



INTERNATIONAL FOOD  
POLICY RESEARCH INSTITUTE  
*sustainable solutions for ending hunger and poverty*

# How does international trade and agriculture policies impact global food systems and sustainable agriculture?

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# How does international trade and agriculture policies impact global food systems and sustainable agriculture?

- Introductory remarks
  - It is well known that trade distortions are concentrated in the agricultural sector:
    - MAC Maps : une Mesure Bilatérale et Désagrégée de l'Accès au Marché, with L. Fontagné, M. Mimouni and X. Pichot, 2001, *Economie Internationale*, 89-90(1/2): 39-64.
    - Assessing Applied Protection across the World, with Y. Decreux, L. Fontagné, S. Jean and D. Laborde, 2008, *Review of International Economics*, 16(5), 850-863.
  - WTO is an international public good that supports beneficial trade negotiations
    - Eight Years of Doha Trade Talks: Where Do We Stand?, with D. Laborde, 2010, *Estey Centre Journal of International Law and Trade Policy*, 11(2): 349-70.
    - More or less Ambition in the Doha Round: Winners and Losers from Trade Liberalization with a Development Perspective, with S. Mevel and D. Orden, 2007, *The World Economy*, 30(8): 1253-1280.
    - Multilateral Agricultural Trade Liberalization: the Contrasting Fortunes of Developing Countries, with J.-C. Bureau, Y. Decreux and S. Jean, 2005, *The World Economy*, September, 28(9): 1329-1354.
  - ... and prevents the occurrence of trade wars.
    - Assessing the Potential Cost of a Failed Doha Round, with D. Laborde, 2010, *World Trade Review*, 9: 319-351.

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- It is less known that export restrictions are very often used by WTO countries and endanger food security, in particular in small net food-importing countries.
  - IFPRI trade economists have raised the alarm during the crisis.
    - IFPRI Director General from Joachim Von Braun (April 2008: <http://www.ifpri.org/publication/rising-food-prices> )
    - ... to Shenggen Fan (June 2011, <http://www.ifpri.org/pressrelease/moving-rhetoric-action-priorities-curtail-price-volatility-protect-poor> ).
  - Food Crisis and Export Taxation: the Cost of Non-Cooperative Trade Policies, with D. Laborde, 2011, *Review of World Economics*, forthcoming.

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- When large countries have an objective of constant food domestic prices, in the event of an increase in world agricultural prices the *optimal* response is:
  - to decrease import tariffs in net food-importing countries
  - and to increase export tariffs in net food-exporting countries.
- Small countries are harmed by both decisions.

