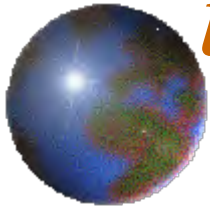




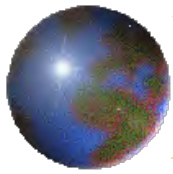
Harnessing globalisation & ICT to improve global food security



Kym Anderson

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EU Centres joint conference on
Fulfilling the Vision: European Union futures?
RMIT, Melbourne, 16-18 October 2017



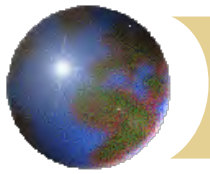
Why focus on agriculture & food?

✚ ... given it represents only 10% of world trade?

1. Agric is the first big sector to shed jobs as economic development proceeds

2. Partly as a result, agric markets attract heavy trade intervention

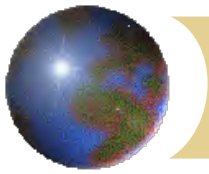
... without which food's share of world trade would be considerably larger



Why so much agric trade intervention by governments?

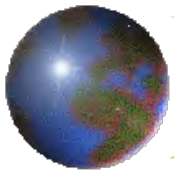
- ✚ Because all countries:
 - (a) want national food security, and
 - (b) dislike domestic food price spikes

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



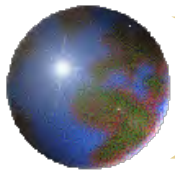
Outline

- ⊕ Agricultural globalization: evidence of effects
- ⊕ Policies employed to deal with perceived adverse outcomes of national openness to globalization
- ⊕ What better ways to deal with declining competitiveness of farm sector & food price spikes?



Distant past: role of int'l agricultural trade

- ✦ For agriculture's first 10,000 years, 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 the importing country
 - ✦ New or more-productive activities for farmers
 - ✦ Lower prices, greater product choice for food consumers

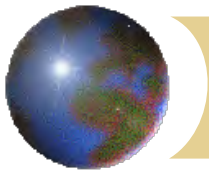


Industrial Revolution boosted agricultural intercontinental trade & agric export prices

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

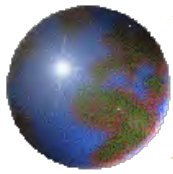
Williamson, J.G. (2012), 'Commodity Prices over Two Centuries: Trends, Volatility, and **Impact**', *Annual Review of Resource Economics* 4(6): 1-22

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



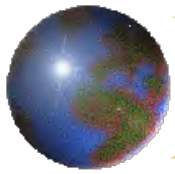
Then in mid-19th century, Europe opened farm trade

- ✦ 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



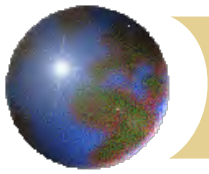
New technologies gave further boost to ag trade

- ✚ Prohibitive costs of trading final 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



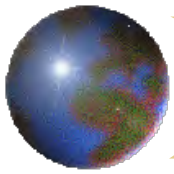
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 - Refrigeration for shipping (late 19th century)
 - Telegraph lowered communication costs
- ✚ Benefitted farmers and consumers in settler economies
- ✚ Benefitted consumers in W. Europe, but
- ✚ Hurt farmers in W. Europe
 - ✚ ... **led some countries to** return to agric protectionism



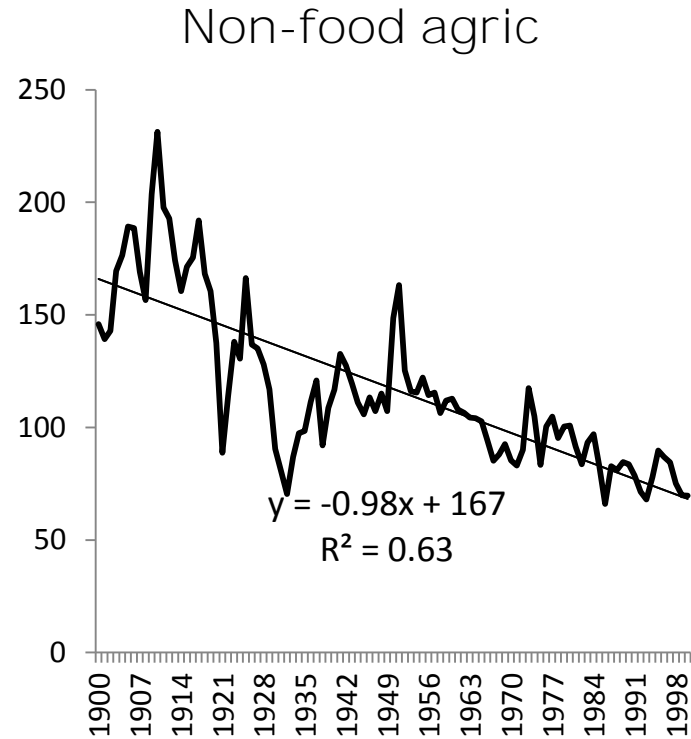
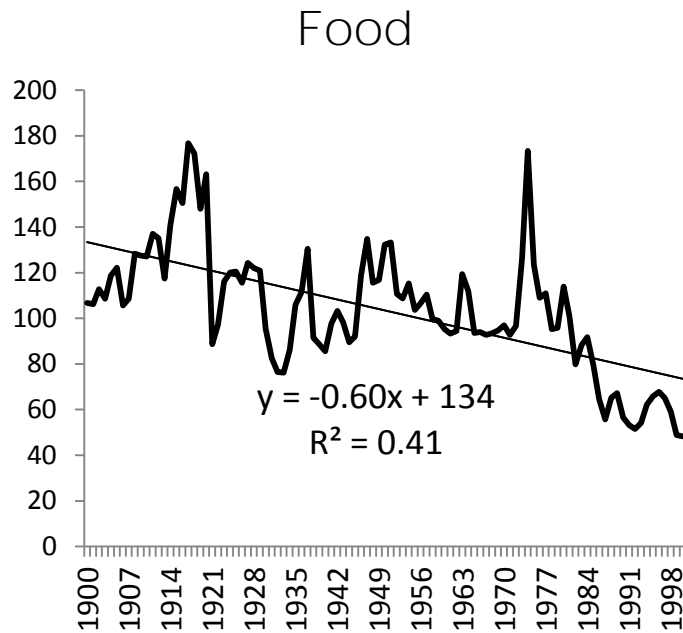
Real int'l prices of farm products since 1920

