EU-UK GVC trade and the indirect costs of Brexit

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EU27-UK after Brexit

- Brexit is approaching, but still high uncertainty about the future EU-UK trade relationship.
- Different scenarios after Brexit: the imposition of a tariff schedule is plausible, especially in the short run.
- Many questions raised on the future evolution of trade and production linkages between the EU and the UK.

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Effects of tariffs:

- Aside from the direct effects of tariffs, indirect tariffs might be sizable, as goods and services bounce back and forth between borders.

This paper

Link the GVC-trade structure to the tariff magnification mechanism.
$\Rightarrow$ assessment of the indirect (and direct) costs of Brexit tariffs.

- **Preliminary analysis**
  1. GVC-trade between EU and UK
  2. Retrieve the hypothetical tariff schedule after Brexit

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  $\Rightarrow$ we compute the accumulated upstream tariffs on imports (Miroudot et al., 2013)

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- **Import side**: imported goods embed upstream tariffs
  ⇒ we compute the accumulated upstream tariffs on imports (Miroudot et al., 2013)
- **Export side**: a relevant share of goods and services reaches destination countries only indirectly, through other countries' exports, and faces indirect trade costs
  ⇒ we compute the direct and indirect costs faced by exports (Muradov, 2017).

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2. **A lot of indirect exports:**
   - Around 20% of EU and UK exports are delivered to the final market indirectly, though other EU countries' exports.

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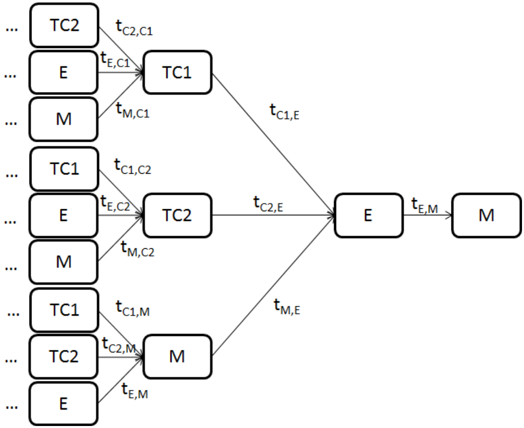
Sectoral heterogeneity is substantial: tariffs on food products, textiles and motor vehicles are much higher than the average.

Import-side analysis

Direct and indirect tariffs

Goal: take into account all the indirect tariffs embedded in the imported goods.



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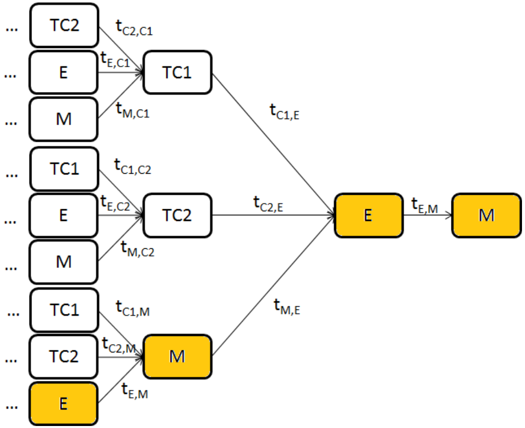

Exploiting IO tabels

References: Miroudot, Rouzet and Spinelli, 2013; Johnson, 2017.

Cumulative cost of trade barriers: trace the total cost of all tariffs incurred along the production process.

$$CT = T_{final} w_F + T_{interm} w_I + (I - A')^{-1}(A' \circ T'_{interm})\iota\iota'$$

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The ij element of CT matrix is the **cumulative tariff that j faces in importing from i.**

The jj element of CT matrix is the **cost increase on j for domestic inputs.**

Focus on imports cost

EU imports cost is amplified by around 10%

EU imports from UK	Direct tariff	Indirect tariff	CT
Average	3.88	0.42	4.30
Motor vehicles	8.24	0.94	9.18
Chemicals	4.05	0.82	4.86
Rubber and plastic	5.30	0.61	5.91

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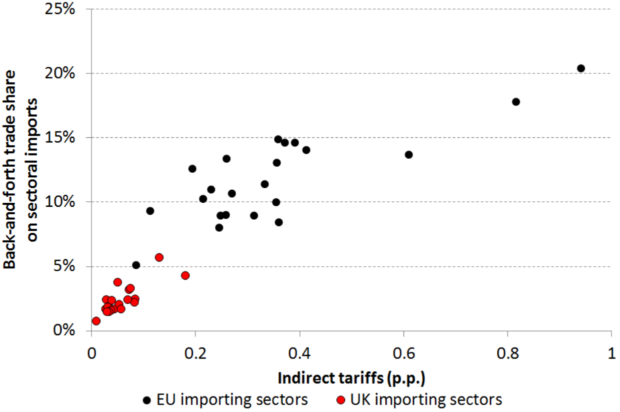
UK imports cost does not change much

UK imports from EU	Direct tariff	Indirect tariff	CT
Average	5.93	0.07	6.00
Food products	17.65	0.18	17.83
Crop and animal	5.51	0.13	5.64
Chemicals	4.38	0.08	4.46

Cumulative tariff and indirect costs: causes

Indirect tariffs driven by the share of imports that has already crossed the Channel in the opposite direction.



