

Evcil, Ayse Nilay; Kiroplu, Gulay Basarir; Dokmeci, Vedia

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Regional Migration in Turkey: Its Directions and Determinants

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Regional Migration in Turkey: Its Directions and Determinants

A. Nilay Evcil^{*}, Vedia Dökmeçi^{**}, Gülay Başarır Kiroğlu^{***}
Istanbul-Turkey

Abstract

It is clear that urbanization is a natural outgrowth of industrialization. But, in developing countries industrialization lag behind the rate of urbanization which involves much more rapid migration. In the case of Turkey, urbanization is mostly related with huge population growth in cities. So, it is worth to understand migration flows to benefit from population's spatial distribution. Thus, this paper aims to show the attributes of regional migration in Turkey.

First, geographic regions are compared with each other according to different migration directions with the help of multivariate analysis of variance (MANOVA). The results show that, when four different migration directions are considered (from urban-to-urban, urban-to-rural, rural-to-urban and rural-to-rural) Marmara Region differ from the other in each cases. It might be related to urbanization level, job opportunities, education level, climatic and geographic conditions, accessibility etc. It is also worth that as a common characteristic migration direction mostly takes place from urban-to-urban (even in least urbanized regions) which points to a more advanced stage of urbanization.

It must also be paid attention to the migration direction occurring from urban-to-rural areas in Marmara Region which has been stimulated by the economic crisis in the late 1990s, 99's earthquake disaster and the investment in the rural areas of east and southeast Anatolia.

* :Ph.D., Assistant Prof, Beykent University, Faculty of Engineering and Architecture, Architecture Department ISTANBUL-TURKEY, anevcil@yahoo.com, nilaye@beykent.edu.tr

** :Ph.D. Professor, Istanbul Technical University, Faculty of Architecture Urban and Regional Planning Department, I.T.U. Faculty of Architecture, Urban and Regional Planning Dept. ISTANBUL/TURKEY, dokmeciv@itu.edu.tr.

***: Ph.D. Professor, Mimar Sinan Fine Arts University, Faculty of Science and Letters Statistics Department, ISTANBUL/TURKEY gkiroglu@msu.edu.tr

Second, multiple regression analysis is performed in the country in order to determine the factors most related to net migration rate by using 2000's and 1990's data. In general, the factors most related to net migration rate are economic factors (working people in different sectors (except agricultural sector) and GDP per capita). It can be said that, during the period of 1990-2000 the influencing factors of migration still remain in the country although national economic situation changed.

Then, it is tried to find if any region is important when we consider net migration rate. It is found that Marmara and Aegean regions are important. This must be related to their attracting economic conditions.

keywords: Regional migration, Turkey, regional differences, statistical analysis

1. Introduction

A rapid urbanization with a rapid urban population growth has occurred in Turkey since the 1950s. Turkey's population growth was 2,5 % during the period of 1965-70, it diminish to 1,62 in 1995-2000. At the same period, urbanization rate was 6,03 % and diminish to 4,67. In 2000, annual growth rate of urban population (26,81 ‰) is still higher than Turkey's annual growth rate of population (18,28 ‰) (Table 1). The main factor in the growth of cities is continuing migration of villagers especially to urban areas. In 1927, early years of the Turkish Republic, urban population consisted only of 24 % of the total population, but according to the 2000 census, this percentage had reached 64,9 %.

In industrialized countries, the number of people working in industrial and service sectors is higher than in the agricultural sector. But in developing countries, agricultural force is still dominant, for ex: in Turkey, the agricultural labor force still came first in sector distribution in 1994 (47 % agricultural sector, 22 % industrial sector and 31 % service sector) (State Institute of Statistics (S.I.S.), 1994a).

