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Research Article

Determinants of Mobility in the Middle-Income Classes for Turkiye

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ABSTRACT

This paper contributes to the literature by examining mobility in the middle-income classes for Turkiye. In this context, this study's aim is to present a profile of the middle-income class in Turkiye and identify the effects of socio-economic and demographic factors on the transition from a middle-income class to a lower income group and upper income group using a probit model. The middle class was determined using the relative income measure. The data used in the analyses are based on the Income and Living Conditions Surveys (ILCS) by the Turkish Statistical Institute (Turk Stat) over the period 2015-2018. The results of the analysis indicate that the age, gender, education level, marital status, employment status housing ownership type of the households, and income type affect the transition of middle-income classes into lower or upper income classes in different ways. Accordingly, in cases where the head of the household is male, household members are young, household members have a high education level, and where there are a small number of members in the household, all negatively affect the probability of transitioning from a middle-income class to a low-income class. In contrast, it positively affects the transition to a high income class.

Jel Codes: D31, D10, D33, D12

Keywords: Middle-Income Classes, Low-High Income Classes, Turkiye, Probit Models



1. Introduction

In developed and developing countries, the formation and development of the middle-income classes differ according to the socio-economic, cultural, and political structures of those countries. The topic of the middle-income class is one of the areas of extreme interest for social scientists, especially regarding how the definitions of the middle class diversify according to the environment, occupation, and income levels of the individuals. As a consequence, the definition of the middle class may vary from time to time and from country to country. In addition to the “bourgeoisie” and “proletariat” classes, Marx defined the middle class as the “petty bourgeoisie”, which is mostly seen in cities. Basically, he expressed that the middle class is the transitional class. In addition, Marx stated that the middle classes are the helpers of the capitalists and should be evaluated on the same terms as them (Wright, 2016). Marx and Engel (2004) underlined in their study that the middle class might disappear as the capitalist mode of production developed, because Marx saw the petty bourgeoisie as an intermediate layer, as a transitional class. Another important fundamental view that determines the discussions on classes is that of Weber. Weber developed Marx’s view and took a broader view of class theory. According to Weber, middle classes were formed by the growth of bureaucracy and rationalization of capitalist production in modern societies. What distinguishes it from Marx’s idea is that social inequalities do not depend on economic factors. He claimed that society had a more complex organization, and the classes consisted of social status and power distribution phenomena. Along with this approach, white-collar worker groups also belonged in the middle class. Yet, according to Weber, different social status groups were formed besides class (Bilton et al., 2009; Edgell, 1998; Weber, 2012).

It is thought that the reason the concepts of the middle class were interpreted differently by two philosophers is that Marx’s evaluation of the social process was in the 19th century and Weber’s evaluation of the social process was in the early 20th century (Liechty, 2003). In fact, until the end of the 19th century, the level of education and occupation were at the forefront in class distinctions, but as a result of the changes that took place in the 20th century, the concept of class became stronger, and income levels began to be used in class distinction (Pressman, 2010).

Öngen (2014) stated in her study that the biggest change that occurred in the 20th century was the internal division and fragmentation of the labour process. The criteria used in the studies conducted with the middle class were determined as follows (Khakhulina, 2001); * Economic and financial situation (income, earnings, savings, number of households); * Housing status (housing ownership, changes to housing); * social-cultural activity habits (at home, summer house, domestic and international vacation); * Education level and occupational group; * Economic and socio-political reforms; * political sympathy.

The middle class differs from country to country according to the economic situation of the country and the level of living welfare. The middle-income class, which plays a significant role in extenuating the poverty level of countries, makes up the largest share of country incomes. In 2019, when the average per capita income in the world was \$ 11,570, the average income per capita in Türkiye was \$ 9,027, and it continues to maintain the level of the upper-middle-income country in which it is present (World Bank, 2021).