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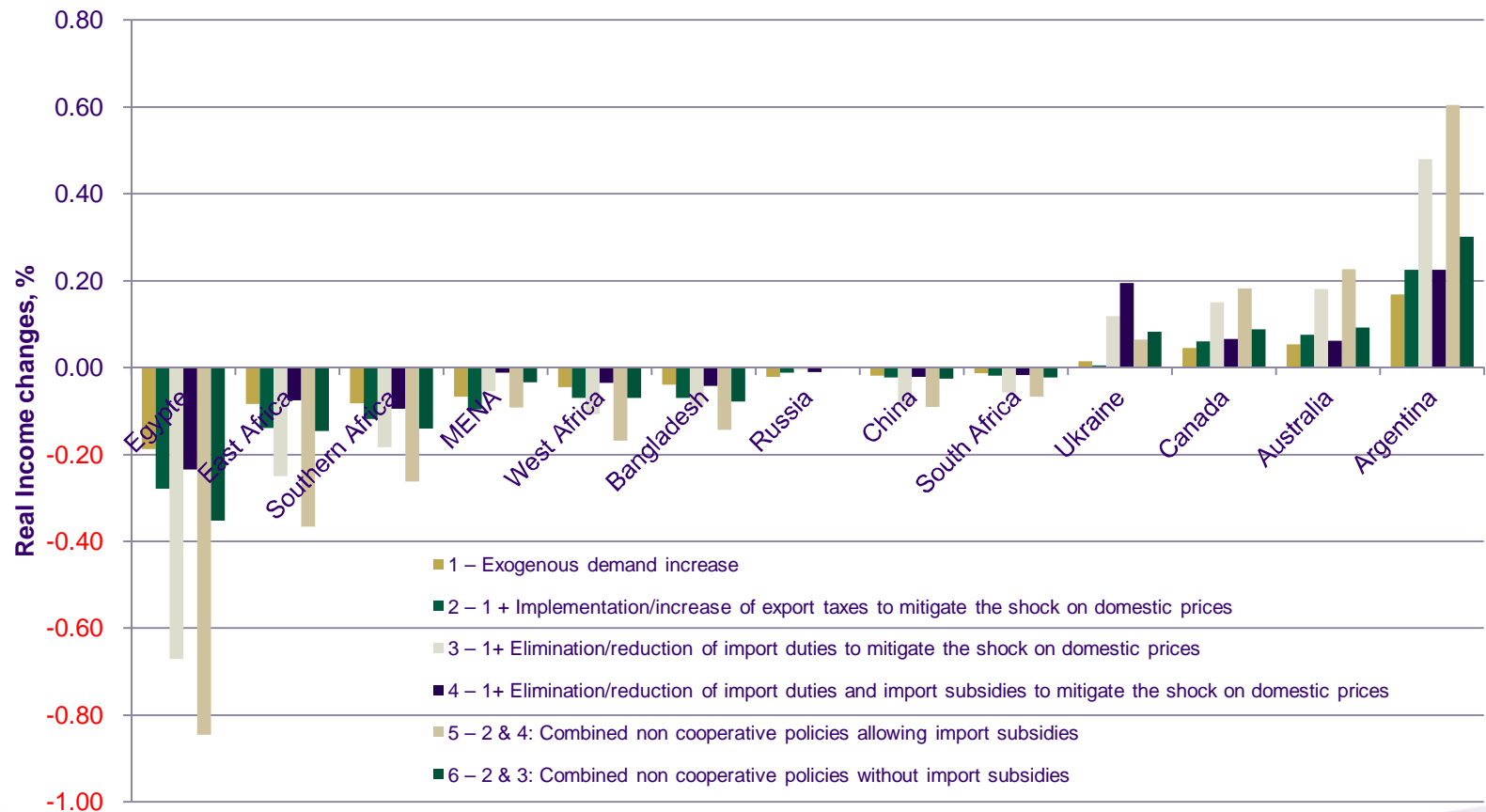
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- The costs of a lack of cooperation in and regulation of (binding process) such policies in a time of crisis has been illustrated using a global computable general equilibrium (CGE) model, mimicking the mechanisms that have appeared during the recent food price surge.

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	Average production price	Average trade price
<b>1 – Exogenous demand increase [initial perturbation]</b>	9.10%	10.8%
<i>Effects of policy responses</i>		
<b>2 – 1 + Implementation/increase of export taxes to mitigate the shock on domestic prices</b>	1.52%	16.76%
<b>3 – 1+ Elimination/reduction of import duties to mitigate the shock on domestic prices</b>	9.05%	12.62%
<b>4 – 1+ Elimination/reduction of import duties and import <u>subsidies</u> to mitigate the shock on domestic prices</b>	20.12%	27.31%
<b>5 – 2 &amp; 4: Combined non cooperative policies allowing import subsidies</b>	16.00%	41.10%
<b>6 – 2 &amp; 3: Combined non cooperative policies without import subsidies</b>	7.05%	20.58%

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# Protection applied by country