Table 1: City and Village Population, Annual Growth Rate of Population by Regions

Region	1990		2000		Annual growth rate of population ‰		
	City	Village	City	Village	Total	City	Village
Total	33656275	22816760	44006274	23797653	18,28	26,81	4,21
Marmara	10350307	2945571	13730962	3634065	26,69	28,26	21,00
Aegean	4344471	3250506	5495575	3443206	16,29	23,5	5,76
Mediterranean	4051596	2974893	5204203	3501802	21,43	25,03	16,30
C.Anatolia	6412910	3500396	8039036	3569832	15,78	22,59	1,96
Black Sea	3337392	4799321	4137466	4301747	3,65	21,48	-10,94
East Anatolia	2285798	3062714	3255896	2881518	13,75	35,37	-6,10
S.E.Anatolia	2873801	2283359	4143136	2465483	24,79	36,57	7,67

Source: State Institute of Statistics(S..I.S), 2002

In developing countries, migration brings urbanization and vitality to the country on one hand, but on the other hand it causes social problems. For example in Turkey, migration from rural areas to big cities diminishes urban quality of life. Since 1955, the number of people living in these shantytowns has grown very fast and according to Keleş it consists of 35 % of the whole urban population in the country in 1995 (Keleş, 1996) (Table 2).

Poor physical security and unsafe sanitary conditions are the other components of rural-urban migration problem. According to Keleş, people living in dwellings with one or two rooms make up 72 % of the whole population living in squatter settlements and 40 % of these settlements in lack electricity and 2 out of 3 lack piped water (Keleş, 1996). Another problem is social disintegration. Like in other developing countries, the newcomers cannot easily integrate to city life. Moreover, young people who cannot find jobs or obtain an

adequate education are not satisfied with their lives. This situation causes social disintegration and unrest in many of today's cities (N'Dow, 1996).

Table 2: Number of Squatter Settlement and Its Population in Turkey

Years	Number of squatter settlements	Its percentage in urban population (%)
1955	50.000	4,7
1960	240.000	16,4
1965	430.000	22,9
1970	600.000	23,6
1980	1.150.000	26,1
1995	2.000.000	35,0*

*: Estimation Source: Keleş, 1996

In short, migration is a social issue, frequently accompanied by social problems that are of tremendous concern in virtually every country. To better deal with the problems resulting from migration requires having a good understanding of it.

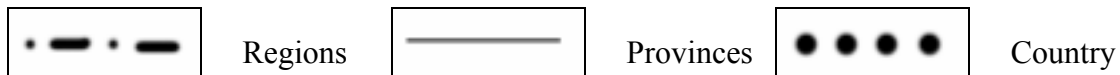
2. A demographic analysis of geographic regions in Turkey

In Turkey, there are seven geographic regions whose boundaries are not the same as political jurisdictions (Figure 1).

The major metropolitan cities are part of these regions. Additionally, there is no regional authority like SMSA (standard metropolitan statistical area) in the USA. There are also provinces where in the authorities belongs to the central government and to local authorities called municipalities. Added to this, the population criteria of urban is not unique (e.g. 1).more than 10000 inhabitants 2).more than 20000 inhabitants 3). city as an administrative unit but regardless of population size) (Gedik, 1996). This matter causes inconsistent outputs. In this study urban is defined as province and/or cities and rural as

sub-district and villages. This matter creates a limitation on the study and migration involves from/to each province as an aggregate data. This limitation is pointed out in Gedik's (1996) study too.

Figure 1: Map of the Regions of Turkey



From the earliest time of the Republic, there have been big differences among these geographic regions in social, economical and educational terms. With respect to regional distribution of labor, the Marmara Region is more industrialized (Table 3) than the other regions. The Aegean region is the second most industrialized region. In the Central Anatolia, 10,2 % of the labor force is in the industrial sector, and 10,6 % in the service sector in 1990 and these percentages reached to 15,33 and 21,04 in 2000. The Mediterranean Region is the fourth highest in the country with respect to the labor force distribution in both industrial and service sectors. A large potential in tourism and plays important role in the service sector development of this region. The other regions: the Black Sea, Eastern Anatolia and Southeastern Anatolia are less developed nearly with half part of labor force working in agriculture.

