**Gravity model of trade**

The gravity model was initially presented as an intuitive way of understanding trade flows. The intuitive findings of the gravity model show that bigger countries trade more, and that more distant countries trade less. These regularities are almost uniformly reflected in the early gravity literature, which applies the model to all regions of the world, covering both developed and developing economies, and various products and time periods. The model is clearly a useful starting point in applied international trade research.

Brexit instigated a debate about the gravity model and the stated benefits to trade with the EU. Since 2016 government departments and think tanks have made the case for and against EU membership using the gravity model.

**Topics covered**

* Trade flows
* Brexit and free trade

**Data sets**

* Gravity model, single year services data [[Link](https://drive.google.com/drive/folders/0B2GupjNVYusicmxGNEF4SV9peGM)]
* Full gravity model time series with codebook. [[Link](https://sites.google.com/site/hiegravity/data-sources)]
* ONS UK total trade: all countries, non-seasonally adjusted. [[Link](https://www.ons.gov.uk/businessindustryandtrade/internationaltrade/datasets/uktotaltradeallcountriesnonseasonallyadjusted)]

**Reading list**

Gravity model

Head, K and Mayer, T. (2014) Gravity Equations: Workhorse, Toolkit, and Cookbook. *Handbook of International Economics*, vol. 4, Elsevier. [[Link](http://www.cepii.fr/pdf_pub/wp/2013/wp2013-27.pdf)]

Anderson, J and van Wincoop, E. (2001) Gravity with Gravitas: A Solution to the Border Puzzle. [[Link](https://www.nber.org/papers/w8079)]

Altman, S and Bastian, P (2020) DHL Global Interconnectedness Index 2020: The State of Globalization in a Distancing World. [[Link](https://www.dhl.com/content/dam/dhl/global/dhl-spotlight/documents/pdf/spotlight-g04-global-connectedness-index-2020.pdf)]

Santos Silva, J and S Tenreyro (2006), “The log of gravity ", The Review of Economics and Statistics 88(4). [[Link](https://personal.lse.ac.uk/tenreyro/jensen08k.pdf)]

Brexit

Estrin, S., Cote, C. and Shapiro, D. (2018). Can Brexit defy gravity? It is still much cheaper to trade with neighbouring countries. [[Link](https://blogs.lse.ac.uk/management/2018/11/09/can-brexit-defy-gravity-it-is-still-much-cheaper-to-trade-with-neighbouring-countries/)]

Coutts, K. et al. (2017) Defying Gravity: A critique of estimates of the economic impact of Brexit. Policy Exchange. [[Link](https://policyexchange.org.uk/wp-content/uploads/2017/06/Defying-Gravity-A-critique-of-estimates-of-the-economic-impact-of-Brexit.pdf)]

Dhingra, S. et al (2016) The UK Treasury analysis of 'The long-term economic impact of EU membership and the alternatives': CEP Commentary [[Link](https://cep.lse.ac.uk/pubs/download/brexit04.pdf)]

Department for International Trade (2020) UK-Australia free trade agreement: the UK's strategic approach. [[Link](https://www.gov.uk/government/publications/uks-approach-to-negotiating-a-free-trade-agreement-with-australia/uk-australia-free-trade-agreement-the-uks-strategic-approach)]