



The changing face of agriculture and food trade: The role of global value chains

Jared Greenville
Trade and Agriculture Directorate

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» Today's talk

Focus is on trade within GVCs and the policy influences that impact it

- Interested in whether changes in the way trade is done have implications for international agro-food trade policy

But the concept of GVC used may differ from past studies

- Not a specific value chain/niche market perspective
- Broad global story of how trade is organised

Interested in exploring policies that allow countries to get the most from international markets

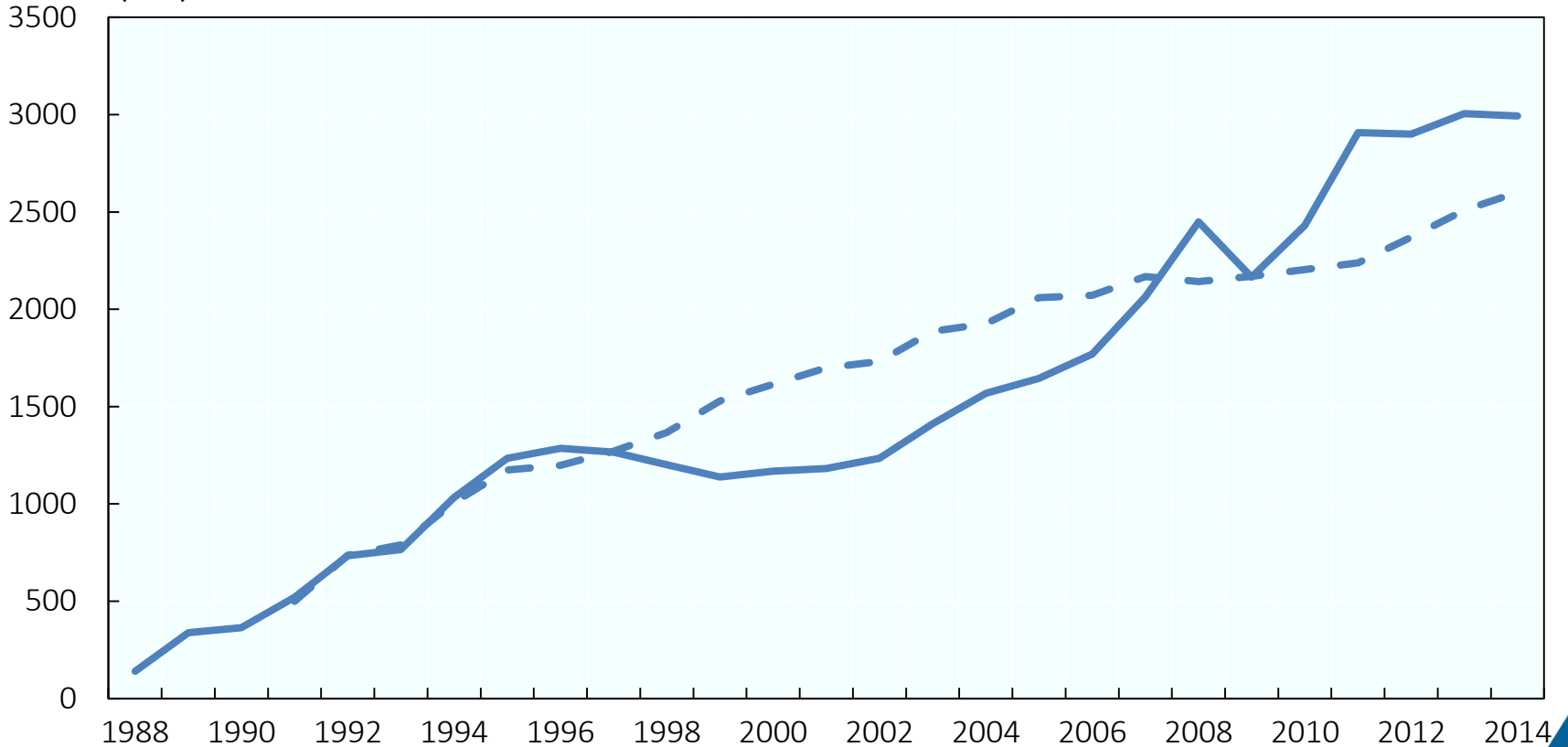
- Concept of domestic value added

Agro-food trade is growing

— US GDP deflator

- - - Food price deflator

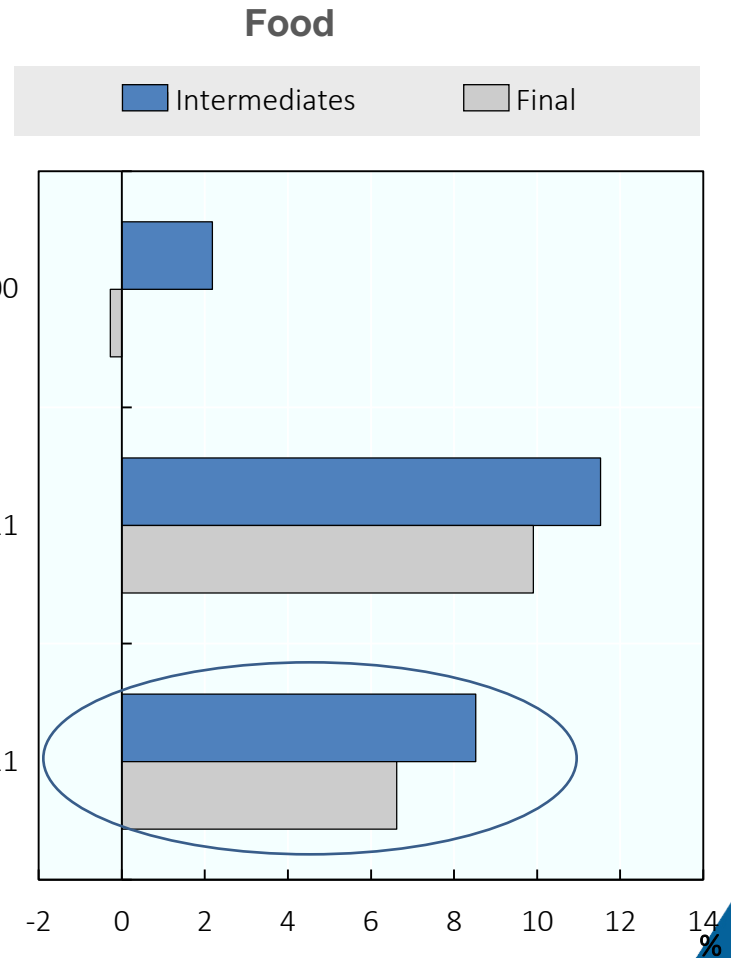
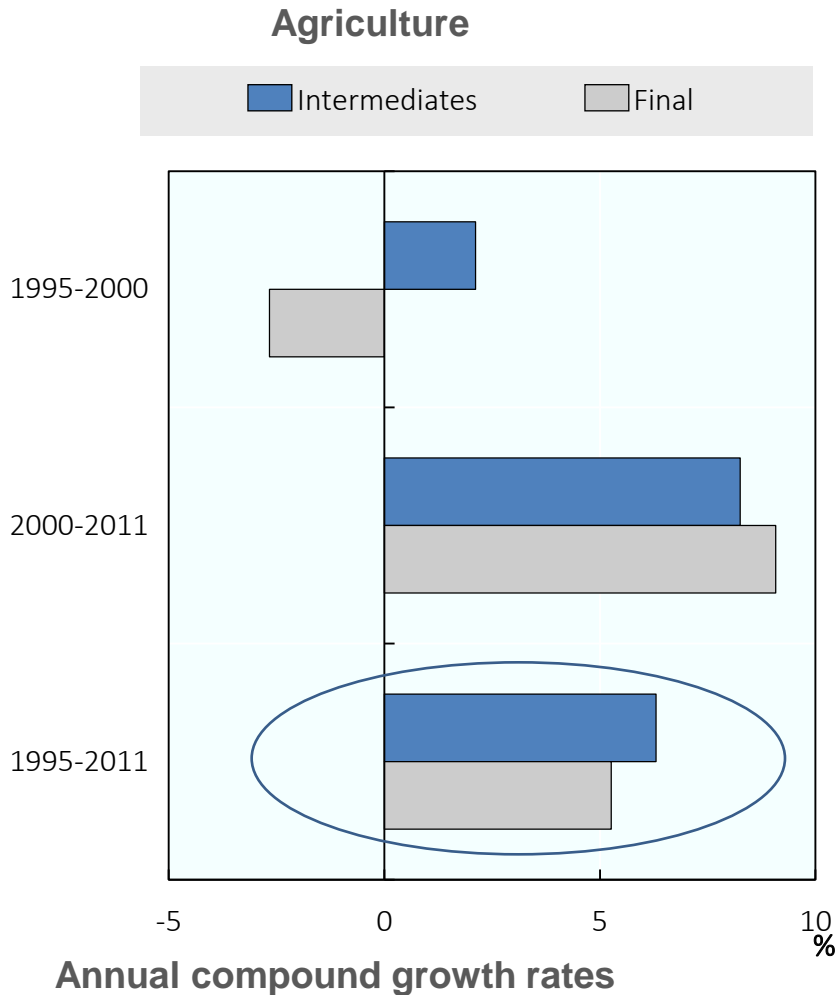
USD bn (real)