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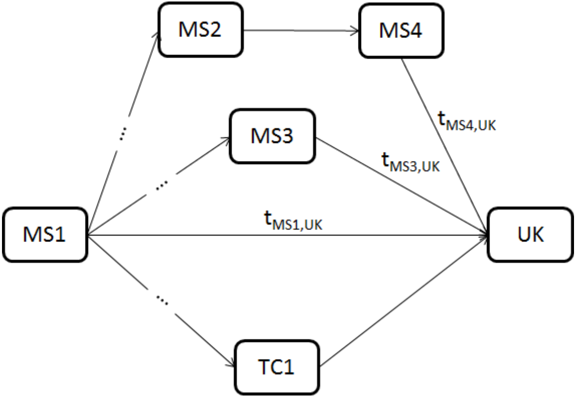
$\Rightarrow$ 20% of inputs used by UK come from EU (1.5% for EU).

Export-side analysis

EU exports: indirect costs

Goal: trace the indirect tariffs that exports face on their path to the destination (Muradov, 2017).



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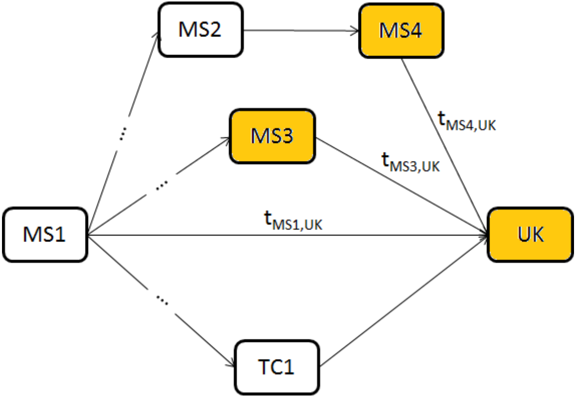

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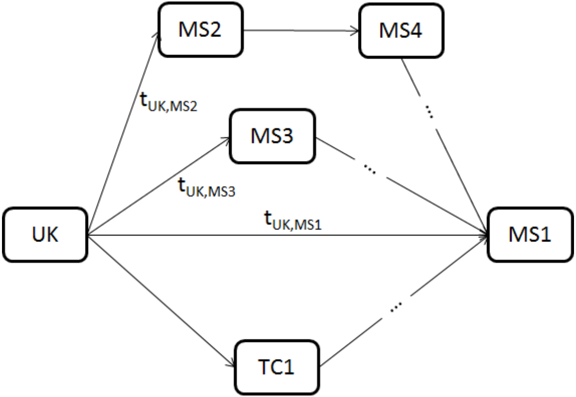

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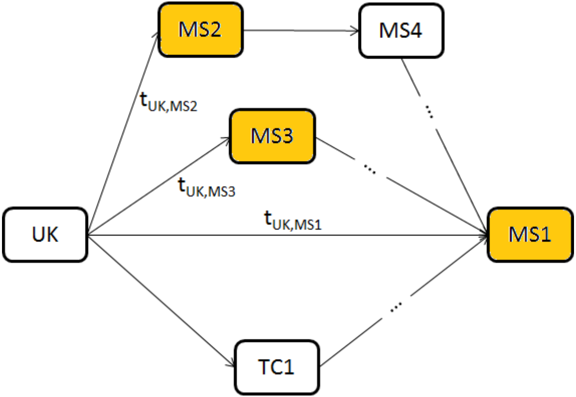

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Tariffs on indirect UK exports account for 22% of total costs faced by UK exports (2.3bn€ direct, 0.6bn€ indirect).

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Tariffs on indirect UK exports account for 22% of total costs faced by UK exports (2.3bn€ direct, 0.6bn€ indirect).

- Total costs faced by UK exports is equivalent to the costs faced by Germany, Italy and France altogether.

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As to the export side:

- Total cost faced by UK exports is much higher than the one faced by EU countries.
- The indirect costs account for around one fifth of the total.

Thank you for your attention