

*Can trade openness assist global
food security, economic growth,
and poverty reduction?*

Kym Anderson

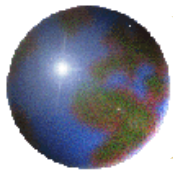
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Challenges to global food security

- ⊕ Heatwaves in northern hemisphere this summer remind us of **climate change's impact on crops**
- ⊕ Climate change also is making it harder for farmers in the tropics to produce sustainably & earn a living
 - ⊞ Adds to flood of **illegal migrants** to cities, EU and US
 - ⊞ Could be mitigated if developing country farmers (= 2/3rds of world's extreme poor) had **better access to markets** in high-income and emerging economies



Why so much agricultural market intervention by governments?

- ✚ Because all countries:
 - (a) want LR **national food security**, and
 - (b) dislike SR **domestic food price spikes**

- ✚ Often perceived as requiring:
 - (a) **national food self-sufficiency**, and
 - (b) **insulation** from int'l food price fluctuations

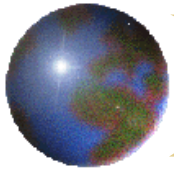


Outline

- ⊕ Agricultural **globalization**: evidence of effects

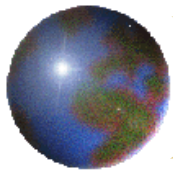
- ⊕ **Policies** employed to deal with perceived adverse outcomes of national openness to globalization

- ⊕ What **better policies** to deal with declining int'l competitiveness of farm sector & food price spikes?
 - ⊠ ... in **HICs such as Sweden?**
 - ⊠ ... and in **DCs?**



Distant past: role of int'l agricultural trade

- ✦ For agriculture's first 10,000 years, international trade was not in final farm products (due to high trade costs), but rather in **agric. inputs**:
 - ✦ **seeds**/cuttings
 - ✦ domesticated **breeding animals** (& their diseases!)
 - ✦ **knowledge**/production technologies
- ✦ Meant **both net sellers and net buyers of food benefitted** in food-importing countries
 - ✦ New or more-productive activities for **farmers**
 - ✦ Lower prices, greater product choice for food **consumers**

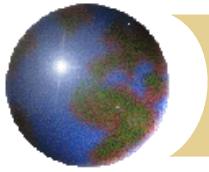


Industrial Revolution boosted agricultural intercontinental trade & agric export prices

- ✚ Initially **imports of fibres** (cotton, wool) by Britain's mechanizing textile industry
- ✚ During 1790-1860, "periphery" countries' international **terms of trade grew at 1.5%/year**

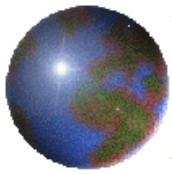
Williamson, J.G. (2012), 'Commodity Prices over Two Centuries: Trends, Volatility, and Impact', *Annual Review of Resource Economics* 4(6): 1-22

⇒ **Europe shared gains** from its industrialization with primary-exporting countries
-- as has **China in recent years**



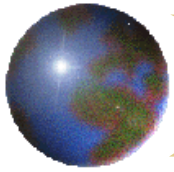
Then in mid-19th century, Europe opened farm trade

- ✪ Britain embraced Ricardo by **repealing its Corn Laws** in 1846, and **re-opening trade with France** from 1860
 - ✪ ... which in turn led to other countries in Western Europe also **reducing their agric protectionism**



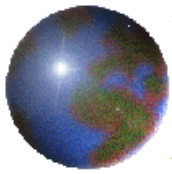
New technologies gave further boost to ag trade

- Also, high **costs of trading** farm products, both within & between countries, fell from mid-19th century
 - **Steam engine**, led to railways and steamships
 - **Steel hulls** for ships on high seas
 - **Refrigeration** for shipping (late 19th century)
 - **Telegraph** lowered communication costs



