

MULTIPLE LINEAR REGRESSION CONFIDENCE INTERVALS

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Abstract:

In this paper it has been made a statistical overview and analysis of the impact of employment and active politics in the labor market in the Republic of Macedonia through the multiple regressions linear. As independent variables of the model we have chosen the annual costs incurred for the implementation of various programs active and inflation (the change in the consumer price level). The model dependent variable is employment (unemployment exit) for each of these programs. The study is based on data from the Employment Agency and the State Bureau of Statistics Republic of Macedonia for the period 2008-2013. Results of the research show that the increase in funding costs for some programs active policies would affect the increase of employment in the Republic of Macedonia. For data processing is used STATA.

Keywords: Bureau, STATA, Funding.

1. INTRODUCTION

European assessment programs before 1994 are reviewed in Heckman studies et.al (1999) and later by Kluge and Schmidt (2002) as additional studies programs until 1999. The first evaluation studies are known as "first generation", it includes assessments of new policies for the time, applying econometric techniques on the new data. The other part is the "second generation" of European research policy evaluation and characterized by advanced and enhanced by a deep and methodologies developed faster, and often more accurate data. Other studies on the experience of ALMPs found in Martin (2000) and Martin and Grubb (2001), which provide a description of the experience of OECD countries with respect to active measures on the labor market. Heckman et al. (1999) presents an overview of microeconomic studies in U.S. and Europe. While U.S. researchers have begun evaluating studies almost the mid '70s, European efforts in this area began much later, at the same time with the recent launch of the full use of these policies. The authors of the study point out that there appears no clear pattern of performance of various active policy. conclusion that an active policy of labor market provides greater employment impact that a different policy". Kluge and Schmidt (2002) reviewed studies evaluating EU programs developed covering the period 1983-1999, especially during the 90s. From initial quantitative analysis (which includes studies reviewed to Heckman) they concluded that studies show ALMPs given the heterogeneity of their effects. Heckman) they concluded that studies show ALMPs given the heterogeneity of their effects. These attitudes early, you added other studies estimate made in recent years in different European countries and recognized studies "third generation". Most come from the empirical microeconomic areas, considering the average treatment effects for individuals treated and neglected potential replacement and its effects. Compared with the large number of micro-studies, literature on the macroeconomic effects of ALMP is truncated. Recent studies microeconomic differ in some respects than those starters. A number of programs have different goals and focus on different target groups. On the other hand moving from one place to another, the programs

implemented in different economic levels regardless of specific institutional background. Given these features, we note that studies show different ways of evaluation and assessment techniques.

2. RELATED WORK

Most of the studies are based on the non – eksperimental data. Given identification strategies, "third generation" of commonly used assessment programs or evaluators or compatible models long, with few exceptions. A part of the study focused on short-term effects, although some recent studies try to evaluate long- term effects. While some studies consider the effects on earnings of participants, most studies estimate the impact of participation in employment and unemployment as the main result. Cost-benefit analysis on the effectiveness of labor market programs are scarce and found only a few evaluation studies. Development of the "culture of proper assessment" has been positive in all European countries, although different countries find themselves at different stages of development. Important finding of these studies is that efforts should continue and expand assessment. Despite improvements in non-experimental evaluation of programs, most European governments concerned about the effectiveness of their policies, but would consider implementation of randomized trials, as the bulk of the evidence that they derive. Any of human being's acquired ability has its own influences, if the influencing factors of an ability can be scientifically grasped and be fulfilled through practices, then it meets the theorem of "efforts+ methods=success". Likewise, the scientific exploration of the ways of improving English reading ability should start with its influencing factors. This paper seeks ways of improving reading ability for English learners, conducts a model study of them based on multiple linear regression methods and aims to contribute to the discovery of major influencing factors and the improving of reading ability.

Many scholars have made great efforts on the researches of improving approaches of English reading ability, and it is their efforts that enable contemporary China joins world's advanced fields. For example, Li Yanglong and his counterparts analyze the question types and contents in Comprehension part of 117 test papers chosen from the National Matriculation Exam papers between 2007 and 2012 and also from English test papers in provinces and cities which are granted independent rights for designing exam papers, point out the deficiencies in testing methods and the contents of English reading ability in current College Entrance Examinations and offer their advice on reform direction. Bao Gui thinks the core of language threshold hypothesis test is whether there is a interaction effect between the second language proficiency as the continuous variable and the native language reading ability when predicting the second language reading ability.

3. METHODOLOGY

To meet the objectives of the research work was focused on the literature review regarding the evaluation of active programs in Europe by various researchers. In realization of this research were used secondary data. These data were obtained from various institutions as an Employment Agency and the State Bureau of Statistics. Selection of statistical data on employment programs that were taken in the study cover the period from 2008 to 2012. In this period of active programs were selected that had a longer time span in the labor market. Was specifically selected: - "Program to encourage employment of unemployed "Because within this program is under different programs with duration of treatment of the unemployed have analyzed them separately as: "Program promoting employment of unemployed workers through self-employment, subsidies, encouraging the formalization of existing businesses, through surveys and training

for new jobs” Other programs were not taken into consideration because the timing of their implementation was relatively short. To determine the effectiveness of the programs we used quantitative analysis of statistical data by building regression models.

