



Università  
Ca' Foscari  
Venezia

**Dipartimento  
di Economia**



## **V EDITION - CALL FOR SELECTION OF N. 12 VERA INTERNSHIP GRANTS AT THE DEPARTMENT OF ECONOMICS - A.A 2020/2021**

### **Art. 1 – Scope**

1.1 The Department of Economics, within the new Center VERA (*Venice center in Economic and Risk Analytics for public policies*), offers students enrolled in its Master's Degree Courses internship projects to promote the development of professional and research skills useful for their orientation and subsequent labor market integration.

1.2 Twelve grants are available. The maximum duration of the internship periods will be 4 months and a commitment of about 300 hours that will be agreed with the tutor of the project. The internships will take place between January and June 2021. The total funding for each internship will be € 1.843,31 (gross salary). Each internship project, including specific objectives, required knowledge and skills as well as the intern tutors, is described in Annex A, which is an integral part of this call.

1.3 The internship will take place at the Department of Economics. Due to the COVID-19 emergency, internships can take place remotely, working from home.

1.4 On request of the student, the internship activity can be validated as the compulsory internship to acquire university credits planned in the Department of Economics Master's degree program to which the student is enrolled.

### **Art. 2 – Admission requirements**

2.1 The call is reserved for students regularly enrolled in the Department of Economics Master's Degree Courses.

2.2 If students already receive a grant economically incompatible with the grant of the present call, they can apply and, if the merit requirements are met, they can decide to carry out the internship project renouncing the grant. The total numbers of internships cannot exceed 14 (maximum of 12 with grants and maximum of 2 without grants), therefore the acceptance of internship applications "without grant" should be subject to the compliance of such limits.

2.3 These requirements must be met by the deadline indicated in the following art.3. Please note that the student status must be held also at the moment of grant acceptance and on the start date of the internship.

### **Art. 3 – Applications**

3.1 Applications must be submitted no later than **21<sup>st</sup> December 2020 at 12.00** by one of the following procedures:

- a) sending to the following Address of Certified Electronic Mail (CEM): [protocollo@pec.unive.it](mailto:protocollo@pec.unive.it). Please consider that the message can only be sent by another Certified Electronic Mailbox; the application sent by a non Certified mailbox cannot be considered valid. Documents must be attached in PDF format only;
- b) sending by ordinary e-mail to the following address: [centro.vera@unive.it](mailto:centro.vera@unive.it). Documents must be attached in PDF format only;

3.2 The application form must include also the following documents:

- Dated and signed Curriculum vitae
- Self certification of exams taken (marks and numbers of university credits – *CFU, Crediti Formativi Universitari*) as well as the weighted average exam marks
- Motivation letter, using the format attached to this announcement (the motivation letter should set out in particular the student's interests, the coherence between academic background and the activities and objectives of the internship projects, as well as the preferential qualifications/skills and knowledge required for each project. See Annex A).
- Scanned copy of a valid ID document.

3.3 Applications received after the deadline or applications received through other procedures, or unsigned applications will not be considered valid.

3.4 The University is not responsible for any failure to receive communications due to incorrect or incomplete indication of address by the applicant or to the lack of or the untimely communication of change of address, as well as possible postal mistakes not attributable to the fault of the administration itself.

#### **Art. 4 – Commission and selection of applicants**

4.1 A commission appointed by Decree of the Department Director will evaluate the candidates on the basis of their qualifications and motivation letters.

4.2 In a preliminary session, the Commission will define the evaluation criteria and the scoring rules for the professional and academic curriculum vitae and for the motivation letter, as well as the minimum threshold for grant eligibility.

4.3 The ranking list will be formulated on the basis of the following criteria:

- weighted average exam marks;
- numbers of University credits (*CFU, Crediti Formativi Universitari*);
- evaluation of the Curriculum Vitae;
- evaluation of the motivation letter that should set out in particular the student's interests, the coherence between academic background and the activities and objectives of the internship projects, as well as the preferential qualifications/skills and knowledge required for each project (See Annex A).

4.4 Applications from candidates that were beneficiaries of the VERA grant in the previous call will be accepted but in the selection procedure priority will be given to candidates that never received the VERA grant.

4.5 The following applications will be excluded from evaluation:

- Applications which do not comply with the admission requirements of the announcement
- Applications which do not comply with the instructions indicated in art.3

#### **Art. 5 –Ranking list**

5.1 At the end of the evaluation process, the Commission will draw up a ranking list in order of decreasing scores of each candidate.

