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DETERMINANTS OF CREDIT USE OF HOUSEHOLDS IN  
TURKEY: THE EFFECT OF COVID-19

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Determinants Of Credit Use Of Households In Turkey:  
The Effect Of Covid-19

Türkiye’de Hanehalkı Kredi Kullanımının Belirleyicileri:  
Covid-19 Etkisi

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## **LIST OF ABBREVIATIONS**

ANOVA: Analysis of Variance

CVAR: Cointegrated Vector Autoregression

GDP: Gross Domestic Product

DTIR: Debt to Income Ratio

EU: European Union

OECD: Organization for Economic Co-operation and Development

OLS: Ordinary Least Square

SEM: Structural Equation Model

VAR: Vector Autoregressive Model

VECM: Vector Error Correction Model

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## ABSTRACT

In this study, it is investigated that which factors determine the credit use of households and what the effects of Covid-19 period have been on the credit use of households in Turkey. Furthermore, it is also examined what factors influence the bank preference of Turkish households. The study is done with survey methodology. The relationship between the demographical features of attendees and the factors taken into consideration, factors that are influential while using credit and factors taken into consideration for the bank preference is analysed with one-way ANOVA and t-test via SPSS. On the other hand, the effects of factors taken into consideration, factors that are influential, factors for the bank preference and the effects of demographic and Covid-19 factors on the credit use of households are analysed with Structural Equation Model (SEM) via STATA.

It's seen that arising the need, having cash shortage and the willingness to close another debt or credit are more influential in the decision of females to use credit compared to men. Moreover, it's found that females are more sensitive in terms of interest rates compared to men while choosing a bank. The number of children, the age and the monthly income level of individuals influence the interest free (Islamic) finance preference of households. The general outlook of the economy, expectation for the future of the economy and political developments are the most important factors that households take into consideration while using credit. For the factors that are influential when households use credit, having cash shortage is seen to be the most remarkable factor. Satisfaction with customer relations is found to be the most powerful factor on the bank preference of households. The number of children, the age and the marital status of individuals are the most influential demographic factors on the credit use of households, respectively. Lastly, it's reached that Covid-19 period has significantly affected the credit use of households.

**Key words:** Credit Use of Households, Covid-19, Factors Taken into Consideration, Factors That are Influential, Structural Equation Model.

## ÖZET

Bu çalışmada; Türkiye’de hanehalkı kredi kullanımını hangi faktörlerin etkilediği ve Covid-19 döneminin hanehalkı kredi kullanımı üzerindeki etkilerinin neler olduğu araştırılmaktadır. Ayrıca, Türk hanehalkının banka tercihini etkileyen faktörler de irdelenmektedir. Çalışma anket yöntemiyle yapılmaktadır. Katılımcıların demografik özellikleri ile kredi kullandıkları zaman dikkate alınan faktörler, etkili olan faktörler ve banka tercihi için dikkate alınan faktörler arasındaki ilişki tek yönlü varyans analizi ve t testi ile SPSS programında analiz edilmektedir. Diğer yandan dikkate alınan, etkili olan ve banka tercihi faktörleri ile demografik ve Covid-19 faktörlerinin; hanehalkı kredi kullanımı üzerindeki etkileri Yapısal Eşitlik Modeli ile Stata programıyla analiz edilmektedir.

Bir ihtiyacın ortaya çıkmasının, nakit sıkıntısı içinde olunmasının, ve başka bir borcu / krediyi kapatma isteğinin; kadınların kredi kullanım kararında erkeklere göre daha çok etkili olduğu görülmektedir. Buna ilave olarak; kadınların banka tercihinde bulunurken erkeklere göre faiz oranlarına karşı daha hassas olduğu bulunmaktadır. Bireylerin çocuk sayısı, yaşı ve aylık gelir seviyesi hanehalkının faizsiz (İslami) finans tercihinin etkilemektedir. Ekonominin genel görünümü, ekonominin geleceğine yönelik beklenti ve politik gelişmeler; hanehalkının kredi kullanırken dikkate aldığı en önemli faktörlerdir. Hanehalkı kredi kullanırken etkili olan faktörler için; nakit sıkışıklığı içinde olunması en kayda değer faktördür. Müşteri ilişkilerinden memnuniyet; hanehalkının banka tercihi üzerinde en güçlü etken olarak gözükmemektedir. Çocuk sayısı, yaş ve medeni durum hanehalkının kredi kullanımı üzerinde sırasıyla en etkili demografik faktörlerdir. Son olarak, Covid-19 döneminin hanehalkı kredi kullanımını önemli ölçüde etkilediği sonucuna ulaşılmaktadır.

**Anahtar Kelimeler:** Hanehalkı Kredi Kullanımı, Dikkate Alınan Faktörler, Etkili Olan Faktörler, Tek Yönlü Varyans Analizi, Yapısal Eşitlik Modeli.

## **1. INTRODUCTION**

The main objective of this study is to identify the determinants of credit use of households and the effects of Covid-19 period on the credit use of households in Turkey. Beyond that, the factors that influence the bank preference of households are also investigated. Although the literature includes plenty of studies regarding to the determinants or drivers of households debt in Turkey and in the world; there seems to be remarkable gap regarding to the determinants of credit use of households. The motivation behind this study was to fill this gap in the context of Turkey. The data was gathered from the survey conducted online. In total 468 answers were collected; however, there were missing answers. After eliminating the missing answers, the analyses were carried out with 340 answers. The results were analysed in the SPSS and STATA programs.

## **2. LITERATURE REVIEW**

In the literature, determinants of credit are generally investigated in the context of determinants of credit card spending, determinants of credit given to agriculture sector, determinants of credit constraints or determinants of credit access. On the other hand, the studies which are directly related to the determinants of credit use of households were quite rare. The study of Rubaszek and Serwa (2011) seems to be one of them. They used two separate data sets for their regression analyses. The first one included 36 countries which are EU and OECD economies and covered the period from 1995 to 2009. The second one included 27 EU countries and spanned over the period from 2005 to 2009. They concluded that the amount of household credit to GDP ratio depends on the generosity of pension system, the lending-deposit interest rate spread, individual productivity persistence and individual income uncertainty.

Unlike determinants of credit use of households, the literature includes plenty of studies regarding to the determinants of household debt. Households debt is mostly researched under the titles of “The Determinants of Households Debt” or “The Drivers of Households Indebtedness” in the literature. Studies are grouped as cross country analysis and single country analysis. Whereas cross country analyses include studies done for Organization for Economic Co-operation and Development (OECD) countries, Euro area countries or emerging economies, single country analyses focus on just a selected country. Firstly, cross country studies will be reviewed and then it will be continued with single country analyses.

Stockhammer and Wildauer (2018) empirically tested 4 arguments used to explain for fast growing of households debt and private consumption expenditure in many countries. They tested these arguments to estimate the determinants of households debt by using the panel data for 13 OECD countries. (1980-2011). The result showed that increase in property prices were the most important determinant of households indebtedness. On the other hand, no significant effect

of income inequality on households debt was found. The results were consistent with low interest and credit deregulation hypotheses; however, their ability to explain was low for the period of 1995-2007.

Moore and Stockhammer (2018) have tested 7 competing hypotheses that was thought as possible determinants of households debt in the literature. These hypotheses include falling wages, the rolling back of the welfare state, the short term interest rate, house prices, the age of the population, the income share of the top 1%, and up movements in the prices of assets demanded by households. The study done by using error correction model showed that real residential house prices are the strongest macroeconomic determinant of households debt in 13 OECD countries for the period of 1993-2011.

Šubová and Buleca (2020) investigated the macroeconomic factors influencing the households debt in 19 Euro area countries for the period of 2007-2018. The data obtained from Eurostat was structured as a panel data. Correlation and regression analyses were employed for the study. The results showed that only disposable income and level of savings are statistically significant indicators. As the level of income increases, the level of households debt goes up. In contrast, negative relationship was found between saving and indebtedness. Higher saving leads to lower indebtedness for households. No statistical significant result was confirmed for inflation and Gross Domestic Product (GDP).

Abd Samad, Mohd Daud and Mohd Dali (2020) examined the leading indicators of households indebtedness in developing countries. They used bias corrected least square dummy variable method for 19 emerging countries for the period of 1995-2018. The result indicated that the financial development is the most significant determinant which explains the households debt. In addition to the financial development, lending interest rate and house prices have a positive significant impact on households debt. Meanwhile, inflation and house prices are negatively related with indebtedness of households.

Debelle (2004) investigated the causes of increase in households debt in different countries employing life cycle / permanent income model of consumption. He concluded that much of the rise is caused by relaxation of credit constraints and rise in inflation and borrowing rates. Furthermore, he estimated that households sector will be more sensitive to change in interest rate and households income and expectation of future income will be more influential on consumption spending.

South Africa, Malaysia and Australia seem to be most studied countries for the topic of “Determinants of Households Debt” in the literature. Meniago et. al (2013) investigated the factors contributing rise in households indebtedness in South Africa employing the Vector Error Correction Model (VECM). The result showed that positive change in households consumption, consumer price index and GDP influenced significantly the increase of households debt. In addition to these determinants, house prices and households savings also made the households debt go up; however, their effects were statistically insignificant. Whereas negative changes in income affected the indebtedness of households significantly, negative change in prime rate influenced households debt insignificantly.

Nometye and Phiri (2017) analysed the macroeconomic indicators affecting households debt in South Africa using quantile regression method. They concluded that consumption and inflation were related to indebtedness of households; however this relation was insignificant. Whereas the effect of GDP growth is significant at moderate to high levels of distributions, the influence of housing price is significant at moderate levels or middle quantiles in determining the debt of households. Furthermore, investment and interest rates are significantly related to households debt across all quantile.

