



Call for a post-doc candidate in France (Rennes) (24 months)

Topic:

Brexit, trade and regional differences in France and the UK

1 - Scientific and socio-economic context of the project:

First, let us recall that the British effectively left the European Union (EU) on January 31 2020, a decision labeled as Brexit. In the long term, and depending on the provisions of negotiated trade agreements with non-European partners, Brexit will disrupt trade between the United Kingdom (UK) and its European partners by increasing the various trade costs.

Since January 1 2021, the EU-UK Trade and Cooperation Agreement determines the new rules applying to bilateral trade flows between the UK and the European Union. Leaving the EU implies the reestablishment of border controls and customs formalities, and generates an increase in the costs of accessing the British market for European producers. This increase in trade costs will lead to changes in trade flows, not only between the UK and its EU partners, but also indirectly between the latter, for example by redirecting some of their exports to the UK to other markets. In addition, the new trade agreements concluded by the UK with non-European partners reduce their costs of access to the British market and reinforce this trade diversion. Beyond the variation of effects across countries, documented in the literature, we expect to find an important heterogeneity across the regions of a country, driven by differences in terms of product specialization and proximity to alternative markets.

To avoid the introduction of customs regulations and border controls between the Republic of Ireland and Northern Ireland, which may jeopardize the economic and political stability of the region, the EU-UK agreement moves the UK's *de facto* border with Ireland on the Irish Sea. Over the past months, the UK on several occasions has attempted (has openly expressed its intention) to breach this part of the agreement, known as the Northern Ireland protocol. The infringement of the protocol raises major concerns within the EU, as it would permit the Northern Ireland become an export platform to the EU market. Evaluating the impacts of this outcome calls for exploring the regional partition of the UK and allow Northern Ireland and Great Britain have different access conditions to the EU market.

Second, the health crisis linked to the Covid-19 pandemic, ongoing at a global scale since spring 2020, calls for a thorough analysis (rethinking) of the location of production and the sourcing of basic consumer goods, including most agricultural and food products. Disruptions of food supply chains encountered during lockdown periods in particular are strong arguments for limiting countries' dependence on food imports and for reshoring food industries. In addition, from an environmental standpoint and given the recent surge in

energy and fuel prices, which are directly passed through into trade costs, the ecological footprint of short supply chains outperforms that of international long ones.

We will focus on the particular case of France and the UK, and capitalize on our previous work on the estimation of unobserved trade flows between and within subnational regions.

2- Research program

The aim of this post-doc project is to deepen our understanding of the effects of Brexit by exploring regional disparities within France and the UK. The heterogeneity of French regions with respect to their specialization across products, distance to the UK and to alternative markets permits to evaluate the contribution of these factors to the resilience of agrifood industries to external chocks, such as Brexit and the Covid-19 pandemic. The project will also rely on the regional breakdown of the British economy in order to estimate how the non-respect of the new EU-UK trade agreement (of the Northern Ireland protocol) would shape global trade flows.

In terms of methodology, the post-doc project will use a structural gravity model in general equilibrium similar to Anderson, Larch and Yotov (2018) and/or Costinot and Rodriguez-Clare (2014). The new trade policy environment introduced by Brexit (and associated changes in trade costs) will be modelled based on product-level specifications of the UK's trade agreements with the EU and third countries, and of the UK's new global tariff. The value of trade flows between and within regions, unobserved in the data but crucial for the analysis, will be estimated based on regional customs and production data, and the structure of the model. The candidate may draw on Dhingra et al. (2017) and Cheptea et al. (2021) for the specification of trade costs and model parameters, as well as on the PhD thesis of Lucile Henry, which estimates the impact of Brexit on the French region of Brittany, for the reconstruction of trade flows at the regional level. The project will include a methodological contribution with the reconstruction of intra- and inter-regional trade data, which are not directly observed.

The availability of trade data for years 2021-2022 will permit to confront the model's predictions with observed data, although for some countries it will be impossible to separate the effect of Brexit from that of the pandemic. The project will also evaluate the impact of the UK's non-compliance with the Northern Ireland protocol on global trade patterns. The analysis will be conducted at industry level, with a higher level of product disaggregation for the agricultural and food sector, and will account for interconnections between industries. Finally, the analysis could also question the dependence on agricultural and food imports and/or on export revenues and the resilience of supply chains during the Covid-19 crisis.

3- Skills

The candidate should hold a PhD in economics. We are particularly interested in candidates with a solid background in international economics and econometrics. We also expect the post-doc candidate to be fluent in English and have very good writing skills. Interest for the agricultural and food sectors is appreciated.

4- Location and Supervision

The post doc candidate will join the SMART-LERECO research unit in Rennes, France (https://www6.rennes.inrae.fr/smart_eng/Research-topics). SMART-LERECO is a joint research unit of French National Research Institute for Agriculture, Food and Environment (INRAE) and of Institut Agro-Agrocampus Ouest, a French elitist public higher education establishment specialized in agriculture, food science, horticulture and landscape. The candidate will be supervised by Marilyne Huchet and Angela Cheptea. The candidate may benefit from the wide network of international research partners of the host.

5 - Scholarship/fellowship

We are looking for a candidate to build a project together and we will help the candidate to apply to the BIENVENÜE programme (https://msca-bienvenue.bretagne.bzh/). The programme offers 75 two-year postdoctoral positions to international highly-skilled researchers. Co-funded by the EU Marie Sklodowska-Curie Actions, Region Bretagne (West of France) and partner institutions, the programme aims to reinforce Brittany's research excellence. The second BIENVENÜE 2022 Call will be launched in December 2021. To be eligible to the BIENVENÜE call, the applicant must have a doctoral degree or at least 4 years of full-time equivalent research experience. He/she must also have resided or worked/studied at least 24 months outside of France in the 3 years prior to the deadline (15/02/2022).

Incoming Call:

01/12/2021 – **15/02/2022** at **23:59** CET: Application Stage

23rd June 2022 at 16:00 CET: Publication of results

September 2022 – January 2023: Beginning of research projects

The support paid by Region Bretagne to partner research institutions amounts to 97,400 euros per post-doctoral fellow recruited over a period of 24 months. The employing partner research institution provides additional funding to cover 10.44% of the salary costs of the post-doctoral fellow, i.e. 10,800 euros over 24 months, as well as research and training costs.

Complementary funding are welcomed.

6 -Contact

Marilyne Huchet, Professor in Economics: marilyne.huchet@agrocampus-ouest.fr Angela Cheptea, Researcher in Economics: angela.cheptea@inrae.fr

7 – References

Anderson, J. E., Larch, M. and Yotov, Y. V. (2018). Estimating general equilibrium trade policy effects: GE PPML. *World Economy* 41: 2750–2782.

Cheptea, A., Huchet, M., Henry, L. (2021) How will Brexit affect the patterns of European agricultural and food exports?, *European Review of Agricultural Economics* 48(5): 1031–1073.

Costinot, A. and A. Rodriguez-Clare (2014). Trade theory with numbers: quantifying the consequences of globalization, in *Handbook of International Economics*, vol. 4, E. Helpman, G. Gopinath, and K. Rogoff, editors. pp. 197–262. Elsevier.

Dhingra, S., Huang, H., Ottaviano, G., Paulo Pessoa, J., Sampson, T. and van Reenen, J. (2017). The costs and benefits of leaving the EU: trade effects. *Economic Policy* 32: 651–705.