

**ERMENİ VE RUM GÖÇÜNÜN TÜRKİYE’DE ULUS  
DEVLETİN OLUŞUMUNA ETKİSİ:1897 YILINDA  
OSMANLI VİLAYET VE SANCAKLARINDAKİ  
ETNO-KÜLTÜREL YAPIDAN ÇIKARIMLAR**

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**ÖZET**

Osmanlı imparatorluğu, diğer imparatorluklar gibi çok sayıda etnik cemaatin bir arada yaşadığı kozmopolitan etno-kültürel yapıya sahip bir devlettir. Ancak bu yapı, imparatorluğun her yeri için geçerli değildir. Yapılan istatistiksel uygulamalar göstermektedir ki nüfusun yedide biri kozmopolitan etno-kültürel yapıya sahip yerlerde, üçte biri ikili etno-kültürel yapıya sahip yerlerde, beşte üçü ise mono etno-kültürel yapıya sahip yerlerde yaşıyordu. Yine yapılan istatistiksel uygulamalar göstermektedir ki, bu etnik kompozisyonun, İstanbul dışındaki yerlerde iktisadi kalkınma ile bağlantısı yoktu. Diğer bir deyişle etno - kültürel yapı, ekonomiyle değil tarihsel süreçle ve yerleşim politikalarıyla şekillenmişti. Ayrıca günümüz Türkiye Cumhuriyeti sınırlarında kalan vilayetlerin ağırlıklı olarak mono, kısmen de ikili dominant etno - kültürel yapıya sahip oluşu, ulus devletinin oluşturulmasını da kolaylaştırmaktaydı. Bu mono - etnik miras sayesinde, Türkiye’de ulusal yapının başarılmasında laiklik ilkesinin benimsenmesi ve eğitim dilinin Türkçe olarak belirlenip uygulanması yeterli olmuştur.

**Anahtar Kelimeler:** Etno - kültürel yapı, kültürel demografi, siyasal demografi, iktisadi demografi, demografik coğrafya, gini eşitsizlik endeksi, cluster analizi, diskriminant analizi, istatistik, çok değişkenli istatistik.

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**THE EFFECT OF GREEK AND ARMENIAN  
IMMIGRATION MOVEMENT TO BASE ON NATION-  
STATE IN TURKEY: EVIDENCE FROM ETHNO –  
CULTURAL STRUCTURE OF OTTOMAN PROVINCES  
IN 1897**

**ABSTRACT**

The Ottoman Empire was a state that she had a cosmopolitan cultural structure in which many ethnic groups lived together like those in other empires. However, this structure was not valid for every part of the Empire. Statistical Applications show that 1/7 of population lived in the places where had a cosmopolitan ethno – cultural structure and 1/3 population lived in the places where had dual ethno – cultural structure, and 5/3 of the population lived in the places where had mono ethno - cultural structure. Nevertheless, the statistical analyses indicate that this ethnic composition did not have a connection with economic development in places where were in the outside of Istanbul. In the other words, ethno – cultural structure shaped with historical process and settlement policies rather than with economy. Furthermore, that the cities located in the borders of today's Turkish Republic had heavily mono and had partly dual dominant ethno cultural structure made the constitution of nation-state easy. By means of this mono-ethnic estate, the appropriation of the principle of secularism and the use of Turkish as educational language sufficed to achieve national structure.

**Key Words:** Ethno – cultural structure, cultural demography, political demography, demography of economics, demographic geography, gini inequality indices, cluster analysis, discriminant analysis, statistics, multivariate statistics.

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### 1. Introduction

Cosmopolitan level of campuses as ethnic composition in location base is related to closeness level of communities rather than excess of the number of different living cultures. In other respect, there exists domination of one culture and other communities can just constitute groups of marginal minorities whether they are different. A province that has a mono ethno – cultural structure can be formulized as a homogeneous culture set up by a dominant community and an obscure minority. Cosmopolitan province will naturally become a milieu where many ethnic groups near each other live together. There is no any doubt that to live together emphasized here is not a mixed settlement in a district criterion. In the end, the districts of the Muslim and non Muslim are separated from each other (Yenen 1993: 12 – 13).

It is not possible to determine level of multicultural “cosmopolitan” settlement explained today in the Ottoman provinces. For, there are not ethnic origins such as language and race in the definition of community in the Ottoman era in spite of communitarian classification of the society. In addition, sectarian differences in Muslim subject were paid insufficient attention. It is appropriate to examine the effect of imperial perspective based on umma difference instead of nation - state in this definitional differentiation. In brief, there was a structure that the communities were defined as the religious “umma” basis and all of them gathered around the Ottoman subject.

Ottoman society in the perspective of national differentiation based religious identical “umma” had more cosmopolitan demographic structure than today’s Turkey has. The most critical subject in this point is that one religious community had not a sharp hierarchical superiority in favor of others. Differentiation of taxation can be made a subject of criticism that there was a hierarchy in the perspective of Muslim and non-Muslim differences. However, it is not possible to take a decision in this matter. Non-Muslims were excepted from military service because they paid “cizye” when Muslims went into the army because they did not pay the “cizye” (Sayın, 1999; Barkan, 1999; Tabakoğlu, 1994). As a result, it is not easy to say that there was discrimination and a structural hierarchy among the communities. It is impossible to reach technically a decision in terms of economic doctrine that one side was given preferential treatment, by trusting in the cost originated in responsibilities and in the measurement stemming from exceptions.

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It is extremely important that the last years of the nineteen century is to become subject of this work. This era determined as the longest century of the Empire by Ilber Ortaylı was, on the one hand, the collapse era for the Ottoman and it was encountered, on the other hand, with the period on which the Empire lived at the top of its cultural maturity (Ortaylı, 1983). Ruled regions were not newly conquered places. Therefore, there was a settled population in demographic perspective. Indeed, the settled population does not mean the settlement of nomads. It means stop of Muslim community's movement from east to west.

