

EXPECTATIONS REGARDING THE ECONOMIC AND POLITICAL SITUATION IN THE 2007 ELECTION PERIOD: THE CASE OF BURSA

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Abstract

Presidential and general elections projected to take place in 2007 are to cause some important decisions to be made regarding the future of Turkey's politics and economics. Before and after the election, some changes are expected especially in economic parameters and conjuncture. In this context, it is important for the public to express their views and expectations about the politics and economy. For this purpose, a questionnaire form consisting of 55 questions was prepared and applied four months before the election in March 2007 to one thousand and one hundred ninety nine people living in Bursa.

As a result of this study, in the March 2007 period the satisfaction of the people in Bursa with some issues, their confidence in some institutions, their opinions about current and old political parties, and their expectations, tendencies and views regarding economic and political situation about the past, current and future period were established. Besides, current AKP government's performance regarding the economic, political, foreign relations and other issues were also determined. Furthermore, the factors affecting the issues such as the level of confidence of people in Bursa in the government (1=confidence, 0=no confidence) and their satisfaction with the current economic situation (1=yes, 0=no) were researched with binary logistic regression analysis that is accepted as the member of advance nonparametric methods set.

Key Words: 2007 general election, binary logistic regression analysis, categorical variable, odds ratio.

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Özet

2007 yılında yapılması planlanan Cumhurbaşkanlığı seçimi ve genel seçimler, Türkiye siyaseti ve ekonomisinin geleceği üzerine önemli kararlar alınmasına neden olacaktır. Seçim öncesi ve sonrasında özellikle ekonomik parametreler ve konjonktürde değişim beklenmektedir. Bu bağlamda kamuoyunun siyaset ve ekonomi hakkındaki görüş ve beklentilerinin ortaya konması önemlidir. Bu amaçla 55 soruluk bir anket formu hazırlanmış ve seçimden dört ay önce Mart ayında Bursa'da yaşayan 1199 kişiye uygulanmıştır.

Bu çalışma sonucunda; Bursa'da yaşayanların Mart 2007 döneminde bazı konulardaki memnuniyet durumları, çeşitli kurumlara güvenme durumları, mevcut partilere geçmiş ve şu andaki bakış açıları, geçmiş-mevcut-gelecek dönem için ekonomik ve siyasi durum konusundaki beklenti, eğilim ve tutumları belirlenmiştir. Bununla birlikte, şu andaki AKP hükümetinin ekonomik, siyasi, dış ilişkiler ve diğer konulara ilişkin performans durumları ortaya konmuştur. Ayrıca Bursa'da yaşayanların hükümete güvenme durumu (1= güveniyorum, 0=güvenmiyorum) ve mevcut ekonomik durumun tatmin ediciliği (1=evet, 0=hayır) konularını etkileyen faktörler, ileri parametrik olmayan teknikler kümesinin üyesi niteliğindeki ikili lojistik regresyon analizi ile araştırılmıştır.

Anahtar Kelimeler: 2007 genel seçimleri, ikili lojistik regresyon analizi, kategorik değişken, odds oranı.

1. INTRODUCTION

In this day and age, it is often possible to observe that the word conjuncture is synonymously used with the word statistics. Conjuncture utilizes a dynamic method of analysis that binds today to near past and near future. Therefore, it is possible to say that examining the conjuncture will contribute to the prediction of future today in terms of economics. In order to be able to explicate the economic conjuncture, a certain train of events have to be systematically observed. For that reason, this significant duty has been undertaken by such institutions as Turkish Statistical Institute (TSI), State Planning Organization (SPO) and the Central Bank (CB). In order for those institutions in question to be able to shape the economy, they collect data related to a train of meaningful and strategic variables and/or convert those data into a report through assessment.

The choice of those variables is changeable according to the countries, period of time and the economic structure of those countries. In order to determine the general conjectural situation in our country, some quantitative indicators such as annual growth rate, unemployment and inflation rates, balance deficits, budget deficits, unused capacity in industry, increase in investments, internal and external debts, monetary supply, interest rates and currency reserves can be utilized (Unay, 2001: 24).

In addition to comprehension of the general economic situation, in terms of the persons and institution shaping the economy, it is vitally important for the non-financial sector (real economy) and financial sector to determine the expectations about the future. For this purpose, Turkish Statistical Institute and the Central Bank try to establish the expectations regarding those sectors through certain statistical techniques. Descriptive statistics, deductive statistics, expectation index, confidence index and similar statistical studies calculated using the surveys results prepared and applied for this purpose, are used as useful tools in the assessment of the economy.

In this context, “the non-financial sector confidence index” whose main purpose is to establish the general tendencies in conjectural developments and present information related to future expectations, and “the consumer confidence index” geared to the assessment of those expectations are examples of those kinds of studies.

One of the most significant components of a statistical study is the data. For this purpose, it is important for the researcher to determine what kind of data to be used. Gender, confidence or non-confidence in the government, satisfaction or non-satisfaction of the economic situation etc. in social sciences displays a variable categorical structure in many situations. In situation in which the dependent variable displays such a variable categorical structure, in order to determine the correlation between dependent and independent variable, classical regression analysis is not used. In situation in which dependant variable has two or multiple choice categorical structure and independent variables display uninterrupted or categorical structure, the cause and effect correlation between the variables in question is studied by the logistic regression analysis. (Işığçok, 2003: 1).

Logistic regression analysis can be taken into consideration in cases when the expletive variables are not distributed evenly and also when some or all of them are either discrete or categorical. (Johnson, 1998: 287). The correlation in question is acquired thanks to the probable obtaining of the effects of independent variables over dependent ones. In other words, the probable effects of dependent variable in comparison to independent variables are found on the level of likelihood. These calculated probabilities are used in the classification of observations.

2. STATISTICAL TECHNIQUES USED IN THE STUDY

In carrying out a statistical analysis, the data obtained and the structures of the variables chosen have to be examined in the first place. While data expressed in numbers are described as quantitative, data expressed in explanations are described as qualitative data. Non parametric techniques can be applied to data obtained from qualitative variables and

data from parametric techniques can be applied to quantitative variables. Consequently, as pointed out in Table-1, it is possible to say that the choice of the statistical technique is dependant upon quality of the data collected. As observed in Table-1, in cases in which dependant variable is qualitative, logistic regression analysis is used; and in cases where dependant variable is quantitative, regression analysis is used.