Ma'in, Tajuddin and Nathan (2016) investigated the determinants of households debt in Malaysia employing Ordinary Least Square (OLS) method. According to results; housing price index is the most significant determinant of households debt followed by base lending rate, unemployment and GDP. While

housing pricing index and GDP are positively correlated with households debt, unemployment and base lending rate have a negative impact on the rise of indebtedness of households.

Azmin, Zaidi and Mohamad (2019) searched the factors that determine households indebtedness in Malaysia. They employed the OLS method with multiple regression analysis for their study. The result showed that interest rate, consumption and unemployment are significantly and positively related to the debt of households. Furthermore, positive relationship was found between inflation rate and households debt; however, this relation was insignificant.

Mohamed et. al (2020) analysed the relationship and effects of macroeconomic determinants on Malaysian households indebtedness. Three macroeconomic determinants that are inflation rate, unemployment rate and GDP were used to explore the relationship and effects of these determinants on debt of Malaysian households. As an econometric method, Normality Test, Unit Root Test, Regression Analysis, Augmented Dickey Fully Test, Descriptive Analysis, Philips-Perron were employed. The result indicated that GDP, unemployment and inflation had direct relationship with and positive impact on households debt. While GDP and unemployment were significant determinants, inflation had an insignificant effect on households debt.

Meng, Hoang and Siriwardana (2013) employed Cointegrated Vector Autoregression (CVAR) model to analyse the determinants of households debt in Australia. The result indicated that indebtedness of households was positively affected by GDP, the population in the economy and housing prices. On the contrary, the unemployment rate, interest rates, the number of new houses and inflation negatively influenced the debt of Australian households. Among these, interest rates were the most significant determinant.

Kolios (2020) divided households debt into two categories which are housing debt and consumer (personal) debt. He examined the impacts of monetary policy and labour market condition on both housing debt and consumer debt in

Australia using VECM. The results illustrated that while consumption significantly influences consumer debt, employment income and unemployment have an insignificant effect on consumer debt. The findings implied that the consumption of households was the prominent determinant of consumer debt which means consumers use debt as a wage substitute. Income and monetary policy positively influenced the decision of households in terms of housing debt. In contrast, consumption and unemployment had a negative influence on the level of housing debt.

Turinetti and Zhuang (2011) investigated the factors influencing US households debt employing the quarterly data for the period of 1980-2010. The result indicated that educational attainment, share of retiring population, the unemployment rate, interest rate, disposable personal income per capita, are negatively related to households indebtedness, whereas the share of working-age population, housing prices and consumer confidence were positively related to the debt of households.

Zimunya and Raboloko (2015) analysed the determinants that affect the growth of households debt in Botswana using VECM. They concluded that money supply, interest rates and GDP per capita had an influence on households debt in the long term. When the further analysis done, interest rates, lagged households debt and money supply were found to have impact on households debt in the short run.

Duy et. al (2012) investigated the factors that influence the decision of both borrowing and the amount that is borrowed in the Mekong Delta, Vietnam employing the double hurdle and Heckman Selection models. They collected the data from 325 households who live in rural areas. The result implied that locations, distance to the market center, marital status, capital endowments and family size had impact on the probability to ask for and amount of credit.

Lundbäck and Martinsson (2016) examined the macroeconomic determinants that have been influence on debt to income ratio (DTIR) of Swedish



households for the last 30 years. They used vector autoregressive model (VAR) and the results indicated that increase in house prices and a decrease in consumer confidence and unemployment rate led to increase in DTIR for the long run. On the other hand, only consumer confidence had significant influence on DTIR for the short run.

Nas (2016) investigated the determinants influencing households debt. He made a survey with 608 households in Fethiye district in Muğla / Turkey and analysed the survey results using ordinal logistic regression model. The result indicated that monthly income had positive effects on the debt of households, whereas regular income, home ownership and real estate ownership negatively influenced the indebtedness of households.

Nas and Özkoç (2017) searched the factors that lead to households debt and types of households debt. They made a survey with 450 household heads again in Fethiye district in Muğla / Turkey to analyse the differences between borrowed households and non-borrowed households. They employed Binary Logistic Regression for their analysis and concluded that education level, marital status, occupation, type of households, consumer confidence, regular income and number of dependents living in the households had an impact on households debt.

Gündüzalp (2018) discussed the relationship between demographic, socioeconomic, psychosocial factors and the level of debt. In addition to that, she also investigated the relationship between financial management, financial stress, financial literacy, life satisfaction, financial satisfaction with the level of debt. She made her study on 300 individuals who live in 3 different socioeconomic districts of Ankara which are Keçiören, Mamak, and Çankaya and employed Pearson Correlation Analysis, One-Way Anova, Chi Square, Tamhane T2 to test her hypotheses. The result indicated that as the age, family size, amount of income, number of children, credit card limit and number of credit card increased the level of indebtedness also increased. Employment and marital status had positive influence on debt. Moreover, low level of financial literacy and being worried about financial issues increased debt level.

In the literature, the impacts of Covid-19 on households were generally investigated in terms of households financial decisions, households food & energy security, households income and households debt. Since the debt and income of households are closely related to each other, the studies of those will be emphasized. Firstly, the effects of Covid-19 on debt of households will be mentioned, then continue with the effects of it on the income of households.

Achou et. al (2020) investigated the early effect of Covid-19 on households finances in the province of Quebec in Canada. They employed survey methodology with respondents from a variety of demographic characteristics in terms of age, gender and education level to analyse the effects of Covid-19. They concluded that many households preferred increasing or deferring or missing their debt instead of using their savings to compensate the loss of income. Among those, deferring debt appeared to have been the most widely used method by households to smooth their spending. In more detail, homeowners chose deferring their mortgage debt since this way is widely advertised and easily available for them. On the other hand, renters didn't have this option; therefore, they had to rely on more costly alternatives such as taking another debt or missing their debt payments.

Cherry et. al (2021) examined the influences of Covid-19 pandemic period on US households debt that entered forbearance process. They investigated private and government forbearance by employing the panel data for more than 20 million US consumers. It was found that the amount of 2\$ trillion loans entered forbearance process between March and October in 2020. Mortgage loans were the biggest amount (\$1.1 trillion) that entered into forbearance. After that, student loans (\$580 billion) and auto loans (\$130 billion) were the type of loans that have second and third highest amount in forbearance. The large amount of debt relief prevented households from experiencing debt distress which resulted in lower delinquency rates compared to the pre-pandemic period. Forbearance was more preferable in the regions where Covid-19 infection rates were higher and hard economic conditions existed.

Almeida et. al (2021) investigated the effects of Covid-19 on the income of households in EU. They found that Covid-19 pandemic has the probability to influence significantly the income of EU households. In addition, the effects of it on the lower income class are more severe. However, discretionary fiscal policy put in action by EU member states mitigates the severe effects of Covid-19 by decreasing the income loss from  $-9.3\%$  to  $-4.3\%$ . They resulted that policy interventions are influential to diminish the negative effects of the crises.

Janssens et. al (2021) analysed how Covid-19 pandemic affected the low income of households who live in rural area of Kenya. They used financial data derived from the interviews with households which covered the period of 6 weeks before the first case was detected and 5 weeks after in Kenya. The regression results indicated that the work income decreased approximately one-third. Moreover, the income from presents and remittance went down more than one-third. On the other hand, food expenditures of households remained at pre-pandemic level. No evidence was found that households deal with the loss of income by borrowing money, selling their assets or using their savings. Instead of these, they prefer delaying their loans or lending less money or giving less presents and remittance to each other. In addition, they decreased the amount of money spending on transportation and school in accordance with the travel limitations and school closing.

### **3. RESEARCH**

#### **3.1. RESEARCH METHODOLOGY**

SPSS and STATA programs were used to perform analyses with the data collected from the survey conducted online. Questions were about the demographic features of attendees, which factors they take into consideration and which of them are influential when they use credit, what factors they take into consideration when they prefer bank and whether Covid-19 period has affected the credit use of them or not. These factors (factors taken into consideration, factors that are influential and factors taken into consideration for the bank preference) refer to following;

While households are planning to use credit, they observe external factors and wait for convenient economic and political atmosphere to use the credit. These external factors observed by households refer to factors taken into consideration in the study. On the other hand, factors that are influential are the factors which trigger the decision of credit use of households. Finally, factors taken into consideration for the bank preference are factors that may have influence on the bank preference of households. Factors taken into consideration for the bank preference and factors for the bank preference are used interchangeably in the study.

Questions, except demographic and Covid-19, were designed as ranking questions (1 being the most important, 5 being the least important) and 5 point likert scale questions. 340 answers were collected from the variety of demographical characteristics and these answers were clustered in SPSS program for Cronbach's Alpha reliability analysis.

After collecting the answers, factors taken into consideration are divided into 2 groups. Group 1 includes the factors that are credit interest rate and easy access to credit, whereas Group 2 includes the factors which are general outlook of the economy, political developments and expectation for the future of the economy. Since Group 1 and Group 2 are dummy variable, only Group 1 which

takes the value of 1 in most of the observations is tested by t-test and one-way ANOVA. Similarly, factors that are influential are also divided into 2 groups. Whereas arising the need, cash shortage of individuals and the willingness to close another debt or credit are Group 1 factors, Group 2 includes the factors that are the decrease in interest rate and general outlook of the economy. Since Group 1 and Group 2 are dummy variable, only Group 1 which takes the value of 1 in most of the observations is tested by t-test and one-way ANOVA.

Since the data is normally distributed, t-test and one-way ANOVA tests were employed to analyse the effects of demographic features of respondents on the factors taken into consideration group 1, factors that are influential group 1 and factors for the bank preference via SPSS. On the other hand; the influence of factors taken into consideration, factors that are influential, factors for the bank preference, demographic and Covid-19 factors on the credit use of households are analysed with Structural Equation Model (SEM) via STATA.