5.2 The ranking list will be published on the web site of the Department of Economics at the following web address [www.unive.it/vera](http://www.unive.it/vera), Vera Academy section, after 11<sup>th</sup> January 2021.

#### **Art. 6 - Assignment of grants**

6.1 At the end of the evaluation process, the Secretariat of the Department of Economics will notify the selected candidates, communicating the starting date of the internship grant.

6.2 The Winners will have to send their acceptance (via e-mail to the following address: [centro.vera@unive.it](mailto:centro.vera@unive.it)) within 5 days from notification. If a candidate turns down a grant, it will be assigned to the candidate ranked next.

6.3 Grants will be paid in one single instalment at the end of the internship after the submission of the final report approved by the academic tutor.

6.4 The assignment of Internship grants is subject to the possession of student status at the beginning of the internship period.

#### **Art. 7 – Obligations for winners**

7.1 Winning students, with the support of the “company” and academic tutors, **must**, as a condition of the grant, agree to carry out the approved procedures to set up their internship, to prepare training projects and all the related administrative procedures.

#### **Art 8 - Incompatibility**

8.1 The present grant can be received in conjunction with any other grants except in case of express incompatibility specified by applicable law, Regulations of the University and other specific calls in which the candidates participated (See Art. 2.2)

#### **Art. 9 – Cross-reference**

9.1 For any relevant matters not mentioned in the call, reference is made to the current University Regulation for the assignment of grants, study awards and incentives to students to sustain enrollment for courses and other specific learning activities.

#### **Art. 10– Person in charge of the procedure**

10.1 The person in charge of the selection procedure, within Law n.241/1990, is the Secretary of the Department of Economics, Ing. Silvia Lovatti. For further information concerning the selection procedure, please send an e-mail to [centro.vera@unive.it](mailto:centro.vera@unive.it)

#### **Art.11 – Processing and protection of personal data**

11.1. Personal data sent by the candidates with the application forms will be processed according to national and European legislation (Italian Legislative Decree n. 196/2003 and Regulation EU 2016/679). For further information <https://www.unive.it/pag/36610/> .

Department Director  
Prof. Michele Bernasconi

Person in charge of the procedure  
Ing. Silvia Lovatti

## **ANNEX A**

### **1. DEEP LEARNING AND HIGH FREQUENCY FINANCIAL DATA FOR AN HYBRID TRADING SYSTEM**

#### **PROJECT DESCRIPTION:**

A trading system is a set of rules that allow us to define how to operate in the financial market. Its definition requires accurate configuration of the parameters that characterize the indicators used to define the rules of decision and the choice of the rules. The goal of the stage is the design of a trading model optimized by evolutionary meta-heuristics and integrated with forecasting model based on deep learning techniques.

The stage includes the following steps:

- review of the literature on hybrid models (technical analysis and prediction), on evolutionary meta-heuristics and on neural networks for prediction;
- design of a hybrid trading system;
- Implementation of the previous point using appropriate software (R or Python).

#### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

Skill on R e/o Python

TUTOR: Claudio Pizzi (estimated start date: January 2021)

### **2. MACHINE LEARNING FOR ALGORITHMIC TRADING STRATEGIES**

#### **PROJECT DESCRIPTION:**

The aim of the stage is to analyze how the combination of models to forecast financial market trend and technical analysis indicators can improve the performance of a system of algorithmic trading rules.

As concern the forecasting models both artificial intelligence, in particular Neural Networks, Recurrent Neural Networks Long Short-Term Memory Networks and kernel-based regression models will be used.

With regards to technical analysis indicators, their parametric configuration will be obtained using optimization meta-heuristics such as Particle Swarm Optimization.

The stage includes the following phases:

- Literature review on abovementioned models.
- Design of a trading system that combines forecasting models and technical analysis indicators.
- Implementation of the previous point.

#### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

Skill on R e/o Python

TUTOR: Claudio Pizzi (estimated start date: January 2021)

### **3. GENDER DISCRIMINATION IN COMPETITION: EVIDENCE FROM A TV GAME SHOW**

#### **PROJECT DESCRIPTION:**

The student will support a research project aiming to analyse evidence of information-based discrimination against women, in a famous Italian game show. The game shows represents a convenient setting where to study gender discrimination in competitive situations, since it's a relatively natural environment with well defined rules and clear monetary incentives.

