Tradable vs. Non-tradable
An Empirical Approach to the Classification of Sectors

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Purpose:

Another way to look at tradable vs non-tradable

Source: xkcd.com/927

Why 'tradable' matters

- Crisis: Change of environment and expectations

➔ Requires reallocation of labour, capital, and output

One important yardstick:
Reallocation from non-tradable to tradable activity:
"produce machines, not houses"

Reasoning:

- Export contrib. to GDP; as world imports grow faster than world GDP
- Demand for tradable goods more elastic – i.e. supply expansion reflected in revenue

Why tradable prices should remain more stable

Demand in crisis countries has collapsed

➔ Reorient supply towards export markets

Since demand for NT less elastic than for T:

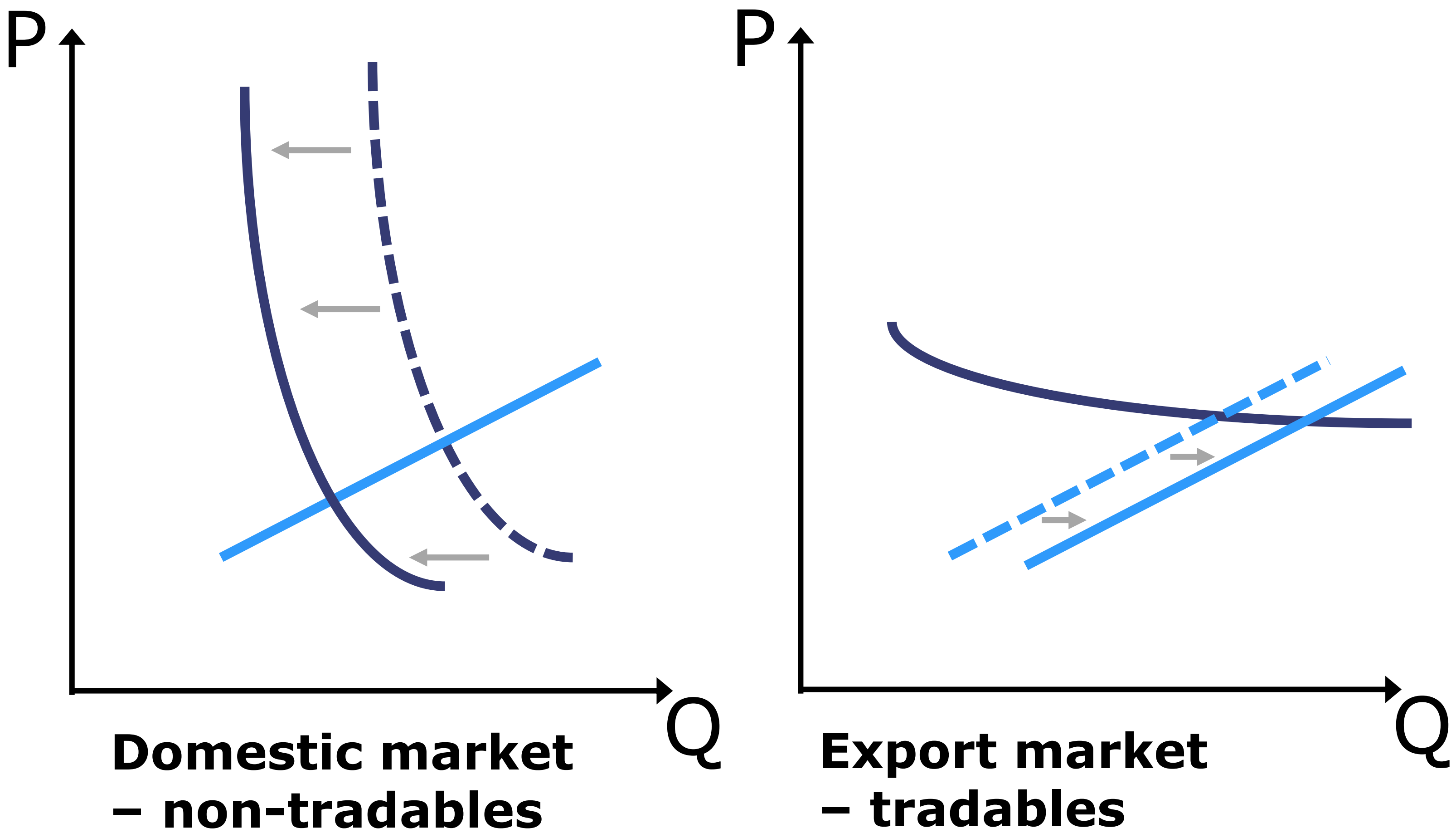
➔ Prices of 'tradable' goods should remain stable, and output increase (→ increased revenue)

