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Determinants of Consumer Preferences for Imported and Domestic Wooden Furniture: Lessons from Addis Ababa, Ethiopia

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Abstract

Currently, domestic wood product enterprises in Ethiopia are facing increasing competition from imports. Therefore, more needs to be done to address the evolving dynamics in public preference and taste while overcoming the pressure from the import market. However, the wooden furniture sector in Ethiopia is scarcely researched and documented to support the production and marketing system. This study investigated the determinants of consumer preferences for imported and domestic wooden furniture in Addis Ababa, Ethiopia. Multistage sampling was used to select a sample size of 385 consumers who had purchased wooden furniture. Data were collected using a structured questionnaire and analyzed through descriptive statistics, Kendall's test, and the multivariate probit (MVP) model. The findings revealed that imported wooden furniture scored higher in terms of finishing, color, compatibility with other objects, and design, whereas domestic wooden furniture excelled in terms of durability, environmental friendliness, maintainability, and affordability. The MVP results indicated that wooden furniture preference was influenced by factors such as age, number of years in marriage, family size, number of years living in the city, occupation, and exposure to advertisements. The study recommends that domestic furniture companies enhance the finishing, design, color, and other desirable attributes of their products to attract and satisfy domestic demand, potentially reducing the need for imports. By focusing on improving multiple attributes, companies better cater to the preferences of consumers. Additionally, furniture companies should consider the diverse socioeconomic characteristics of consumers during the production of their furniture products to meet a range of needs.

The forest product industry is highly integrated with larger economic activities through timber products, various housing types, manufacturing, and other finished consumer goods such as furniture. Among forest products, the production and consumption of wood products are growing rapidly worldwide (Jonsson and Rinaldi 2017; Yu et al. 2023). Wood is an essential renewable material used as a raw material for furniture production. Furniture is a value-added product closely related to human life, and it is continuously subject to innovation and promoted in the home improvement industry (Zhou et al. 2023). The global wooden furniture trade has seen significant growth, estimated at US$409.55 billion in 2023 and predicted to reach approximately US$688.44 billion by 2030 (Global Wooden Furniture Market 2023). This growth is attributed to increasing population growth, the development of new furniture models, rising household incomes, and evolving individual tastes and preferences, leading to a sustainable demand for quality furniture in households (Adu-Sarpong 2017, Zhou *et al*. 2023).

Currently, consumers have a better and wider variety of furniture and other product choices from around the world due to decreasing trade barriers and the digitization of the world economy (Jonsson and Rinaldi 2017, Gordeev 2020). The shifts in consumer demand, preference, and retention are issues that affect all organizations, whether large or small, global or local (Lin *et al*. 2023). As a result of high

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demand and competition, furniture industrialists worldwide are operating under firm competition in an attempt to own the largest share of the market to serve the high demand (Jošt *et al*. 2020). The situation in the international market forces countries to focus on developing and facilitating the growth of the local market since the domestic market is seen as the root of economic growth (Chanjarika 2013, Jošt *et al*. 2020). In developed parts of the world, the majority of furniture-producing firms have begun to emphasize innovative consumer-oriented furniture product designs as a strategy for maintaining a reasonably big percentage of satisfied consumers (Nirmal *et al*. 2018).

In African countries like Ethiopia, the production and consumption of furniture products have grown over the years. However, this has not translated into a positive trend in global production growth, as they have been facing a severe struggle for survival in a less dynamic domestic consumer market (Adu-Sarpong 2017). Consumers have been exposed to foreign alternatives for domestically made products and foreign products due to the increase in imported products and highly competitive consumer markets in Africa (Robert and Patrick 2009). Chinese and Malaysian furniture dominates the domestic market in most African countries and other developing nations more than domestically produced furniture (Kumburu and Kessy 2018). Like other African countries, Ethiopia and other East African nations import furniture products from outside of Africa (ITTO 2016). Ethiopia, with a trade value of US$43 million, has emerged as the largest importer among East African countries (ITTO 2016). As a result of increased competition in furniture markets, countries are shifting their comparative advantages by assessing their relative competitiveness to develop better policies and business strategies (Epede and Wang 2022). However, many African countries, including Ethiopia, remain in a position of comparative disadvantage, with no significant improvement in the furniture market over the years.

Ethiopian wooden furniture is produced by local manufacturers and imported from abroad (Birhan 2014, MEFCC 2018, EFCCC 2020, Girma and Abate 2021). There has been a noticeable increase in the production of modern and innovative furniture products in Ethiopia due to a shift in consumer preferences. This change has led to a rise in the importation of high-quality furniture products from international markets. Consequently, the country has imported large quantities of various furniture products from other countries, resulting in a negative trade balance where imports exceed exports (Birhan 2014, Alem 2016, MEFCC, 2018, Girma and Abate 2021). To address the growing demand for furniture and boost production, the government of Ethiopia has identified small and microenterprises (SMEs) as a solution. These enterprises are part of the *Growth and Transformation Plan strategies* aimed at promoting wealth creation, increasing employment opportunities, and improving import substitution (Drbie and Kassahun 2013, Gutu and Yali 2020).

Even with increased efforts, the competition in the Ethiopian furniture market far exceeds what is necessary. Most furniture manufacturing SMEs are not showing improvement in their performance (Cherkos *et al*. 2018). The competition between imported and domestically manufactured furniture is intense, putting significant pressure on domestic furniture sector players. This highlights the importance of furniture manufacturers understanding what drives consumers' preferences and tastes for their wooden furniture in order to succeed in their business. For instance, Kotler and Armstrong (2010) clearly stated that consumer preferences are influenced by both product-specific and non-product-specific factors. Consumers' socioeconomic characteristics, such as age, sex, education, marital status, house condition, income, product knowledge, etc., and furniture attributes, such as finishing, design, color, durability, price, maintainability, etc., have the ability to influence preferences across various product categories (Kumburu and Kessy 2018, Jošt et al. 2020). In order to develop and implement a successful furniture production and marketing strategy, a comprehensive understanding of consumer furniture preferences throughout the buying process and the factors influencing those preferences is essential. This type of information is vital for companies looking to operate successfully and efficiently in the furniture industry (Van Raaij 2016, Pirc Barčić et al. 2021, Khojasteh-Khosro et al. 2022).

