Should gains from trade be redistributed at the national or regional level?
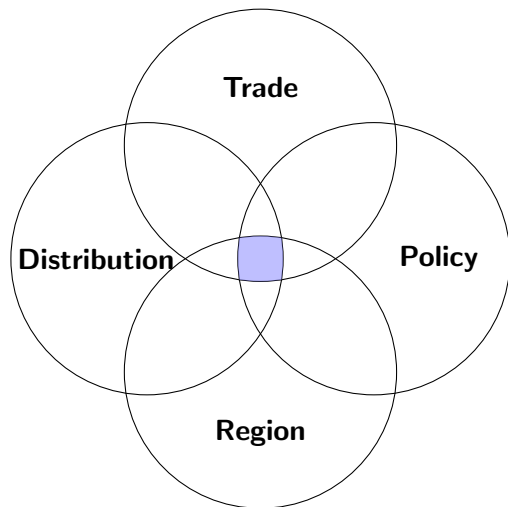
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Why is this area important?

- Polarisation (McCann 2020)
- Levelling up agenda
- ↑ Re-industrialisation
- ↑ Trade wars

Contribution & Model

Research questions

What are the regional *and* distributional effects of trade?
How could national and regional governments redistribute trade gains?

Model:

- Dynamic General Equilibrium Trade model (Duparc-Portier and Figus 2024)
- UK ITL1 regions (Thissen et al. 2018)
- 13 monopolistically competitive industries (Dixit and Stiglitz 1977; Krugman 1979)
- Five quintiles per region
- "Skilled" & "Unskilled" workers
- Wage curve

Method (1)

We define four simulation scenarios:

1. Trade liberalisation
   - 5% price equivalent reduction in UK-ROW trade costs
2. Trade liberalisation and national redistribution
3. Trade liberalisation and cross-regional redistribution
4. Trade liberalisation and within-regional redistribution

| Redistribution	Objective variable	Government	Constraint
National	National Gini	National	National
Cross-Region	Cross-region Gini	National	National
Within-region	Within-region Gini	Within-region	Regional

Method (2)

How should we redistribute income across households?

- Taxes on household income (Labour & Capital)
- *Average tax rate neutrality principle*
- But how should we redistribute income across household groups?
    - Define bilateral after-tax income ratios $\Delta_{h,k,t}$
    - Define redistributive policy $\Delta_{h,k,t} = 1 + (\Delta_{h,k,t=0} - 1) \cdot (1 - \chi)$
- By increasing χ, we decrease the ratio of after-tax incomes
- This reduces inequality between groups h and k and therefore the target Gini coefficient
- So each simulation adopts a version of this equation

Trade liberalisation - Household results
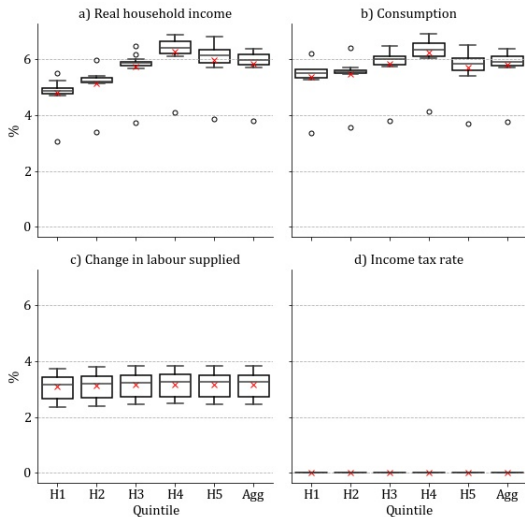
# Trade liberalisation - Gini coefficient
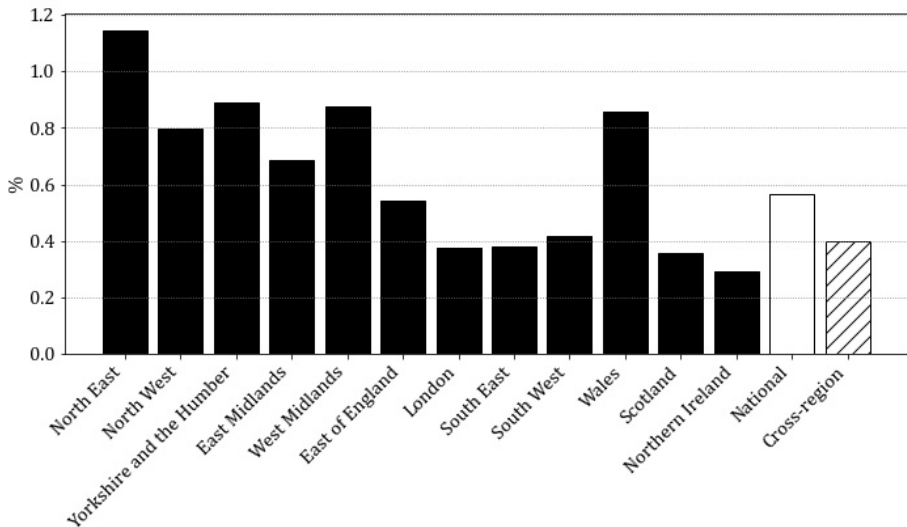
Comparing the policies - Summary