» Trade in agro-food products is increasingly ‘global’

- Sectors producing food source in inputs internationally
 - Production processes buy from GVCs
- Agro-food products also get used in the production of other food products
 - Exports are sold into ongoing into GVCs
- Interconnections mean policies have wider impacts on markets
 - Trade barriers and NTMs

‘Global’ trade seen with strong growth in intermediates trade



GVCs – what are they?

Value chains: describe a production process for a final good

- Full range of activities from concept to final good
- Represent all the links between industries

Global value chains focus on the international linkages ⇒ relate to trade

- But there are also significant domestic linkages
- And products are often delivered to final demand

How do we measure GVCs?

Measured from country-industry perspective

- We look first at the links for an industry in a given country
- Look at the breakdown of *value added in exports*

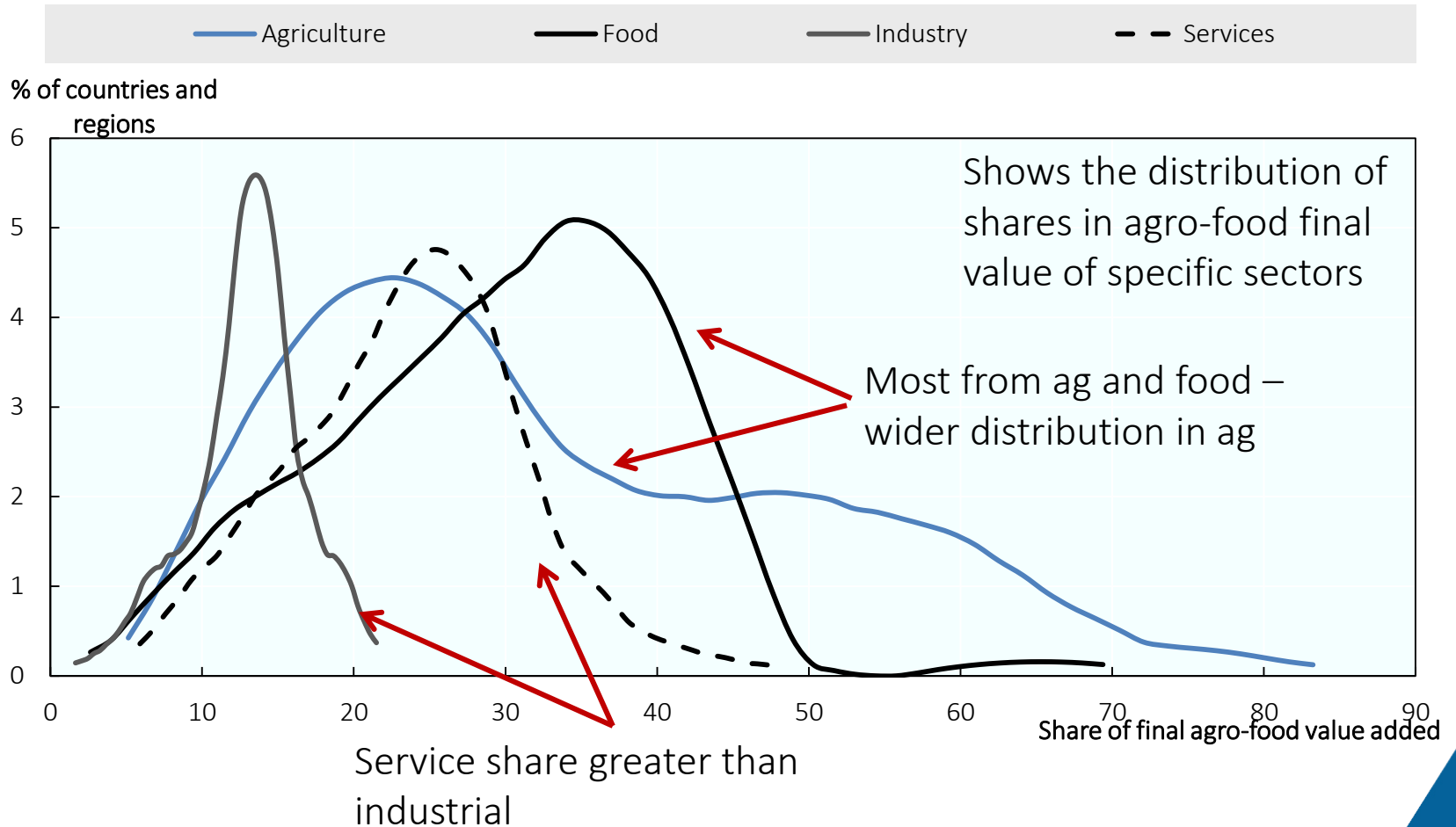
Track trade in value added flows between countries

- And see where it is used and potentially re-exported
- Computed from Inter-Country Input-Output tables



INSIGHTS INTO VALUE ADDED

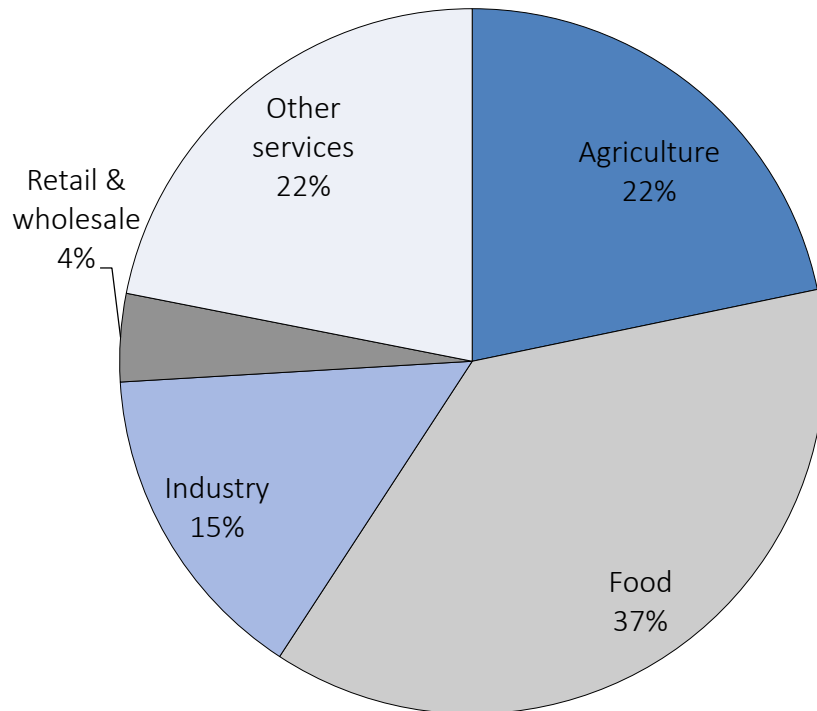
Which sectors contribute to agro-food final value? Broad players in the value chain