Table 1. Choice of the Statistical Technique

		Dependent variable (Y)	
		Qualitative	Quantitative
Independent variable (X)	Qualitative	Ratio tests Chi-squared test	t test, z test, F test ANOVA, DOE Simple Regression
	Quantitative	Discriminant analysis Logistic regression	Correlation Multiple Regression

Reference: Erkan İŞİĞİÇOK, **Altı Sigma Kara Kuşaklar İçin Hipotez Testleri Yol Haritası**, Sigma Center, Bursa, 2005, s. 6.

In this study, in addition to the frequency distributions related to 55 questions, binary logistic regression analysis was used. As the explanations of findings are to be made in the application section, the theoretical framework of frequency distributions under this subheading has been used. However, it will be necessary to explicate the issue of binary logistic regression under a separate heading.

3. LOGISTIC REGRESSION ANALYSIS

Logistic regression analysis is a technique used in situations in which dependent variable has a categorical structure whereas independent variables are continuous and categorical. Logistic regression analysis, whose result variable displays a categorical structure, is applied in three ways. These are referred to as; binary logistic regression analysis when the dependent variable has binary choices, nominal logistic regression with at least triplet choices when dependent variable has nominal measurement level and ordinal logistic regression analysis when dependent variable has ordinal measurement level and with at least triplet choices. (Özdamar, 2004: 591). In this study, binary logistic regression (BLR) was used.

3.1. Logistic Regression Model and its Features

While independent variable in classical regression is the fixed conditional expected value or the mean of dependent variable the value is shown as in the following:

$$E(Y \mid x_1, x_2, \dots, x_k) = \beta_0 + \sum_{j=1}^k \beta_j x_j + \varepsilon \quad \varepsilon \sim N(0, \sigma^2) \quad (1)$$

Although there is no limitation on the explanatory variables in this model, the condition of the continuity of Y result variable is required. Therefore, the dependent variable can accept all the values between $-\infty$ and $+\infty$. However, when dependent variable has binary results, the assumption that the error term complies with normal distribution with the mean zero and with invariant variance does not materialize (Steven, 2002: 146). For that reason, it will not be possible to carry out hypothesis tests and establish confidence limits. In such a case, logistic regression analysis that does not need for the assumption of normal distribution with multiple variables can easily be used.

In Equation-1, while the left side of the equation takes limited probability value between 0 and 1, independent variables can accept infinite values. As explanatory variables can accept infinite variables, the equation in question may not always be obtained. In order not to face such kind of a situation, probability value referred to as result value should be made definite between $(-\infty, +\infty)$ interval with the different transformations. The most used transformations among others was lojit one. In this transformation, after the limits of the dependent variable was made $(0, +\infty)$ with the transformation of $1/(1+e^{-(\beta_0+\beta_j x_j)})$ over the probability value in the equation (1), the by taking the natural logarithm of the percentage obtained, the limits of the result variable was converted into $(-\infty, +\infty)$. The new function obtained after this transformation;

$$g(x) = \beta_0 + \sum_{j=1}^k \beta_j x_j \quad (2)$$

with the inclusion of,

$$E(Y \mid X) = \pi(x) = \frac{e^{g(x)}}{1 + e^{g(x)}} = \frac{e^{\beta_0 + \sum_{j=1}^k \beta_j x_j}}{1 + e^{\beta_0 + \sum_{j=1}^k \beta_j x_j}} \quad (3)$$

is as stated above. The $g(x)$ figure is called the lojit of logistic regression model between $g(x)$ and $\pi(x)$;

$$g(x) = \ln \left[\frac{\pi(x)}{1 - \pi(x)} \right] = \beta_0 + \sum_{j=1}^k \beta_j x_j \quad (4)$$

lojit transformation as expressed above is possible. (Hosmer and Lemeshow, 2000: 6).

The assumptions of logistic regression model with binary categorical dependent variable can be explained as in the following:

- $0 < E(Y | X) < 1$. That is, the conditional mean of logistic regression model is to be between 0 and 1.
- $P(Y = 1 | x) = \pi(x)$. This assumption implies that while the value x is the invariant, it implies that $Y=1$ probability is $\pi(x)$.
- The distribution of error terms of logistic regression model fits the binom distribution.
- The observation values $Y_1, Y_2, Y_3, \dots, Y_n$ of the dependent variable are statistically independent.
- Explanatory variables are independent of each other.

One of the significant concepts of logistic regression analysis is the odds ratio. The odds ratio referred to in various sources as a bet ratio, dominance ratio, probability ratio or **uniqueness** ratio, can be defined as the ratio of the probability of an event taking place over not taking place. When the anti logarithm of $g(x)$ referred to as the lojiti of logistic regression model is taken, it is observed that odds ratio is obtained (Agresti, 1996: 107):

$$\text{Odds Ratio} = OR = e^{[g(x)]} = e^{\left[\beta_0 + \sum_{j=1}^k \beta_j x_j\right]} = \left[\frac{\pi(x)}{1 - \pi(x)} \right] \quad (5)$$

In this figure, odds value of each parameter is equal to $e^\beta = \exp(\beta)$ and with the effect of explanatory variable of e^β value dependent variable, shows the possibility of how many times more or what percentage more observation it has. Therefore, to test the significance of β coefficient means the same as to test $OR = \exp(\beta)$ (Özdamar, 2004: 591).

Odds ratio and probabilities enable to evaluate the same result from different angles. In other words, it is possible to convert probabilities into odds ratio and odds ratio into probabilities (Kalaycı et. al., 2005: 279).

3.2. Estimation of Logistic Regression Model and Goodness of Fit Tests

Logistic regression analysis is similar to multiple regression analysis in terms of its results. However, it is different from multiple regressions in terms of the method used in estimating coefficients. In the logistic regression analysis, instead of minimizing the square of deviances, the possibility of an event taking place is maximized. To use this alternative estimation technique requires the assessment of model fit from different aspects (Hair et. al., 1998: 280).

