Feeding the Dragon and the Elephant: A Comparison of Trade Distortions on U.S. Agricultural Exports in China and India

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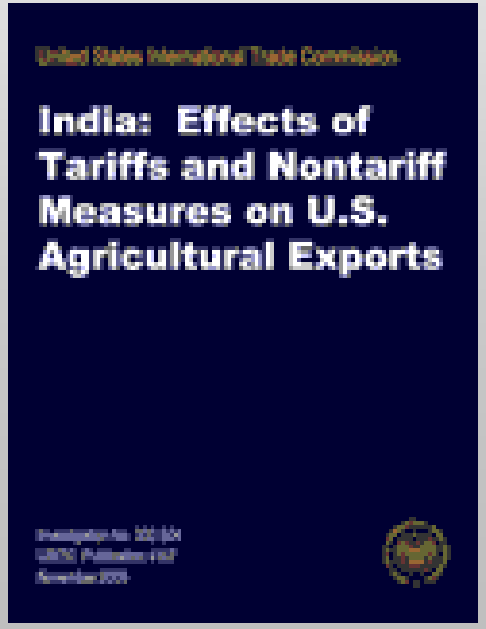
Disclaimer: The views expressed here are those of the presenters, and do not necessarily represent those of any individual Commissioner or of the Commission as a whole.

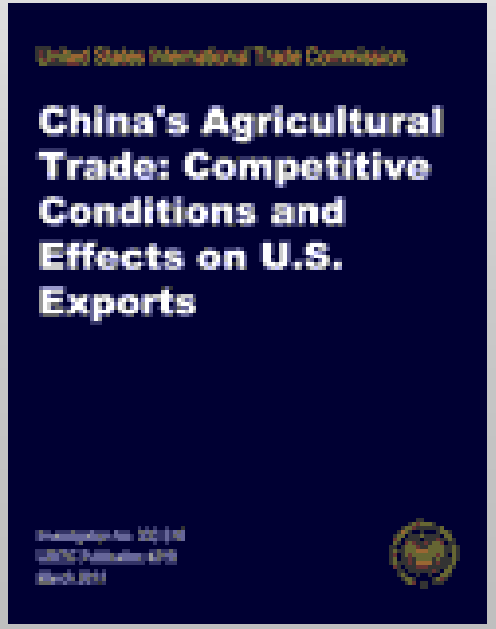
Roadmap

- Objective
- Background on agricultural markets in China and India
  - Domestic production and policy goals
  - Role of imports
  - Mechanisms used to regulate trade (tariffs and NTMs)
- Modeling Framework
- Results and details on specific traded products
- Conclusions and opportunities for further research

Objective

To compare and contrast the results of two similar recent USITC investigations on the effects of India's and China's tariffs and nontariff measures on U.S. agricultural exports to those markets





INDIA

POLICY ENVIRONMENT
History of famines and food shortages
Large population of poor farmers
Politically powerful farm sector
Environmental degradation

POLICY OBJECTIVES
Food security
Food self-sufficiency
Income support for farmers

POLICY INSTRUMENTS
Minimum support prices for agricultural commodities
Input subsidies
Regulated markets
Food subsidies for consumers
Strategic export and import controls

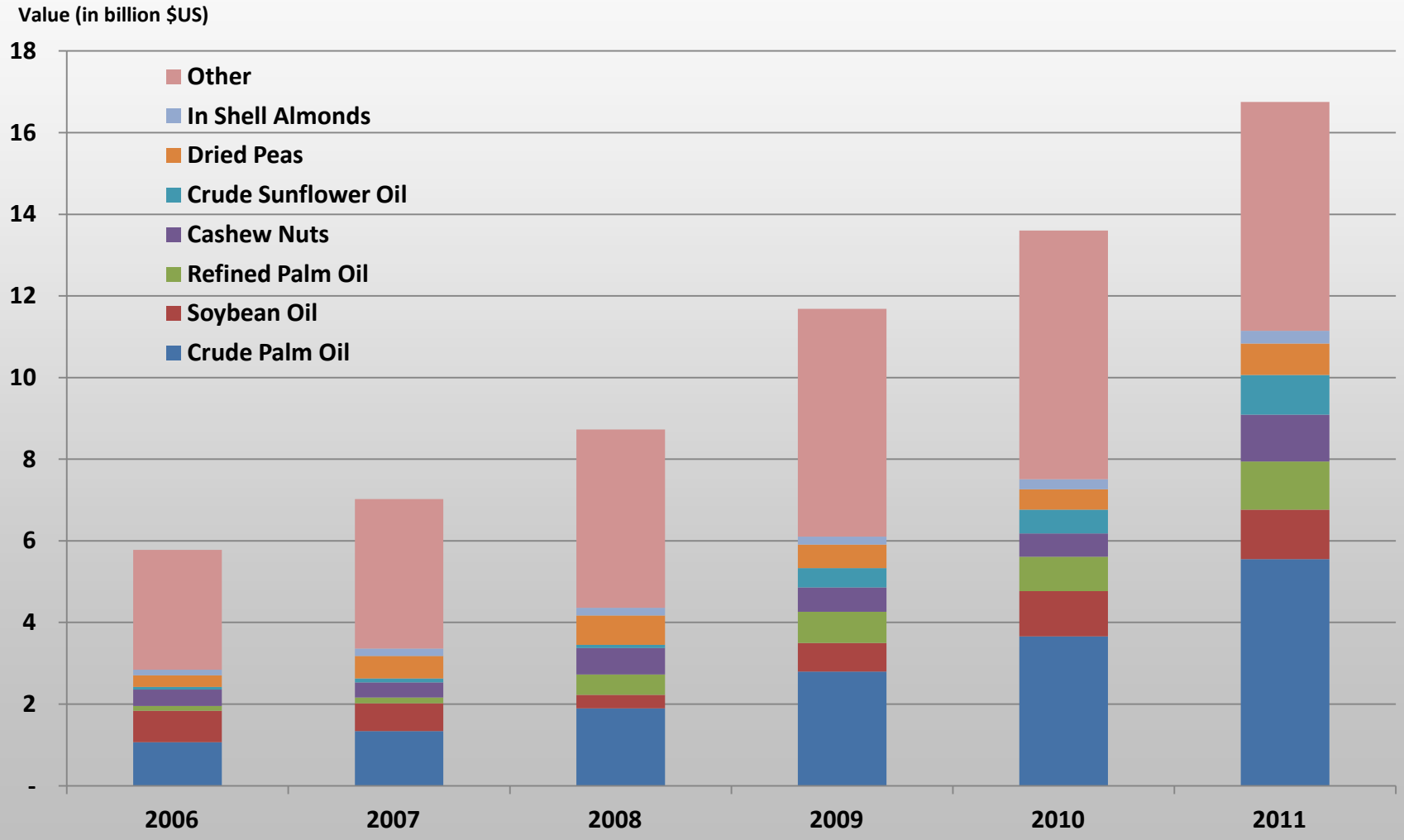
CHINA

POLICY ENVIRONMENT
History of famines and food shortages
History of political upheaval
Large population of poor farmers
Limited agricultural land per capita
One-party authoritarian system
Environmental degradation