Income distribution inequality has been among the issues frequently discussed in studies conducted in Türkiye in recent years. According to 2018 data from the Turkish Statistical Institute (Turk Stat) Income Living Conditions (ILC), the gap between the richest 20% and the poorest 20% has increased to the point where the former group’s income is almost eight times that of the latter group. Therefore, the middle-income class has a prominent place in total income for Turki-

ye. In Türkiye, after the 1980s, the concept of the middle class began to be questioned more, its development process was examined, and class characteristics began to be discussed. The most comprehensive class chart developed to analyse Türkiye's social structure belongs to the studies of Boratav (2004, 2016). After the 1990s, the number of studies dealing with differentiation in the middle class according to socio-economic and demographic determinants is limited. In this context, the main purpose of this study is to determine the socio-economic and demographic variables that have an effect on the mobility of Türkiye's middle-income class (with Türkiye being a developing country). It is thought that the results obtained here can guide remedial social policies. In the study, Income Living Conditions Survey data, which is a micro data set prepared by the Turkish Statistical Institute (Turk Stat) between the years 2015-2018, was used. The effects of socio-economic and demographic factors on the transition from a middle-income class to a lower-income group and upper-income group were analysed with the probit model.

The study consists of the following sections. In the second part, the situation of the middle-income class in Türkiye is presented along with the literature summary. In the third section, the data set and analysis method are covered. In the fourth chapter, the findings obtained as a result of the analysis are included. Finally, in line with the indications obtained in the conclusion, the general situation in Türkiye is evaluated and suggestions are given.

2. Literature Review

The middle class is a substantial group placed between the rich and the poor. Middle income class is classified according to the relative income measure. In related studies, income information that is given in detail in the Income and Living Conditions Surveys, Labour Force Surveys or Household Budget Surveys in Türkiye has been used. Economically, the middle-income class is considerable for every society as it is associated with high income, rapid economic growth, social and political stability (Pressman, 2007). Three different criteria have been proposed by Pressman (2007) due to the different definitions of the middle-income class. The first of these criteria is that individuals base themselves on the criteria they determine. Individuals can define themselves as being in the income class they want. People with a high-income level or people with a low-income level may define themselves as being in the middle-income class. In their study, Lora and Fajardo (2013) emphasized that subjective criteria were more effective in determining the middle-income class in the study they conducted for Latin American countries in 2007. The second criterion is that they have a higher education level and a better job level. Giddens (2008) pointed out that the concept of the middle class encompassed a wide working-class consisting of various occupations. The third criterion, which is frequently used in the literature, is the measurement of income by considering the classification of income levels in economic terms. With this criterion method, the opportunity to compare countries is provided. However, which slice will be taken in the income distribution varies from study to study. For example, in the studies such as Easterly (2000); Khabulina (2001); Atkinson and Brandolini (2011), the income level was taken as 60% (it refers to the income segment between the highest 20% and the lowest 20% of the income distribution). In many studies, the middle-income class has been created by considering the median income. In these studies, different median ranges are used while creating the middle-income class. Birdsall et al. (2000); Pressman (2010); Thurow (1985) determined the middle class as the median range of 75%-125% in their study. Similarly, while Davis and Huston (1992) determined the median income of the middle class in the range of 50%-150%, Bigot et al. (2012), on the other hand, determined this range to be between 70% and 150% in their studies. In the globalization process, when