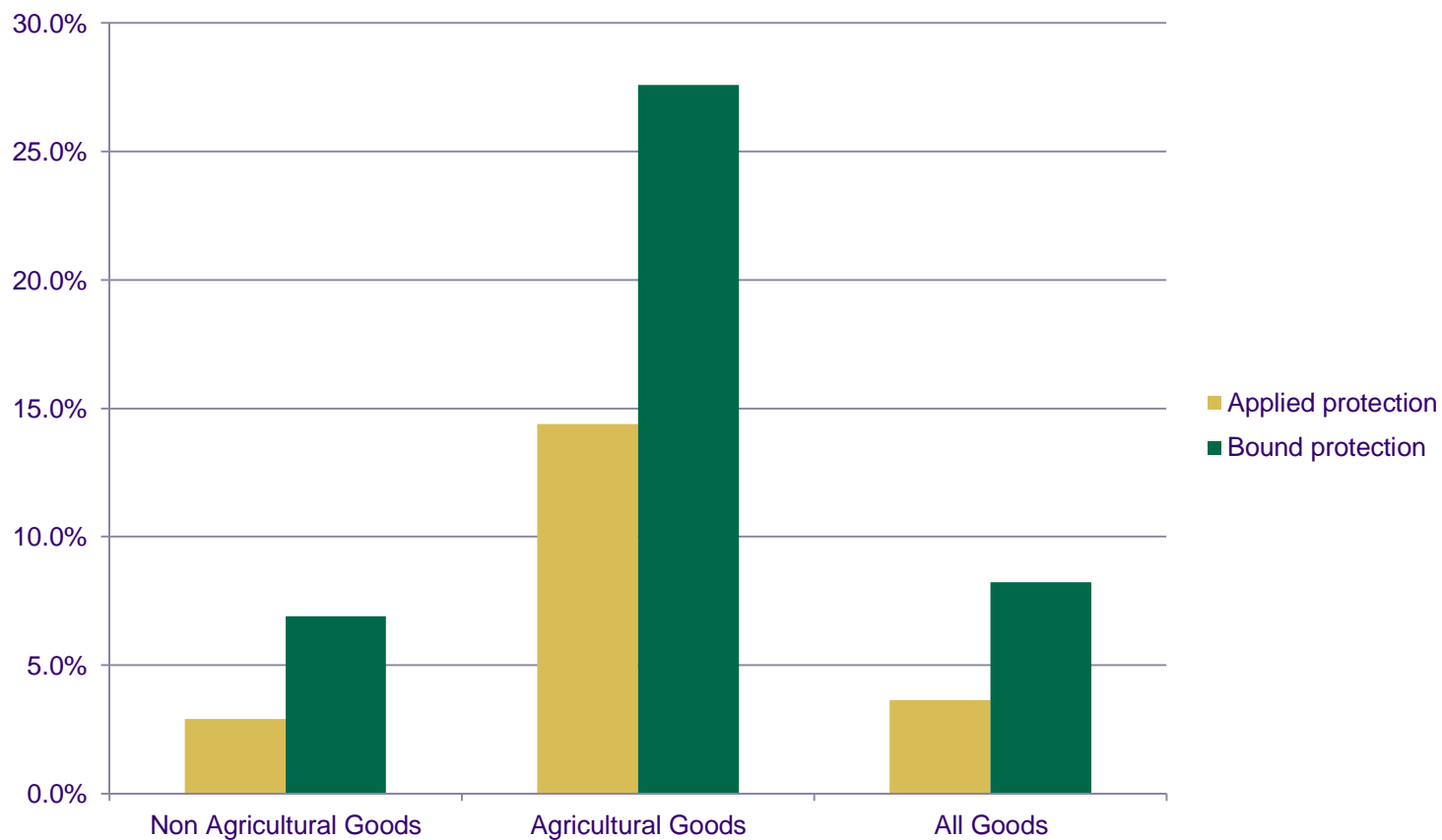
Table 2: Protection applied by country (2001)

	Total	By sector			By exporter		
		Agric.	Manuf.	Tex-Wea	LdC	Dvping Co.	Dvped Co.
<b>World</b>	<b>5.6%</b>	<b>19.1%</b>	<b>4.2%</b>	<b>10.5%</b>	<b>4.9%</b>	<b>5.3%</b>	<b>5.7%</b>
Argentina	12.6%	12.0%	12.4%	18.3%	7.7%	10.8%	13.1%
Australia	5.1%	2.7%	4.9%	14.2%	7.9%	5.6%	4.9%
Bangladesh	16.9%	20.9%	15.2%	29.7%	16.7%	20.2%	14.8%
Brazil	11.8%	11.0%	11.4%	18.1%	2.4%	9.4%	12.8%
Canada	3.4%	14.9%	2.1%	10.8%	5.8%	3.1%	3.5%
China	14.1%	25.0%	12.7%	20.4%	3.6%	12.9%	14.7%
European Union (15)	3.1%	17.9%	2.0%	5.7%	0.8%	2.7%	3.5%
India	33.5%	59.6%	29.9%	29.5%	28.3%	35.4%	32.5%
Japan	3.9%	35.3%	0.9%	6.8%	1.6%	3.9%	3.9%
Korea	9.2%	53.8%	5.5%	10.3%	10.1%	9.9%	8.9%
Madagascar	4.4%	5.5%	4.1%	4.7%	2.2%	4.6%	4.4%
Mexico	11.0%	28.2%	8.9%	14.5%	15.9%	17.9%	8.9%
Morocco	20.9%	40.1%	17.9%	33.9%	17.4%	25.0%	19.3%
Mozambique	9.9%	13.4%	8.3%	21.6%	10.0%	11.4%	9.1%
South Africa	8.4%	19.2%	6.5%	22.5%	5.8%	10.7%	7.7%
Switzerland	4.3%	43.3%	1.3%	4.0%	0.6%	4.0%	4.5%
Thailand	12.6%	28.0%	10.7%	18.1%	4.4%	12.8%	12.6%
Tunisia	20.3%	53.3%	16.5%	26.0%	9.4%	24.2%	18.9%
Turkey	6.0%	38.0%	2.6%	8.9%	3.3%	9.1%	4.9%
United States of America	2.3%	5.0%	1.7%	9.4%	5.1%	2.4%	2.3%
Vietnam	14.4%	26.0%	11.1%	31.1%	15.0%	16.6%	13.0%

Source: MacMap.