In the estimation coefficient of logistic regression model; the methods of Maximum Likelihood (ML), Reweighted Iterative Least Square (RILS) and in the event of iteratively data Minimum Logit Chi Square (MLCS) are used. (Tatlıdil, 2002: 295).

The most prevalent method of these is the method of Maximum Likelihood. When the dependent variable in regression model is binary choice coded with the values 0 and 1, the error term of the model in question does not have a fixed variance. Therefore, the estimation of model parameters with and Ordinary Least Squares will be without deviance, but will not be the best one. This means that there is a need for alternative estimation methods. One of those, the Maximum Likelihood, chooses the best one that most increases the probability of obtaining the values observed among the present parameters. (Koutsoyiannis, 1992: 441)[†].

After being tested with any of the estimation techniques, logistic regression model should be tested by the goodness of fit. How effective the dependent variable is defined has to be known. Goodness of fit of the model has to be considered.

There are some statistical criterions used to study the goodness of fit of the logistic model. The model called saturated model that includes as many parameters as variables and what is referred to as estimated model, the criterions based on the difference of likelihood ratios belonging to the model that includes variables thought to be the most important ones shows the χ^2 distribution. D statistics is one of those criterions. D statistics,

$$D = -2 \ln \left[\frac{\text{Likelihood of estimated model}}{\text{Likelihood of saturated model}} \right] \quad (6)$$

is defined this way. Furthermore, using the Log Likelihood Function, D statistics can be expressed as in the following;

$$D = -2 \sum_{i=1}^n \left[Y_i \ln \left(\frac{\hat{\pi}(x_i)}{Y_i} \right) + (1 - Y_i) \ln \left(\frac{1 - \hat{\pi}(x_i)}{1 - Y_i} \right) \right] \quad (7)$$

D statistics referred to as deviation corresponds to error sum of squares in linear regression and both statistics have the same role (Hosmer and Lemeshow, 2000: 13). Therefore, the model that has the minimum deviant value can be seen as a better model than the other models.

When the dependent variable accepts 0 or 1, the probability of saturated model in which the $\pi = \hat{Y}_i$ equation is true,

[†] Given the size of the study, no details were given here.

$$l(\text{Saturated model}) = \prod_{i=1}^n Y_i^{Y_i} (1 - Y_i)^{(1-Y_i)} = 1 \quad (8)$$

is equal to 1. In this case, D statistics is converted in to the following;

$$D = -2 \ln(\text{Likelihood of estimated model}) \quad (9)$$

Should the test statistics be defined by the parameter number k, it is compared with chi-square with (n-k) degrees of freedom.

Since there is no limitation of normality assumption in logistic model, in goodness of fit tests, as it is the case with most of the multivariate tests, when t and F table values are not used for comparison, criterions such as χ^2 and G^2 that are the simplest non parametric criterion, are used (Murat, 2006: 85).

D statistics used in the determination of goodness of fit of logistic model, is also used in determining explanatory variables included in the model. With the comparison of D statistics calculated by when the dependent variable is present or not in the model, whether dependent variable in question greatly contributes to the model. Based on this, the following formula

$$G = D(\text{model without dependent variable}) - D(\text{model with dependent variable}) \quad (10)$$

can be written. It is possible to say that the G statistics calculated for logistic regression model formulated in equation (10), corresponds to F test that tests the general significance of parameters in the multi-linear regression model. Using the equation (6),

$$G = -2 \ln \left[\frac{\text{likelihood of without independent variable model}}{\text{likelihood of with independent variable model}} \right] \quad (11)$$

Equation is obtained. The hypotheses tested here are;

$$H_0 : \beta_0 = \beta_1 = \beta_2 = \dots = \beta_k = 0$$

$H_1 : \beta_0 \neq \beta_1 \neq \beta_2 \neq \dots \neq \beta_k \neq 0$ (At least one is different)

G statistics calculated as such has the χ^2 (k-1) degree of freedom distribution.

The other criterion used in the assessment of individual significance of estimated parameters is the Wald test. The Wald test statistics that has the same logic as the standart error approach used to test the significance of multiple regression coefficients is obtained as in the following,

$$W_k = \left[\frac{\hat{\beta}_k - 0}{SE(\hat{\beta}_k)} \right]^2 \quad (12)$$

as a result of calculating its own standard error with $\hat{\beta}_k$ coefficient of explanatory variables. (Tabachnick vd., 1996: 581). This statistics is individually tested for the null and alternative hypotheses of $H_0 : \beta_k = 0$ ve $H_1 : \beta_k \neq 0$. As a result of the Wald test, the W value is compared to the table value of standard normal distribution.

In the assessment of goodness of fit of the logistic model, Hosmer-Lemeshow (H-L) test that accords with chi-square distribution can also be used. The purpose of this test is to group the estimated probability values. To explain it with an example; the limit values for $g=10$ are determined, while those whose later estimated probability values are smaller than 0,1 are appointed to first group, those whose probability values are greater than 0,9 are appointed to group ten. Furthermore, on the one hand, efforts are made to enable the degrees of freedom to fall by making sure that theoretical frequencies are greater than 5 in the Hosmer-Lemeshow test and on the other hand, with the χ^2 distribution fit in the degrees of freedom in question, the criterion of reliable goodness of fit is eventually obtained (Arabacı, 2002: 33). \hat{C} , a statistics of Hosmer-Lemeshow goodness of fit is calculated as Pearson chi-square from the $g \times 2$ table composed of observed and expected frequencies. \hat{C} , the statistics of Hosmer-Lemeshow test is close to χ^2 distribution with

(g-2) degrees of freedom.

In order to test the goodness of fit of logistic regression model, correct classification percent can also be used. For this purpose, classification tables can be used. These tables are made up of crossing the observed real values of dependent variable with estimated values. In order to establish the classification table, a limit value c is primarily determined and the estimated values are compared to this limit value and then an appropriate appointment is made to the group. If the value estimated is greater than the value c, it is added to group one; if not, to the group. The value of 0,5 is generally used for the limit c in question here.