considered at the individual level, the issue of income inequality frequently comes to the fore. In Milanovic's (2002) study, the national income distribution was calculated from the regional household income distribution by deriving the world income distribution. Similar studies have been carried out by Chotikapanich et al. (1997); Firebaugh (1999); Korzeniewick et al. (1997); Milanovic and Yitzaki (2002); Schultz (1998) examined 111 countries in their study and found that 11% of the world population was middle class. Rasch (2015) evaluated the middle class in six different countries with 5 different measurement methods. Three of these measurement methods used absolute income, one relative income, and finally socio-economic income. The percentage of the working population within the middle class was calculated for each measure. As a result of the study, it was emphasized that there is a positive relationship between income and socio-economic status. In addition, it was emphasized that the determinants of income are different for middle-income countries and high-income countries. For example, education has been found to be more effective in determining income in high-income countries. While Pressman (2007, 2010) stated in their study that the size of middle-income class tended to decrease after the 1980s, Lopez-Calva et al. (2014), in their analysis for Chile, Peru, and Mexico showed that the size of the middle-income class increased in the 2000s, underlining that the probability of the class becoming impoverished again was low. The studies focusing on the middle-income class also reveal its relationship with income inequality. Winkelmann and Wilkenmann (2010) used Swedish household data for 2002 in their study. The study aimed to investigate whether income inequality harms the middle-income class. The results of the study showed that there was an inverse relationship between income inequality and the middle class. As income inequality decreased, the middle income class rose to the upper income level. Curtis (2013) studied 15 different countries and obtained similar results with the study of Winkelmann and Wilkenmann (2010). The Teichman (2014) study revealed the relationship between the middle class and income inequality. In the results of the study, it was stated that the size of the middle class was diminishing in Chile, where income inequality is high, and the size of the middle-income class was rising in South Korea, where income inequality is low. In studies such as that of Franko et al. (2011), it was stated that the size of the middle-income class was rising in countries with a high level of development, such as Latin America. This study contributed to the literature in terms of measuring social classes. In this research, we aimed to distinguish the poor from the middle class and the rich from the middle class. In the analysis phase, it was emphasized that age, gender, marital status, education level and settlement were effective in determining the middle class. There are many studies on income distribution and the factors affecting income distribution in Türkiye. Bakış and Polat (2013) studied the evolution of wage inequality over the previous decade in Türkiye using a household labour force survey between 2002 and 2010. Generally, study results showed that the upper-tail (90/50) wage inequality decreased between 2002 and 2004 and stayed constant thereafter. The lower-tail (50/10) wage inequality decreased steadily between 2002 and 2010. Eksi and Kırdar (2015) showed the changes in hourly wage and annual labour income in Türkiye and the inequalities these changes created between individuals for the 2002–2011 period. However, the number of studies dealing with the middle-income class in income distribution is quite limited. The term middle class became important in Türkiye after the 1980s. The middle class includes small and medium-sized businesses, and self-employed and salaried employees in the private sector (Beyaz Sipahi, 2021). Yılmaz (2007) surveyed 18 provinces in order to define the middle-income class in Türkiye. Yılmaz (2012) revised his work in 2007 and observed the changes in a 5-year period. The study emphasized how the middle-income class in Türkiye was perceived socially, culturally, and

politically. Considering income inequality in Türkiye together with income mobility in his research, he stated that the income mobility in Türkiye during the 2005-2010 period did not reduce income inequality. It has been stated that the income mobility of individuals in the middle-income group is low. Balıkçiođlu and Dalgıç (2015) presented a general profile of the middle-income class in Türkiye by using the Income and Living Conditions Surveys (ILCS) for the period 2005-2011. According to the results obtained from the study, middle-class individuals could not benefit from the expanding growth process in Türkiye in the relevant periods. Likewise, of its most important findings was that the limited improvement in income inequality in Türkiye did not lead to an improvement in the relative welfare of middle-income households. Among the studies conducted in Türkiye, Balıkçiođlu et al. (2016)'s study can be shown as a pioneering study examining the socio-economic and demographic variables that affect the mobility of the middle-income class. As a result of this research, it was pointed out that age, gender, education, registration with social security agency (The Turkish word is SGK), number of households, number of children in the household, type of income obtained in the household and the sectors worked all had an effect on the transition from middle income to low and high income.

In line with the aforementioned literature and due to the limited number of studies conducted in Türkiye, this investigation aims to determine the factors that affected the transition from a middle-income class to high income and low income in Türkiye between the years 2015 and 2018 and to reiterate how these factors were effective.

