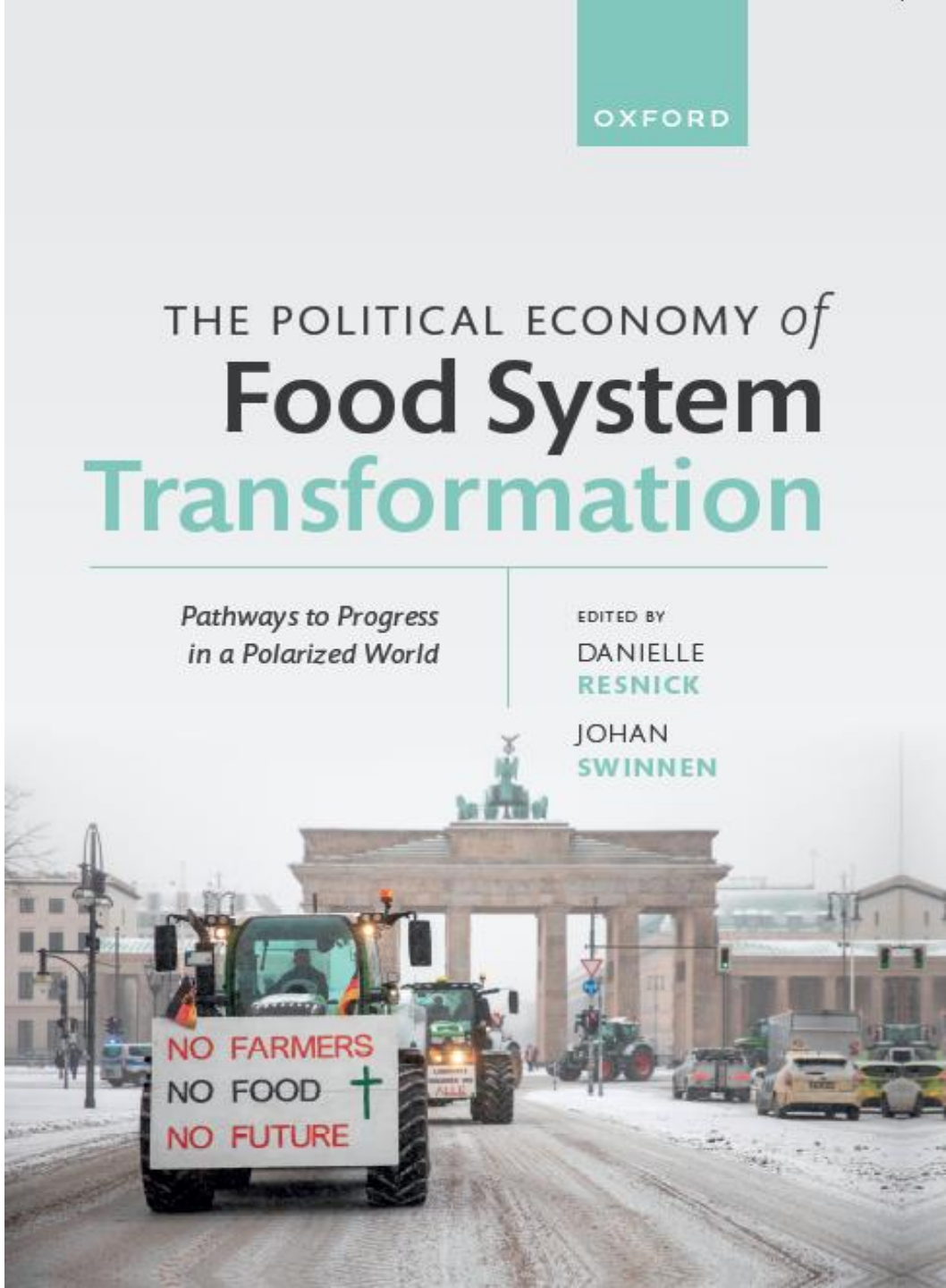
THE POLITICAL ECONOMY OF FOOD SYSTEM TRANSFORMATION

Johan Swinnen

BIDS, 10 December 2024



Political economy of agricultural policies

Some key questions :

Why heavy market distortions: farmers subsidized in HICs and taxed in LICs ?

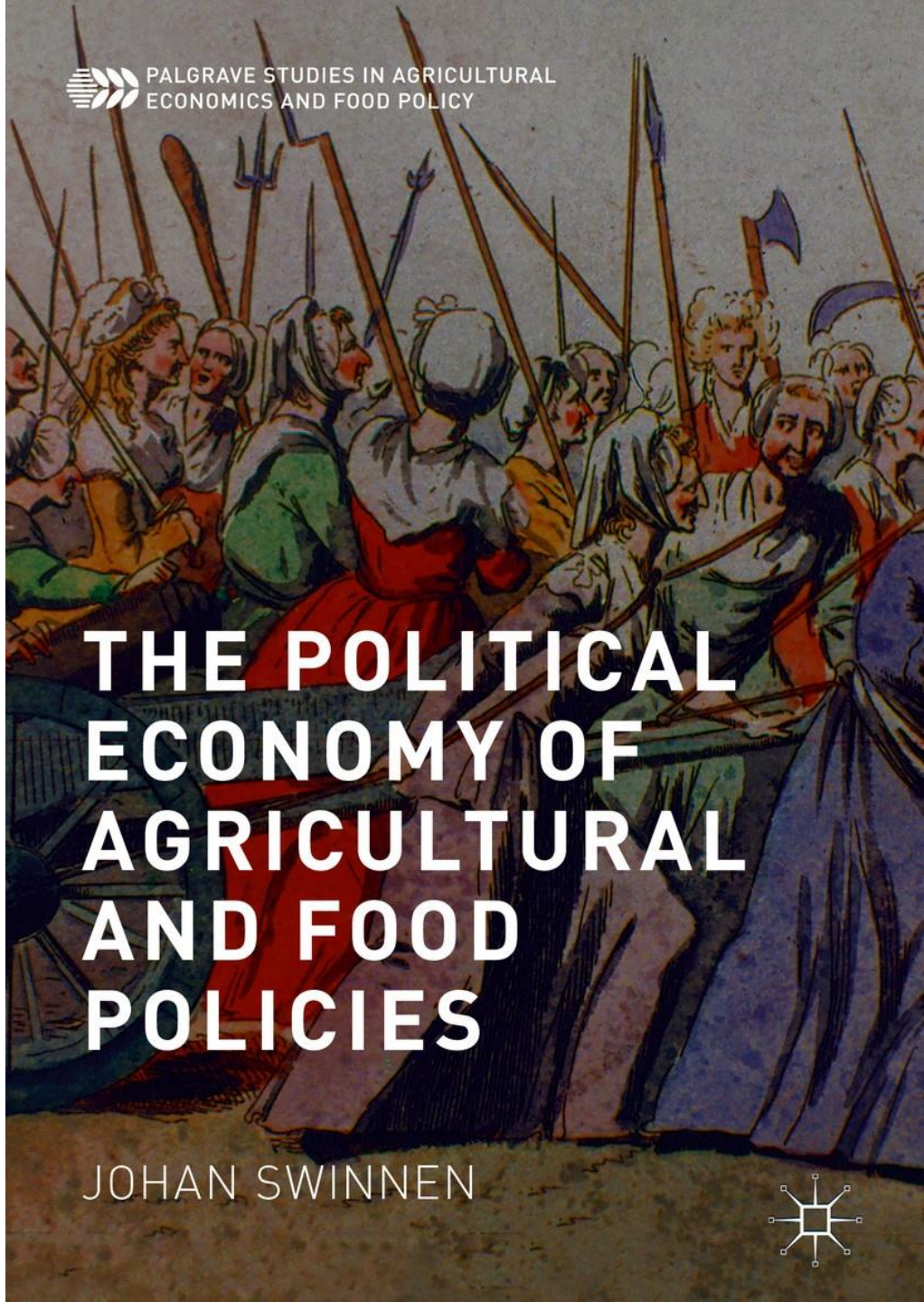
Why preference for inefficient instruments ?

Why suboptimal land rights persist ?

Why underinvestment in R&D ?

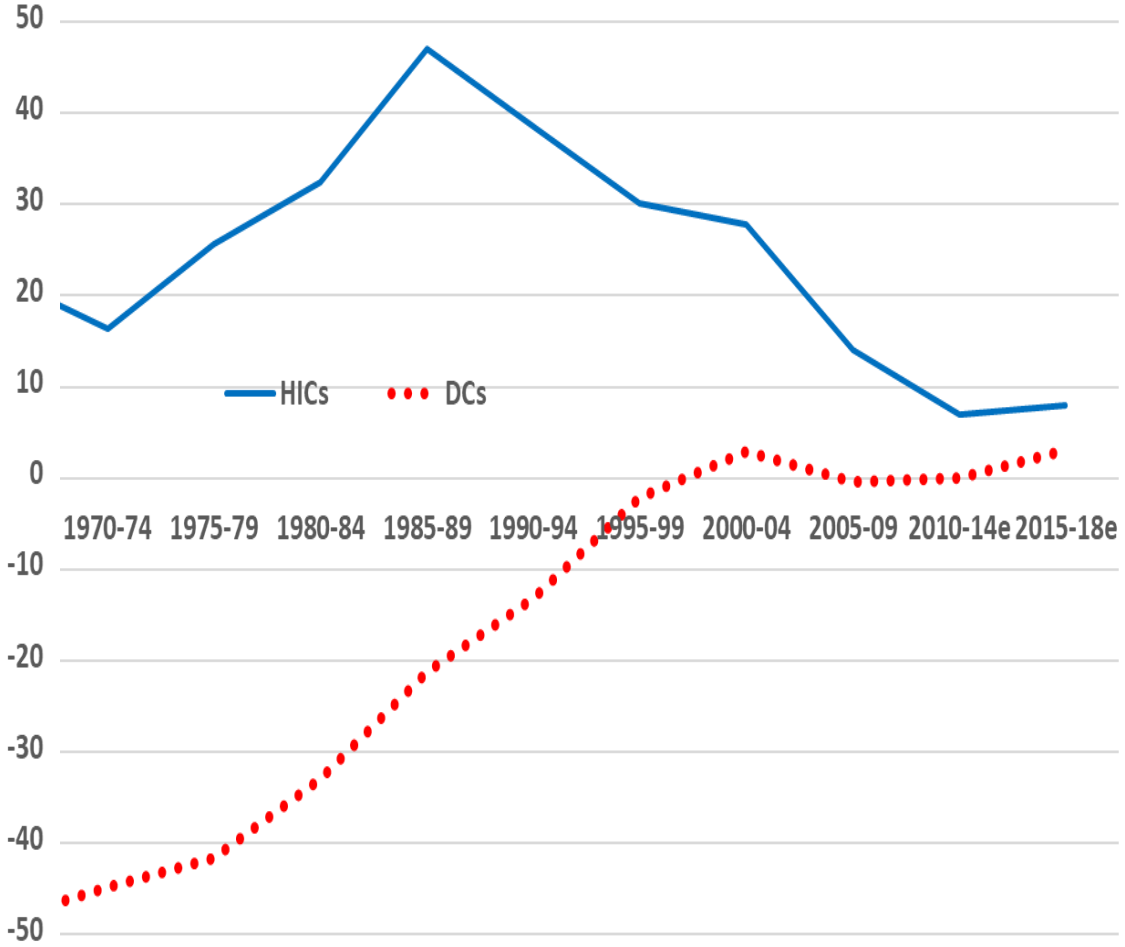
What determines food safety and quality standards ?