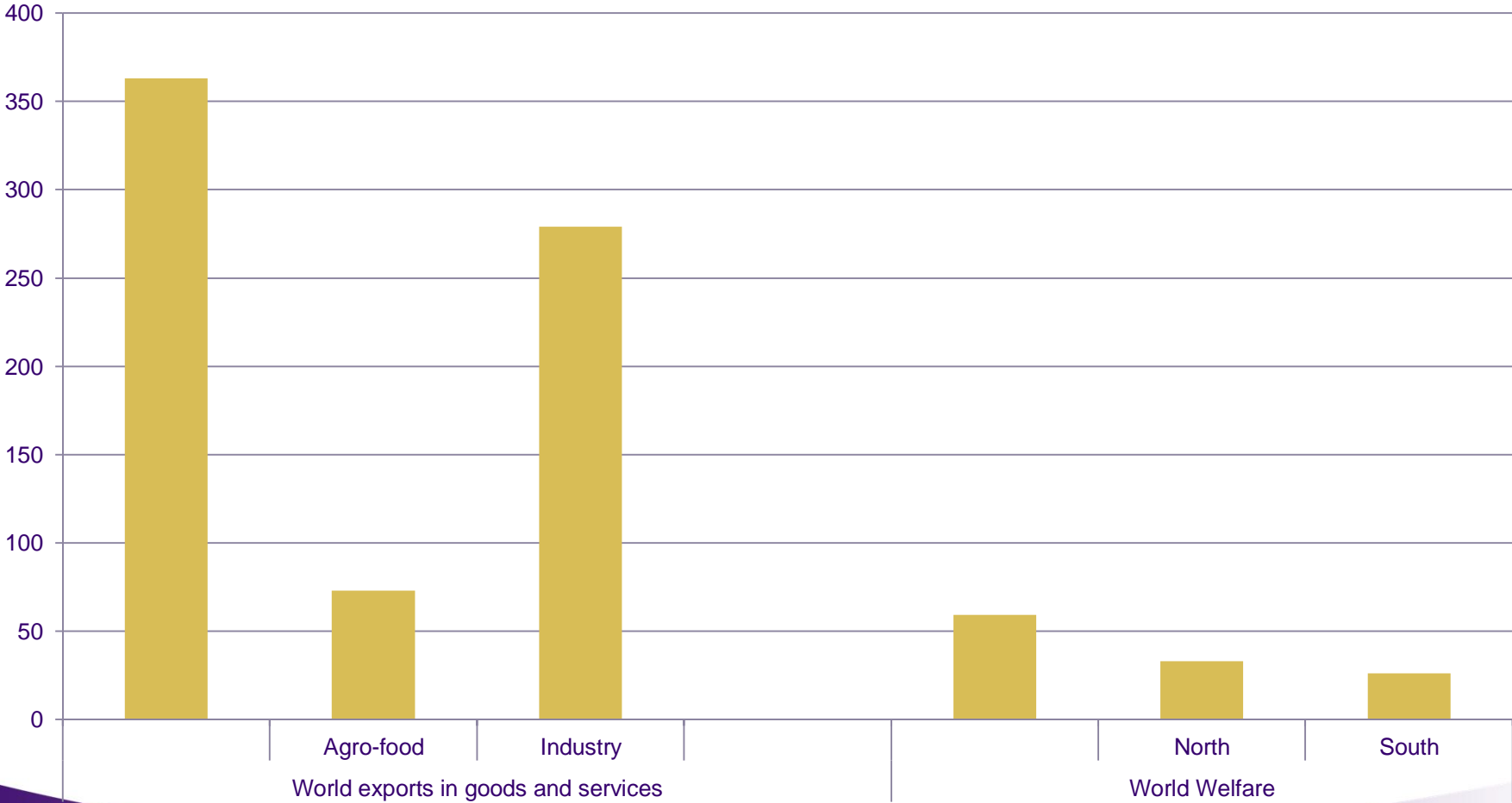
## Protection applied by sector – 2007 “updated”