New technologies gave further boost to ag trade

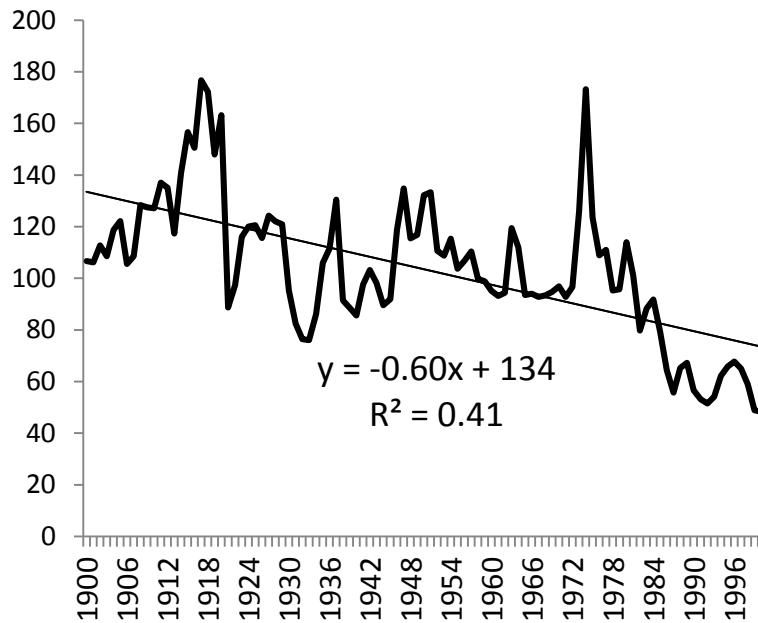
- ✦ Also, high **costs of trading** final farm products fell from mid-19th century
 - **Steam engine**, led to railways and steamships
 - **Steel hulls** for ships on high seas
 - **Refrigeration** for shipping (late 19th century)
 - **Telegraph** lowered communication costs
- ✦ Benefitted farmers and consumers in settler economies
- ✦ **Benefitted consumers but hurt farmers** in W.Eur.
 - ✦ ... led some countries to **return to agric protectionism**, which contributed to fall in int'l food prices in 20th century



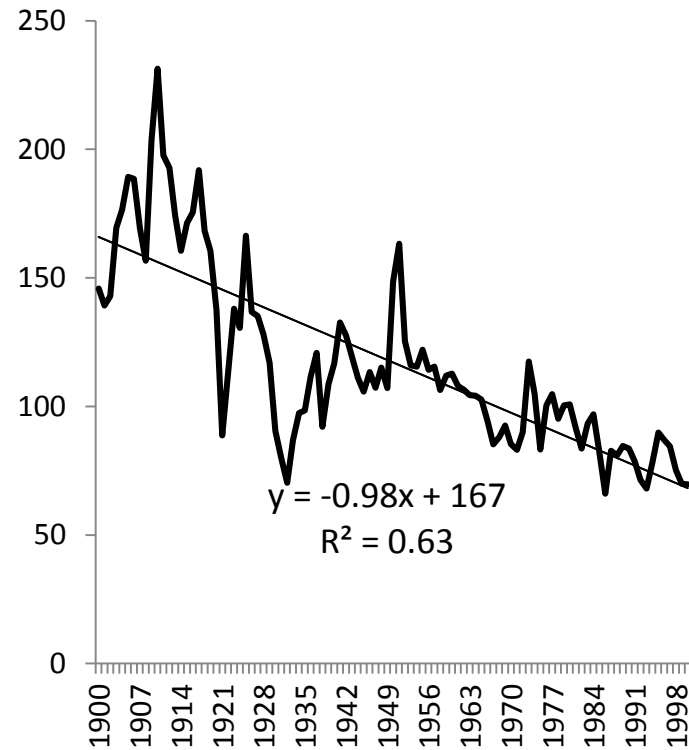
Real int'l agric prices, 1900-2000

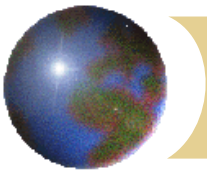
(Source: World Bank, 1977-79 = 100)

Food



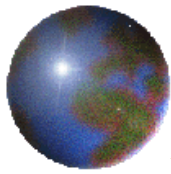
Non-food agric





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Post-war agric policies to mid-1980s

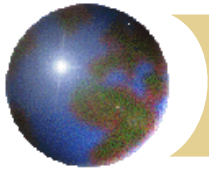
- ⊕ High-income countries (**HICs**) used **variable import restrictions and export subsidies** to:
 - ⊠ Protected, **and** insulated, farmers from int'l food markets
 - ⊠ But **helped largest HIC farmers most**, and **hurt DC farmers**