## **2. Data and Methodology**

### **2.1. Data**

A work group was formed by State Institute of Statistics, whose new name is Institute of Statistics of Turkey, so as to search statistical data about the Ottoman era under Prof. Şevket Pamuk's chairmanship in 1990s. Prof. Tevfik Güran transcribed "The First Statistical Yearbook of the Ottoman Empire", from Arabic alphabet to Latin alphabet. (Güran, 1997).

In the work, number of people lived in the provinces was summarized according to their nationalities in a table in accordance with results of census made in 32 provinces in 1897. This table giving number of population according to ethnic groups and provinces in the Ottoman geography is the earliest and the most detailed table. This table was taken basis for the circumstance in statistical application.

### **2.2. Gini Inequality Measurement**

Gini coefficient used in the measurement of dispersive inequality among observations is expressed as index of odd inequality (Laporte, 2002). Economists benefit from this coefficient to measure the justice of income distribution (Pianegonda, Iglesias, 2004, 197). In addition, there are many kinds of inequality indices. Some of these many statistical methods: Dahl's and Nagel's index like Gini index is based on deviations; coefficient of variation, logarithmic variance, Theil index is based on entropy or information theory and Atkinson index is based on normative social welfare models (Chakravarty, 1996). However, Gini coefficient is the most commonly referred and the best-known index (Ravallion, 2001, 6; Fedorov, 2002, 447; Moran 2003, 353; Milanovic, 2007, 12). In 1912, Gini created firstly this number used intensively in the inequality measurement (Sen, 1973).

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The disparity indices are used for many different scientific areas. These disparity indices used for measurement of:

- The regional inequality in productivity and GDP per capita (Such as, Duro, Esteban, 1998; Benito, Ezcurra, 2005; Ezcurra, et al. 2005; Ezcurra, & Rapún, 2006; Ezcurra, Pascual, 2007; Escurra, Pascual, Rapún, 2007; Gezici, 2007), agricultural yield fertility (Sadras, Bongiovanni, 2004), the human capital and education “years of education” (Medrano, Sanhueza and Contreras, 2006; Siew, Lim, Tang, 2008) and the capital stock per capita (Lu, 2008) for economics,
- the occupational segregation by gender or nationality (Chakravarty, Silber, 2007) for sociology,
- the decomposition of migration flow (Sweeney, Goldstein, 2005) for demography,
- the levels of nationalism for political parties (Jones, Mainwaring, 2003),
- the centralization (Dawkins, 2006) and regional distribution of workforce (Carlino, Chatterjee, 2002; Heindenreich, 2003) for urban and regional planning,
- the energy-intensity inequalities across countries (Alcantara, Duro, 2004) and in air, water, land, underground pollution per capita across states (Millimet, Slottjet, 2002) for environment science,
- the pitfall for competitive balance (Utt, Fort, 2002) and attendance (Schmidt, Berri, 2001) in Major League Baseball for sports,
- the offenders distribution (Oberwittler, 2004) for criminology,
- a test method of goodness (Jammalamadaka, Gorla, 2004) for statistics,
- body lengths of helminth parasites (Poulin, Latham, 2002) for helminthology.

The Gini coefficient takes a value among [0, 1]. If its coefficient was 1, the value looked at its distribution accumulated in an observation. The total value distributed equally in the whole values if it was 0,. To calculate gini coefficient we benefit from different methods. Gini coefficient in the method, which has been rather popular in the last years, is calculated with

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$$G = \frac{2Co\ var(Y, R_y)}{N\bar{Y}} \quad [1]$$

formula. According to this, “G” represents gini coefficient. “Y” represents value of observation when “ $\bar{Y}$ ” symbolizes average value of whole observations. “N” represents the number of observations and, “ $R_y$ ” symbolizes the line of observations from the smallest to the biggest one (Lerman and Lerman, 1986: 325; Milanovic, 1997: 45; Beenstock and Felsenstein, 2007; Milanovic, 2007).

In this calculation method, the maximum gini value is always smaller than one. This Gini-coefficient ranges between 0 and (N-1)/N. Hence, the standardized Gini-coefficient  $G*N/(N-1)$ , referred to as the Lorenz-Münznercoefficient, is used in the estimates. (Stirböck, 2002: 6)

$$G_{st} = \left( \frac{2Co\ var(Y, R_y)}{N\bar{Y}} \right) \times \left( \frac{N}{N-1} \right) \Rightarrow \quad [2]$$

$$G_{st} = \left( \frac{2Co\ var(Y, R_y)}{(N-1) \times \bar{Y}} \right) \quad [3]$$

In this work, ethno - demographic distributions of the Ottoman provinces will be examined as first application stage with gini inequality coefficient in the last quarter of the nineteen century. That the coefficient becomes 0 means that each of five observations set up with the first four nationalities having the highest weight in the province and totality of other communitarian members gathered around the others title is equal to each other. That the coefficient is 1 means that population of province contains just one nationality.

Consequently, if the coefficient in five observed applications is among [1,0.8], it will be in the ethno-demographic distribution, which is equivalent of population of province containing one nationality. If it is among [0.7999,0.6], it will be in the ethno-demographic distribution, which is equivalent of population of province containing two nationalities. If it is among [0.5999,0.4], it will be in the ethno-demographic distribution, which is equivalent of population of province containing three nationalities. If it is among [0.3999,0.2], it will be in the ethno-demographic distribution, which is equivalent of population of province containing four nationalities. In addition, it can be interpreted that if it is among [0.1999, 0.0], it will

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be in the ethno-demographic distribution, which is equivalent of population of province containing five nationalities.