POLICY OBJECTIVES
Economic and social well-being of the rural population
Grain self-sufficiency and stable prices
A safe food supply for all citizens
Conserve valuable environmental resources

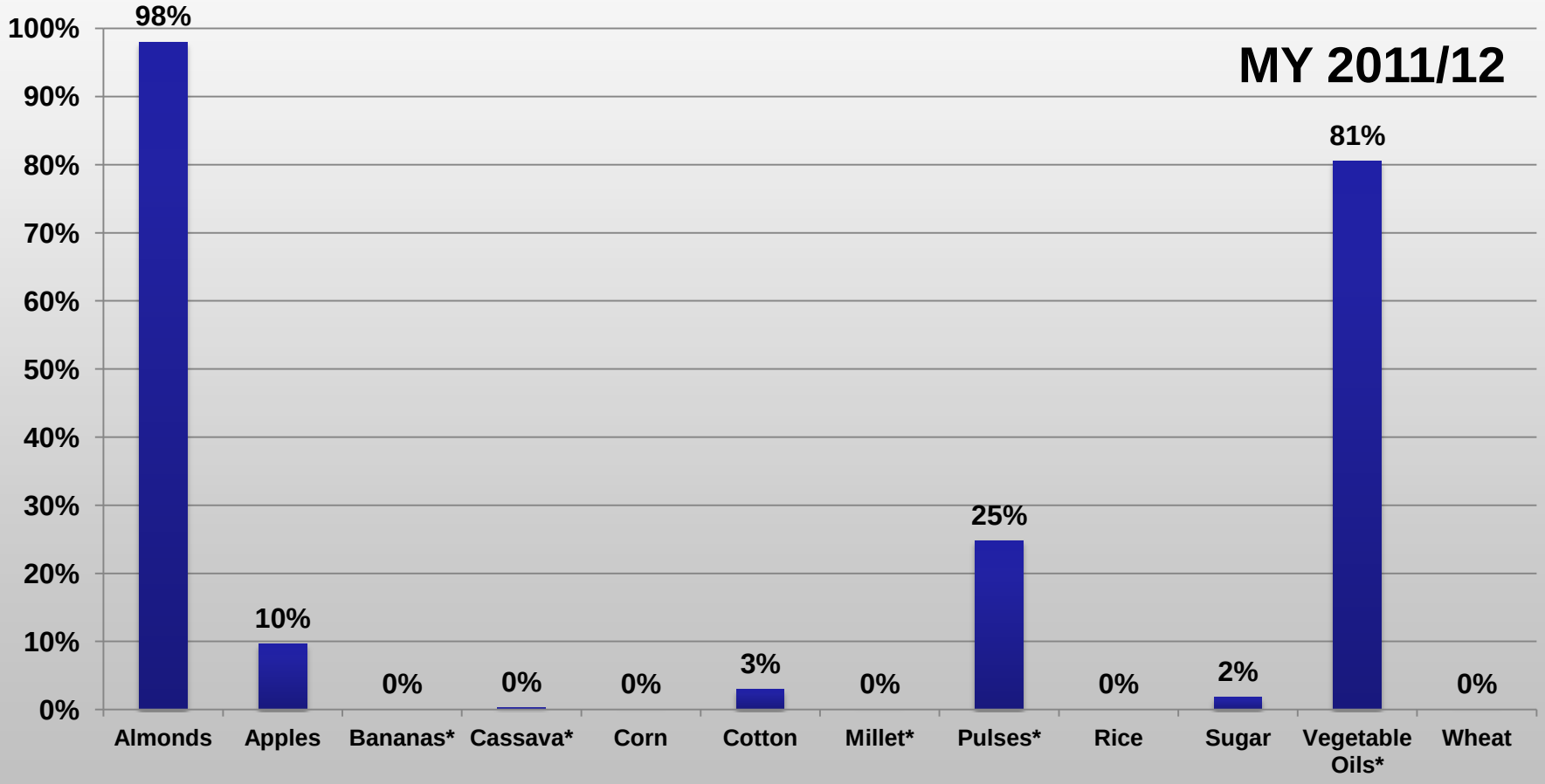
POLICY INSTRUMENTS
Minimum support prices for agricultural commodities
Input subsidies, direct payments, and preferential credit
Food reserves
Investments in rural infrastructure and agricultural research and development
Strategic export and import controls

