Agri-Food Trade and Cooperation, Measuring Sectoral Effects of the EU-UK post-Brexity Trade Agreement

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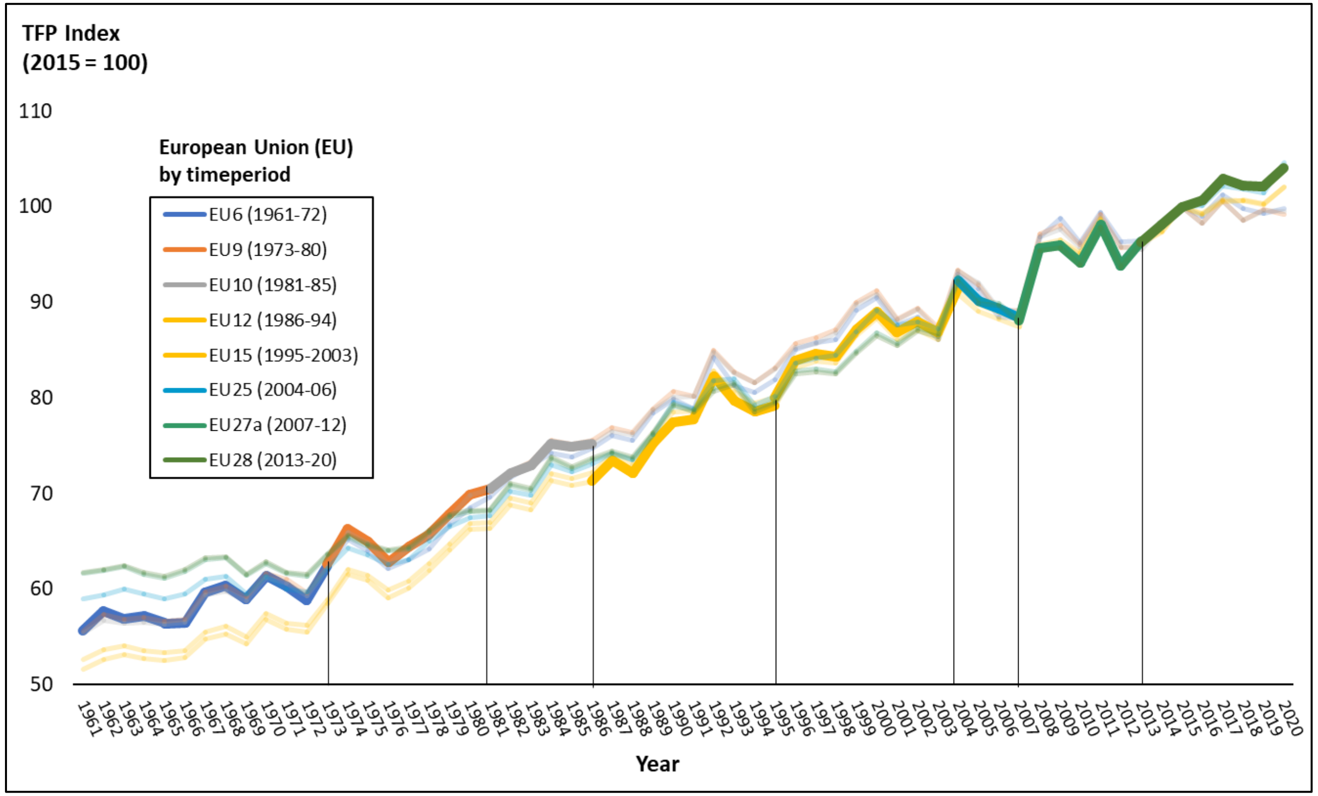
Disclaimer: The findings and conclusions in this abstract submission are those of the authors and should not be construed to represent any official USDA or U.S. Government determination or policy.

