

## **THE IMPACT OF FINANCIAL CRISIS ON THE QUALITY OF LIFE**

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**Abstract:** *The quality of life is a relatively new concept, which is continually changing and for which there is not yet a wholly satisfactory definition. The quality of life involves human, social-economic and health characteristics. The manifold nature of the quality of life led to the development of various patterns for measuring it. The quality of life is determined by subjective and objective indices and this allows us to have a clearer overall picture of it.*

*The aim of this research paper is to measure the standard of living based on six main levels determined by the European Foundation for the Improvement of Living and Working Conditions-Eurofound: 1. Employment; 2. Total income; 3. Family & Home; 4. Social life & Community involvement; 5. Medical care & health security insurance and 6. Knowledge & education*

*A very interesting part of the paper is the research into the impact of economic crisis on the quality of life. The study is based on a questionnaire which is filled by 200 persons living in Gjirokastra and Saranda. The analysis of the results from the questionnaire is carried out employing the logistic regress method.*

**Key words:** *quality of life; economic crisis; welfare; objective indices; subjective indices; logistic regression method; Albania*

### **1. What is the concept of quality of life; a historical overview**

*"People are the real wealth of a nation. Thus, the main real aim of development is to provide the basis for an environment where people could be able to lead a long, healthy and creative live. Human development brings about an increase in the number of possible alternatives offered to the individual, of which the most important are to live longer and healthier and to get used to enjoying a respectably high standard of living. Other alternatives include political freedom, human rights and self-respect."*

UNDP 1990

The quality of life is a relatively modern concept, which has undergone significant changes, and for which, there does not exist a universally excepted definition. The quality of

live involves human, social, economic and health characteristics (Lamau, 1992; Treasury Board of Canada Secretariat, 2000).

Historically speaking the quality of life as a concept appeared first in the 50s referring to a high living standard in the new consumer society just created. The way in which it was measured was the accumulation of wealth (money, new cars, houses, furniture, modern electrical appliances etc). Later, in the 60s, the concept extended to include elements such as education, health care, economic and technological development as well as the protection of the Free World (Fallowfield, 1990). During the 70s, times in which, the development schemes failed to improve the living standards of the poor strata of the society, there was a heated long-running debate over the real goals of the economic development as well as the political goals supposed to be achieved by the developed countries. Thus, the concept of basic human needs as the fundamental estimated parameter of development schemes was brought to light (Nagamine, 1981:1).

This perception, highlighting the human basic needs and reduction of poverty did not except economic growth as the only goal of economic development. On the contrary a special interest was shown in the quality of life of the poor strata of the society and the distribution of income. Meeting the basic needs has often been identified with those needs providing the bases for a living standard in accordance with human dignity. Put otherwise, this means that different generally accepted patterns should be studied considering food, clothing, housing, health, education, social safety, working conditions and human freedom (Moon, 1991:5).

In the 60s and 70s the concept of wellbeing (as a subjective perception) was extended to include happiness or life enjoyment as a new dimension in asserting the quality of life. For many researchers it was considered to be the most important (Argyle, 1996) and later, fronted by Amartia Sen, several new elements were added to it, to determine human development. In Sen's research (1993) individual ability was introduced as a concept making for the first time the connection between the quality of live and people's ability to be involved in important activity mutually beneficial of both individual and society. In the 90s, by putting these theories together one could talk about human development, which in fact is a multi dimensional concept.

The fundamental idea of human development is that wellbeing is a crucial parameter of development and that the individual is the bases of every level of this development.

The quality of life as a concept involves several subjective and objective elements and every study on the quality of life should consider all these elements. The subjective space refers to the wellbeing and pleasures one gets from the environment in which one lives, whereas the objective space refers to the pleasures of the individual related to social political requirements; material wellbeing, social status, good medical conditions, etc (Noll, 1998).