India's agricultural imports - products



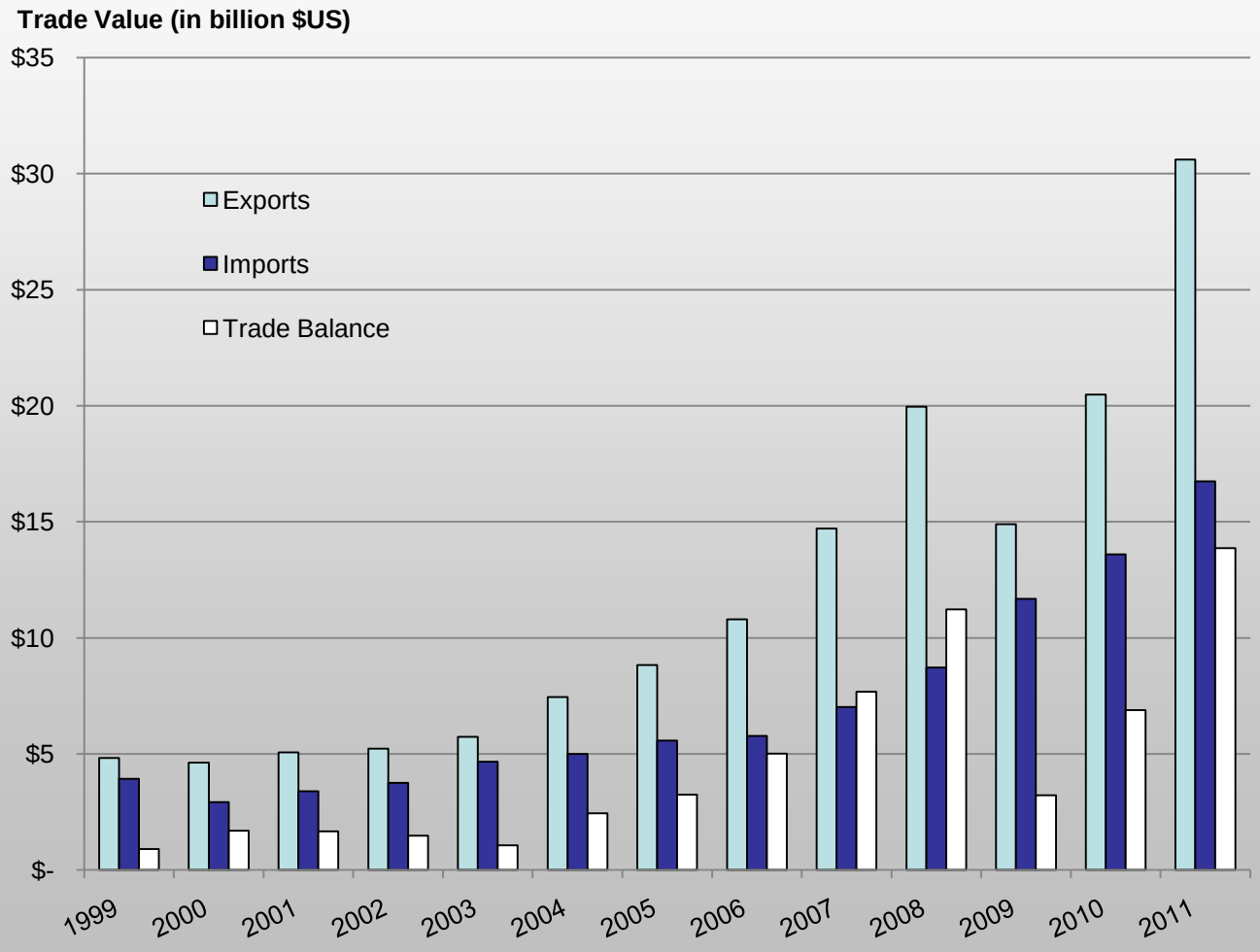
Source: GTIS, GTA Database, Nov 2012.

India's agricultural imports as a share of consumption

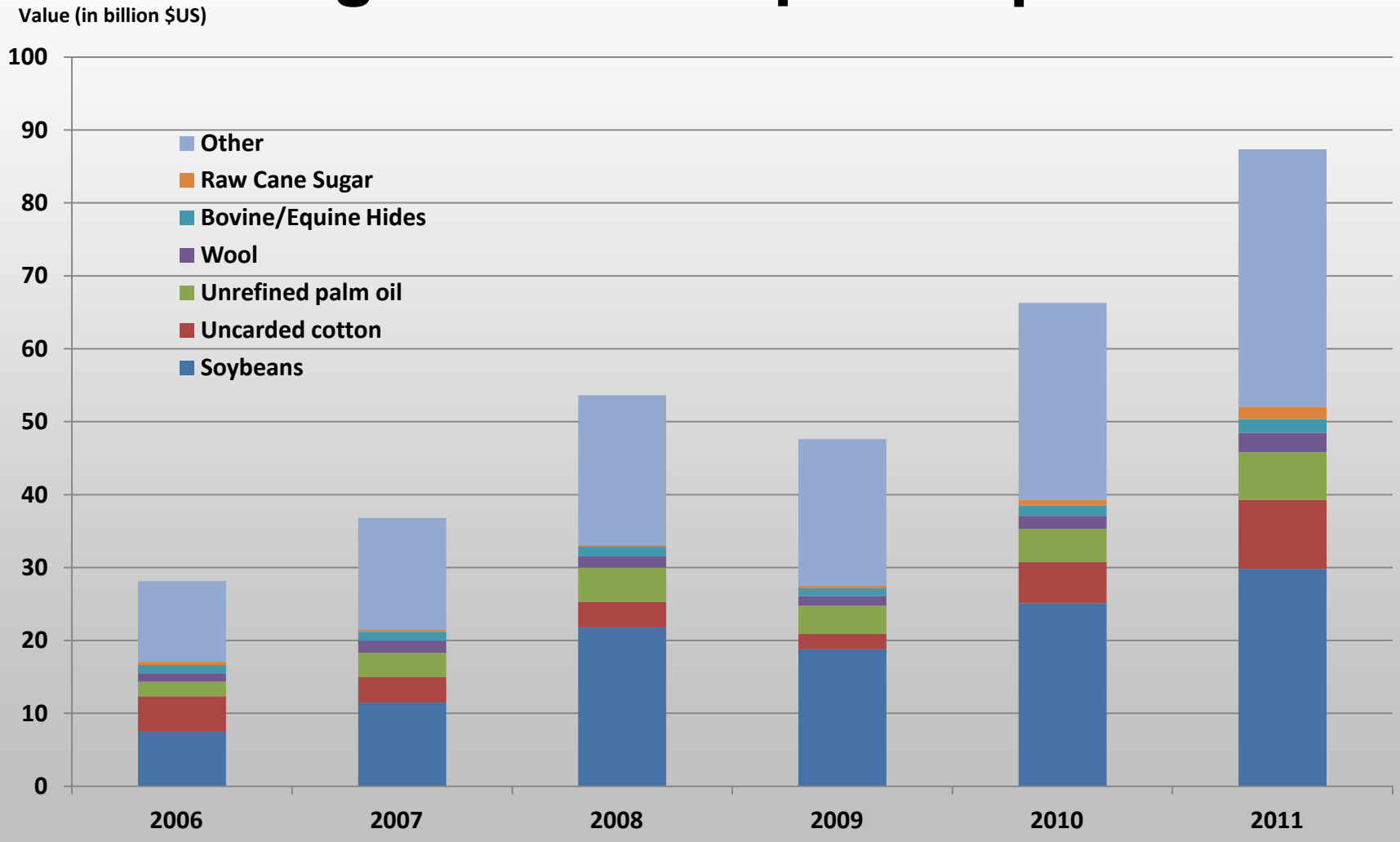


Source: USDA Production, Supply, & Distribution Database, Nov 2012.
*FAOSTAT 2009 data, accessed Nov 2012.