However, many existing studies conducted in Ethiopia related to furniture have focused on the growth, contribution, and challenges of SMEs engaged in the furniture industry (Birhan 2014, Drbie and Kassahun 2013, Tarfasa *et al*. 2016, Cherkos *et al*. 2018). Despite this, determinants of consumer preference towards imported and domestic wooden furniture remain scarce in the context of Ethiopian consumers. It is important to understand this factor in order to gauge the competitive position of the Ethiopian furniture industry and to shape policies and business strategies from the demand or consumer side. Understanding consumers' preferences and determinants is crucial for furniture manufacturers to differentiate themselves in the context of current market globalization (Lihra et al. 2012, Khojasteh-Khosro *et al*. 2020). Therefore, more research and analysis are needed in the furniture market to comprehend consumers' behavior and the key factors influencing their buying decisions and selection criteria.

Hence, this study conducted an in-depth analysis of the determinants of consumer preferences towards imported and domestic wooden furniture. This information is vital for advising policymakers and stakeholders, as well as informing domestic manufacturers and traders on how to improve their products to compete in both national and international markets. To fill this gap, this study evaluated consumers' preferences for imported and domestic wooden furniture and the factors that influence their decision-making.

Theoretical Approach

The concept of preferences originates from economic theory; it is defined as individual tastes measured by the utility of different bundles of goods. Preferences involve choosing between neutral or more valued options (Rajpurohit and Vasita 2011). The consumer plays a vital role in deciding which product to choose. The theory of consumer choice is based on microeconomics theory, linking preferences to consumption expenditures and consumer demand curves. Preferences show how consumers maximize the desirability of their consumption through their choices while considering limitations on their expenditures, maximizing utility within a consumer budget constraint.

Consumer preference depends on the type of utility function used, where utility theory assumes preferences are completely reflexive and transitive (Belton and Stewart 2002). Preferences are considered complete if, for any pair

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of choices A and B, one and only one of the following conditions is fulfilled: A is preferred to B, B is preferred to A, or A and B are equally preferred. According to Board (2009), preferences are said to be reflexive if, for any pair of choice where A and B are identical, B is also equally preferred to A. Preferences are considered transitive if, for any three choices A, B, and C, where A is preferred over B and B is preferred over C, it is concluded that A is preferred over C (Board 2009). The hypothesis on reflexivity and transitivity implies that the furniture consumer is a rational decision-maker. Furniture consumers are assumed to act rationally because they will choose between imported and locally made furniture to maximize total utility. Hence, consumers have to make choices based on preferences. This implies that the consumer will maximize utility by preferring either imported or domestic furniture subject to the factors that constrain them.

Materials and Methods

Study area and sampling technique

This study was conducted in Addis Ababa, the capital city of Ethiopia, which serves as a social, economic, and political center for the country. The total population as of August 2019 was estimated to be 4,592,000 with an annual growth rate of 4.4 percent (Central Statistical Agency [CSA] 2019). The city has a higher level of business activities, including furniture businesses, and larger numbers of furniture manufacturing firms are located there than in any other city or town in the country (CSA 2014).

In this study, a multistage sampling technique was employed to achieve the objectives of the study. In the first stage, Addis Ababa city was selected among the major cities in the country. The study city was chosen as the research area for several reasons: (1) Geographically, Addis Ababa has the highest population with various backgrounds of citizens; (2) there is availability of both modern retail outlets and traditional markets; (3) it is a region that holds a good mixture of potential respondents with different levels of education, income distribution, and ethnicity, which are anticipated to have some impact on the purchase of furniture; and (4) a large consumer base is present for both imported and domestic products, including wood products. Furthermore, the city is the largest city among the cities of Ethiopia, and it is the major destination for imported furniture, with most domestically produced furniture products being transacted there.

In the second stage of the study, Bole and Arada subcities were chosen out of 10 subcities in Addis Ababa due to their furniture potential. Arada subcity was selected because it represents the center of the city and has a wide variety of domestic wooden furniture products and consumers. On the other hand, Bole subcity was chosen for its abundance of many imported wooden furniture products, consumers, and the expansion of new houses, particularly condominiums, to better represent the consumer base.

In the third stage of the study, sample consumer households were selected randomly. The target population or sample unit of the study comprised imported and domestic household wooden furniture consumers. The selected sample frame consisted of consumers with knowledge and experience in purchasing domestically produced and imported furniture within the last 5 years, taking into consideration inflation and changes in consumer behavior. The sample consumers were chosen from populations in both Arada and Bole subcities who had purchased either locally produced or imported furniture, were between the ages of 20 and 65 years, and were actively responsible for making purchasing decisions.

However, the target population was very large. Therefore, the sample size determination method was applied to select representative samples from the total population. To determine the sample size out of the total population of wooden furniture consumers in the sample subcities, the researchers followed Cochran's formula. The sample size was determined using Cochran's formula for calculation from a large population (Cochran 1977) as follows:

$$n = \frac{Z^2 \times (P) \times q}{e^2} \quad (1)$$

$$n = \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2} = \frac{3.8416 \times 0.5 \times 0.5}{0.0025}$$
$$= 384.16 = 385$$

Thus, the sample size is equal to 385 consumer households. Here, n is the sample size, Z is the selecting criteria value of the desired confidence level (1.96), p is the estimated proportion of an attribute that is present in the population (0.5), $q = 0.5\ (1 - p)$, and e is the desired level of precision (0.05). The sample frame was drawn from buyers of imported, domestic, and imported plus domestic wooden furniture in the two sample subcities of Addis Ababa. The sample size from each subcity was determined using proportional to population size. As a result, 122 consumers from Bole subcity and 263 consumers from Arada subcity were included in the sample. In total, 174 respondents purchased imported furniture, 151 respondents purchased domestic furniture, and 60 respondents purchased imported plus domestic furniture.

Data collection methods

Data were collected from primary sources. The main primary data sources were imported and domestic wooden household furniture consumers. The primary data included socioeconomic variables, wooden furniture attributes, consumer perception of furniture attributes, and types of wooden household furniture purchased from imported and domestically produced furniture shops, such as bedroom and living room furniture. The data included the preference of bedroom and living room furniture attributes such as durability, finishing, design, color, price affordability, user-friendliness, compatibility with other objects, guarantee, and multipurpose.

The data were collected from consumers of imported and domestic wooden furniture using structured questionnaires through face-to-face interviews at homes and furniture stores. A self-administered questionnaire was used for data collection. The responses of each participant were recorded on the structured questionnaire. Consumers were categorized into three groups: those who purchased imported furniture only, domestic furniture only, and a combination of imported and domestic furniture. All sample consumers were aware of the manufacturing sources of their purchased furniture. Their preferences were determined by asking why they preferred the specified sources or country of origin for the three furniture groups. During data collection, data were gathered from a total of 390 respondents. Out of these, only 385 responses were deemed valid, while the remaining five

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responses were found to be invalid and were therefore removed from the analysis.