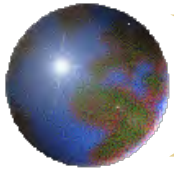
- ⊕ Reversal of earlier upward trend:
 - ⊞ real agricultural prices declined at 0.7%/year during 20th century
- ⊕ Largely due to new agric. Technologies, but exacerbated by rising ag. protectionism
 - ⊞ ... **which together ensured global supplies** expanded faster than slow-growing demand



Real int'l agric prices, 1900-2000

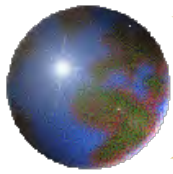
(Source: World Bank, 1977-79 = 100)





Outline

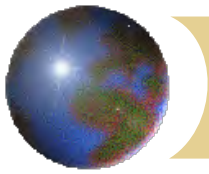
- ⊕ Agricultural globalization: evidence of effects
- ⊕ Policies employed to deal with perceived adverse outcomes of national openness to globalization
- ⊕ What better ways to deal with declining competitiveness of farm sector & food price spikes?



Post-war agric policies to mid-1980s

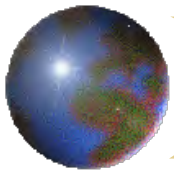
- ❖ Despite the GATT, high-income countries (HICs) used variable import restrictions and export subsidies to:
 - ❑ Protect, and **insulate**, farmers from int'l food markets
 - ❑ But helped largest farmers most

- ❖ 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



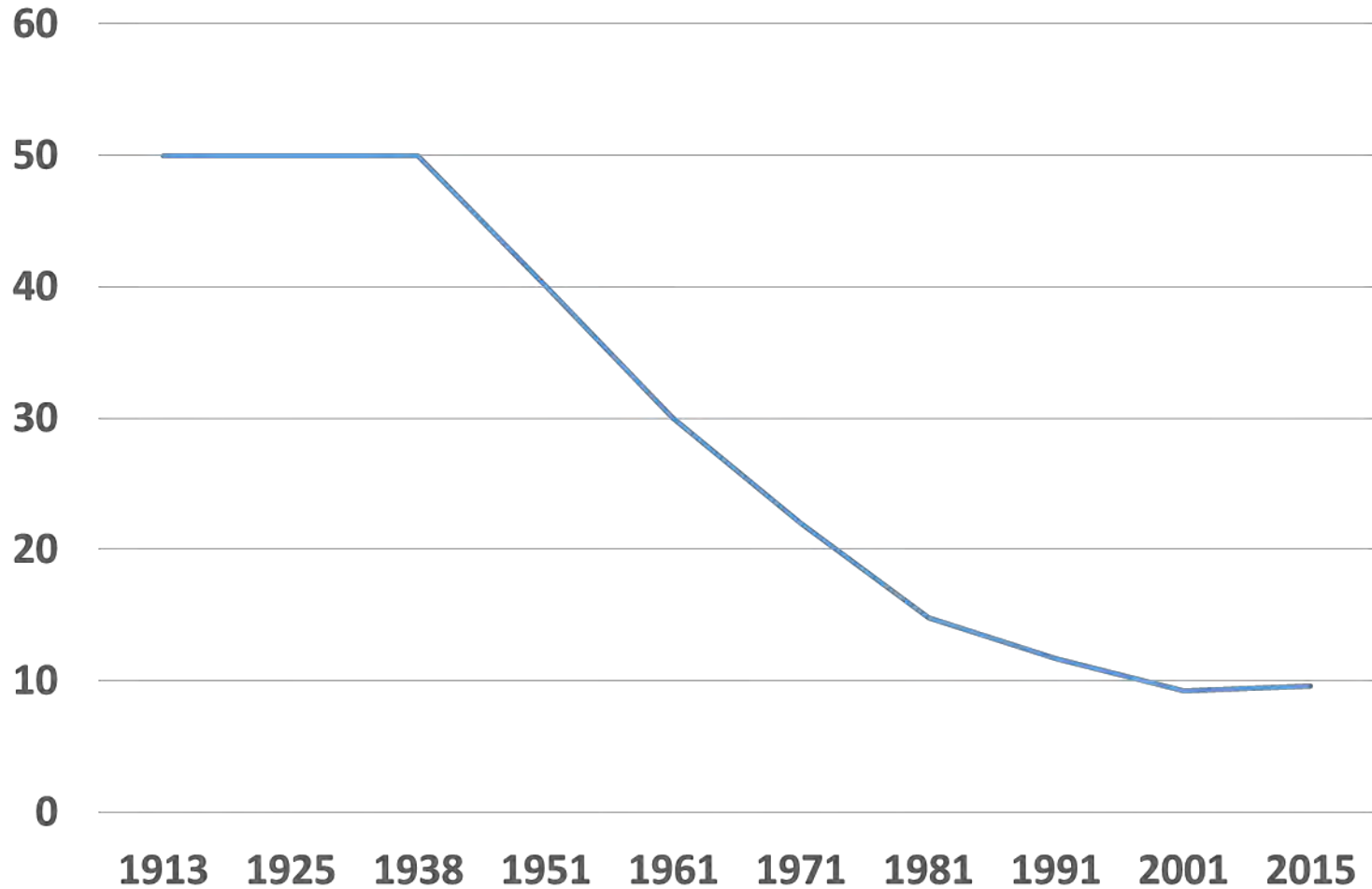
Policy impacts on international agric trade