India's agricultural goods trade balance

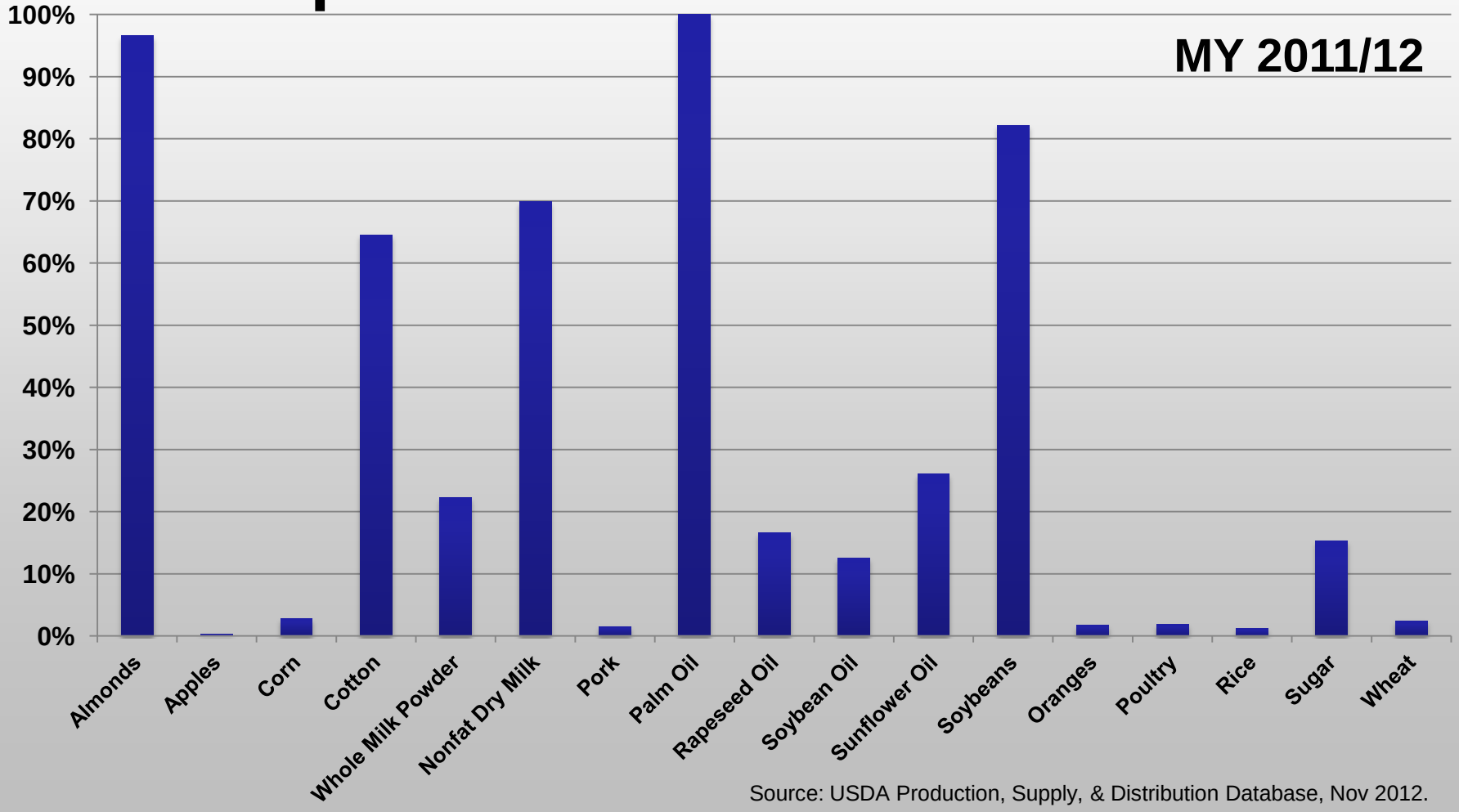


China's agricultural imports - products



Source: GTIS, GTA Database, Nov 2012.