The student will be asked to watch a series of episodes of a famous Italian TV game show, in order to build a precise a detailed database on its content, thus defining, among other things, the participants' gender and their choices along the game.

#### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

Optimal knowledge of Italian language and optimal knowledge of Excel. The candidate should be a very precise and diligent person when dealing with datasets.

TUTOR: Valeria Maggian (estimated start date: January 2021)

#### **4. REALIZATION OF A DATABASE FOR THE ANALYSIS OF FINANCIAL VULNERABILITIES IN THE ITALIAN MUNICIPALITIES**

##### **PROJECT DESCRIPTION:**

The fellow will be part of a research project that analyzes the financial vulnerabilities of the Italian municipalities. In this regard, the fellow will work on the construction of a database that will include both financial and demographic data for the Italian municipalities, in a given time period. The project will be completed after the estimation of panel data models that will measure the impact of these factors on the financial stability of the Italian municipalities.

##### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

Having passed one of the following exams:

1. Statistics
2. Econometrics

Ability to build and manage a database. Advanced knowledge of at least one of the following software: Matlab, Python, R e STATA.

TUTOR: Stefano Campostrini, Michele Costola (estimated start date: January 2021)

#### **5. GENERIC ENTRY IN PHARMACEUTICAL MARKETS: FINANCIAL IMPLICATIONS AND OPPORTUNISTIC BEHAVIOUR BY PRESCRIBERS**

##### **PROJECT DESCRIPTION:**

The research project is aimed at evaluating the economic and financial implications of generic entries for large sale drugs. Using administrative data on the consumption of pharmaceuticals covering over more than a decade, the objective is to quantify the effects of patent expiration on volumes of drugs and on the associated expenditures. In doing so, the study is expected to provide policymakers with novel insights on the amount of potential savings and on possible opportunistic behavior by prescribers. Alongside the drug experiencing the end of patent coverage, the analysis will consider also the molecules that represent viable clinical alternatives in order to account for the possible substitution effects within the same class of drugs. The research assistant is expected to actively cooperate in the descriptive analysis of the data and in the first steps of the econometric analysis, based on a regression-discontinuity-in-time strategy.

##### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

The applicant is required to have passed graduate-level econometrics/statistics exam. Being already familiar with the econometric software Stata would be an asset.

TUTOR: Irene Mammi (estimated start date: January 2021)

#### **6. UNDERSTANDING TRENDS AND PATTERNS IN CLIMATE EXTREMES AND IMPACTS ASSESSMENT INDICATORS**

##### **PROJECT DESCRIPTION:**

Climate extreme indices and impact indicators are important metrics derived using meteorological parameters that not only assist in the analysis of regional and global extremes in weather, but also aid climate modellers and policymakers in the assessment of sectoral impacts of climate change. Other potential applications of such high-resolution indicators include identification of hot spots (clusters) showing similar single or compound extreme events.

The research assistance activity will follow the following phases:

1. Preliminary quality checks on climate impact indicators assembled using the output of climate observations or model simulations.
2. Principal Component Analysis and/or other Machine Learning approaches (e.g. Cluster analysis) to identify regions showing similar spatiotemporal patterns of climate stressors.
3. Identification of future global hotspots using projected impact indicators and population.

##### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

1. Advanced knowledge of any of the following: R (preferable), Matlab, Python, Fortran or Julia.
2. Familiarity with Cluster Analysis, Principal Component Analysis or other similar statistical/machine

learning approaches suitable for multi-dimensional big data.

TUTOR: Malcolm N. Mistry, Enrica De Cian (estimated start date: January 2021)

## **7. AN ANALYSIS OF THE CORRELATION BETWEEN GENDER AND INNOVATION**

### **PROJECT DESCRIPTION:**

In this project we aim to examine the relations between companies' gender diversity of board and innovation communication claims: the final research goal will be to propose a framework to quantitatively assess the gender diversity and the online articulation of innovation, in order to understand whether some correlations hold between these two variables. During the project, the candidate main tasks will be:

- to identify business belonging to some selected industries and stock exchange indices;
- to count the occurrences of some selected keywords on the afore mentioned businesses' websites
- to identify the board of directors of the afore mentioned businesses and to assess the women presence in the board

### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

Microsoft Office/OpenOffice operational skills

TUTOR: Giacomo di Tollo (estimated start date: January 2021)

## **8. RECESSIONS AND THE TRANSITION TO A DECARBONISED ECONOMY**

### **PROJECT DESCRIPTION:**

There is a view that recessions are beneficial for climate change in that reduced economic output reduces carbon emissions. We investigate whether recessions cause a shift in the composition of investments towards the current carbon emitting production capacity, thus significantly delaying the transition to a decarbonised society.