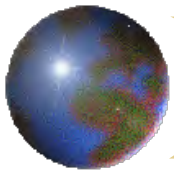
- ⊕ Agric protection growth in HICs, plus anti-agric policy bias in DCs from 1960s, plus insulation by both, had 3 trade impacts:
 - ⊠ shrunk **agriculture's share of global trade**,
 - ⊠ delayed rise in share of agric output exported,
 - ⊠ 'thinned' **int'l food markets** and made international food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



Share of ag & food in global merchandise trade (%)

(Sources: League of Nations, and WTO)



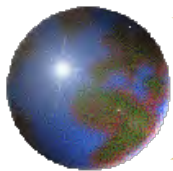


Farm policy reforms since mid-1980s

- ✚ 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

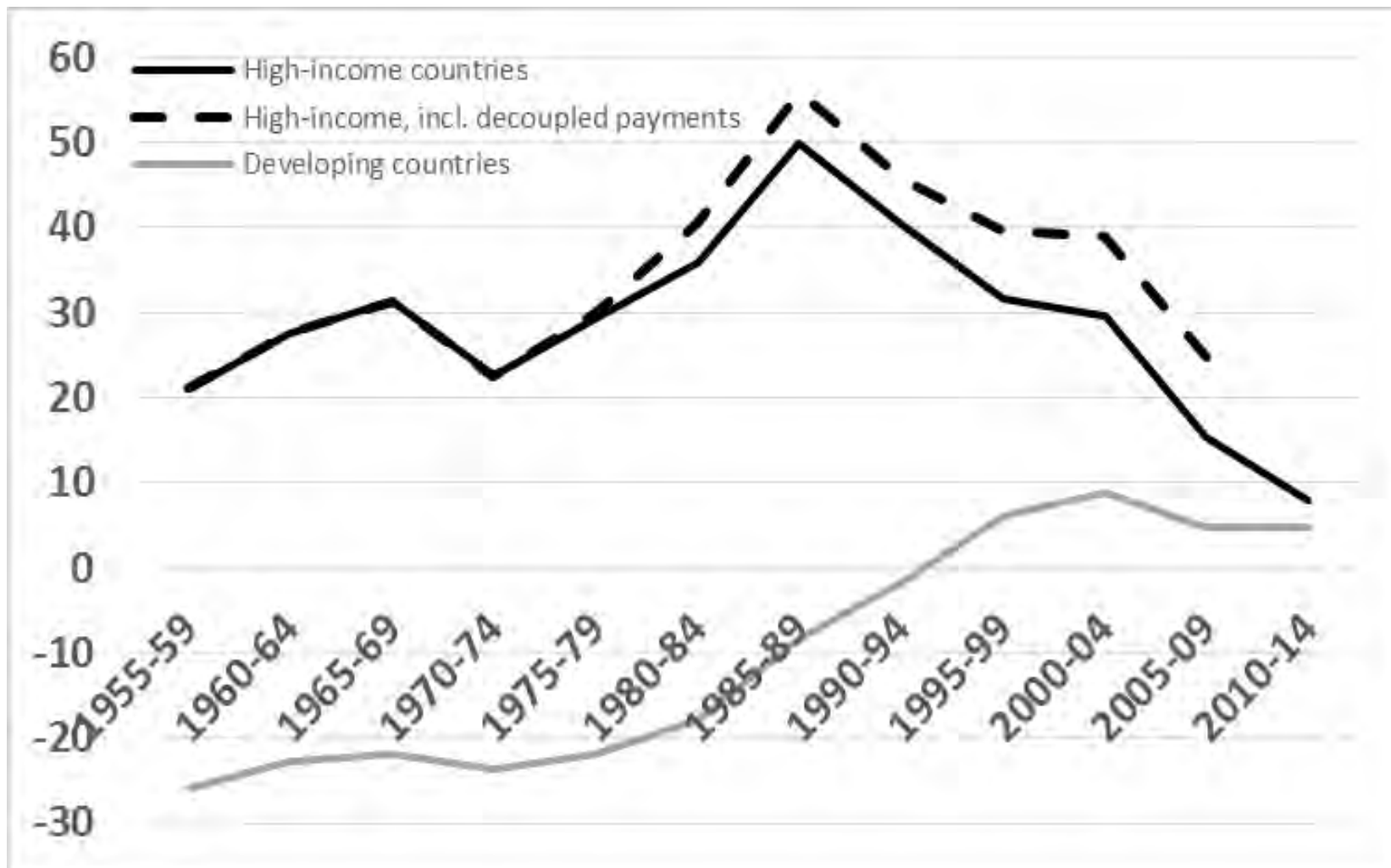
- NRA = % by which price of a farm product in domestic market exceeds that in int'l market

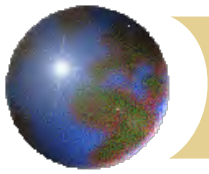


Convergence of average NRAs to near 0%

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

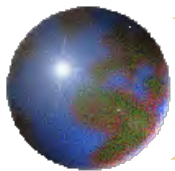
(Source: www.worldbank.org/agdistortions, updated from www.ag-incentives.org)





Will emerging economies avoid ag protectionism?

