Analyzing Macroeconomic Indicators of Economic Growth Using Panel Data

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During last 10 years some EU countries had economic instability. They have short and long term challenges such as unemployment, population ageing, globalization etc. In this study it is aimed to analyze macroeconomic indicators of EU countries' economic growth using panel data approach. Static and dynamic panel data models were used for determining the effects of independent macro-economic variables on gross domestic product (GDP) of EU member countries including Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom; acceding country: Croatia; and candidate countries: Iceland, Montenegro, Serbia, The former Yugoslav Republic of Macedonia and Turkey. While dependent variable of analyze is gross domestic product (volume), the independent variables are current account balance, general government gross debt, general government revenue, general government total expenditure, gross national savings, inflation, average consumer prices, population, total investment, unemployment rate, volume of exports of goods and services, volume of imports of goods and services. The analysis proposed is based on a panel data (cross sectional time series data) approach. The dataset of this research involves 33 EU member and EU candidate countries (units). The effects of 12 macroeconomic indicators on gross domestic product volume were examined. The paper also empirically analyzes the negative impacts of global financial crisis (the 2007 U.S. Subprime Financial Crisis) into EU member and candidate countries' economic growth during the 2002–2012

periods (time series). In this context, the paper explains what a financial crisis is, the factors that promote a financial crisis, and the dynamics of a financial crisis. Thus, the effects of macroeconomic parameters are analyzed using panel data series. The findings of this research are especially useful for EU candidate countries such as Iceland, Montenegro, Serbia, The Former Yugoslav Republic of Macedonia and Turkey for developing convenient economic strategies.

Keywords: European Union and Candidate Countries, Financial Crisis, Macro Economic Parameters, Panel Data Analysis, Gross Domestic Product, Economic Growth.