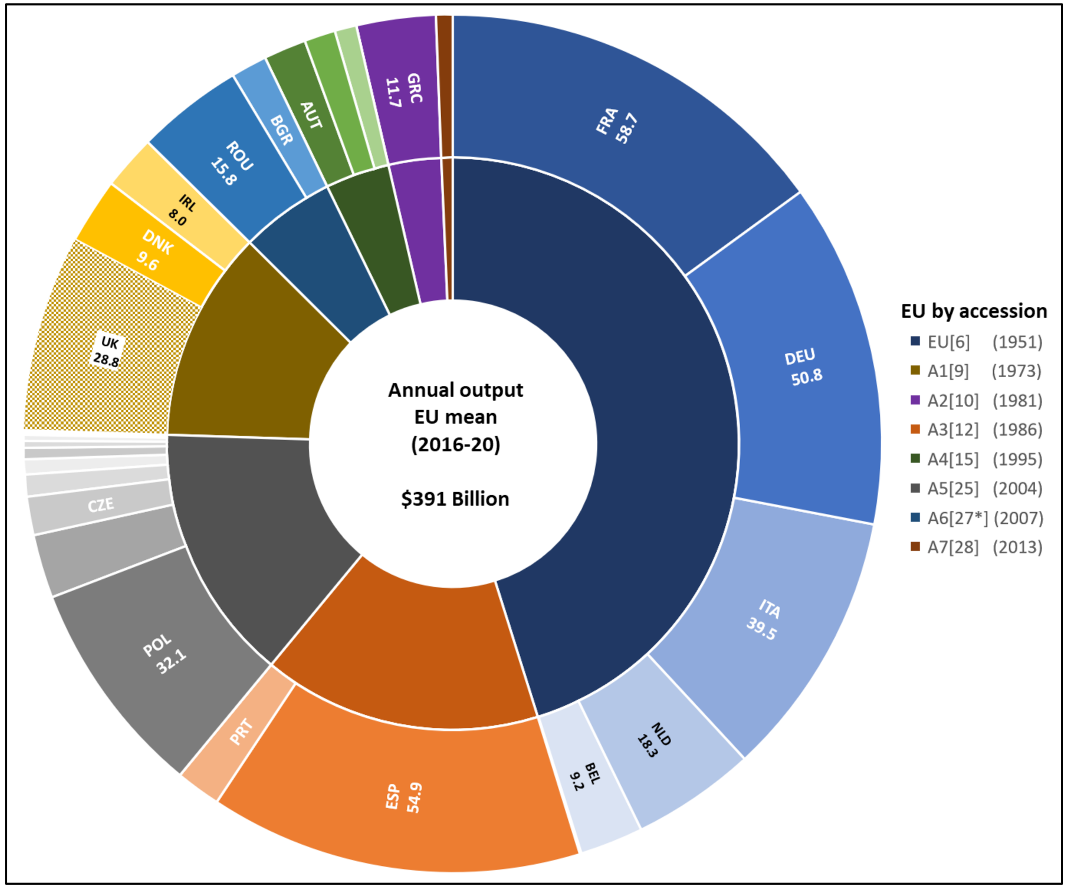
Overview

- Background: UK & European Union
- UK selected facts and figures
  - Production: trends and agricultural policy
  - Trade: “towards a Global Britain”
- Agri-food patterns under EU-UK TCA

Original members yield almost half EU ag. output as UK generated a tenth of EU livestock pre-Brexit



Source: authors' calculations based on USDA ERS, IAP data product, October 2022.



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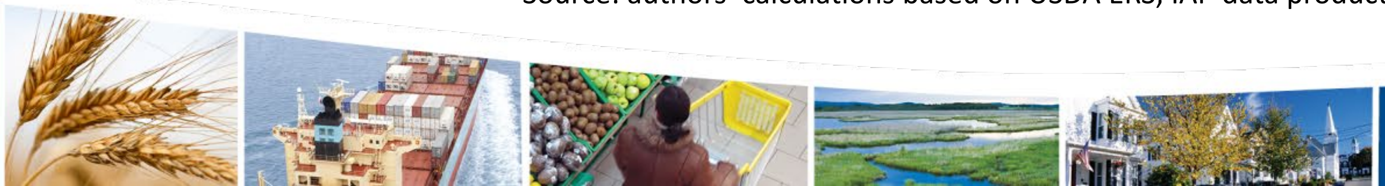
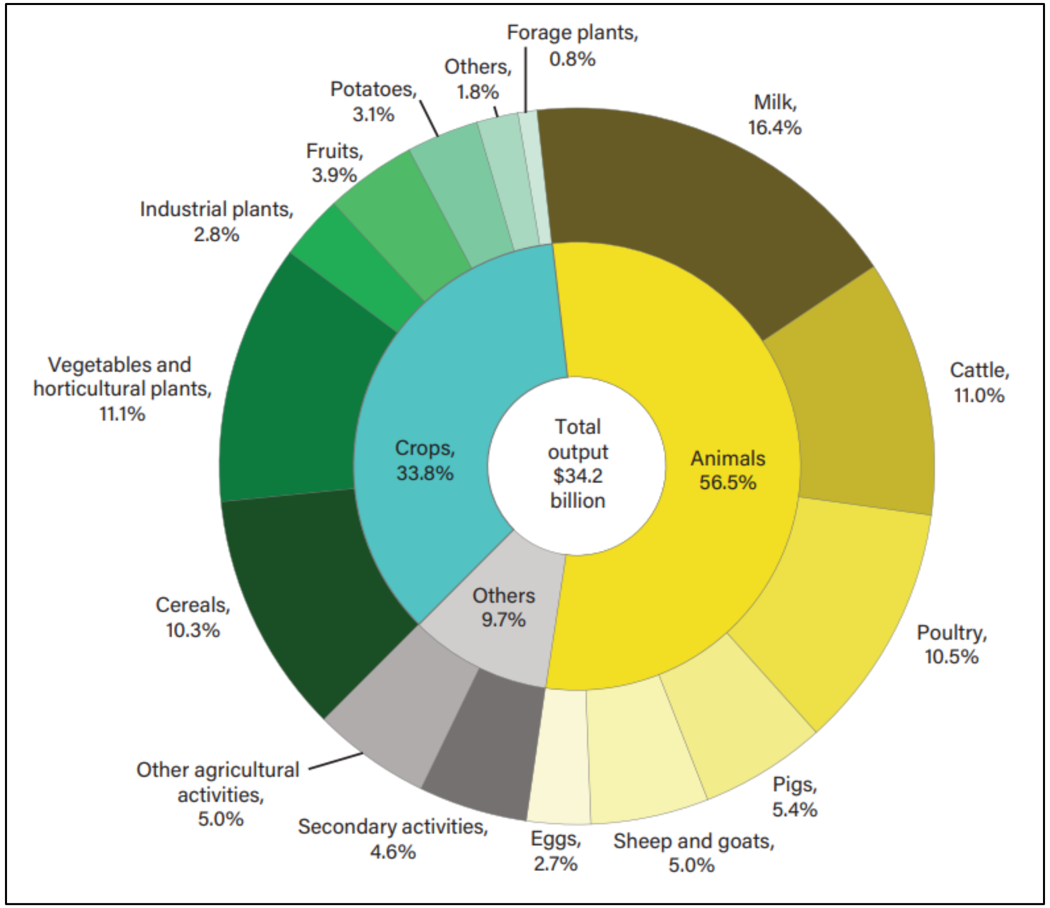
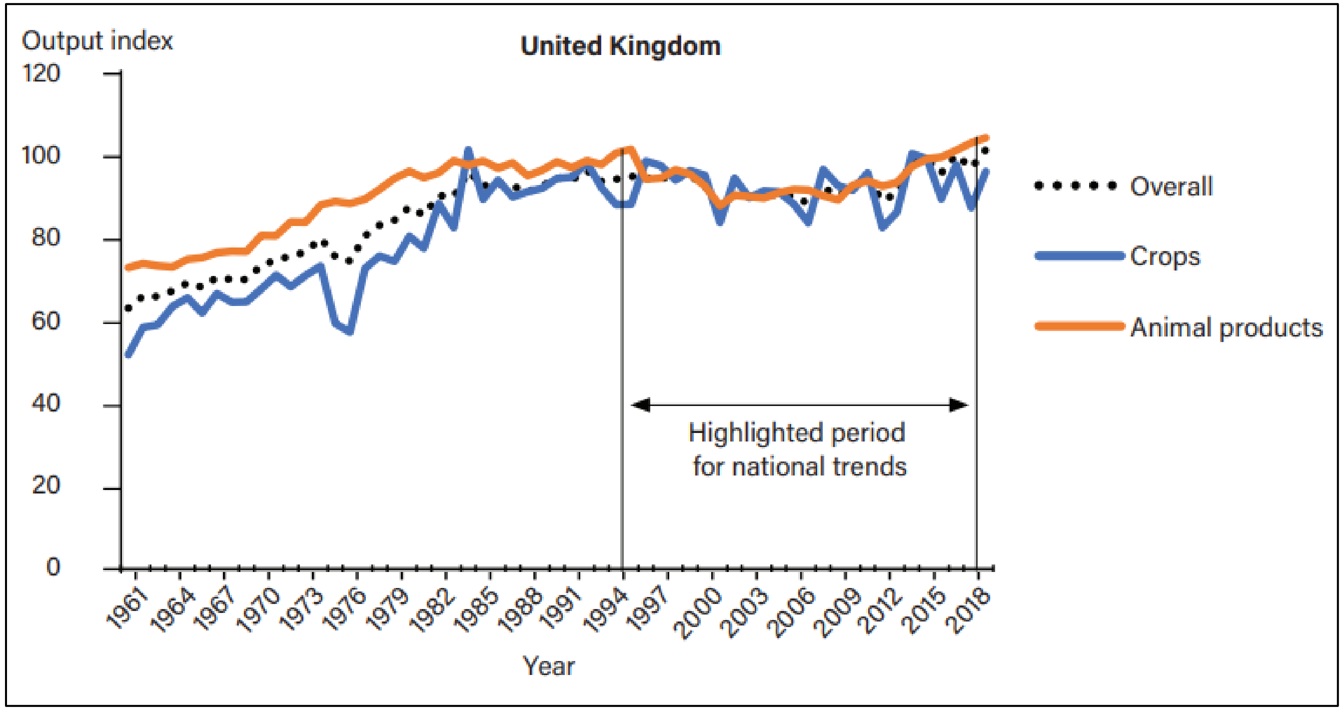