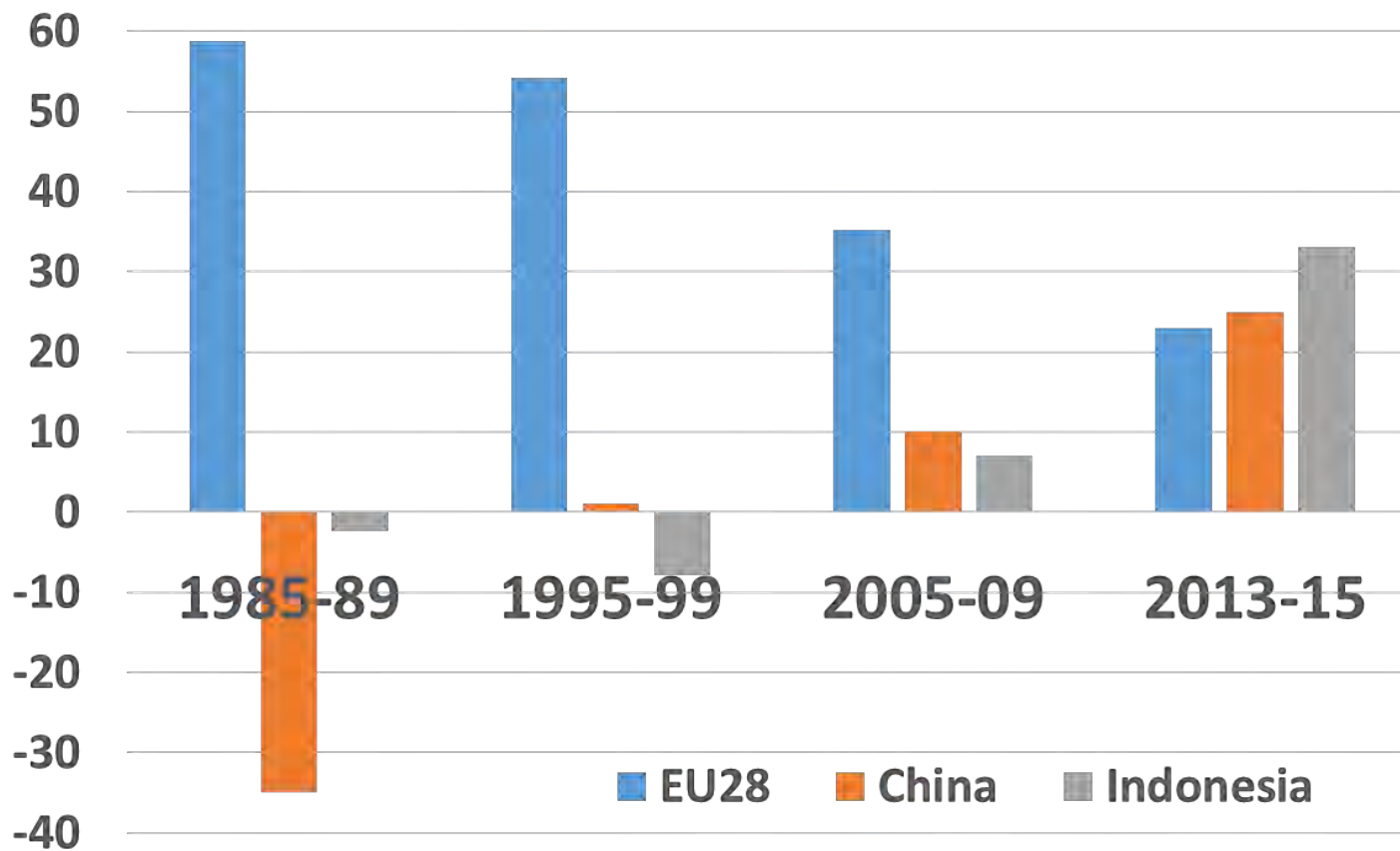
- ✚ **While dev. countries' anti-agric/pro-consumer** trade measures have been gradually phased out,
- ✚ **... they are being replaced by** supports for some farm prices in some East Asian economies
 - helps some farmers, but at the expense of other producers, and of consumers

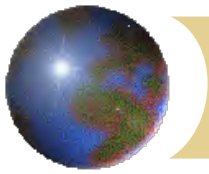


Agric protection is rising in emerging Asia:

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

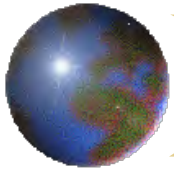
Sources: Huang et al. (2009), Warr (2009), David et al. (2009) and OECD (2016, 2017)





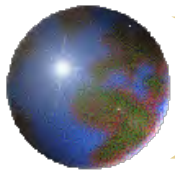
Outline

- ⊕ Agricultural globalization: evidence of effects
- ⊕ Policies employed to deal with perceived adverse outcomes of national openness to globalization
- ⊕ What better ways to deal with declining competitiveness of farm sector & food price spikes?



Outline

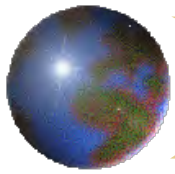
- ⊕ Agricultural globalization: evidence of effects
- ⊕ Policies employed to deal with adverse outcomes
- ⊕ What better ways for DCs to deal with declining competitiveness of farm sector, & food price spikes?



