

## Economical Distinctions and Social Problems of Iran: Rates of Unemployment and Suicide

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### Introduction

Human resources as one of the important indexes of production and development have always suffered from social problems including committing suicide. Committing suicide is amongst the first ten causes of mortality. In some countries, it is among the first three causes of the death of young people who are the main capital of the society. Although an economic view to social problems especially committing suicide has just come to the forefront during the past decade, focusing on this view has been so widespread that the relationships between social and economic problems at the international, national, local, family, and individual levels has been the concern of economists and social scientists alike. Having this view in mind, it is illogical to ignore the role of economy in social problems; therefore, there have been many studies aimed at investigating this relationship. On the one hand, the rate of unemployment is one of the economic variables that has resulted in a remarkable discrimination in different areas. On the other hand, committing suicide is one of the social problems that has caught the attention of experts and communities alike. Therefore, the present study aims at investigating the relationships of the two variables – society and economy – in different parts of Iran base on the province.

### Materials & Methods

In terms of the aim, this study is practical and it employed a descriptive-analytical approach. Library research was employed to collect the necessary data. The number of those committed suicide and the rate of unemployment from 1386 to 1389 were the major and most important sources of data for the present study. These data were extracted from the annual report declared by the Statistics Center of Iran. The independent variable of the model was the number of those who had committed suicide per 10000 people and the rate of unemployment defined as the ratio of the unemployed population to the active population (the employed and unemployed), which was considered as the explanatory variable. It is necessary to mention that since the purpose of the present study was to investigate the relationship between unemployment and committing suicide and due to the lack of continuous access to the data on committing suicide, the data were limited to a range of four years. Therefore, because of time and budget restrictions, measurement method used in this study, the regression estimate method, was a mixture of the time-series and sequential data, in which the time-series data were mixed with the sequential data and resulted in a set of data which had the characteristics of both the time-series and sequential data.

### Discussion of Results & Conclusions

In the studies which use mixed data, it is necessary for them to be studied before the estimation of the model and to be studied in terms of the assumptions that the mixed data of some tests have about the data. One of the most important tests is the lamer test used for selecting the methods of panel regression and pulling regression. This test reveals that whether the coefficients of determining the regression using the permanent effects are meaningfully bigger than the coefficients of determining the model of pulling regression or not. The results of the present study indicated that since the possibility of the obtained F lamer (0.0021) is lesser than 0.05, therefore the null hypothesis of being a pulling model was rejected, and the hypothesis of being panel was accepted. After identifying the estimated model, in order to compare the permanent effect methods and the incidental effect methods in terms of the explanatory strength of the comparing dependent variable, Heisman test was used. The result of this test also showed that since the amount of the attained possibility (0.0183) was lesser than 0.05, the model's estimate with permanent effects was accepted. Before estimating the model, it is necessary to investigate the permanency of all the utilized variables. However, in this study due to time limitations it was not possible to have a single root test

so the results of the single root tests are not valid. Therefore, there was no need for the single root table test, consequently the need for the panel overlap tests was canceled too. On the other hand, after studying the permanency of the data due to the mixed data it is possible for the studies on this sort of data to show differences in the variances. Taking into the consideration the important effects of differences in variances on estimation, standard deviation, and inferential statistics, differences or similarities in the variances need to be identified before the estimation. To test the equality of variances in the table data, the test of LR was utilized. Since the estimated Prob is lesser than 0.05, the null hypothesis on the variance of the paradoxical sentences was rejected. Therefore the model has inequality and differences in the variances. Thus, the model should be estimated so that the problem of differences in the variances is alleviated. One of the methods of alleviating the problems of differences in variances is the Generalized Square Model. In this model, this problem is alleviated if there will be a self-independence in the model. Testing the data of the model, the estimation of the model and the results will be dealt with.

The results showed that since the total statistical probability (Prob= 0.013) in the model is lesser than 0.05, the general meaningfulness of the model was accepted. Studying the estimation results in the model in this study, we realized that there was a positive and meaningful relationship between unemployment and committing suicide since the estimated coefficient was 0.363693 and the probability for unemployment as a variable was 0.004. Thus it can be said that in Iran and consequently in different provinces, the rate of committing suicide increases to 0.36 with each 0.01 increase in the unemployment rate. So, the results indicated that there is a meaningful relationship between committing suicide and the rate of unemployment.

Although different aspects of committing suicide such as sociological and psychological aspects are important, the economic aspect plays an important role as well. The economic factors affect the social factors, the individuals, and the society at large. Thus the relationship is quite clear. This study aimed to investigate the relationship between economic problems – here unemployment as a representative of it – and the social problems – here suicide as a representative of it. In the present study, after studying the sociological view and the Durkheim's theory, the Hammer's view, the first pure economic view on suicide, was reviewed. Comparing the results of the present study with the experimental bulks of research on the topic and the theoretical literature of the field of crime economy, it is apparent that the results are in line

with most studies on crime economy (Balky et al., 2003; Lin, 2006; Rodriguez, 2006; Suzuki, 2008; Sadeghi et al., 2004; Mehregan et al. 2010). Unemployment decreases self-confidence. Every one of these factors increases the possibility of committing suicide. Thus, although the economic problems and unemployment should not be considered as the only contributors to suicide, the positive relationships between unemployment and suicide should not be taken for granted. So, determining the role of unemployment and economic problems is the case that is crucially important in terms of the security affairs.

**Keywords:** Social Problems, Economic Factors, Committing Suicide, Unemployment Rate, Mixed Data, Provinces of Iran

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