4. APPLICATION and FINDINGS

The current year of 2007 will historically be remembered a significant and strategic year for our country. The two important reasons are that the Presidential and general elections will be held within the same year.

The demands and expectations of the public have become all the more important for the country in this crucial process. Therefore, in this study, efforts were made to establish the opinions and expectations of the people related to economic and political conditions in Bursa, the fourth largest and major city in Turkey. For this purpose, a questionnaire with 55 questions on the issues in question were prepared and applied four months before the elections in March 2007 to a sample group of 1199 subjects determined according to stratified sampling approach. The data obtained were analyzed in programs such as the Microsoft Office Excel, SPSS 13.0 and Minitab 14.0.

4.1. The Frequency Tables Regarding Questions in the Study

The findings related to the responses to the questions asked in the questionnaire were obtained as in the Table-1, Table-2 and Table-3.

Table 2. Findings in relation to Some Issues

Frequency	Percentage
1. How much are you satisfied with your life?	
Not satisfied at all	114 9,5
Not satisfied	169 14,1
Undecided	210 17,5
Satisfied	584 48,7
Very Satisfied	122 10,2
2. Are you satisfied with your current economic condition?	
Yes	460 38,4
No	737 61,6
3. Are you satisfied with the "general economic condition" of our country?	
Satisfied	277 23,2
Not satisfied	917 76,8
4. Are you satisfied with the "general political condition" of our country?	
(1) Satisfied	305 25,5
(0) Not satisfied	892 74,5
5. If you voted for Turkey's EU membership, would you vote for or against it?	
I would vote for Turkey's membership	566 47,5
I would vote against Turkey's membership	626 52,5
6. What is Turkey's current biggest problem for you?	
Inflation	136 13,4
Unemployment	395 38,9
Problem of domestic and foreign debt	98 9,7
Cyprus issue	7 0,7
EU membership	46 4,5
Terror	211 20,8
Presidential election	78 7,7
Other(s)	44 4,3

In order to understand the Table-2, we have to be content with interpreting the findings regarding only the first question asked. As is clear in the table, the question of “How much are you satisfied with your life?” was responded by the subjects as in the following: while 48.7% were responded as “satisfied” and 10.2% “very satisfied”, 17.5% responded as “undecided”, 14.1% “not satisfied” and 9.5% “not satisfied at all”. Based on these findings, it would not be incorrect to argue that the respondents were satisfied with their lives.

Table 3. Findings Regarding Confidence/Nonconfidence Values for Various Institutions

Frequency Percentage	Frequency Percentage
1. The President (A. N. Sezer)	6. Police Organization
(1) Have confidence 878 74,7	(1) Have confidence 668 56,9
(0) No confidence 297 25,3	(0) No confidence 505 43,1
2. The Present Government (AKP)	7. Media
(1) Have confidence 394 33,5	(1) Have confidence 130 11,1
(0) No confidence 781 66,5	(0) No confidence 1042 88,9
3. The Main Opposition Party (CHP)	8. EU Officials
(1) Have confidence 227 19,5	(1) Have confidence 128 11,0
(0) No confidence 940 80,5	(0) No confidence 1033 89,0
4. Politicians	9. International Monetary Fund (IMF)
(1) Have confidence 137 11,8	(1) Have confidence 88 7,6
(0) No confidence 1024 88,2	(0) No confidence 1077 92,4
5. Turkish Armed Forces (TSK)	10. Industrialists
(1) Have confidence 1028 87,0	(1)) Have confidence 595 50,9
(0) No confidence 153 13,0	(0) No confidence 574 49,1

When we examine the findings regarding the confidence for various institutions in this table, we see that while 74.7% of the people in Bursa stated that they had confidence for the President Ahmet Necdet Sezer, those who respondent that they had no confidence for the President was 25.3%. While 33.5% of the people had confidence for the current AKP government, 66.5% had no confidence for the government. The confidence people had for the CHP, the main opposition party, was 19.5%, nonconfidence for it was 80.5%. It is quite noticeable that the percentages of confidence people had for AKP and CHP were in line with the percentage of votes they received in the previous general elections. In addition, another significant finding was that while the Turkish Armed Forces were the most reliable institution, the

least reliable one was IMF. The confidence or nonconfidence people had for other institutions can be examined in the table.

On the other hand, the findings regarding the opinions of the public in regards to the parties capable or not capable of obtaining enough votes for the parliament in the upcoming elections can be seen in the Table-4 below.

Table 4. The findings regarding the parties capable or not capable of obtaining enough votes for the parliament in the upcoming elections

Frequency Percentage	Frequency Percentage
1. Motherland Party (ANAP)	5. Democratic Left Party (DSP)
(1) Yes 199 16,8	(1) Yes 88 7,4
(2) No 987 83,2	(2) No 1098 92,6
2. Justice and Development Party (AKP)	6. Young Part (GP)
(1) Yes 1066 89,9	(1) Yes 66 5,6
(2) No 120 10,1	(2) No 1120 94,4
3. Republican People's Party (CHP)	7. Nationalist Movement Party (MHP)
(1) Yes 914 77,1	(1) Yes 570 48,1
(2) No 272 22,9	(2) No 616 51,9
4. True Path Party (DYP)	8. OTHERS
(1) Yes 472 39,8	(1) Yes 24 2,0
(2) No 714 60,2	(2) No 1161 98,0

As is clear in the Table-4 where the findings regarding the parties capable of receiving enough votes for the parliament are shown, more than 77% of the people in Bursa declared that AKP and CHP were independently capable of passing the barrage and entering the parliament in the next general elections. The percentage of those who thought that MHP, the third ranking party with highest votes was capable of passing the barrage was 48.1% and those who thought that DYP was 39.8%. According to the people in Bursa, it is possible to state that other parties inclusive of DYP were incapable of passing the barrage should they stand for election solo. In the period following the present study, as a result of the fact that DYP and ANAP converged under a new part named Democratic Party (DP), there is no question that the new party will be capable of passing the barrage. In this case, the public opinion of the people in Bursa in March 2007 stands as in the following: AKP is the first party, followed by CHP, DP and MHP respectively or at least that is the opinion of people in Bursa as of March 2007. There is no doubt that due to some factors such as the post March period that saw the online memorandum of Turkish Armed Forces and withdrawal of Abdullah Gül's candidature for Presidency, a possible

convergence of leftist parties under a single stronger party and other possible developments until the election period can easily affect this ordering.

