

Globalisation in the National Accounts - Pharmaceuticals

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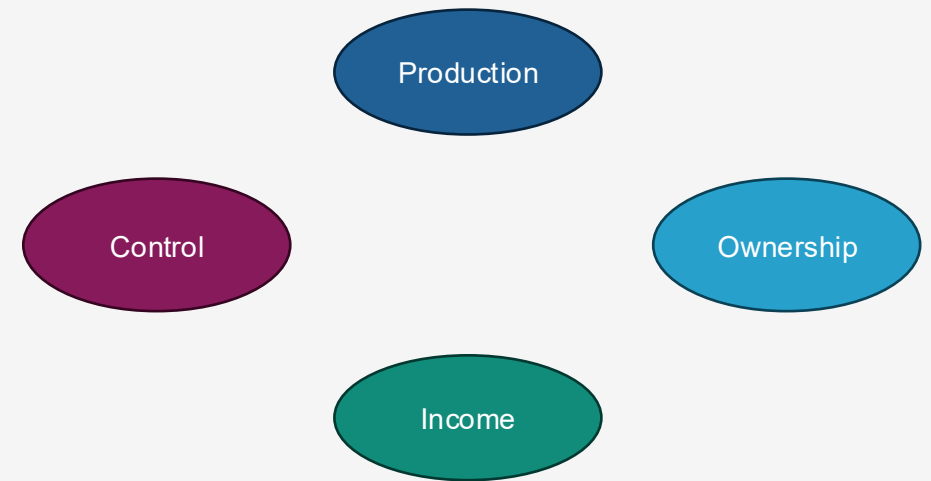
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What is globalisation to the national accounts?

- The statistical measurement of economic globalisation and responding to the measurement challenges posed by it
- Economic activity is organised across borders
- Multi-national enterprises (MNEs) and fragmented production weaken the alignment between activity and territory
- Statistical frameworks must still assign these activities based on the concepts of residence and economic presence e.g. see [SNA](#), [BPM](#), [UNECE Guide to Measuring Global Production](#)