Studies on the quality of life based only on objective indices cannot be complete. For this reason, a serious study should analyze objective and subjective indices both from the qualitative and quantitative point of view. According to European Foundation for the Improvement of Living and Working Conditions (Eurofound) the quality of life is a clear indication related to economic wellbeing in social context and has 6 main areas of study:

1. Employment
2. Total income
3. Family & Home
4. Social life & Community involvement
5. Medical care & health security insurance
6. Knowledge & education

## **2. Objective indices of the quality of life assessment.**

This study emphasizes some of the objective parameters measuring wellbeing as a component of the quality of life and will stop to analyze mainly its subjective elements. Among the objective elements we should highlight the parameters universally accepted as important in measuring economic growth for example:

1. Gross Domestic Product
2. Gross Domestic Product per capita
3. Investments as percentage of Gross Domestic Product
4. Average salary
5. Average income per capita after tax
6. Minimal pay (salary)

Employment & unemployment indicators:

1. Population (Active – Non active ) according to group age & Gender
2. Employment
3. Unemployment
4. Full-time, Part- time employment
5. Employment according to economic fields or occupation etc.

Parameters for measuring material goods & services:

1. Number of cars
2. Number of schools- primary & secondary schools
3. Number of hospitals, clinics etc.
4. Illiteracy rate
5. Number of pupils & students
6. Number of doctors
7. Number of computers etc.

Indicators for public expenses:

1. Public expenses as percentage of GDP
2. Public expenses for health care
3. Private expenses for health care
4. Expenses for old age pensions as percentage of GDP
5. Expenses for employment programs as percentage of GDP
6. Expenses for social welfare as percentage of GDP etc.

The combination of all these indicators can provide a clear picture over the level of wellbeing and development of a country; it can help even to compare the countries among themselves. But the quality of life comprises elements other than the above mentioned ones. The most delicate and, therefore, the most important factor in the process of its evaluation is undoubtedly the implication of subjective elements in it.

## **3. The subjective indices of quality of life assessment**

The main goal of this study is precisely the assessment of the subjective elements and their impact on determining the quality of life. A questionnaire was compiled for this reason comprising several categories which takes place in this determination. Specifically in the questionnaire is asked the evaluation of the interviewee for:

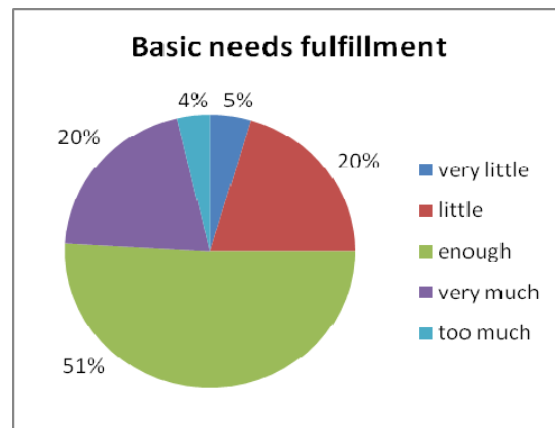
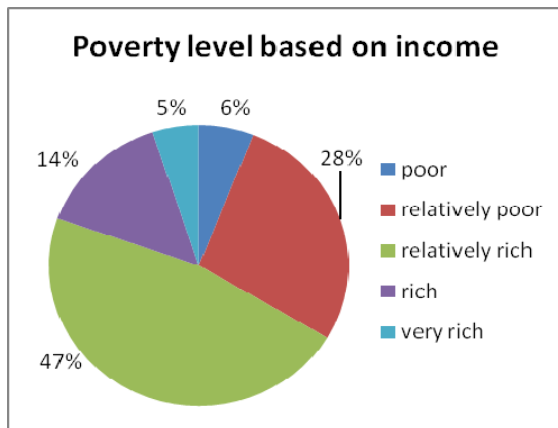
- Material wellbeing (income, purchasing power, housing)
- Wealth

- Political stabilization and security
- Family life
- Employment and work safety
- The connection between employment and personal life
- Culture and sports
- Social quality evaluation

The survey is conducted in the Southern Region of Albania including three districts: Saranda, Gjirokastra and Tepelene. Initially we thought to carry out the survey based on 250 questionnaires. The questionnaire contains 38 questions and 221 persons were questioned out of 250. The survey area was divided in several groups in order to have a complete cover of the area according to the formula: 30% in rural areas, 30% at random choice (random sample), 10% in private business, 10% in family environments, 10% employed in the private sector, 10% employed in the public sector. The questionnaire was distributed in the whole region according in the following way: 60% in Gjirokastra, 25% in Saranda and 15% in Tepelena according to the number of inhabitants in the three districts respectively. The questionnaire contains six questions related to the resent economic and financial crisis, in order to study its link with the quality of life. Data processing was carried out based on logistic regress method and here are some of the results.