- ⊕ Developing countries (**DCs**) used **variable agric. export restrictions** plus overvalued exchange rates and manuf. import tariffs to:
 - ⊠ boost industrialization, and
 - ⊠ placate urban demands for lower & stable food prices
 - ... but **at expense of DC farmers**



Policy impacts on international agric trade

- ✚ **Agric protection growth** in HICs, plus **anti-agric policy bias** in DCs during 1960-85, plus **insulation** by both groups, had 3 trade impacts:
 - ✚ shrunk **agriculture's share of global trade**,
 - ✚ delayed rise in **share of agric output exported**,
 - ✚ 'thinned' **int'l food markets** and made international food prices **more volatile** than they would have been

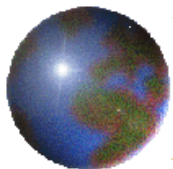


Farm policy reforms since mid-1980s

- ✚ Reduction in farm supports in many **HICs**, and
- ✚ reduction in agric. **export taxation in DCs**

... as captured by estimates of Nominal Rate of Assistance (**NRA**) to farmers

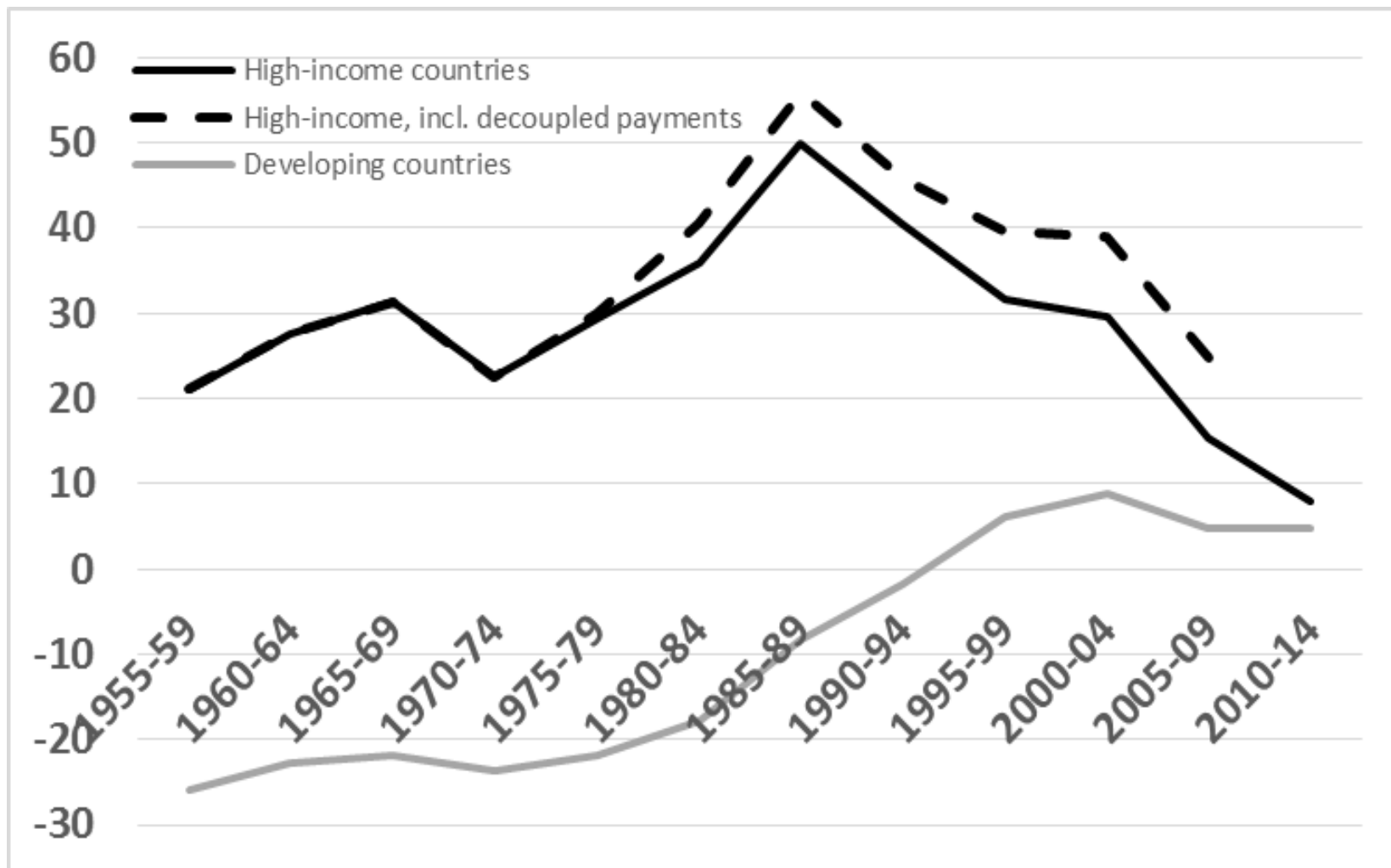
- NRA = % by which price of a farm product in domestic market exceeds that in int'l market