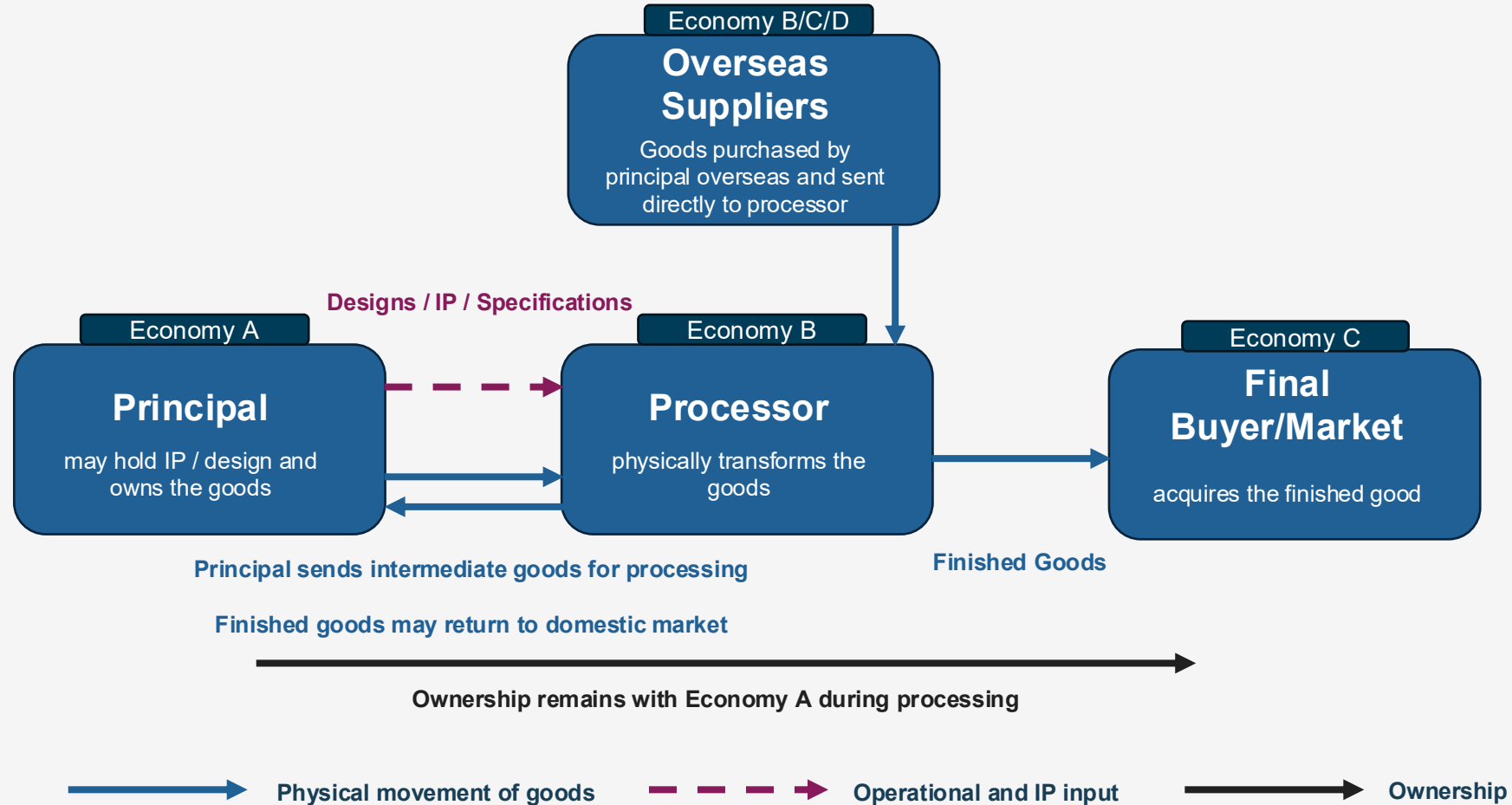


These functions do not always line up neatly inside one economy

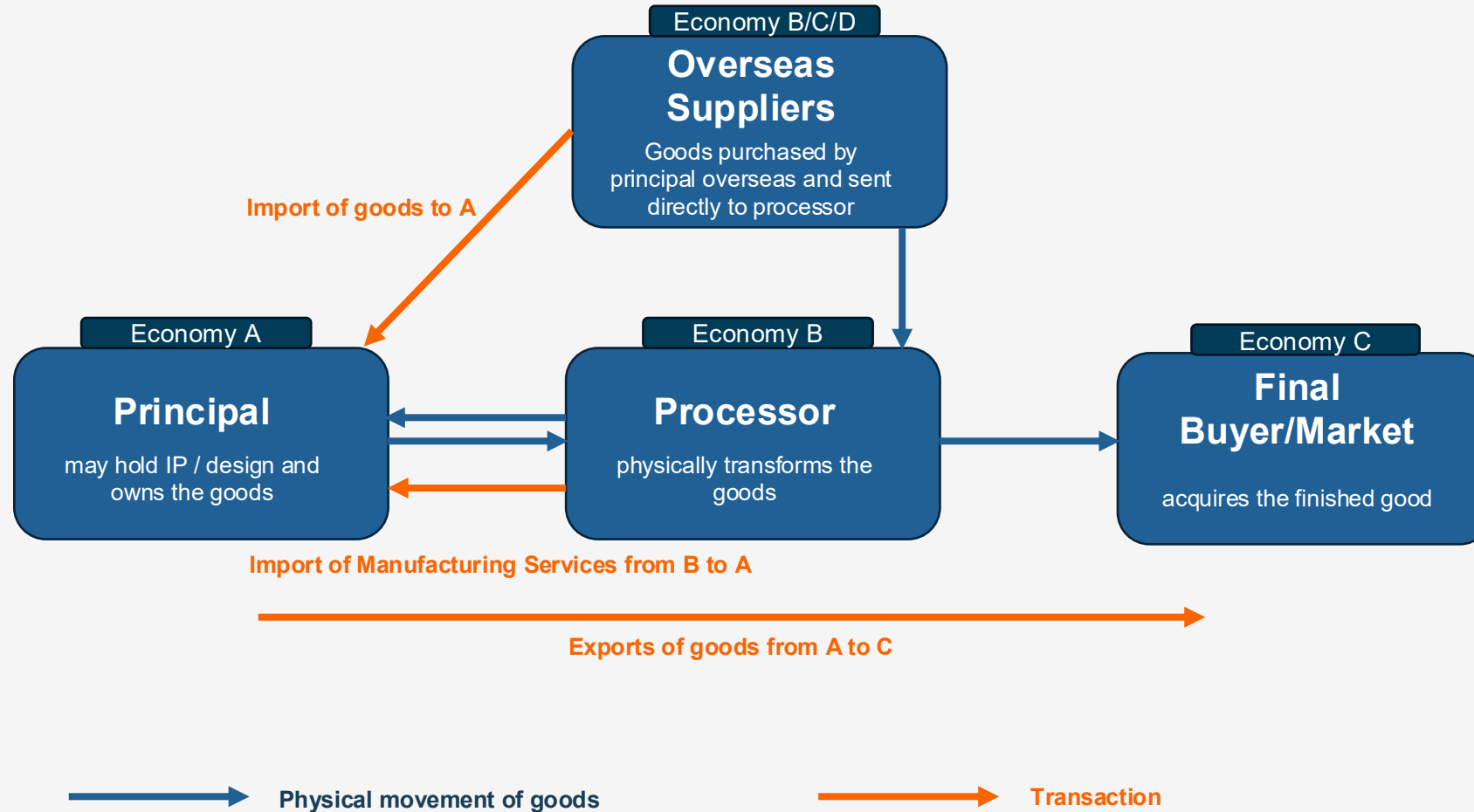
Themes and Measurement Challenges

- Global production arrangements