### **3.2. DATA GATHERED**

The survey which lasts 5 minutes to complete was conducted between the dates of April 2021 and August 2021. Since the Covid-19 pandemic conditions were quite severe at that time, the survey was shared via multiple online channels with attendees. In total 468 answers were collected, after eliminating missing answers the analyses were carried out with 340 answers. All the answers were independent of each other which mean that each attendee took the survey only once. Survey questions were tested with Cronbach's Alpha and coefficient was found as "0,754" which indicates that the reliability of the scale is acceptable. Demographical distribution of respondents is as following;

**Table 1: Demographical Distribution of Respondents\***

<b>Gender</b>	<b>Responses</b>	
Males	317	68.32%
Females	147	31.68%
<b>Total</b>	464	100.00%

<b>Marital Status</b>	<b>Responses</b>	
Single	198	42.49%
Married	268	57.51%
<b>Total</b>	466	100.00%

<b>The number of children</b>	<b>Responses</b>	
0	260	55.67%
1	64	13.70%
2	98	20.99%
3	34	7.28%
3+	11	2.36%
<b>Total</b>	467	100.00%

<b>Age Interval</b>	<b>Responses</b>	
18-25	50	10.71%
26-40	294	62.96%
41-50	47	10.06%
51-60	70	14.99%
Above 60	6	1.28%
<b>Total</b>	467	100.00%

<b>Education Level</b>	<b>Responses</b>	
Primary school	4	0.86%
High school	38	8.14%
University (Undergraduate)	270	57.82%
Post Graduate	155	33.19%
<b>Total</b>	467	100.00%

<b>Monthly Income Level</b>	<b>Responses</b>	
TRY 0	26	5.59%
TRY 1-2.000	14	3.01%
TRY 2001-4.000	55	11.83%
TRY 4.001-6.000	99	21.29%
TRY 6.001-10.000	146	31.40%
Above TRY 10.000	125	26.88%
<b>Total</b>	465	100.00%

\* Respondents who skipped demographical questions were excluded.

The survey questions are as following;

**Table 2: Survey Questions-1**

<b>Demographic</b>	Your Gender
	Your Marital status
	Number of children you have
	Your Age
	Your Level of education
	Your Monthly Income
<b>Credit Question</b>	Did you use credit?
<b>Covid</b>	Have you used credit during the Covid-19 period?
	How did the social and economic conditions caused by Covid-19 affect your credit use?
<b>Factors taken into consideration (Credit)</b>	Can you rank the factors you take / would take into consideration when you use / used credit from 1 to 5 (1 being the most important, 5 being the least important) in order of importance?
	<input type="checkbox"/> Credit interest rates
	<input type="checkbox"/> General Outlook of the Economy
	<input type="checkbox"/> Easy access to credit (online channels, proximity to branches, etc.)
	<input type="checkbox"/> Political developments (elections, geopolitical risks, war, etc.)
	<input type="checkbox"/> Expectation for the future of the economy
<b>Factors that are Influential</b>	Would you rank the factors that are / would be influential when you decide / decided to use a credit from 1 to 5 (1 being the most important, 5 being the least important) in order of importance?
	<input type="checkbox"/> Arising the need (House, car, marriage, paid military service, etc.)
	<input type="checkbox"/> Having a cash shortage
	<input type="checkbox"/> Willingness to close another debt / credit
	<input type="checkbox"/> Decrease in credit interest rates
	<input type="checkbox"/> General Outlook of the Economy
<b>Factors taken into consideration (Bank Preference)</b>	Could you rank the factors you take / would take into consideration when you prefer / preferred a bank from 1 to 5 (1 being the most important, 5 being the least important) in order of importance?
	<input type="checkbox"/> Credit interest rate
	<input type="checkbox"/> Being previously worked with
	<input type="checkbox"/> Satisfaction with customer relations
	<input type="checkbox"/> Easy accessibility of the bank (online channels, branch proximity, etc.)
	<input type="checkbox"/> Giving credit with interest-free (Islamic) finance

**Table 3: Survey Questions-2**

	5 Point Likert Scale Questions
Factors taken into consideration (Credit)	If I use / used credit, credit interest rate is / would be the most important factor I take into consideration.
	If I use / used credit, I take / would take into consideration the general outlook of the economy.
	When I use / used credit, easy access to credit is / would be important for me.
	Political events are / would the factor I take into consideration when I use / used credit.
	When I use / used credit, I take / would take into consideration expectation for the future of the economy.
Factors that are Influential	Arising the needs such as house, car, marriage, paid military service is influential on my (possible) decision of credit use.
	Having cash shortage influences / would influence my (possible) decision of credit use.
	The willingness of closing another debt or credit has / would have an effect on my (possible) decision of credit use.
	Decrease in interest rate affects / would affect my (possible) decision of credit use.
	The general outlook of the economy is / would be influential on my (possible) decision of the credit use.
Factors taken into consideration (Bank Preference)	If I prefer / preferred bank, credit interest rate is / would be the most important factor on that.
	If I prefer / preferred bank, it is / would be important that the bank is previously worked with.
	When I prefer / preferred bank, satisfaction with customer relations has / would have influence on that.
	Easy access of a credit has an effect on my (possible) bank preference.
	Interest-free (Islamic) finance influences my (possible) bank preference.

### 3.3. HYPOTHESES

Şener, Yücel and Gündüzalp (2020) found that the main purposes of use of consumer credit during Covid-19 period in Turkey were compensating the cash shortage and closing another credit or debt. They revealed that 54,8% of the individuals used consumer credit to compensate cash shortage and 19,5% of them used it to close another credit or debt during Covid-19 period. Therefore, having cash shortage and willingness to close another debt or credit were added to the factors that are influential group 1 in the study.

The hypotheses tested by Structural Equation Model (SEM) are as following;

H1a: When the households use / used credit, credit interest rate is / would be the most important factor that households take into consideration.

H1b: When the households use / used credit, general outlook of the economy is / would be the factor taken into consideration by households.



H1c: When the households use / used credit, easy access to credit is / would be important.

H1d: When the households use / used credit, political developments are / would be the factor taken into consideration by households.

H1e: When the households uses / used credit, expectation for the future of the economy are / would be the factor that households take into consideration.

H1f: Arising the needs such as house, car, marriage and paid military service is influential on the (possible) decision of credit use of households.

H1g: Cash shortage of households influences the (possible) decision of credit use of households.

H1h: The willingness to close another debt or credit has an effect on the (possible) decision of credit use of households.

H1i: Decrease in interest rates affects the (possible) decision of credit use of households.

H1j: The general outlook of the economy is influential on (possible) decision of the credit use of households.

H1k: When the households prefer / preferred bank, credit interest rate is / would be the most important factor.

H1l: When the households prefer / preferred bank, it is / would be important that the bank is previously worked with.

H1m: When the households prefer / preferred bank, satisfaction with customer relations has / would have influence.

H1n: Easy accessibility of the bank has an effect on the (possible) bank preferences of households.

H1o: Interest-free (Islamic) finance influences the (possible) bank preferences of households.

H2a: The gender of individuals affects the credit use of households.

H2b: The marital situation of individuals influences the credit use of households.

H2c: The credit use of households is affected by the number of children individuals have.

H2d: The credit use of households is influenced by the age of individuals.

H2e: The education level of individuals has the effect on the credit use of households.

H2f: Monthly income level of individuals has the influence on the credit use of households.

H3a: Covid-19 period affects the credit use of households.

H3b: Economic and social conditions caused by Covid-19 pandemic influenced the credit use of households.

The hypotheses tested by t-test are following;

H4a: The gender of individuals affects the idea that credit interest rate is / would be the factor taken into consideration when households use / used credit.

H4b: The marital status of individuals affects the idea that credit interest rate is / would be the factor taken into consideration when households use / used credit.

H4c: The gender of individuals has influence on the idea that easy access to credit is / would be important when households use / used credit.

H4d: The marital status of individuals has influence on the idea that easy access to credit is / would be important when households use / used credit.

H4e: There is a relationship between the gender of individuals and the idea that arising the needs such as house, car, marriage and paid military service is influential on the (possible) decision of credit use of households.

H4f: There is a relationship between the marital status of individuals and the idea that arising the needs such as house, car, marriage and paid military service is influential on the (possible) decision of credit use of households.

H4g: There is a relationship between the gender of individuals and the idea that cash shortage of individuals affects the (possible) decision of credit use of households.

H4h: There is a relationship between the marital status individuals and the idea that cash shortage of individuals affects the (possible) decision of credit use of households.

H4i: There is a relationship between the gender of individuals and the idea that the willingness to close another debt or credit has an effect on the (possible) decision of credit use of households.

H4j: There is a relationship between the marital status of individuals and the idea that the willingness to close another debt or credit has an effect on the (possible) decision of credit use of households.

H4k: The gender of individuals affects the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank.

H4l: The marital situation of individuals affects the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank.

H4m: The gender of individuals affects the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank.

H4n: The marital status of individuals affects the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank.

H4o: The gender of individual affects the idea that satisfaction with customer relations has / would have influence on the bank preference.

H4p: The marital status of individual affects the idea that satisfaction with customer relations has / would have influence on the bank preference.

H4q: There is a relationship between the gender of individuals and the idea that easy accessibility of the bank is / would be influential on the bank preference.

H4r: There is a relationship between the marital status of individuals and the idea easy accessibility of the bank is / would be influential on the bank preference.

H4s: There is a relationship between the gender of individuals and the idea that interest free (Islamic) finance influence / would influence the bank preference of households.

H4t: There is a relationship between the marital status of individuals and the idea that interest free (Islamic) finance influence / would influence the bank preference of households.

The hypotheses tested by one-way ANOVA are following;

H5a: The number of children individuals have influences the idea that credit interest rate is / would be the factor taken into consideration when households use / used credit.

H5b: The age of individuals affects the idea that credit interest rate is / would be the factor taken into consideration when households use / used credit.