Convergence of average NRAs to near 0%

But, this hides much variation between countries, products and policy instruments

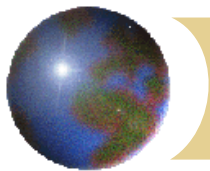
(Source: www.worldbank.org/agdistortions, updated from www.ag-incentives.org)





Will emerging economies avoid ag protectionism?

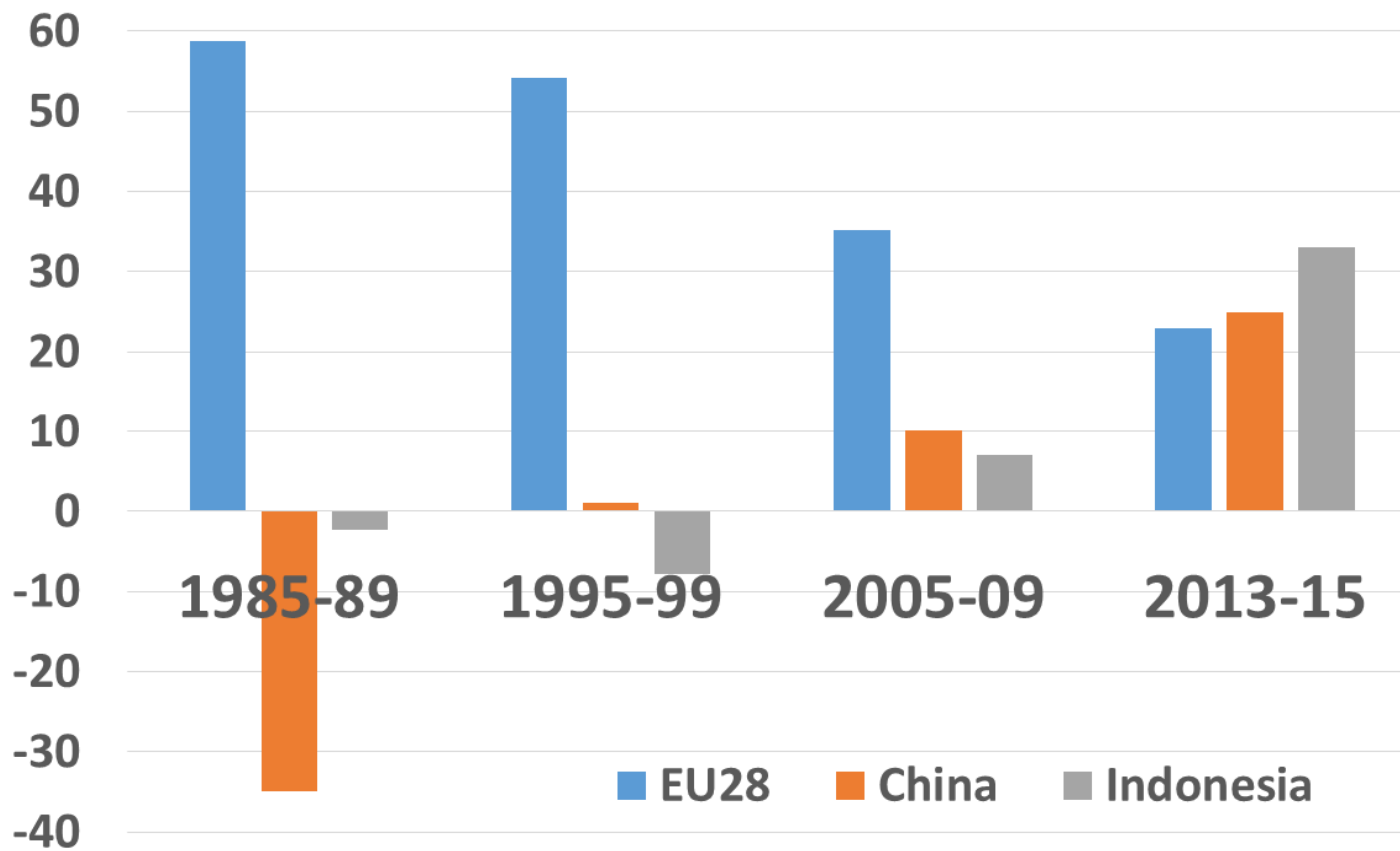
- ⊕ While dev. countries' anti-agric/pro-food consumer trade measures have been gradually phased out,
 - ⊕ ... they are being replaced by **supports for some farm prices** in some East Asian economies
 - helps supported farmers, but **at expense of other producers, and of consumers**

