and their impact on improving the country's economy. Moreover, increasing the quality of domestic products will make consumers have a more positive image of domestic products and producers and, hence, over time, will lead to increased nationality and intention to buy domestic products. Future researchers are recommended to consider a more varied range of products in their studies. Future studies also can consider a variable such as value consciousness, and a deep understanding of why and how interactions exist between different variables. Researchers are recommended to identify the factors that have played an important role, in other categories of products, between ethnocentrism and the support of domestic products, and consider them in the home appliance industry. Likewise, researchers can examine the attitude of consumers towards the products of other countries. Future studies can use a comparative approach and compare Iran with some developed countries or compare different regions with different developmental levels in Iran.

One of the limitations of the research is that data were mainly collected from Tehran and other cities and regions were ignored. Another limitation is that there is no up-to-date and complete statistics on home appliance industry.

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