3. Data, Methodology and Findings

3.1. Data

In this part of the study, the data used in the analysis phase are defined in order to better know the middle-income class of Türkiye. The analyses in the study are based on the input obtained from the Income and Living Conditions Surveys (ILCS) by the Turkish Statistical Institute (Turk Stat) for the years 2015-2018. Since it is the last updated data published by Turk-Stat, the 2015-2018 data were used in the study. In addition, the data set is published at 4-year intervals. It has been published every year since 2006 to reveal the income distribution of households and individuals in Türkiye, to obtain information such as living conditions, social exclusion, and poverty. To be able to compare Türkiye with the European Union countries, question modules are added every year according to the subjects determined by the European Union Statistical Office (Eurostat). Within the scope of the research, all household members within the borders of the country were encompassed. Meanwhile, individuals living in university dormitories, guesthouses, kindergartens, orphanages, nursing homes, unique quality hospitals, prisons, barracks, and army houses were excluded from the scope. In addition to knowledge on income and living conditions from the relevant statistics set, it includes information such as socio-demographic variables (gender, education, marital status, age, etc.), employment status of individuals, health status, and housing status. Equivalent household income was used to classify household income in the research. Equivalent household income is derived from total net household disposable income. The OECD scale specified in Atkinson's (1975) study was used to calculate the equivalent household income. According to the scale, 1 was given as a weight for the first adult member of the household; 0.5 for adults over 14 years old; and a weight of 0.3 to individuals under the age of 15. With this calculation, it was found how many people were in each household. Then, the equivalent household income was computed by dividing the total net income of each household by the equivalent household size. To determine the middle class in this study, the studies of Bigot et al. (2012) and Thurow

(1984) were used as a reference. In this way, the middle class was based on the median income, and 70% of the median income is defined as the lower restrictive and 150% as the upper restrictive. In this context, it provides the opportunity to compare the median value taken as a reference and the results in Türkiye with different countries. Another deduction for taking this median value range as a reference is in the limited number of studies on the middle class in Türkiye, Balıkcıoğlu and Dalgıç (2015) and Balıkcıoğlu et al. (2016). Since the median range is taken as 70% and 150% in the middle-class calculations in their study, it will be possible to compare the results of the related studies. In this case, the incomes of households and individuals in the ILCS data are generally based on the period one year ago. The variables used as explanatory variables in this study, household equivalent size, age, gender (male=1; female=0), education level, which was taken as 7 groups in the data set, were collected under 5 groups in the study. These groups consisted of illiterate (illiterate and literate but not able to enter a school), primary school, secondary school (secondary school, vocational secondary school and primary education), high school (general high school and vocational high school), college (vocational school, college and above) students respectively. Household type is aggregated under 3 groups. These groups consist of single-person households, nuclear families (couple-only nuclear families, couples and children, single-parent and children) and other households (at least one nuclear family and other members, multiple-person households, household type). Marital status consists of 5 groups - married, single, widowed, divorced, and living separately. The employment status of the household head are - working, unemployed, retired and not in the labour force. A dummy variable was created as the social security status of the household head. In the data set, household income type data refers to incomes entering the household, excluding individual incomes. Income type of households consists of retirement income, real estate (rental income and real estate), and transfer income (child benefits, social benefits). Finally, there is the form of housing ownership, which consists of 4 groups: householder, renter, lodging and other (not paying any rent).

Table 1: Distribution of Income Classes in Türkiye (2015-2018)

	2015	2016	2017	2018
Median Income	13142.88	13893.44	14603.45	14654.67
Median Income (70%)	9200.02	9725.41	10222.41	10258.27
Median Income (150%)	19714.32	20840.17	21905.17	21982.01
Low Income Group (%)	29.2	28.5	28.3	28.5
Middle Income Group (%)	44.3	44.9	45.3	45
High Income Group (%)	26.6	26.6	26.4	26.5
Transition from Middle income to Low income	-	2828 (25.7%)	4246 (25.7%)	4590 (28.2%)
Transition from Middle Income to High Income	-	3244 (29.4%)	4725 (28.6%)	4338 (26.7%)
Number of Observations (N)	5622	11025	16509	16253

Table 1 shows the income class spread in Türkiye between 2015 and 2018. From 2015 to 2018, an expansion was observed in income levels. In the transition from 2015 to 2016, the increase in the transition to the lower middle-income group was notably higher. There was a slight decrease in the low-income group. While the middle-income group increased from 2015 to 2017, it reduced in 2018. There was no change in the high-income group between years. Information about the dependent variables used in the model is also provided. Since the previous year was used in the calculations, information about 2015 was not given. In all years, there was a mobility towards both low and high income groups in the middle income group.