Domestic policy objectives of developing countries include reducing:

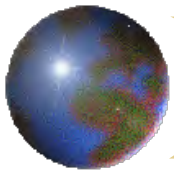
- ❑ national food insecurity
- ❑ rural-urban income gap
- ❑ poverty and malnutrition
- ❑ soil and water degradation
- ❑ unsafe food

... none of which is best dealt with using a trade policy instrument



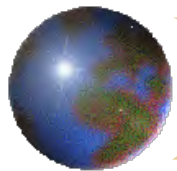
Domestic policy options for DCs

- ✚ 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



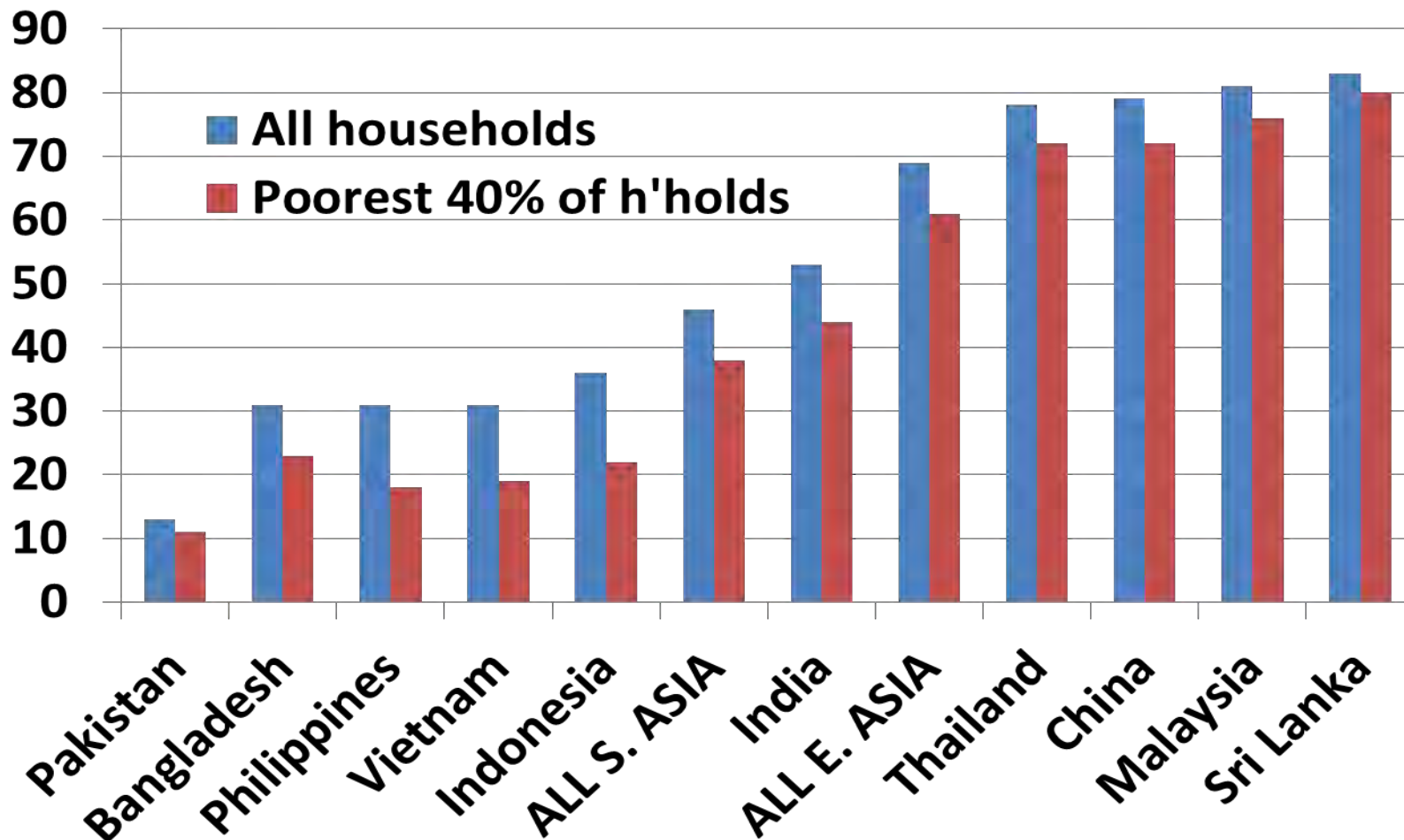
Domestic policy options for DCs

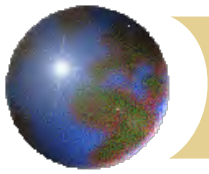
- ❖ Replace farm price-support policies with generic conditional cash transfers to poor
 - ❖ to reduce poverty, & rural-urban income gap, & provide funds to improve educ. and health
 - Design as a 'trampoline' rather than a 'safety net'
 - ❖ *Now far more feasible with growth of e-bank accounts and ICT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



Share of adult population with bank account or equivalent, 2014 (%)

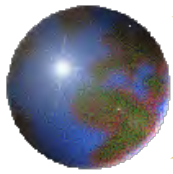
Source: World Bank (2015), The Global Findex Database



