

Is the European Bank Handling the Stress

Modi Lovenvall*

September 2015

Abstract

This rapports aim is to investiage the European Central Banks way of using mathematical statistical processes to affect the European economy. In order to accomplish this, we explain what methods are being used, how the are working, and what purpose they serve the European Central Bank. The models of concern are the Vector Autoregressive Model and other time series models. We use these models to simulate forecasts, using data from two time series; these being unemployment rate and house price index. We will further compare our results with official European Central Bank statistics, where we will see that the Vector Autoregressive Model could be a suitable method when fine-tuned. Additionally we will see that the Vector Autoregressive Model has good use for the European Central Bank when they are conducting their macroeconomic scenarios, we will attempt to explain why in this rapport.

^{*}Postal address: Mathematical Statistics, Stockholm University, SE-106 91, Sweden. E-mail: modi.lovenvall@gmail.com. Supervisor: Mathias Lindholm.