…

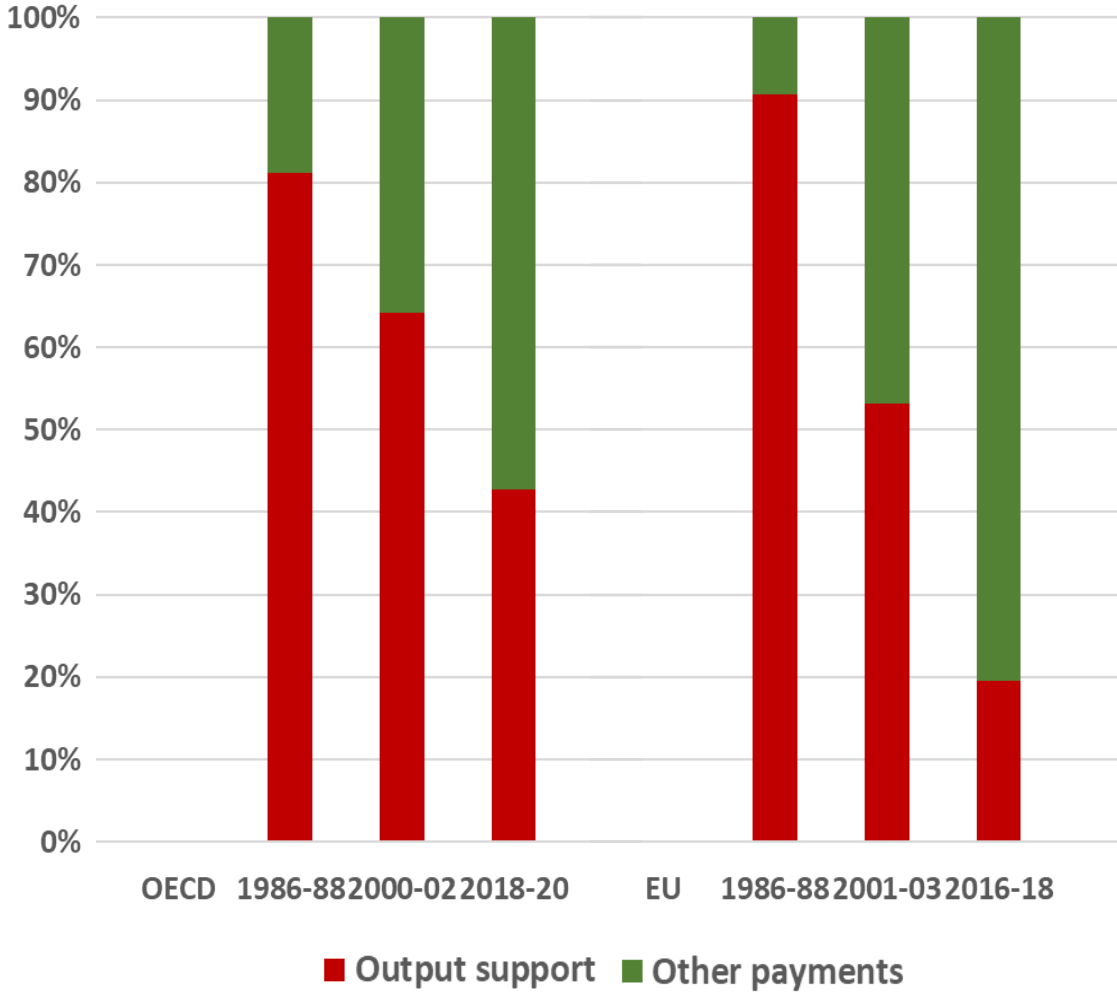


Agricultural policy – major global reforms are possible

From more to less distortions 1970 - 2020



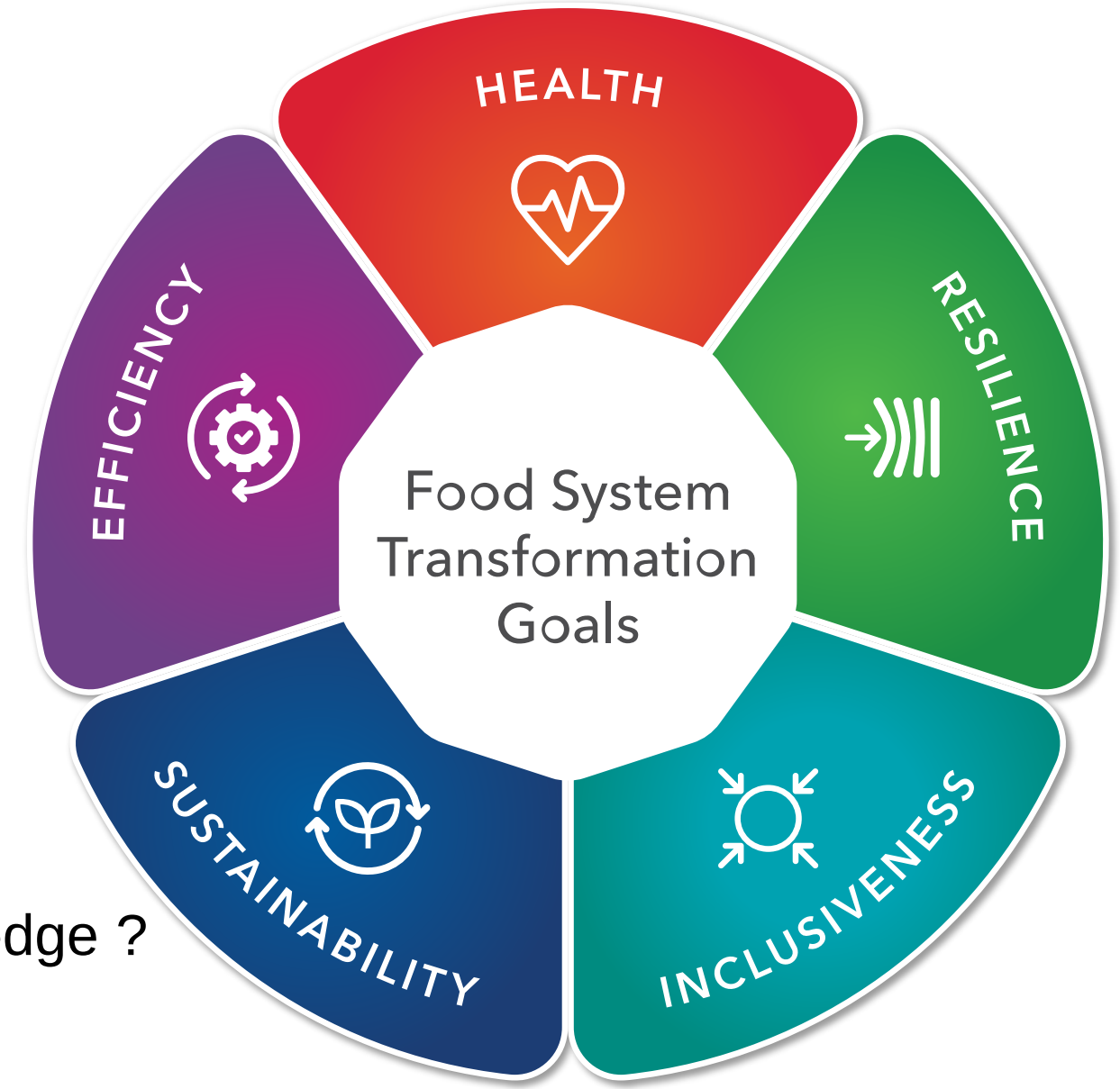
From more to less distortive policy instruments 1980 - 2020



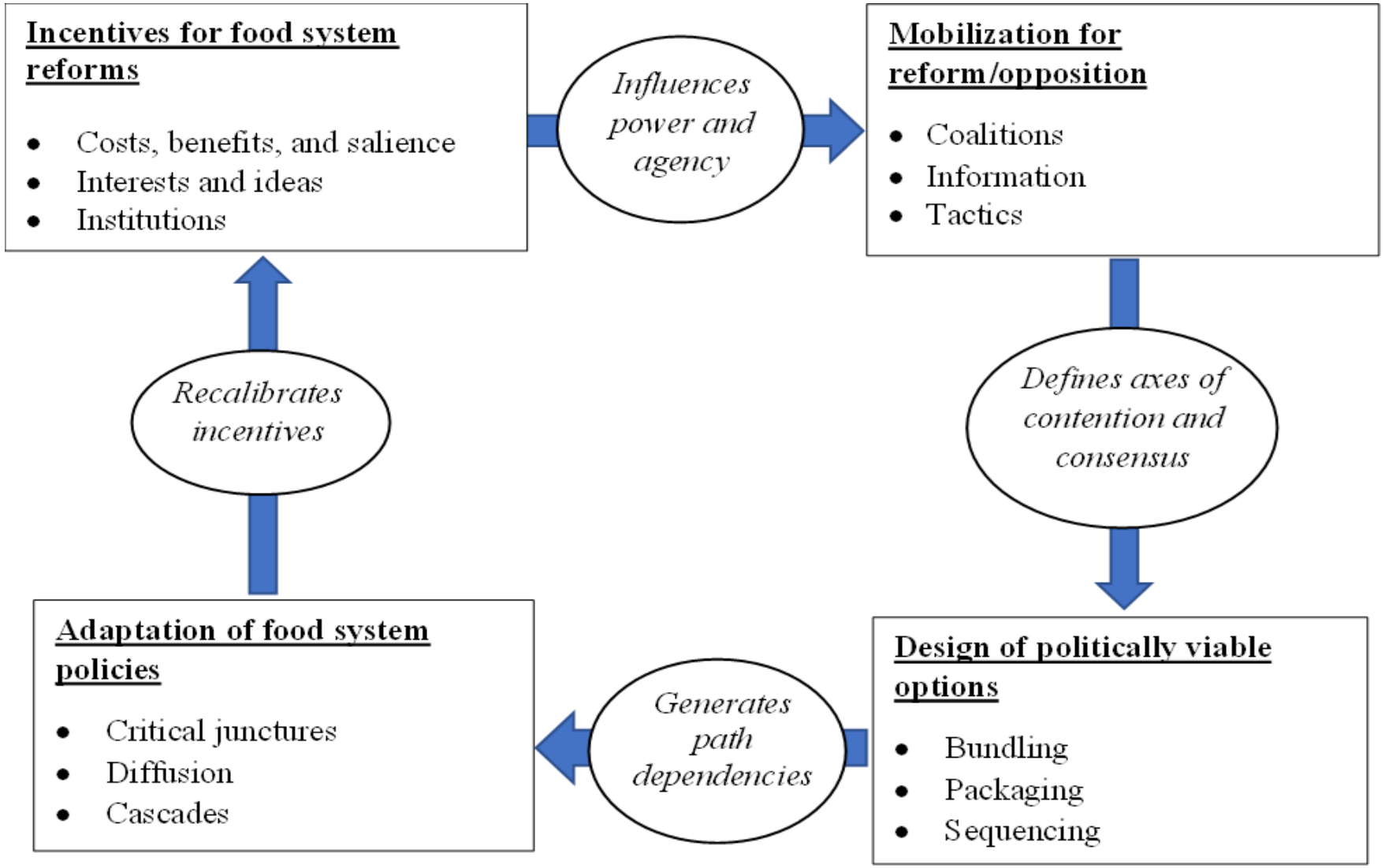
Source: Anderson et al; OECD

From agricultural policy reform to food systems transformation

More objectives
More policy instruments
More trade-offs / synergies
More actors
More polarization
More information / less knowledge ?
…
More difficult to reform ?



Political Economy Framework for Food Systems Transformation



Source: Resnick & Swinnen (2023)

Some key issues

- Key actors in food systems
  - Vertical
  - Horizontal
  - Global vs domestic
- Static and dynamic equilibria
- Shocks and political economy
- Information and its providers
- Facts, interests, and values
- Bundling for economics and politics

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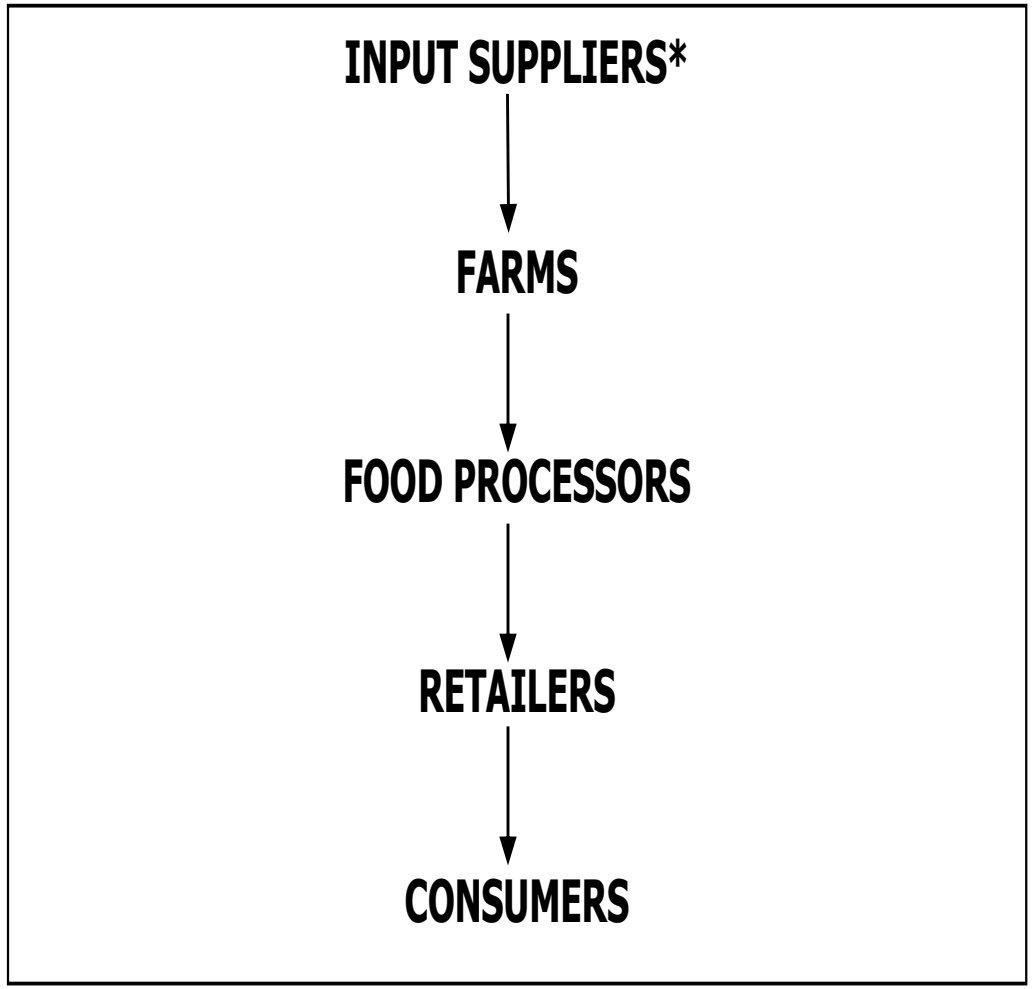
Value chains and policy coalitions
Who are the “producers” and “consumers” ?