UK agricultural output stable & lead by animal products



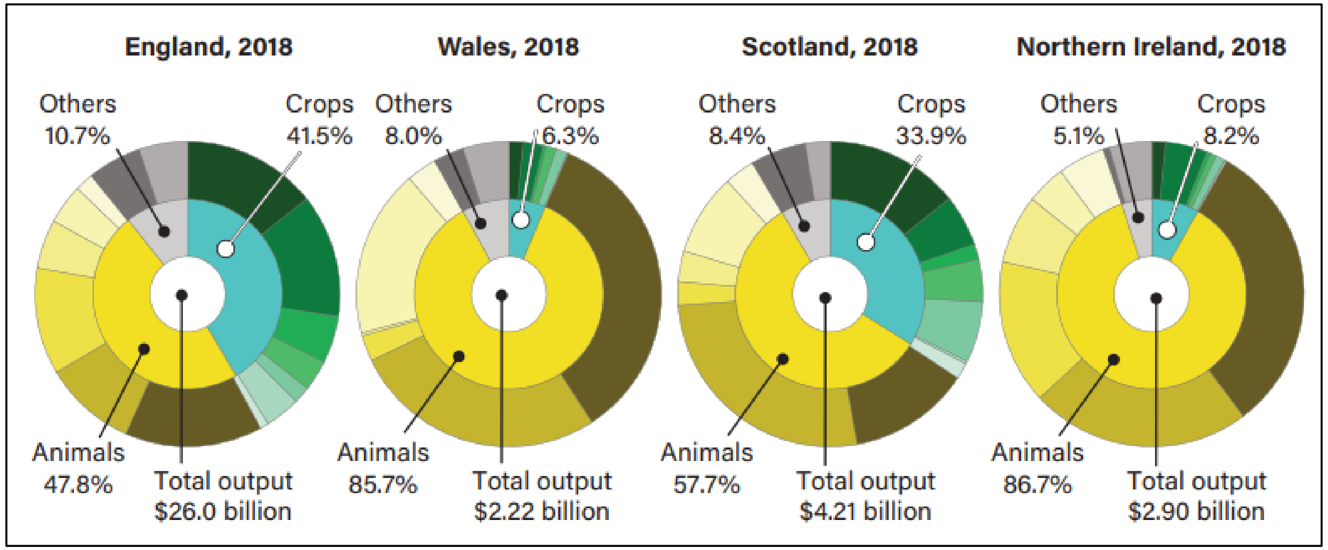
Source: fig. 2, ERS EIB #250



Source: fig. 4, ERS EIB #250

UK breakdown illustrates key sub-national differences

- England's balance of crops-to-animals
- Rest of UK greater reliance on cattle
- Makeup reflected in ag. policies