Table 2: Profile of the Middle-Income Class (2015-2018)

Variables	2015	2016	2017	2018
Age Groups				
15-24	1.4	1.5	1.5	1.5
25-34	13.5	13.5	13.2	13.6
35-44	20.9	20.6	20.8	20.9
45-54	22.7	22.2	22.6	22.7
55-64	19.6	20.9	21.0	21.1
65+	21.9	21.3	20.9	20.3
Household Equivalent Size (Mean)	1.99	2	2	2
Gender				
Female	19.77	18.73	18.42	18.35
Male	80.23	81.27	81.58	81.65
Education Status				
Illiterate	14.22	13.49	13.39	12.74
Primary School	45.96	46.69	46.30	46.44
Middle School	13.78	14.12	14.17	14.28
High School	16.47	16.46	16.91	16.93
College	9.56	9.24	9.22	9.61
Household Type				
Single-Person Household	12.17	11.08	11.05	10.80
Nuclear Families	73.68	74.07	74.33	74.83
Other Household	14.14	14.84	14.61	14.37
Marital Status				
Married	78.38	79.64	79.56	79.57
Single	2.81	2.57	2.62	2.42
Widowed	14.70	13.67	13.49	13.56
Divorced	3.70	3.68	3.60	3.69
Living Separately	0.40	0.44	0.74	0.75
Employment Status				
Working	56.81	57.51	57.17	57.40
Retired	25.75	26.19	26.08	25.91
Unemployment	1.89	2.08	2.30	2.26
Not in the Labor Force	15.55	14.22	14.45	14.43
Social Security Status				
Not Have Social Security	59.54	59.84	60.81	60.92
Have Social Security	40.46	40.16	39.19	39.08
Household Income Type				
Real Estate (D=1)	38.65	38.18	39.06	39.14
Transfer Income (D=1)	11.7	11.3	7.7	0.0
Retirement Income (D=1)	59.66	61.46	61.86	62.29
Housing Ownership				
Householder	61.35	63.01	61.89	61.73
Renter	21.82	21.03	21.35	21.33
Lodging	1.33	1.21	1.20	1.22
Others	15.51	14.74	15.56	15.73
Number of Observations (N)	2489	4945	7481	7313

Since the profile of the household head was taken into account in the study, the profile of household heads in the middle-income class was examined on a yearly basis and are presented in Table 2. In terms of the household head, the age group in which the middle-income class is most

concentrated is the 45-54 age group. This age range is the range in which the working group is concentrated. This situation is shown in the employment status section of the table. About 57 % of the middle-income group is in the working group, and 14% is in the group that are not in the labour force. Approximately 60% of household heads in the middle-income group do not have social security. Most middle-income households are homeowners. The rate of households living in rented accommodation was around 21% in 2015-2018. When we look at the income type of the household heads in the same period, it can be said that the weight of the income is mostly from the pensioners. It can be said that the middle-income class mostly has a nuclear family structure.

3.2. Methodology

So far in the study, the profile of the middle-income class in Türkiye has been presented. After this stage, two different models were used. In the first model, the relationship between the probability of transition from a middle-income class to a low-income group and socio-economic and demographic variables are discussed. In the second model, the relationship between the probability of transition from a middle-income class to a high-income group and socio-economic and demographic variables are discussed. While determining the dependent variable in the models, the change in the next period (t), that is, the transition to high income or low income, is taken into account based on the middle-income class calculated one period ago (t-1). In Model 1, households that pass from the middle to low-income class are given a value of 1, and households that do not pass are given a value of 0. In the second model, a value of 1 was assigned to households that moved from the middle-income class to the high-income group, and 0 to those that did not pass from the middle-income class to the high-income group. Therefore, there are 3 different transition periods (2015-2016, 2016-2017 and 2017-2018) in the analysis. Since the dependent variable was chosen as a two-valued qualitative variable in the study, the probit model was preferred when the dependent variable was binary. The probit model is usually constructed with an unobservable utility index. This is expressed by the following equations in the linear probability model.

