## Cesar Augusto Castro Rozo

Project: **COM_1_2015_FGIV**

Descr: **Call for expressions of interest: Researchers - Function group IV - COM/1/2015/GFIV – Research**

Application number: **JRC-0012762**

*Generate: 03-04-2016 19:28:04*

### PERSONAL INFO

**Surname:** Castro Rozo
**Name:** Cesar Augusto
**Maiden name (where applicable):**
**Address:** Cipriano Sancho, 36, 4A, Madrid, Spain
**Permanent address (if different from above):**
**Telephone number:** 679548237
**E-mail address:** ccastrorozo@gmail.com
**Gender:** M
**Nationality:** Spain
**Country and place of birth:** Bogota Colombia
**Date of birth:** 22-JAN-68
**Main language:** Spanish
**Language 2:** English

### ABOUT YOURSELF

**Experience and background:** I am an economist with a strong interest in data analysis and econometric issues. My research topics have been focused on issues related with i) Techniques for analysis and forecast of economic variables; ii) Development of models using time series techniques; iii) Effects of energy price shocks on economic variables; iii) Multivariate time series analysis at disaggregate level and iv) R programming, reproducible research and data visualization. I have worked as an economic analyst at Universidad Carlos III de Madrid for 12 years. I was in charge on the development and the maintenance of the econometric models used for the analysis and forecast of many macroeconomic variables in the U.S., Euro area and some European countries including Spain and its regions. Beside using a variety of time series techniques, I also use disaggregate analysis of the variables, especially Bottom-Up procedures in hierarchical structures of consumption, production, etc.

**Interest to profile:** I am interesting in the work with Joint Research Center because its objectives deal with issues of my own professional and personal interests. First, I am entirely convinced about the importance, utility and enrichment of the transversally focus in the economic analysis, with the wide range of points of views from different professionals. I also found of interest the spatial work, that is, the inclusion of characteristics related with the geography and idiosyncrasy of the regions in the economic analysis. The more objective and efficient way to improve and integrate the key issues selected by professionals and the empirical work is through models. Due to the dynamic process originated by the feedback between the facts and the analytical tools, I consider important the development of my work in a reproducible research environment. The evaluation, validation and improvement of the results should be made according to the objective of analysis or forecasts.

**Contribution to EU:** I can put at the service of the Joint Research Center my commitment to development an econometrician work in an interdisciplinary focus and my knowledge in reproducible research, that is the easy use of computational tools that allows an easy change, update, improve or addition of the parameters in the analysis. I also put my commitment and experience in the study of European economic variables, hierarchical analysis of these variables, and the preparation of the workshops, handbooks, reports or presentation in order to discuss and improve the results of the investigation.

**Best achievements:** During my work activity, I was challenged with a lot of situation about the unexpected behavior of macroeconomic variables. The analysis of these series, demand a sketch of current issues that could have been related with this behavior: market and regulatory changes, monetary policy decisions, idiosyncratic characteristics especially of consumers, etc. Because the dynamic of variables is increasingly influenced by complex global relations, it is important to assess the likely pass-though or feed-back with key international economic variables. The next key step is the descriptive analysis. Fortunately, there are a lot of analytical tools for it (statistics, programming, etc.), but I prefer to work with R (I also use Matlab and excel) because it permits a flexible reproducible research. I have tried several forms to match the dynamics of macroeconomic variables to the key issues of the complex reality. The results give some highlights about the problem, although they must always be considered into the specific characteristics of the analysis. Debates and presentations with colleagues have been a valuable and enrichment exercise. I consider this method has allowed me to better understand the complex dynamic of most economic variables.

**QUESTIONS**

**Question 1a**: Do you hold a doctoral diploma in one of the fields listed under point II.B.b) of the call for expressions of interest?

OR

Are you enrolled in a PhD program in one of the fields listed under point II.B.b) of the call for expressions of interest, but you did not defend their doctoral thesis yet?

**Yes**

**Question 1b**: If yes, please indicate your title and the name of the academic institution which awarded or will award it, the name of the supervisor and the main findings of your thesis.

Three Essays on Applied Time Series Econometrics University of Salamanca Supervisor: Rebeca Jiménez-Rodríguez Author: César Castro Rozo The results of this thesis contribute to better understand the effects of oil price changes on prices in the euro area and its main economies. First, it shows the relevance of assuming oil prices as an exogenous variable in economies different from the U.S. This assumption supports the use of ARIMA models, transfer functions and restricted vector autoregressive models, where oil price is treated as an exogenous variable. This methodology allows us: 1) to forecast oil price under different scenarios and to assess the risk of deflation; 2) to prove that the effect of oil price changes on inflation does not come from higher industrial costs; and 3) to show that the effects on inflation depend on the reaction of consumers and that the effect on the inflation of non-energy goods and services depends on the magnitude of the direct and instantaneous effect on fuel prices.