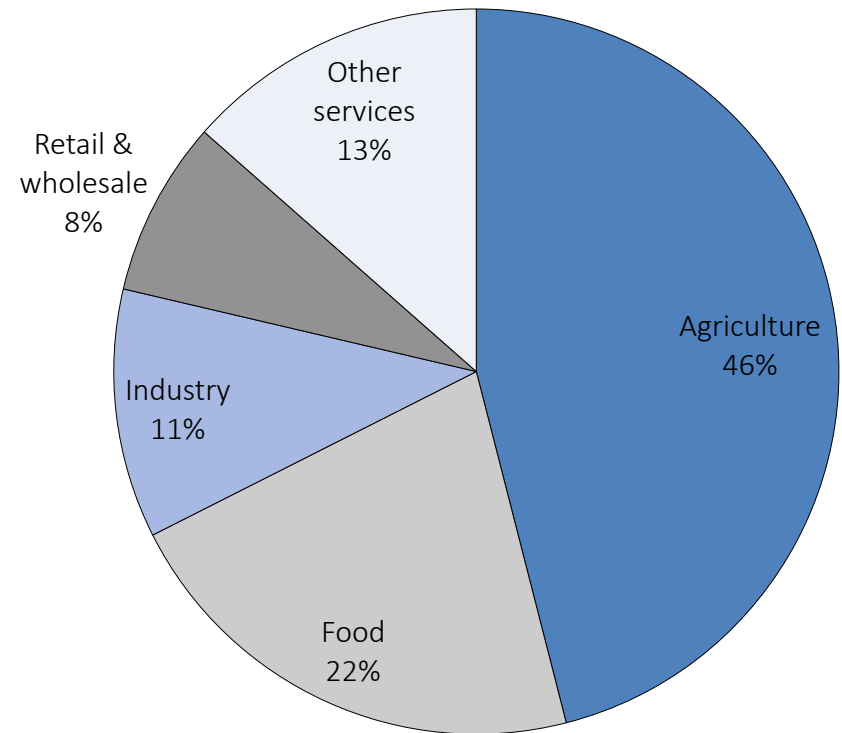
Differences across countries depending on levels of development

Shares of final agro-food value by broad sector grouping, 2011

High income countries



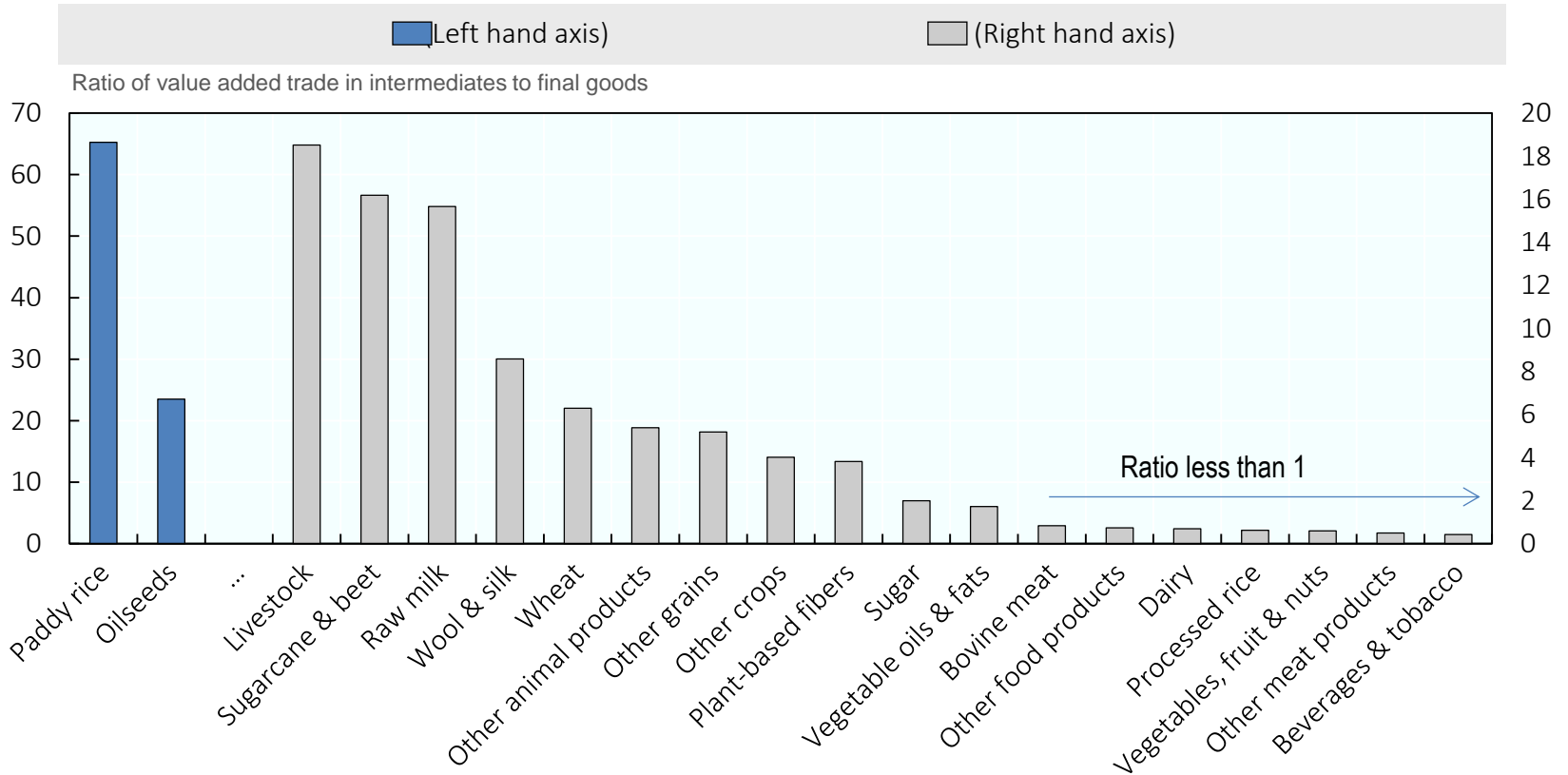
Middle and low income countries





SOME RESULTS ON AGRO- FOOD GVCs

How important are GVCs? Ratio of value added trade in intermediates to final goods



What does the agro-food GVC landscape look like?