Based on Fisher's view of a structured questionnaire, closed-ended questions were employed. If the researcher wants to quantify the research material, it is best to use a structured approach (Fisher and To 2012). The relevant attributes of wooden furniture were identified from various stakeholders (producers, consumers, traders, and SME offices) through key informant interviews. In total, 20 key informants were interviewed to inquire about preferred furniture attributes and the availability of imported and domestic furniture. Prior to actual data collection, a preliminary survey was conducted, and, finally, primary data collection was carried out using the final questionnaire.

Method of data analysis

Descriptive statistics.—The collected data were analyzed using descriptive statistics through STATA software version 16. Descriptive statistics, including mean, standard deviation, frequency, and percentage, were used to describe the hypothesized variables. This analysis focused on various socioeconomic characteristics and furniture attributes associated with consumers who preferred domestically produced, imported, or both domestic and imported furniture products. The results of the descriptive statistics are presented in tables and graphs. Additionally, Kendall's coefficient of concordance test was employed to rank an individual's level of preference for imported and domestic wooden furniture attributes.

Multivariate probit model specification and analysis.—To analyze the major factors influencing consumers' preference for imported and domestic wooden furniture products, the multivariate probit model (MVP) was utilized. The MVP model is a type of random utility model that examines consumers' choices and preferences. This model is suitable for analyzing discrete choice decisions, such as selecting furniture attributes and the product itself. It functions as an indirect utility function, where individuals with specific characteristics associate an average utility level with the origin of the product choice set (Lancaster 1966). Multinomial models are typically used when individuals can select only one outcome from a set of mutually exclusive and collectively exhaustive alternatives. However, the MVP model is more appropriate for estimating several correlated binary outcomes simultaneously. It can effectively capture the influence of various explanatory variables on different furniture sources. This model takes into account potentially correlated unobserved disturbances and relationships between choices of different categorical dependent variables (Cappellari and Jenkins 2003). In this study, consumers' choices of products and attributes were not mutually exclusive. There was a possibility of simultaneous selection of furniture sources and potential correlations among these products. Therefore, the multinomial logit model was deemed to be unsuitable for estimating non-mutually exclusive and nonhomogeneous alternatives, and the MVP was instead used to analyze consumer preferences for different products and to estimate multiple correlated binary outcomes simultaneously (Cappellari and Jenkins 2003).

It is assumed that for a given consumer i making decisions considering nonexclusive alternatives that constitute the preference set k of furniture products, the choice sets may differ according to the decision-maker for maximizing his/her utility. Let U_0 represent the benefits to the consumer who chooses domestic wooden furniture, and let U_k represent the benefits of the consumer choosing the k furniture products, where k denotes preference of imported furniture (Y_1), domestic furniture (Y_2), and both imported and domestic (Y_3). The consumer decides to choose the kth furniture product if $Y^*_{ik} = U_k - U_0 > 0$. The net benefit Y^*_{ik} that the consumer derives from choosing furniture is a latent variable determined by the observed explanatory variable (X_i) and the error term (ε_i):

$$Y^*_{ik} = X_i\beta_{ki} + \varepsilon_i = (Y_1, Y_2, Y_3) \tag{2}$$

Using the indicator function, the unobserved preferences in the above equation translate into the observed binary outcome equation for each choice as follows:

$$Y^*_i = \begin{Bmatrix} 1 \text{ if } Y^*_{ik} > 0 \,|\, (k = (Y_1, Y_2, Y_3)) \\ 0 \text{ otherwise} \end{Bmatrix} \tag{3}$$

Here, Y_i* is an unobservable latent variable denoting the probability of choosing k type of furniture, for i presents a consumer choosing imported furniture/domestic furniture, both imported and domestic furniture.

In the multivariate model, where the choice of several furniture products is possible, the error terms jointly follow a multivariate normal distribution (MVP) with zero conditional mean and variance normalized to unity (for identification of the parameters), where (μ_{x1}, μ_{x2}, μ_{x3}) MVP $\sim$ (0, $\mathbf{\Omega}$), and the symmetric covariance matrix $\mathbf{\Omega}$ is given by:

$$\begin{bmatrix} 1 & \rho X_1X_2 & \rho X_1X_3 \\ \rho X_2X_1 & 1 & \rho X_2X_3 \\ \rho X_3X_1 & \rho X_3X_2 & 1 \end{bmatrix} \tag{4}$$

Of particular interest are the off-diagonal elements in the covariance matrix, which represent the unobserved correlation between the stochastic components of the different types of furniture products. This assumption means that Equation 4 generates an MVP model that jointly represents a decision to choose a particular furniture product. This specification with nonzero off-diagonal elements allows for correlation across error terms of several latent equations, which represent the unobserved characteristics that affect the choice of alternative products. Different factors that influenced the preference of consumers for domestic and imported wooden furniture are presented in Table 1.

Following the formula used by Cappellari and Jenkins (2003), the log-likelihood function associated with a sample outcome is then given by:

$$LnL = \sum_{i=1}^{n} \omega i ln\varphi(\mu\mu_i, \Omega) \tag{5}$$

where ω is an optional weight for observation i, and Φi is the multivariate standard normal distribution with arguments μi and Ω, where μi can be denoted as:

$$\mu_i = (k_{i1}\beta_1X_{i1}, k_{i2}\beta_2X_{i2}, k_{i3}\beta_3X_{i3}) \text{ while } \Omega_{ik} = 1 \text{ and } \Omega_{ki} = kiik\rho ik;\ k = 1;\ 2;\ 3 \text{ with } kik = 2y_{ik} - 1$$

A categorical dependent variable was measured by the probability of consumers purchasing imported, domestic, or both imported and domestic wooden furniture. It was

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Table 1.—Data summary and hypotheses for explanatory variables.