**a) Assessment of quality of life elements**

The first part of the survey deals with material welfare as one the main elements of determining the quality of life. Material welfare can be determined in two ways or according to two principal view points, from the objective one (income level and their growth rate, individual purchasing power etc) as well as the subjective one (the satisfaction he gains from possessing material goods). Put otherwise, two individuals with the same purchasing power ability judge their situation differently according to their own requirements. The outcome of the survey is interesting: 47% of the interviewees feel relatively rich, 14% feel rich, 28% relatively poor, 5% very rich and 6% very poor (figure 1).



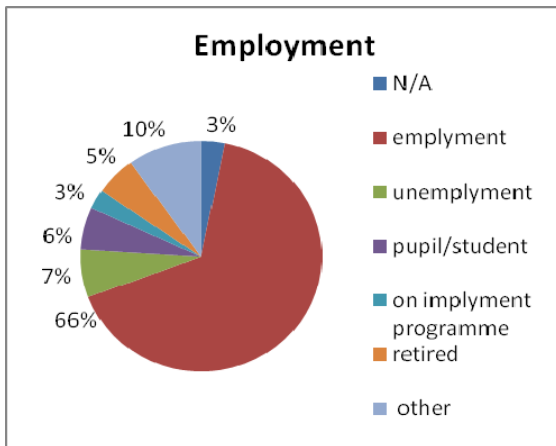
**Figure 1.** The poverty level based on incomes

**Figure 2.** The basic needs fulfillment

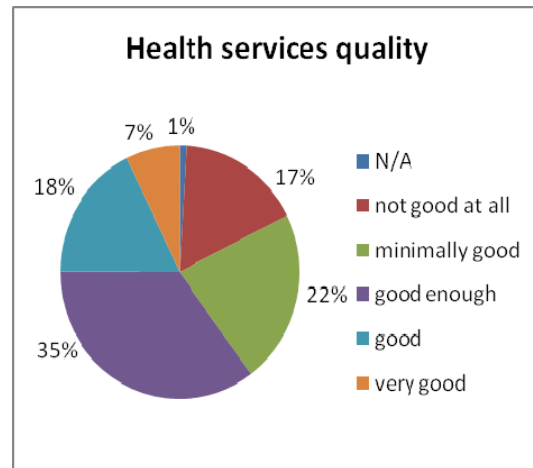
The rate of meeting their basic needs divides the survey area into two parts: 51% of them meet their basic needs adequately, 20% little and the same percentage much, 4% very little and 5% meet their basic need too much. We think that the answers to the above mentioned questions have a considerable margin of insincerity. That's because the Albanians are too proud to accept their level of poverty (graph nr 2).

Concerning employment the survey reveals that 60% of the interviewees were employed, 7% unemployed, 5% retired (graph nr 3)

Concerning medical care in the region 30% of the interviewees asses it as adequate, 18% as good, 17% as not good at all, 7% as very good (graph nr 4). Social stability and safety were assessed to be as follows: 35% of relatively high level, 33% relatively low level, 14% very low and only 3% judged it to be very high (graph nr 5)