H5c: The education level of individuals affects the idea that credit interest rate is / would be the factor taken into consideration when households use / used credit.

H5d: The income level of individuals affects the idea the idea that credit interest rate is / would be the factor taken into consideration when households use / used credit.

H5e: The number of children individuals have influences the idea that easy access to credit is / would be important when households use / used credit.

H5f: The age of individuals has influence on the idea that easy access to credit is / would be important when households use / used credit.

H5g: The education level of individuals has influence on the idea that easy access to credit is / would be important when households use / used credit.

H5h: The income level of individuals has influence on the idea that easy access to credit is / would be important when households use / used credit.

H5i: There is a relationship between the number of children individuals have and the idea that arising the needs such as house, car, marriage and paid military service is influential on the (possible) decision of credit use of households.

H5j: There is a relationship between the age of individuals and the idea that arising the needs such as house, car, marriage and paid military service is influential on the (possible) decision of credit use of households.

H5k: The education level of individuals influences the idea that arising the needs such as house, car, marriage and paid military service is influential on the (possible) decision of credit use of households.

H5l: There is a relationship between the income level of individuals and the idea that arising the needs such as house, car, marriage and paid military service is influential on the (possible) decision of credit use of households.

H5m: There is a relationship between the number of children individuals have and the idea that cash shortage of individuals affects the (possible) decision of credit use of households.

H5n: There is a relationship between the age of individuals and the idea that cash shortage of individuals affects the (possible) decision of credit use of households.

H5o: The education level of individuals affects the idea that cash shortage of individuals affects the (possible) decision of credit use of households.

H5p: There is a relationship between the income level of individuals and the idea that cash shortage of individuals affects the (possible) decision of credit use of households.

H5q: There is a relationship between the number of children individuals have and the idea that the willingness to close another debt or credit has an effect on the (possible) decision of credit use of households.

H5r: There is a relationship between the age of individuals and the idea that the willingness to close another debt or credit has an effect on the (possible) decision of credit use of households.

H5s: The education level of individuals affects the idea that the willingness to close another debt or credit has an effect on the (possible) decision of credit use of households.

H5t: There is a relationship between the income level of individuals and the idea that the willingness to close another debt or credit has an effect on the (possible) decision of credit use of households.

H5u: The number of children individuals have affects the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank.

H5v: The age of individuals affects the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank.

H5w: The education level of individuals affects the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank.

H5x: The income level of individuals affects the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank.

H5y: The number of children individuals have affects the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank.

H5z: The age of individuals affects the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank.

H5ab: The education level of individual affects the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank.

H5ac: The income level of individual affects the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank.

H5ad: The number of children individuals have affects the idea that satisfaction with customer relations has / would have influence on the bank preference.

H5ae: The age of individuals affects the idea that satisfaction with customer relations has / would have influence on the bank preference.

H5af: The education level of individuals affects the idea that satisfaction with customer relations has / would have influence on the bank preference.

H5ag: The income level of individuals affects the idea that satisfaction with customer relations has / would have influence on the bank preference.

H5ah: There is a relationship between the number of children individuals have and the idea that easy accessibility of the bank is / would be influential on the bank preference.

H5ai: There is a relationship between the age of individuals and the idea that easy accessibility of the bank is / would be influential on the bank preference.

H5aj: The education level of individuals influences the idea that easy accessibility of the bank is / would be influential on the bank preference.

H5ak: There is a relationship between the income level of individuals and the idea that easy accessibility of the bank is / would be influential on the bank preference.

H5al: There is a relationship between the number of children individuals have and the idea that interest free (Islamic) finance influence / would influence the bank preference of households.

H5am: There is a relationship between the age of individuals and the idea that interest free (Islamic) finance influence / would influence the bank preference of households.

H5an: The education level of individuals affects the idea that interest free (Islamic) finance influence / would influence the bank preference of households.

H5ao: There is a relationship between the income level of individuals and the idea that interest free (Islamic) finance influence / would influence the bank preference of households.



## 4. RESULTS

Hypotheses tested by T-test, One-Way ANOVA and SEM are alternative hypotheses. When the p value > significance level, the alternative hypothesis is rejected.

### 4.1. T-TEST RESULTS

H4a and H4c claim that there is a relationship between the gender of individuals and the factors taken into consideration group 1. Since the significance level (0.303) > 0.01, 0.05 and 0.10 equal variances are assumed. The p value (0.602) > 0.01, 0.05 and 0.10; therefore, the hypotheses were rejected. This result indicates that there is no significant difference between means of gender groups.

**Table 4: T test for H4a and H4c Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Factors taken into consideration group 1	Equal variances assumed	1.064	0.303	-0.522	338	0.602	-0.024	0.046	-0.114	0.066
	Equal variances not assumed			-0.515	232.545	0.607	-0.024	0.046	-0.115	0.068

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4b and H4d propose that there is a relationship between the marital status of individuals and the factors taken into consideration group 1. Since the significance level (0.769) > 0.01, 0.05 and 0.10 equal variances are assumed. The p value (0.883) > 0.01, 0.05 and 0.10; hence, the hypotheses were rejected which means there is no significant difference between means of marital status groups.

**Table 5: T test for H4b and H4d Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Factors taken into considiration group 1	Equal variances assumed	0.086	0.769	-0.147	338	0.883	-0.006	0.044	-0.093	0.080
	Equal variances not assumed			-0.147	326.225	0.883	-0.006	0.044	-0.093	0.080

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4e, H4g and H4i predict a relationship between the gender of individuals and the factors that are influential group 1. Since the significance level 0.000, equal variances are not assumed. The hypotheses were rejected for 5% confidence interval since the p value (0.056) > 0.05, whereas they were not rejected for 10% significance level. Therefore, there can be seen a statistically significant difference between means of gender groups for 10% confidence level.

The group statistics table indicates that mean of females is higher than mean of males. This result concludes that factors which are influential group 1 have more effect in the decision of females compared to males when they use credit.

**Table 6: T test for H4e, H4g and H4i Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Factors that are influential group 1	Equal variances assumed	13.234	0.000	1.750	338	0.081	0.059	0.034	-0.007	0.125
	Equal variances not assumed			1.918	307.743	0.056*	0.059	0.031	-0.002	0.119

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

**Table 7: T test Group Statistics for H4e, H4g and H4i**

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Factors that are influential Group1	Females	119	0.941	0.236	0.022
	Males	221	0.882	0.323	0.022

H4f, H4h and H4j claim that there is a relationship between the marital status of individuals and factors that are influential group 1. Since the significance level is 0.484, equal variances are assumed. The hypotheses were rejected; because the p value (0.726) >0.01, 0.05 and 0.10 which means there is no significant difference between means of marital status groups.

**Table 8: T test for H4f, H4h and H4j Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Factors that are influential group 1	Equal variances assumed	0.491	0.484	-0.351	338	0.726	-0.011	0.032	-0.075	0.052
	Equal variances not assumed			-0.349	321.074	0.727	-0.011	0.032	-0.075	0.053

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4k proposes that the gender of individuals affects the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank. Since the significance level is 0.000 equal variances are not assumed. The hypothesis was not rejected because the p value (0.003) < 0.01, 0.05 and 0.10 which means that there is a significant relation between the means of gender groups.

The group statistics table indicates that mean of females is higher than mean of males. This result concluded that credit interest rate is more important for females compared to males when they prefer bank.

**Table 9: T test for H4k Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Bank preference credit interest rate	Equal variances assumed	34.844	0.000	2.705	338	0.007	0.116	0.043	0.032	0.201
	Equal variances not assumed			2.964	307.749	.003***	0.116	0.039	0.039	0.194

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

**Table 10: T test Group Statistics for H4k**

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Bank preference credit interest rate	Females	119	0.899	0.302	0.028
	Males	221	0.783	0.413	0.028

H4l proposes that the marital status of individuals affects the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank. Equal variances are assumed because the significance level is 0.178. The hypothesis was rejected since the p value (0.503) > 0.01, 0.05 and 0.10 which means that there is no statistically significant relation between means of marital status groups.

**Table 11: T test for H4l Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Bank preference credit interest rate	Equal variances assumed	1.819	0.178	0.671	338	0.503	0.028	0.042	-0.054	0.110
	Equal variances not assumed			0.674	333.562	0.501	0.028	0.041	-0.053	0.109

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4m predicts the relation between the gender of individuals and the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank. Since the significance level (0.048) < 0.05 and 0.10, equal variance is not assumed for 5% and 10% confidence intervals, it is assumed for 1% confidence interval (0.048 > 0.01). The hypothesis was rejected for 5% and 10% confidence intervals since the p value (0.332) > 0.05 and 0.10. It's rejected for 1% confidence interval level as well, since the p value (0.333) > 0.01.

**Table 12: T test for H4m Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Bank preference previously worked with	Equal variances assumed	3.954	0.048	-0.969	338	0.333	-0.055	0.057	-0.167	0.057
	Equal variances not assumed			-0.972	243.734	0.332	-0.055	0.057	-0.166	0.056

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4n which claims that the marital status of individuals affects the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank is rejected. Since the significance level is 0.344 equal variances are assumed and since the p value (0.610) >0.01, 0.05 and 0.10, there can't be seen a statistical significant relation between the marital status group.

**Table 13: T test for H4n Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Bank preference previously worked with	Equal variances assumed	0.898	0.344	0.510	338	0.610	0.028	0.054	-0.079	0.135
	Equal variances not assumed			0.510	327.048	0.611	0.028	0.054	-0.079	0.135

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4o proposes that the gender of individual affects the idea that satisfaction with customer relations has / would have influence on the bank preference. Since the significance level  $0.069 < 0.10$ , equal variance is not assumed for 10%, confidence interval, it is assumed for 5% confidence interval ( $0.069 > 0.05$ ). The hypothesis was rejected because the p value (0.362) >0.10 for 10% confidence level and it's rejected for 5% confidence level as well (The p value  $0.374 > 0.05$  and 0.01).

