











# Open Call for a post-doctoral researcher

We invite applications for a Post-Doctoral position, funded by the Portuguese Research Council (Fundação para a Ciência e Tecnologia-FCT), to work on a 3-year joint-project between 1) UECE research centre, based at ISEG-UL and 2) CERIS/CESUR, based at IST-UL. The post holder will work with Professor Patricia Melo (ISEG-UL), Professor João de Abreu e Silva (IST-UL) and other project researchers.

Job reference	UECE/02/SAICT/2017-TiTuSS/PD
Project title	Transport Infrastructure and Urban Spatial Structure: Economic, Social & Environmental Effects (TiTuSS)
Contract type	Full-time fixed-term for 30 months, with a 6-month probation period
Salary	2 128.34 €/month
Location	ISEG-UL, Lisbon
Starting date	January 2019

#### **ABOUT THE PROJECT TITUSS:**

The main aim of TiTuSS is to create new knowledge on the relationship between transport improvements and urban spatial structure in Portugal, and how changes in this relationship can be better managed to enhance regional and national productivity together with more sustainable and inclusive growth. The key objectives are:

- 1. To provide new evidence for Portugal, and also for Lisbon Metropolitan Area, on the effects of transport improvements on the urban spatial structure, particularly location patterns of the population and economic activities.
- 2. To provide new evidence for Portugal on the relationship between productivity and urban agglomeration externalities resulting from improvements to the transport network (i.e. wider economic impacts);
- 3. To provide new evidence for Portugal on the contribution of transportation infrastructure, particularly improvements in regional accessibility resulting from the expansion of the road network, to spatial cohesion, particularly a more sustainable and inclusive growth.

The objectives will be achieved by addressing the following research questions:

- To what extent has the expansion of Portugal's road network over the last 30 years altered patterns of urban spatial structure? How much has it contributed to patterns of suburbanisation and dispersion of economic activity?
- What is the magnitude of the productivity benefits from urban agglomeration economies induced through transport improvements, and have the benefits enlarged or reduced over time as a result of the expansion of the motorway network and associated changes in regional accessibility?
- To what extent have the improvements in regional accessibility levels that followed the extension of the motorway road network contributed to greater territorial cohesion, particularly to sustainable and inclusive growth?

#### **JOB DESCRIPTION & RESPONSIBILITIES:**

The main duties of the post holder include:

- 1. Develop and carry out theoretically informed and empirically grounded research focusing on the project topics described above, in particular: economic and environmental effects of transport and urban spatial structure;
- 2. Manage large datasets, particularly for longitudinal microdata, such as Quadros de Pessoal and Balanço Social;
- 3. Develop and implement advanced panel data statistical modelling, including spatial econometrics and causal inference techniques, using appropriate statistical software such Stata and/or R;
- 4. Carry out and develop collaborative research with other project colleagues and research groups;
- 5. Prepare academic papers and presentations;
- 6. Contribute to the organisation of project events and activities (e.g. seminars, workshops).
- 7. Contribute to small-scale project management activities under supervision of project's PI (Patricia Melo) and Co-PI (João de Abreu e Silva).

## **SELECTION CRITERIA:**

To be eligible candidates must hold a PhD in economics, geography, transport studies, urban studies or similar fields with a strong quantitative focus. Candidates will be evaluated against the criteria below:

Requirements		Desirable
A good understanding of the theoretical and empirical approaches to the study of	Х	
the economic and/or environmental effects of transport and urban spatial structure	^	
Evidence of published research in one or more of the relevant PhD topic areas		
Experience handling/managing secondary datasets, especially longitudinal datasets		
Experience using panel data econometric techniques and software (e.g. Stata, R)		
Experience using transport accessibility modelling in GIS software (e.g. ArcGIS, QGIS)		Х
High standard of written and spoken English		
Good communication and interpersonal skills		
Experience working in a project team		Х
Project management skills		Х

#### **LEGISLATION FRAMEWORK:**

The work contract follows Decree-Law No. 57/2016 of 29 August, which approved the scientific recruitment regime (RJEC) reviewed by Law No. 57/2017 of 19 July and considering the Regulatory Decree No. 11-A/2017 29 December. The contract is also regulated by labour law No. 7/2009 of 12 February.

### **SELECTION PROCESS:**

Eligible applications will be evaluated by a committee: Patricia Melo (chair), João de Abreu e Silva and António Afonso. Applications will be ranked according to the following selection criteria weights:

- Publication record (55%);
- Previous project-based research experience, national and international, relevant to TiTuSS (35%);
- Other scientific dissemination and management activities (10%).

A maximum of five applicants will be shortlisted and invited for an interview. Failure to identify suitable candidates will result in the cancellation of the advertisement for this job position.

# **APPLICATION DOCUMENTS & DEADLINE:**

- **Required documents**: Motivation letter, CV, copy of PhD award certificate, copy of identification document, 3 most relevant publications for TiTuSS with brief justification, two letters of reference.
- The required documents must be sent to Patricia Melo (<a href="mailto:pmelo@iseg.ulisboa.pt">pmelo@iseg.ulisboa.pt</a>) with the reference "UECE/02/SAICT/2017-TiTuSS/PD/applicants surname".
- The closing date for applications is **25/11/2018**.