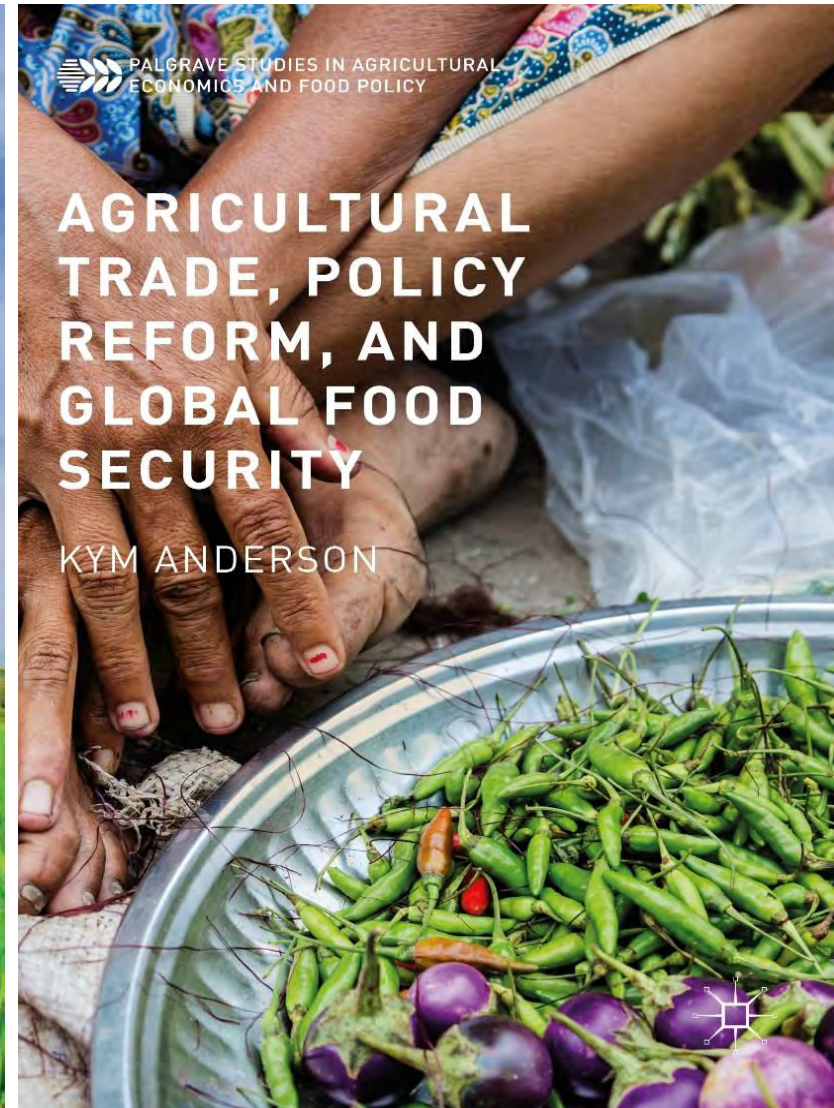
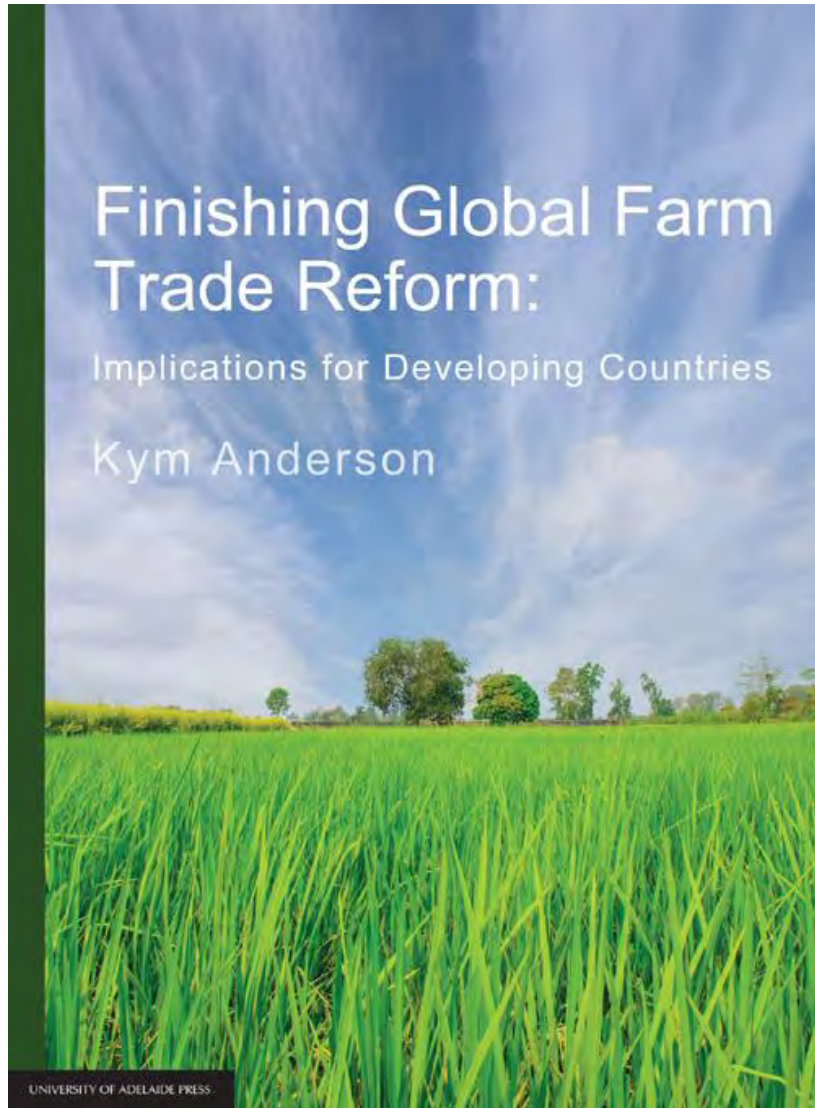


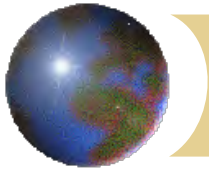
Implications for EU & Cairns Group at WTO

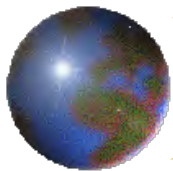
- ✦ Following outlawing of agric export subsidies in Dec. 2015 WTO Ministerial, use Dec. 2017 WTO Ministerial to bring greater discipline to domestic price supports
- ✦ **... and keep using FTAs to bring down market access barriers (hopefully so as to eventually multilateralize and bind at WTO)**