The distribution of votes according to the parties the respondents voted for in the 2002 elections and will vote for in the upcoming elections is demonstrated in the Table-5.

Table 5. The Findings Regarding the Parties that Respondents Voted for in the 2002 Election and the Parties They Might Vote for in the Upcoming Election

The Party Voted for in 2002 Frequency Percentage	The Party likely to be voted for in the Upcoming Election Frequency Percentage
1. ANAP 30 2,5	1. ANAP 51 4,5
2. AKP 326 27,6	2. AKP 321 28,1
3. CHP 261 22,1	3. CHP 294 25,7
4. DYP 49 4,1	4. DYP 56 4,9
5. DSP 51 4,3	5. DSP 38 3,3
6. GP 20 1,7	6. GP 30 2,6
7. MHP 98 8,3	7. MHP 138 12,1
8. Did not cast a vote 295 25,0	8. UNDECIDED 76 6,6
9. OTHER 51 4,3	9. OTHER 139 12,2

According to the results obtained, compared to the previous election, CHP and MHP will get higher votes by the people in Bursa. In addition, it is possible to say that there will be a significant decrease in the percentage of people who will not cast a vote in this election. There is no doubt that these results which belong to four months before the election will change in July 2007. The findings regarding the demographic questions the respondents were asked can be found in Table-6. Apart from this table, it was found that the subjects in this study were 18.5% white-collar worker civil servants, 8.5% executive-directors, 16.9% blue-collar workers, 1% farmers, 12.6% freelance tradesman, 3.4% medical doctor-engineer etc., 2.8% employers, 8.3% pensioners, 9.5% housewives, 14.9% students and 3.6% people of other professions.

Table 6. Demographic Findings Regarding Subjects in the Study

Frequency Percentage	Frequency Percentage
1. Gender	3. Education Level
(1) Male 670 55,9 (2) Female 529 44,1	(1) Primary-Secondary 219 18,3 (2) High School 441 36,8 (3) vocational colleges 118 9,9 (4) University graduates 368 30,7 (5) M.A. and Ph.D. 51 4,3
2. Age	4. Total Monthly Income
18-24 293 24,73 25-31 265 22,36 32-38 212 17,89 39-45 165 13,92 46-52 150 12,66 53-59 67 5,65 60-78 33 2,78	0-500YTL 135 12,63 501-1000 YTL 379 35,45 1001-1500 YTL 233 21,80 1501-2000 YTL 160 14,97 2001-2500 YTL 52 4,86 2501-3000 YTL 43 4,02 3001-30000 YTL 67 6,27

Lastly, in Table-7 questions used in the section where government's success was questioned regarding economy, politics, foreign relations and some other issues in the questionnaire form and the descriptive statistics calculated regarding these questions are illustrated. Since the result of reliability analysis calculated regarding the questions in table-7 was found as Cronbach's Alpha =0,939, it is possible to say that the criterion used was a highly reliable one.

As can be seen in Table-7, in this part of the questionnaire, there were 35 statements that aimed to ask the respondents to express their views on the success of present AKP government's policies on Economy, Politics, Foreign Relations and Some Other issues. Therefore, in order to determine their level of agreement, the subjects were asked to respond according to 5-level Likert scale by giving points such as "(1) Strongly Disagree", "(2) Disagree", "(3) Undecided", "(4) Agree", "(5) Strongly Agree". In table-7, ordering based on the percentages obtained as a result of assessment regarding every agreement level, means calculated for every question asked under the headings such as economy, politics, and foreign relations and other issues and standard deviation values, and their means can be found.

In the table in question, it was statistically confirmed at 5% level that apart from the two, all of the average values of the questions asked under four main headings were smaller than 3. This proves that the level of agreement of the respondents regarding the government's success on economy, politics, and foreign relations and other issues was quite low; in other words, it demonstrates that the current government's performance on the four main headings specified was regarded as poor.

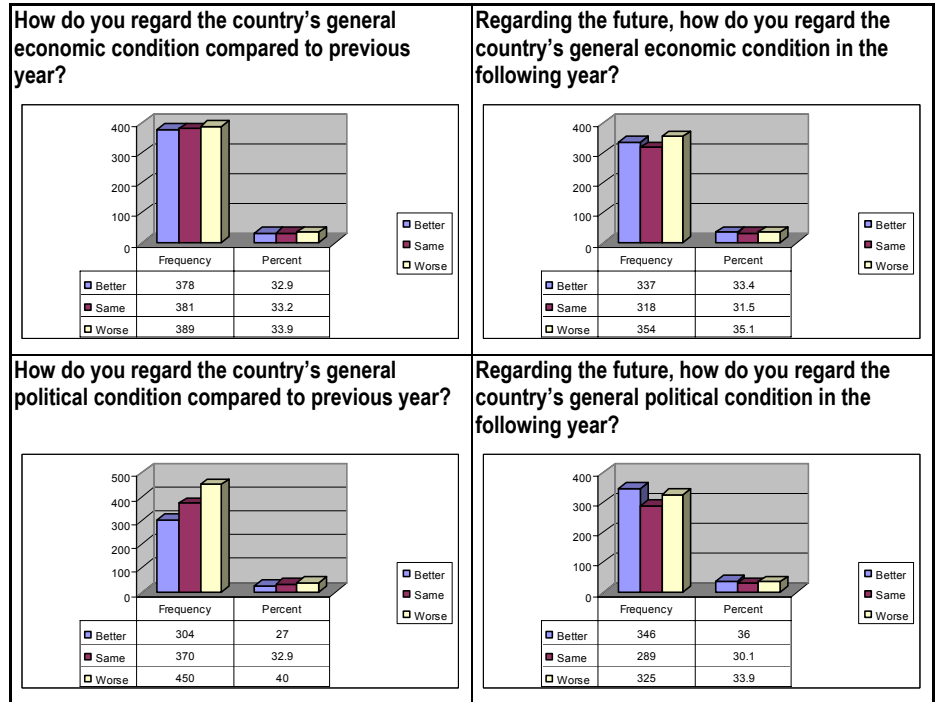
Table 7. Statements that Question the Government's Success in Policies in Various Areas and their Relevant Descriptive Statistics