Barrett, Christopher B., Thomas Reardon, Johan Swinnen, and David Zilberman. 2022. "***Agri-food Value Chain Revolutions in Low- and Middle-Income Countries.***" Journal of Economic Literature, 60 (4): 1316–77**.**

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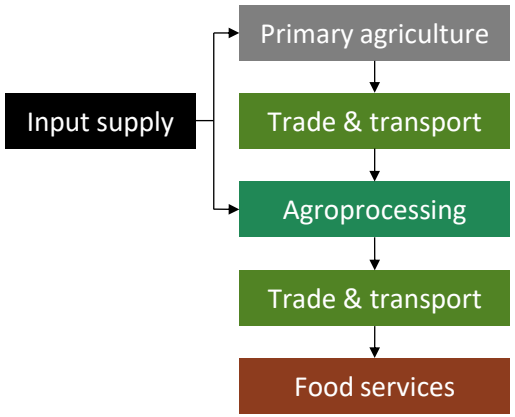
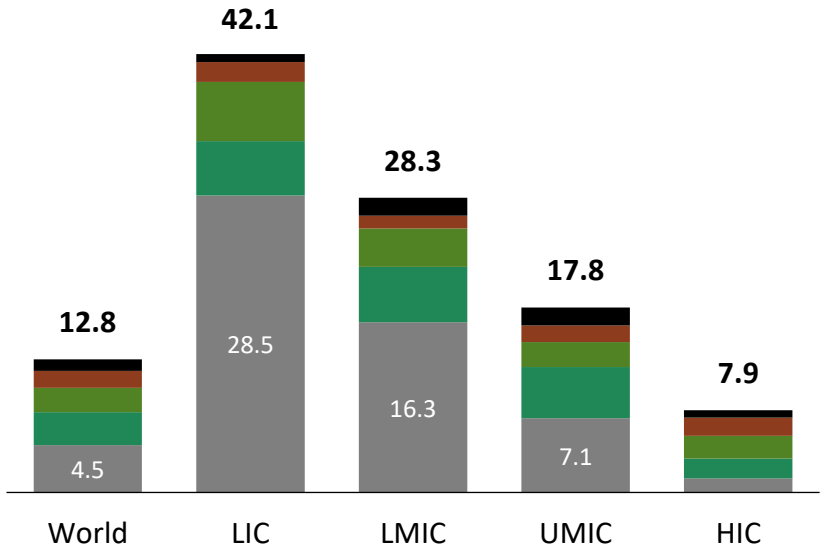
Importance of AVC components in development



AFS GDP = $11.7 trillion in 2021 (13% of global GDP | 62% in developing countries)
AFS employment = 1.3 billion workers in 2021 (38% of global workforce | 95% in developing countries)

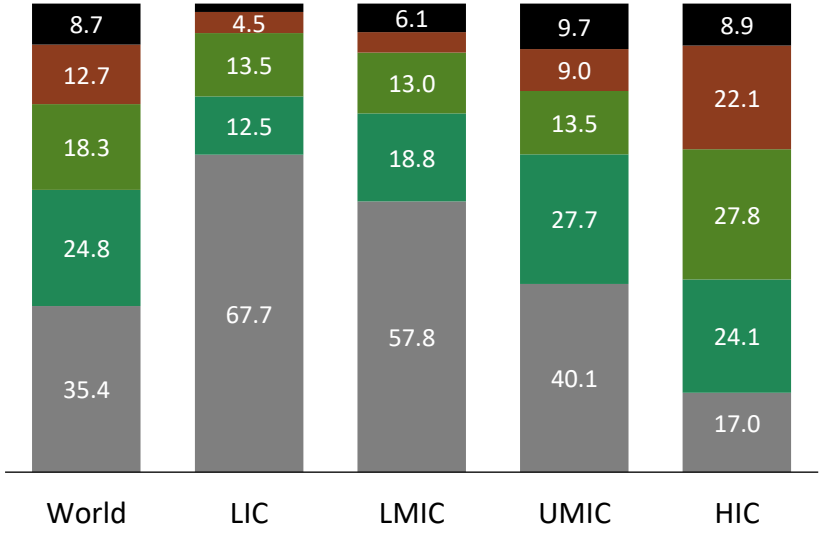
1 Share of total GDP in 2021 (%)

- Agriculture and the agrifood system contribute less to the overall economy in more developed countries



2 Share of agrifood system GDP in 2021 (%)

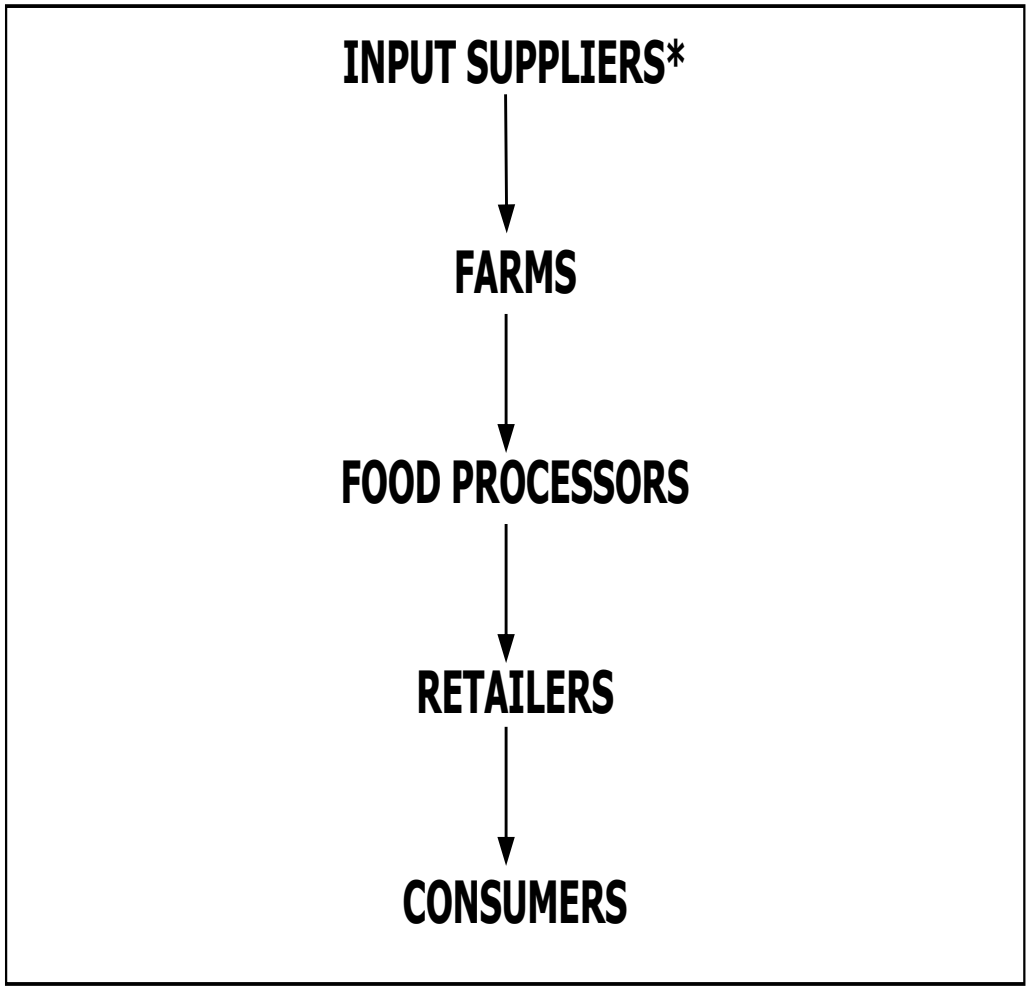
- Off-farm components are more important parts of the agrifood system in more developed countries



LIC = low-income | LMIC = low-middle | UMIC = upper-middle | HIC = high-income

Source: IFPRI Global Agrifood System Database of 217 countries (2023)

Value chains and policy coalitions
Who are the “producers” and “consumers” ?



- Convenient for theory and empirics
  - Who are they ?
- Policy itself defines the distinction
  - Import tariffs
  - Land regulations
  - The “Farm Bill” in the USA
- Coalitions allow to combine comparative advantages in political influence (scale, votes, $, …)
  - Post-WW II growth in OECD subsidies coincided with growth of agribusiness, etc. and relative decline in farm incomes
- Technology, policy and new players
  - Biofuel industry
  - Insurance industry
  - Technology companies

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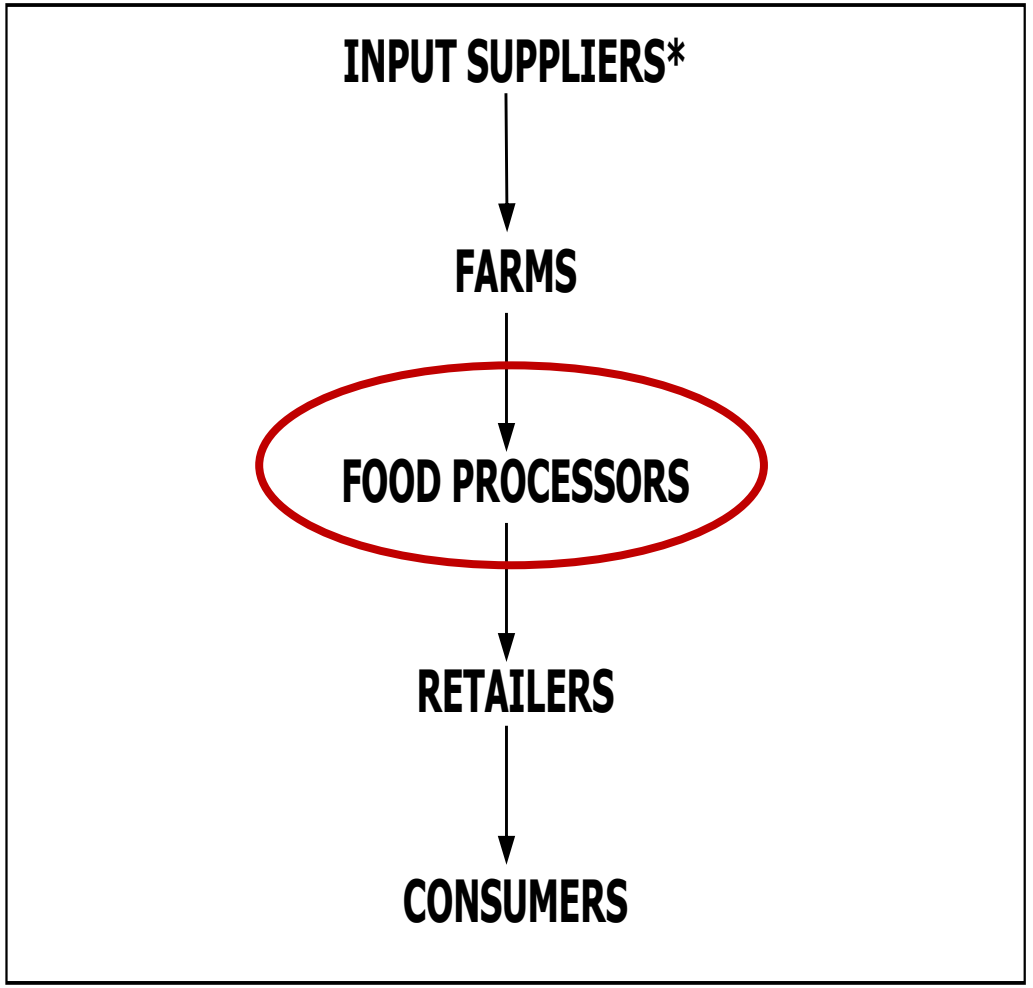
Value chains and policy coalitions

Ex : EU regulation on Unfair Trading Practices (UTPs) in value chains



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Value chains and (complex) policy coalitions

Ex : The definition of meat in 21st century

The Washington Post

Democracy Dies in Darkness

BUSINESS

Veggie burgers were living an idyllic little existence. Then they got caught in a war over the future of meat.

Value chains and (complex) policy coalitions

The definition of meat in 21st century

- In 2019, officials in nearly 30 states proposed bills to prohibit companies from using words such as meat, burger, sausage, jerky or hot dog unless the product came from an animal that was born, raised and slaughtered in a traditional way.
- The **cattle associations** traditionally have enormous political power
  - "Traditional animal agriculture is looking to the lessons learned by the dairy industry, which saw cow's milk sales dwindle by $1.1 billion last year, much of that business scooped up by alternative milks such as almond and oat."
- **Top veggie brands** are owned by **food giants** such as Kellogg and Kraft Heinz.
- **Major meat processors** — Tyson Foods and Smithfield Foods, for instance — aren't taking sides, relying on the ranchers for traditional meat but also investing heavily in these new alternatives they believe consumers increasingly desire.
- Counter-lobbying by investors in **specialized companies**, e.g., **advocacy groups** (Animal Legal Defense Fund, Good Food Institute), **plant-based food companies** (Impossible Burger, Beyond Meat, Tofurkey **lab-grown meat companies** (Cellular Agriculture Society CAS)
- Some of the biggest **retailers and restaurants** in America focus on plant-based alternatives.

From the Washington Post 25 August 2019

FIG. 1: Just Four Companies Control Three-Quarters of the Lab Meat Market

Market shares of the top plant-based meat producers

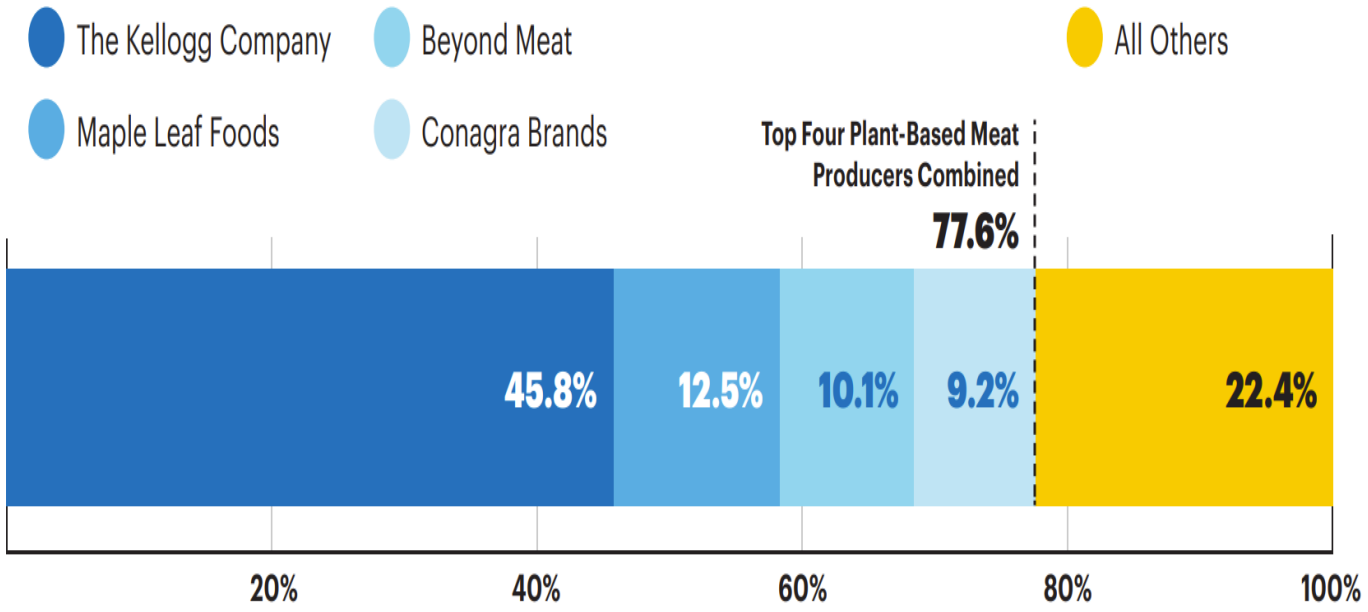

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FIG. 2: Big Meat Is Gobbling Up the Lab Meat Market

Cultured and plant-based meat portfolios of the four largest meatpackers, ranked by U.S. market share of meat and poultry

MEATPACKER	COMPANY/BRAND
* Indicates minority stake	
1 JBS S.A.	BioTech Foods Incrível Planterra Foods Vivera
2 Tyson Foods	Beyond Meat* First Pride Future Meat Technologies* Updside Foods* MycoTechnology Inc.* New Wave* Raised & Rooted
3 Cargill	Aleph Farms* Bflike* PlantEver Upside Foods*
4 WH Group (Smithfield)	Pure Farmland

Globalization, value chains and policy coalitions (1)

Distinction between “domestic” and “foreign” interests is less clear in global value chains where foreign companies use domestic inputs and where domestic companies use foreign inputs.