**Table 14: T test for H4o Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Bank preference satisfaction with customer relations	Equal variances assumed	3.316	0.069	-0.891	338	0.374	-0.039	0.044	-0.126	0.048
	Equal variances not assumed			-0.914	259.769	0.362	-0.039	0.043	-0.124	0.046

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4p estimates the relation between the marital status of individuals and the idea that satisfaction with customer relations has / would have influence on the bank preference. Since the significance level is 0.476, equal variances are assumed. The hypothesis was rejected since the p value (0.721) > 0.01, 0.05 and 0.10, which means there is no statistical significant relation between the marital status group.

**Table 15: T test for H4p Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Bank preference satisfaction with customer relations	Equal variances assumed	0.510	0.476	0.358	338	0.721	0.015	0.042	-0.068	0.099
	Equal variances not assumed			0.357	323.790	0.722	0.015	0.043	-0.069	0.099

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4q proposes the relation between the gender of individuals and the idea that easy accessibility of the bank is / would be influential on the bank preference.



Equal variance is assumed because significance level is 0.139. Since the p value (0.469) > 0.01, 0.05 and 0.10, the hypothesis was rejected which means no statistical relation was found between the gender groups.

**Table 16: T test for H4q Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Bank preference easy accessibility of the bank	Equal variances assumed	2.203	0.139	-0.725	338	0.469	-0.036	0.050	-0.134	0.062
	Equal variances not assumed			-0.735	251.305	0.463	-0.036	0.049	-0.133	0.061

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4r claims that there is a relationship between marital status of individuals and the idea that easy accessibility of the bank is / would be influential on the bank preference. Since the significance level is 0.004, equal variance is not assumed. The hypothesis was rejected because the p value (0.148) > 0.01, 0.05 and 0.10 which means there is no statistical relation between the means of marital status groups.

**Table 17: T test for H4r Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Bank preference easy accessibility of the bank	Equal variances assumed	8.374	0.004	1.463	338	0.144	0.070	0.048	-0.024	0.164
	Equal variances not assumed			1.452	316.029	0.148	0.070	0.048	-0.025	0.164

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4s estimates the relation between the gender of individuals the idea that interest free (Islamic) finance influence / would influence the bank preference of households. Significance level is 0.581 meaning equal variance is assumed. Since the p value (0.781) > 0.01, 0.05 and 0.10 the hypothesis was rejected which means there is no significant relation between the means of gender groups.

**Table 18: T test for H4s Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Bank preference interest free (Islamic) finance	Equal variances assumed	0.305	0.581	0.279	338	0.781	0.014	0.051	-0.086	0.115
	Equal variances not assumed			0.277	238.059	0.782	0.014	0.051	-0.087	0.115

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H4t states that there is a relation between the marital status of individuals and the idea that interest free (Islamic) finance influence / would influence the

bank preference of households. Equal variance is not assumed since the significance level is 0.000. The p value (0.003) <0.01, 0.05 and 0.10; as a result, the hypothesis was not rejected which means that there is a statistically significant relationship between the means of marital status groups.

The group statistics table indicates that mean of married individuals is higher than mean of single ones. This result concluded that interest free (Islamic) finance is more important for married individuals compared to singles when they prefer bank.

**Table 19: T test for H4t Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P value (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Bank preference interest free (Islamic) finance	Equal variances assumed	36.145	0.000	-2.913	338	0.004	-0.141	0.048	-0.235	-0.046
	Equal variances not assumed			-2.957	337.976	0.003***	-0.141	0.048	-0.234	-0.047

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

**Table 20: T test Group Statistics for H4t**

	Marital Status	N	Mean	Std. Deviation	Std. Error Mean
Bank preference interest free (Islamic) finance	Single	155	0.200	0.401	0.032
	Married	185	0.341	0.475	0.035

## 4.2. ONE-WAY ANOVA RESULTS

Since the p-value (0.497)  $> 0.01$ , 0.05 and 0.10 H5a and H5e were rejected. The result indicates that the number of children individuals have doesn't influence the factors taken into consideration group 1.

**Table 21: ANOVA Analysis of H5a and H5e**

ANOVA					
Factors taken into consideration group 1					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.550	4	.137	.846	.497
Within Groups	54.447	335	.163		
Total	54.997	339			

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

Since the p-value (0.222)  $> 0.01$ , 0.05 and 0.10 H5b and H5f were rejected. This result shows that the age of individuals doesn't affect the factors taken into consideration group 1.

**Table 22: ANOVA Analysis of H5b and H5f**

ANOVA					
Factors taken into consideration group 1					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.926	4	.232	1.435	.222
Within Groups	54.071	335	.161		
Total	54.997	339			

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

H5c and H5g which claims that the education level of individuals influences the factors taken into consideration group 1 were rejected. The p value

(0.354) > 0.01, 0.05 and 0.10 resulting that there is no statistically significant relationship between the means of education groups.

**Table 23: ANOVA Analysis of H5c and H5g**

ANOVA					
Factors taken into consideration group 1					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.530	3	.177	1.089	.354
Within Groups	54.467	336	.162		
Total	54.997	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5d and H5h which estimate the relationship between the income level of individuals and the factors taken into consideration group 1 were rejected. The reason is p value (0.528) > 0.01, 0.05 and 0.10 indicating that there is no statistically significant relationship between the means of factors.

**Table 24: ANOVA Analysis of H5d and H5h**

ANOVA					
Factors taken into consideration group 1					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.676	5	.135	.831	.528
Within Groups	54.321	334	.163		
Total	54.997	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

Since the p value (0.915) > 0.01, 0.05 and 0.10 H5i, H5m and H5q were rejected. The result clarifies that there is no statistically significant relationship between the number of children individuals have and the factors that are influential group 1.

**Table 25: ANOVA Analysis of H5i, H5m and H5q**

**ANOVA**

Factors that are influential group 1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.086	4	.021	.241	.915
Within Groups	29.711	335	.089		
Total	29.797	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

Since the p value (0.240) >0.01, 0.05 and 0.10 H5j, H5n and H5r were rejected. The result indicates that there is no statistically significant relationship between the age of individuals and the factors that are influential group 1.

**Table 26: ANOVA Analysis of H5j, H5n and H5r**

**ANOVA**

Factors that are influential group 1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.483	4	.121	1.381	.240
Within Groups	29.314	335	.088		
Total	29.797	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5k, H5o, H5s that the education level of individuals affects the factors that are influential group 1 are rejected. The p value (0.805) >0.01, 0.05 and 0.10 resulting that there is no statistically significant relationship between the means of factors.

**Table 27: ANOVA Analysis of H5k, H5o and H5s****ANOVA**

Factors that are influential group 1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.087	3	.029	.328	.805
Within Groups	29.710	336	.088		
Total	29.797	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5l, H5p, H5t that there is a relation between the income level of individuals and the factors that are influential group 1 are rejected. The reason behind the rejection is the p value (0.466) >0.01, 0.05 and 0.10 indicating that there is no relation between the means of factors.

**Table 28: ANOVA Analysis of H5l, H5p and H5t****ANOVA**

Factors that are influential group 1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.406	5	.081	.923	.466
Within Groups	29.391	334	.088		
Total	29.797	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

Since the p value (0.134) >0.01, 0.05 and 0.10 H5u is rejected. This result indicates the number of children doesn't affect the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank.

**Table 29: ANOVA Analysis of H5u****ANOVA**

Bank preference credit interest rate

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.023	4	.256	1.770	.134
Within Groups	48.389	335	.144		
Total	49.412	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5v that there is a relation between the age of individuals and the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank is rejected. The p value (0.754) >0.01, 0.05 and 0.10 meaning that there is no statistically significant difference between the means of age groups.

**Table 30: ANOVA Analysis of H5v****ANOVA**

Bank preference credit interest rate

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.278	4	.070	.475	.754
Within Groups	49.133	335	.147		
Total	49.412	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5w which proposes that the education level of individuals affects the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank is rejected. Since the p value (0.815) >0.01, 0.05 and 0.10 resulting that there is no statistically significant relation between the means of education level groups.



**Table 31: ANOVA Analysis of H5w****ANOVA**

Bank preference credit interest rate

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.138	3	.046	.314	.815
Within Groups	49.274	336	.147		
Total	49.412	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

Since the p value (0.743) > 0.01, 0.05 and 0.10 the H5x is rejected. The result shows that there is no statistically significant relation between the income level of individuals and the idea that credit interest rate is / would be the most important factor when households prefer / preferred bank.

**Table 32: ANOVA Analysis of H5x****ANOVA**

Bank preference credit interest rate

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.399	5	.080	.544	.743
Within Groups	49.012	334	.147		
Total	49.412	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5y that there is a relation between the number of children individuals have and the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank is rejected. The reason is the p value (0.158) > 0.01, 0.05 and 0.10 which results that there is no statistically significant relation between the means of number of children groups.

**Table 33: ANOVA Analysis of H5y****ANOVA**

Bank preference previously worked with

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.642	4	.411	1.663	.158
Within Groups	82.696	335	.247		
Total	84.338	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

Since the p value (0.546) > 0.01, 0.05 and 0.10 the H5z is rejected. The result indicates that there is no statistically significant relation between the age of individuals and the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank.

**Table 34: ANOVA Analysis of H5z****ANOVA**

Bank preference previously worked with

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.768	4	.192	.769	.546
Within Groups	83.570	335	.249		
Total	84.338	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5ab proposes that the education level of individuals affects the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank. Since the p value (0.656) > 0.01, 0.05 and 0.10, the hypothesis is rejected which results that there is no statistically significant relation between the means of education level groups.