	(1)	(2)	(3)	(4)	(5)			
	Strongly Disagree	Do not Agree	Undecided	Agree	Strongly Agree	Mean	Standard Deviation	Classification according to Mean
PRESENT GOVERNMENT'S	%	%	%	%	%			
ECONOMIC CONDITION	1	2	3	4	5	2,40		
1) Inflation policy is successful.	22,4	35,2	11,3	26,8	4,3	2,56	1,221	10.
2) Unemployment policy is successful.	35,4	39,8	12,2	10,7	2,0	2,04	1,040	28.
3) Income distribution policy is successful.	38,1	38,3	12,4	9,0	2,2	1,99	1,030	29.
4) Exporting policy is successful.	17,8	27,6	26,1	23,9	4,6	2,70	1,149	6.
5) Importing policy is successful.	20,6	30,9	26,7	17,8	4,0	2,54	1,121	12.
6) Per capita income policy is successful.	36,6	34,4	14,7	12,0	2,3	2,09	1,094	27.
7) Economic growth policy is successful.	23,6	30,4	17,1	24,0	4,9	2,56	1,223	10.
8) Investment policy is successful.	22,7	32,0	22,4	19,4	3,5	2,49	1,142	13.
9) Finance policy is successful.	23,2	31,9	22,9	17,7	4,4	2,48	1,155	14.
10) Central Bank (monetary policy) is successful.	17,1	27,0	27,1	25,1	3,7	2,71	1,127	5.
11) IMF policies are successful.	33,0	30,6	20,6	12,8	3,0	2,22	1,127	24.
POLITICAL CONDITION						2,42		
12) Relations with the Presidents are as they should be.	28,8	32,9	13,3	20,4	4,7	2,39	1,226	18.
13) Relations with the Opposition are as they should be.	32,4	34,4	11,0	18,1	4,2	2,27	1,208	21.
14) Relations with the Armed Forces are as they should be.	27,3	28,4	12,8	25,1	6,5	2,55	1,299	11.
15) Relations with the Higher Education Council are as they should be.	33,6	30,3	19,4	13,3	3,4	2,23	1,148	23.
16) Relations with the Industrialists' Association are as they should be..	13,2	22,3	31,4	26,0	7,1	2,92	1,135	3.
17) Relations with NGOs are as they should be.	20,3	27,2	27,3	21,9	3,4	2,61	1,134	9.
18) Relations with Trade Unions are as they should be.	22,8	30,1	27,7	16,6	2,8	2,47	1,099	15.
19) Its policies on foreigners' right of possessions are acceptable.	39,7	25,0	19,9	10,9	4,4	2,15	1,187	26.
20) Its policies on handling terrorism are successful.	38,8	28,7	11,6	15,6	5,3	2,20	1,253	25.
FOREIGN POLICY						2,55		
21) Government's policies of national security are positive.	29,0	28,9	14,0	23,4	4,7	2,46	1,256	16.
22) Its policies on European Union (EU) are successful.	24,7	34,2	14,3	21,0	5,8	2,49	1,229	13.
23) Its policies regarding USA are successful.	25,5	34,4	16,1	19,6	4,4	2,43	1,189	17.
24) It makes concessions of its values due to EU membership.	28,0	28,6	11,5	17,8	14,0	2,61	1,413	9.
25) Legal arrangements regarding Copenhagen political criteria are successful.	17,2	24,6	39,4	15,4	3,3	2,63	1,042	8.
26) Closure of State Security Courts for EU membership is acceptable.	30,8	26,7	23,5	14,0	5,0	2,36	1,195	19.
27) Its policies on Iraq are successful.	28,2	33,2	19,2	16,6	2,8	2,33	1,134	20.
28) Its policies on other Middle east countries are successful.	16,8	28,5	26,2	24,8	3,8	2,70	1,125	6.
29) Its policies on Central Asian countries are successful.	15,3	23,4	28,4	27,6	5,3	2,84	1,146	4.
30) Its policies on Balkans are successful.	16,6	25,9	34,0	20,6	2,8	2,67	1,066	7.
OTHER ISSUES						2,58		
31) EU is fair and sincere about Turkey's membership.	55,8	24,4	7,7	8,5	3,6	1,80	1,121	31.
32) I believe that Turkey will become a member of EU.	35,4	28,8	15,8	16,1	3,9	2,24	1,204	22.
33) Turkey should definitely become a full member even if she has to accept all the conditions stipulated by the EU.	52,5	26,4	8,2	8,9	3,9	1,85	1,139	30.
34) An early election before the Presidential election will be useful for our country's present political situation.	17,6	19,9	16,5	21,9	24,0	3,15	1,436	2.
35) The current main opposition party (CHP) maintains an effective and successful opposition policy.	4,1	12,8	12,8	33,5	36,9	3,86	1,165	1.

Note: Questions 24, 34 and 35 were subjected to inverse process.

4.2. Findings Regarding Economic and Political Conditions

Graphics and frequency tables of questions asking about the expectations and trust regarding economic and political conditions are illustrated below.



Based on these findings, while it is possible to calculate the expectation and trust indexes (see. Işığçok, 2004), only frequency tables are provided not to go into details.

4.3. Findings Regarding Logistic Regression Models

In our study, dependent variable was calculated to be categorical and have a double choice structure with two different models. These two models have six independent variables such as age, level of income, government's economical performance, political performance and performance of foreign relations. The dependent variable in the first model was confidence (non confidence) in the government and satisfaction (dissatisfaction) in the second model. Therefore, the level of effect of the independent variables mentioned above whether there was confidence (non confidence) and satisfaction (dissatisfaction) in the government was determined separately. In other words, our aim was to determine whether these independent variables were a

risk factor for the conditions of confidence (non confidence) and satisfaction (or dissatisfaction) for the government.