Variables	Type	Description	Hypothesis		
			Imported preferences	Domestic preferences	Both imported and domestic preferences
Sex (SEX)	Dummy	1 = if female, 0 = male	+	−	+
Age (AGE)	Continuous	Age of consumer in years	−/+	+	+/−
Marital status (MARTS)	Dummy	1 = married, 0 = single	+	+	−
Education (EDUC)	Continuous	Level of education in years	+	−	+
Married year (MARDYR)	Continuous	Number of years after marriage	−	+	+/−
Family size (FAMS)	Continuous	Total family members in the household	+	+/−	−
Occupation (OCCUP)	Dummy	1 = self-employed, 0 = salaried employee	−	−	+
Log Income (INCMlog)	Continuous	Amount of consumer's income/month	+	−	+/−
Years lived (YEARSLVD)	Continuous	Number of years lived in the city	+	+	+/−
House type (HOUSTY)	Dummy	1= Condominium, 0= single-family house	+/−	+	−
Home ownership (HOMRSHIP)	Dummy	1 = own house, 0 = rented house	+	−	+/−
Residential distance (RESDDIST)	Continuous	Distance in kilometers	−	+	+/−
Advertisement access (ADVRTACSS)	Dummy	1= access to advertisement, 0 = otherwise	+	−	+/−

represented in the model as Y_1 for consumers who choose to purchase imported furniture, Y_2 for consumers who choose domestic wooden furniture, and Y_3 for consumers who choose a combination of both imported and domestic wooden furniture (Table 1). The choices of the outcome variables were presented by (0 and 1), which means that if the consumer chooses the product, it is given a value of 1, and it is 0 otherwise. The expected directional hypotheses of each explanatory/independent variable included in the model are presented in Table 1.

Results and Discussion

Socioeconomic characteristics of consumers correlates with furniture preference

The different socioeconomic characteristics of respondents were summarized using summary statistics (Table 2). During data collection, 390 respondents were solicited, and only 385 responded and were valid. The findings revealed that 52.7 percent of the consumer households were females, and 65.2 percent of sample consumer households were married. The mean age of consumers was 35.1 years old, and the average years of schooling was 7.7 grade. The result also showed that the average years of staying after marriage was 6.72 years, and the sample respondents had 4.43 average family members per household. The average years of staying in the area was 10.78 years, and 45 percent of sample respondents were self-employed. Regarding income, the average monthly income of the respondent was ETB 12,874.94. Furthermore, the results revealed that 47 percent of respondents lived in a condominium house, and 52 percent of them had their own house. During furniture purchasing time, consumers traveled an average distance of 6.84 km from their residence to the furniture purchasing center. The advertising access showed that 83 percent of respondents had advertising access when they purchased a particular type of wooden furniture.

Motives of consumer preference towards imported and domestic wooden furniture

The results showed that 45.2 percent of respondents preferred to buy imported furniture, while 39.2 percent preferred domestically produced wooden furniture. Only 15.6 percent of respondents preferred to buy both imported and domestic furniture (Fig. 1). This finding is supported by the study conducted by Khattak and Shah (2011), which found that consumers living in big cities consider imported products to be of higher value and feel pride in consuming them. Additionally, this finding aligns with findings showing that consumers in developing countries such as Ethiopia are more likely to favor global products over local ones because they perceive global products as superior to domestic ones (Lumintang et al. 2018).

Consumers were asked to provide reasons for their preference between imported and domestic wooden furniture, as shown in Figure 2. The results indicated that consumers favored imported wooden furniture products primarily because of their finishing. Additionally, the results revealed that color was another attractive attribute of imported furniture, followed by the availability of various imported furniture options in the market, compatibility with other objects/items, design, and fast delivery to consumers. On the other hand, attributes such as price affordability, durability, guarantee, ease of maintenance, and environmental friendliness were less favored when describing imported furniture.

In the case of domestic wooden furniture, respondents stated that durability was the most important attribute for preferring domestic wooden furniture, followed by being environmentally friendly, easy to maintain, affordability of

Table 2.—Summary statistics of consumers' socioeconomic characteristics (see Table 1 for definitions of variables).

Variable	No. obs	Mean	SD	Minimum	Maximum
SEX	385	0.52	0.50	0	1
AGE	385	35.10	10.37	20	70
EDUC	385	7.71	5.12	0	22
MARTS	385	0.62	0.49	0	1
MARDYR	385	6.72	9.48	0	50
FAMS	385	4.43	2.04	1	10
YEARSLVD	385	10.78	10.60	0	45
OCCUP	385	0.45	0.50	0	1
INCMlog	385	12,874.94	9,692.54	500	53,000
HOUSTY	385	0.47	0.50	0	1
HOMRSHIP	385	0.52	0.50	0	1
RESDDIST	385	6.84	5.73	0	27
ADVRTACSS	385	0.83	0.37	0	1

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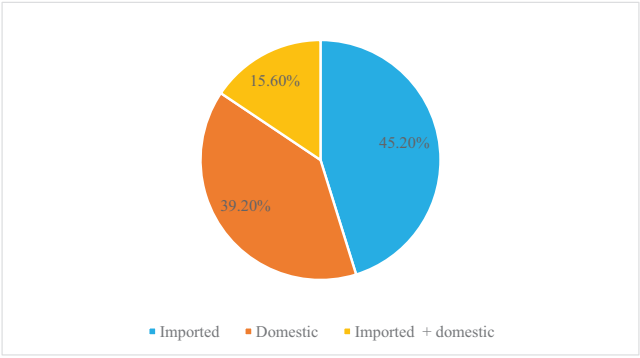

Figure 1.—Wooden furniture preference in terms of country of origin.

price, and guarantee. Other attributes such as design, compatibility with other objects, finishing, fast delivery to users, availability of multiple alternatives, and color were less preferred criteria for domestic wooden furniture.

The findings of the study indicate that finishing, color, multiple alternatives, compatibility with other objects, and design are the most preferred product attributes for imported wooden furniture. However, durability, environmental friendliness, ease of maintenance, affordability of price, and guarantee are the most preferred product attributes for domestic wooden furniture. The result is compatible with related literature (Pezeshkpoor 2020, Genc and Merdan 2021, Hilal and Şükrü 2022), which found that furniture selection criteria most often are durability, comfort, functionality, design, cost, environmentally friendly, moveability, and finishing. In addition, this finding is consistent with the study by Chanjarika (2013), who noted that domestic furniture was more durable and had fewer varieties compared to imported furniture, while consumers preferred imported furniture due to its availability of many varieties and designs. In line with this, wooden furniture holds a significant market share among consumers in terms of durability and environmentally friendly features (Guzel 2020, Khojasteh-Khosro *et al*. 2022). Similarly, the durability, design, and finishing of wooden furniture are highly preferred by consumers (Kizito *et al*. 2012). In other, developing countries, foreign brands are often preferred over local brands due to their better finishing and design (Lee and Nguyen 2017).