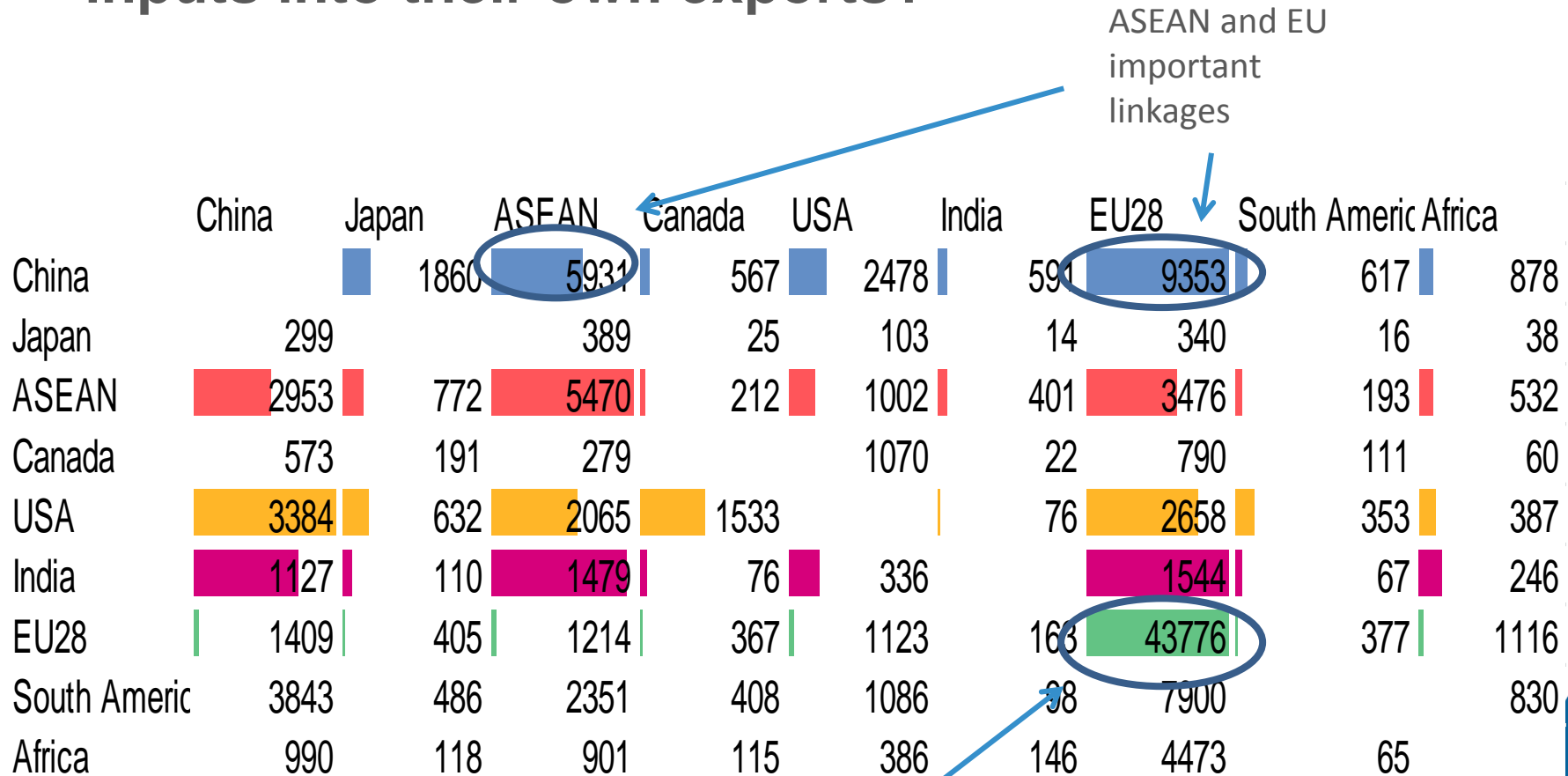
Agro-food GVC hubs: EU, China followed by ASEAN, USA

Column shows source of foreign value added in own exports:
Buying from GVCs

| | China | Japan | ASEAN | Canada | USA | India | EU28 | Sth America | Africa |
|-------------|-------|-------|-------|--------|------|-------|------|-------------|--------|
| China | | 1860 | 5931 | 567 | 2478 | 591 | 9353 | 617 | 878 |
| Japan | 299 | | 389 | 25 | 103 | 14 | 340 | 16 | 38 |
| ASEAN | 2953 | 772 | | 212 | 1002 | 401 | 3476 | 193 | 532 |
| Canada | 573 | 191 | 279 | | 1070 | 22 | 790 | 111 | 60 |
| USA | 3384 | 632 | 2065 | 1533 | | 76 | 2658 | 353 | 387 |
| India | 1127 | 110 | 1479 | 76 | 336 | | 1544 | 67 | 246 |
| EU28 | 1409 | 405 | 1214 | 367 | 1123 | 163 | | 377 | 1116 |
| Sth America | 3843 | 486 | 2351 | 408 | 1086 | 98 | 7900 | | 830 |
| Africa | 990 | 118 | 901 | 115 | 386 | 146 | 4473 | 65 | |

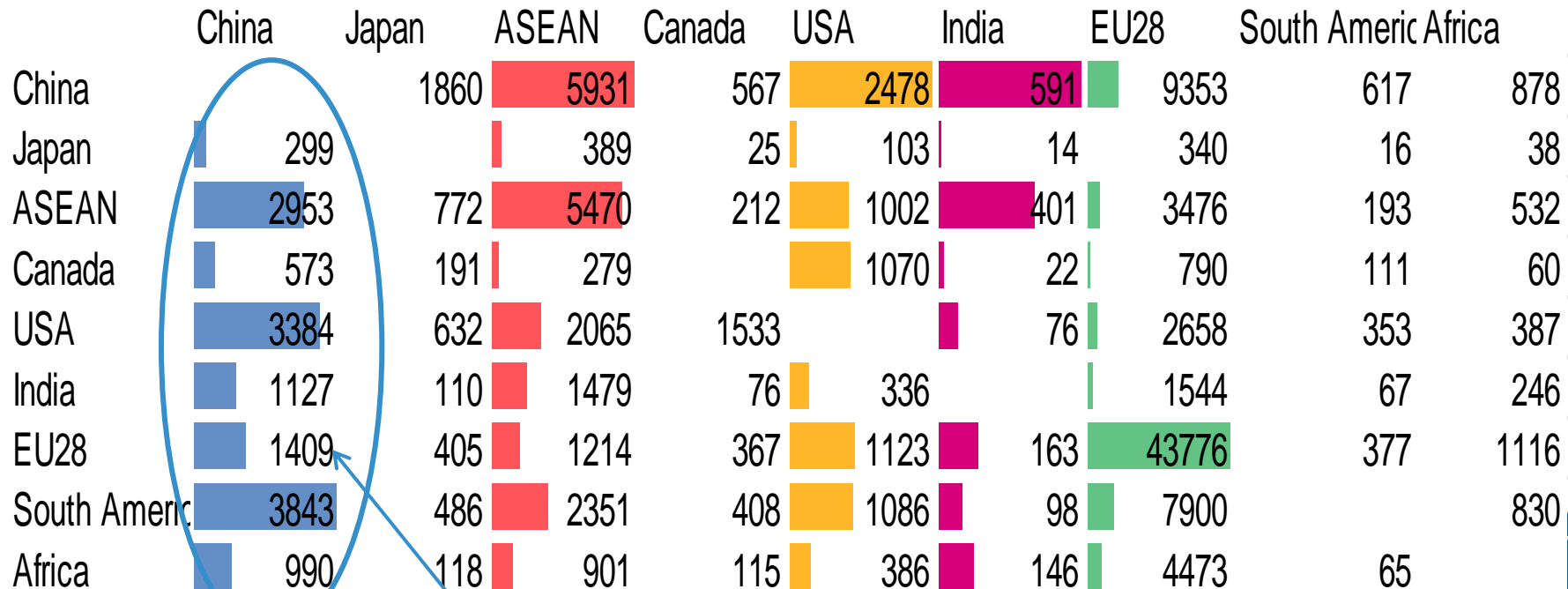
Row shows how exported value added is used in other country exports: **Selling to GVCs**

Example: Who uses China's agro-food exports as inputs into their own exports?



For EU, GVCs are internal to the common market

Example: Where does China source from for its own exports?