### 2.3. Multivariate Normal Distribution

In statistical applications, many real – word problems fall naturally within the framework of normal theory. The importance of the normal distribution rests on its dual role as both population models for certain natural phenomena and approximate sampling distribution for many statistics. (Johnson, Wichern, 1988) Hence, many unvaried tests and confidence intervals are based on the unvaried normal distribution. Similarly, the majority of multivariate procedures have the multivariate normal distribution as their underpinning. (Rencher, 2002)

Multivariate normality (the combination of two or more variables) means that the individual variables are normal in a unvaried sense and that their combinations are normal. Thus, if a variable is multivariate normal, it is also unvaried normal. However, reverse is not necessarily true (two or more univariate normal variables are not necessarily multivariate normal). Thus, a situation in which all variables exhibit univariate normality will help gain, although not guarantee, multivariate normality. Multivariate normality is more difficult to test, but some tests are available for situations in which the multivariate technique is particularly affected by a violation of this assumption. (Hair, etc, 1998: 70 -71)

Both Mahalanobis distance and chi – squared measurement is used together for testing to multivariate normal distribution. In this test procedure:

The set of multivariate outcomes  $x$  such that

$$(\mathbf{x}_i - \boldsymbol{\mu})' \boldsymbol{\Sigma}^{-1} (\mathbf{x}_i - \boldsymbol{\mu}) = D_i^2 \quad [8]$$

$$(\mathbf{x}_i - \boldsymbol{\mu})' \boldsymbol{\Sigma}^{-1} (\mathbf{x}_i - \boldsymbol{\mu}) \leq \chi_p^2(0.5) \quad [9]$$

has probability 0.5. Thus, we should expect roughly the same percentage, 50%, of sample observation to lie in the ellipse. This formulation is transformed for samples:

$$(\mathbf{x}_i - \bar{\mathbf{x}})' S^{-1} (\mathbf{x}_i - \bar{\mathbf{x}}) \leq \chi_p^2(0.5) \quad [10]$$

(Johnson, Wichern, 1988)

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#### **2.4. K – Means Cluster Analysis as a Multivariate Statistical Approach**

The second stage in the application made in this work is K – means cluster analysis. Cluster analysis is a generic term for a wide range of numerical methods for examining multivariate data with a view to uncovering or discovering groups or clusters of observations that are homogeneous and separated from other groups (Everitt 2005: 115). This method is one of the explanatory multivariate statistical methods like factor analysis (Timm, 533: 2002; Harris, 2001: 409 – 410; Venables, Ripley, 2002: 301 – 330). Cluster analysis differs fundamentally from classification analysis. In classification analysis, we allocate the observations to a known number of predefined groups or populations. In cluster analysis, neither the number of groups nor the groups themselves are known in advance (Rencher, 2002: 451). Nevertheless, there were works showing this analysis with discriminant function analysis among classification techniques (Johnson, Wichern, 1988: 470 – 589).

Cluster analysis divides into two: Hierarchic and non-hierarchic. K – Means cluster analysis is also a non-hierarchic statistical approach. Researcher gives number of heaps in the K – means cluster analysis. Consequently, this application provides a large option for the researcher. The centers of groups are calculated and, the procedure functions when observations cluster around the centers. It is possible to test the application with anova analysis in SPSS. We go to the application by taking variables one by one in the anova analysis used a kind of K – means cluster analysis test in order to determine the clusters. However, there is not a test process considering totally the whole variables. Therefore, it will be true to make discriminant function analysis to test whether or not the observations clustered in groups the totality of variables. For, properly classifying every one of variables cannot mean that all the variables were truly classified.

#### **2.5. Discriminant Function Analysis as A Multivariate Statistical Approach**

The aim of discriminant function analysis is to classify an observation, or several observations into these known groups (Hardle, Hlavka, 2007: 227). The ANOVA is used for an only variable to test whether the classification rightly was made. Manova “multivariate analysis of variance” can be used for two or more variables. If the number of independent variable is more than one in the application, in the first attention it seems possible to argue that the manova analysis functions like the discriminant function analysis. The main difference from manova is that Discriminant function analysis uses the

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continuous (discriminating) variables as predictors of the categorical group membership dependent variable. Hence, the focus in Discriminant function analysis is reversed between "independent" and "dependent" variables compared with MANOVA (Harlow, 2005: 129). Accordingly, the discriminant function analysis not only tests whether observations remained in the right group or not but also redistributes them to the most ideal groups where they necessarily remain.

The application procedure in the discriminant function analysis can be summarized like that:

Firstly, it is begun with the discriminant factor of the linear discriminant functions by revealing maximum group differentiations. The number of discriminant factors is one less than the number of groups. To determine these factors it is necessary to calculate a discriminating factor criterion and Wilks' lambda. Meaningfulness of factors is statistically tested with values of chi - squared by profiting from Wilk's lambda. It is found percentages of the variance explanation for every one of the discriminant factors. Thus, we determine which canonical correlation discriminant function is a weighted explanatory in the discriminant function analysis. Furthermore, we find the relationship among the linear discriminant functions "discriminating factor: canonical discriminant factor" by calculating canonical correlation coefficients gotten with variables (Bolch, Huang, 1974: 229 - 238; Saraçoğlu, 1992; Amstrong, 2000: 294 - 297.)

Additionally, we begin the second procedure, which makes the discriminant function analysis more different and more important than manova analysis, after finding and testing discriminating factors. Moreover, we determine the possibilities of inclusion for the observations in the heaps by testing whether or not we rightly classified the observations (Klecka, 45 - 47).

### 3. Statistical Results

We tested whether or not two variables fitted with the assumption of the multivariate normal distribution before starting multivariate statistic applications. In the end of the calculation, we observed that 36 % of calculated  $\chi^2$  value is bigger than critic  $\chi^2$  value. We began applications after reaching a conclusion that three variables fit with the assumption of the multivariate normal distribution because this proportion is less than 50 %.