Wooden furniture attribute importance ranking by consumers

The factors that consumers considered when purchasing household furniture were ranked on a five-point preference basis, ranging from not very important to very important (Table 3). The results revealed that in the ranking of furniture attributes by consumer preference for bedroom furniture, durability was the most important attribute with a mean rank of 7.16, followed by finishing with a mean rank of 6.32; design with a mean rank of 5.7; color with a mean rank of 5.12; affordability with a mean rank of 4.58, user-friendliness with a mean rank of 4.28; compatibility with other objects with a mean rank of 4.06; guarantee with a mean rank of 4.4; and multipurpose with a mean rank of 3.74.

The value of Kendall's coefficient of concordance (W) (0.24) was found to be significant at a 1 percent significance level, indicating agreement among respondents in ranking bedroom furniture attributes. The value of *W* also suggested a notable difference in factors influencing the preference for wooden bedroom furniture. Therefore, it can be concluded that there is a significant difference in consumers' preference for wooden bedroom furniture attributes. This aligns with findings from previous studies (Oztop et al. 2008, Jaderna 2022, Hitka et al. 2024), which highlighted that buyers consider bedroom furniture purchases as long-term investments, with durability being a key factor in consumer preference. Additionally, design, availability, and price were identified as important factors influencing consumer preferences for bedroom furniture purchases (Hitka et al. 2024).

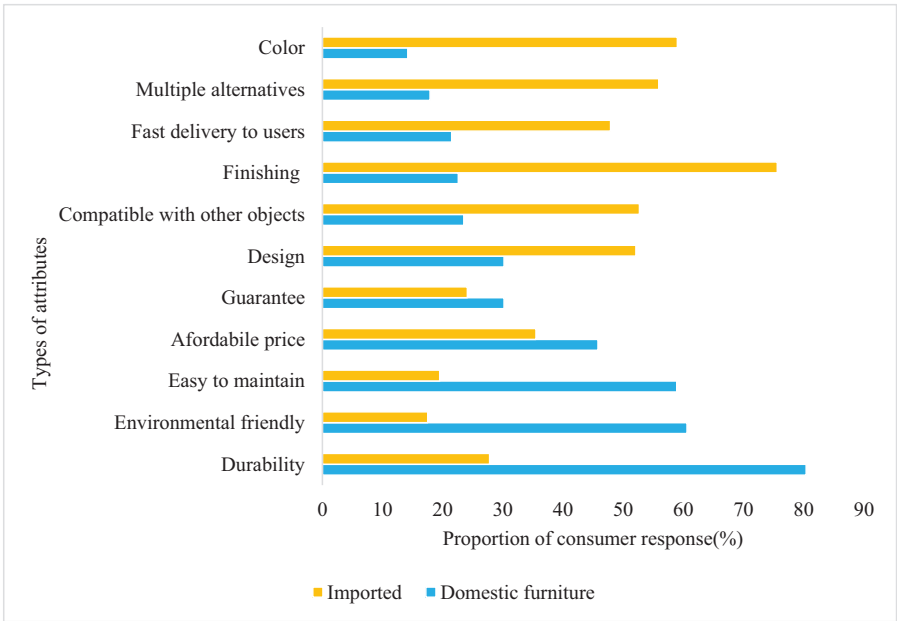

Figure 2.—Consumers' choice criteria for domestic versus imported wooden furniture.

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Table 3.—Mean ranking and preference of consumers for wooden furniture attributes.

Attributes	Living room furniture Mean rank	Bedroom furniture Mean rank
Durability	6.41	7.16
Color	5.08	5.12
Multiple options	3.85	3.74
User-friendly	5.71	4.28
Affordable price	4.53	4.58
Guarantee	3.60	5.45
Design	5.73	5.7
Fast delivery to consumers	3.05	3.51
Finishing	5.94	6.32
Compatible with other objects	4.05	4.06
Maintainability	3.92	4.00
Kendall's *W*	0.205	0.24
Chi-square	632.57	740.39
P-value[a]	0.000***	0.000***

[a] *** = 1 percent level of significance.

The results from consumer preferences for living room furniture features revealed that durability was the most preferred attribute with a mean rank of 6.41. This was followed by finishing, with a mean rank of 5.94; design, with a mean rank of 5.73; user-friendliness with a mean rank of 5.71; color with a mean rank of 5.08; affordability with a mean rank of 4.53; and compatibility with other objects with a mean rank of 4.05.

These findings are consistent with previous research indicating that durability was rated as the most important factor by consumers (Oztop et al. 2008). Similarly, other scholars have identified durability, design, and price as key influencing factors for wooden household living room furniture purchase among all consumers (Mohamed and Yi 2008, Hitka et al. 2024). Additional studies have shown that durability, design, finishing, and color are significant attributes influencing consumers' choices of wooden dining furniture (Wiafe *et al*. 2014). As human lifestyles evolve, there is a growing trend toward personalized and diversified furniture preferences due to ongoing innovations in furniture attributes (Xiong *et al*. 2023, Zhou *et al*. 2023).

Determinants of consumer preference toward imported and domestic wooden furniture products

Table 4 presents the estimation of the MVP model for the factors affecting consumers' preference for wooden furniture, with a total of 385 valid respondents included. The Wald test is significant at a 1 percent probability level, indicating that the MVP model fits the data reasonably well. Likewise, the model is significant because the null hypothesis, stating that the preference for the three furniture choices is independent, was rejected at a 1 percent significance level. The result of the likelihood ratio test in the model indicates that the null hypothesis of independence between wooden furniture preference decisions is rejected at a 1 percent significance level, and there are significant joint correlations for two estimated coefficients across the equations in the models. The correlation between the probability of choosing domestic or domestic plus imported furniture was significant at a 1 percent level of significance (Table 4). The finding of the estimated correlation implies that coefficients are statistically significantly different from zero in one pair of the three pairs. This suggests that the unobservable factors that increase the probability that a consumer chooses to purchase their furniture from domestic sources reduce the probability of purchasing the same from both imported plus domestic sources. The preference for domestic wooden furniture was found to be a substitution for domestic plus imported, as presented by rho32 (Table 4).

Table 4.—MVP estimations for determinants of wooden furniture preference (see Table 1 for definitions of variables).