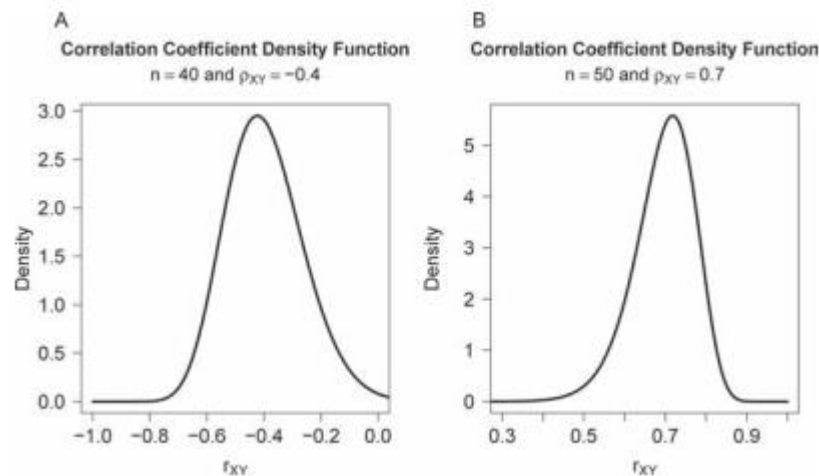


Fig.1.Sampling

For selecting the variables of the model relied on macroeconomic assessment establishes a relationship between the econometric main macro aggregates (unemployment, employment, GDP, inflation and various dimensions of the size of Active Policy. Testing regression model was made with SPSS 17 program, using a Guide for Research and Doctoral company Minimax Consulting.LLC December 2008). Various scholars in their research are trying to explain the impact of programs active in the labor market. Heckman et. al. (1999) concluded that training and employment programs dictated by the government, have different impacts on different demographic groups and affect more people with disabilities. Kluge and Schmidt (2002) supported the above conclusion concluding that training programs are likely to improve the future labor market. Moreover, the direct creation of jobs in the public sector has had little success, while subsidies to the private sector show some positive effects. (Boone and van Ours 2004) in their macroeconomic assessments concluded that there is a positive relationship between spending on employment policies and labor market effects.

4. ANALYSIS

To analyze the impact that can have different active programs on employment levels built a multiple regression model. Building this model took into account the research literature by adjusting the market opportunities offered vendors. Si independent variables of the model we have chosen the annual costs incurred for the implementation of various programs active and inflation (the change in the consumer price level). the model dependent variable is employment (unemployment exit) for each of these programs. The reading ability reflects the total point of test paper questions, the influencing factors of reading ability can be measured by using the gist understanding ability, detail understanding ability, inference ability, attitude judging ability and semantic understanding ability. In order to explore the correlation between these five influencing factors and the English reading ability, this paper applies the multiple linear regression method, studies the importance degrees of five influencing factors and the relationship between them and provides

scientific ways for English learners to improve their reading abilities. The theoretical models of the multiple linear regression analysis can be categorized into two types, namely, the research models between independent variables and the variables, and the research models between independent variables and independent variables. As can be seen from the above analysis, among five factors which influence English reading ability, detail is the most important one, followed by theme, semantics and attitude. From the characteristics of regression parameters, there is a high correlation between semantics and detail factors and between attitude and theme.

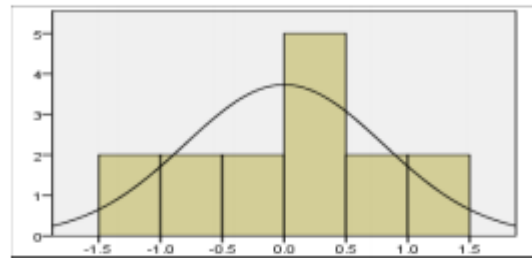


Fig.2. Analysis Fig

In practical reading, it is familiar to us that if we are sure about the details, we will always be right about semantic questions; and if we are certain about the theme, we can always be right about attitude-related questions. When it comes to the negative correlation between deductions and English reading ability, there are two main assumptions: a strong deductive ability can lead to misunderstanding or the author's ideas; or data characteristics can contribute to the negative correlation in the regression equation. The author tends to agree with the first assumption. As long as English learners can accurately understand the details and the theme of an article, he can choose the right answer of deductive questions without too much consideration. enlarge vocabulary, learners can recite English dictionaries or vocabulary outline. This paper mainly explores improvement methods of reading skills instead of hard indicators which can be changed through efforts. Specifically extensive and intensive reading skills are discussed, which are respectively associated with the theme and details accordingly. Next is the elaboration of skills in extensive reading and intensive reading to enhance readers' reading ability.

CONCLUSION

This paper first makes a questionnaire of influential factors of English reading ability and then an analysis of exam questions of reading ability evaluation, and comes to a conclusion that theme, details, deductions and semantics are main influential factors of English reading ability. Then the mathematical theory and application range of the multi-variable linear regression model are elaborated, laying the theoretical basis for exploring the relationship between English reading ability and five influential factors. Next, after an English reading test is given to 100 students who major in electrical automation, sample data is collected according to the text result and data processing method. The sample data is later used to establish the multi-variable linear regression model of English reading ability and get main influential factors of reading ability, laying the basis of exploring the improvement approaches of reading ability.

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