**Table 35: ANOVA Analysis of H5ab****ANOVA**

Bank preference previously worked with

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.403	3	.134	.538	.656
Within Groups	83.935	336	.250		
Total	84.338	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5ac that there is a relation between the income level of individuals and the idea that it is / would be crucial that the bank is previously worked with when households prefer / preferred bank is rejected. The p value (0.236) >0.01, 0.05 and 0.10 meaning that there is no statistically significant difference between the means of income level groups.

**Table 36: ANOVA Analysis of H5ac****ANOVA**

Bank preference previously worked with

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.692	5	.338	1.368	.236
Within Groups	82.646	334	.247		
Total	84.338	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

Since the p value (0.483) >0.01, 0.05 and 0.10 the H5ad is rejected. The result indicates that that there is no statistically significant relation between the number of children individuals have and the idea that satisfaction with customer relations has / would have influence on the bank preference.

**Table 37: ANOVA Analysis of H5ad****ANOVA**

Bank preference satisfaction with customer relations

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.527	4	.132	.869	.483
Within Groups	50.800	335	.152		
Total	51.326	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5ae which proposes that the age of individuals affects the idea that satisfaction with customer relations has / would have influence on the bank preference is rejected. Since the p value (0.539) >0.01, 0.05 and 0.10 resulting that there is no statistically significant relation between the means of age groups.

**Table 38: ANOVA Analysis of H5ae****ANOVA**

Bank preference satisfaction with customer relations

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.474	4	.118	.780	.539
Within Groups	50.853	335	.152		
Total	51.326	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5af that the education level of individuals influence the idea that satisfaction with customer relations has / would have influence on the bank preference is rejected. The p value (0.951) >0.01, 0.05 and 0.10 meaning that there is no statistically significant difference between the means of education level groups.

**Table 39: ANOVA Analysis of H5af****ANOVA**

Bank preference satisfaction with customer relations

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.053	3	.018	.115	.951
Within Groups	51.274	336	.153		
Total	51.326	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5ag claims that there is a relation between the income level of individuals and the idea that the idea that satisfaction with customer relations has / would have influence on the bank preference. The hypothesis was rejected since the p value (0.985) >0.01, 0.05 and 0.10 meaning that there is no statistically significant difference between the means of income level groups.

**Table 40: ANOVA Analysis of H5ag****ANOVA**

Bank preference satisfaction with customer relations

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.101	5	.020	.132	.985
Within Groups	51.226	334	.153		
Total	51.326	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

Since the p value (0.505) >0.01, 0.05 and 0.10 H5ah is rejected. This concluded that there is no statistically significant relation between the number of children individuals have and the idea easy accessibility of the bank is / would be influential on the bank preference.

**Table 41: ANOVA Analysis of H5ah**

ANOVA					
Bank preference easy accessibility of the bank					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.642	4	.161	.833	.505
Within Groups	64.581	335	.193		
Total	65.224	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5ai proposes that the age of individuals affects the idea that easy accessibility of the bank is / would be influential on the bank preference. Whereas the hypothesis was not rejected for 5% confidence interval level, it's rejected for 1% confidence interval level since the p value (0.05). Games-Howell analysis was applied since the rejection of equal variances assumed. In the analysis, there can be seen a statistically significant difference between above 60 age group and 18-25 age group for 5% confidence interval. On the other hand, this statistically significant difference exists between above 60 age group and 26-40 and 41-50 age groups for 1% significance level. In conclusion, easy accessibility of the bank is more influential on the bank preference of 18-25, 26-40 and 41-50 age groups compared to above 60 age group for confidence intervals mentioned above. No statistical relation was found between above 60 age group and 51-60 age group.

Age groups were shown in the Games-Howell tables with numbers from 1 to 5. Corresponding age intervals for the numbers are as following;

**Table 42: Corresponding Age Intervals for the Numbers**

1	2	3	4	5
18-25	26-40	41-50	51-60	Above 60

**Table 43: ANOVA Analysis of H5ai**

**ANOVA**

Bank preference easy accessibility of the bank

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.817	4	.454	2.400	.050**
Within Groups	63.406	335	.189		
Total	65.224	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

**Table 44: The mean differences of age groups concerning easy accessibility of the bank**

**Multiple Comparisons**

Dependent Variable: Bank preference easy accessibility of the bank

Games-Howell

(I) Age Group	(J) Age Group	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.105	.067	.519	-.29	.08
	3	-.229	.103	.183	-.52	.06
	4	.028	.085	.997	-.21	.26
	5	.171**	.059	.048	.00	.34
2	1	.105	.067	.519	-.08	.29
	3	-.124	.089	.634	-.38	.13
	4	.133	.067	.290	-.06	.32
	5	.276***	.030	.000	.19	.36
3	1	.229	.103	.183	-.06	.52
	2	.124	.089	.634	-.13	.38
	4	.257	.103	.106	-.03	.55
	5	.400***	.084	.000	.16	.64
4	1	-.028	.085	.997	-.26	.21
	2	-.133	.067	.290	-.32	.06
	3	-.257	.103	.106	-.55	.03
	5	.143	.060	.145	-.03	.32
5	1	-.171**	.059	.048	-.34	.00
	2	-.276***	.030	.000	-.36	-.19
	3	-.400***	.084	.000	-.64	-.16
	4	-.143	.060	.145	-.32	.03

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

Since the p value (0.262) > 0.01, 0.05 and 0.10 H5aj is rejected. The result indicates that the education level of individuals doesn't have statistically significant influence on the idea that easy accessibility of the bank to credit is / would be influential on the bank preference.



**Table 45: ANOVA Analysis of H5aj**

ANOVA					
Bank preference easy accessibility of the bank					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.769	3	.256	1.336	.262
Within Groups	64.454	336	.192		
Total	65.224	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5ak claims that there is a relation between the income level of individuals and the idea that easy accessibility of the bank is / would be influential on the bank preference. The hypothesis was rejected since the p value (0.906) >0.01, 0.05 and 0.10 meaning that there is no statistically significant difference between the means of income level groups.

**Table 46: ANOVA Analysis of H5ak**

ANOVA					
Bank preference easy accessibility of the bank					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.303	5	.061	.312	.906
Within Groups	64.921	334	.194		
Total	65.224	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5al proposes that the number of children individuals have affects the idea that interest free (Islamic) finance influence / would influence the bank preference of households. Since the p value (0.000) <0.01, 0.05 and 0.10, the hypothesis was not rejected. Games-Howell analysis was applied because the rejection of equal variances assumed.

In this analysis, there can be seen statistically significant difference between the individuals with 3 children and the ones with 1 child for 5%

significance level. On the other hand, this relation is observable between the individuals with 3 children and the ones with 2 children and without child for 1% significance level. In conclusion, individuals with 3 children take more seriously the interest free (Islamic) finance compared to the ones with 0, 1 and 2 children for confidence levels mentioned above. No statistical relation was found between the individuals with 3 children and the ones with more than 3 children.

**Table 47: ANOVA Analysis of H5a1**

**ANOVA**

Bank preference interest free (Islamic) finance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.191	4	1.798	9.902	***.000
Within Groups	60.821	335	.182		
Total	68,012	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

**Table 48: The mean differences of the number of children individuals have in terms of the interest free (Islamic) finance**

**Multiple Comparisons**

Dependent Variable: Bank preference interest free (Islamic) finance

Games-Howell

(I) Number of children	(J) Number of children	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
0	1	-.133	.072	.357	-.34	.07
	2	-.081	.066	.741	-.27	.10
	3	-.550***	.103	.000	-.86	-.24
	3+	-.514	.187	.151	-1.20	.18
1	0	.133	.072	.357	-.07	.34
	2	.053	.090	.977	-.20	.30
	3	-.417**	.120	.011	-.76	-.07
	3+	-.381	.196	.372	-1.07	.30
2	0	.081	.066	.741	-.10	.27
	1	-.053	.090	.977	-.30	.20
	3	-.469***	.116	.003	-.80	-.13
	3+	-.434	.194	.265	-1.12	.25
3	0	.550***	.103	.000	.24	.86
	1	.417**	.120	.011	.07	.76
	2	.469***	.116	.003	.13	.80
	3+	.036	.209	1.000	-.66	.73
3+	0	.514	.187	.151	-.18	1.20
	1	.381	.196	.372	-.30	1.07
	2	.434	.194	.265	-.25	1.12
	3	-.036	.209	1.000	-.73	.66

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5am claims that there is a relationship between the age of individuals and the idea that interest free (Islamic) finance influence / would influence the bank preference of households. The hypothesis was not rejected since the p value (0.001) < 0.01, 0.05 and 0.10 which means there is a relation between the means of age groups. Games-Howell analysis was applied since the rejection of equal

variances assumed. Whereas there is a statistically significant relation between 51-60 age group and 18-25 age group for 10% confidence interval level, this relation exists between 51-60 age group and 26-40 and 41-50 age groups for 1% confidence interval. No statistically significant relation was found between 51-60 age groups and above 60 age group. The analysis concluded that interest free (Islamic) finance is more important for 51-60 age group compared to 18-25, 26-40 and 41-50 age groups for confidence levels mentioned above.

**Table 49: ANOVA Analysis of H5am**

**ANOVA**

Bank preference interest free (Islamic) finance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.608	4	.902	4.692	***.001
Within Groups	64.404	335	.192		
Total	68.012	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

**Table 50: The mean differences of age groups concerning the interest free (Islamic) finance**

**Multiple Comparisons**

Dependent Variable: Bank preference interest free (Islamic) finance

Games-Howell

(I) Age Interval	(J) Age Interval	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
1	2	.019	.076	.999	-.19	.23
	3	.097	.095	.847	-.17	.36
	4	-.303*	.110	.056	-.61	.01
	5	.018	.260	1.000	-1.23	1.26
2	1	-.019	.076	.999	-.23	.19
	3	.077	.071	.809	-.12	.28
	4	-.323***	.090	.007	-.58	-.07
	5	-.001	.252	1.000	-1.31	1.31
3	1	-.097	.095	.847	-.36	.17
	2	-.077	.071	.809	-.28	.12
	4	-.400***	.107	.003	-.70	-.10
	5	-.079	.258	.997	-1.33	1.18
4	1	.303*	.110	.056	-.01	.61
	2	.323***	.090	.007	.07	.58
	3	.400***	.107	.003	.10	.70
	5	.321	.264	.747	-.90	1.54
5	1	-.018	.260	1.000	-1.26	1.23
	2	.001	.252	1.000	-1.31	1.31
	3	.079	.258	.997	-1.18	1.33
	4	-.321	.264	.747	-1.54	.90

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.