➔ Prices and output in 'non-tradables' should decrease

➔ labour cost in both sectors may differ due to specialization and search-matching

➔ I.e. in 'tradables': ULCs should decline less, and operating margins increase more, than in non-tradables

Some reasoning behind the quest for tradables



Traditional (Ameco) approach

Tradables:
- Manufacturing
- Agriculture & fisheries
- Mining
- Trade, hotels, transport,…
- (Utilities)

Non-tradables:
- Construction
- Finance & real estate
- Public services

Traded shares approach

- Instead of separating sectors into T & NT…
- … assign each of them a 'traded' weight according to their open-ness per country

Public services

Trade, tourism, transport

Manufacturing

Agriculture

Construction

100% domestic demand

100% foreign demand

Why use a different approach?

Classification by sector? 0 or 100%

- Freight insurance = housing mortgage = non-tradable?
- Little tailor = garment factory = tradable?

By export intensity? (Maya & Paul OeNB)

- Hungary exports many cars, but most inputs are imported
- Little domestic suppliers for exporting firms

➔ Empirical 'exported value added'

- Ideally, each firm's, worker's contribution towards exports
- Aggregate: 'exported value added' by sector

VA embedded in foreign demand vs. export intensity, 2009

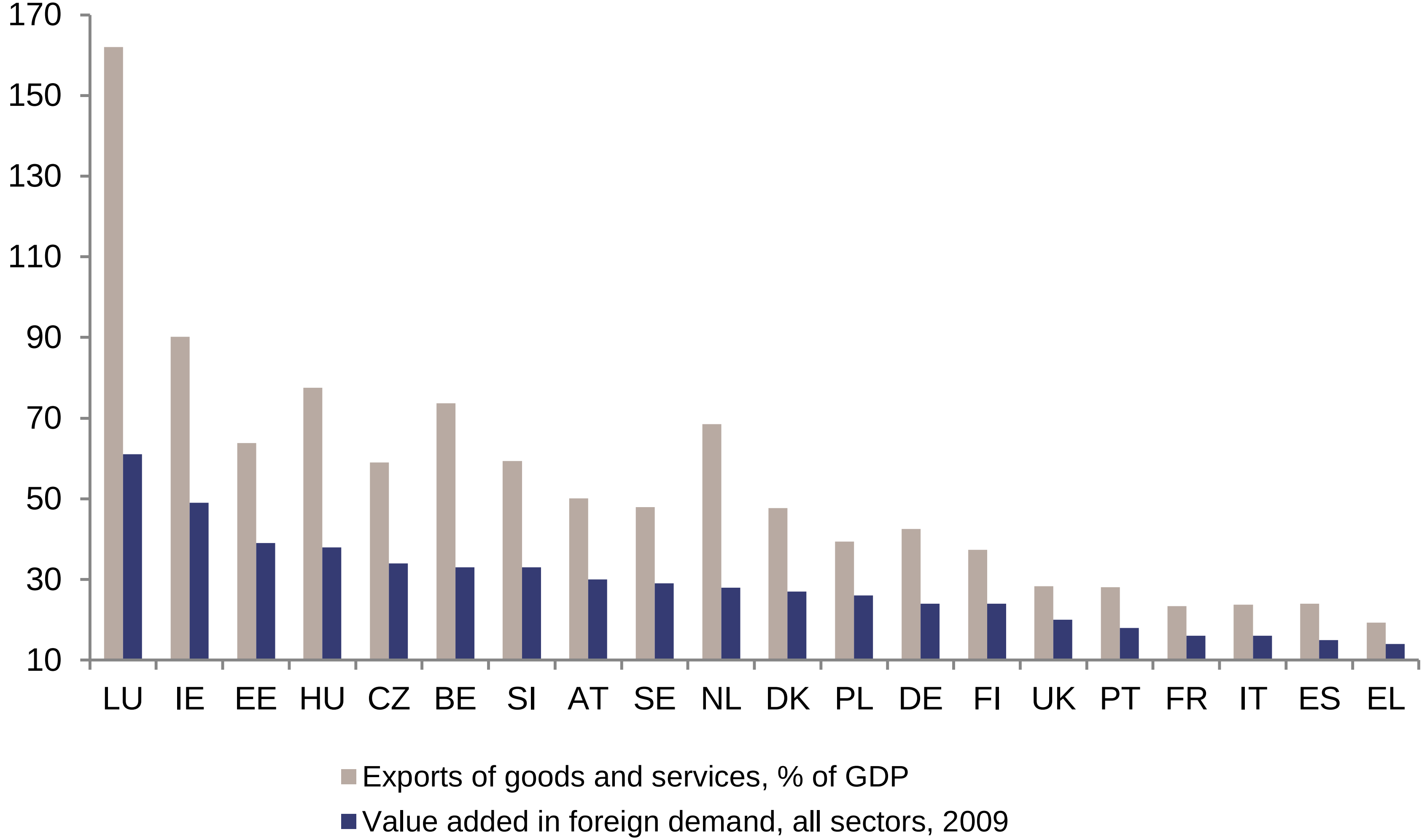


Illustration: ULCs

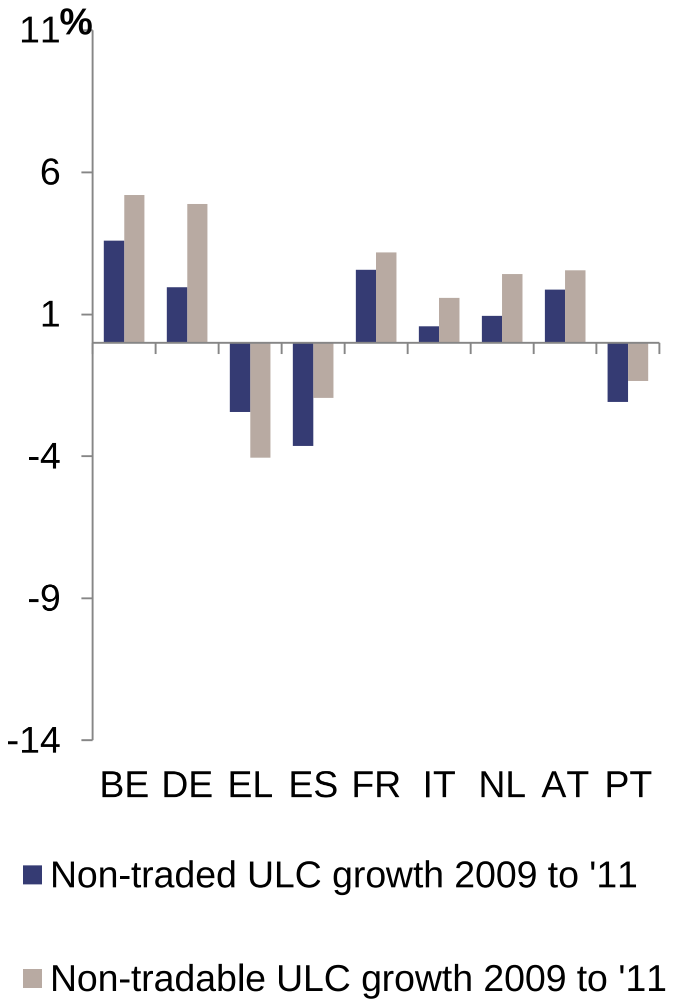
- Traditional tradable ULC:

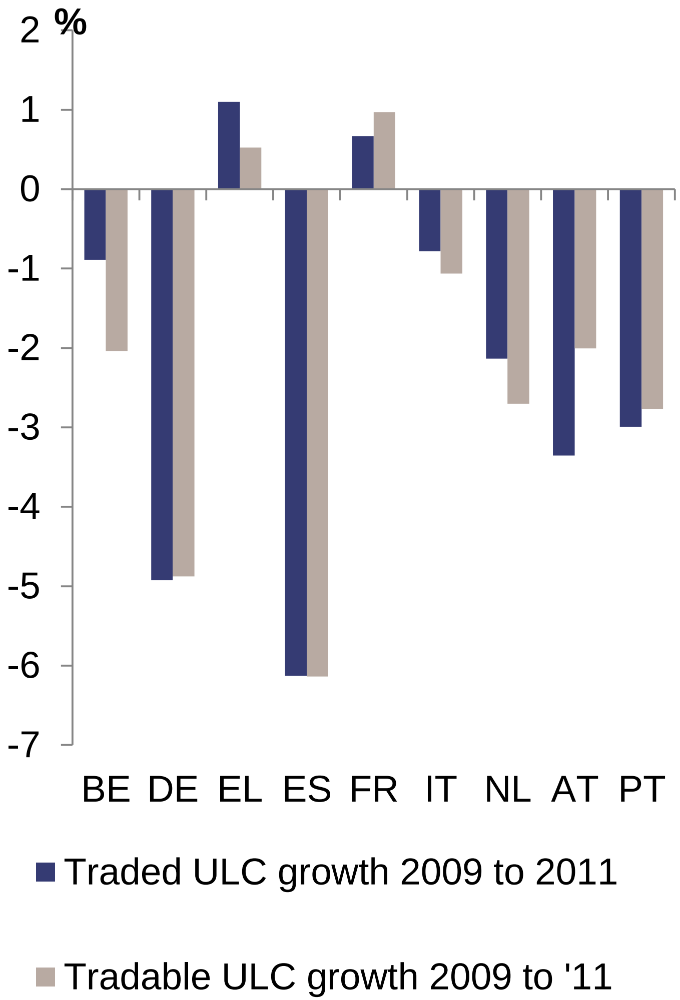
$$\frac{Wage\ sum\ of\ tradable\ sectors}{Value\ added\ in\ tradable\ sectors}$$

- 'Traded' ULC:

$$\frac{Wage\ sum\ paid\ for\ producing\ 'exports'}{Value\ added\ produced\ for\ foreign\ demand}$$