This affects political incentives and thus policy measures

- Data from 1995-2015
- 150 countries
- Tariffs and NTMs

Food Policy 118 (2023) 102469

Contents lists available at ScienceDirect

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journal homepage: www.elsevier.com/locate/foodpol

Impact of global value chains on tariffs and non-tariff measures in agriculture and food

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[b] European Commission Joint Research Centre, Via Enrico Fermi, 2749, 21027 Ispra, Italy
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ARTICLE INFO

Keywords:
Global value chains
Tariffs
NTMs
Political economy
Agri-food sector

ABSTRACT

We analyse whether global value chains (GVCs) reduce trade barriers in the agricultural and food sectors as they affect lobbying and government incentives. Political economy theory predicts that tariffs will be lower in countries integrated in GVCs and that the effect will be stronger outside regional trade agreements (RTAs). We use data from 1995 to 2015 from 160 countries on tariffs and non-tariff measures (NTMs) in the agri-food sector. Our evidence indicates that GVC integration, measured as domestic (foreign) value added in foreign (domestic) final goods, does affect trade policy. Stronger GVC integration is associated with lower tariffs, but mainly outside RTAs, and lower NTMs, both inside and outside RTAs.

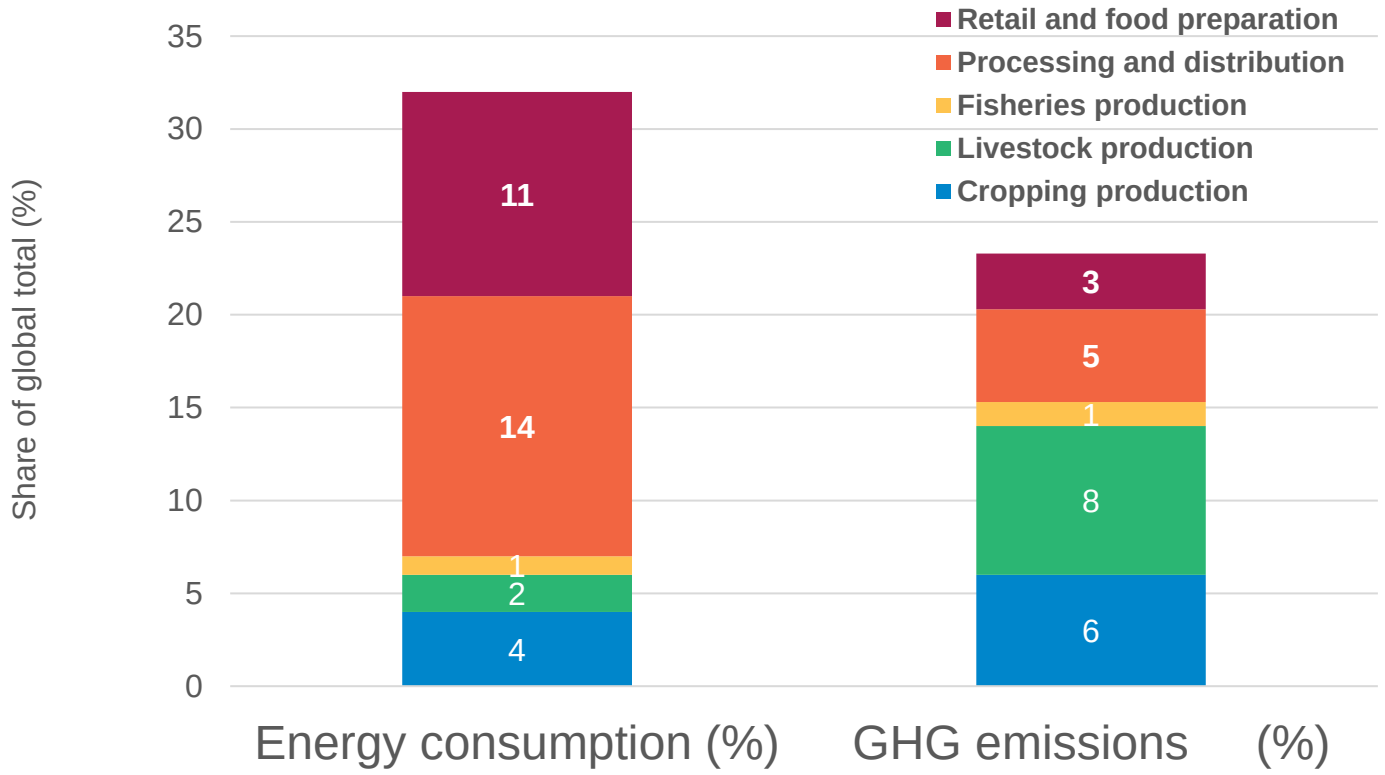
Globalization, stakeholders and policy coalitions (2)

- **Food systems discussion linked to transnational advocacy networks**
  - Food systems are not only tied to livelihoods, production, and nutrition but climate action, food sovereignty, and rights to food
  - Growth in transnational movements that rely on frames that mobilize very disparate groups and shift traditional agricultural lobbying
  - Beyond the traditional domestic policy stakeholders and coalitions

Climate change, value chains, and political economy of food systems transformation

- Two-way relationship
- Major cause
  - "Official recognition" only at COP-28
- Potential major (part of) solution
- Impacts are real now

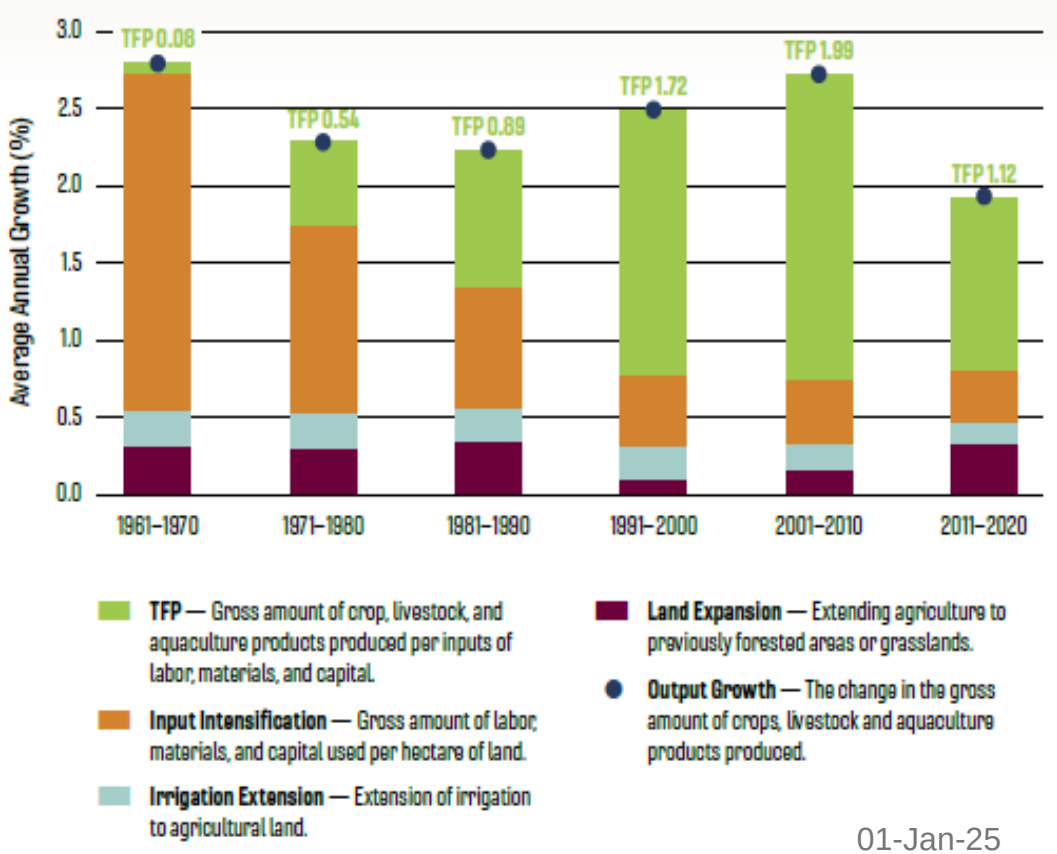
The global food system consumes >30% of energy and produces >20% of GHG emissions



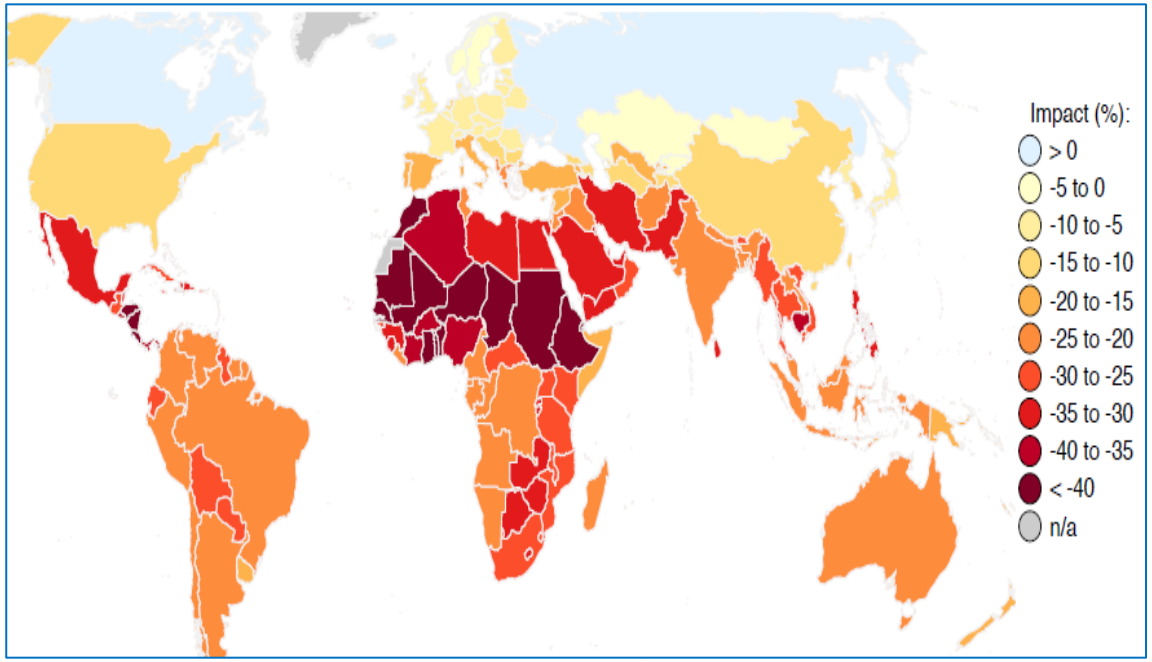
Source: EAT-Lancet Report 2019

Climate Change and Agricultural Productivity

Global Agricultural Productivity (TFP) has been declining during the last decade



Global, regional, and country level impacts of climate change on agricultural TFP



01-Jan-25

Source: USDA (left figure) and Ortiz-Bobea, A., Ault, T.R., Carrillo, C.M., Chambers, R.G. and Lobell, D.B. (2021): 'Anthropogenic climate change has slowed global agricultural productivity growth' *Nature Climate Change*, 11: 306–312. http://www.nature.com/natureclimatechange

Climate change and value chains : sustainability and equity

- Size differentiation allows scale effects in CC and in Climate Finance
- Endogenous institutions induce spillover effects and impacts throughout the value cain
- Important lessons from safety and quality standards over past 20 years
- Size differentiation and vertical coordination may imply power imbalance in distribution of benefits
- Trade-off or synergy ?

Swinnen, Ronchi and Reardon. 2024. "***Harness agrifood value chains to help farmers be climate smart.***" Science**.**