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In the perspective of the application, multivariate statistical application was applied for thirty – two provinces by calculating sixty-four gini coefficients. In the application starting with cluster analysis, the number of clusters as proportional to the number of observation was sequentially divided into titles as two, three, four, and five. There are the applications stemmed form Anova and divided into two and three clusters. Discriminant function analysis was made by preferring the most heaping choice in conformity with purpose of the application. Categorical variable was given {1,2,3,}. The procedure of multivariate statistical application was concluded like that:

Categorical variable makes explaining variables separately divided in cluster analysis according to the results of ANOVA. Thus, it is concluded that cluster analysis as a first stage became achieved (table 1).

**Table 1.** Test Result for ANOVA

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Women	0.22467	2	0.00265	29	84.7564	0.000
Men	0.21372	2	0.00206	29	103.67	0.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

It is seemed that Covariance matrixes are equal in the result of Box M test realized so as to test heaping analysis and to make final grouping for the observations in the discriminant function analysis (table 2).

**Table 2.** Results for Tests null Hypothesis of Equal Population Covariance Matrices

Box's M		14.5249
F	Approx.	1.80859
	df1	6
	df2	218.62
	Sig.	0.09855

The values of chi-square calculated according to Wilk's Lambda showed that discriminant factors are meaningful (table 3). That is to say, both canonical discriminant functions are meaningful.

**Table 3.** Test of Meaningfulness for Discriminant Factors

Test of Function(s)	Wilks' Lambda	Chi-square	degree of freedom	Sig.
1 through 2	0.08876	69.0223	4	0.000
2	0.72525	9.1553	1	0.002

Variant explaining percentage of first one of Canonical discriminant functions exceed % 95. Accordingly, first discriminant function can be solely accepted as discriminant factor (table 4).

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**Table 4.** Eigenvalues for Canonical Discriminant Functions

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	7.17104	94.9822	94.9822	0.93681
2	0.37883	5.01776	100	0.52417

a First 2 canonical discriminant functions were used in the analysis.

The correlation between “women and men” and canonical discriminant function of two observations is close to each other and has an extremely high level (table 5).

**Table 5.** Structure Matrix

	Function 1	Function 2
women	0.99843	-0.0561
men	0.89711	0.4418

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions. Variables ordered by absolute size of correlation within function.

It is enough to look at the essential statistics to label province after obtained statistical perfect results (table 6).

**Table 6.** Group Statistics

Cluster Number of Case	Mean	Std. Deviation	Valid N (listwise)	
			Unweighted	Weighted
1 women	0.506	0.065	3	3
1 men	0.546	0.016	3	3
2 women	0.903	0.048	18	18
2 men	0.914	0.046	18	18
3 women	0.769	0.054	11	11
3 men	0.758	0.049	11	11
Total women	0.820	0.130	32	32
Total men	0.826	0.125	32	32

The gini coefficient average of three provinces in the first group is around 0.5. This proportion means that population of provinces was gathered in three ethnic groups. This group can be labeled as cosmopolitan provincial cluster heap because number of observations is five for gini coefficient.

The gini coefficient average of eighteen provinces in the second group is around 0.91. The proportion means that population of provinces is gathered in one ethnic group. This group can be labeled as provincial cluster heap having mono – dominant ethnic groups because number of observations is five for gini coefficient.

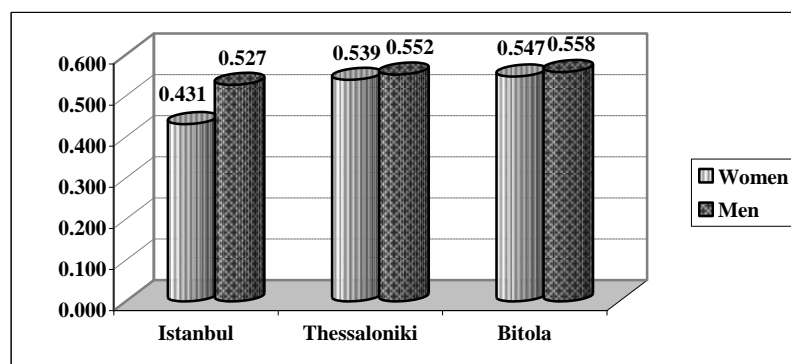
The average of eleven provinces in the third group is around 0.76. The proportion means that population of provinces is gathered in two ethnic groups. This group can be labeled as provincial cluster heap having dual – dominant ethnic groups because number of observations is 5 for gini coefficient.

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### 3.1. First Cluster: The Cosmopolitan Provinces (Istanbul, Bitola and Thessaloniki)

Three provinces, which have cosmopolitan ethnic composition, were composed of Istanbul, Bitola, and Salonika. The province, which has the most cosmopolitan ethnic – cultural structure in three provinces, is Istanbul. There was more cosmopolitan ethno-cultural structure for male population than that for female population but there was an opposed structure in Bitola and Salonika. This circumstance can be explained like that: Istanbul province was not only a capital but, at the same time, a center for economy and trade in the Ottoman Empire. It can be thought that important part of officials, artisans, tradesmen, labors, and students coming from every part of the Empire did not bring their families to Istanbul, which was an attractive place. Number of women under number of men also supports this circumstance. In brief, it can be argued that male population which became weighted in the masses coming to Istanbul positively assisted in cosmopolitan ethno - cultural structure. Gini coefficients close to each other in Salonika and Bitola are obtained for the male and female populations. This supports that there was not a populous circulation as that in Istanbul (figure 1).

