
Announcement Master Thesis

The Impact of Climate Change on Exporter Dynamics – Evidence from 70 countries and 15 years

at

Wegener Center for Climate and Global Change, University of Graz

Start: Spring 2018

Supervisors: Ass. Prof. Dr. Stefan Borsky, Assoz. Prof. Dr. Birgit Bednar-Friedl

In 2011, a strong earthquake followed by a large tsunami occurred off the Pacific coast of Tōhoku. The impact of these two natural disasters on the Japanese economy was significant affecting countless large and small, national and international active firms. After this event, some of these firms went out of business, whereas others survived. Both, exporter characteristics (firm size, number of exporters, size of trade flows per exporter etc.) and exporter dynamics (entry and exit rates of firms in export markets, length of survival of newly entered firms) can explain whether firms survive or exit a market after such a shock. According to economic theory, both exporter characteristics and exporter dynamics are influenced e.g. by a firm's productivity level or distortions in access to finance, but also by default risk due to large weather shocks and natural disasters. Countries differ in the probability of occurrence and size of these shocks and such shocks can have a large impact on the composition and dynamics of exporting firms in a country. Knowledge, how firms' export decisions are influenced by such large shocks, will have a significant influence in policy decision on adaptation strategies of a country.

Based on a recent database on exporter dynamics for 70 countries and 15 years published by the World Bank in 2016 the master thesis should focus on following research questions (areas):

- What is the impact of large weather shocks and natural disasters on a countries' composition of exporting firms?
- What is the impact of large weather shocks and natural disaster on the firms' entry and exit and survival time?

The stated research questions can be seen as a guidance. The exact and final research question of the master thesis project will also depend on the applicant's interest.

Relevant literature to get an overview on this topic:

Fernandes, A.M., Freund, C. and Pierola, M. D. (2016), Exporter behavior, country size and stage of development: Evidence from the exporter dynamics database, *Journal of Development Economics* **119**: 121-137.

Fernandes, A.M., Ferro, E. And Wilson, J.S. (2017). Product standards and firms' export decision, *The World Bank Economic Review*, **forthcoming**.

Required competences:

- Master student in Economics, Environmental System Sciences (major in economics) or other equivalent master programs.
- Good knowledge of econometrics or statistics and ideally experience in applied econometric/statistical analysis.
- Experience in data handling and management.
- Ideally knowledge of trade and industry data.
- Knowledge of STATA or R.
- Very good English skills.

Personal skills:

- High level of dedication and motivation to work independently in research.
- High degree of self-organization and effective time management.

Duration: 6 months

Payment: 500 EUR/month scholarship

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Please send your application (including motivation letter, curriculum vitae, transcript of records and a 1-page research sketch) via e-mail to Sabine Tschürtz, sabine.tschuertz@uni-graz.at

Application Deadline: 04th March 2018

For further information on the Wegener Center and its research go to www.wegcenter.at