Redistribution	National	Cross-region	Within-region
Gini coefficient relative to no shock baseline			
National	0.0%	0.59%	0.013%
Cross-region	-0.15%	0.0%	0.23%
Within-region	0.045%	0.71%	0.0%
	(0.23%)	(0.29%)	(0.0%)
Cost in key variables			
Output	-0.58%	0.45%	-0.81%
	(0.49%)	(0.47%)	(0.21%)
Household Consumption	0.91%	1.28%	0.39%
	(1.21%)	(1.02%)	(0.48%)
Household Income	-0.41%	0.0%	-0.51%
	(1.36%)	(1.31%)	(0.90%)

Table: Gini coefficients are measured as percentage point increases relative to the no-trade shock baseline. The cost in key variables is measured as a percentage reduction relative to the initial trade gain. Standard deviations in brackets.

Comparing the policies - Gini coefficients

Policy implications
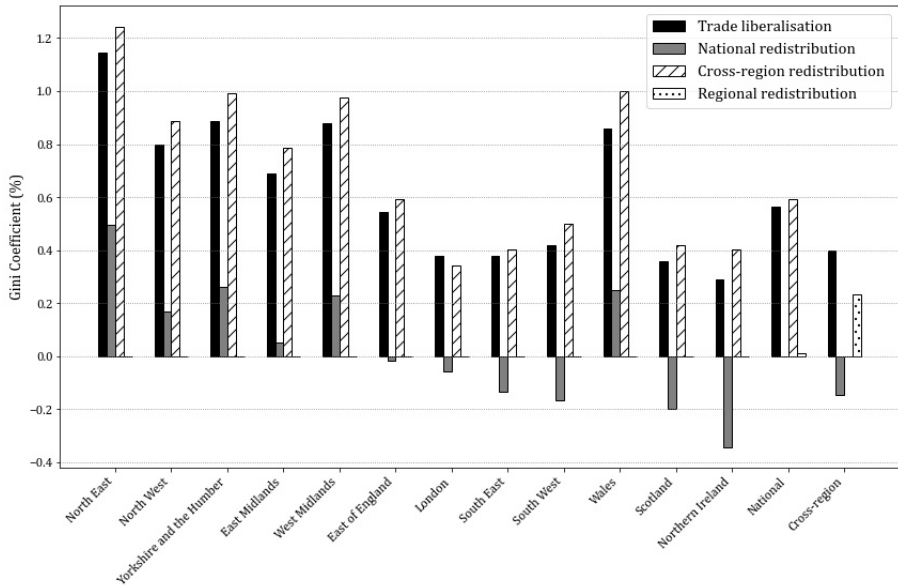
1. The gains from trade are positive in the aggregate, but have the potential to have regressive effects both within and across regions
2. The costs of re-distribution are relatively low meaning that policy makers could act proactively to redistribute trade gains
3. However, we show that meeting all the likely different pressures that will arise in terms of tackling these inequalities is not easy and there are trade-offs

Thank you for your attention! Any questions?

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