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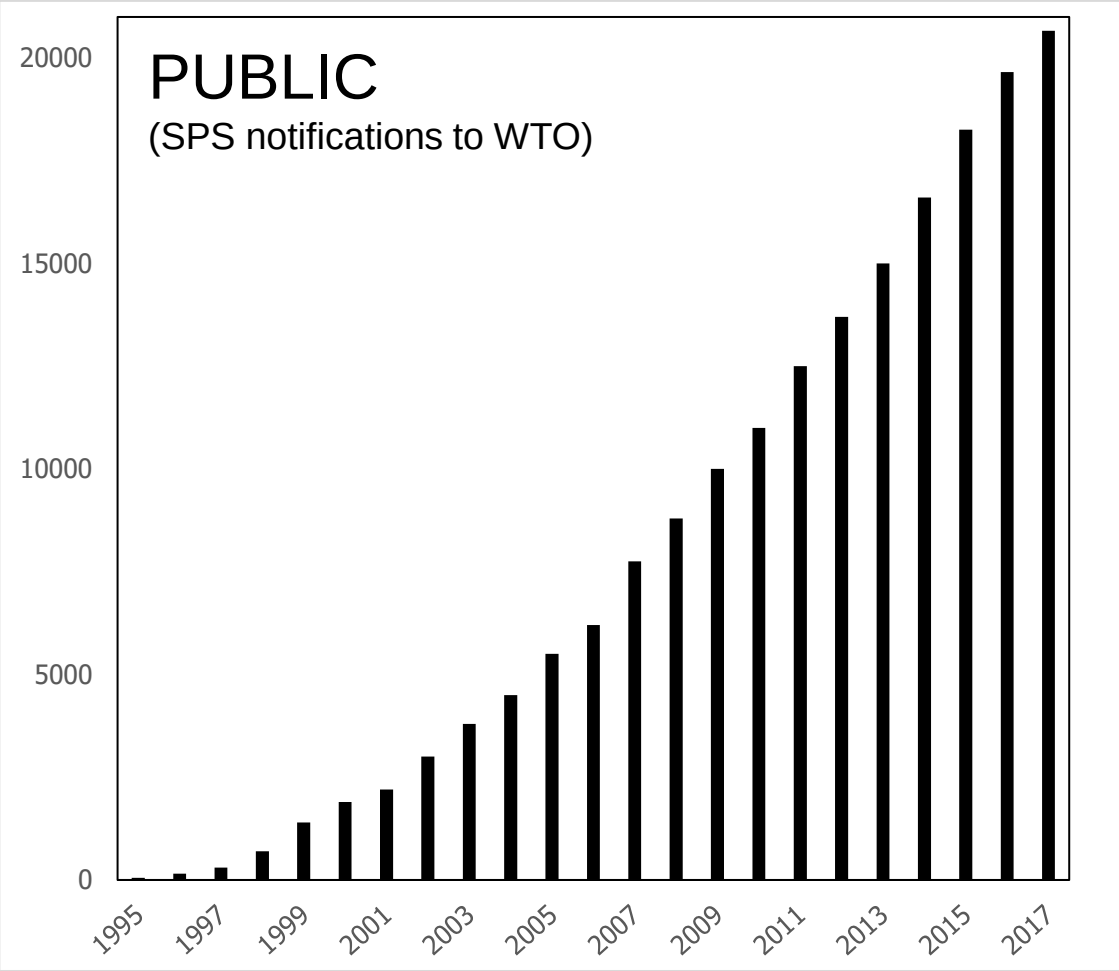
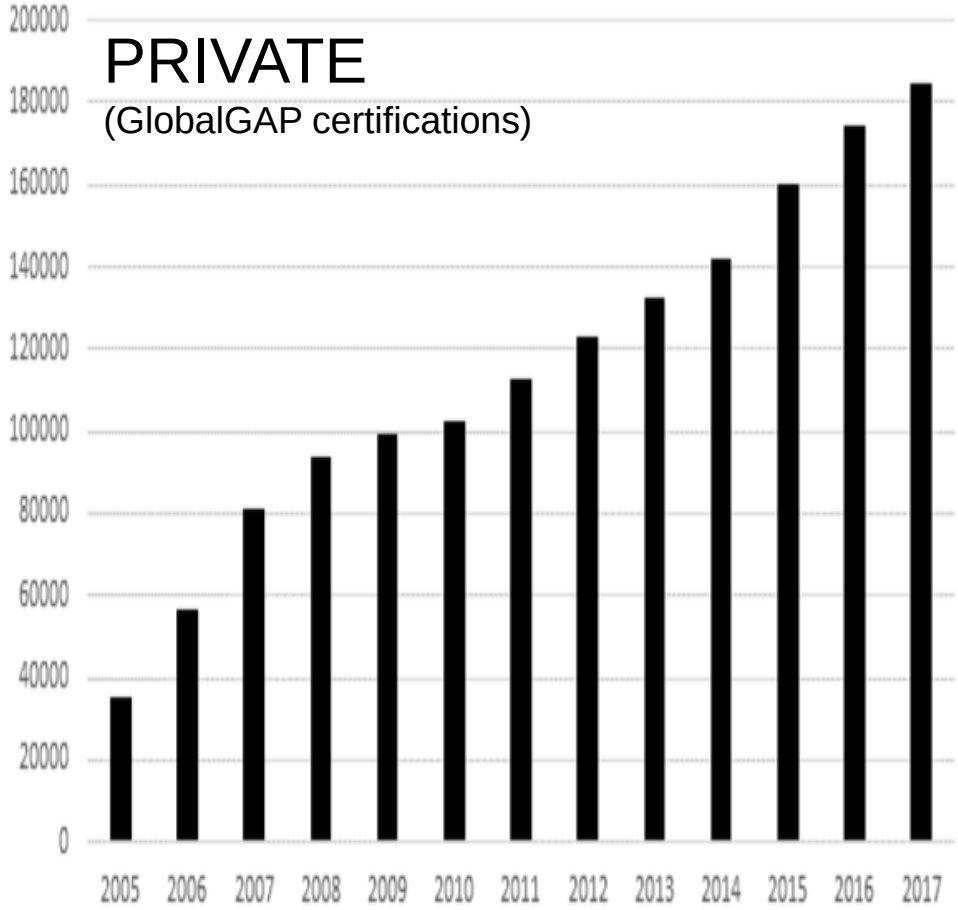
Global spread of food safety and quality standards 2000 - 2020





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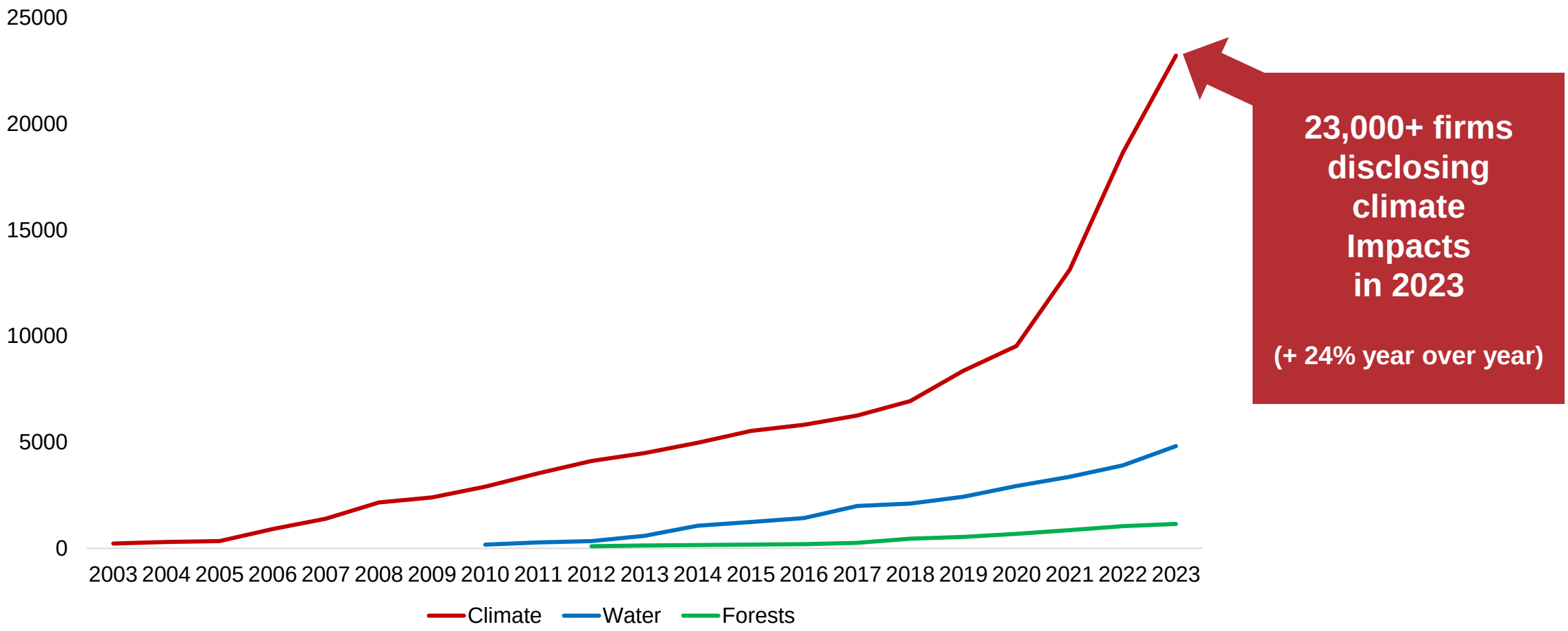
From safety and quality to sustainability:

Firms' disclosure of environmental impact information

Number of firms disclosing impacts through CDP



23,000+ firms disclosing climate Impacts in 2023

(+ 24% year over year)

Source: Deconinck et al. 2023

From safety and quality to sustainability:

FAST and FURIOUS

Source: Deconinck et al. 2023

The political economy of information : More but less ?

- Information on a variety of issues, such as GMOs, pesticides, health effects, nutrition, etc …
  - 2000: Most consumers and voters got information from **mass media**
  - 2020: 62% of US adults get their news from **social media**; 40% from Facebook alone
- Readers/viewers discount information bias taking into account the source and their perception on the sources' incentives (ideology, …). **Bias discount is imperfect / partial**. Biased information hence does affect risk perception and people's behavior in economic and political markets.
- Echo chambers and **polarization**
- **Rational ignorance** continues despite falling information costs – because of opportunity costs and disutility from preference ("ideology") gaps (McCluskey and Swinnen)

New York Times, March 10, 2018

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nature human behaviour

Letter | Published: 14 January 2019

Extreme opponents of genetically modified foods know the least but think they know the most

Philip M. Fernbach ✉, Nicholas Light, Sydney E. Scott, Yoel Inbar & Paul Rozin

Nature Human Behaviour (2019) | Download Citation ⬇

Abstract

There is widespread agreement among scientists that genetically modified foods are safe to consume[1,2] and have the potential to provide substantial benefits to humankind[3]. However, many people still harbour concerns about them or oppose their use[4,5]. In a nationally representative sample of US adults, we find that as extremity of opposition to and concern about genetically modified foods increases, objective knowledge about science and genetics decreases, but perceived understanding of genetically modified foods increases. Extreme opponents know the least, but think they know the most. Moreover, the relationship between self-assessed and objective knowledge shifts from positive to negative at high levels of opposition.

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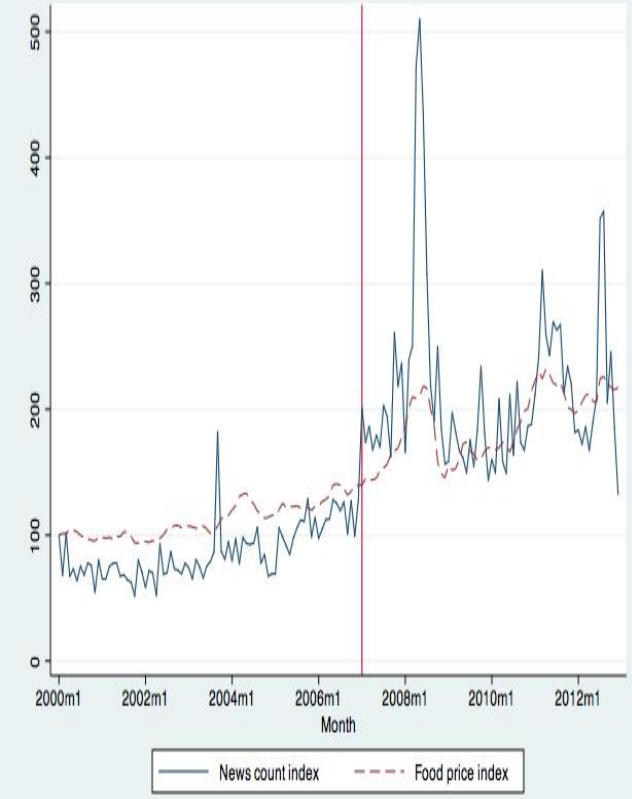
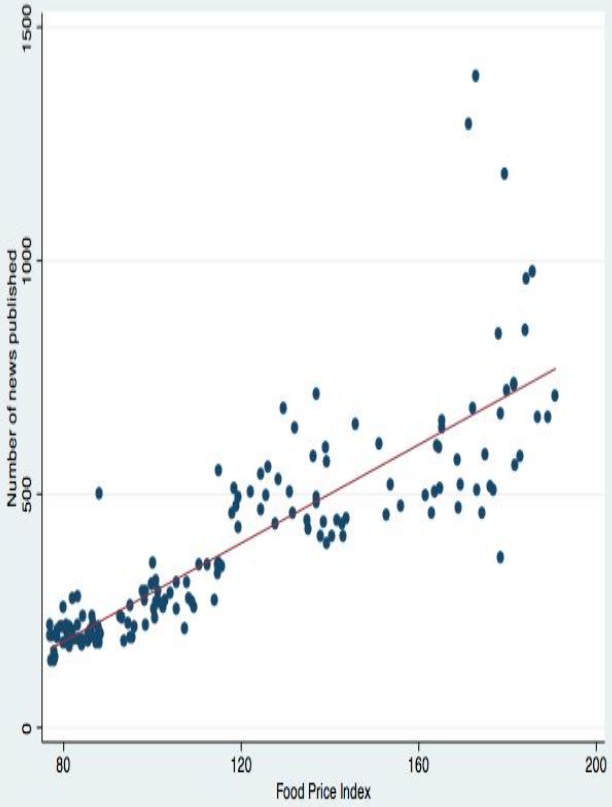
Political economy of information and shocks