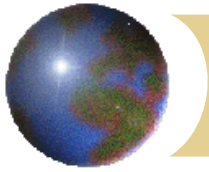


Agric protection is rising in emerging Asia:

China's & Indonesia's NRAs now exceed EU's

Sources: Huang et al. (2009), Warr (2009), David et al. (2009) and OECD (2016, 2017)



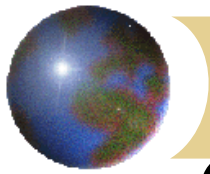


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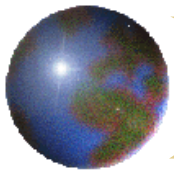
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Domestic policy objectives of food-importing HICs include reducing:

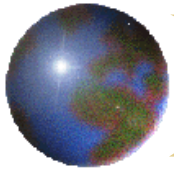
- ❑ national food insecurity
- ❑ soil and water degradation
- ❑ GHG emissions
- ❑ unhealthy and unsafe food
- ❑ animal mis-treatment

... none of which is best dealt with using agric trade policy instruments



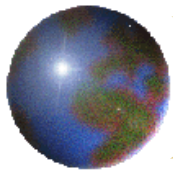
Alternatives to trade policy instruments

- ✦ Concerns about **production** and/or **processing standards** (farm chemicals, GMOs, hormones, animal welfare, too much sugar/fats, ...) can be met by retail supermarkets requiring **all** suppliers to meet consumer expectations
 - ✦ That is, require **foreign** suppliers to meet the **same standards** as **domestic** farmers