Table 3: Percentage of Labor Force Distribution In Some Sectors, 1990-2003

Regions	Agriculture (agriculture, hunting, forestry and fishing)		Industry (Manufacturing)		Service (finance, insurance, real-estate, business, retail, wholesale, rest. & hotels)		Other	
	1990	2003	1990	2003	1990	2003	1990	2003
Marmara	28,9	14,15	23,6	30,97	17,4	28,19	30,1	26,69
Mediterranean	57,3	33,76	9,6	12,07	10,0	27,59	23,1	26,58
Aegean	54,1	37,92	12,5	17,24	10,2	21,04	23,2	23,8
C. Anatolia	50,5	21,27	10,2	15,33	10,6	25,09	28,7	38,31
S.E. Anatolia	67,3	43,67	5,9	16,87	6,4	17,62	20,4	21,84
East Anatolia	71,9	53,23	3,5	3,81	4,3	16,92	20,3	26,04
Black Sea	71,1	61,05	6,2	7,32	5,5	13,79	17,2	17,84
Turkey	53,7	33,88	11,9	17,33	10,2	22,65	24,2	26,14

Source: State Institute of Statistics (S.I.S.), 1994b, S.I.S 2003

Furthermore, there are some similarities on urbanization and industrialization level among the regions. Mostly, urbanization level is higher in developed and industrialized regions. In other words, the most industrialized region Marmara is also the most urbanized region; the least industrialized and urbanized region is Black Sea Region.

It can be said that each region has been in progress in urbanizing since the 1940s (Table 4). Another progress occurred in the population distribution: the share of urban population increased from 14,5 % to 64,9 % between 1950-2000 (Table 5). According to Table 5, it reached a peak during the 1980s (6,2 % per annum).

Table 4: Urbanization Ratio in Geographic Regions (%)

REGIONS	1940	1960	1980	1985	1990	2000
Marmara	35,1	43,3	68,7	74,1	75,1	79,1
Mediterranean	20,1	31,6	49,8	52,7	54,3	59,8
Aegean	23,3	30,3	48,6	54,8	53,0	61,5
C. Anatolia	14,8	24,8	47,4	53,3	59,5	69,3
S.E. Anatolia	15,8	16,1	36,5	39,9	53,5	62,7
East Anatolia	9,3	13,4	27,2	31,1	37,5	53,1
Blacksea	7,2	11,4	24,0	29,2	33,7	49,0
Turkey	18,0	25,2	45,4	50,9	55,4	64,9

Source: Keleş, 1996, pp. 47, S.I.S., 2002

Table 5: Population Distribution in Turkey 1950-2000 (%)

	1950	1960	1970	1980	1985	1990	1995	1997	2000**
Urban population*	14,5	22,4	32,4	42,1	47,2	54,0	60,9	64,6	64,9
Rural population	85,5	77,6	67,6	57,9	52,8	46,0	39,1	35,4	35,1

Source: S.P.O., 1990 (www.dpt.gov.tr) (total population: estimate for year-end population from 1991 onward)

*: Urban refers to areas with population of 20.000 or more; **S.I.S., 2000

At times, the sharing of sectors in gross domestic product (GDP) changed its structure too. For example, the share of agriculture in the total GDP of Turkey decreased from 39,8 % in 1968 to 17 % in 1990 while that of industry increased from 16,7 to 25 % and services grew from 43,5 % to 58 %, indicating the structural changes in the country's economy as a whole (S.I.S; 1995).

Table 6 shows the ratio of in-migration according to migration streams within the regions. It is seen that, for the whole country, urban to urban migration streams possess the highest percentage (57.8 % in 2000). It determines that since 1985 the migration changed its direction even in less developed regions. Today, a large amount of the population movement in Turkey occurs among urban areas within each region after the result of economic development to same extent.