- Management of intellectual property and resulting flows
- Intra MNE group flows
- Complex corporate structures

Example Global Production Arrangement



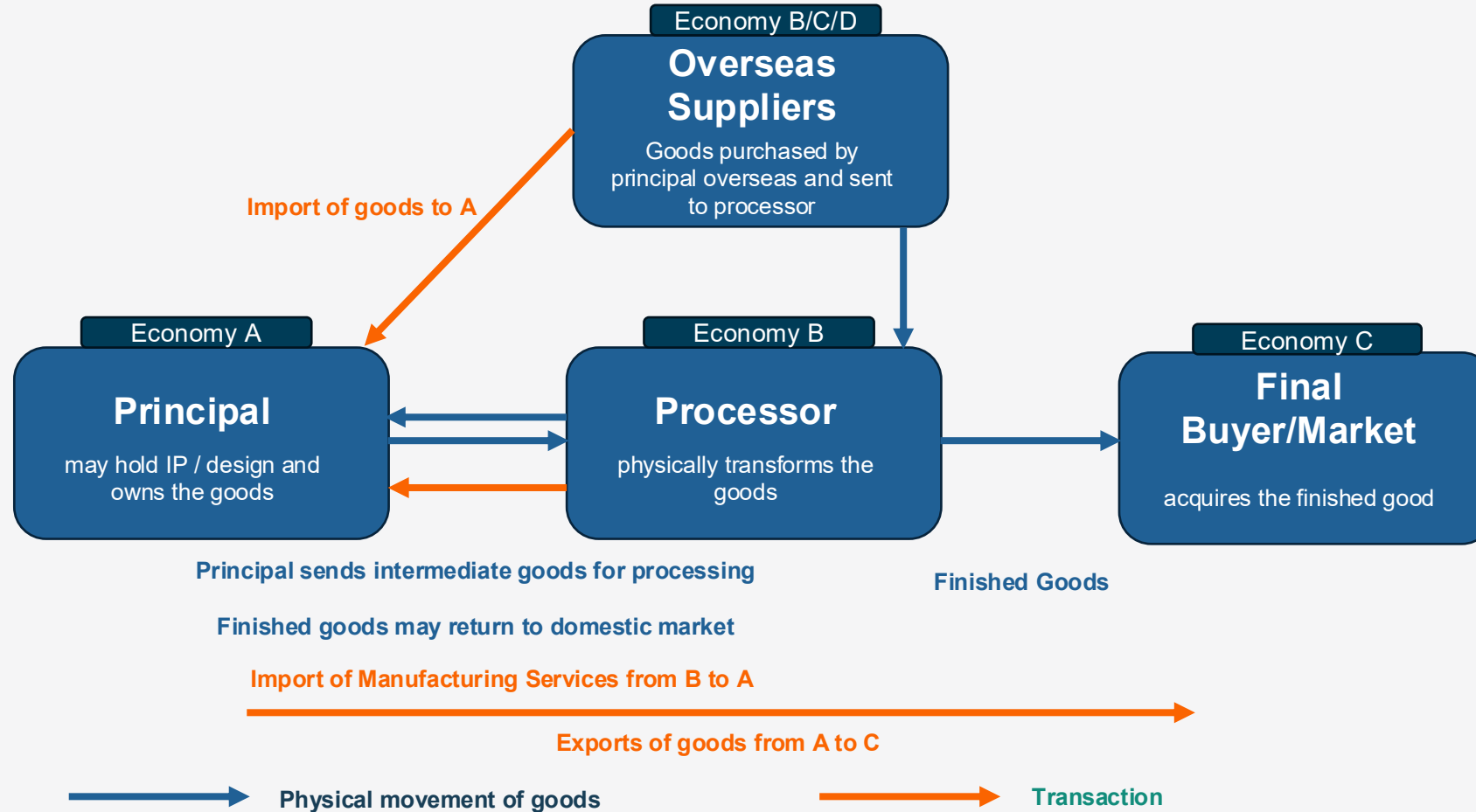
What to Record?