China's agricultural imports as a share of consumption



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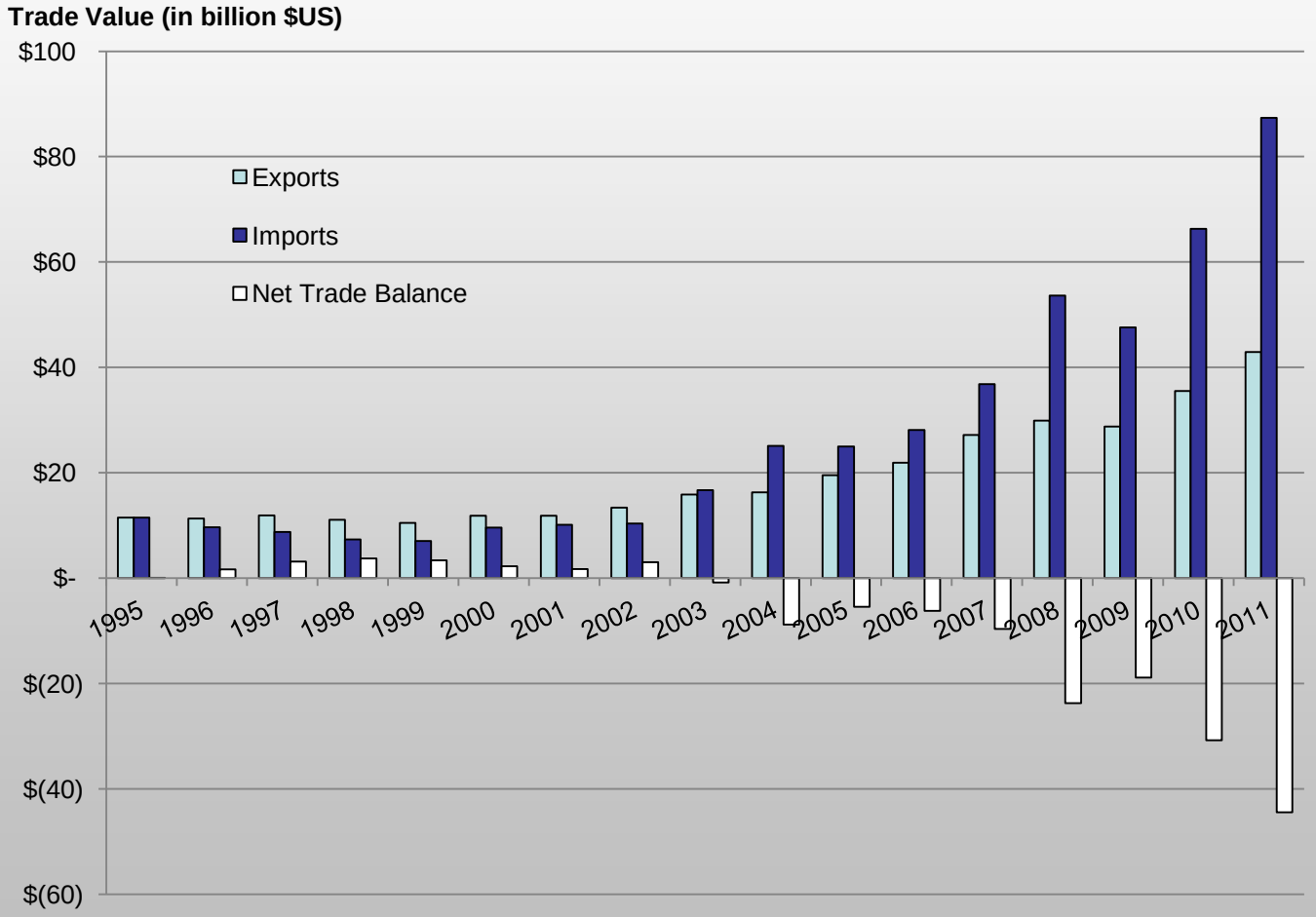
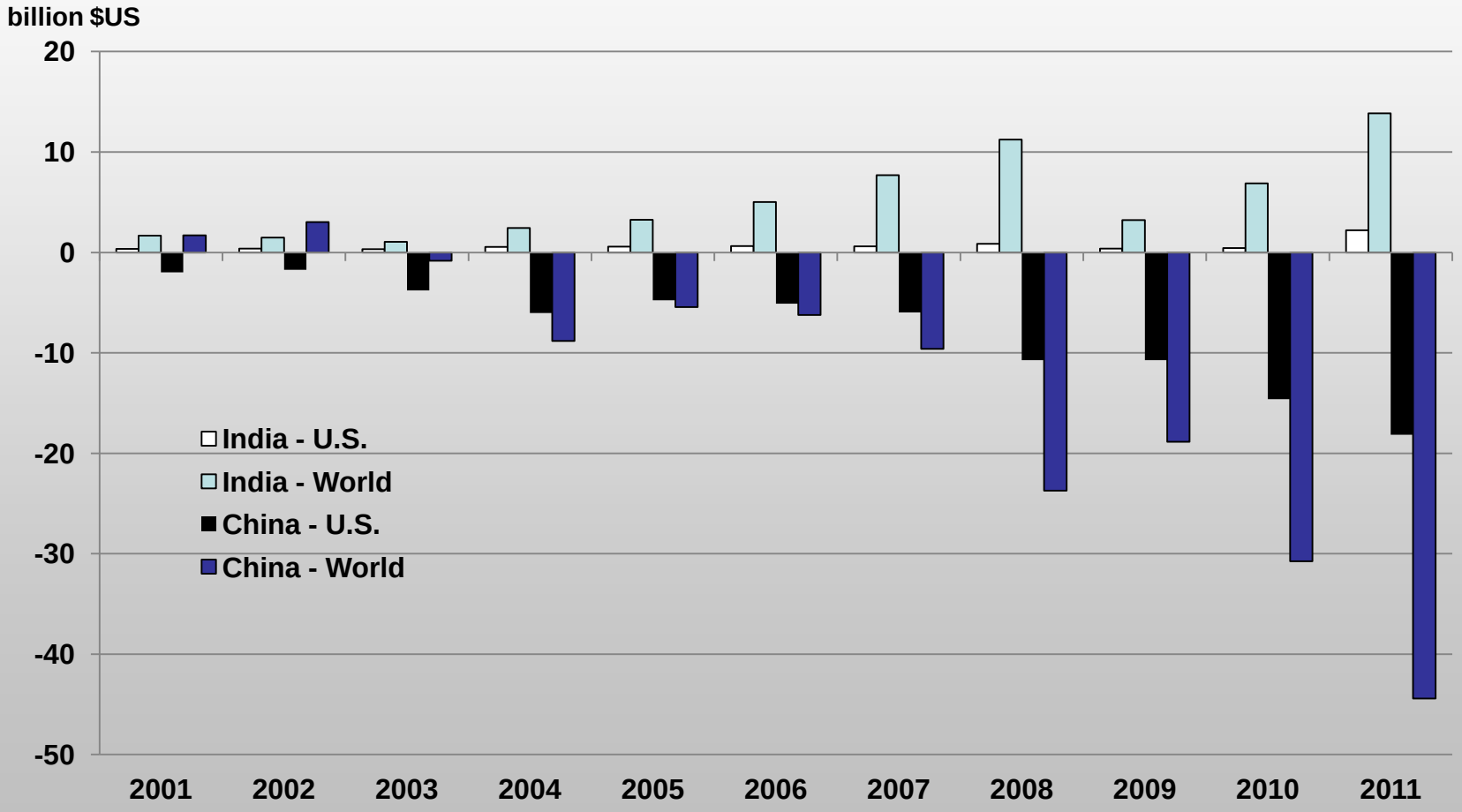
China's agricultural goods trade balance