Table 6: Ratio of Migration Streams within Regions 1985-1990 and 1990-2000

<i>Regions</i>	FUU %		FRU %		FUR %		FRR%	
	<i>1985-90</i>	<i>1990-00</i>	<i>1985-90</i>	<i>1990-00</i>	<i>1985-90</i>	<i>1990-00</i>	<i>1985-90</i>	<i>1990-00</i>
<i>Mediterranean</i>	<i>61,9</i>	<i>55,0</i>	<i>17,5</i>	<i>14,3</i>	<i>13,3</i>	<i>24,6</i>	<i>7,3</i>	<i>6,1</i>
<i>East Anatolia</i>	<i>56,1</i>	<i>57,8</i>	<i>19,8</i>	<i>19,7</i>	<i>15,3</i>	<i>17,7</i>	<i>8,8</i>	<i>4,8</i>
<i>Aegean</i>	<i>59,5</i>	<i>56,7</i>	<i>18,3</i>	<i>15,8</i>	<i>13,1</i>	<i>20,7</i>	<i>9,0</i>	<i>6,8</i>
<i>S. East Anatolia</i>	<i>62,2</i>	<i>57,4</i>	<i>19,9</i>	<i>20,6</i>	<i>10,9</i>	<i>17,9</i>	<i>7,0</i>	<i>4,1</i>
<i>Central Anatolia</i>	<i>66,6</i>	<i>64,6</i>	<i>18,7</i>	<i>17,1</i>	<i>9,8</i>	<i>15,3</i>	<i>5,0</i>	<i>3,0</i>
<i>Black Sea</i>	<i>49,8</i>	<i>52,6</i>	<i>22,5</i>	<i>18,6</i>	<i>19,5</i>	<i>23,7</i>	<i>8,2</i>	<i>5,1</i>
<i>Marmara</i>	<i>66,2</i>	<i>57,6</i>	<i>15,4</i>	<i>18,0</i>	<i>11,2</i>	<i>20,4</i>	<i>7,1</i>	<i>4,0</i>
<i>TURKEY</i>	<i>62,2</i>	<i>57,8</i>	<i>18,0</i>	<i>17,5</i>	<i>12,6</i>	<i>20,0</i>	<i>7,3</i>	<i>4,7</i>

FUU: From Urban to Urban,, FRU: From Rural to Urban, FUR: From Urban to Rural, FRR: From Rural to Rural

Source: S.I.S, 1995 ; TURKSTAT2000 Migration Statistics

In short, a structural change in Turkey occurred between 1950-2000: population in urban areas increased, industry and service sectors grew and agriculture diminished year by year. This process has created serious economic and social dislocation and has forced profound structural transformation upon cities, which require new approaches to urban and employment policies.

3. An Overview of Migration

Whether in rich or poor countries, the spatial distribution of population is still an important topic in urban and regional planning. Migration flows in a country have a number of causes and consequences that tend to be self-reinforcing and cumulative. Some of these factors can include: Causes:

- Inadequate quality of life factors
- Inadequacy of job opportunities, healthcare facilities and/or educational facilities
- Insecure areas because of terrorism or natural disease (earthquake etc.)
- Some governmental decisions (investments in a region while neighboring become poor)
- Personal decisions

Consequences:

- Physical expansion of urban/rural areas
- Increased economic viability in an area due to the development of natural resources
- Better or worse life conditions
- Urbanization/sub urbanization
- Development in social and economic terms
- A way to diminish inequalities
- Social disintegration and poor physical conditions (e.g. shantytowns)

It is known that, one of the consequences of migration is rapid and unprecedented urbanization, which occurs both in rich and poor countries. However, in poor ones urbanization progresses in a different manner. For instance, while developed countries have experienced a dramatic transformation of the labor force industry to the service sector, in developing countries the majority of the population is still struggling with the

massive problem of how to shift resources from agriculture to manufacturing. In the early periods of economic development, when agriculture dominated both output and employment, the service sector tended to grow faster than the industrial sector, due to rapid rural-urban migration. Because of the limited capacity of industries to expand employment, the informal sector is the only means to absorb new urban migrants, who cannot find jobs elsewhere. The growth of the informal sector in developing countries makes it difficult to delineate the patterns of structural change over time in the service sector relative to other sectors of the economy.