China sources globally,
with key links to USA, Sth
America and ASEAN

» Looking more closely at backward and forward linkages

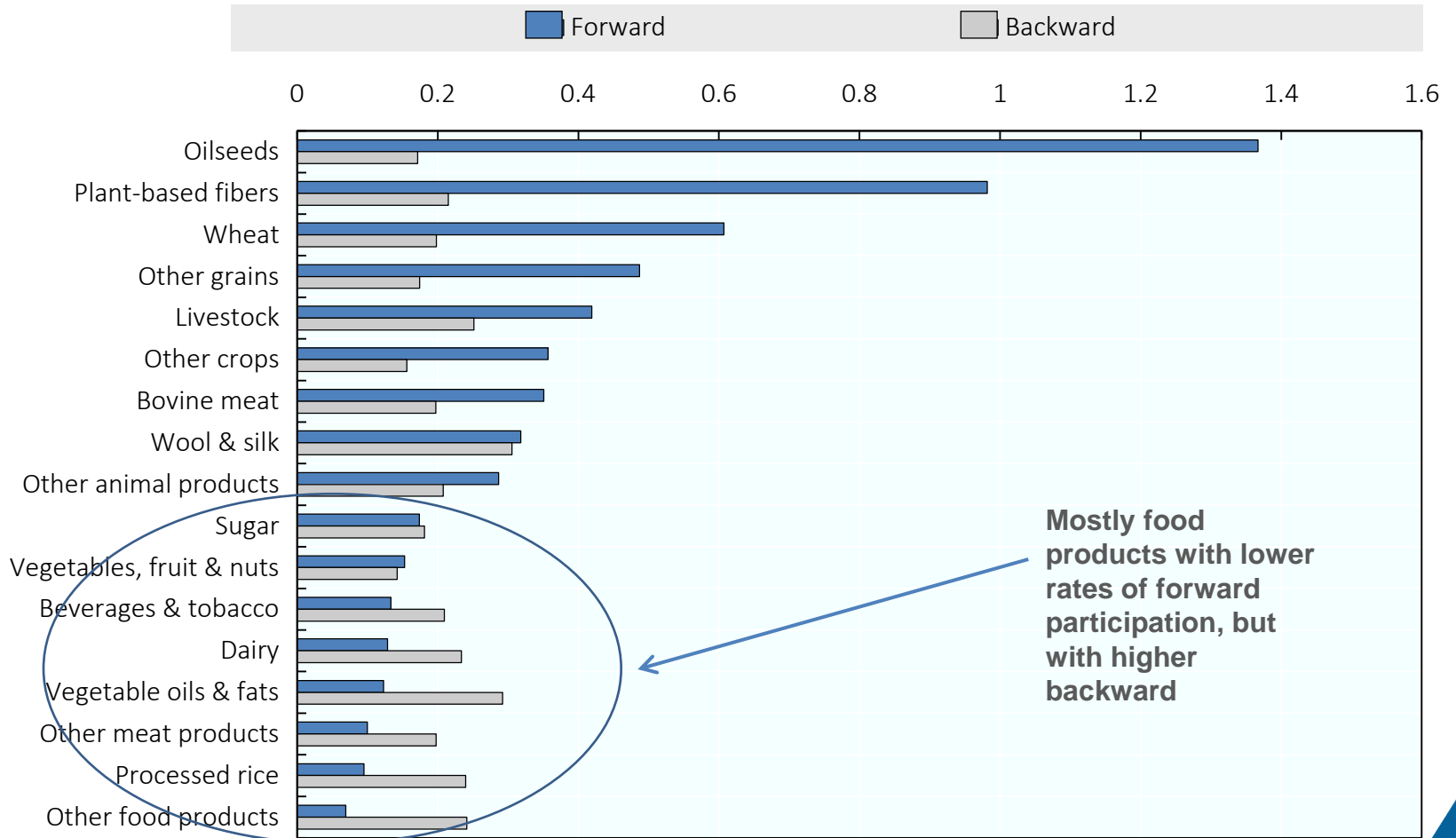
Backward linkages: *buying from GVCs*

- Measures the amount of foreign value added embodied in exports
- Comes through intermediate input usage

Forward linkages: *selling into GVCs*

- Measures the amount of domestic value added that forms part of *another* country's exports
- So picks up the ongoing value chain
- Domestic value exported can be either *direct* (own exports) or *indirect* (exports from other domestic industries that make use of the outputs produced, eg processing sector exports using agricultural production as inputs)

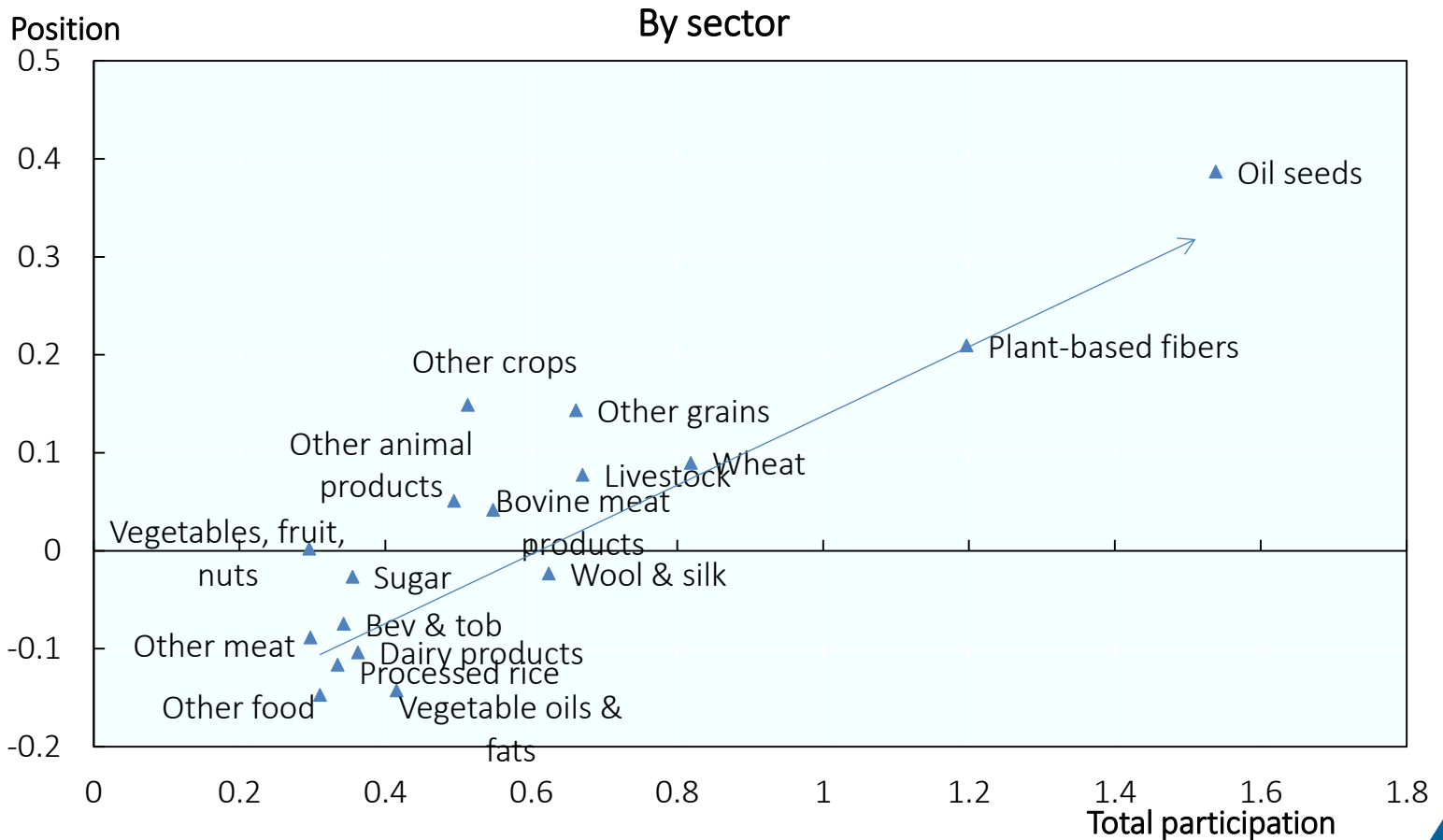
Forward and backward indicators across sectors