In this context, the categorical dependent variable referred to as GOV_CON that explicates the condition of confidence (non confidence) in the government took the value 1 when confidence was expressed and was coded with the value 0 in the case of non confidence. The AGE and INCOME variables, the independent variables of logistic regression model in question, are quantitative variables. The other independent variables were converted from qualitative into quantitative ones as a result of calculating the arithmetical means of responses to the relevant issues in the questionnaire. In clear terms, the variables such as EP that illustrates the current government's economical performance, PP that demonstrates political performance, FRP that represents foreign relations performance and OTHER that shows government's performance on other issues are also quantitative variables.

Consequently, the model can be formulated as in the following;

$$\text{GOV_CON} = f(\text{AGE, INCOME, EP, PP, FRP, OTHER})$$

The results obtained regarding the model as formulated above are illustrated in Table-8.

Table 8. Logistic Regression Analysis Results Regarding the GOV_CON Model

	B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
							Lower	Upper
AGE	0.012***	.007	2.877	1	.090	1.012	.998	1.027
INCOME	.000	.000	.000	1	.994	1.000	1.000	1.000
EP	1.038*	.152	46.348	1	.000	2.824	2.094	3.807
PP	0.745*	.148	25.369	1	.000	2.108	1.577	2.818
FRP	0.855*	.167	26.386	1	.000	2.352	1.697	3.260
OTHER	-0.839*	.130	41.442	1	.000	.432	.334	.558
Constant	-6.117*	.495	152.788	1	.000	.002		

*= statistically significant on the level of 1%.

*** = statistically significant on the level of 10%.

When we examine the individual significance of the parameters in the model, we can see that the parameters of all the variables apart from INCOME and AGE are statistically significant on the level of 1%. The parameter of AGE variable is statistically significant on the level of 10%. The variable of INCOME has not been found to be statistically significant.

Odds ratio found to be 1,012 belonging to AGE variable whose parameter is significant, signifies that 1% increase in the variable of AGE will raise the issue of confidence in government 1,012 times. The significance of odds ratio found to be 2,824 for the variable of EP signifies

that 1% increase in the variable of EP will raise the issue of confidence in the government 2,824 times. The significance of odds ratio found to be 2,108 for the variable of PP signifies that 1% increase in the variable of PP will raise the issue of confidence in government 2,108 times. Similarly, it can be explicated that the significance of odds ratio found to be 2,352 for the variable of FRP signifies that 1% increase in the variable of FRP will raise the issue of confidence in government 2,352 times.

Therefore it can be concluded that the variables of AGE, EP, PP and FRP whose parameters are significant and that have greater odds ratio than 1 is an important risk factor on the confidence in government. The odds ratio of the variable of OTHER whose parameter was presumed to be negative was calculated to be 0,432. This can be explained as that 1% increase in the variable of OTHER will raise the issue of confidence in government 2,315 (1/0,432) times.

Apart from the individual significance tests of the parameters, should we need to test the general significance of the model calculated;

$$H_0 : \beta_0 = \beta_1 = \beta_2 = \dots = \beta_k = 0$$

$H_1 : \beta_0 \neq \beta_1 \neq \beta_2 \neq \dots \neq \beta_k \neq 0$ (At least one of them is different)

The test statistics (G=423,865) calculated under the hypothesis above is compared with the table value of 6 degrees of freedom. However, to this end, it is more practical to compare with the p value. Since p=0,000 was found regarding this statistics, H_0 hypothesis is refused and H_1 is accepted. Therefore, it is possible to say that this model is statistically significant at the level of 5%.

In order to test the goodness of fit of this model, Hosmer-Lemeshow (H-L) test was used in view of the observed and expected frequency values.

Table 9. Observed and Expected Frequencies Table for the Hosmer-Lemeshow Test

Method	Chi-Square	DF	P				
Hosmer-Lemeshow	1.68	4	0.795				
Table of Observed and Expected Frequencies: (See Hosmer-Lemeshow Test for the Pearson Chi-Square Statistic) Group							
Value	1	2	3	4	5	6	Total
1							
Obs	6	16	26	48	99	144	339
Exp	5.1	15.7	28.8	50.7	93.0	145.7	
0							
Obs	167	157	148	125	74	30	701
Exp	167.9	157.3	145.2	122.3	80.0	28.3	
Total	173	173	174	173	173	174	1040

$\chi^2 = 1,68$ was calculated regarding the H-L test statistics calculated under the hypothesis “ H_0 : Model is fitted with the data “ H_1 : Model is not fitted with the data”. With 4 degrees of freedom, the value of $p = 0,795$ was found. In this case, it is possible to say that the hypothesis of H_0 is not to be rejected. The goodness of fit of the model that illustrates how efficient the dependent variable is defined reveals that dependent variable is efficiently defined as to the result obtained. Since there is no value smaller than 5 in the observed and expected frequencies table calculated for six groups, the results of H-L test can be reliable.

It is going to be useful to look at the classification table, which is also a criterion of goodness of fit that becomes important if the aim is classification.

Table 10. Classification Table Regarding the GOV_CON Model

		Predicted		
		GOV CON		Percentage Correct
		0	1	
Observed	GOV_CON			
	0	631	70	90.0
	1	132	207	61.1
	Overall Percentage			80.6

a. The cut value is .500

According to Table-10, the following was found; the percentage of correctly predicting the non confidence in the current government was 90,0% and the percentage of correctly predicting the confidence in the

current government was 61,1%. We see that the percentage of the model carrying out correct classification is 80,6.

On the other hand, while the independent variables in the second model stay the exactly same, the dependent variable was 'whether the economical situation was satisfactory' and referred to as ECO_SIT. While categorical dependent variable took the value 1 for when the current economic situation was found satisfactory, it took the value 0 when the economic situation was found not satisfactory. The analysis results regarding the logistic model are illustrated in the table below.