Migration has usually been seen as an important allocative mechanism for integrating the supply and demand of labor over time and space (Lipton, 1982). However, the role of migration, as an equilibrating mechanism has not been empirically observed in developing countries. On the one hand, migration can bring vitality to a destination area, but on the other hand, if the process is not understood properly, a huge number of problems might evolve both for destination and departure areas. In short, migration flows influence differently the general policies and spatial organizations of a country.

In migration researches, another important topic is the determinants of these movements.

In general, two main determinants are present (Dissart and Deller, 2000):

1. Individual's (or household) decision about family and life cycle considerations
2. Labor migration-disequilibrium approach or human capital approach (migration from low to high wage areas)

In the first case, people decide to migrate according to their personal or family characteristics (e.g. marriage, birth and aging children, educational opportunities etc.). As for the second case, migration is made only if it is profitable.

There are also some researches studying types of migrants: The vast literature on migration suggests that there are many types of migrants who migrate for a variety of reasons.

Although both economic and non-economic factors are recognized as playing a role in the decision to migrate, the relative influence of these factors varies from person to person (Shefer and Steinvortz, 1990; Yang, 2000).

4. Outputs of Statistical Analysis

In this study, it is aimed to evaluate migration in the seven regions of Turkey as a developing country. All the statistical analysis of the study is done with the help of the packet program SPSS 11,5 and the variables of the analysis are derived from Turkish Statistical Institute (TURKSTAT)'s 2000 statistical data. Firstly, the analysis of MANOVA is performed to reveal the similarities and/or differences among the regions according to migration stream occurring within a region. As it is known, multivariate analysis of variance (MANOVA) is a multivariate extension of analysis of variance (Green et al., 1997). Here, migration stream is measured by the number of migrants within a region. Each region is given a number code as follows:

1: Marmara, 2: Mediterranean, 3: Aegean, 4: Central Anatolia, 5: South East Anatolia, 6: East Anatolia, 7: Black Sea Region. The migration stream is investigated in comparison with urban to urban (FUU), from urban to rural (FUR), from rural to urban (FRU) and from rural to rural (FRR). The results show that the analysis is statistically meaningful to the 0,05 confidence level (Pillai Trace Value: 0, 592 and Sig.:0,000) (Table7).

According to migration stream from urban-to-urban, it can be said that Marmara Region is different from S.E. Anatolia, E. Anatolia and Black Sea Region. These results are mostly related to urbanization level and unemployment rate of cities. In S.E. Anatolia, E. Anatolia

Table7: Results of MANOVA analysis (Method: LSD)

Dependent Variable	(I) Region	(J) Region	Mean Difference (I-J)	Sig.
FUU	1	5	81035,0795*	0,045
	1	6	88726,6545*	0,011
	1	7	88846,9545*	0,008
	5	1	-81035,0795*	0,045
	6	1	-88726,6545*	0,011
	7	1	-88846,9545*	0,008
FUR	1	4	25605,5035*	0,014
	1	5	30020,5227*	0,011
	1	6	32538,8727*	0,001
	1	7	29550,9949*	0,003
	4	1	-25605,5035*	0,014
	5	1	-30020,5227*	0,011
	6	1	-32538,8727*	0,001
7	1	-29550,9949*	0,003	
FRU	1	6	27153,1576*	0,011
	1	7	26949,4798*	0,009
	6	1	-27153,1576*	0,011
	7	1	-26949,4798*	0,009
FRR	1	4	4851,3776*	0,012
	1	5	5511,2045*	0,012
	1	6	5841,6545*	0,002
	1	7	5497,8990*	0,002
	2	6	4255,4500*	0,037
	2	7	3911,6944*	0,048
	3	4	5454,7981*	0,010
	3	5	6114,6250*	0,009
	3	6	6445,0750*	0,002
	3	7	6101,3194*	0,002
	4	1	-4851,3776*	0,012
	4	3	-5454,7981*	0,010
	5	1	-5511,2045*	0,012
	5	3	-6114,6250*	0,009
6	1	-5841,6545*	0,002	
6	2	-4255,4500*	0,037	
6	3	-6445,0750*	0,002	
7	1	-5497,8990*	0,002	
7	2	-3911,3194*	0,048	
7	3	-6101,3194*	0,002	