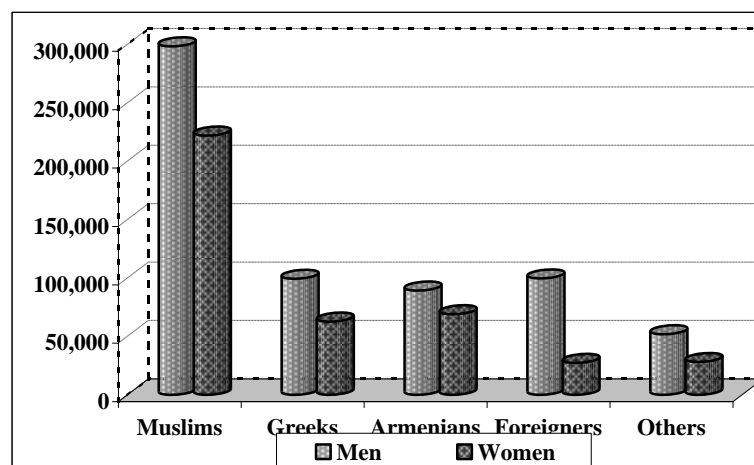


**Figure 1.** Gini Coefficients for Cosmopolitan Provinces in Ottoman Empire

The most crowded ethnic group was Muslims in Istanbul, which had the most cosmopolitan ethno-cultural structure in the Ottoman geography. Weightiness of Muslims reached at 54 % in females and 48 % in males though Muslims was the most crowded ethnic group. Armenians, Greeks, and Foreigners followed Muslims. Non-Muslim groups contributed to Istanbul in terms of ethno-culture because their population had close levels (figure 2).

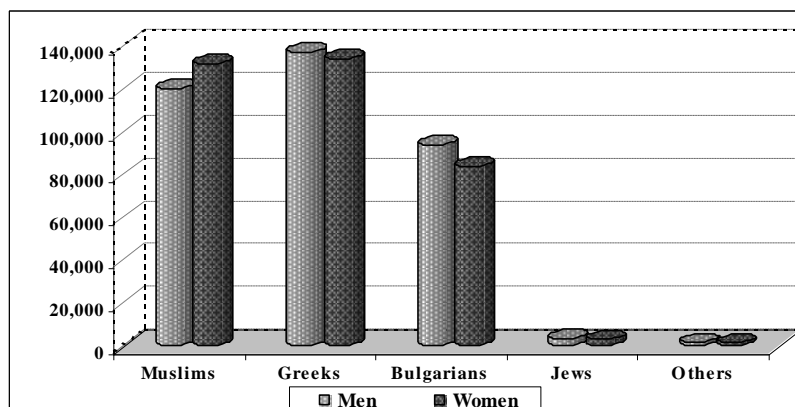
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**Figure 2.** Ethnic Composition in Istanbul, as people

If Bitola is examined, it will be seen that three ethnic groups were dominant in the nineteenth century. Greeks, Muslims, and Bulgarians were close to each other in conformity with majority in sequence. This compose gives an idea that there was a triple ethno-cultural structure in Bitola (figure 3).

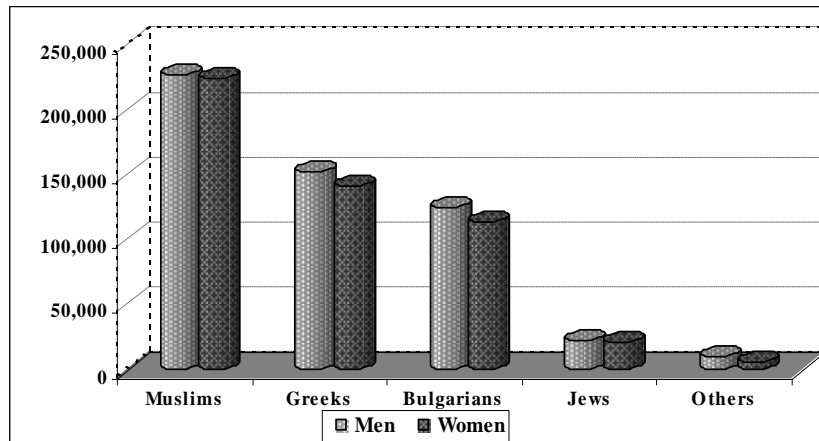


**Figure 3.** Ethnic Composition in Bitola, as people

If it is examined ethno-cultural structure in Salonika, it will be encountered a separation between Istanbul and Bitola. The gini coefficients are higher than those of Bitola are. However, weightiness of Jews, fourth ethnic group, was extremely close to first three dominant ethnic groups in Salonika. Accordingly, it is difficult to make a definition of triple ethno-cultural structure for Salonika. It is similar to Istanbul rather than Bitola (figure 4).

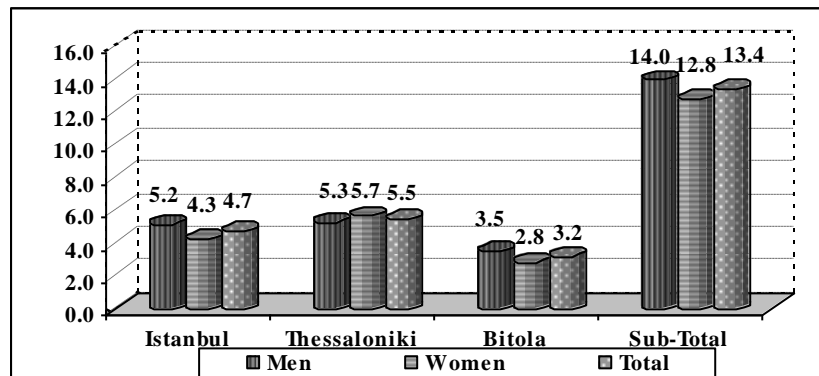
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**Figure 4.** Ethnic Composition in Thessaloniki, as people

Populations of Istanbul, Bitola, and Salonika were extremely close to each other in compared thirty-two provinces, which had a cosmopolitan ethno cultural structure. These three provinces included in about fourteen percent of the population of thirty-two provinces (figure 5).