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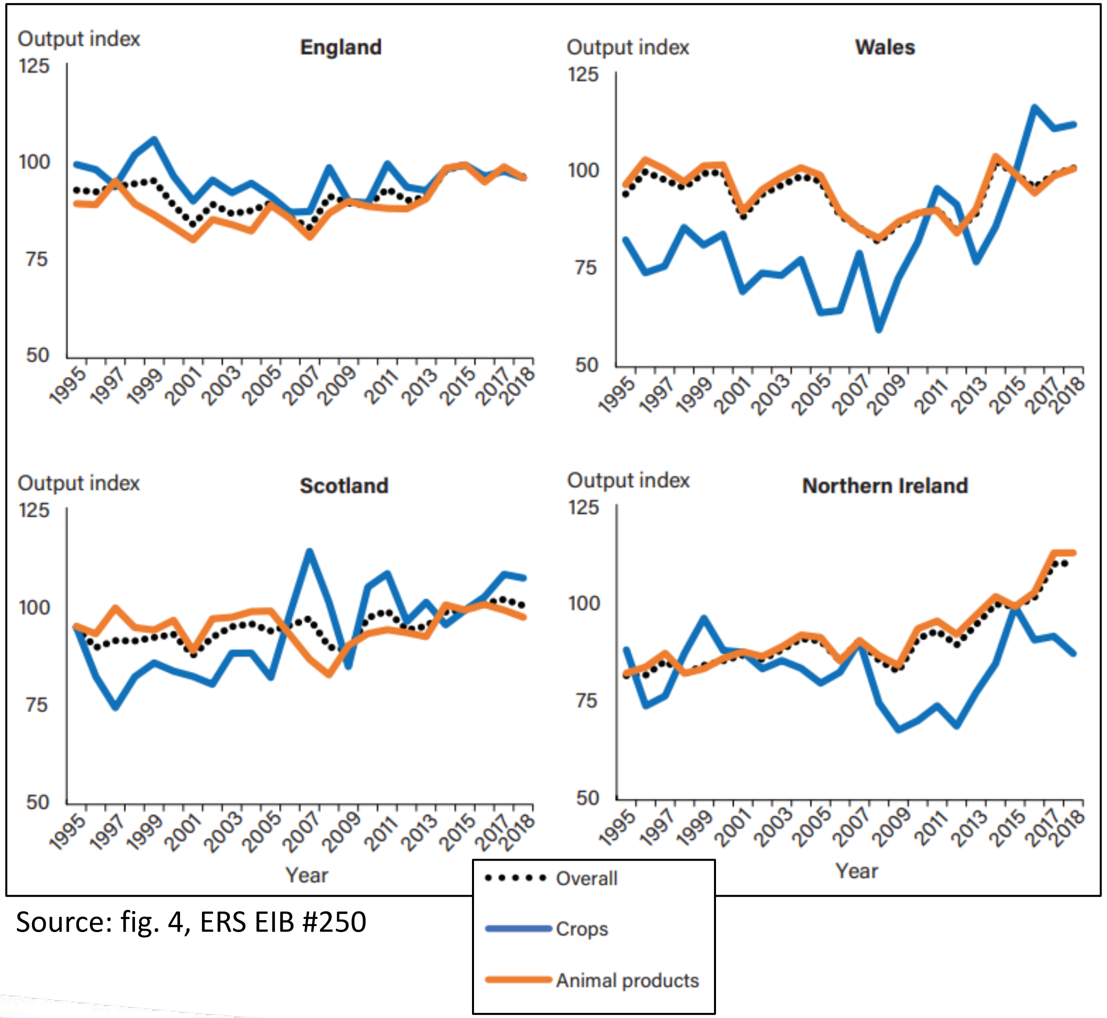
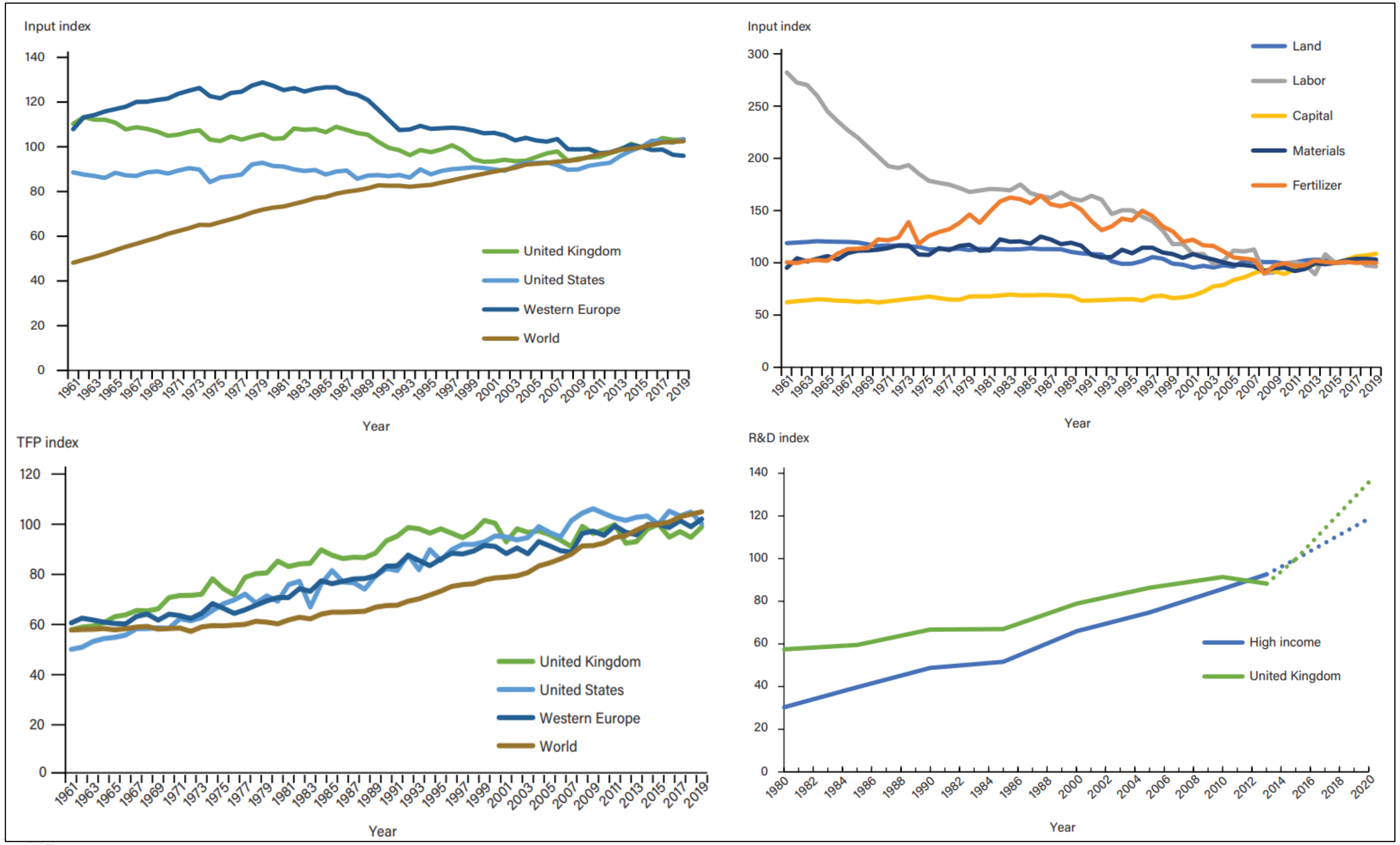