1: Marmara, 2: Mediterranean, 3: Aegean, 4: Central Anatolia, 5: South East Anatolia, 6: East Anatolia, 7: Black Sea Region
 The migration directions: From urban to urban (FUU), from urban to rural (FUR), from rural to urban (FRU) and from rural to rural (FRR)
 *Significant at 0,05 confidence level

and Black Sea Region there are small sized and less developed cities such as Iğdır, Hakkari, Tunceli, Artvin, Bayburt etc. On the contrary, cities of Marmara are the most developed urbanized and industrialized cities of the country such as İstanbul, Bursa and Kocaeli. There are also some topographic obstacles, which prevent spatial expansion of cities especially in Black Sea Region. Also, the rural character of the regions cannot provide enough job opportunities for young people.

When the stream from urban to rural is investigated, it is seen that Marmara Region is different from C. Anatolia, S.E. Anatolia, East Anatolia and Black Sea Region. For all the regions the migration direction mostly takes place from urban to urban but after the 1990s economic stagnation the number of people who migrated from urban to rural increased. This movement is unlike to suburbanization. People go back to rural areas to work as seasonal workers, in agricultural lands since they cannot find a temporary job in cities. Some of the local authorities supported families who wanted to return to their initial family homes especially at the beginning of 2000 (Erdem,2006).

If one evaluates the results of the migration from rural to urban within the regions, it will be seen that Marmara Region is different from E. Anatolia and Black Sea Region. The main reason for the attraction of the region is Istanbul metropolitan area Turkey's biggest national and international business and production center. The Marmara Region attracts the highest percentage of migrants in the country (33,3 %, TURKSTAT., 2000). On the other hand, as a general tendency migration direction from rural to urban decreased if two different population census data are considered (18 % in 1990, 17,5 % in 2000). Moreover, regional out-migration also decreased; this means people migrate within the regions. They also choose medium sized cities to find new job opportunities. From this point of view Marmara Region becomes unique because of its heterogeneous urbanization level. It

consists of both one prime city as Istanbul, highly industrialized cities as Bursa, Kocaeli and less developed ones as Çanakkale and Kırklareli.

As for rural-to-rural migration, it can be said that Marmara, Mediterranean and Aegean Regions characters differ from the others. In all the regions, this direction decreased at 2000 then 1990. But especially in these three regions, except metropolis, people live in medium and small-sized provinces, and migration from rural to rural areas is rare. Secondly, multiple regression analysis is performed to determine factors related to migration in the country. For this analysis the net migration rate of 2000 is chosen as a dependent variable. As it is known, the net migration rate of an area is the percent of its total migration and it shows the contribution to population change and its direction (Miller and Glenn, 1994).

As for the independent variables, 14 variables dated 1990 and 2000, which are expected to induce migration flow on the regional level, are considered. These independent variables are as follows: Gross domestic product per capita, household size, share of agricultural, financial, industrial and trading employees in total employed population, unemployment rate, rural and urban population rates, urbanization rate, number of persons per physician, population density, rate of university graduates in 25 years old and over population and ratio of population by literacy. These variables are analyzed after a careful research into migration literature. For example, income is used since a relatively higher income at the destination can be expected to induce migration (Shefer, 1987; Feden, 1982). Similarly, employment opportunities in agricultural, industrial, service and trade sectors are expected to induce migration. Population density already used in previous studies (Milne, 1981) like household size (Yang, 2000). On the other hand, to determine the relationship between migration and social inequalities in the country three different variables (number of

persons per physician, ratio of population by literacy and rate of university graduates in 25 years old and over population) are also considered as independent variables in this study.