Food prices, media coverage, and policy reactions

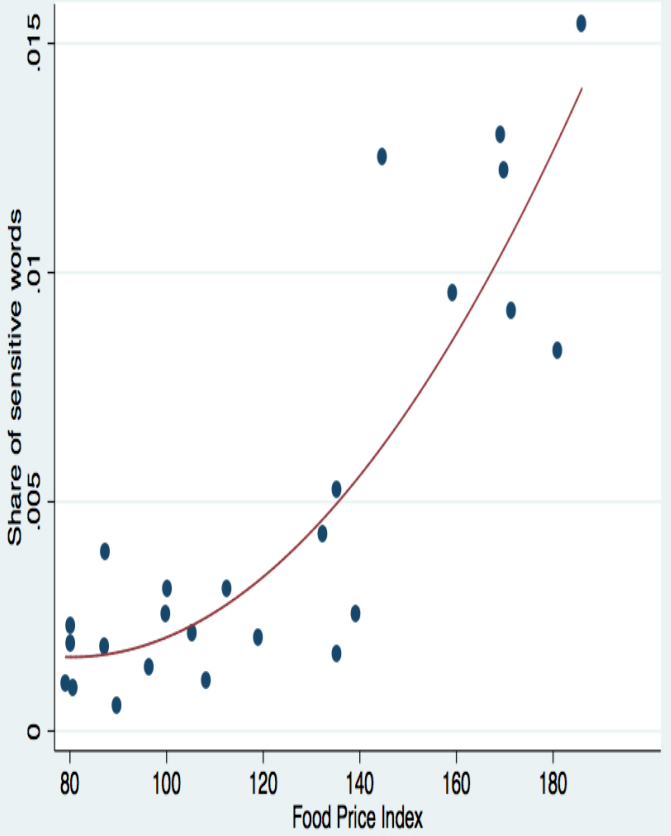
Food prices 2000-2012



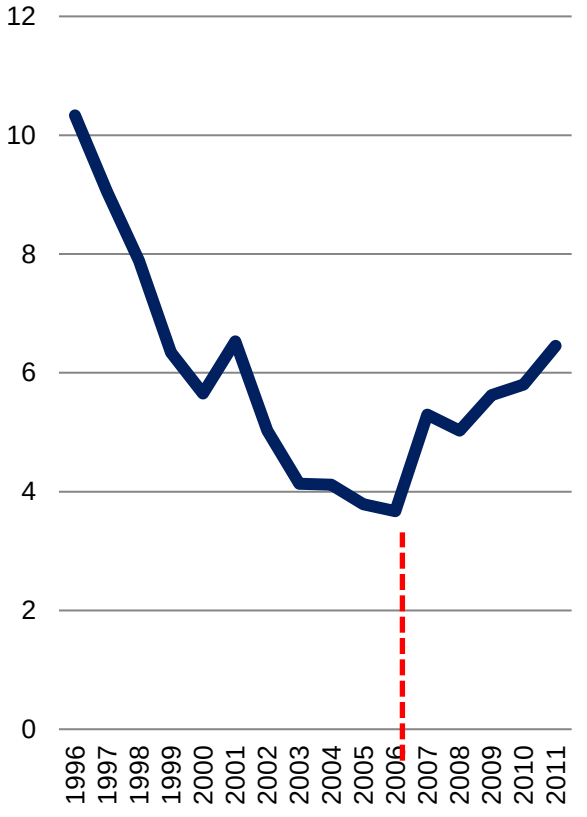
Media coverage and food prices



Development policy focus and food prices



Agriculture as % of Aid 2000-2012



Dynamic political economics : policy persistence and impact of shocks

- Hysteresis and **path dependency**:
  - Standards/regulations will induce economic and political adjustments
    → *changes comparative advantage of producers and preferences of consumers in the long run*
    → *induce changes in political preferences,*
    → *path-dependency (hysteresis) of regulations.*
- Regulations that were **introduced for "good"** reasons may **persist for "bad"** reasons.
- Long persistence : major reforms require "**shocks**" to overcome institutional inertia
  - Crises
  - Economic / international integration
    - Note: Integration may lead to the removal of "bad" standards, but may also lead to the spread of "bad" standards

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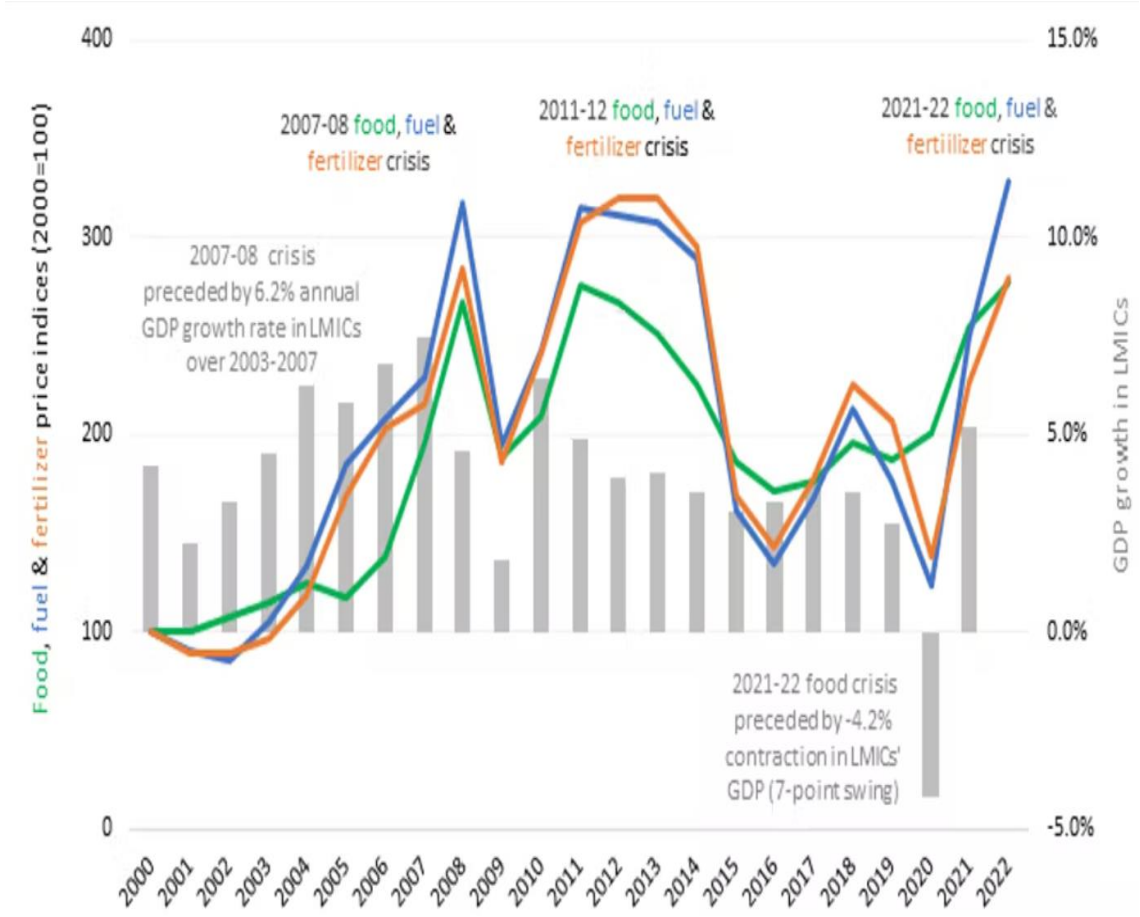
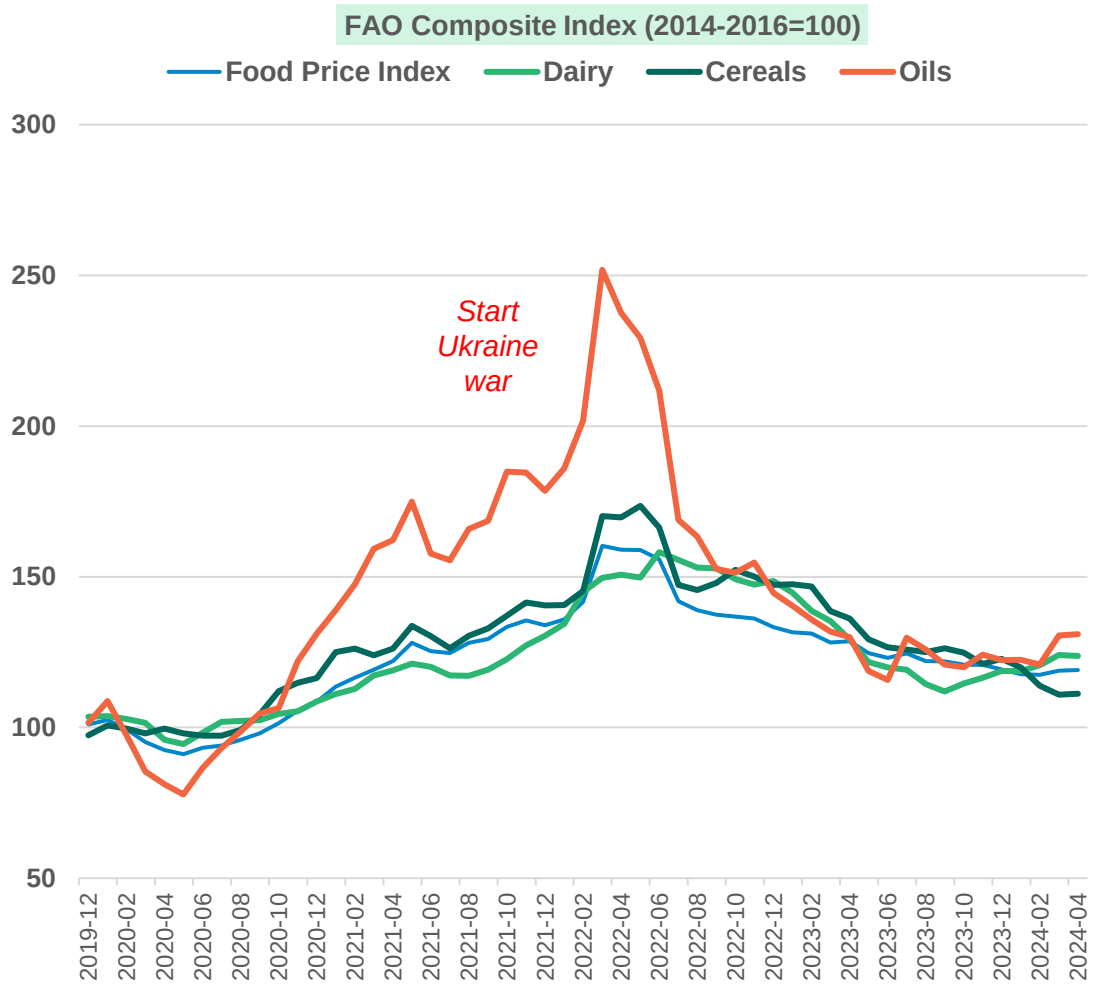
Price shocks and volatility: “the new normal’ ?

Food, fertilizer, oil prices 2001-2022





Source: IFPRI, Food Security Portal; based on FAO data

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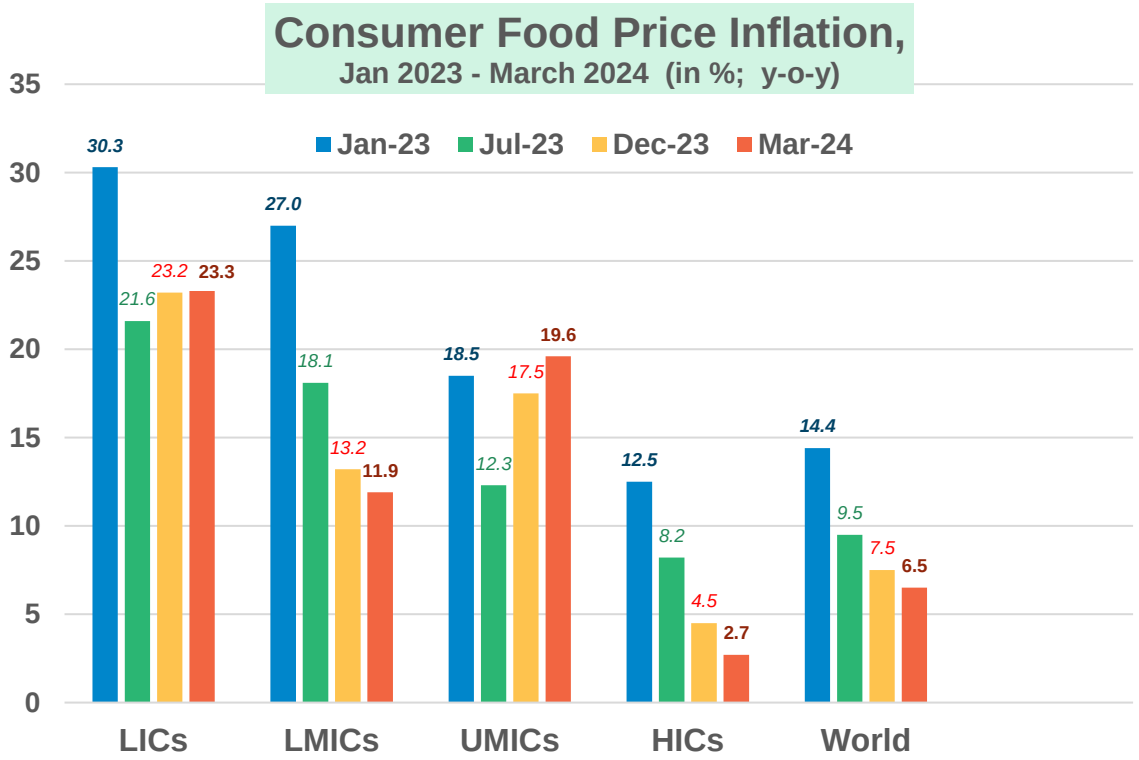
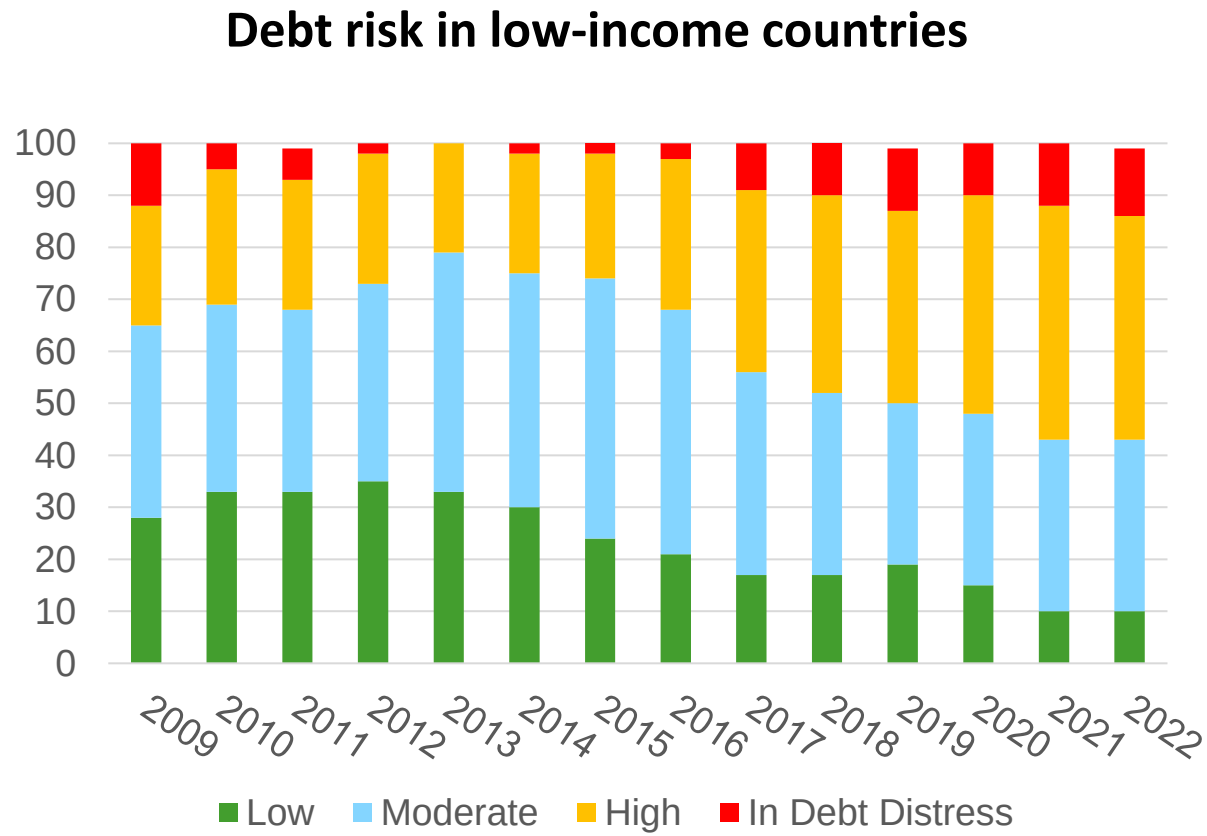
Post-shock concerns and impacts persist