The fellow will construct a database using data from the Energy Information Administration, which cover the period 1970-2019 and detail the universe of US electricity generation plants. The fellow will first make the data consistent for the analysis, as, for example, new technologies have been introduced over this long period of time. At the same time, the fellow will annotate the changes and updates implemented, to facilitate future uses. Second, the fellow will track developments in electricity generation through each of the main US recessions. The fellow can use this database to develop a master thesis under the supervision of the tutor.

### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

The fellow will need to be fluent in English. Being familiar with a statistical software (e.g. Stata, Python, R, Matlab, or another one) is required. Experience in constructing and managing datasets of medium/large dimension is preferred but not required.

TUTOR: Alessandro Spiganti (estimated start date: January or February 2021)

## **9. NATURAL RESOURCES, TERRITORIAL SUSTAINABILITY AND CIRCULAR ECONOMY**

### **PROJECT DESCRIPTION:**

Pollution, wasted natural resources and climate change are just some of the pressing issues facing our society. The increase in population, production costs and pollution, now unsustainable, require the adoption of a new approach to the economy and everything that revolves around it.

The aim of the research work is the reconstruction of the cognitive framework at different territorial levels through indicators (environmental, social, economic), necessary for identifying suitable sustainable strategies in a bottom-up perspective.

The research activity is developed in different steps:

1. investigation and analysis of the existing bibliography on natural resources and construction of a summary scheme;
2. survey of databases and collection of existing data of natural resources in different territorial areas;
3. critical analysis of the methods used in the literature for the processing of the collected data (see the previous step);
4. identification of new methods for processing the collected data and application hypotheses.

**PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

Have passed at least one of the exams of the list:

Optimization, Mathematical Models for Decision Making, Laboratorio sulle Scelte, Econometria, Laboratorio di Econometria, Econometrics, Nonlinear Models and Financial Econometrics

and have passed at least one of the exams of the list:

Commodity Markets, International Trade of Commodities, Economics of Rural Development, Economia e Gestione dell'Azienda Agraria e Agroindustriale.

Advanced knowledge of Excel, knowledge of R or Matlab language and of territorial or primary sector issues.

TUTOR: Paola Ferretti e Bruna Zolin (estimated start date: end of January 2021)

**10. MOSE BARRIER SYSTEM OPERATIONS AND THE DESIGN OF PORT INFRASTRUCTURE UNDER UNCERTAINTY**

**PROJECT DESCRIPTION:**

The MOSE mobile barrier system represents the main measure aimed at protecting Venice from periodic flooding dictated by the tides. In addition to the costs incurred for its implementation, the system has, in addition to the costs directly associated with its use, costly implications for navigation and port activities. The object of our study is the evaluation of the economic convenience of the redesign of the port infrastructure in the light of this costly interference.

The research fellow will be asked to:

- collect and elaborate data for the definition of the costs for the port associated with the closure of the barriers,
- collect and elaborate data to define the costs associated with the redesign of the port infrastructure,
- collect and elaborate data relating to the trend of the tides and the water level. Specifically, its consistency with respect to certain stochastic processes that are assumed to illustrate the dynamics will be tested.
- carry out a review of the economic literature on the subject.

**PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

The following background is essential: i) solid preparation, at master's degree level, in Microeconomics, Mathematical Analysis and Econometrics, ii) excellent knowledge of the English language (in particular with regard to reading and comprehension) and iii) synthesis and aptitude toward critical analysis, iv) familiarity with the use of i) softwares for algebraic calculus such as Matlab, Mathematica or Maple and ii) softwares for statistical-econometric analysis programs such as STATA, R +, E-Views or SPSS.

TUTOR: Luca Di Corato, Carlo Giupponi (estimated start date: April 2021)

**11. THE ECONOMICS OF CARBON OFFSHORING**

**PROJECT DESCRIPTION:**

The research fellow will be asked to carry out a review of the economic literature on the topic of carbon offshoring, that is, the transfer abroad of parts of a production process which, being pollutant, would be subject to domestic regulation.