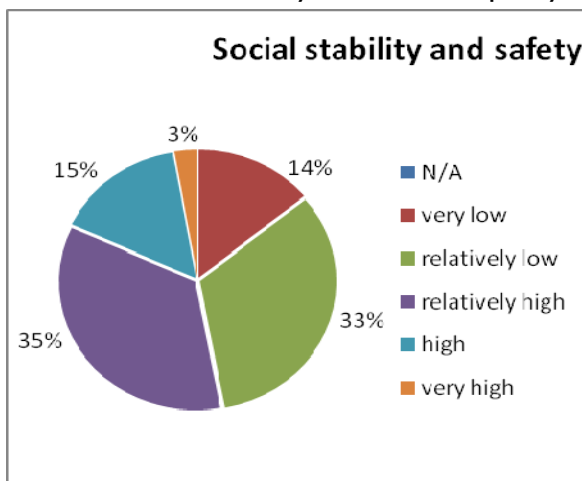


**Figure 3.** Employment

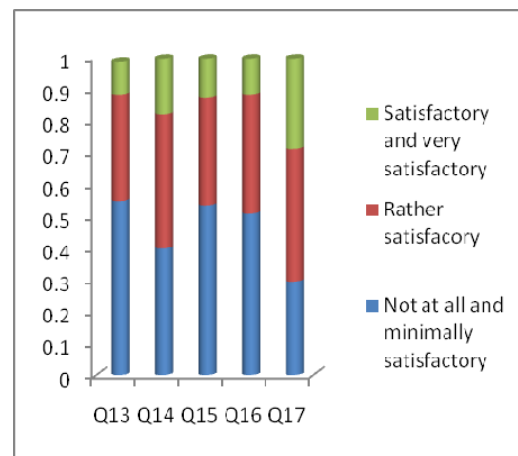


**Figure 4.** Health services quality

In graph number 6 represents the results of five questions concerning cultural life and sports (question nr 13), the quality of social services such as education etc offered in the region (question number 14), assessment on the environment related to greenery and pollution (question 15), every day facilities such as roads, traffic, public transport system (question 16) and as a syntheses of all the above mentioned questioned there is question number 17: how would you assess the quality of your life.

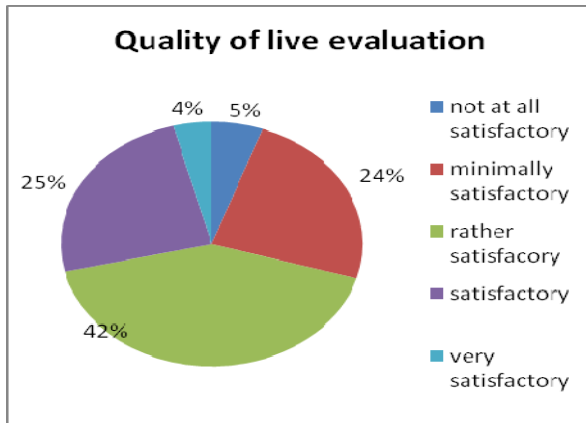


**Figure 5.** Social stability and safety

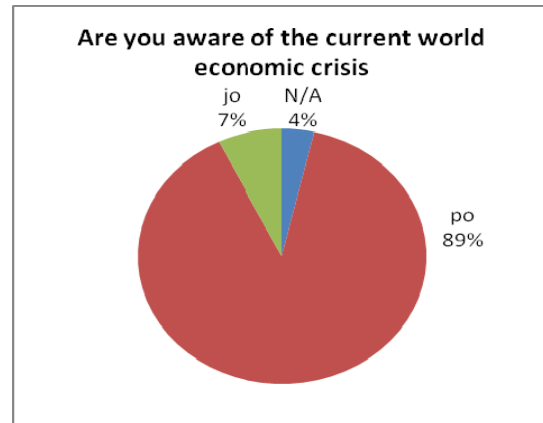


**Figure 6.** The results for questions 13, 14, 15, 16 and 17

Again the outcome of the survey is interesting: more than 50% think that the cultural and sport life (Q13), the environment their live (Q 15) and the everyday facilities (Q 16) offer them little or too little satisfaction. The quality of the public services (Q 14) is thought to be little or not at all satisfactory from 39% of the interviewees, averagely satisfactory from 40% and 17% of them feel satisfied and very satisfied. As a synthesis of all the above questions the interviewee is asked to express their feelings about their quality of life (Q 17) and here we have contradictory results. 30% of them are minimally or not at all satisfactory, 42% are rather satisfactory and the rest, which means 28% feels from satisfactory to very satisfactory (graph nr 7).



**Figure 7.** Quality of life evaluation



**Figure 8.** The world crisis information

**b) The relation between the economic crisis and quality of life**

The part of the survey which tends to show the assessment of the impact of the economic crisis concerning the quality of life starts with the question: are you aware of the resent world economic crisis? The survey reveals that 89% of the interviewees answered positively, 7% of them answered negatively and 4% didn't give an answer (graph nr 8)

Logistic regress applied to understand the link between question number 18 (Are you aware of the current world economic crisis) as a reactive variable (the Y of the logistic regress) and question number 21 (What has happened with the general price level) as a predictive variable (the X of the logistic regress) shows an odd ratio of a very high level (1.8099). This goes to show that according to the interviewees' price increase from a base level to another lever with one unit increases 1.8 times the possibility of crisis sensitivity on the consumers part (table nr 1 logistic regress)

The link between question number 18 as a reactive variable and question 20 as a predictive variable reveals an odd ratio lower than the unit (0.8867) which means that in mean time there are no positive chances for an increase in the family income. On the contrary it is expected to be in decline due to the impact of the economic crisis on the real income.