Traded vs non-traded ULC growth





Contributions towards ULC growth

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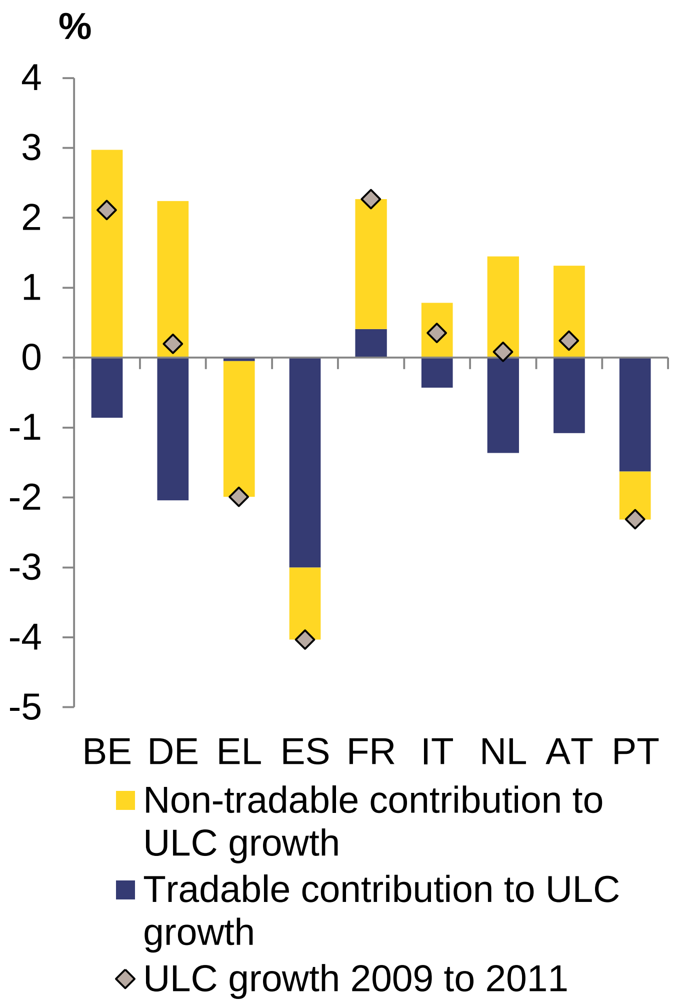
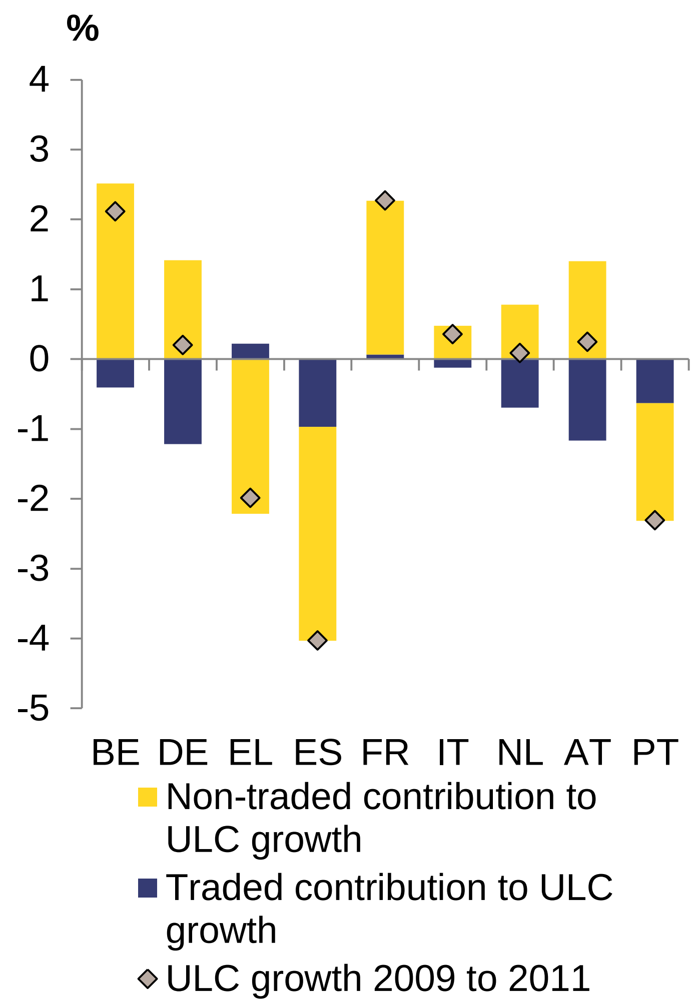
'traditional' approach



'trade shares' approach



Things to keep in mind

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- 'Traded shares' is a slightly different concept than 'tradability' – but used to the same end
- Useful indicator to complement traditional ones on MIP work
- Not limited to ULC: Effectively measures open-ness of sectors and economies
- Also a useful input for refining other indicators (e.g. cyclically adjusted current account)

Caveats and requirements

- OECD work has limited country range ➔ draw on WIOT to extend to all EU countries
- IO data only available with 3-year time lag ➔ Real time analysis requires 'nowcasting'
- Method requires a consistent set of input tables ➔Future of world input output tables not guaranteed, but national I-O tables are there