Source: fig. 4, ERS EIB #250

Trends in input use, productivity (TFP), and R&D are also key factors in UK agri-environmental policy

- UK under EU policies
  - Influence
  - *CAPitalization*
- 2-fold pressures
  - Intensive (inputs)
  - Extensive (land)
- R&D investments
  - Biotech policy & trials
  - Precision agriculture



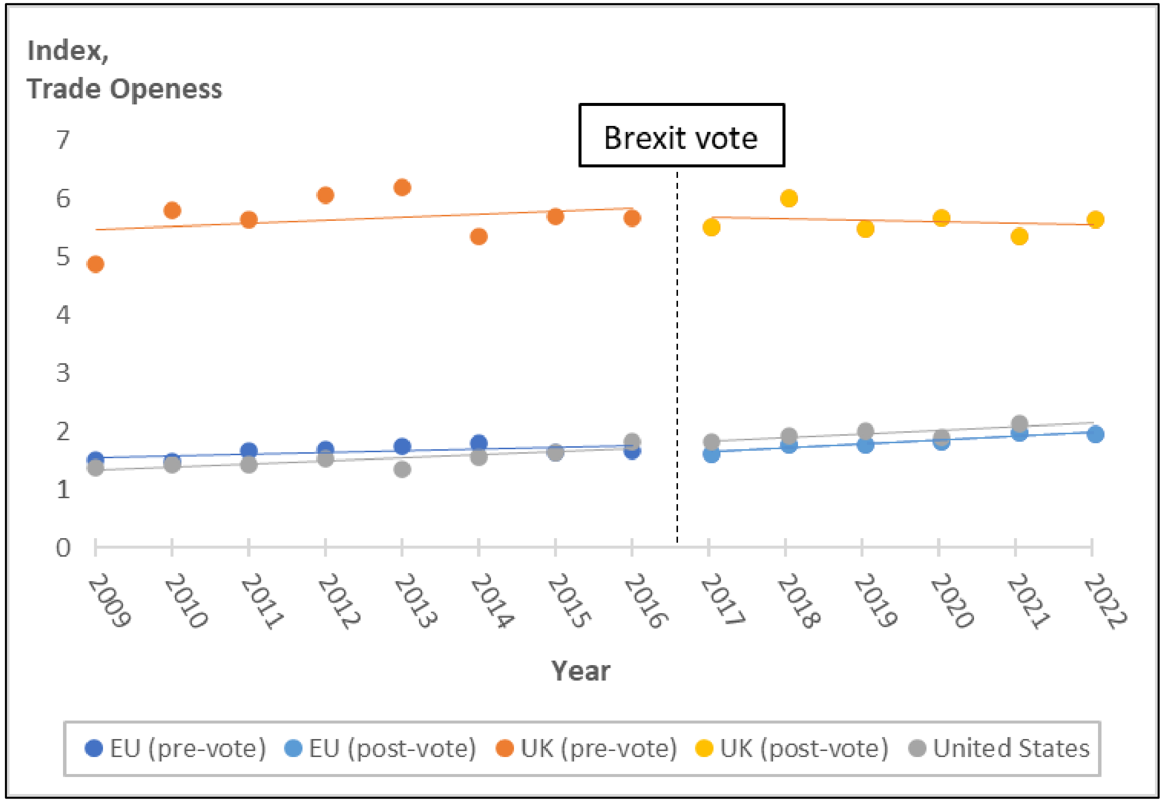
Source: fig. 6, 7, 9, and 10, ERS EIB #250

From short-term transitions toward UK's long-term vision for the agri-environmental sectors and trade

- EU Common Ag. Policy (CAP) UK transition & replacements
  - England's Environmental Land Mgmt
    - Phase-in through 2027
  - N. Ireland & the new CAP (2023—27)
  - Scotland's "CAP by any other name"
  - Wales' Sustainable Farming Scheme

- UK Government Food Strategy
  - Env. Sustainability, GHG emissions, Land reclamation (forest & peat)
  - Animal welfare
  - R&D and technology transfer
    - Feed and environmental aims
    - Biotech, GE & GMO considerations
- **UK Trade deals, deals, deals**

Compared to EU and U.S. ag. trade openness in UK is higher though decreasing trend after Brexit vote



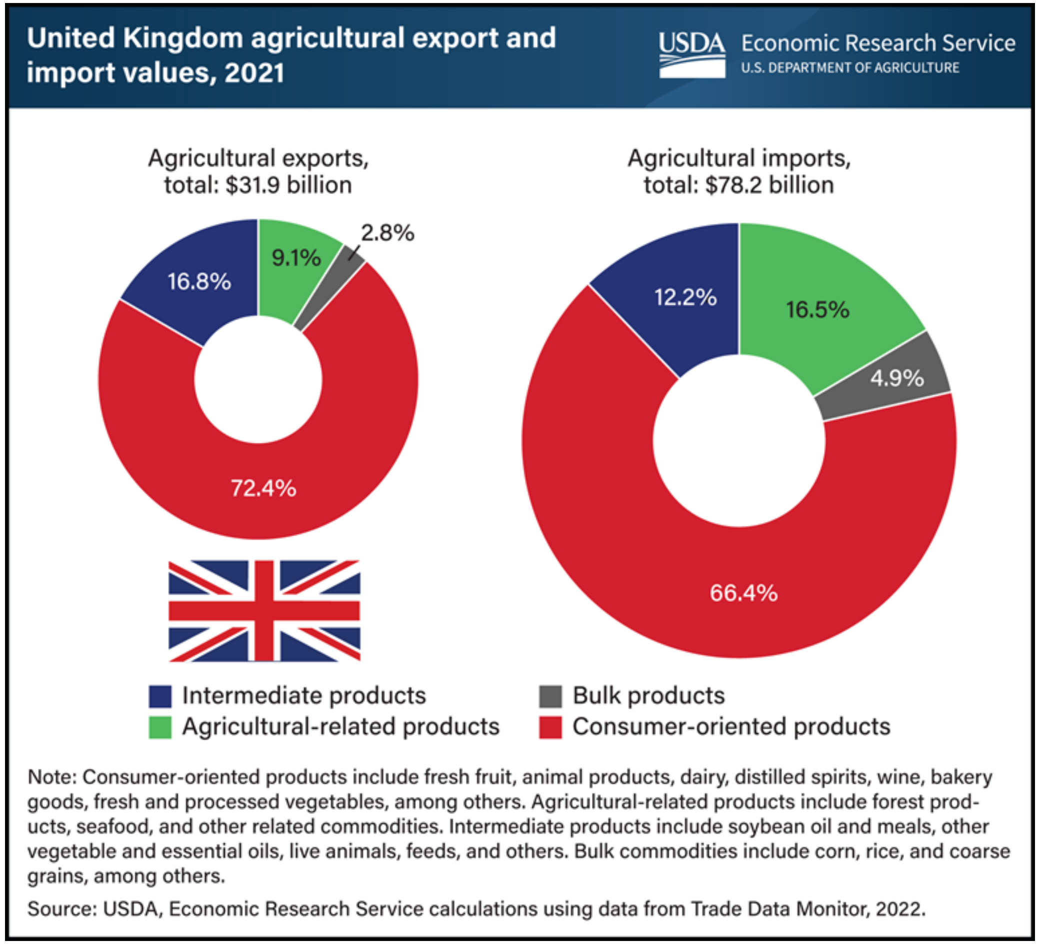
Source: authors' calculations using data from World Bank (2023)