Position and total participation across sectors

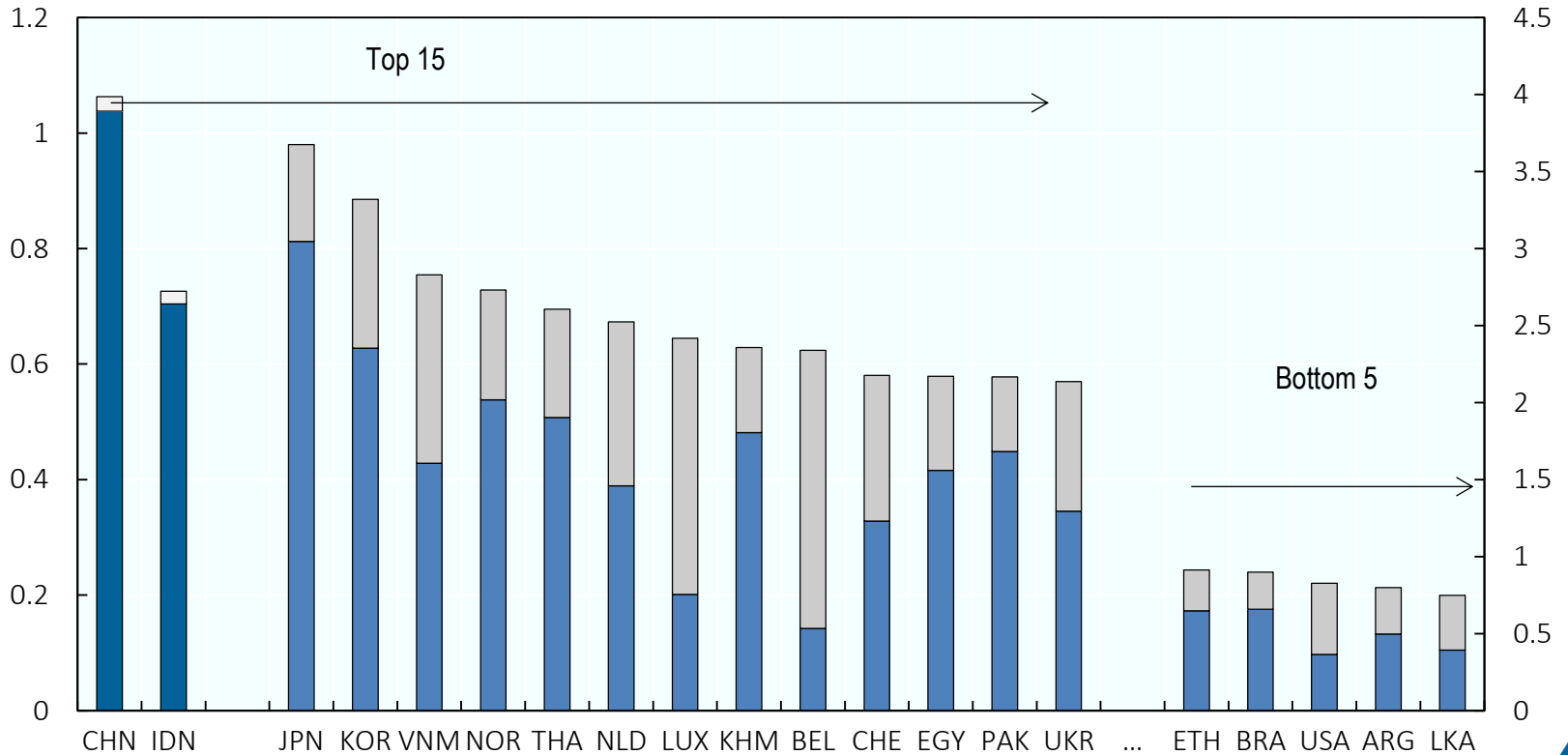
Position shows how relatively forward or backward a sector is.

Greater than 0 more forward, less than 0 more backward



Forward and backward indicators across countries

Backward (right hand axis)
 Forward (right hand axis)
 Backward (left hand axis)
 Forward (left hand axis)





GETTING THE MOST FROM GVCs: IMPLICATIONS FOR MULTILATERAL REFORMS?

Getting the most from GVCs: domestic value added creation

Domestic value added represents the returns from participation....

- The benefits to an economy from being involved in trade
- It represents the returns to labour and capital, along with taxes paid to governments (but less subsidies)
- It picks up the benefits to the entire economy from the activity
- Both within the sector and to all who contribute
- Directly links to jobs and growth

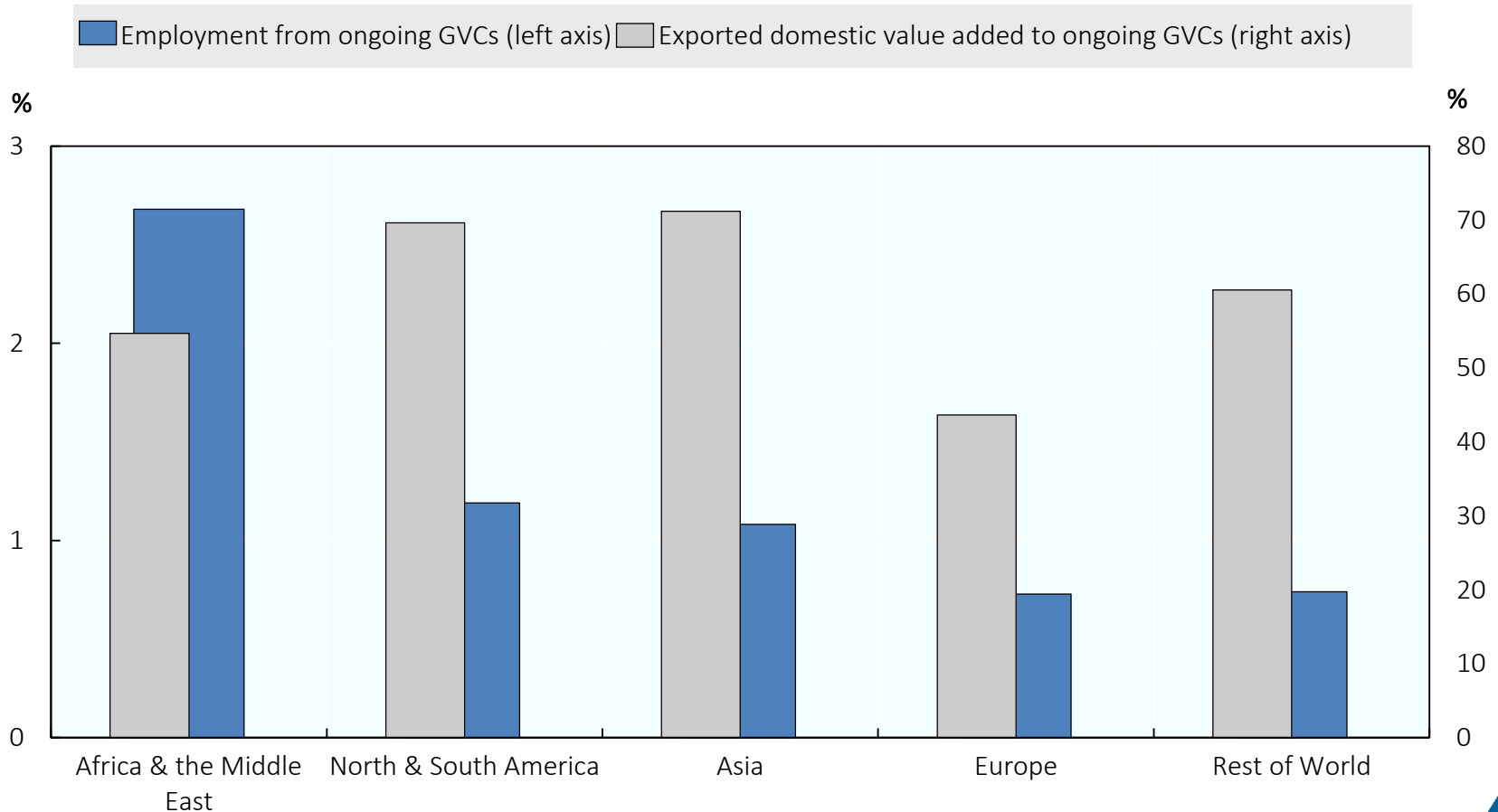
Getting the most from GVCs : participation spillovers