Since the p value (0.841) > 0.01, 0.05 and 0.10 H5an is rejected. The result indicates that there is no statistically significant relation between the education level of individuals and the idea that interest free (Islamic) finance influence / would influence the bank preference of households.

**Table 51: ANOVA Analysis of H5an**

ANOVA					
Bank preference interest free (Islamic) Finance					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.169	3	.056	.279	.841
Within Groups	67.843	336	.202		
Total	68.012	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

H5ao claims that there is a relationship between the income level of individuals and the idea that interest free (Islamic) finance influence / would influence the bank preference of households. Since the p value (0.029), the hypothesis was not rejected for the 5% and 10% confidence interval levels; on the other hand, it is rejected for 1% confidence interval level. After the analysis it was concluded that there can be seen a significant difference between the means of income level groups for 5% and 10% confidence interval levels, this difference does not exist for 1% confidence interval level.

Games-Howell analysis was applied since the rejection of equal variances assumed. Whereas there is a statistically significant relation between the 6.001-10.000 TRY and above 10.000 TRY monthly income groups for 5% confidence intervals level, it can't be seen any significant relation between other monthly income groups. The analysis indicated that interest free (Islamic) finance is more influential in the decision of 6.001-10.000 TRY income group compared to above 10.000 TRY income group for 5% confidence level.

Monthly income groups were shown in the Games-Howell tables with numbers from 1 to 6. Corresponding monthly income levels for the numbers are following;

**Table 52: Corresponding Monthly Income Levels for the Numbers**

0 TRY	1-2.000 TRY	2.0001-4.000 TRY	4.001-6.000 TRY	6.001-10.000 TRY	Above 10.000 TRY
1	2	3	4	5	6

**Table 53: ANOVA Analysis of H5ao**

#### ANOVA

Bank preference interest free (Islamic) finance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.477	5	.495	2.525	.029 **
Within Groups	65.535	334	.196		
Total	68.012	339			

“\*\*\*”, “\*\*” and “\*” indicate significance at 1%, 5% and 10% respectively.

**Table 54: The mean differences of income levels concerning interest free (Islamic) finance****Multiple Comparisons**

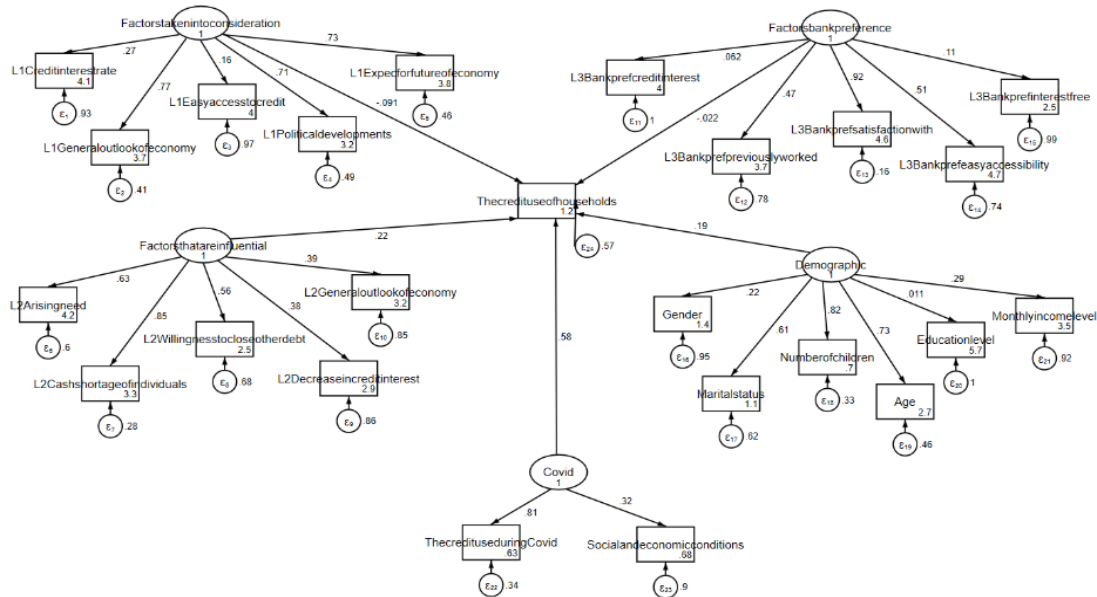
Dependent Variable: Bank preference interest free (Islamic) finance  
Games-Howell

(I) Monthly Income Level	(J) Monthly Income Level	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
1	2	0.201	0.163	.816	-0.31	0.71
	3	0.005	0.141	1.000	-0.43	0.44
	4	0.102	0.131	0.969	-0.31	0.51
	5	-0.067	0.128	0.995	-0.47	0.34
	6	0.118	0.126	0.931	-0.28	0.52
2	1	-0.201	0.163	0.816	-0.71	0.31
	3	-0.197	0.134	0.688	-0.63	0.23
	4	-0.099	0.124	0.962	-0.51	0.32
	5	-0.268	0.120	0.296	-0.68	0.14
	6	-0.083	0.118	0.977	-0.49	0.33
3	1	-0.005	0.141	1.000	-0.44	0.43
	2	0.197	0.134	0.688	-0.23	0.63
	4	0.097	0.093	0.899	-0.17	0.37
	5	-0.072	0.087	0.963	-0.33	0.18
	6	0.114	0.084	0.760	-0.14	0.36
4	1	-0.102	0.131	0.969	-0.51	0.31
	2	0.099	0.124	0.962	-0.32	0.51
	3	-0.097	0.093	0.899	-0.37	0.17
	5	-0.169	0.071	0.170	-0.37	0.04
	6	0.016	0.067	1.000	-0.18	0.21
5	1	0.067	0.128	0.995	-0.34	0.47
	2	0.268	0.120	0.296	-0.14	0.68
	3	0.072	0.087	0.963	-0.18	0.33
	4	0.169	0.071	0.170	-0.04	0.37
	6	0.185**	0.060	0.027	0.01	0.36
6	1	-0.118	0.126	0.931	-0.52	0.28
	2	0.083	0.118	0.977	-0.33	0.49
	3	-0.114	0.084	0.760	-0.36	0.14
	4	-0.016	0.067	1.000	-0.21	0.18
	5	-0.185**	0.060	0.027	-0.36	-0.01

\*\*\*, \*\* and \* indicate significance at 1%, 5% and 10% respectively.



### 4.3. STRUCTURAL EQUATION MODEL (SEM) RESULTS



**Figure 1: Structural Equation Model**

Above figure includes 5 latent variables that have effect on the credit use of households. The observed variables below the “Factors taken into consideration”, “Factors that are influential” and “Factors bank preference” latent variables are comprised of 5 Point Likert Scale questions from the survey conducted. For this reason, the letter of “L” was added to the beginning of the name of these observed variables.

The results indicated that latent variable of “Factors taken into consideration” has a negative but weak influence on the credit use of households for 10% confidence interval (s.e.=.054, p value (0.092) <0.10,  $\beta$ =-0.091). The latent variable of “Factors for the bank preference” doesn’t have statistically significant effect on the credit use of households (s.e.=0.053, p value (0.671) >0.10,  $\beta$ =-0.022). On the other hand, the latent variables of “Covid-19”, “Factors that are influential” and “Demographic” have statistically significant influence on the credit use of households. Whereas “Covid-19” has the most powerful effect ( $\beta$

= 0.580), “Factors that are influential” and “Demographic” second and third most influential factors after “Covid-19” ( $\beta=0.224$  and  $\beta=0.189$ , respectively).

**Table 55: SEM Results of Hypotheses**

<b>SEM RESULTS</b>			
Standardized Estimates			
<b>Variable Name</b>	<b>Coefficient</b>	<b>Standard Error</b>	<b>P Value</b>
<b>Factors taken into consideration (Latent)</b>	<b>-0.091</b>	<b>0.054</b>	<b>0.092</b>
L1 Credit interest rate	0.272	0.058	0.000
L1 General outlook of economy	0.766	0.037	0.000
L1 Easy access to credit	0.164	0.060	0.007
L1 Political developments	0.711	0.038	0.000
L1 Expectation for future of economy	0.734	0.039	0.000
<b>Factors that are influential (Latent)</b>	<b>0.224</b>	<b>0.054</b>	<b>0.000</b>
L2 Arising the need	0.629	0.043	0.000
L2 Having cash shortage	0.847	0.038	0.000
L2 Willing closing other debt or credit	0.563	0.045	0.000
L2 Decrease in interest	0.380	0.056	0.000
L2 General outlook of economy	0.391	0.055	0.000
<b>Bank preferences factors (Latent)</b>	<b>-0.022</b>	<b>0.053</b>	<b>0.671</b>
L3 Bank preferences credit interest rates	0.062	0.061	0.312
L3 Bank preferences previously worked with	0.469	0.061	0.000
L3 Bank preferences satisfaction with	0.919	0.086	0.000
L3 Bank preferences easy accessibility of bank	0.507	0.061	0.000
L3 Bank preferences interest free (Islamic) finance	0.113	0.059	0.057
<b>Demographic (Latent)</b>	<b>0.189</b>	<b>0.051</b>	<b>0.000</b>
Gender	0.217	0.059	0.000
Marital Status	0.613	0.043	0.000
Number of children	0.818	0.037	0.000
Age	0.733	0.038	0.000
Education Level	0.011	0.062	0.853
Monthly Income Level	0.288	0.060	0.000
<b>Covid-19 (Latent)</b>	<b>0.580</b>	<b>0.082</b>	<b>0.000</b>
The use of credit during Covid-19	0.812	0.103	0.000
The effects of social and economic conditions	0.318	0.063	0.000

H1a claims that credit interest rate is / would be the most important factor that households take into consideration when the households uses / used credit. The hypothesis was failed to be rejected (s.e.=0.058, p value (0.000) <0.01,  $\beta$ =0.272).

