Individual tasks of "Quantitative methods" course – MBA6

Task 1 (15 points)

1. Create a database of parameters in EViews mentioned in your variant. The sample must contain quarterly data from 2000Q1 till 2016Q3 for three countries according to your variant. The list of independent variables should consist maximum 10 items. It's preferable to use IMF, EUROSTAT or National statistical agencies for collecting data. Truncate sample, if data are unavailable. Analyse the necessity of transforming data (e.g. standardization, differencing, normalisation on the cpi index, etc). Provide economic analysis of the data with graphs.
2. Calculate the dummy variable CRISIS that is equal to 1 from 3rd quarter 2008 till end 2009 and 0 otherwise (the exact measures can be shifted if necessary). This variable shows the consequences of the financial crisis.
3. Formulate economic hypotheses about dependence of investigated variables and propose econometric models. Choose the best econometric models for explaining dependent variables for each country. Estimate them and check for standard econometric tests. Compare the results among countries.
4. Calculate forecasts for 2016, using data until the end of 2015. Calculate forecast errors (RMPSE).
5. Write an essay (3-5 pages) that analyses the common and different consequences of the financial crises for investigated countries. The analysis must be based on researched models.
6. Combine all fulfilled tasks into one separate file (Word or Acrobat file is preferable), which contains estimation outputs of analysed (best) models, essay (task 5), conclusions of the work and references. The first tittle page must contain your name. Send your file via email a.stavytskyy@gmail.com **before taking the exam**.

Variants

#	Student	Dependent variable	Countries
1.	Reserved	Gross Domestic Product	Belgium, Latvia, Russia
2.	Reserved	Household Consumption Expenditure	Austria, Lithuania, Gambia
3.	Reserved	Government Consumption Expenditure	Kazakhstan, Macedonia, Slovakia
4.	Reserved	Gross Fixed Capital Formation	Belgium, Germany, Slovenia
5.	Reserved	Change in Inventories	France, UK, Spain
6.	Reserved	Exports of Goods and Services	Bulgaria, The Netherlands, Sweden
7.	Reserved	Imports of Goods and Services	Croatia, Norway, Switzerland
8.	Reserved	Nominal Effective Exchange Rate	Cyprus, Poland, Turkey
9.	Reserved	Real Effective Exchange Rate	Czech Republic, Portugal, Switzerland
10.	Reserved	Total Reserves	Denmark, Romania, United Kingdom
11.	Abrashyna Olena	Consumer Prices	Finland, Serbia, Lithuania
12.	Kokosha Alla	Producer Prices	France, Slovakia, Macedonia
13.	Krot Oleksandr	Share Prices (End of Month)	Georgia, Slovenia, Moldova
14.	Onyshkiv Yuriy	Wages, Weekly Earnings	Germany, Spain, Montenegro
15.	Poznikhirenko Yulia	Industrial Production	Greece, Sweden, The Netherlands
16.	Rudakov Olexander	Unemployment	Hungary, Switzerland, Norway
17.	Savchenko Oleksii	Gross Domestic Product	Iceland, Turkey, Poland
18.	Shkavro Tetiana	Household Consumption Expenditure	Ireland, Belgium, Portugal
19.	Zernis Inna	Government Consumption Expenditure	Italy, United Kingdom, Romania
20.	Zubchenok Oleg	Government Bonds, percent per Annum	Italy, Spain, France

Task 2 (5 points)

Write a short essay (less than 1 page), which discusses the problem of applying econometric models **at your current job position**. Provide possible examples, how **you can deal** with models in the nearest future. Describe **necessary variables**, ***give the preliminary view of your model***, formulate possible hypothesis to test.