**Table 1.** Logistic regression between Q18 and Q19-23

| <b>Logistic regression</b>                      |                 |                  |                 |
|---|-----------------|------------------|-----------------|
| Dependent Y                                     | Y               |                  |                 |
| Method  | Enter           |                  |                 |
| Sample size                                     | 207             |                  |                 |
| Cases with Y=0                                  | 15 (7.25%)      |                  |                 |
| Cases with Y=1                                  | 192 (92.75%)    |                  |                 |
| <b>Overall Model Fit</b>                        |                 |                  |                 |
| Null model -2 Log Likelihood                    | 107.62585       |                  |                 |
| Full model -2 Log Likelihood                    | 99.65450        |                  |                 |
| Chi-square                                      | 7.9714          |                  |                 |
| DF  | 5               |                  |                 |
| Significance level                              | P = 0.1578      |                  |                 |
| <b>Coefficients and Standard Errors</b>         |                 |                  |                 |
| Variable  | Coefficient     | Std.Error        | P               |
| X19   | 0.0505          | 0.4062           | 0.9010          |
| X20   | -0.1203         | 0.2834           | 0.6712          |
| X21   | 0.5933          | 0.4530           | 0.1904          |
| X22   | 0.0630          | 0.4496           | 0.8886          |
| X23   | -0.9422         | 0.4775           | 0.0485          |
| Constant  | 3.4529          |                  |                 |
| <b>Odds Ratios and 95% Confidence Intervals</b> |                 |                  |                 |
| Variable  | Odds Ratio      | 95% CI           |                 |
| X19   | 1.0518          | 0.4745 to 2.3317 |                 |
| X20   | 0.8867          | 0.5088 to 1.5451 |                 |
| X21   | 1.8099          | 0.7448 to 4.3982 |                 |
| X22   | 1.0650          | 0.4412 to 2.5710 |                 |
| X23   | 0.3898          | 0.1529 to 0.9938 |                 |
| <b>Classification table</b>                     |                 |                  |                 |
| Actual group                                    | Predicted group |                  | Percent correct |
|   | 0               | 1                |                 |
| Y = 0   | 0               | 15               | 0.00 %          |
| Y = 1   | 0               | 192              | 100.00 %        |
| Percent of cases correctly classified           |                 |                  | 92.75 %         |

The impact of the economic crisis on the interviewees' income shows the following: 22.6% think that their income is the same in rapport to the crisis, 45.7% have a slight decrease in their income, 27.1% have a considerable decrease and 4% have an increase in their income. From the logistic regression analyses it appears that the difference in the income level has no impact on crisis sensitivity because the odd ratio is near the unit.

The method of logistic regress was applied in our study in order to find the link between question number 18 (Are you aware of the current world economic crisis) and the questions 30 (Where do you live; in rural or urban area), question 32 (The type of housing; owned or rented) and question 33(The educational level). All the three variables seem to have had a considerable impact on the interviewees' answers on the recent crisis. The most considerable impact seems to be noticed on variable 32 (The type of housing) which means that those families that live in rented accommodation, thus having a higher living cost, tend to be more liable to recent crisis impact. Such a family feels the economic effect of the crisis three times more than the families that live in their own accommodation (odd ratio 3.1373),

**Table 2.** Logistic regression between Q18 and Q30, 32, 33

| <b>Logistic regression</b> |       |
|----------------------------|-------|
| Dependent Y                | Y     |
| Method                     | Enter |

|                |              |
|----------------|--------------|
| Sample size    | 207          |
| Cases with Y=0 | 16 (7.73%)   |
| Cases with Y=1 | 191 (92.27%) |

**Overall Model Fit**

|                              |            |
|------------------------------|------------|
| Null model -2 Log Likelihood | 112.65429  |
| Full model -2 Log Likelihood | 108.74713  |
| Chi-square                   | 3.9072     |
| DF                           | 3          |
| Significance level           | P = 0.2717 |