**Question 2a**: Do you have five (5) years' full time equivalent professional experience or more in one of the fields listed under point II.B.b) of the call for expressions of interest?

**Yes**

**Question 2b**: If yes, please indicate the exact titles of your qualifications and the names of the academic institutions which awarded them. Please provide the names of the employers and the duration of your academic and/or professional experience. Please describe this experience and your specific roles.

Economic Analyst Universidad Carlos III de Madrid, Instituto Flores de Lemus Director: Antoni Espasa Duration of my professional experience: 12 years I was in charge on the development and the maintenance of the econometric models used for the analysis and forecast of many macroeconomic variables in the U.S., Euro area and some European countries including Spain and its regions. Besides using a variety of time series techniques, I also use disaggregate analysis of the variables, especially Bottom-Up procedures in hierarchical structures of consumption, production, etc.

**Question 3a**: Do you have less than five (5) years' full time equivalent professional experience in one of the fields listed under point II.B.b) of the call for expressions of interest?

**No**

**Question 3b**: If yes, please indicate the names of the employers and the duration of your academic and/or professional experience. Please describe this experience and your specific roles.

**Question 4a**: Have you published articles in peer-reviewed journals relevant to one or more of the fields listed under point II.B.b) of the call for expressions of interest?

**Yes**

**Question 4b**: If yes, please give the references and the titles of the publications.

César Castro, Miguel Jerez, Andres Barge-Gil, 2016. The deflationary effect of oil prices in the euro area. Energy Economics. Forthcoming.

**Question 5**: Please detail the professional skills you developed during your education and professional experience. (e.g. scientific software, programming languages, laboratory experience -equipment, security standards- etc.)

My professional skills include: - Manage of a variety of data bases, especially from European Institutions - R programming (reproducible research) - Statistical techniques for time series analysis - Interdisciplinary work - Preparation of reports and presentations - Use of other software including SCA, Matlab and Excel

**EDUCATION**

**Level:** Doctorate degree
**Education type:** Economics
**University:** University of Salamanca
**Qualification obtained:** PhD
**Skills:** Econometry, Economics, Time series, Energy economics, Macroeconomics
**Country:** Spain
**From:** 01-OCT-10
**to:** 01-APR-16

**Level:** Other degree
**Education type:** Economics
**University:** Universidad de Alcalá
**Qualification obtained:** Diploma Advanced Studies
**Skills:** Economics, Macroeconomics
**Country:** Spain
**From:** 01-OCT-00
**to:** 01-JUL-02

**Level:** Master's degree
**Education type:** Economics
**University:** Universidad Nacional de Colombia
**Qualification obtained:** M.A.
**Skills:** Economics, Macroeconomics
**Country:** Colombia
**From:** 01-JAN-95
**to:** 01-APR-00

**Level:** Bachelor's degree
**Education type:** Economics
**University:** Universidad Nacional de Colombia
**Qualification obtained:** B.A.
**Skills:** Economics, Macroeconomics
**Country:** Colombia
**From:** 01-FEB-90
**to:** 01-APR-95

**Level:** Bachelor's degree
**Education type:** Engineering
**University:** Universidad Distrital Francisco José de Caldas
**Qualification obtained:** B.Sc.
**Skills:** Engineering, Forestry
**Country:** Colombia
**From:** 01-SEP-88
**to:** 01-DEC-93

## EXPERIENCE

**Job Field:** Economics
**Classification:** Public service/Government
**Name and address of employer:** Universidad Carlos III de Madrid Calle Madrid, 133, Getafe, Madrid, Spain
**Area:** Economy, Econometric, Statistics
**Duties:** I was in charge on the development and the maintenance of the econometric models used for the analysis and forecast of many macroeconomic variables in the U.S., Euro area and some European countries including Spain and its regions. Beside using a variety of time series techniques, I also use disaggregate analysis of the variables, especially Bottom-Up procedures in hierarchical structures of consumption, production, etc.
**Occupation:** I worked in the study and development of new models for the forecasts of macro-variables, reading academic papers, searching for data in different institutional sources, programming and development new codes and proceedings, writing reports and preparing presentations.
**From:** 01-NOV-02
**to:** 31-MAR-14
**Work pattern:** Full-time
**Number of months full time equivalent:** 136

## LANGUAGES

**English** Listening: B2; Reading: B2; Writing: B2; Speaking: B2;

**Spanish** Listening: C1; Reading: C1; Writing: C1; Speaking: C1;

## OTHER INFO

**How did you learn about this job opportunity?**
inomics

**Further informations:**