Past studies have found the potential for spillovers from GVC participation

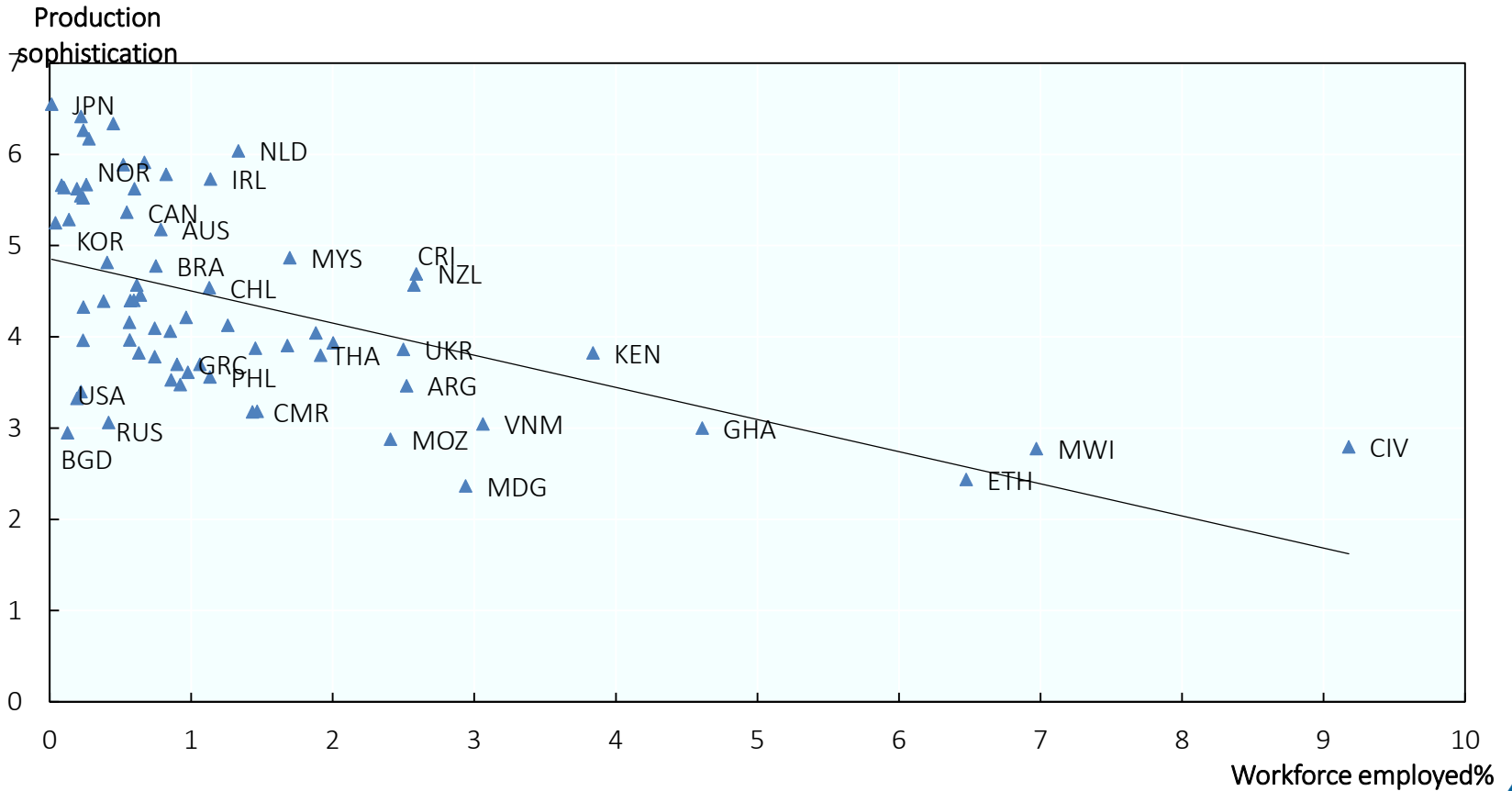
- Past engagement through the use of foreign factors grows DVA over time
 - Often in developing country context, but results hold for developed
 - Results hold for agri & food along with manufacturing & services
- Influence on increasing export sophistication

Essentially productivity related upgrading (through scale or scope)