Table 11. Logistic Regression Analysis Results Regarding the ECO_SIT Model

	B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
							Lower	Upper
AGE	-0.011***	.006	3.583	1	.058	.989	.977	1.000
INCOME	0.000*	.000	41.551	1	.000	1.000	1.000	1.001
EP	0.720*	.127	32.402	1	.000	2.056	1.604	2.635
PP	0.226**	.123	3.410	1	.065	1.254	.986	1.596
FRP	.014	.136	.010	1	.919	1.014	.777	1.322
OTHER	-.152	.103	2.167	1	.141	.859	.702	1.052
Constant	-2.771*	.367	56.899	1	.000	.063		

*= signifies significance at the 1% level of significance.

***= signifies significance at the 10% level of significance.

Given the significance of the parameters, we see that while the parameters of the variables of INCOME and EP are statistically significant at the level of 1%, the parameters of the variables of AGE and PP are statistically significant at the level of 10%. Since the parameters of the variables of FRP and OTHER are not statistically significant, it is possible to say that the variables that these parameters belong to, have no role to play in explaining the dependent variable.

It is interpreted that the odds ratio calculated to be 0,989 for the variable of AGE, with an increase of 1% in the variable of AGE will raise the odds of non satisfaction with the economic situation 1,011 (1/ 0,989) times. The fact that the odds ratio for the variable EP is 2,056 signifies that 1% increase in the variable of EP will raise the odds of satisfaction with the economic situation 2,056 times. The odds ratio calculated to be 1,254 for the variable of PP, with an increase of 1% in the variable of PP will raise the odds of satisfaction with the economic situation 1,254 times. It is possible to say for this model that the variables of EP and PP are important risk factors on the fact that the economic situation has been found as satisfactory.

In order to test the general significance of the model, $G=166,927$ was calculated and with 6 degrees of freedom, the statistics of $p=0,000$ was found. This value implies that this model in general is significant.

In order to interpret the goodness of fit, H-L test statistics was calculated as $\chi^2 = 4,30$ and with 8 degrees of freedom, the value of $p = 0,829$ was found. This value makes it possible to conclude that goodness of fit of this model is good.

Table 12. Observed and Expected Frequencies Table for the Hosmer-Lemeshow Test

Method	Chi-Square	DF	P									
Hosmer-Lemeshow	4.30	8	0.829									
Table of Observed and Expected Frequencies: (See Hosmer-Lemeshow Test for the Pearson Chi-Square Statistic)												
Group												
	Value	1	2	3	4	5	6	7	8	9	10	Total
1	Obs	15	19	22	24	38	37	49	52	61	83	400
	Exp	13.7	20.2	24.9	29.4	33.3	38.2	44.1	53.1	62.1	80.9	
0	Obs	90	87	83	82	67	69	56	54	44	23	655
	Exp	91.3	85.8	80.1	76.6	71.7	67.8	60.9	52.9	42.9	25.1	
	Total	105	106	105	106	105	106	105	106	105	106	1055

Table 13. Classification Table for the ECO_SIT Model

Classification Table^a

Observed	ECO_SIT	Predicted		Percentage Correct
		ECO_SIT		
		0	1	
0	0	563	92	86.0
1	1	227	173	43.3
Overall Percentage				69.8

a. The cut value is .500

When the table is examined, we observe that with 86,0% the non satisfaction of the current economic situation and with 43,3% its satisfaction have been correctly predicted with this model. We can see that in general correct classification percentage of the model is 69,8%.

5. CONCLUSION

In this study that was carried out before the 2007 election period, our aim was to try to examine and determine the expectations, tendencies and opinions of the people in Bursa regarding the economic and political situation. In this connection, in order to determine and measure the opinions and expectations of the public regarding the economic and political situation, a questionnaire was prepared and applied to 1199 subjects determined according to the stratified sampling method.

Based on the data obtained from the questionnaire applied, various percentages regarding the satisfaction and confidence/non confidence of the people in Bursa in different issues were found. When the results are examined, the percentages obtained are interesting. 76,8% of the participant who answered the questionnaire applied in March 2007 reported that they were not satisfied with the economic situation and 74,5% were not satisfied with the political situation. Furthermore, 61,6% of the participants stated that they were not satisfied with the economic situation of the period in March 2007. Regarding Turkey's EU membership, while 47,5% of the participants supported the membership, 52,5% opposed it.

The people in Bursa reported regarding the confidence in institutions and persons that they had the lowest amount of confidence with 92,4% in the IMF and the highest amount of confidence with 87,0% in the Turkish Military Forces. Given the sampling of the young people in this study, the most important problem of Turkey was reported to be unemployment with 38,9%. AKP, CHP, DP and MHP appeared to be the parties predicted to get enough votes to get into the parliament.

89,9% of people in Bursa reported that AKP would get into the parliament in the upcoming elections, 77,1% CHP and 48,1% MHP. In the elections expected to take place on the 22nd of July 2007, 28,1% of the people reported that they would vote for AKP, 25,7% for CHP and 12,1% for MHP.

In the classification based on the averages calculated according to agreement with statements questioning the success of the current government on different areas, it turned out that the most agreed on statement was the following one; "The current main opposition party (CHP) conducts an efficient and successful opposition policy against the (AKP) government". While, the second most agreed on statement "A general election before the Presidential election will be a beneficial for our country in terms of our country's current general political atmosphere, the third most agreed on statement was "The current government's relations with TÜSİAD are as they should be". The least agreed on statement in the classification was "I think that EU is fair and honest about Turkey's membership". While

the second least agreed on statement was “Turkey should definitely become a full member even if she has to accept all the conditions stipulated by the EU”, “The current government’s policy of distribution of income is successful” was the third least agreed one.

On the other hand, in the first of the two logistic regression models designed, regarding the confidence in the government; it turned out that age, current government’s performance of the economic situation, its performance of political situation and foreign relations performance were important risk factors. In comparison with the second model, it was also observed that the variables of current government’s performance of the economic situation and the performance of political situation were important risk factors over participants’ satisfaction with the economic situation.

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