**Coefficients and Standard Errors**

| Variable | Coefficient | Std.Error | P      |
|----------|-------------|-----------|--------|
| X33      | 0.5772      | 0.3647    | 0.1134 |
| X30      | 0.6319      | 0.6381    | 0.3220 |
| X32      | 1.1434      | 1.0707    | 0.2856 |
| Constant | -1.4615     |           |        |

**Odds Ratios and 95% Confidence Intervals**

| Variable | Odds Ratio | 95% CI            |
|----------|------------|-------------------|
| X33      | 1.7811     | 0.8715 to 3.6399  |
| X30      | 1.8813     | 0.5386 to 6.5713  |
| X32      | 3.1373     | 0.3847 to 25.5820 |

**Classification table**

| Actual group                          | Predicted group |     | Percent correct |
|---------------------------------------|-----------------|-----|-----------------|
|                                       | 0               | 1   |                 |
| Y = 0                                 | 0               | 16  | 0.00 %          |
| Y = 1                                 | 0               | 191 | 100.00 %        |
| Percent of cases correctly classified |                 |     | 92.27 %         |

Of no little importance seems to be the difference in sensitivity to the crisis in the rural areas compared to the urban ones. According to the study the possibility that families living in the rural area feels the crisis is two times more than the families living in the urban ones (odd ratio 1.8813). As well as this, the link between the education level and crisis sensitivity due to a better understanding of things, shows that the increase in the education level with one unit increases the crisis sensibility by 1.7811 times.

If we add the political impact on the above mentioned regress (question number 24: Are you personally interested in politics?) it is obvious that crisis sensitivity remains the same whether one lives in the rural or urban area. The same can also be said for the education level, but things are different when it comes to the kind of accommodation people live in, case in which the crisis sensitivity appears to increase considerably (from 3.1373 to 4.0951). This means that the political impact of economic crisis on the families with rented accommodation is more significant.



**Table 3.** Logistic regression between Q18 and Q30, 32, 33 and Q24

| <b>Logistic regression</b>                      |                 |                   |                 |
|---|-----------------|-------------------|-----------------|
| Dependent Y                                     | Y               |                   |                 |
| Method  | Enter           |                   |                 |
| Sample size                                     | 207             |                   |                 |
| Cases with Y=0                                  | 16 (7.73%)      |                   |                 |
| Cases with Y=1                                  | 191 (92.27%)    |                   |                 |
| <b>Overall Model Fit</b>                        |                 |                   |                 |
| Null model -2 Log Likelihood                    | 112.65429       |                   |                 |
| Full model -2 Log Likelihood                    | 95.69744        |                   |                 |
| Chi-square                                      | 16.9568         |                   |                 |
| DF  | 4               |                   |                 |
| Significance level                              | P = 0.0020      |                   |                 |
| <b>Coefficients and Standard Errors</b>         |                 |                   |                 |
| Variable  | Coefficient     | Std.Error         | P               |
| X33   | 0.4737          | 0.3882            | 0.2224          |
| X30   | 0.5468          | 0.6664            | 0.4119          |
| X32   | 1.4098          | 1.1208            | 0.2085          |
| X24   | -0.9250         | 0.2869            | 0.0013          |
| Constant  | 1.7539          |                   |                 |
| <b>Odds Ratios and 95% Confidence Intervals</b> |                 |                   |                 |
| Variable  | Odds Ratio      | 95% CI            |                 |
| X33   | 1.6059          | 0.7503 to 3.4371  |                 |
| X30   | 1.7278          | 0.4680 to 6.3790  |                 |
| X32   | 4.0951          | 0.4552 to 36.8408 |                 |
| X24   | 0.3965          | 0.2260 to 0.6958  |                 |
| <b>Classification table</b>                     |                 |                   |                 |
| Actual group                                    | Predicted group |                   | Percent correct |
|   | 0               | 1                 |                 |
| Y = 0   | 0               | 16                | 0.00 %          |
| Y = 1   | 0               | 191               | 100.00 %        |
| Percent of cases correctly classified           |                 |                   | 92.27 %         |

On the other hand the level of the interviewees' interest in politics, which normally expresses their level of trust in it and the alternatives offered by it, has a major impact on their perception of the crisis. As the answers to question number 24 (Are you personally interested in politics?) show a decrease in the interest in politics (odd ratio has a much lower level than the unit, 0.3965) which means that the lower the interest in politics the lower the sensitivity towards the crisis becomes.