- UK trade openness down relative to G7 peers
  (UK in Changing Europe, 2023)

  – UK agri-food sector:
    - Openness
    - Post 2016 Brexit referendum
      – UK ↓
      – EU and US ↑

UK ag. & related trade remains closely tied to EU as the U.S. has emerged as a key supplier of green energy inputs

- EU reliance remains strong
  - EU-UK Trade & Cooperation Agreement (TCA) "1st of its kind"
  - UK-side checks begin 2024
- Renewable energy
  - U.S. exports
    - Wood pellets (too much?)
    - Bioethanol

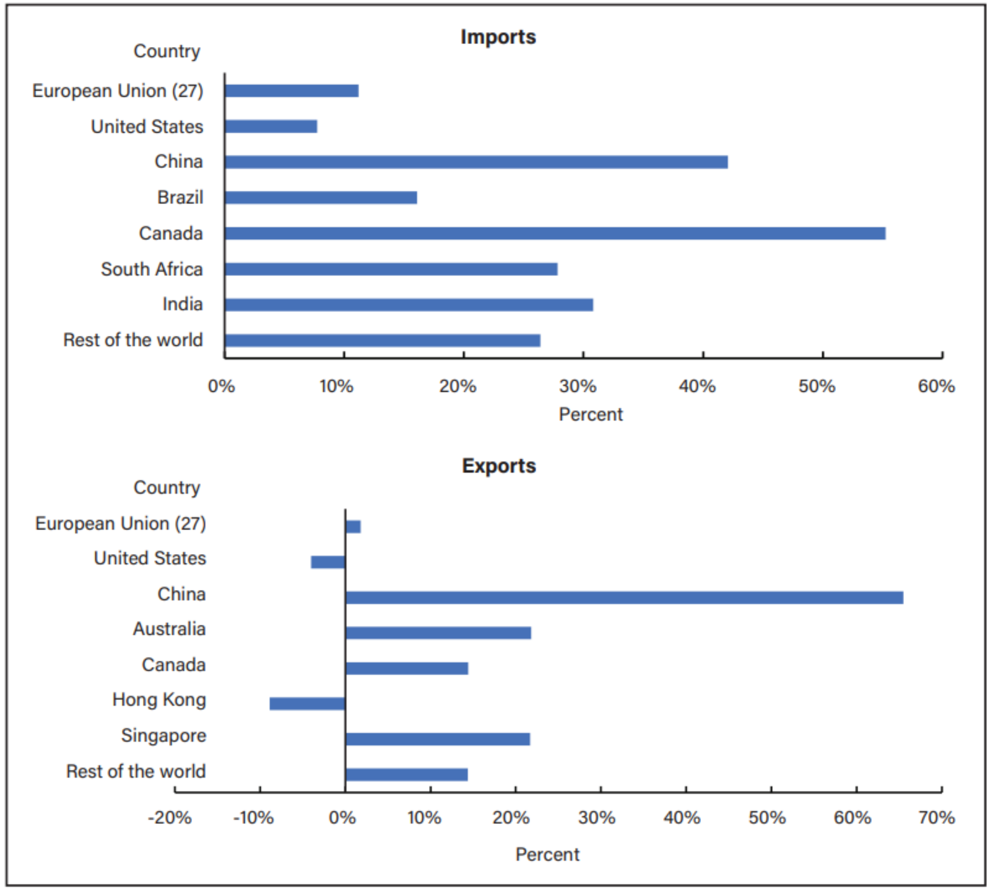


Note: ERS chart of note, April 12, 2023 based on fig. 11 and 13, ERS EIB #250

"Global Britain" negotiating free trade deals

- UK trade agreements
  - **EU-UK Trade & Coop. Agreement**
  - Australia and New Zealand
  - Roll-overs (44, 67 countries)
- Ongoing negotiations
  - CPTPP "Comp. & Prog. Agr. for Trans-Pac. Partnership"
  - Gulf Cooperative Council (GCC)
  - N. America (U.S., Canada, Mexico)

Percentage change in United Kingdom (UK) agricultural trade imports and exports, 5-year trends, 2016–21