Interpreting Trade in Goods

- Primary data source is HMRC's Overseas Trade Statistics (OTS)
- Based on physical movement across UK border
- International guidance demands we capture the changes in economic ownership – when the risks and rewards related to the good are judged independently from the movement across international borders
- When a UK firm outsources production overseas while retaining ownership, or when an overseas firm outsources production to the UK; a data source relying upon the physical movement of goods, cannot reflect all changes of economic ownership.

Physical Movements vs Recorded Transactions



Approach

- Bottom-up, working at the MNE level with a focus on coherency
 - Understand their operating model
 - When a business produces output -> matching that to how it is used
 - When a business reports intermediate inputs or capital formation -> identifying its source
- Industry reviews focusing on largest MNEs in that industry
- Large Case Unit work with MNEs to collect high quality data and facilitate queries
- Globalisation team in the National Accounts interpret the data and supplement with additional sources to create coherency and adjust data where necessary for a consistent time-series

Pharmaceutical Review

- Initial articles focused on introduction to [theory](#) and [results](#) from proof-of-concept work
- First industry review then considers the pharmaceutical industry
- Cross-over with research and development

Focus on pharmaceuticals because of:

- Prevalence of contract manufacturing and global production arrangements
 - Including evidence provided by [2019 ESCoE paper 'No plant, no problem? Factoryless manufacturing and economic measurement'](#) (Diane Coyle and David Nguyen)
- High concentration of large businesses
- Strong existing relationships with MNEs
- Large contributor to the economy (prior to review, 10.5% of UK manufacturing in 2023)