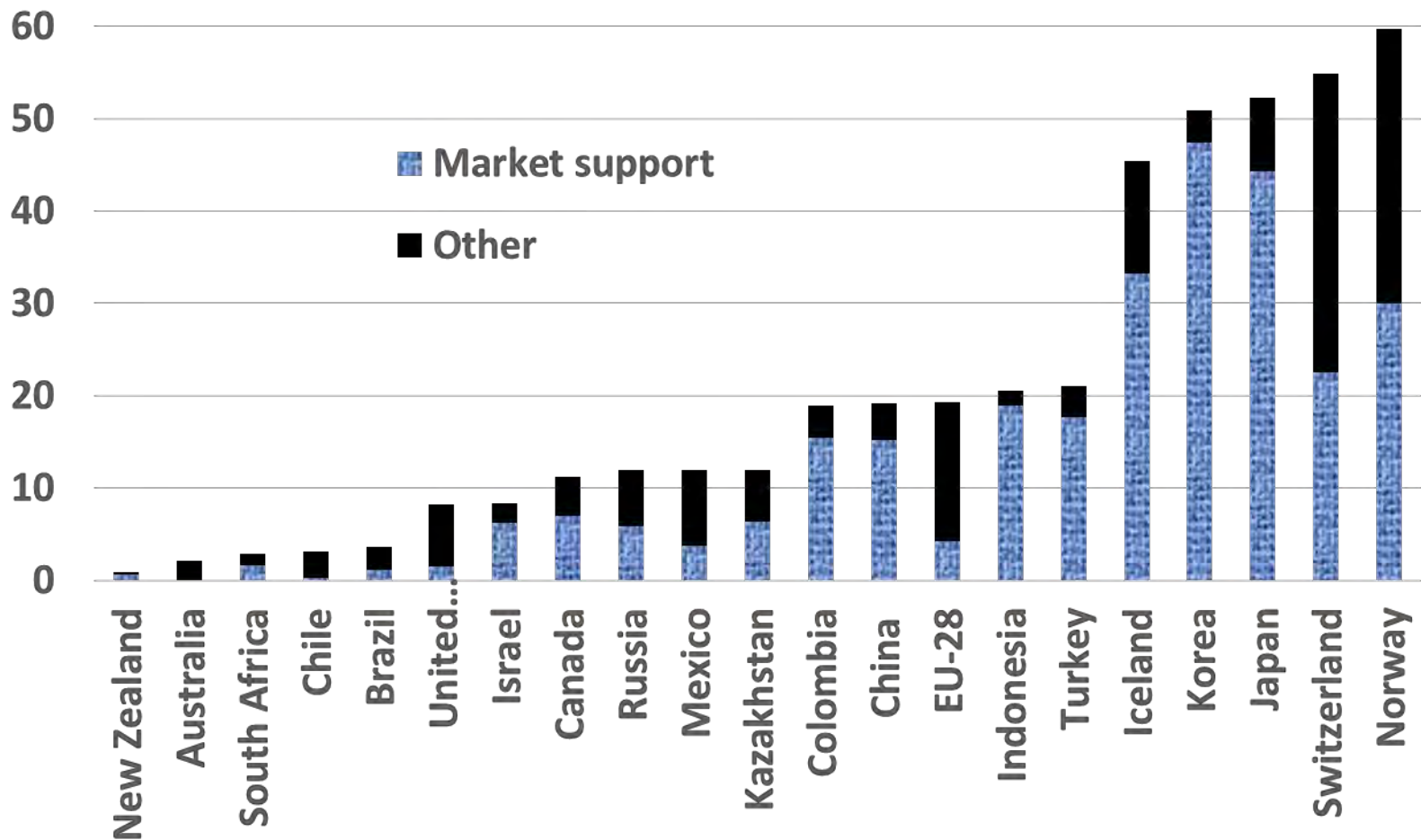
Thanks! (and two new books for further reading)

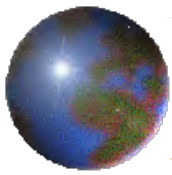






Contribution of market-distorting and other support to agric PSEs, 2012-14 (Source: OECD)