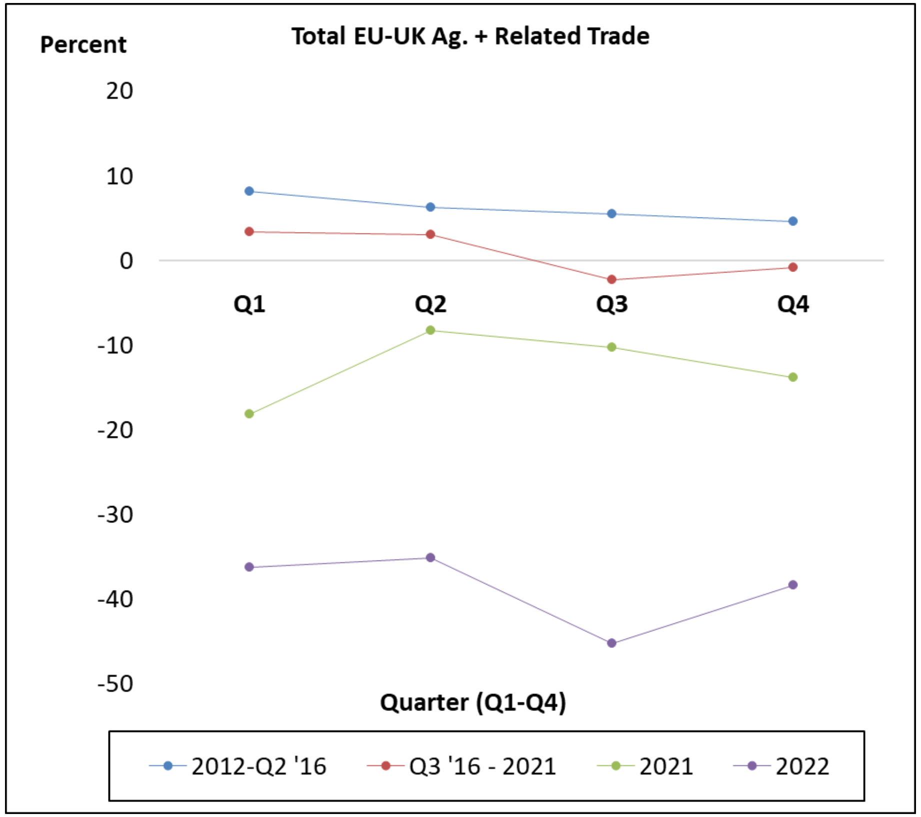
Note: Trends are for the 5-year lead up to EU-UK TCA
Source: fig. 12, ERS EIB #250

Following the TCA, UK ag. and related trade with EU has fallen relative to other trade partners

- Research question: what is the EU-UK TCA effect on ag.+ related trade?

- Establish counterfactual - UK '*remained*'
  - Analyzing differential trade trends:
    - Step 1: measure EU-UK quarterly trade
    - Step 2: de-trend EU & UK trade with 3rd c's
    - Step 3: account for intra-EU trade trends

- Attributing the losses and gains (next step):
  - Destruction and/or diversion (to 3rd c's)?



Source: authors' calculations using data from Trade Data Monitor (2023)

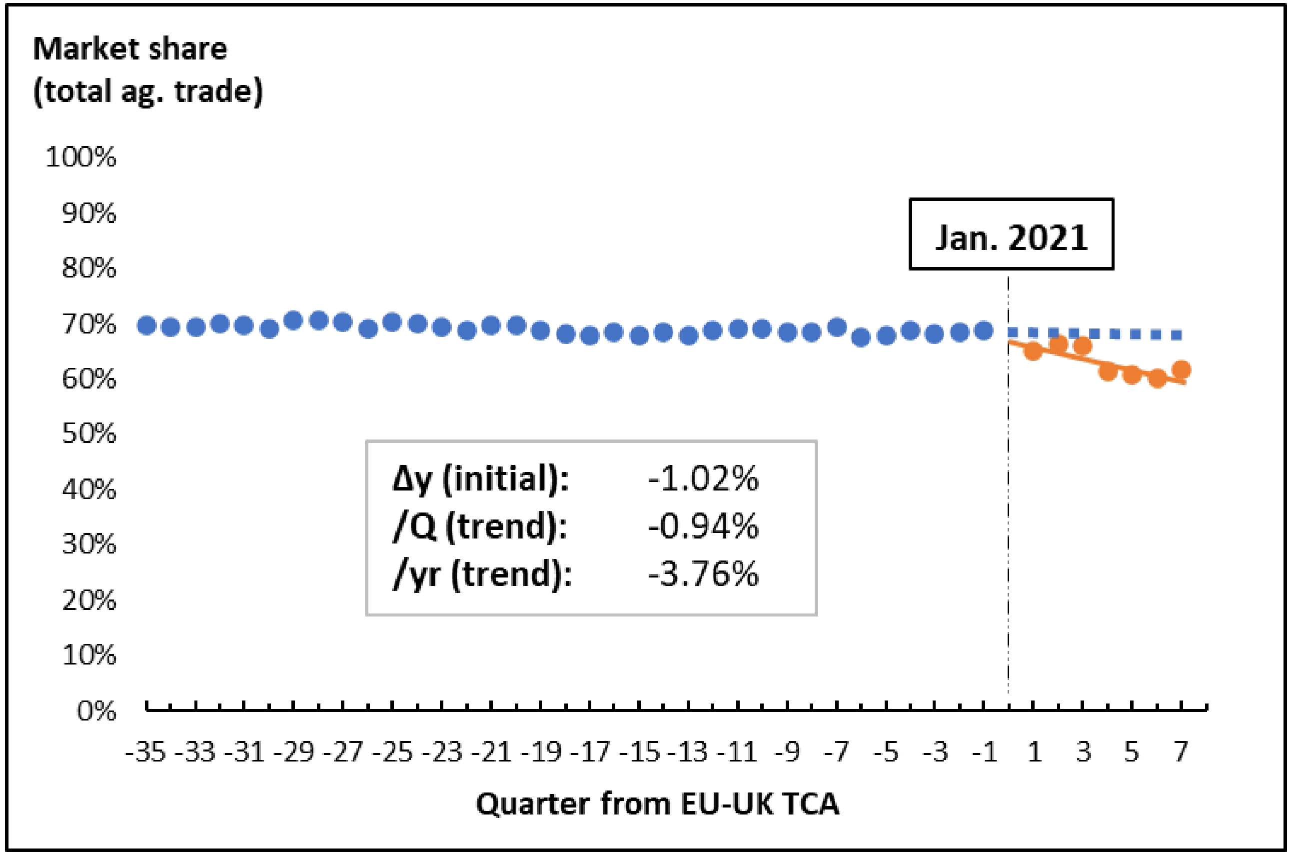
Expanded UK and EU reliance on goods from 3rd countries illustrated by import share of total trade declines

