UK Trade in the Wake of Brexit

Rebecca Freeman CEP

Kalina Manova UCL

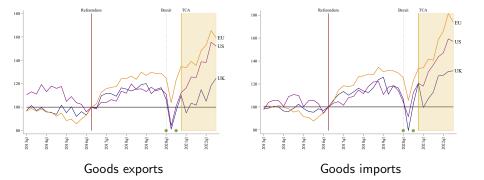
CEP

Thomas Prayer Thomas Sampson LSE

December 2022

- How has Brexit affected UK trade?
- Key question for understanding economic consequences of Brexit
- Natural experiment on how single market and customs union membership affect trade
- Economists forecast TCA would lead to large fall in UK-EU trade
 - Bevington et al. (2019) forecast long-run decline of around 30%

UK trade growth slowdown



- UK trade growth since referendum lower than other major economies
- Gap has grown since start of Covid-19 pandemic
- Is slow UK trade growth due to TCA or other weaknesses in UK economy?

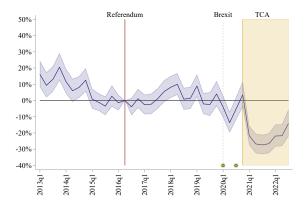
- Model bilateral trade flows as determined by
 - Exporter supply capacity productivity, input costs
 - Importer demand income, market size, market competitiveness
 - 8 Bilateral openness trade policy, transport costs
- Aim to isolate impact of Brexit on bilateral openness between UK and EU
 - Under TCA UK is no longer member of EU's single market or customs union \Rightarrow higher non-tariff barriers to UK-EU trade
- Brexit may also affect exporter supply capacity and importer demand through supply chain linkages and general equilibrium adjustments. Do not capture these effects

Estimation strategy

- Identify Brexit effect on bilateral openness by comparing growth in UK trade with EU vs non-EU countries
- Use data on US & EU goods trade to control for changes in supply and demand conditions outside the UK
- Analyse changes within 1,200 detailed products to control for shocks to sectoral composition of trade
- Compare 3 periods
 - Pre-referendum
 - Ø Between referendum & TCA: anticipation & uncertainty
 - **③** TCA: higher UK-EU trade costs
- Caution: Brexit led to changes in data collection methods for UK-EU trade

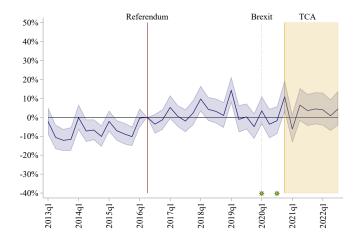
Regression specification

Goods imports



- No significant import diversion away from EU between referendum & TCA
- TCA has reduced imports from EU by around 20%

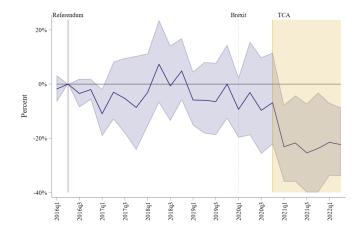
Goods exports



Do not find evidence of sustained drop in EU relative to non-EU exports

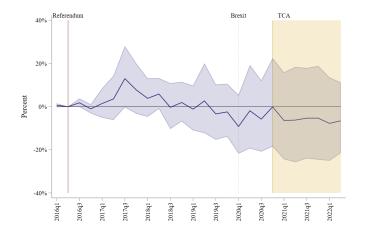
- Services account for around half of UK exports and one-third of UK imports
- Single market is world's deepest trade agreement for services
- How has Brexit affected bilateral openness between UK and EU in services?
- Compare growth in EU vs non-EU trade within 32 services categories
 - Exclude travel and transport services: hardest hit by Covid-19

Regression specification



• Find TCA reduced services imports from EU by around 25%

Services exports



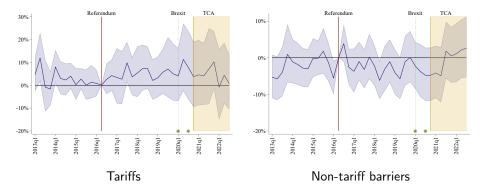
- No evidence of significant drop in EU relative to non-EU exports
- Weak evidence that TCA reduced exports if use bilateral instead of regional exports

Freeman, Manova, Prayer, Sampson

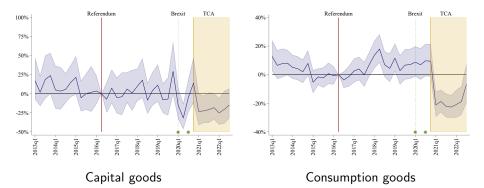
- TCA has reduced goods and services imports from EU relative to rest of world by around 20%
- Do not find evidence of decline in EU relative to non-EU exports so far
- Ongoing research
 - Why do estimated import and export effects of TCA differ?
 - Has TCA reduced UK's export supply capacity leading to lower exports to non-EU destinations?
 - Have changes to data collection methods affected measures of UK-EU trade?

Policy heterogeneity – imports

• Heterogeneity in import effects by EU trade policy exposure?

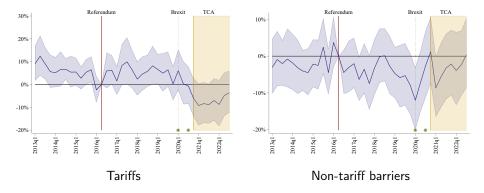


Product type heterogeneity - imports

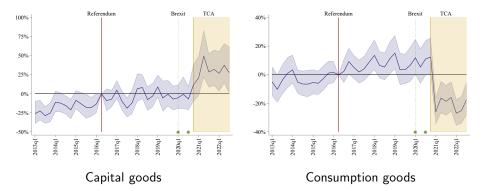


Policy heterogeneity – exports

• Heterogeneity in export effects by EU trade policy exposure?



Product type heterogeneity - exports



$$\ln V_{pct}^{UK} = \sum_{t} \beta_{t} D_{t} E U_{c} + \gamma \ln V_{pct}^{US} + \delta \ln V_{pct}^{EU} + \alpha_{pc} + \alpha_{pt} + \epsilon_{pct}$$

- *p* HS4 digit products; *c* regions EU & rest of world; *t* quarters
- V either export or import values
- α_{pc} , α_{pt} product-region & product-quarter fixed effects
- D_t quarter dummy; EU_c EU dummy
- Coefficient of interest: β_t difference-in-differences estimate of change in UK trade with EU relative to rest of world in quarter t

$$\ln V_{pct}^{UK} = \sum_{t} \beta_{t} D_{t} E U_{c} + \alpha_{pc} + \alpha_{pt} + \epsilon_{pct}$$

- *p* services categories; *c* regions EU & rest of world; *t* quarters
- V either export or import values
- α_{pc} , α_{pt} product-region & product-quarter fixed effects
- D_t quarter dummy; EU_c EU dummy
- Weight regressions using 2015 UK export and import shares by services category
- Coefficient of interest: β_t difference-in-differences estimate of change in UK trade with EU relative to rest of world in quarter t