The review will include papers presenting a mathematical modelling of the phenomenon (both at micro and macroeconomic level) and/or an empirical evaluation of the issue. It is also expected a review of the current regulatory framework and of the debate for the definition of new rules governing the phenomenon in the light of the need to mitigate the impact of climate change.

The final research output will be i) a report that presents with an adequate level of synthesis the state of the art of the literature above and discusses the main results obtained and ii) a report illustrating the current regulatory framework and the debate aimed at its improvement.

**PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

The research assistant will read scientific articles that propose a mathematical modelling of the phenomenon (both at a micro and macroeconomic level) and/or an empirical evaluation of the issue. The following skills and abilities are essential: i) solid preparation, at master's level, in Microeconomics, Macroeconomics,

Mathematical Analysis and Econometrics, ii) excellent knowledge of the English language (in particular with regard to reading and comprehension) and iii) synthesis and aptitude toward critical analysis.

TUTOR: Luca Di Corato (estimated start date: April 2021)

## **12. CITIES IN THE EVOLVING EUROPEAN GOVERNANCE: THE PANDEMIC CASE**

### **PROJECT DESCRIPTION:**

The project examines the role of cities in performing key public functions in the domain of health, democracy and global networking. In the first part of this project we will focus on the current pandemic. Covid-19 has affected densely populated cities in a special way. Some of the cities have become symbols of the fight against the pandemics. Although health issues are chiefly a matter of national and regional government, the pandemics showed that the local municipal level (and the European level) are also important. How and to which extent has the pandemics affected cities differently than states and regions? Was there a distinct urban way of combatting Covid-19? Have the existing laws and regulations helped or hampered cities' work? How has the interplay between various levels of governance evolved during the pandemics? We hope that the holder of the VERA internship grant will collect data helping us to address these questions.

Our first task will be to identify the key relevant academic as well as policy literature pertinent to this project. This will include drafting a comprehensive overview of the most recent work on the evolution of urban governance in the emergency situations; and more specific studies devoted to the urban dimensions of health. With the survey of existing work completed, we will prepare an online questionnaire followed by telephone interviews with urban officials in major Italian cities. The purpose would be to identify the 'best' and 'worst' practices of urban governance in the struggle against the pandemic, and query what lessons they may hold for more formalized and institutionalized architectures.

### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

The successful candidate should have sound background in methods and theories of Social Sciences, and public policies and their geographic and territorial impacts in particular. Proficiency in English is indispensable; knowledge of more than two European languages will be an asset.

TUTOR: Stefano Soriani, Jan Zielonka (estimated start date: between January and June 2021)

## **13. LOCAL PUBLIC FINANCES AND POLITICAL OUTCOMES IN ITALIAN MUNICIPALITIES**

### **PROJECT DESCRIPTION:**

The candidate is expected to help cleaning an already collected dataset of municipality-level data on local public finances from the Italian Ministry of Interior's Certificati Consuntivi. This will enable the student to get access to unique highly-disaggregated information on all financial inflows and outflows of all Italian municipalities between 1998 and 2018. The dataset reports exact amounts of collected taxes and transfers (sub-divided by tax type) and expenses (sub-divided by chapter of expense). A set of pre-defined tasks in MS Excel and STATA are to be agreed with the supervisor and computed by the candidate.

In addition, the candidate will be asked to help collecting and cleaning data on the outcome of municipal elections for the same period (1998-2018), available from the Historical Archive of Elections of the Italian Ministry of Interior. Data on voting outcomes for Campania, Calabria and Sicily 1998-2013 is already available to the supervisor, while the data for remaining regions is to be computed by the candidate, closely following the supervisor's guidance and the Excel/STATA commands suggested.

The candidate is allowed to use this whole dataset for her/his MSc Thesis.

### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

The candidate is expected to be familiar with the following software:

- 1) STATA version 13 or above
- 2) MS Excel

Preferably, the candidate should have familiarity with applied statistical and econometrics methods and experience of longitudinal (panel) data management and elaboration.

The candidate should be fluent in Italian.