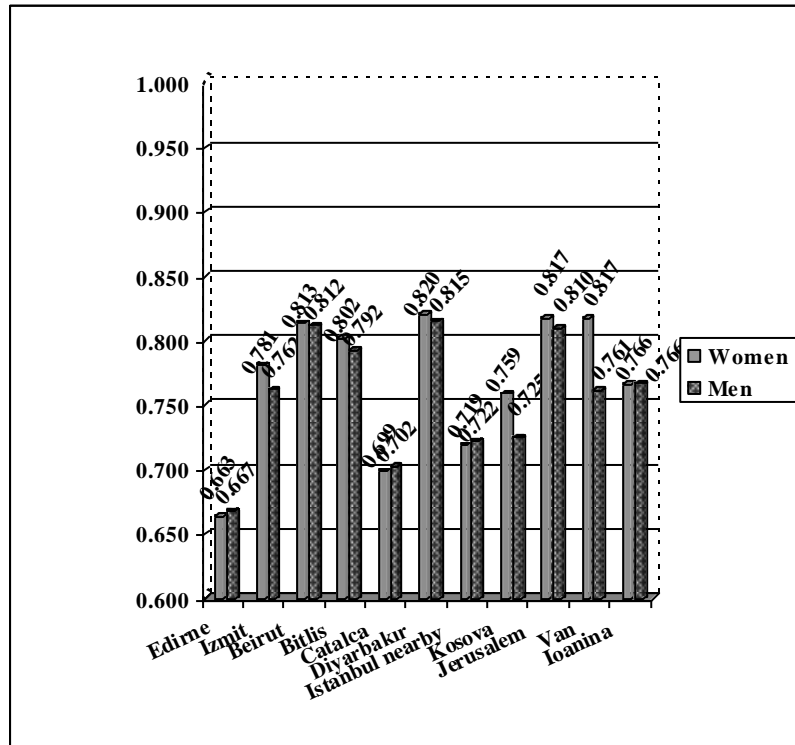


**Figure 5.** The Population in Cosmopolitan Provinces percentage of Total population as third Provinces in Ottoman Empire (Men, Women, Total)

**3.2. Third Cluster: the Provinces having Dual Ethno – Cultural Structure**

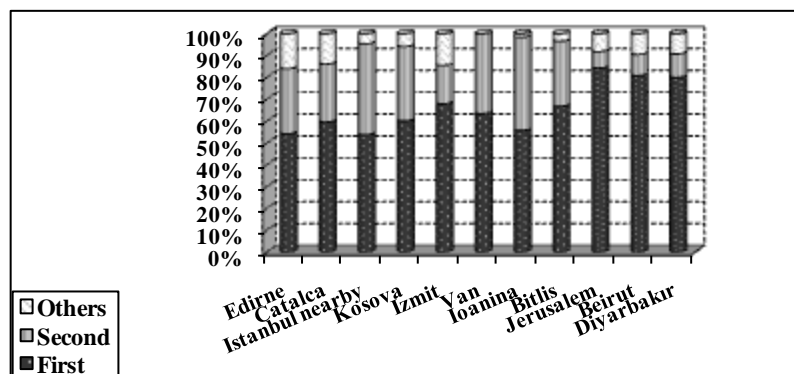
Number of provinces that has dual ethno – cultural structure was found as eleven in result of statistical applications. Gini coefficients for these eight provinces change between 0.663 and 0.820 intervals (figure 6).

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**Figure 6.** Gini Coefficients for Third Provinces Cluster

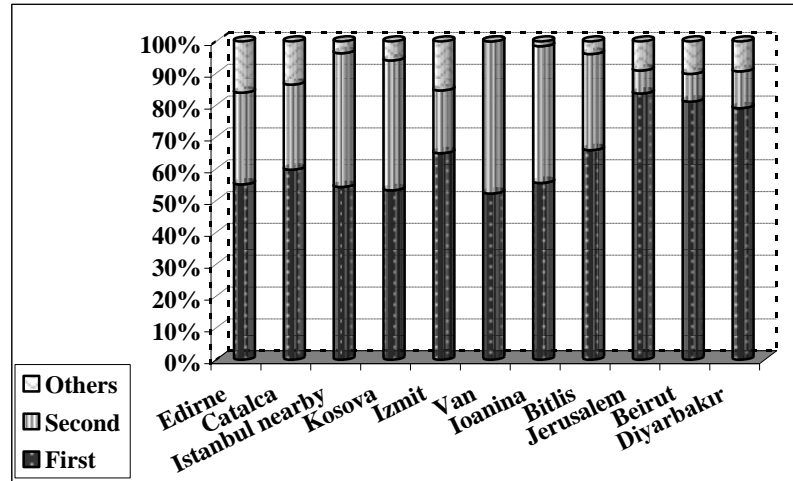
Weightiness of the most weighted ethnic group for the male population in the provinces, which had dual ethno – cultural structure, changes between 54 % and 84 %. Weightiness of the second weighted ethnic group changes between 8 % and 42 % (figure 7).



**Figure 7:** Distribution for men population as the first two ethnic groups and total of other groups in the Provinces at members of third cluster

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Weightiness of the most weighted ethnic group for the female population in the provinces, which had dual ethno – cultural structure, changes between 52 % and 84 %. Weightiness of the second weighted ethnic group changes between 7 % and 42 % (figure 8).