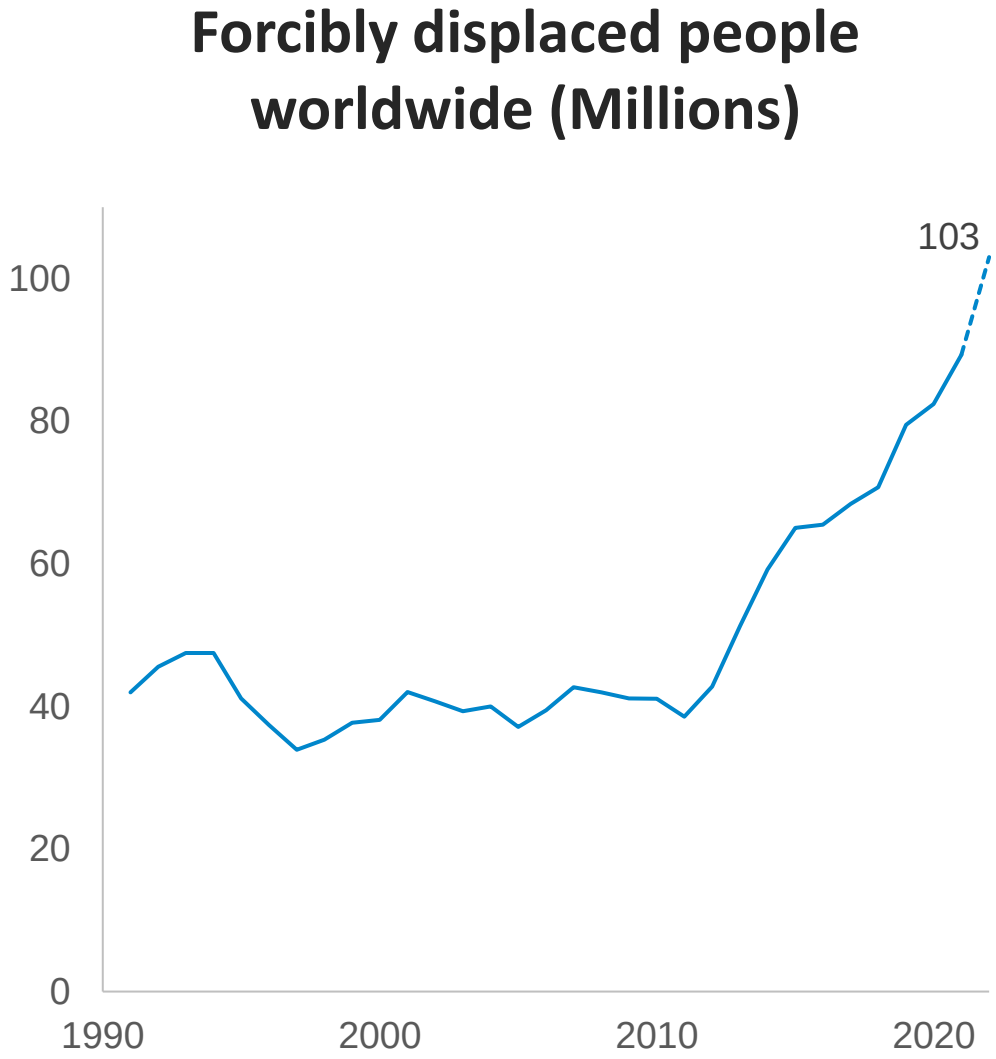
1. Food commodity prices remain high by historical standards
2. Food stocks remain low
3. Increased debt risk in low-income countries
4. Food inflation remains high

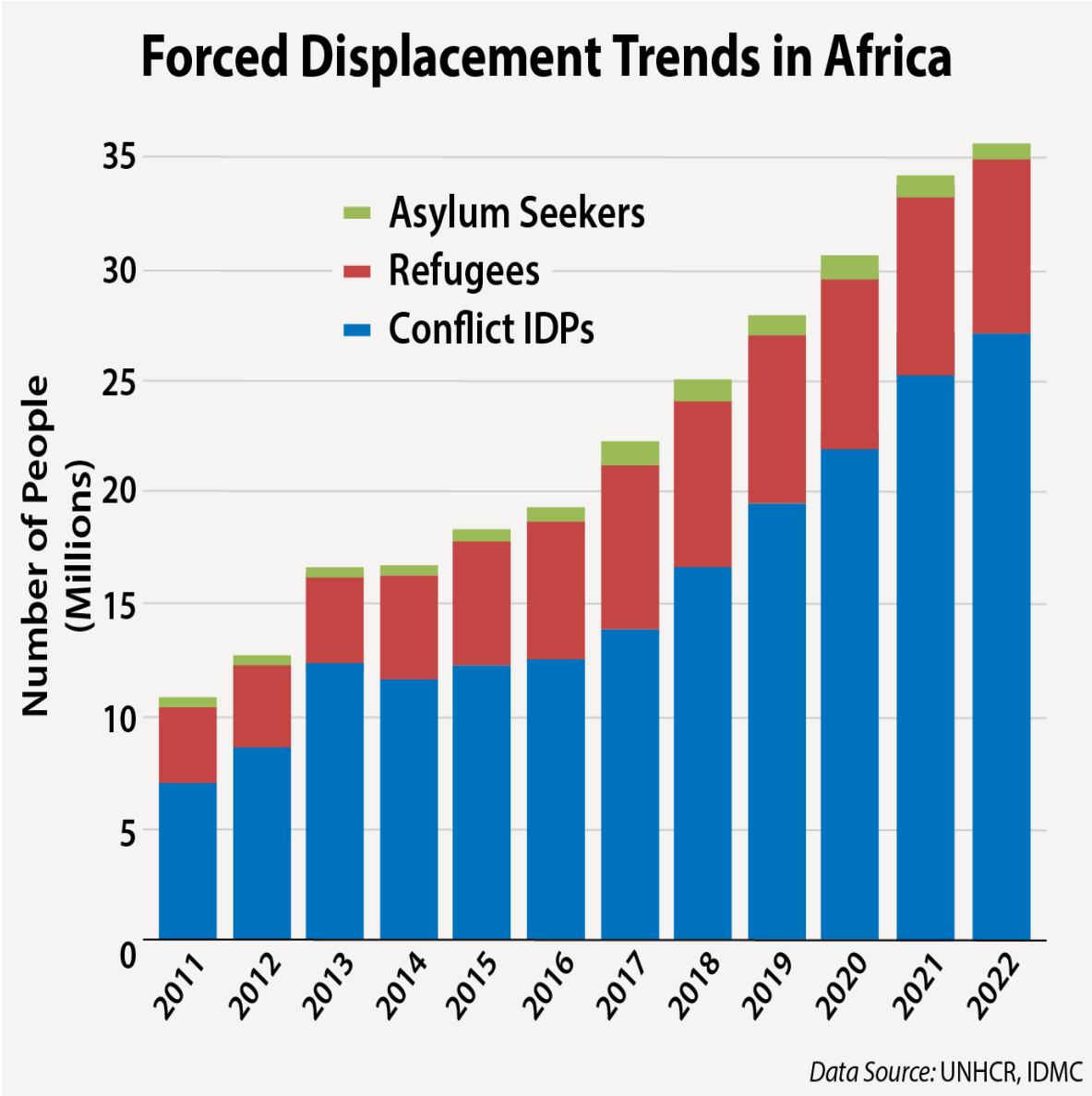




Source: Glauber 2023,USDA 2023, Laborde and Vos 2023, FAO 2023

Political Economy and Conflict
Global surge in displaced people





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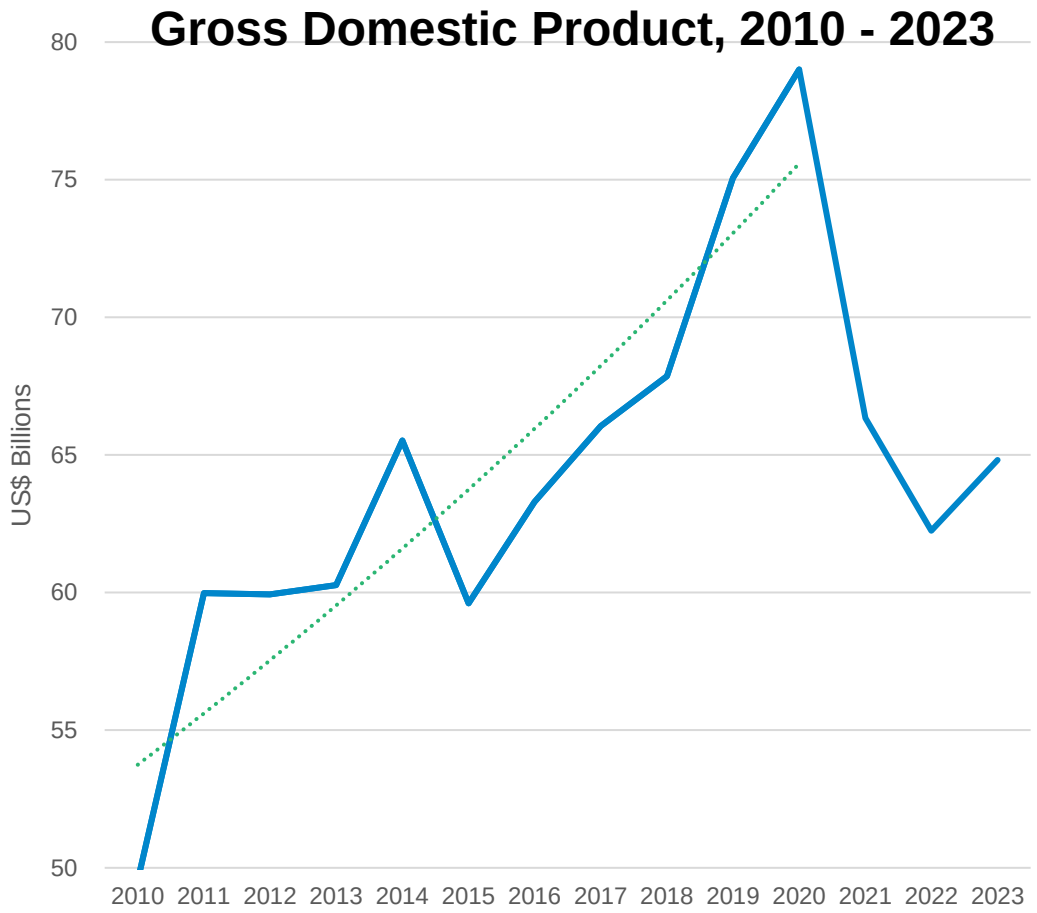
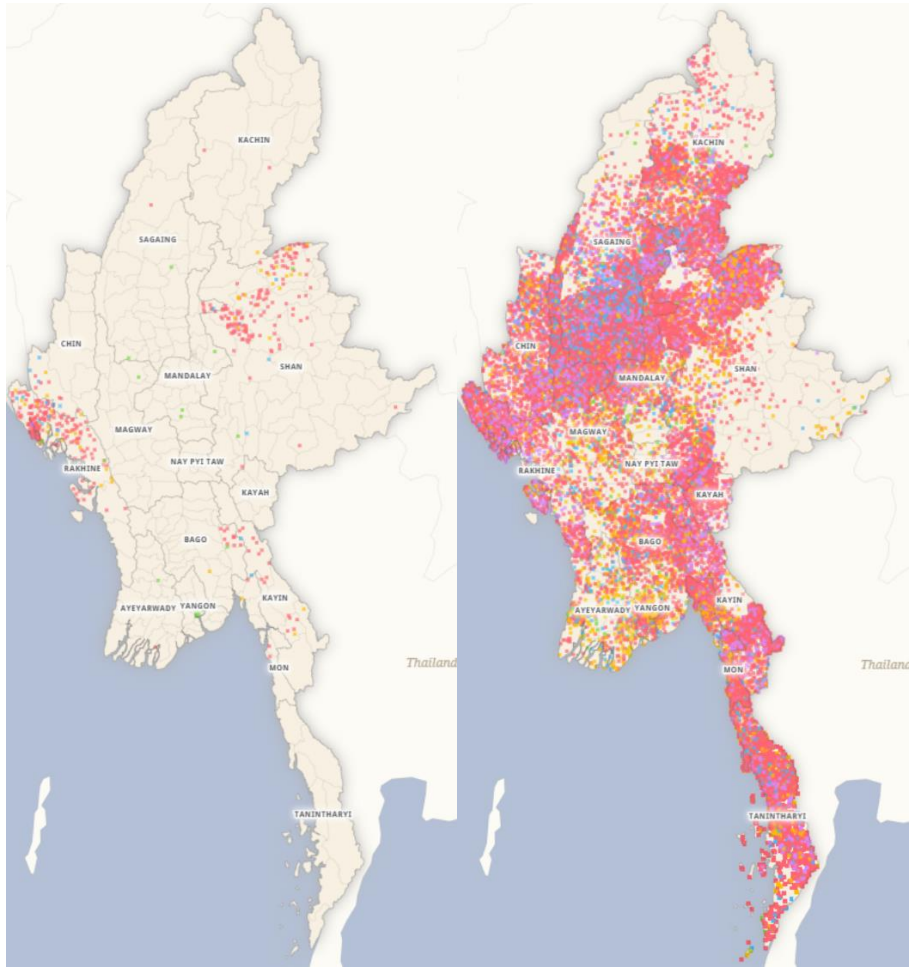
Political Economy and Conflict