	Import (1)		Domestic (2)		Domestic + imported (3)	
Variables	Coefficient[a] (SE)	*Dy/dx*[b]	Coefficient[a] (SE)	*Dy/dx*[b]	Coefficient[a] (SE)	*Dy/dx*[b]
SEX	−0.193 (0.157)	−0.194	−0.208 (0.153)	−0.203	0.076 (0.157)	0.083
AGE	−0.021* (0.012)	−0.021	−0.005 (0.011)	−0.002	0.022* (0.012)	0.017
EDUC	0.007 (0.015)	0.007	−0.005 (0.014)	−0.009	0.011 (0.015)	0.012
MARTS	−0.021 (0.172)	−0.023	−0.220 (0.168)	−0.208	−0.058 (0.186)	−0.014
MARDYR	0.003 (0.013)	0.003	0.026** (0.013)	0.024	−0.027* (0.014)	−0.018
FAMS	0.138*** (0.043)	0.139	0.029 (0.040)	0.035	0.107*** (0.040)	0.130
YEARSLVD	−0.002 (0.007)	−0.002	−0.014* (0.008)	−0.016	0.004 (0.007)	−0.001
OCCUP	0.218** (0.086)	0.219	−0.254*** (0.082)	−0.267	0.153* (0.092)	0.144
INCMlog	−0.111 (0.099)	−0.113	0.009 (0.093)	0.028	0.023 (0.100)	0.039
HOUSTY	−0.154 (0.161)	−0.157	−0.012 (0.159)	−0.015	−0.167 (0.168)	−0.194
HOMRSHIP	0.159 (0.154)	0.157	0.235 (0.152)	0.233	−0.106 (0.164)	−0.172
RESDDIST	−0.007 (0.012)	−0.007	−0.012 (0.012)	−0.010	−0.009 (0.014)	−0.010
ADVRTACSS	0.796*** (0.231)	0.793	0.476** (0.187)	0.478	−0.507** (0.229)	−0.550
CONST	1.829 (0.955)		0.964 (0.901)		−3.038 (0.956)	
	/atrho21	0.042 (0.087)	rho21	0.041 (.086)		
	/atrho31	−0.054 (0.090)	rho31	−0.054 (0.090)		
	/atrho32	−0.999 (0.171)	rho32	−0.761*** (0.072)		

Likelihood ratio test of rho21 = rho31 = rho32 = 0: chi-square (3) = 65.3082, prob > chi-square = 0.0000; no. obs. = 385, log likelihood = −598.49269, prob > chi-square = 0.0000, Wald chi-square (39) = 93.09.

[a] ***, **, and * = 1 percent, 5 percent, and 10 percent level of significance, respectively.

[b] *Dy/dx* presents marginal effect of independent variables on dependent variables.

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Age.—The results revealed that the coefficient of age had a negative effect on the preference for imported wooden furniture and a positive effect on the preference for imported plus domestic wooden furniture at a 10 percent significance level, respectively. The results support the expected hypotheses regarding preferences for imported and both imported and domestic furniture preferences but do not confirm preferences for domestic furniture. This means that older consumers had a probability of choosing imported wooden furniture that was less than 2.1 percent. This may be due to globalization; younger individuals have a better understanding of the attributes present in furniture products, and today's market is dominated by consumers who have the ability to demand quality attributes for new types of housing.

Family size.—The results showed that family size was positively and statistically significant in preferences for imported and imported plus domestic wooden furniture at a 1 percent significance level. This aligns with the expected direction of hypotheses regarding imported furniture preferences but contradicts with preferences for both imported and domestic furniture. This result implies that the larger households were more likely to prefer imported and both imported plus domestic wooden furniture by a factor of 0.139 (13.9%) and 0.13 (13%). This may be because as the size of the family increases, the variety and needs of family members' preferences regarding the origin of wooden furniture also increase. This finding is supported by the research of Kumburu and Kessy (2018).

Years lived after marriage.—Consumers who live for a long period after marriage are more likely to choose imported furniture, with statistical significance levels of 5 percent and 10 percent, respectively. This aligns with the expected direction of the hypotheses. The results suggest that the likelihood of choosing domestic furniture decreases by 2.6 percent, while the likelihood of choosing imported plus domestic increases by 2.7 percent for consumers who have been married for a longer time.

Years lived in the city.—The results indicated that the length of time consumers have lived in the city has a statistically significant negative effect on domestic wooden furniture preference at a 10 percent level of significance. This explanatory variable does not support the hypotheses of expected directional signs. This finding reveals that consumers who have resided in the city for longer periods are 1.6 percent less likely to choose domestic wooden furniture. This may be because individuals who have lived in the city for many years, especially in a large city, are more likely to gradually shift towards new products from abroad than the usual product.

Occupation.—The results revealed that occupation is positively and significantly associated with preferences for imported furniture at the 5 percent level of significance, and preferences for both imported and domestic furniture at the 10 percent level of significance. However, it is negatively and significantly associated with domestic furniture preference at the 1 percent level of significance. These results do not support the expected hypotheses for the three furniture choice categories with explanatory variables. The marginal effect analysis shows that consumers engaged in self-employment increased their choice of imported wooden furniture by 21.9 percent and their choice of imported plus domestic furniture by 14.4 percent. On the other hand, self-employed consumers decreased their preference for domestic furniture by 23 percent. This suggests that occupation creates different economic classes leading to varying purchasing power among consumers. This is consistent with the findings of previous studies, such as Troian (2011), who stated that occupation reflects the social status of the consumer and was linked to the consumer characteristics and their preferences. Furthermore, these results align with the findings of Chekol et al. (2022), who found that occupation was linked to preferences for imported goods.

Advertisement.—Advertisement had a positive and significant influence on the preference for imported and domestic furniture at the 1 percent and 5 percent significance levels, respectively, but it negatively affected the preference for imported plus domestic wooden furniture at a 5 percent significance level. The marginal effect indicates that consumers who are exposed to advertisements are more likely to prefer imported and domestic furniture products by a factor of 0.79 and 0.48, respectively. These results support the expected directional signs of the hypotheses for imported furniture preferences but contradict the hypotheses for domestic wooden furniture preferences. Various studies have shown that advertising is a powerful tool that influences consumer preferences for different types of furniture (Jošt et al. 2020, Hitka et al. 2024). Additionally, advertising plays a significant role in influencing the choice of imported goods and can attract new customers to brands (Chekol et al. 2022).

Conclusions

The purpose of this study was to contribute to research information on the linkages between consumers' preference for wooden furniture and furniture sources. Understanding consumer preferences for products and relevant attributes is crucial for production and marketing success. Manufacturers and enterprises engaged in product differentiation of higher value-added furniture products must constantly seek out attributes that are most attractive to consumers and carefully evaluate whether any of those favorable products and attributes are competing with existing attributes.