**Figure 8:** Distribution for women population as the first two ethnical groups and total of other groups in the Provinces at members of third cluster

#### 4. Relationship between Level of Cosmopolitan Ethno – Cultural Structure and Wealth Degree

If today's metropolis such as New York, London, and Paris is thought, it will be concluded that there is a strong relationship between "cosmopolitan ethnic structure" which is ethnic heterogeneity of population and welfare. For, Metropolis providing large profit opportunities is centers for attraction.

If the late Ottoman era is examined, it will be seen that there is not only a political but also a socio-economic disintegration. This circumstance was not peculiar to the Ottoman Empire. Parallel processes were lived in the Russian Tsardom and Austria-Hungarian Empire like in the Roman Empire after 700. In addition, this parallelism lived in the Britain Empire even if it was late.

It was difficult for the big provinces to continue their qualities of becoming attractive places in the disintegration process of the Empire. For instance, wage increases were lower than that in Southern England during the second half of the nineteen-century (table 7).

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**Table 7.** DAILY WAGES OF CONSTRUCTION WORKERS IN CITIES OF THE MIDDLE EAST AND SOUTHEASTERN EUROPE, 1860–1913  
(in British pounds sterling converted at the prevailing exchange rate)

	Unskilled Workers					Skilled Workers				
	1860-69		1900-1909		1860-69	1860-69		1900-1909		1860-9
	£	S.ENG =100	£	S.ENG= 100		£	S.ENG =100	£	S.ENG =100	
Istanbul	0.07	50.0	0.075	32.6	107.1	0.155	67.40	195	59.1	125.8
Damascus & Aleppo	0.05	35.7	0.10	43.5	200.0	0.10	43.5	0.22	66.7	220.0
Beirut	0.05	35.7	...	...	...	0.11	47.8	...	...	...
Cairo	0.05	35.7	0.06	26.1	120.0	0.14	60.9	0.17	51.5	121.4
Iran	0.02	14.3	0.03	13.0	150.0	0.08	34.8	0.10	30.3	125.0
Mousul	0.04	28.6	...	...	...	0.09	39.1	...	...	...
Bulgaria	0.05	35.7	0.08	34.8	160.0	...	...	0.12	36.4	...
Romania	0.06	42.9	0.09	39.1	150.0	0.09	39.1	0.11	33.3	122.2
Greece	0.08	57.1	0.12	52.2	150.0	0.12	52.2	0.16	48.5	133.3
Southern England	0.14	100.0	0.23	100.0	164.3	0.23	100.0	0.33	100.0	143.5

**Source:**

PAMUK, Şevket (2006), "Estimating Economic Growth in the Middle East since 1820", *The Journal of Economic History*, (66), 3 (September 2006), p. 809 - 828.

The meaning of what a district could not continue its quality for attractive place is that there is a power to attract people in its near environment. Meant thing here is not that entrance of refugees into the Ottoman Empire in result of wars. For this reason, it is necessary to examine sensitively the relationship between level of cosmopolitan structure and welfare degree for the Empire.

It is difficult to make an inter-regional welfare comparison for the Ottoman Empire because economic indicators are not sufficient. However, we have some social indicators representing welfare level in the provinces. There are population density, some basic economic and health indicators for big parts of the provinces in the first Ottoman general census.

It is possible to accept population density as an indicator representing urbanization level. It can be maintained that density is as higher as urbanization is. In any case, there is not another indicator for the Ottoman Empire of the nineteenth century.

Proportion of students' number to whole population and number of books in libraries per one thousand people can be accepted as educational indicator. It is possible to reach the conclusion that highness of the proportion of students' number to whole population and the number of books in libraries per one thousand people shows the educational level. Both income expectation and life quality will increase because the highness of educational level will raise personal abilities. Health expenses per capita and population per a doctor and a bed can be taken as health indicators. The higher health expense is and the lower population per a doctor and a bed are, the higher health standard there exists.

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It is encountered with an instable structure in the provinces in outside of Istanbul when three basic welfare indicators are compared gini coefficients. In other word, it is not always possible that the higher cosmopolitan level is, the higher welfare level is. For instance, the most mono ethno-cultural was Kastamonu, in which student proportion and population density are high when the population per a doctor and a bed is low. On the other hand, educational and health indicators in Kosova, which had a dual ethno-cultural structure, had a low performance, comparing with that in Kastamonu (table 8).