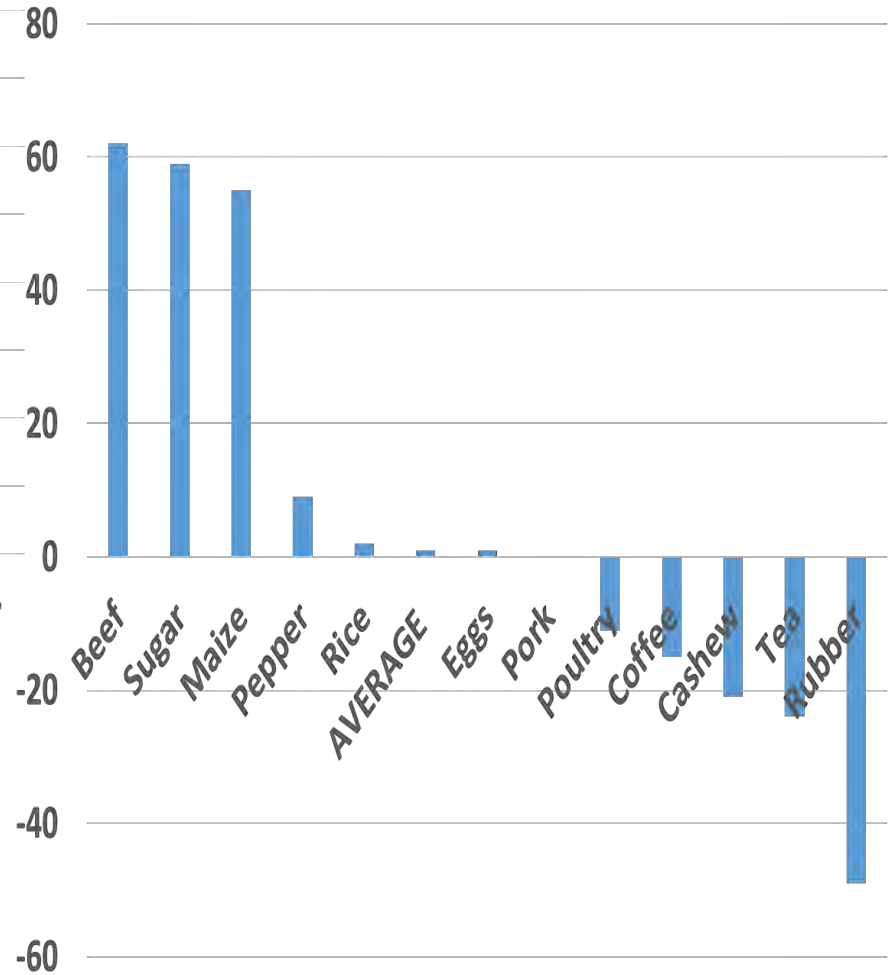
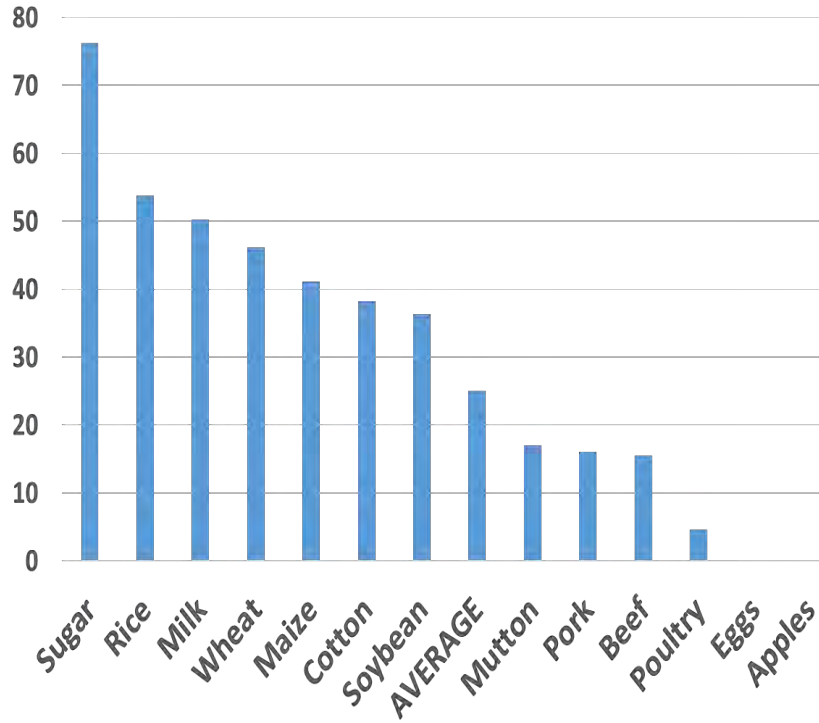


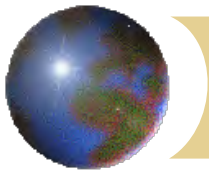


Wide range of product NRAs (% 2013-15) adds to welfare cost:

China

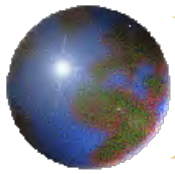
Vietnam





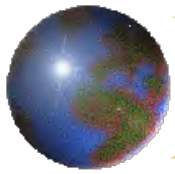
Thanks!

- ✦ Anderson, K. (ed.), *Distortions to Agricultural Incentives: A Global Perspective, 1955-2007*. London: Palgrave Macmillan, 2009
- ✦ Anderson, K., J. Cockburn and W. Martin (eds.), *Agricultural Price Distortions, Inequality and Poverty*. Washington DC: World Bank, 2010
- ✦ **Martin, W. and K. Anderson, 'Export Restrictions and Price Insulation During Commodity Price Booms', *Amer Jou of Agric Econ* 94(2): 422-27, Jan. 2012**
- ✦ Anderson, K., **M. Ivanic and W. Martin, "Food Price Spikes, Price Insulation, and Poverty", Ch. 8 in *The Economics of Food Price Volatility***, eds. J.-P. Chavas, D. Hummels and B. Wright, University of Chicago Press for NBER, 2014
- ✦ Anderson, K., *Agricultural Trade, Policy Reforms, and Global Food Security*, London: Palgrave Macmillan, 2016
- ✦ Anderson, K., *Finishing Global Farm Trade Reform: Implications for Developing Countries*, University of Adelaide Press, 2017



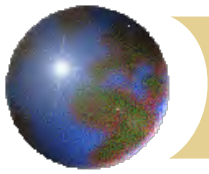
What about temporarily altering trade restrictions to stabilize domestic food prices?

- ✚ Many developing countries impose or increase export restrictions, or lower or suspend import **restrictions, when int'l food prices spike up**
 - ✚ and conversely when prices slump



What about temporarily altering trade restrictions to stabilize domestic food prices?

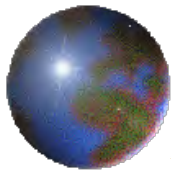
- ✚ Many developing countries impose or increase export restrictions, or lower or suspend import restrictions, when int'l food prices spike up
 - ✚ and conversely when prices slump
- ✚ which exacerbates **the int'l price change**, &
- ✚ reduces adjustments by both producers and consumers, & so prolongs the spike period



Household effects of temporarily altering food trade restrictions

- ✚ Empirically, such measures have been shown also to do little to reduce global number of people falling below the poverty line

(Anderson, K., M. Ivanic, and W. Martin. 2014. 'Food Price Spikes, Price Insulation, and Poverty'. In *The Economics of Food Price Volatility*, edited by J.-P. Chavas, D. Hummels and B. Wright, University of Chicago Press for NBER)



Volume of world ag production & exports

(Source: WTO, 2005 = 100)