The stepwise regression model is chosen in order to find the most related factors with the net migration rate (Table 8). This technique enables one to identify the optimal set of predictors from a larger array. It also allows one to examine the relative predictive power of a wide array of variables. As it is seen, each analysis is statistically significant to the level 0,005.

Table 8: Model Summaries (method: stepwise) (dependent variable: net migration rate in each model)

Model for TURKEY (2000)	R	R Square	Std. Error of the Estimate	F	F (Significance)	Durbin-Watson
	0,702a	0,492	27,47	24,899	0,000	1,910

a. Predictors: (constant), share of trading employees in total employed population, share of industrial employees in total employed population, population density

Model for TURKEY (1990)	R	R Square	Std. Error of the Estimate	F	F (Significance)	Durbin-Watson
	0,515a	0,266	68,52	25,665	0,000	1,994

a. Predictors: (constant), GDP per capita

According to the regression analysis ($R^2=0,492$, $F(\text{Sig})=0,000$), the most important variables are that of share of trading and industrial employees in total employed population and population density. In or out-migration in the country still occurs due to insufficient economical conditions. Especially, the inequalities between regions push people to move from their land to places where they can find new job opportunities. It can be said that social, educational or cultural factors are less important than economic factors. This result is deeply related to a developing country's conditions because urbanization, which is not based on industrialization, cannot provide enough work for everybody.

This result is nearly the same when it is used 1990's data. Even the change of country's economic conditions GDP per capita (one of the economic factors) is found the most related variable to migration.

Added to these regression analyses, we again performed another one to understand whether regions play an important role in net migration rate (Table 9). So, we added region factor as dummy variable into the model and performed regression analysis. It is obtained that the Marmara and Aegean Regions are effective factors in migration equation. In other terms these two regions play an important role in migration within the country.

Istanbul's dominance in terms of economic and social opportunities with its big hinterland (Edirne, Gebze, Yalova, Çerkezköy) and big industrial cities (Bursa, Kocaeli, Sakarya) in Marmara Region still attract people from the east part of the country. As for Aegean region, relatively good opportunities to work and easy life conditions due to the climatic and geographic components pull people from other regions.

Moreover, we tried to find if there is an outlier observation and we determined Istanbul. Then, we deleted this observation from the data set and we performed again the regression analysis. We found that there is a small increase ($R=0,706$, $R^2=0,499$, $F=6,224$ $Sig(F)=0,000$ $Durbin-Watson=1,855$). Since the data set is quite large we can say that it is not so efficient. Additionally, we find out residual diagram as randomly scattered and there is no assumption violation.

Table 9: Model Summary (method: stepwise) (dependent variable: net migration rate)

Model for TURKEY (2000)	R	R Square	Std. Error of the Estimate	F	F (Significance)	Durbin-Watson
	0,732a	0,535	26,2968	29,549	0,000	2,121

a. Predictors: (constant), share of trading employees in total employed population, Marmara Region, Aegean Region

Added to this, by considering the three predictors (share of trading employees in total employed population, share of industrial employees in total employed population, population density), to find similarities/differences between regions, we realized again MANOVA analysis (meaningful to the 0,05 confidence level, Pillai Trace Value: 2,055 and $Sig.:0,000$, method: LSD). It is found that, in terms of share of trading employees in

total employed population, Marmara Region is different from C. Anatolia, S.E. Anatolia, E. Anatolia and Black Sea Region; Mediterranean Region is different from S.E. Anatolia, E. Anatolia and Black Sea Region; Aegean Region is different from E. Anatolia and Black Sea Region; C. Anatolia is different from E. Anatolia and E. Anatolia is different from Black Sea Region. The outputs are nearly the same when it is considered the share of industrial employees in total employed population. But, when the population density is considered, only Marmara region differ from S.E. Anatolia, E. Anatolia and Black Sea Region. As a result;

- Marmara region is different from other regions in terms of these three variables related to migration
- Black Sea, E. Anatolia and S.E. Anatolia regions are also different from the other regions in terms of these three variables.
- The differences of economic conditions between the eastern and western regions effect migration.