Comparative agricultural trade balances



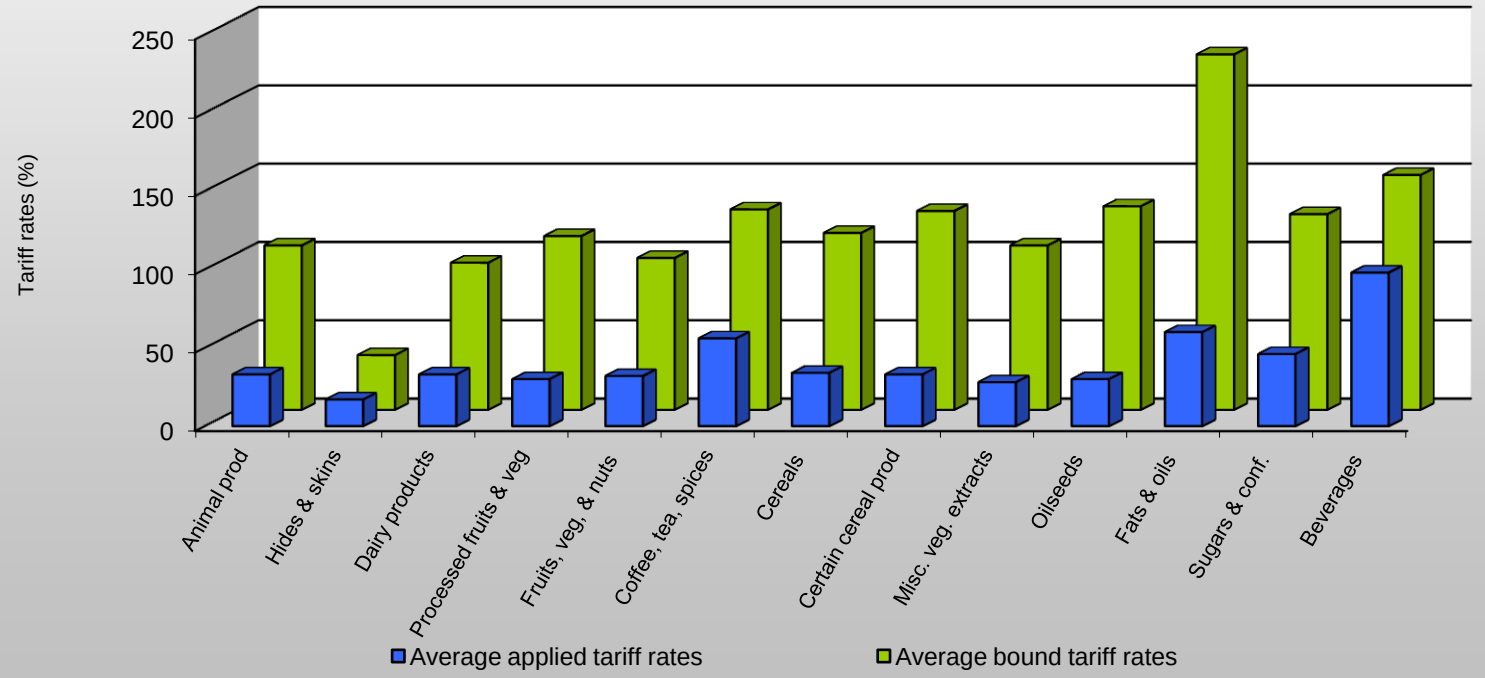
Source: GTIS, GTA Database, Aug 2012.

In the context of each country's agricultural policy paradigm, how are they using trade policy to regulate imports?

Mechanisms used to regulate trade - India

- Tariffs: Large differences between bound and applied tariff rates

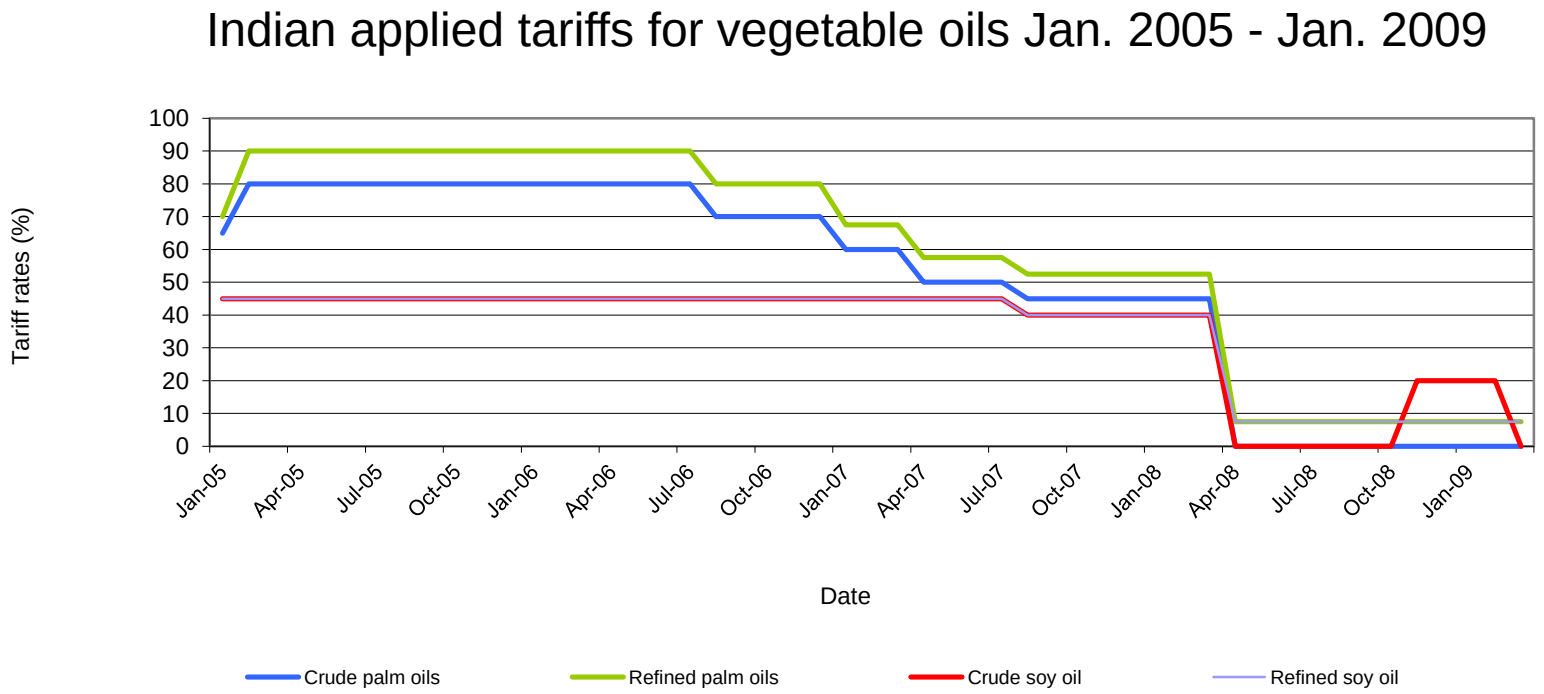
Indian average applied and bound tariff rates, 2009



Source: Government of India, Ministry of Finance, Central Board of Excise and Customs, *Customs Tariff 2008/09*; Government of India, Ministry of Finance, Central Board of Excise and Customs, various *Notifications of Customs*.