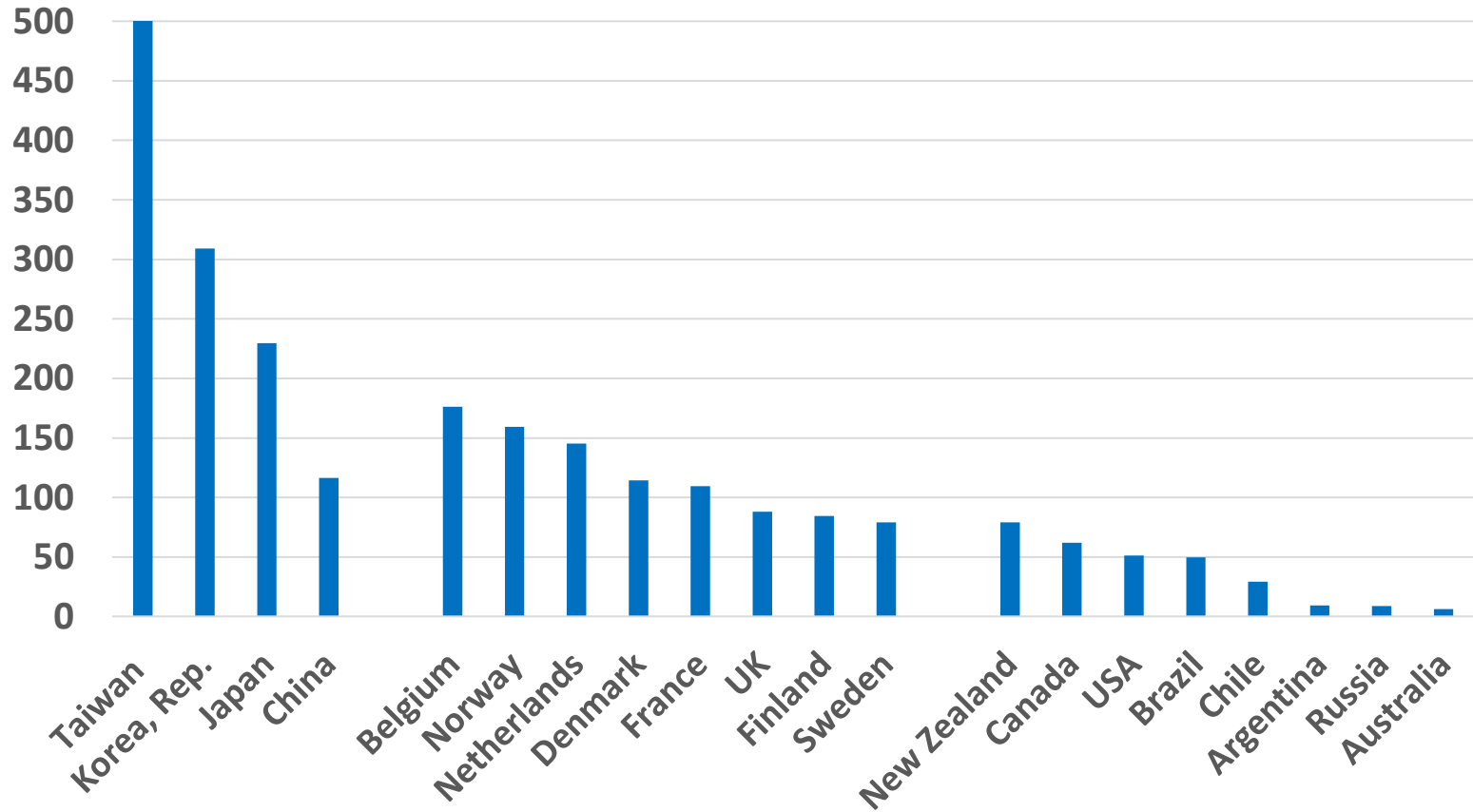


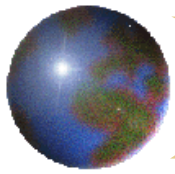
Alternatives to trade policy instruments

- ⊕ Concerns about **un-competitiveness** of domestic farmers can be met by boosting **domestic agric R&D** to lower farmers costs or raise quality of local products
- ⊕ ... in place of product price supports which encourage more input use, incl. of farm chemicals



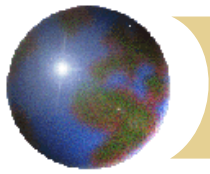
Fertilizer use per ha of agric area (kgs), 2014





Alternatives to trade policy instruments

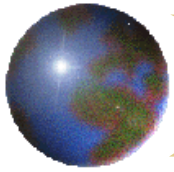
- ✚ Also, foregoing discrimination against imports increases the chance of **better trade agreements**, including via WTO
 - ✚ which benefits Sweden's (**and** rest of world's) exporters



Domestic policy objectives of developing countries include reducing:

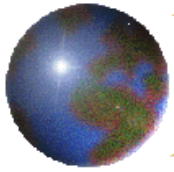
- ❑ national food insecurity
- ❑ rural-urban income gap
- ❑ poverty and malnutrition
- ❑ soil and water degradation
- ❑ unhealthy and unsafe food

... again, none of which is best dealt with using govt trade policy instruments



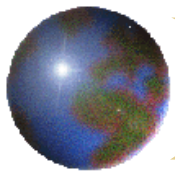
Domestic policy options for DCs

- 🌐 Boost ag productivity through investments in:
 - 🏠 agricultural **R&D**
 - can help farmers **and** consumers
 - 🏠 rural **infrastructure** (transport & communication)
 - also helps both farmers **and** consumers
 - 🏠 rural **education & health** (quality as well as quantity)
 - will also boost job prospects of those seeking **non-farm jobs**