As a conclusion we can say that politics and momentary political events such as elections, political instability, and frequent rotation in office and frequent changes in government increase the level of the sensitivity towards the economic crisis. The answer to the question: how you forecast the crisis in the months to come 54.7% of the interviewees' answered "I don't know", 20.4% of them think the situation is going to improve and 23.9% think that it is going to deteriorate.

## **4. Conclusions**

The above survey shows the following results:

1. In the quality of live assessment a very important part is played by subjective indicators along side with the objective ones. Therefore it is necessary that they are taken into consideration in its assessment. Of great importance in this context are the methods applied to measure them. Certainly every method should be based on surveys where the individuals express their subjective assessment concerning the integral components of the quality of life.
2. These indices are relative and of national character related to culture, tradition and the other peculiarities of each nation.
3. The quality of health care in the region is inadequate because 75% of the interviewees value it from satisfactory to not good at all.
4. Cultural life and sports in the region is poor, this because 88% of the interviewees give a negative answer to it, offering them little or no satisfaction at all.
5. Public services are beginning to improve. Consequently, there is a good attitude to them. Therefore 55% of the interviewees assess themselves to be rather satisfied, satisfied and very satisfied. Nevertheless, if it is thought that the requirements for the public sector will be on the increase, the assessment on their quality will probably change.
6. An increase in the amount of information and sensibility has been of great help to the citizens to know and assess the economic crisis of the recent months. The number of those interviewed with knowledge and perception on the crisis and its link with income level, purchasing power level and the general price level is high. All these factors increase the stress level and have a negative impact on the quality of life.
7. Interest shown in politics, which indirectly measures the trust and commitment level of broad masses in it, was low. 60% of the interviewees are little or not at all interested in politics.
8. In this research paper it is not possible to state out if the quality of life has been on the increase or otherwise because of the lack of the basis for comparison. This study will provide the basis for a further research to compare the Albanian quality of live in the future.

## **5. Recommendation**

1. During the process of assessment of the quality of life, it is indispensable that decision making authorities in cooperation with the civil society should take into account objective indicators as well as subjective ones.
2. It is high time that human development in Albania was considered a priority as it is nowadays in all developed countries. Besides the classical concept (economic growth) it should be extended to include such new concepts as social, cultural, educational development, increase security and qualitative public services.
3. In order to enable the achievement of satisfactory levels of human development the quality of life should be increased. It is for this reason that an increased rate of awareness is considered to be of paramount importance. The community should put

pressure on the decision making authorities so that they improve their policies aiming at the betterment of all the afore-mentioned indicators.

## References

1. Agresti, A. **An introduction to Categorical Data Analysis**, New York, Wiley, 2002
2. Argyle, M. **The Social Psychology of Leisure**, Penguin, London, 1996
3. Fallowfield, L. **The Quality of Life: The Missing Measurement in Health Care**, Souvenir Press (E & A), London, 1990
4. Fox, J. **Applied Regression Analysis, Linear Models and Related Methods**, Sage publication, Thousand Oaks, CA, 1997
5. Fox, J. **Logistic Regression, Maximum-Likelihood Estimated and Generalized Models**, York Summer Programme in Data Analysis, May 2005
6. Lamau, M.L. **The Idea of Quality of Life in the Health Field**, The Quality of Life in the Mediterranean Countries, First Mediterranean Meeting on Bioethics, Instituto Siciliano di Bioetica, 1992, pp. 47-68
7. Mano, R. **Regresi Logjistik dhe një zbatim në microfinance**, Mikrotezë Master, Departamenti I Matematikës, FSHN, UT, 2005
8. Moon, B. E. **The Political Economy of Basic Human Needs**, Cornell University Press, London, 1991
9. Nagamine, H. **Human Needs and Regional Development**, Nagoya, Japan, 1981
10. Noll, H.-H. **Societal Indicators and Social Reporting: The international Experience**, The Quality-of-Life Research Center, Copenhagen, 1998
11. Sen, A. **Capability and Well-being in the Quality of Life**, Nussbaum, M.C. and Sen, A. (eds.). Oxford University Press, 1993
12. \* \* \* **Easy-to-use statistical software**, MedCalc, 2002
13. \* \* \* **Quality of Life – A Concept Paper. Defining, Measuring and Reporting Quality of Life for Canadians**, Treasury Board of Canada Secretariat, 2000