H1b proposes that general outlook of the economy is / would be the factor taken into consideration by households when they use / used credit. The hypothesis was failed to be rejected (s.e.=0.037, p value (0.000) <0.01,  $\beta$ =0.766).

H1c suggests that easy access to credit is / would be the factor taken into consideration by households when they use / used credit. The hypothesis was not rejected (s.e.=0.060, p value (0.007) <0.01,  $\beta$ =0.164).

H1d estimates that political developments are / would be the factor taken into consideration by households when they use / used credit. The hypothesis was failed to be rejected (s.e.=0.038, p value (0.000) <0.01,  $\beta$ =0.711).

H1e states that expectation for the future of the economy are / would be the factor that households take into consideration when they use / used credit. The hypothesis was failed to be rejected (s.e.=0.039, p value (0.000) <0.01,  $\beta$ =0.734).

The general outlook of the economy, expectation for the future of the economy and political developments are remarkable factors that households take into consideration when they use credit ( $\beta$ =0.766,  $\beta$ =0.734 and  $\beta$ =0.711 respectively). On the other hand, credit interest rates and easy access to credit are the factors which have relatively lower importance in terms of taking into consideration when households use credit ( $\beta$ =0.272 and  $\beta$ =0.164, respectively).

H1f claims that arising the needs such as house, car, marriage and paid military service is influential on the (possible) decision of credit use of households. The hypothesis was not rejected (s.e.=0.043, p value (0.000) <0.01,  $\beta$ =0.629).

H1g proposes that cash shortage of households influences the (possible) decision of credit use of households. The hypothesis was failed to be rejected (s.e.=0.038, p value (0.000) <0.01,  $\beta$ =0.847).

H1h suggests that the willingness to close another debt or credit has an effect on the (possible) decision of credit use of households. The hypothesis was not rejected (s.e.=0.045, p value (0.000) <0.01,  $\beta$ =0.563).

H1i estimates that decrease in interest rates affects the (possible) decision of credit use of households. The hypothesis was failed to be rejected (s.e.=0.056, p value (0.000) <0.01,  $\beta$ =0.380).

H1j states that the general outlook of the economy is influential on (possible) decision of the credit use of households. The hypothesis was not rejected (s.e.= 0.055, p value (0.000) <0.01,  $\beta$ =0.391).

Cash shortage of households has a remarkable effect on the (possible) decision of credit use of households ( $\beta$ =0.847). After that, arising the need and willingness to close another debt or credit have important effect on that ( $\beta$ =0.629 and  $\beta$ = 0.563, respectively). The general outlook of the economy and decrease in interest rates have relatively poor effect on the (possible) decision of credit use of households ( $\beta$ =0.391 and  $\beta$ =0.380, respectively).

H1k claims that credit interest rate is / would be the most important factor when the households prefer / preferred bank. The hypothesis was rejected (s.e.=0.061, p value (0.312) >0.01, 0.05 and 0.10,  $\beta$ =0.062).

H1l proposes that it is / would be important that the bank is previously worked with when the households prefer / preferred bank. The hypothesis was failed to be rejected (s.e.=0.061, p value (0.000) <0.01,  $\beta$ =0.469).

H1m suggests that satisfaction with customer relations has / would have influence on the (possible) bank preference of households. The hypothesis was not rejected (s.e.=0.086, p value (0.000) <0.01,  $\beta$ =0.919).

H1n estimates that easy accessibility of the bank has an effect on the (possible) bank preferences of households. The hypothesis was not rejected (s.e.=0.061, p value (0.000) <0.01,  $\beta=0.507$ ).

H1o states that interest-free (Islamic) finance influences the (possible) bank preferences of households. The hypothesis was rejected for 5% confidence interval, whereas it was failed to be rejected for 10% confidence level (s.e. 0.059, p value (0.057) <0.10,  $\beta=0.113$ ).

Whereas satisfaction with customer relations has the most influential factor on the (possible) bank preference of households ( $\beta=0.919$ ), easy accessibility of the bank and being a previously worked bank have the moderate effect ( $\beta=0.507$  and  $\beta=0.469$ , respectively). Interest-free (Islamic) finance doesn't have statistically significant effect on the (possible) bank preference of households for 5% significance level, whereas it has a weak effect for 10% confidence level ( $\beta=0.113$ ). Credit interest rates don't have statistically significant effect on the (possible) bank preference of households.

H2a which claims that the gender of individuals affects the credit use of households was not rejected (s.e.=0.059, p value (0.000) <0.01,  $\beta=0.217$ ).

H2b which proposes that the marital situation of individuals influences the credit use of households was failed to be rejected (s.e.=0.043, p value (0.000) <0.01,  $\beta=0.613$ ).

H2c suggests that the credit use of households is affected by the number of children individuals have. The hypothesis was not rejected (s.e.=0.037, p value (0.000) <0.01,  $\beta=0.818$ ).

H2d estimates that the credit use of households is influenced by the age of individuals. The hypothesis was failed to be rejected (s.e.=0.038, p value (0.000) <0.01,  $\beta=0.733$ ).

H2e which states that the education level of individuals has the effect on the credit use of households was rejected (s.e.=0.062, p value (0.853) >0.01, 0.05 and 0.10,  $\beta=0.011$ ).

H2f which claims that monthly income level of individuals has an influence on the credit use of households was failed to be rejected (s.e.=0.060, p value (0.000) <0.01,  $\beta=0.288$ ).

The number of children individuals have has the most powerful effect on the credit use of households among demographic factors ( $\beta=0.818$ ). After that, the age and marital status of individuals have important effects ( $\beta=0.733$  and  $\beta=0.613$ , respectively). Monthly income level and the gender of individuals have relatively poor effect on the credit use of households ( $\beta=0.288$  and  $\beta=0.217$ , respectively). Education level of individuals doesn't have statistically significant effect on the credit use of households.

H3a which proposes that Covid-19 period affects the credit use of households was not rejected (s.e.=0.103, p value (0.000) <0.01,  $\beta=0.812$ ).

H3b suggests that economic and social conditions caused by Covid-19 pandemic influenced the credit use of households. The hypothesis was not rejected (s.e.= 0.063, p value (0.000) <0.01,  $\beta=0.318$ ).

Covid-19 period strongly influences the credit use of households ( $\beta=0.812$ ). Moreover, economic and social conditions caused by Covid-19 pandemic affects the credit use of households as well ( $\beta=0.318$ ); however, this effect is not be seen as strong as Covid-19 period itself.

## 5. CONCLUSION

In this study, determinants of credit use of households and the factors that influence the bank preferences of households in Turkey were tried to be revealed. Moreover, the effects of Covid-19 period on the credit use of Turkish households were also examined. To reach the conclusions, two statistical programs which are SPSS and STATA were used. While investigating the relationship between the demographic features of households and factors taken into consideration, factors that are influential when households use credit and factors taken into consideration for the bank preference, one-way ANOVA and t-test via SPSS were used.

On the other hand, the effects of demographic and Covid-19 factors, the effects of factors taken into consideration, factors that are influential and factors taken into consideration for the bank preference on the credit use of households were analysed with Structural Equation Model (SEM) via STATA. Due to the hard Covid-19 pandemic conditions, the survey was conducted online and reached 468 people in total. There were missing answers, after subtracting the missing answers from total; the analyses were done with 340 answers. The reliability of the survey was tested with Cronbach's Alpha.

According to the one-way ANOVA analyses, the number of children individuals have, the age and the monthly income level of individuals influence interest free (Islamic) finance preferences of households. Moreover, it was found that there is a relation between the age of individuals and the idea that easy accessibility of the bank has an influence on the bank preferences of households. According to t-test analyses, females take more seriously the factors which are arising the need, having cash shortage and the willingness to close another debt or credit compared to men when they use credit. Furthermore, credit interest rate is more influential in decision of females compared to men concerning the bank preferences. Interest free (Islamic) finance has a greater effect on the bank preferences of married individuals compared to single ones.



According to the SEM results, general outlook of the economy ( $\beta=0.766$ ), expectation for the future of the economy ( $\beta=0.734$ ) and political developments ( $\beta=0.711$ ) are the most powerful factors that households take into consideration when they use credit. On the other hand, having cash shortage ( $\beta=0.847$ ), arising the need ( $\beta=0.629$ ) and willingness to close another debt or credit ( $\beta=0.563$ ) are seen the most crucial factors among the factors that are influential when households use credit. For the bank preferences, satisfaction with customer relations ( $\beta=0.919$ ), easy accessibility of the bank ( $\beta=0.507$ ) and being a previously worked bank ( $\beta=0.469$ ) are the most remarkable factors when households prefer a bank. Considering the effects of demographic factors on the credit use of households, the number of children ( $\beta= 0.818$ ), the age ( $\beta=0.733$ ) and the marital status ( $\beta=0.613$ ) have the most powerful effect, respectively. Covid-19 period ( $\beta=0.812$ ) has powerfully affected the credit use of households.

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## **ETHICS BOARD APPROVAL**

Ethics Board Approval is available in the printed version of this dissertation.