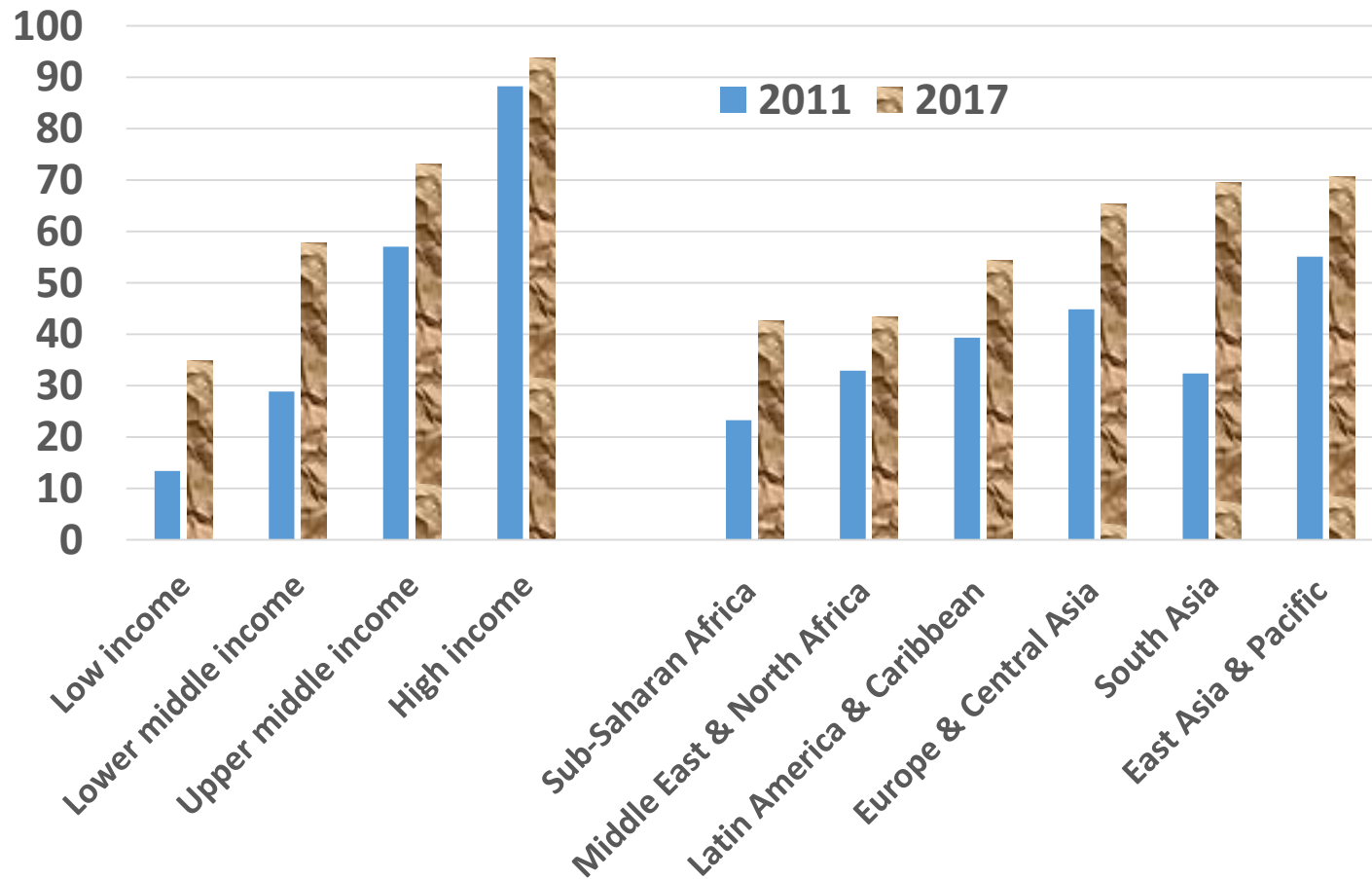
Domestic policy options for DCs

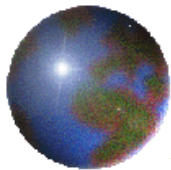
- ❖ Replace farm price-support policies with **generic conditional cash transfers** to poor
 - ❖ to reduce poverty, & rural-urban income gap, & provide funds to improve education & health
 - Design as a 'trampoline' rather than a 'safety net'
 - ❖ ***Now far more feasible with growth of e-bank accounts and ICT revolution, even in low-income countries***



Share of adult population with bank account or equivalent, 2011 and 2017 (%)

Source: World Bank (2018), The Global Findex Database





Thanks! (and two new books for further reading)