This study analyzed consumers' preferences for imported and domestic wooden furniture products and their attributes. The findings of the study revealed significant differences in consumers' preference levels between imported and domestic wooden furniture products and their attributes. The results indicate that consumers mostly preferred imported wooden furniture, which scored higher in finishing, color, compatibility with other objects, and design. On the other hand, domestic wooden furniture was superior in terms of durability, environmental friendliness, maintainability, and affordability. The preference for domestic wooden furniture was found to be a substitution for imported plus domestic wooden furniture preference and was statistically significant. Consumer preference for furniture products was influenced by factors such as age, the number of years in marriage, family size, years lived in the city, occupation, and advertisement exposure. The findings suggest that consumers are not a homogeneous group, showing great variation in preferences between imported and locally produced wooden furniture based on socioeconomic characteristics and product attributes.

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The findings suggest that domestic wooden furniture manufacturers should consider consumer preferences for finishing, design, color, and compatibility to increase the competitiveness of domestic furniture with imported products. Policymakers and practitioners need to understand which wooden furniture attributes are valued by different consumer types and how these attributes can be innovated and promoted successfully. Furniture manufacturers should focus on innovating multiple local furniture attributes to meet the needs of different consumer groups and compete with imported furniture.

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Literature Cited

Adu-Sarpong, M. 2017. Analyzing the sources of wood supply to sustain domestic wood demand: A case study of selected wood markets in Kumasi-Ghana. Master's thesis. Technische Hochschule, Köln, Germany.

Alem, S. 2016. Status and trends of the processed wood products trade in Ethiopia. *J. Sustain. For*. 35(4):251–260.

Belton, V. and T. Stewart. 2002. Multiple Criteria Decision Analysis: An Integrated Approach. Springer Science & Business Media, New York.

Birhan, G. 2014. Competitiveness analysis of Ethiopian furniture industry. MA thesis. Addis Ababa University, Ethiopia.

Board, S. 2009. Preferences and utility. Lecture, Department of Economics, University of California–Los Angeles. http://www.econ.ucla.edu/sboard/teaching/econ11_09/econ11_09_lecture2.pdf. Accessed April 12, 2023.

Cappellari, L. and S. P. Jenkins. 2003. Multivariate probit regression using simulated maximum likelihood. *Stata J*. 3(3):278–294.

Central Statistical Agency (CSA). 2014. Population and housing census report of Addis Ababa, Ethiopia. Central Statistical Agency, Addis Ababa, Ethiopia.

Central Statistical Agency (CSA). 2019. Population projection of Addis Ababa city, 2019. Central Statistical Agency, Addis Ababa, Ethiopia.

Chanjarika, C. 2013. Factors leading imported furniture to be preferred over locally produced ones: A case of Ilala and Temeke municipal councils in Dar es Salaam-Tanzania. MS thesis. Mzumbe University, Tanzania.

Chekol, F., Y. Alimaw, N. Mengist, and A. Tsegaye. 2022. Consumer choice for purchasing imported apparel goods and its effect on perceived saving in Debre Markos district, Amhara Ethiopia: A logistic regression analysis. *Cogent Soc. Sci*. 8(1):2140509. https://doi.org/10.1080/23311886.2022.2140509

Cherkos, T., M. Zegeye, S. Tilahun, and M. Avvari. 2018. Examining significant factors in micro and small enterprises performance. *J. Ind. Eng. Int*. 14:227–239.

Cochran, W. G. 1977. Double sampling. *In:* Sampling Techniques. 3rd ed.. W. G. Cochran. John Wiley & Sons, New York. pp. 327–358.

Drbie, M. and T. Kassahun. 2013. Deterrents to the success of micro and small enterprises in Akaki-Kality sub-city. *J. Bus. Admin. Stud*. 5(2):1–33.

Environment, Forest and Climate Change Commission (EFCCC). 2020. Trees, Forests and Profits in Ethiopia: An Assessment of Tree-Based Landscape Restoration Investment Opportunities in Ethiopia. EFCCC, Addis Ababa, Ethiopia.

Epede, M. B. and D.Wang. 2022. Competitiveness and upgrading in global value chains: A multiple-country analysis of the wooden furniture industry. *Forest Policy and Economics*, 140, 102737.

Fisher, C. D. and M. L. To. 2012. Using experience sampling methodology in organizational behavior. Journal of Organizational behavior, 33(7), 865–877. DOI: 10.1002/job.1803

Genc, A. and R. Merdan. 2021. Investigating the effect of Covid-19 pandemic process on furniture usage frequency and consumer preferences. *Res Mobilis*. 10(12):109–126.

Girma, G. and T. Abate. 2021. The status of wood products supply and demand in Ethiopia: A review. *J. Econ. Sustain. Dev.* 12:15–23. https://doi.org/10.7176/JESD/12-1-03

Global Wooden Furniture Market. 2023. Global wooden furniture market by type (hardwood, softwood), material (laminates, MDF, plywood), application, distribution channel—Forecast 2023–2030. https://www.researchandmarkets.com/content-images/1529/1529208/2/global-wooden-furniture-market.png. Accessed January 25, 2024.

Gordeev, R. 2020. Comparative advantages of Russian forest products on the global market. *For. Pol. Econ*. 119:102286. https://doi.org/10.1016/j.forpol.2020.102286

Gutu, T. G. and A. S. Yali. 2020. Association of owner related and external factors with micro and small manufacturing enterprises growth in Ethiopia. *J. Pers. Fin. Reg. Dev.* (Indonesia) 8(2):155–174.

Guzel, T. A. 2020. Consumer attitudes toward preference and use of wood, woodenware, and furniture: A sample from Kayseri, Turkey. *BioResources* 15(1):28–37.

Hilal, S. and Ö. Şükrü. 2022. Applying an interval-valued Pythagorean fuzzy analytic hierarchy process to rank factors influencing wooden outdoor furniture selection. *Wood Mater. Sci. Eng*. 18:322–333. https://doi.org/10.1080/17480272.2021.2025427

Hitka, M., A. Miklošík, M. Gejdoš, and P. Štarchoň. 2024. Insights into consumer preferences and purchasing behaviour for wooden bed furniture in Slovakia. *J. Retail. Consum. Serv*. 76:103613. https://doi.org/10.1016/j.jretconser.2023.103613

International Tropical Timber Organization (ITTO). 2016. Intra-African trade in tropical timber and timber products and options for trade facilitation. International Tropical Timber Organization, Yokohama, Japan.