**Table 8.** Comparison between Gini Coefficients and Basic Welfare Indicators

		Some Basic Welfare Indicators for Provinces in 1897									
		Gini coefficients, Last of 19th Century			Population indicators		Education indicators		Public health indicators		
		women	men	total	Population density	Pop. percentage of population	Student book in a library per thousand people	Expenditure as Gurush per capita	people per physician	people per bed	
Istanbul	Turkey	0.480	0.350	0.407	1,030,234	775.780	14.32	69.0	1.94	36,794	1,554
Bitola	, Greece Macedonia	0.510	0.510	0.509	1,061,522	24.050	13.39	0.6	0.03	265,381	19,300
Thessaloniki	Greece	0.570	0.570	0.569	1,040,218	21.800	14.64	6.3	0.24	260,055	6,119
Edirne	Turkey	0.650	0.650	0.651	986,446	15.330	23.01	2.7	0.17	197,289	9,671
Ist.nearby	Turkey	0.710	0.700	0.703	90,034	27.280	...	...	...	...	...
Kosova	Ind. state	0.730	0.770	0.752	954,634	21.600	6.59	1.7	0.01	318,211	318,211
Catalca	Turkey	0.740	0.730	0.735	61,236	32.230	19.49	...	...	...	...
Van	Turkey	0.760	0.760	0.758	202,007	2.770	5.93	...	...	...	...
Bitlis	Turkey	0.780	0.780	0.777	488,642	17.650	5.59	0.6	...	...	...
Ioanina	Greece	0.780	0.770	0.771	517,274	16.590	21.32	0.9	0.32	86,212	7,958
İzmit	Turkey	0.780	0.770	0.771	228,529	15.460	19.77	0.3	0.05	228,529	...
Diyarbakir	Turkey	0.820	0.820	0.818	564,671	8.750	3.61	5.1	0.13	188,224	13,132
Aydin	Turkey	0.850	0.840	0.843	1,534,229	17.100	16.59	9.4	1.12	36,529	1,583
Beirut	Lebanon	0.860	0.850	0.850	623,505	25.190	7.7	...	0.02	155,876	13,856
Jerusalem	Israel	0.860	0.860	0.857	264,317	17.460	13.64	1.8	0.36	264,317	7,552
Elazig	Turkey	0.880	0.880	0.879	566,656	12.32	9.78	4.09	0.04	566,656	47,221
Erzurum	Turkey	0.880	0.880	0.881	687,322	8.550	4.88	...	...	...	...
Aleppo	Syria	0.880	0.870	0.870	921,345	7.860	5.24	9.1	0.09	307,115	30,712
Biga	Turkey	0.890	0.890	0.887	144,157	12.51	21.91	4.4	0.004	144,157	15,330
Hudavendigâr	Turkey	0.890	0.890	0.890	1,458,079	15.950	16.15	10.5	0.24	132,553	8,628
Sivas	Turkey	0.890	0.890	0.886	980,982	9.920	12.31	2.6	0.08	490,491	81,749
Syria	Syria	0.890	0.860	0.872	701,134	7.020	6.25	4.7	0.09	233,711	17,528
Trabzon	Turkey	0.890	0.860	0.873	1,164,827	30.740	14.55	4.0	0.04	582,414	55,468
Ankara	Turkey	0.900	0.900	0.902	1,018,727	10.350	5.5	10.6	0.05	203,745	16,700
Aegean Island	Turkey	0.910	0.900	0.907	...	...	...	...	...	...	...
Adana	Turkey	0.910	0.910	0.911	398,764	5.570	9.94	2.7	0.28	199,382	4,691
Shkoder	Albania	0.930	0.930	0.933	337,584	16.750	15.13	3.4	...	...	...
Konya	Turkey	0.960	0.960	0.959	1,022,844	6.440	20.63	7.8	...	...	...
Kastamonu	Turkey	0.990	0.990	0.986	968,884	13.220	18.07	6.9	0.21	64,592	4,796
Zor	Turkey	1.000	0.990	0.993	151,260	1.240	1.67	...	...	...	...

Source for estimation of indicators:

Güran, T. (1997) Osmanlı Devleti' nin İlk İstatistik Yılığ 1897 (The First Statistical Yearbook of Ottoman Empire)

Ankara: State Institute of Statistics publications.

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That there was not a crucial relationship cosmopolitan and development levels gives a clue that the ethno-cultural structure had a historical basis in the Ottoman Empire in the nineteenth century. As a matter of fact, it was calculated that there was an important difference between female and male coefficients. Consequently, it is possible to argue that ethno-cultural structure constituted in the provinces in outside of Istanbul did not have an economical basis in this period.

### **5. Discussion and Conclusion**

Empires are the states that have a cosmopolitan structure composed of many ethnic groups. Many opportunities are given to communities to continue freely their inner lives in these organizations. For, it is not hoped that the communities feel themselves like possessor of empire in these states, a kind of unity of nations. Obedience and loyalty precede the feel of the state of belonging.

Attempt to create a homogeneous nation also constitutes formal policy in nation state. If there exists unity of religion and language, the it will be easy to establish a nation state. However, if there are many differences of community composed of different religion and language, there will remain a tool to emphasize the citizenship-based land. Accordingly, it can be concluded that the more religious and linguistic differences there are, the longer nationalizing process continues. One exceptional instance of this circumstance is seen in the United State because it is depended on the unity of inter-individual economic benefit. This society protected its identity for “whites” and unwillingly accepted American identity to reach a nation structure by passing from the nineteen to twentieth century. For, they immigrated to the place, which was ten thousand, distance and coming back was difficult. However, this circumstance is exceptional.

The Ottoman Empire had also a cosmopolitan ethno – cultural structure like other empires. However, this structure was not valid for every part of the Empire. If results of statistical applications are examined, it is seen that almost 14 % of population of the Ottoman Empire lived in places having a cosmopolitan ethno-cultural structure like the structure of today’s metropolis a multi-cultural structure in the last quarter of the nineteenth century. 1/4 of the population lived in the places where there was a dual dominant ethno – cultural structure. Remained 63 % population continued their lives in the places where were an extremely homogeneous mono ethno – cultural structure.

Existence of a prominent relationship could not be determined for the places in outside of Istanbul when basic welfare indicators were compared with ethnic distribution. Therefore, it can be

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argued that economic activities did affect ethnic structure because ethnic structure had a historical basis in the Ottoman geography.

It can be thought that ethno – cultural structure left for an inheritance to Turkish Republic assisted in establishing a nation state. There is a dual ethno – cultural structure in Van and Bitlis among the eastern provinces of Anatolia. The dual structure could be transformed to a mono ethno-cultural structure by removing Armenians. It is observed that the provinces in the Western Anatolia had a population composed of Muslim and Greek components. As a result of between Greeks and Turkish population barter in 1924, dual structure could be easily transformed to mono ethno cultural structure in these provinces like in Van and Bitlis. To create a nation was made easy by the transformation lived in restricted ethno – cultural structure in Republican Turkey. Local linguistic differences were transformed to a common language with education. Additionally, possible conflict manner among sects was extremely restricted with secularism. Dual structure in these provinces could be easily transformed to mono ethno cultural structure like that in Van and Bitlis with population barter. Briefly, the immigration movements of Greeks and Armenians to abroad led to create nation state in Turkey.

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