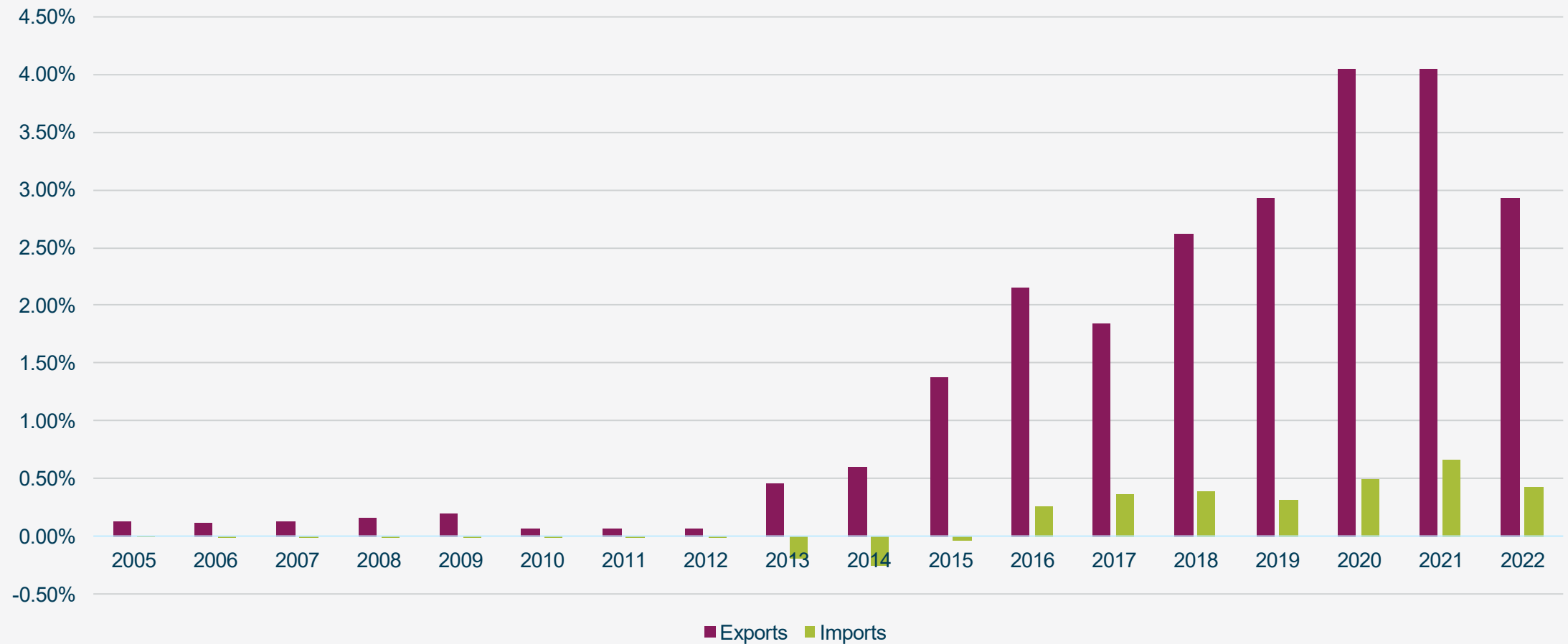
Impacts

*The following industry review impacts were published on 19 August 2025, [Blue Book 2025: Globalisation](#) - **Covering three primary strands:***

- Positive impacts on trade in goods balance from improved measurement of global production arrangements
- Partially offsetting impacts on trade in services from improved understanding of global intellectual property and research and development flows.
- Impact on gross value added from industrial reclassifications and a focus on coherency