5. Conclusion

The relevant outputs are summarized as follows:

- In Turkey, it is clear that, the migration stream from urban-to-urban and from rural-to-urban will continue under present circumstances. But, it can be said that, the migration stream from urban-to-urban will increase parallel to country's development, just the opposite direction from rural-to-urban which will decrease to the same extent. This as it is also observed by Gedik (2003) relatively new phenomenon of urban-to-urban migration direction points to a more advanced stage of urbanization that prevails in Turkey now, where 65 % of population resides in urban areas. Furthermore, in a developing country, other urban amenities and

quality of life factors will undoubtedly provide an added stimulus for some migrants (Yap, 1977).

- In Turkey, according to the 2000's population census data, the share of urban to urban migration poses the highest percentage. This result can be supported by Gedik's (1996) study. She explains the share of urban to urban migrants in increasingly larger than the share of rural to urban migrant due to the urban growth in developing countries. In this stream, the destination will be whether metropolis or an intermediate size city. She also emphasis that another reason behind the urban to urban stream is urbanization level increasing in the country. "In the early periods of urbanization (when level of urbanization is approximately 30 %, such as it was in Turkey 1965) the intra-sectoral and inter-sectoral migration is comparable in size. In other words, the volume of migration between rural and between urban areas is at least as great as the rural to urban migration" (Gedik, 1996, pp16-17).
- Marmara Region differs from the other regions when we consider migration stream. This is because of its urbanization level, prime city as Istanbul, some industrial cities as Bursa and Kocaeli. This also results as, Marmara Region attract higher inter-urban (urban to urban) mobility than the others.
- In general, urban to rural migration is negligible in less developed and developing countries. But in Turkey it must also be paid attention to the migration from urban-to-rural areas, which already reached 20 % in 2000 of the total in-migration in the country. It is hoped that especially after the 1990s economic stagnation there would be a considerable reverse migration from urban-to-rural areas since people have been applying local authorities for help in returning to their provinces in every regions (Posta, 2002a; Posta, 2002b, Erdem, 2006). During the 1980s and early 1990s, Turkey wallowed in economic stagnation. Many young skilled or unskilled,

educated or uneducated became unemployed. So, most of them migrated in the country or out of the country to find menial but relatively high-paying jobs (anonymous1). Moreover, 99's earthquake disaster and some investment in rural areas are also be the reason of this stream. But, this stream and the destination areas must be revised in the near future, because if they return towards the villages of the big cities then this does not mean urban to rural stream in reality (Gedik, 1996). But in Turkey's history, this stream shows a high ratio for a special time period such as 1975-80, the period of political and social chaos and violence.

- By the help of regression analysis it is tried to find factors which are more important in predicting net migration rate in the country. It is found that in general migration is deeply related to economic conditions. Possessing sectors in which many people are employed and the gross domestic product per capita are the most important elements behind the migration process in Turkey. Even in industrialized and urbanized regions, the results show the same pattern.
- Regression analysis is performed both for 1990 and 2000's data. It is seen that the economic factors are related to migration even the change of economic condition in the country.
- Regression analysis is also performed to find the importance of regions in net migration rate of the country. It is seen that the Marmara and Aegean regions effect net migration rate. This result is parallel to social and economic differences between east and west part of the country and cause migration through the western regions.
- It can be said that in general, urbanization and development are not equitably distributed among regions in Turkey as a developing country. More effective policies such as GAP(South Eastern Anatolia Project) in the southeast part of the

country are needed to decentralize investments, to provide new job opportunities and better living conditions and to provide more balanced development throughout the country.

- In Turkey, there is a need to encourage growth center in regions. According to Gedik, these centers attract immigrants from their immediate vicinity in short or medium term. This is seen in GAP in S.E. Anatolia Region.
- In Turkey, considering urban to urban migration, there is a need for specific national settlement policies as pointed out by Renaud (1979).

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