BICO category	UK-Side			EU-Side		
	Total	Export	Import	Total	Export	Import
Agriculture + related	-25.7	-12.9	-33.0	-21.3	-14.6	-37.7
Agriculture	-26.7	-18.4	-33.8	-21.6	-14.2	-39.7
Bulk	-28.7	37.5	-33.1	-30.1	-18.5	-48.7
Intermediate	-40.9	-12.5	-53.4	-22.0	-1.2	-49.7
Consumer	-22.6	-20.4	-26.9	-19.2	-16.0	-31.0
Related	-9.9	38.4	-16.4	-17.2	-18.3	-24.2

Source: authors' calculations using data from Trade Data Monitor (2023)

- UK deeper declines compared to EU (excl. bulk and related)
- Differential effects for bulk, intermediate, and ag. related, gravity approach? Supply chains?

Accounting for time trend paints a patterned picture that could be reinforced by incoming customs checks



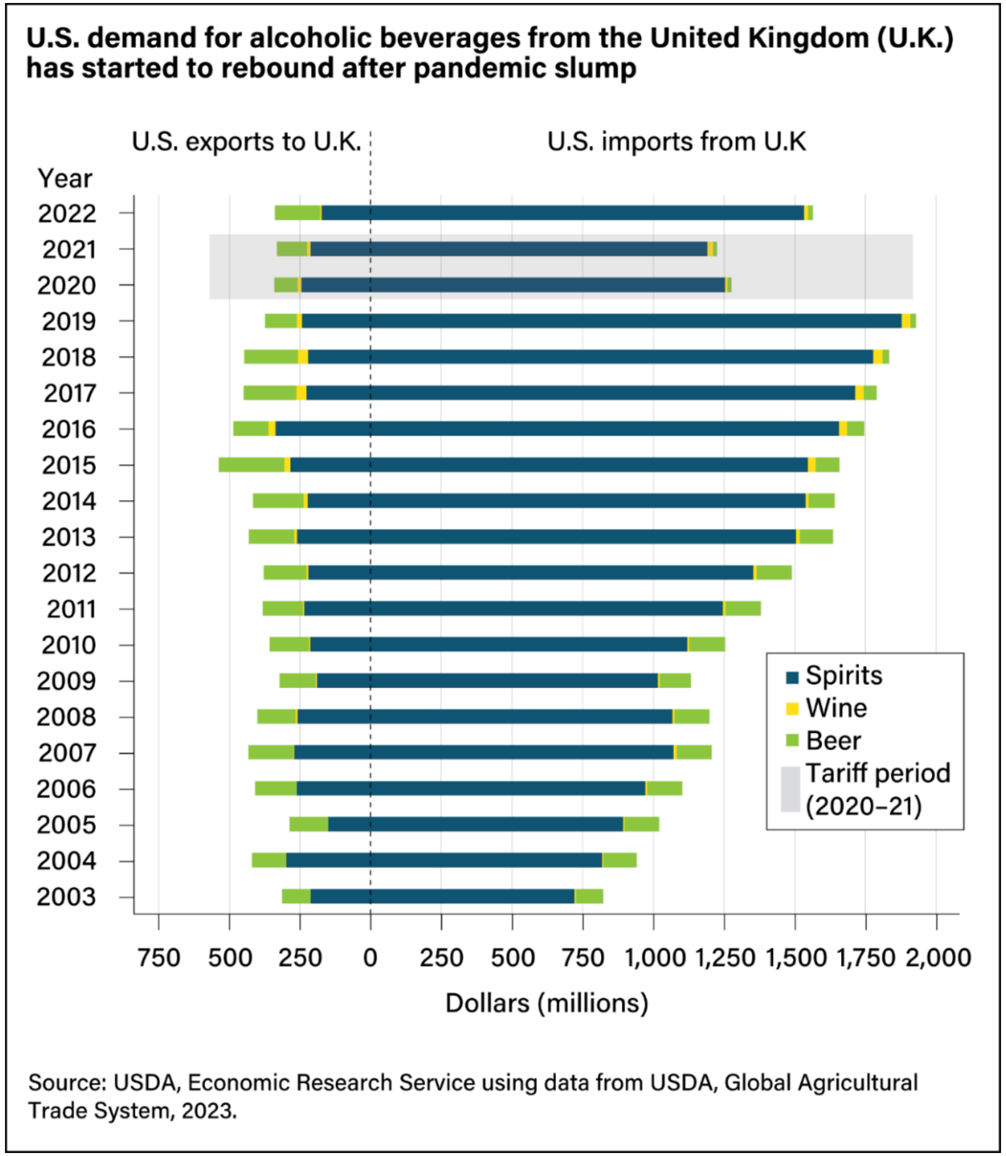
Source: authors' calculations using data from Trade Data Monitor (2023)

- TCA trade shock:
  - Doppelganger '*member*' UK (CER, Springford, 2021-23)
  - Agriculture and related
    - Pre- v. Post-trend analysis
- Next steps:
  - Regression discontinuity design (RDD)
  - Intra-EU trends controls
  - U.S. agri-food trade with EU & UK
    - TCA effect?
    - Disentangling retaliatory tariffs?

Closing considerations for UK-U.S. agri-food trade

Trade imbalance and U.S. demand for high-value consumer products

- A tornado of beverages
  - U.S. thirst for UK spirits
- Green energy transition
  - U.S. wood pellet industry trouble
    (WSJ, Nov. 22, 2023)
  - Bioethanol, the other ethanol
- Next step: disentangling tariff effects



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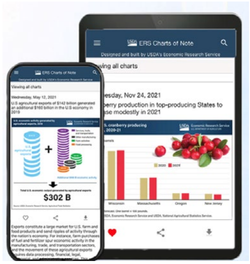

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