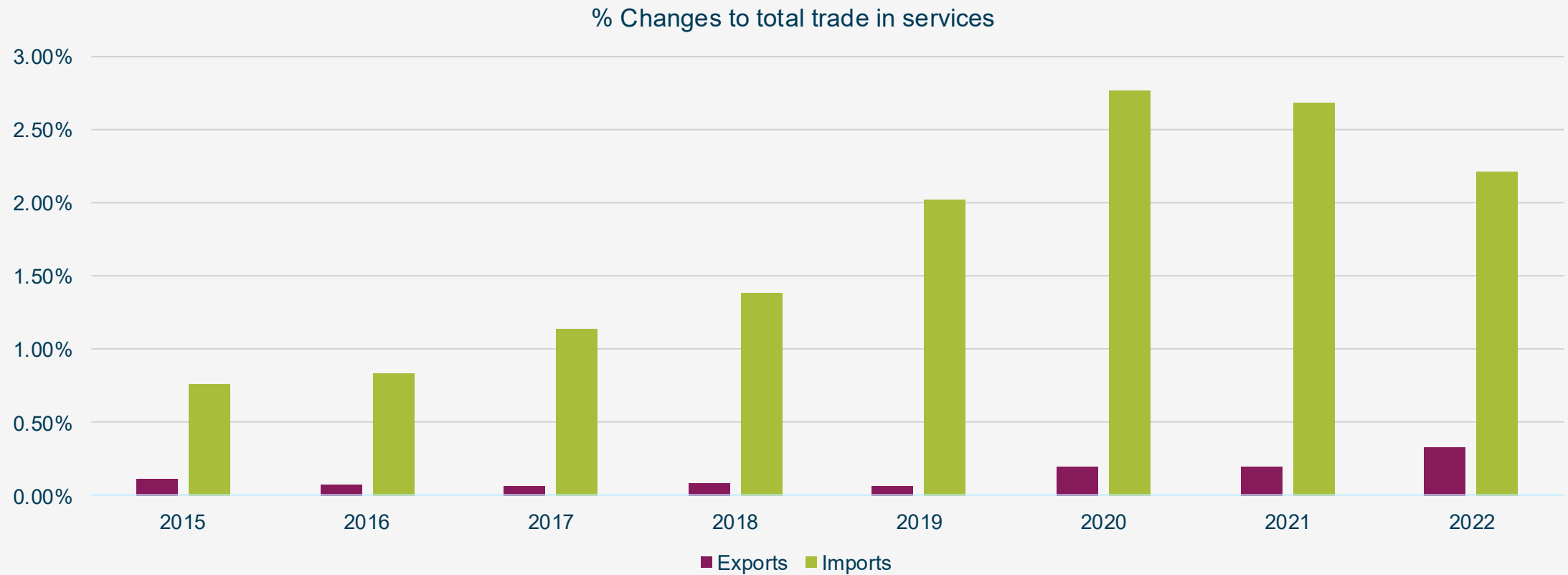
Key Impacts – Trade in Goods

% Changes to total trade in goods



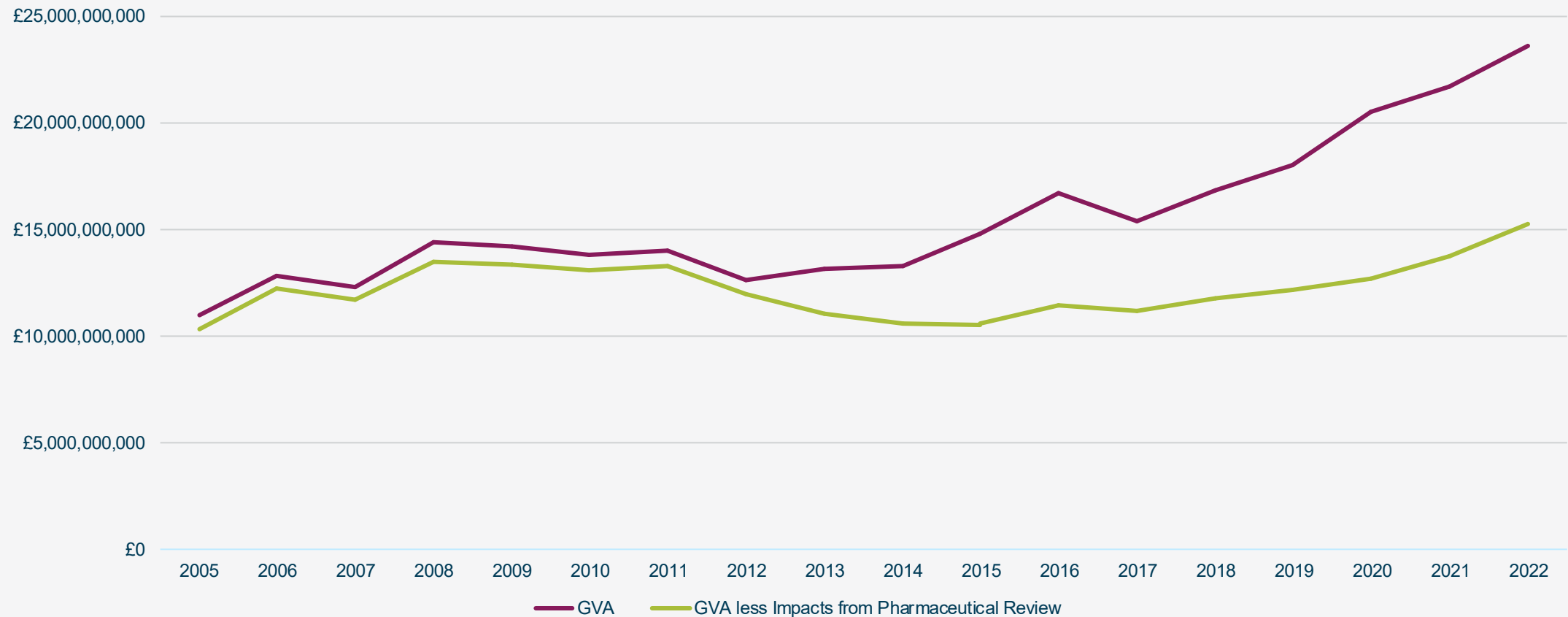
Key Impacts – Trade in Services

- % Changes to total trade in services



Key Impacts – Gross Value Added

Manufacture of Pharmaceuticals Industry Gross Value Added



Next Steps

- Building on this early work, improvements to measuring globalisation are a part of the [plan for ONS economic statistics](#)
- Plans are in motion for further industry reviews. Aircraft and Oil/Gas
- An improved annual business survey is planned for a more comprehensive data source to complement bottom-up approach