Rapid reversal of policies and impacts – Ex. Myanmar



- 43 percent of Myanmar's population is actively exposed to conflict.
- 17.6 million (32%) people in need of humanitarian assistance
- 4.5 million (8%) people with severe humanitarian needs
- 3.3 million (6%) internally displaced people

Pre-Coup (2020) **Post-Coup (~ Present)**

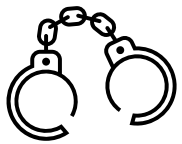


Source: International Institute for Strategic Studies

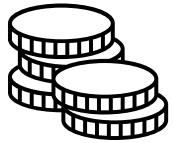
Multiple shocks the “new normal” ?
Myanmar since 2020

Conflict
- Civil War
- Rohingya Crisis

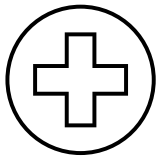
Global Events
- Russia-Ukraine War
- Food, Fuel, & Fertilizer Prices



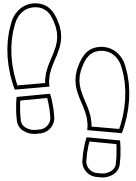
Insecurity
- Crime
- Gambling and Drug Use



Economic Mismanagement
- Depreciating Currency
- Forex Controls – Imports/Exports



Health
- COVID-19 Pandemic
- Lack of Services & Medicine



Migration
- Outmigration and IDPs
- Conscription Law

Climate
- Irregular Weather, Flooding, & High Winds
- Cyclone Mocha & Typhoon Yagi

Infrastructure
- Electricity & Communication Outages
- Mobility Issues & Fuel Shortages
- Banking Disruptions

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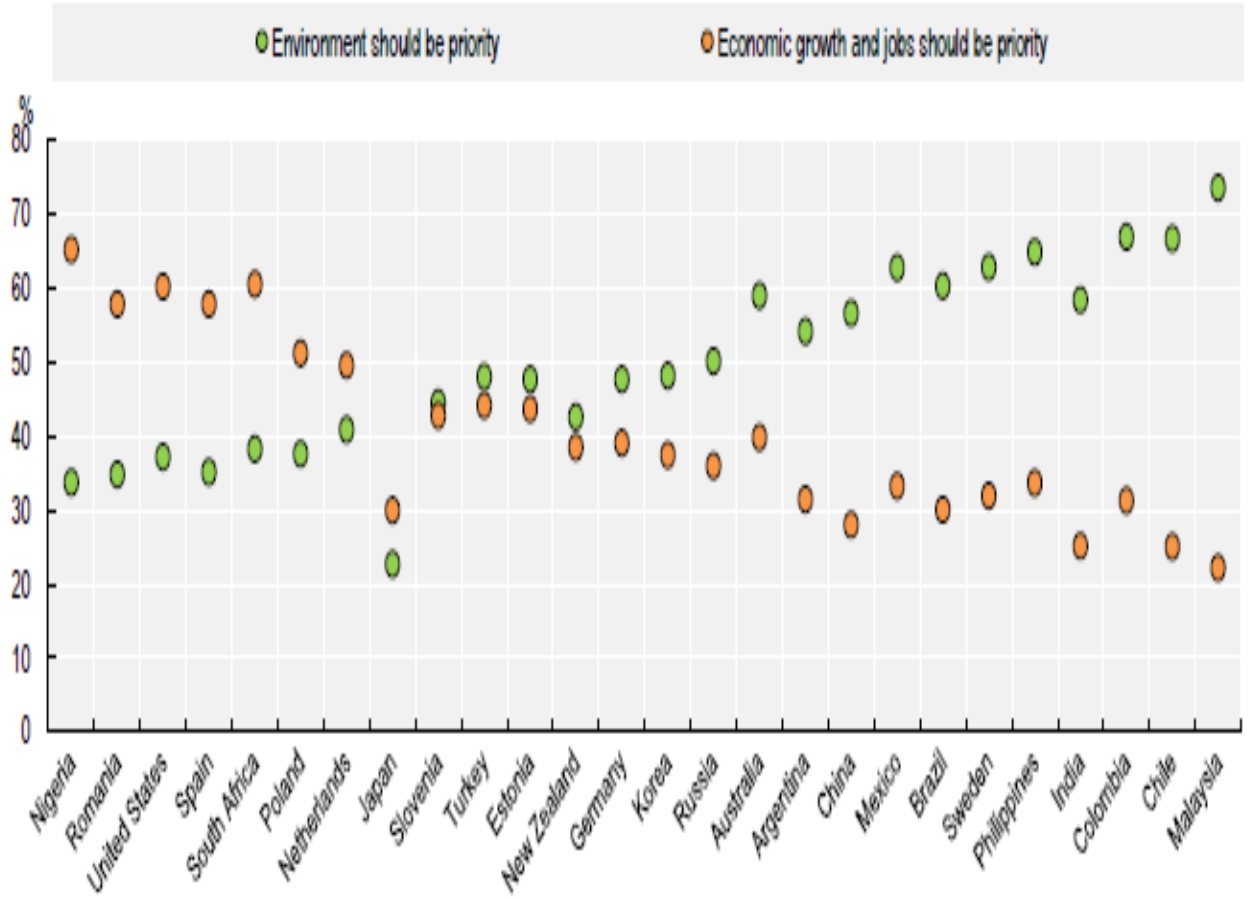
Facts, Interests and Values

- **Differences in policy preferences may be driven by several factors**
- **Value differences matter for food systems**
  - Religious taboos, fasting
  - Naturalness, preference for organic, fair trade, …
  - Desire to help family farms
  - …
- **Value differences are more difficult to deal with than differences over interests**

Figure 3.1. Prioritisation of environment versus economic growth within and across countries



Source: OECD (2021), based on World Values Survey, and Deconinck (2023)

Some final reflections

- **Reforms** are possible, but more complicated now ?
  - More objectives, more agents, more …
- Search for **non-traditional coalitions**
  - Coalitions are always **more complex** than often assumed
  - Who are the producers and consumers in **value chains**
- **Bundling** of innovations/strategies is important for economic and political reasons
- **Trade-offs** and win-wins are inherent in the challenges
  - **Complexity** of issues creates uncertainty
  - Important economic and political aspects
- The ability to reconcile trade-offs depends on whether there is conflict among **interests or values**
- External **shocks** can trigger reforms or constrain them
- **Rational ignorance** continues despite falling information costs (opportunity costs and disutility from preference gaps with social media contributing to **polarization**)

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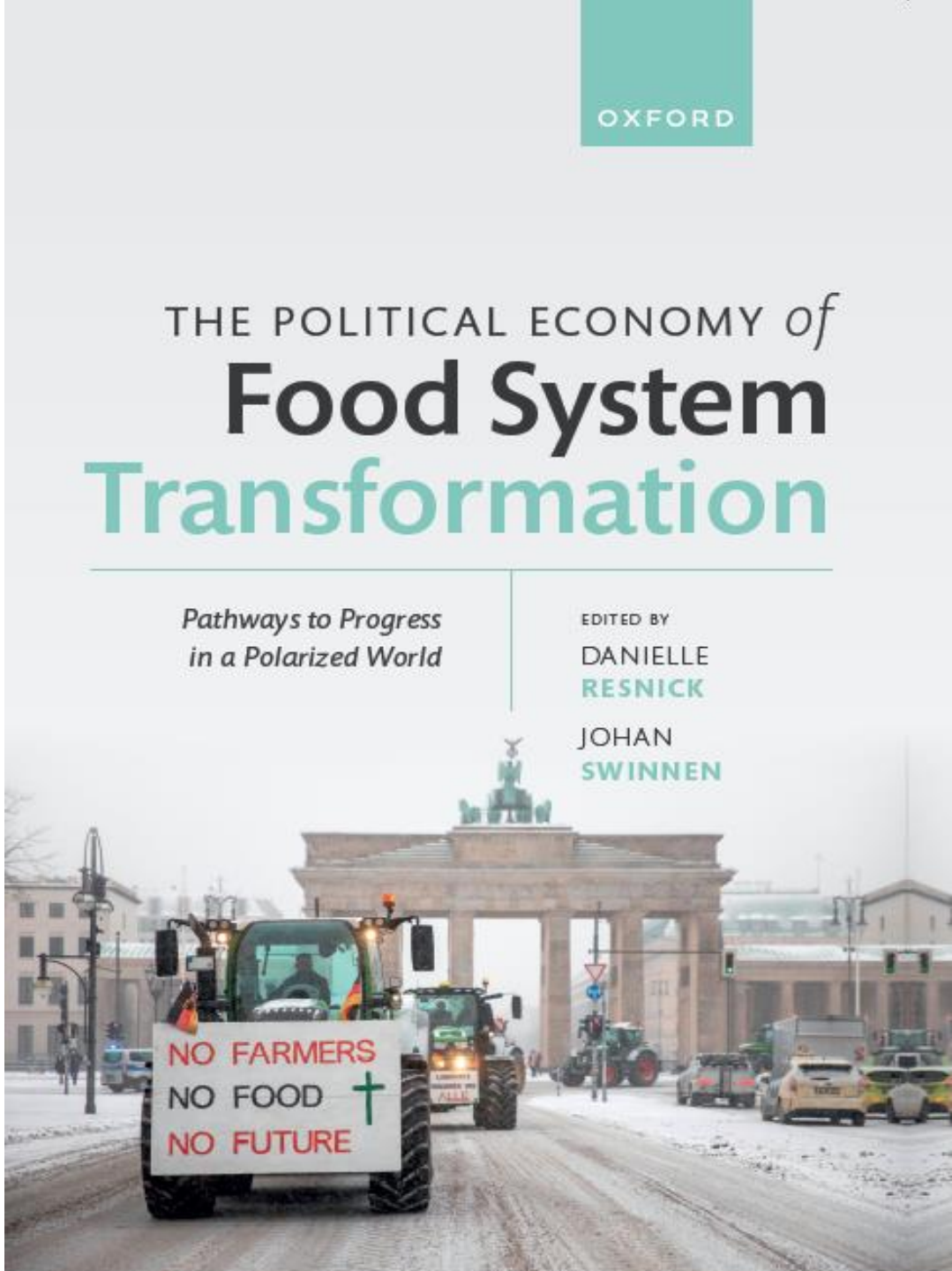
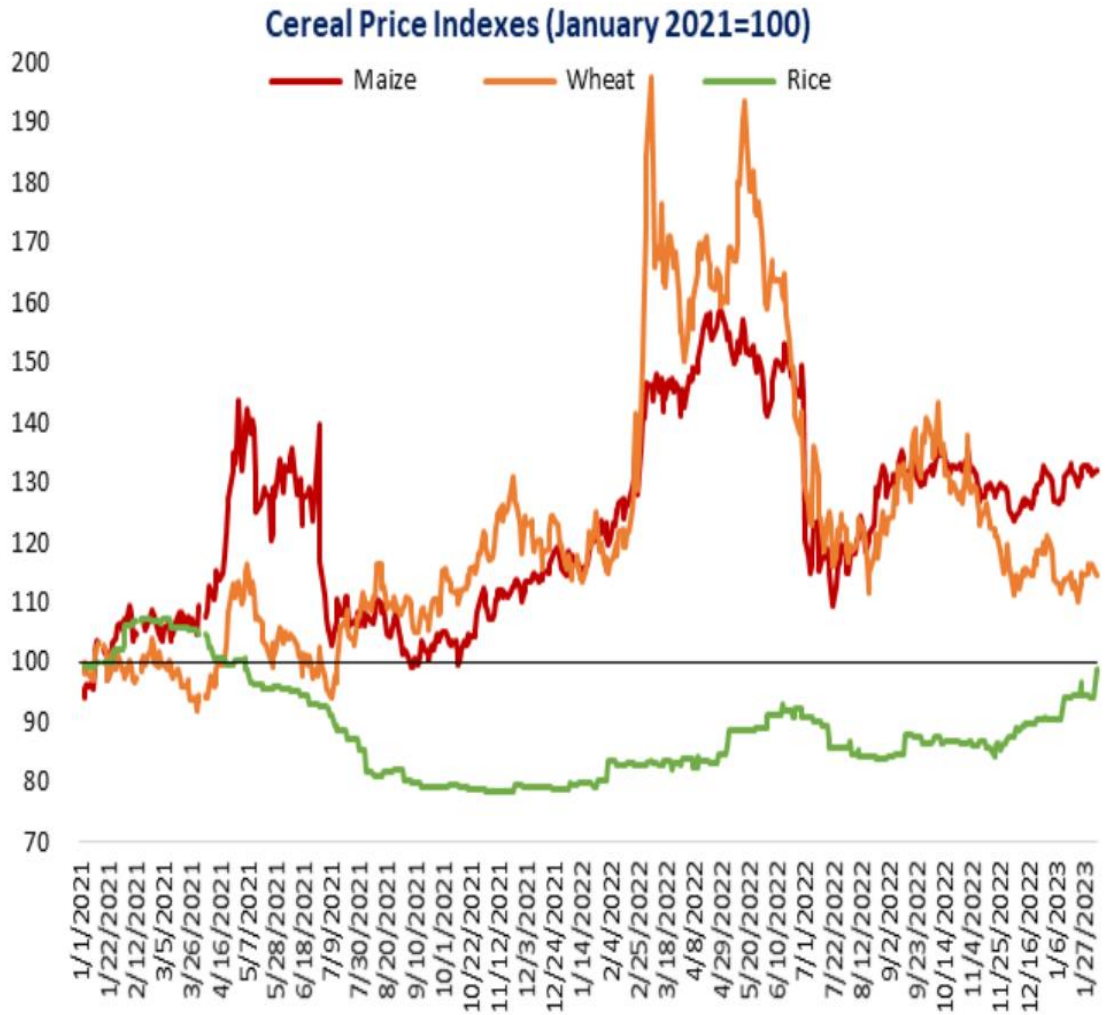
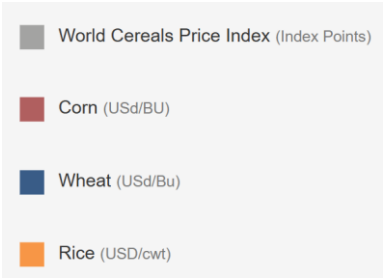




Cereal price indexes (2014-2016=100)



Source: World Cereals Price Index