$$Y_i = 1 \text{ ise } (Y_i = 1) = P \text{ Ayrıca } Y_i = 0 \text{ ise } (Y_i = 0) = 1 - P \quad (1)$$

$$(Y_i = 1) = (x, \beta) \quad (2)$$

Equation 2 estimates the effects of the independent variables selected on the probability of the dependent variable. The β parameters in the equation reflect the effect of the change in the independent variables on the probability value.

3.3. Findings

The prediction results of the probit model expressing the transition from middle income to low income (model 1) and high-income transition (model 2) are shown table 3.

Table 3: Model Results

Variables	Transition from Middle to Low Income (Model 1)			Transition from Middle to High Income (Model 2)		
	Coefficient	Std. Err.	Z Value	Coefficient	Std. Err.	Z Value
Constant	-0.377***	0.097	-3.88	-1.212***	0.113	-10.76
Age	-0.017***	0.001	-21.9	0.013***	0.001	15.49
Household Equivalent Size	0.449***	0.013	34.34	-0.398***	0.017	-23.61
Gender (Male=1)	0.436***	0.034	12.64	-0.244***	0.033	-7.34
Education Status (Omitted Variable: Middle School)						
Illiterate	0.986***	0.031	32.1	-0.871***	0.037	-23.61
Primary School	0.308***	0.023	13.6	-0.254***	0.024	-10.69
High School	-0.301***	0.027	-11.04	0.394***	0.026	15.27
College	-1.101***	0.037	-29.59	1.266***	0.027	47.60
Household Type (Omitted Variable: Other Household Type)						
Single-Person Household	0.523***	0.041	12.86	-0.349***	0.043	-8.13
Nuclear Families	0.152***	0.023	6.59	-0.028	0.025	-1.11
Marital Status (Omitted Variable: Living Separately)						
Married	-0.267***	0.079	-3.36	-0.012	0.092	-0.13
Single	-0.277***	0.089	-3.12	0.261***	0.097	2.68
Divorced	-0.3***	0.085	-3.52	0.153	0.096	1.60
widowed	-0.308***	0.081	-3.81	0.207**	0.094	2.21
Employment Status (Omitted Variables: Not in the Labour Force)						
Working	-0.444***	0.033	-13.51	0.541***	0.037	14.53
Employment	-0.02	0.047	-0.43	0.197***	0.059	3.33
Retirement	-0.632***	0.034	-18.68	0.339***	0.037	9.24
Social Security Status (D=1)	-0.298***	0.021	-14.47	0.172***	0.022	7.64
House Income Type (Omitted Variables: Retirement Income)						
Real Estate (D= 1)	-0.48***	0.016	-30.25	0.547***	0.015	36.46
Transfer Income (D=1)	-0.401***	0.042	-9.54	0.060	0.044	1.36
Housing Ownership (Omitted Variable: Others)						
Householder	-0.274***	0.021	-13.22	0.357***	0.023	15.72
Renter	0.116***	0.023	5.1	0.020	0.026	0.77
Lodging	-0.542***	0.096	-5.62	0.341***	0.058	5.93
N: 43.787; Pseudo R2: 0.2116			N: 43.787; Pseudo R2: 0.2466			
Linktest_hatsq:0.0167, P: 0.141.			Linktest_hatsq:0.0144, P: 0.146			