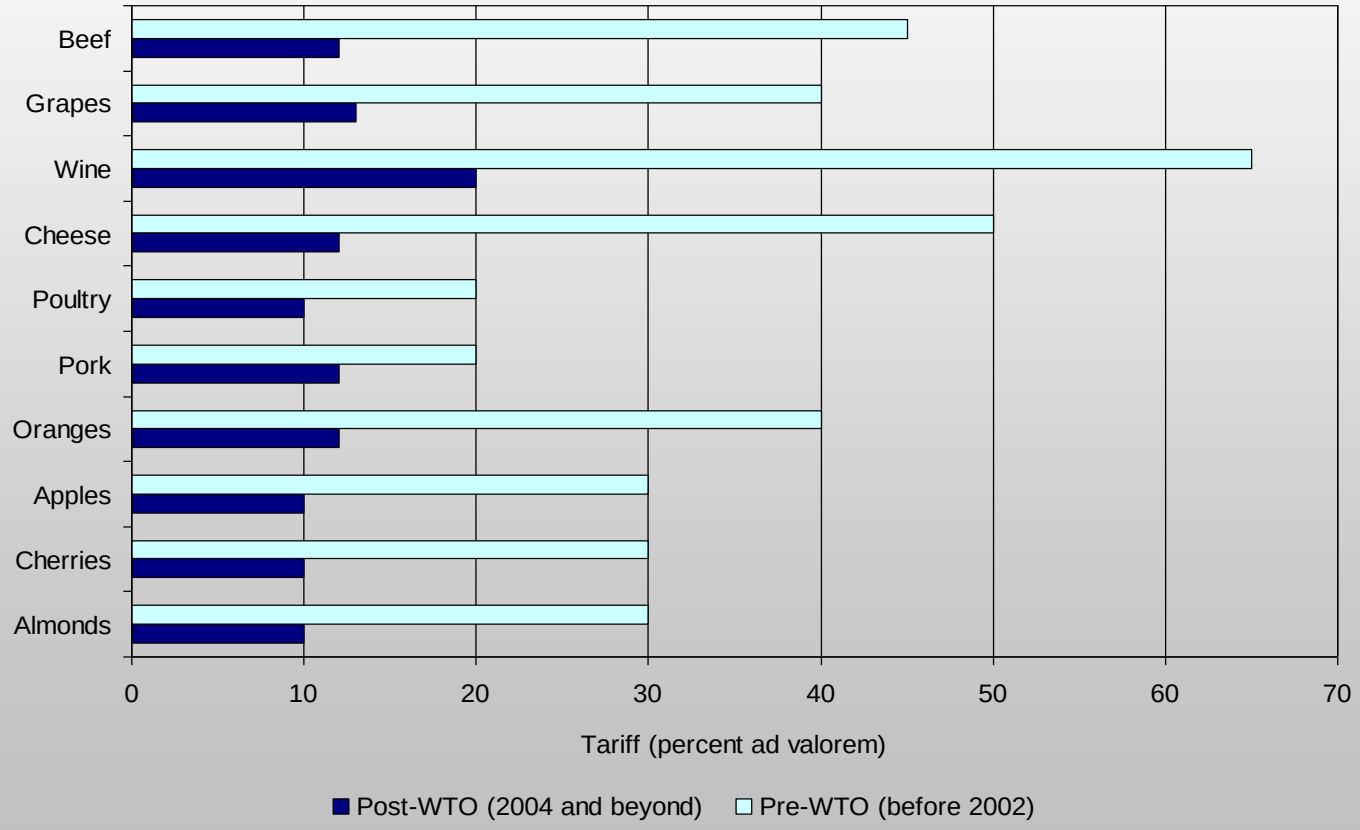
Mechanisms used to regulate trade - India

- Unpredictable variability of tariff rates



Source: USDA, FAS, various *India Oilseeds and Products* GAIN Reports.

Chinese agricultural tariffs were reduced significantly upon joining the WTO



Mechanisms used to regulate trade - China

- Tariffs: TRQ fill rates vary significantly by product, year

Source: Estimated by USITC staff based on data from the Global Trade Atlas.

Mechanisms used to regulate trade - NTMs

- **Sanitary/phytosanitary measures**
  - Health standards that exceed internationally accepted levels
  - Contamination standards that are inconsistent with international practices
  - Burdensome GMO approval processes
  - Fumigation requirements
- **Technical barriers to trade**
  - Quality standards
  - Labeling and packaging rules
  - Bans, monitoring, and licensing requirements
  - Customs procedures
  - Transparency
- **State trading enterprises**

Main questions:

- Why were US ag exports to India so low?
- Why were US ag exports to China, although larger and growing, concentrated in such a small number of unprocessed products?
- To what extent were tariffs and NTMs to blame and for which specific product groups?

Measuring the effects of tariffs and NTMs

- Four simulations
  - Two simulations: removed India/China's applied tariffs (and tariff equivalents of TRQs) on all food and agricultural imports from all sources
  - Two simulations: removed India/China's NTMs on certain food and agricultural imports from all sources