TUTOR: Marco Di Cataldo (estimated start date: January 2021)



## **14. COVID-19 AND MENTAL HEALTH**

### **PROJECT DESCRIPTION:**

The COVID-19 pandemic and the resulting economic recession have negatively affected many people's mental health. Many people are distressed due to the immediate health impacts of the virus and the consequences of physical isolation. Many are afraid of infection, dying, and losing family members. Individuals have been physically distanced from loved ones and peers. Millions of people are facing economic turmoil having lost or being at risk of losing their income and livelihoods. Frequent misinformation and rumours about the virus and deep uncertainty about the future are common sources of distress.

This research project studies the impact of COVID-19 and related policies on the mental health of vulnerable groups of the population in different European countries, with a specific focus on older adults and people with pre-existing health conditions.

The research assistance activity will follow the following phases:

1. Collection and analysis of the existing bibliography on COVID-19 and mental health; elaboration of a summary scheme.
2. Survey of existing sources and collection of data on COVID-19 and mental health.
3. Critical analysis of the methods used in the literature for the processing of the collected data (see the previous step).
4. Identification of method(s) for processing the collected data and working hypotheses
5. Preparation of a final report on what has been learned. The final report may be used as a basis for master/magistrale degree thesis under the Tutor supervision.

### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

Have passed the following exams:

1. An exam of Health Economics at the second degree level
2. At least one exam of Statistics or Econometrics at the first degree level

Have passed or be enrolled in at least one of the following exams at the second degree level: Statistics, Statistical Surveys Analysis, Econometrics, Advanced Econometrics

Knowledge of the English language

Advanced knowledge of Excel (including the use of filters, tables and graphs) and familiarity with R or Stata, or willingness to acquire the necessary knowledge

TUTOR: Enrica Croda (estimated start date: January 2021)

## **15. COVID-19 IN ITALY: IMPACT OF REGIONAL POLICIES**

### **PROJECT DESCRIPTION:**

The Italian healthcare system is highly decentralized. In responses to the COVID-19 pandemic, different regions have tried different approaches. The most notable example is the contrast between the approaches of Lombardy and Veneto, two neighboring regions with similar socioeconomic profiles. The evolution of the pandemic in these two regions has been shaped by several drivers outside of policymakers' control. However, it is becoming increasingly clear that different public health choices have also played an important role.

The ultimate purpose of this project is to understand which policy works and which policy does not work to tackle the pandemic.

The research assistance activity will follow the following phases:

1. Collection and analysis of the existing bibliography on regional policy responses to the COVID-19 pandemic; elaboration of a summary scheme.
2. Survey of existing sources and collection of data on regional policy responses to the COVID-19 pandemic.
3. Critical analysis of the methods used in the literature for the processing of the collected data (see the previous step).
4. Identification of method(s) for processing the collected data and working hypotheses
5. Preparation of a policy brief on what has been learned. The policy brief may be used as a basis for a master/magistrale degree thesis under the Tutor supervision.

### **PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:**

Have passed the following exams:

1. An exam of Health Economics at the second degree level
2. At least one exam of Statistics or Econometrics at the first degree level

Have passed or be enrolled in at least one of the following exams at the second degree level: Statistics, Statistical Surveys Analysis, Econometrics, Advanced Econometrics

Knowledge of the English language

Advanced knowledge of Excel (including the use of filters, tables and graphs) and familiarity with R or Stata, or willingness to acquire the necessary knowledge

TUTOR: Enrica Croda (estimated start date: January 2021)

## **16. GEOCODING IN RETROSPECTIVE SHARE DATASETS**

### PROJECT DESCRIPTION:

SHARE retrospective surveys (wave 3 and wave 7) contain some questions that allow respondents to be geolocated. Respondents must report their "accommodation history", i.e. they must report every Country or Region of residence change along their life. Information about the region of residence is potentially very interesting because it allows to link SHARE to specific context variables for each region, such as economic development measures, pollution indicators, specific policies of some regions. However these context variables, which can be found in other datasets made available for example by eurostat or oecd, have a different regional.

The tasks of the scholarship winner will be:

- Building a correspondence table between the codes of the SHARE regions with the Eurostat codes (NUTS codes)
- Integrate the retrospective database based on SHARE ("job episodes panel") produced by the SHARE Venice Team with the NUTS codes corresponding to the regions of residence of the respondents over the years

### PREFERENTIAL QUALIFICATIONS/SKILLS TO SPECIFY IN THE LETTER OF MOTIVATION:

Experience with STATA software

TUTOR: Giacomo Pasini (estimated start date: between January and June 2021)