# Global results (in volume terms and in \$ billion) led by tariffs and domestic support changes (DDA reform)

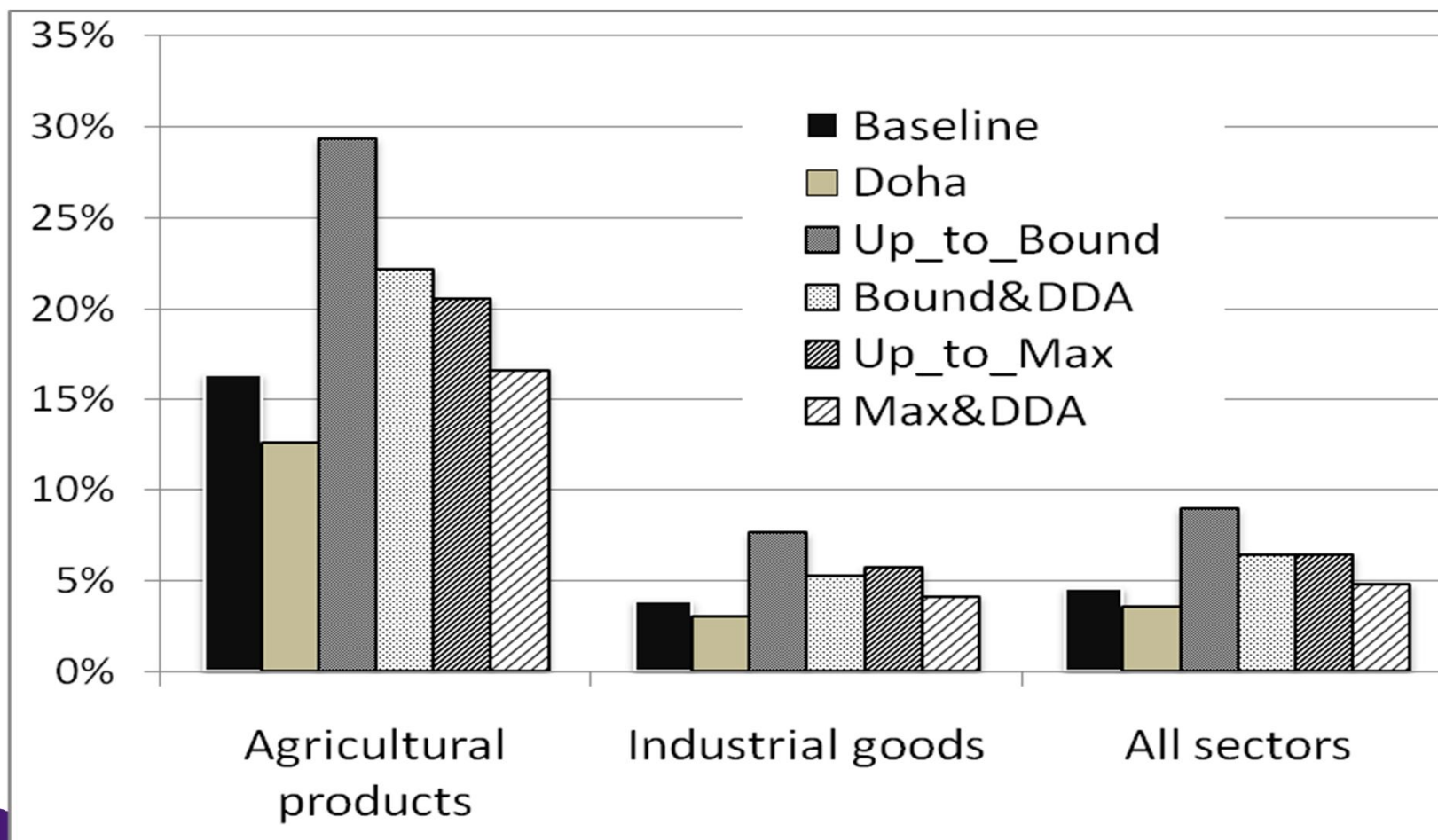
## Change compared to the baseline in 2025

Source: Authors' calculations. MIRAGE simulations.



## World Average Tariffs by scenario – 2010

Source: MAcMapHS6v2.1, TRAINS and authors' calculations (reference group weighting scheme).



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- Advantages of the multilateral trading system
  - Multilateral lib'n is good for international food security
  - Consolidation of trade policies is good for international food security
- The issue of export restrictions has to be very soon addressed by WTO