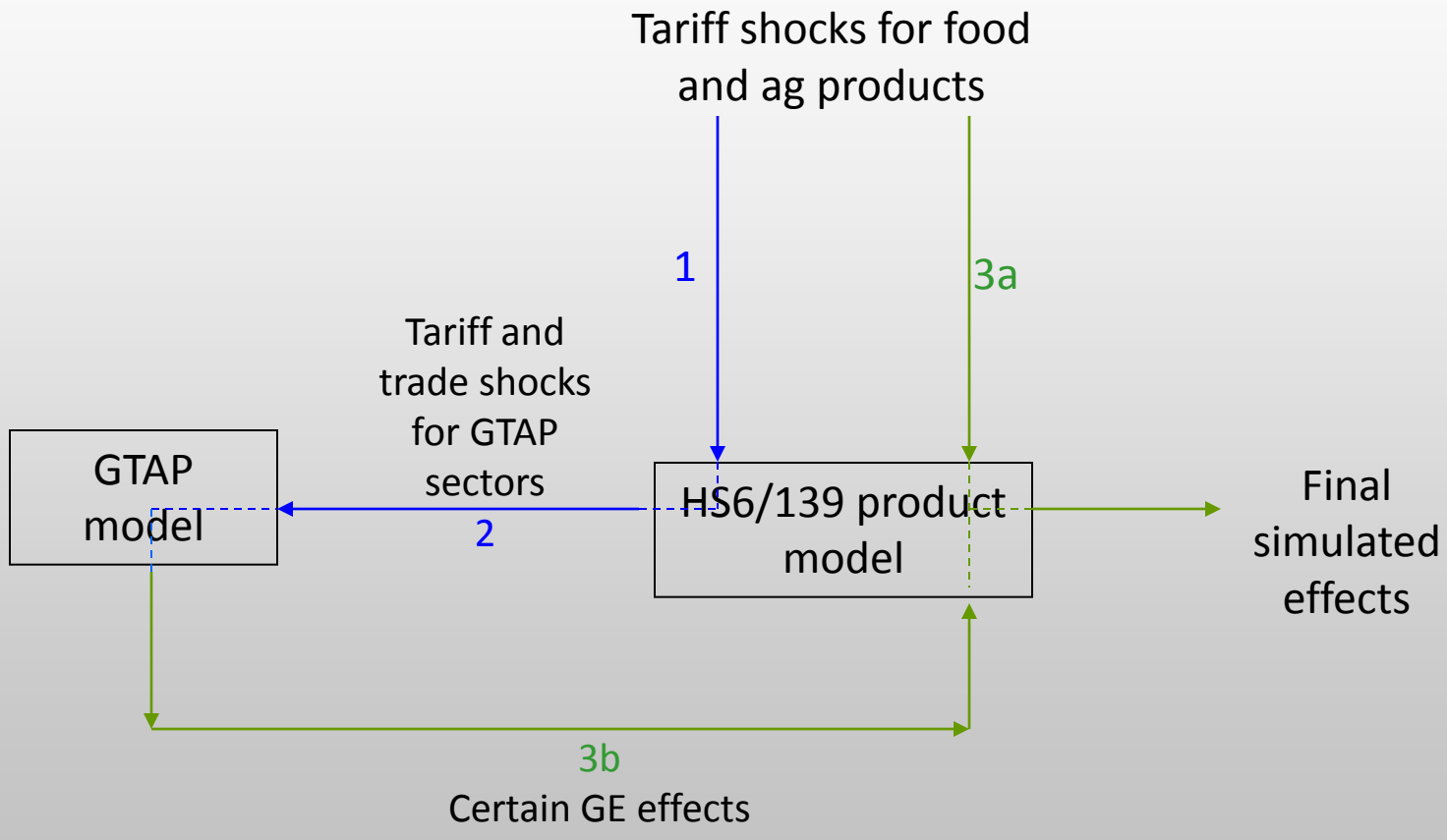
A product-level model is linked to an economy-wide model

- A partial equilibrium (PE) trade model at the product level is linked to a more aggregate general equilibrium (GE) model

- Product coverage: India
  - PE model: 699 food and ag products specified at the HS6 level
  - GE model (GTAP): 57 sectors; about 25 food and agr. sectors

- Product coverage: China
  - PE model: 139 products; 131 are food & agr. products
  - GE model (GTAP): 57 sectors; about 25 food and agr. sectors

Linking a product-level model to an economy-wide model



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NTM analysis

- NTMs raise domestic prices and reduce quantities of imports in a manner similar to a tariff
- Price gaps: Identify products for which consumers pay higher import prices than ROW
- Quantity gaps: Identify products for which imports are effectively low or zero (especially relative to the share of U.S. exports in other markets)

Tariff Simulation Results:

India, 2007

	Actual 2007 U.S. exports to India	Average tariff rate removed in simulation	Simulated change in U.S. exports to India
	(million $)	(percent)	(million $)
Almonds	174	20	27-33
Soybean oil	12	40	17-22
Apples	27	50	17-21
Cotton	79	10	3-26
Fresh grapes	8	30	4-5
All other ag products	135	na	132-184
Total	435	na	200-291

Tariff Simulation Results

China, 2009

	Actual 2009 U.S. exports to China	Average tariff rate removed in simulation	Simulated change in U.S exports
	(million $)	(percent)	(million $)
Wheat	84	68	489-1,192
Poultry	796	13	358-363
Pork offal	52	13	51-84
Cotton	803	5	28-71
Alcoholic beverages	137	29	32-43
All other	9,070	na	293-337
Total	10,942	na	1,251-2,090

NTM Simulation Results

India, 2007

	Main NTM(s)	Actual 2007 U.S. exports to India	Price gap/NTM tariff equivalent	Simulated change in U.S. ag exports
		(million $)	(percent)	(million $)
Wheat	SPS, STE	0	na	146-334
Dairy products	SPS, monitoring	9	49	15-20
Beverages	SPS, labeling	4	199	6-9
Other cereal grains	SPS, licensing	1	261	2-8
Meat products	SPS, bans	0.1	22	0.08-0.10
Total for 5 simulated products	na	14	na	166-371

NTM Simulation Results
China, 2009

	Main NTM(s)	Actual 2009 U.S. exports to China	Price gap/NTM tariff equivalent	Simulated change in U.S. ag exports
		(million $)	(percent)	(million $)
Wheat	SPS, TRQ admin	84	119	1,452-1,704
Cotton	TRQ admin	803	24	524-630
Pork offal	SPS, licensing	52	na	305-363
Frozen pork	SPS, licensing	23	na	49-56
Poultry	SPS, licensing	796	5	35-40
Apples	SPS	19	45	15-18
Stone fruits	SPS	5	6	1
Additional 5 products with NTMs	various	1	na	214-286
Total for 12 simulated products	na	1,782	na	2,595-3,098

Conclusions

- Tariffs and NTMs restrict U.S. agricultural exports to China and India considerably
- The overall scale of effects is much greater for China
- Effects vary widely by product but appear greatest for wheat, soybean oil, and meats

Opportunities for further research

- Update simulations using the latest trade data or to reflect the implementation of new policies
- More closely analyze the “rest of world” category trade effects
- Analyze effects of the movements in factors of production among industry sectors from the GE model

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NTM analysis scope