Jaderná, E. 2022. Retail products' sustainability from the point of Czech consumers' view. *Mark. Sci. Inspir*. 17(1):29–37. https://doi.org/10.46286/MSI.2022.17.1.3.

Jonsson, R. and F. Rinaldi. 2017. The impact on global wood-product markets of increasing consumption of wood pellets within the European Union. *Energy* 133:864–878.

Jošt, M., V. Kaputa, M. Nosáľová, A. Pirc Barčić, I. Perić, and L. Oblak. 2020. Changes in customer preferences for furniture in Slovenia. *Drvna Ind*. 71(2):149–156.

Khattak, M. N. and T. A. Shah. 2011. Consumers' attitudes towards non-local products: a case of Pakistan. *In*: Proceedings of the 2nd International Conference on Business and Economic Research (2nd ICBER 2011), March 14–15, 2011, Langkawi, Kedah, Malaysia; Global Research Agency. pp. 321–332.

Khojasteh-Khosro S., A. Shalbafan, and H. Thoemen. 2020. Preferences of furniture manufacturers for using lightweight wood-based panels as eco-friendly products. *Eur. J. Wood Wood Prod*. 78:593–603.

Khojasteh-Khosro S., A. Shalbafan, and H. Thoemen. 2022. Consumer behavior assessment regarding lightweight furniture as an environmentally-friendly product. *Wood Mat. Sci. Eng*. 17(3):192–201. https://doi.org/10.1080/17480272.2020.1847187

Kizito, S., A. Y. Banana, M. Buyinza, J. R. S. Kabogozza, R. K. Kambugu, A. Zziwa, and O. E. Sseremba. 2012. Consumer satisfaction with wooden furniture: An empirical study of household products produced by small and medium scale enterprises in Uganda. *J. Indian Acad. Wood Sci.* 9(1):1–13.

Kotler, P. and G. Armstrong. 2010. Principles of Marketing (13th ed.). Prentice Hall, Upper Saddle River, New Jersey.

Kumburu, N. P. and J. F. Kessy. 2018. Consumers' preference on imported and locally made furniture in Dares Salaam and Arusha, Tanzania. *Glob. Bus. Rev*. 22(2):0972150918811519.

Lancaster, K. J. 1966. A new approach to consumer theory. *J. Pol. Econ*. 74(2):132–157.

Lee, J. and M. J. Nguyen. 2017. Product attributes and preference for foreign brands among Vietnamese consumers. *J. Retail. Consum. Serv*. 35:76–83. https://doi.org/10.1016/j.jretconser.2016.12.001

Lihra, T., U. Buehlmann, and R. Graf. 2012. Customer preferences for customized household furniture. *J. Forest Econ*., 18(2):94–112. https://doi.org/10.1016/j.jfe.2011.11.001

Lin, Q., L. Xiaoyu, and Z. Jianqiang. 2023. Global Marketing Standards and Local Adaptation: An Analysis of the Literature. International

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Journal of Management and Human Science (IJMHS), 7(2), 44–57. https://doi.org/10.31674/ijmhs.2023.v07i02.006

Lumintang, Y. G., S. S. Pangemanan, and F. S. Rumokoy. 2018. Comparative analysis of consumer preferences between international over local brand in Manado (case study on Everbest and Buccheri). *Journal of Economic, Management, Business and Accounting Research* 6(1), 518–527. https://doi.org/10.35794/emba.v6i1.19317

Ministry of Environment, Forest and Climate Change (MEFCC). 2018. National Forest Sector Development Program, Ethiopia. Volume II: Program Pillars, Action Areas and Targets. MEFCC, Addis Ababa, Ethiopia.

Mohamed, S. and T. P. Yi. 2008. Wooden furniture purchase attributes: A Malaysian consumers' perspective. *Pertanika J. Trop. Agric. Sci*. 31(2):197–203.

Nirmal, U., P. K Ng, K. S. Jee, and E. Anton. 2018. Product and market observations on furniture technological developments. *Int. J. Eng. Technol*. 7(3.7):558–562.

Oztop, H., S. Erkal, and G. Gunay. 2008. Factors influential in consumers' furniture selection and their preferences regarding product features. *Int. J. Interdiscip. Soc. Sci.* 3(6):23–34.

Pezeshkpoor, Z. 2020. The role of movability on campus outdoor furniture. MS Thesis. Kansas State University, Manhattan, Kansas.

Pirc Barčić, A., M. Kitek Kuzman, T. Vergot, and P. Grošelj. 2021. Monitoring consumer purchasing behavior for wood furniture before and during the COVID-19 pandemic. *Forests* 12(7):873.

Rajpurohit, R. C. S. and M. L. Vasita. 2011. Consumer preferences and satisfaction towards various mobile phone service providers. *Reliance* 7, 1–11.

Robert, A. O. and A. K. A. Patrick. 2009. The preference gap: Ghanaian consumers' attitudes toward local and imported products. *Afr. J. Bus. Manage*. 3(8):350–357.

Tarfasa, S., T. Ferede, S. Kebede, and D. Behailu. 2016. Determinants of growth of micro and small enterprises (MSEs): Empirical evidence from Ethiopia. R4D Working Paper 2016/3. Results for Development (R4D), Addis Ababa, Ethiopia.

Troian, D. 2011. Furniture industry: The consumers' furniture preferences in different markets. Master's thesis. University of Trento, Italy.

Van Raaij, W. F. 2016. Understanding Consumer Financial Behavior: Money Management in an Age of Financial Illiteracy, Palgrave Macmillan, London.

Wiafe, E. D., M. Amoah, and F. Bih. 2014. Determinants of choice of cane furniture as household commodity among the elites. *Int. J. Ecol. Econ. Stat*. 34(3):83–92.

Xiong, X. Q., X. Y. Yue, and Z. H. Wu. 2023. Current status and development trends of Chinese intelligent furniture industry. J. Renew. Mat. 11:1353–1366. https://doi.org/10.32604/jrm.2022.023447

Yu, S., Q. Zheng, T. Chen, H. Zhang, and X. Chen. 2023. Consumer personality traits vs. their preferences for the characteristics of wood furniture products. *BioResources* 18(4):7443. https://doi.org/10.15376/biores.18.4.7443-7459

Zhou, C., W. Gu, X. Luo, and J. Kaner. 2023. Building a 4E interview-grounded theory model: A case study of demand factors for customized furniture. *PLoS One* 18(4):e0282956. https://doi.org/10.1371/journal.pone.0282956

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