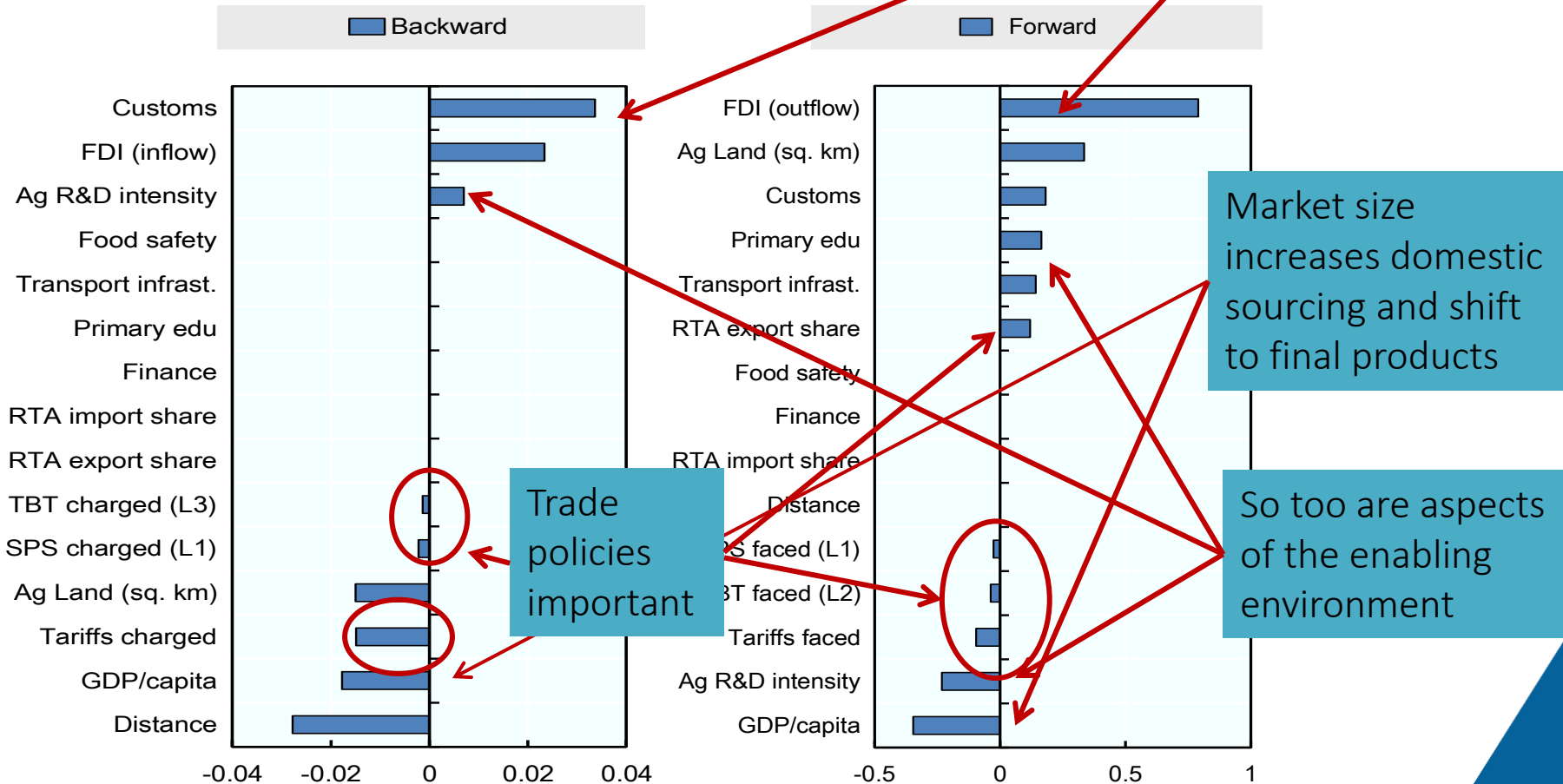
Employment effects from GVCs by region



Employment effects greatest in developing countries



Policy influences on GVC participation



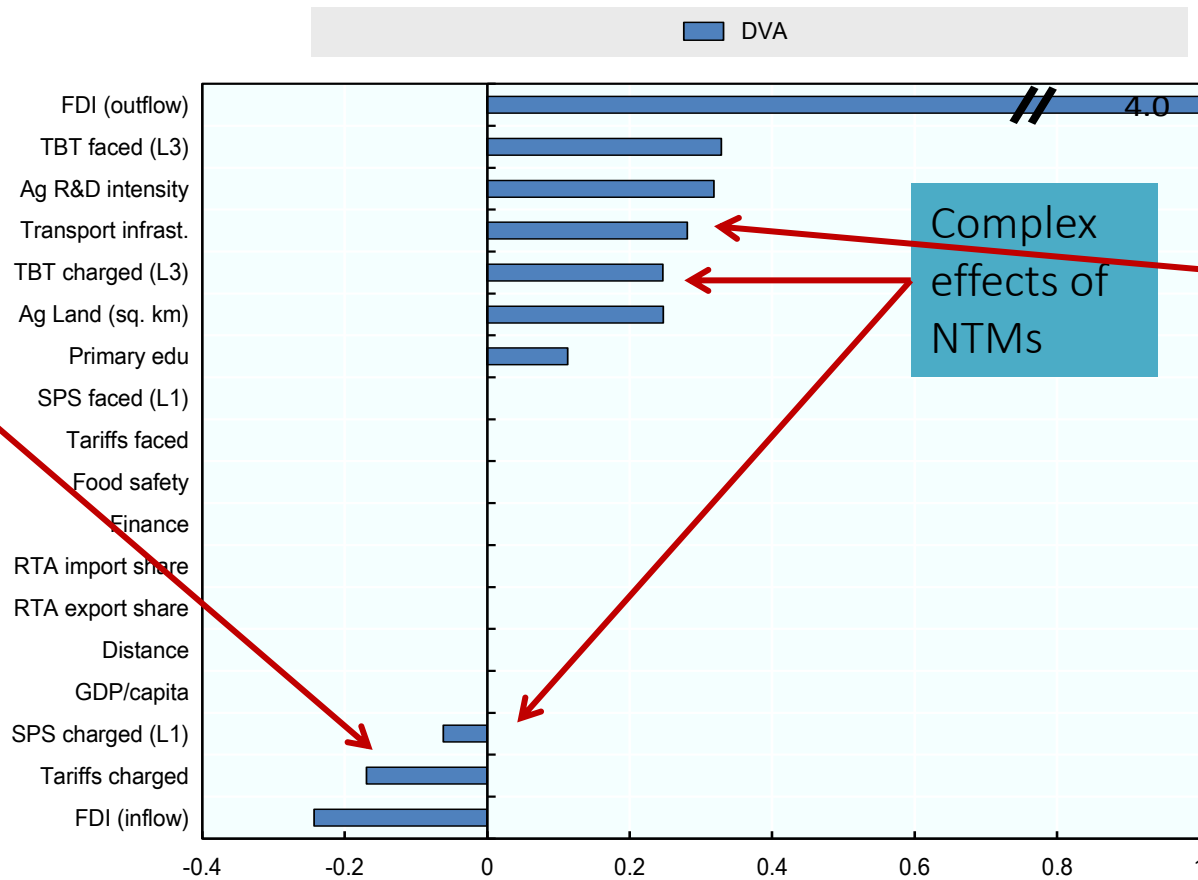
Trade facilitation important

Market size increases domestic sourcing and shift to final products

So too are aspects of the enabling environment

Trade policies important

Policy influences on DVA

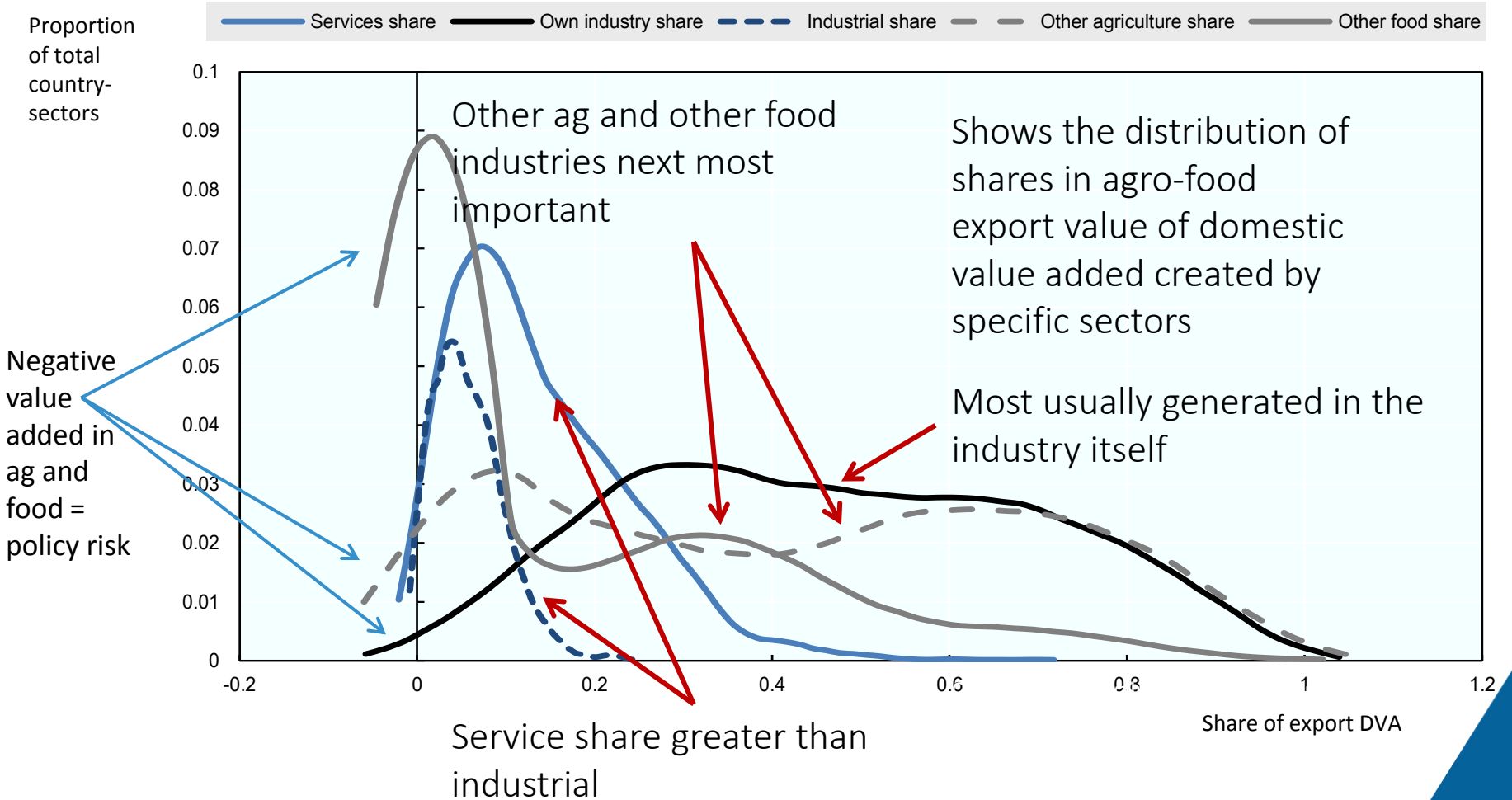


Imports important for export value creation

Complex effects of NTMs

Robust enabling environment also important

Which sectors contribute to agro-food exports?



» Key messages

- World agro-food markets have changed and so have the ways that policies impact the domestic effects of these
- Agro-food GVCs important – domestic value added creation is often underpinned by sourcing inputs internationally for exports
 - Import tariffs act as taxes on exports
 - NTMs – need to harness trade creation and minimise cost
- Domestic agricultural support policies need to be carefully designed to avoid negative effects on DVA (and so jobs)
 - Enabling environment important
- Policies outside agriculture are important – particularly services
 - Plus there will be an allied jobs effect, but issues of ‘where’

Contact us

We look forward to hearing from you!



Access all of the information from the Trade & Agriculture Directorate at:

www.oecd.org/tad



You can reach us via e-mail by sending your message to the following address:

tad.contact@oecd.org



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