Notes: *** p<0.01, ** p<0.05, *p<0.1

In the study, 22 explanatory variables were used for both models. 21 explanatory variables in model 1 and 17 explanatory variables in model 2 were found to be statistically significant. First and foremost, when the gender variable in the models is examined, it is seen that the male head of the household positively affects the probability of transition from middle income to low income, while it affects the transition to high income negatively. The fact that the head of the household is young has a statistically significant and decreasing effect on the transition to low income, while it has an increasing effect on the transition to high income. Considering the education level, as the education level of the household head increases, the probability of transition to low-income de-

creases, while the probability of transition to high-income increases. When we look at marital status, it negatively affects the probability of married individuals moving from the middle-income group to other income groups. While it increases the probability of single individuals moving to the high-income group, it decreases the probability of moving to the low-income group. Having social security for the household head negatively affects the probability of transitioning from middle income to low income, while the probability of transitioning to high income affects positively. Another factor that determines the transition from middle-income to lower and upper-income groups is the working status of the head of the household. In this direction, while employees and retirees have negative effects on the transition to the lower-income group, they have positive effects on the transition to the upper-income group compared to those who do not work actively.

Household equivalent size has an impact on the probability of transition from the middle-income group to the high and low-income group. While the increase in household size has an increasing effect on the probability of transitioning to low income, it has a diminishing effect on the probability of graduation to high income. When we look at the property status of the households, it decreases the probability of the households owning a house moving to the low-income group, while increasing the probability of moving to the high-income group. Finally, the effect of income earned (other than the income earned by working in the household) on other income groups was inspected. While rental income has a depreciating response on the probability of transitioning to a low income, it has an increasing response on the probability of transitioning to a high income. As a result, the income-increasing effect of real estate incomes, such as rental income, should be noted. Transfer income, which is another type of income, reacts depreciating the probability of transitioning to low income and increasing the probability of transitioning to high income. This situation shows the opposite of expectations. It creates the idea that the transfer incomes are not transferred to the right income groups .

4. Conclusion

In national economies, social classification is made by considering households rather than individuals. There are economic imbalances between the classes in Türkiye. In this process, mobility in the middle-income class is important. We can say that the profile of the middle-income class differs according to the level of development of the countries, and it is not homogeneously distributed for individuals within the households. The middle-income class elevated in Türkiye after the 1980s. In general, the share of the middle-income class in total income is higher than that of the low-income and high-income groups. Since the middle-income class does not display a homogeneous construction between periods, there are progressions from the middle-income class to other income groups.

In this research, the effects of socio-economic and demographic factors on the probability of progression from middle income to low income and high income between 2015 and 2018 were analysed with the probit model. The current study contributes to the literature by examining the mobility in the middle-income class for Türkiye (which is a developing country), with current information. Moreover, it is thought that it can lead to remedial social policy suggestions, especially to increase education and reduce poverty in the future.

According to the results of the study, it was concluded that the age, gender, education level, marital status, employment status, housing ownership type of the households, and income type of the household head were effective. However, it was observed that these factors affected the transition from the middle-income group to the low-income group and the transition to the high-

come group in different ways. Accordingly, the fact that the head of the household is male, being young, having a high education level, and having a small number of members in the household negatively affects the probability of transitioning from middle income to low income, while it positively affects the transition to high income. In this case, it can be said that a high level of education, a high young population, and a small number of members in the households in particular all have an income-increasing effect. These findings are similar to the results obtained in the study of Balıkçioğlu et al. (2016), which contributes empirically to this topic in the Turkish literature. When it is considered in terms of the ownership status of the households, the fact that households own houses affects the transition from middle income to low income negatively, while it affects the transition to high-income group positively. Thus, it can be concluded that households can become house owners with an increase in income.

As a consequence, the income-increasing effect of rental income can be mentioned. Transfer income, which is another type of income, reduces the probability of transitioning to low- income, while the probability of transitioning to high income has an increasing effect. As the reason for this, it can be concluded that the transfer incomes are not oriented to the low-income group, that is, the social assistance is not transferred to the right income groups.

Supplementary Data: Supplementary data to this article can be found using Turk-Stat. Turk-Stat provides access and usage facility for the micro data of survey and researches in accordance with the legal legislation based on the national and international researchers demand. For data, an application is made from the website <https://ty.tuik.gov.tr>.

Ethics Committee Approval: In the study we sent, data from the TUIK Income and Living Conditions survey was used. For this reason, it is a study that does not require an ethics committee permission document.

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