

Antonia Ngavozafy and
Dr. Maria C. Latorre

New EU-MERCOSUR
Association Agreement:
Quantitative
Assessment of its
Impacts on Global Trade
in Agricultural
Commodities

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1. Background

2. Literature review

3. Our model and
assessment strategy

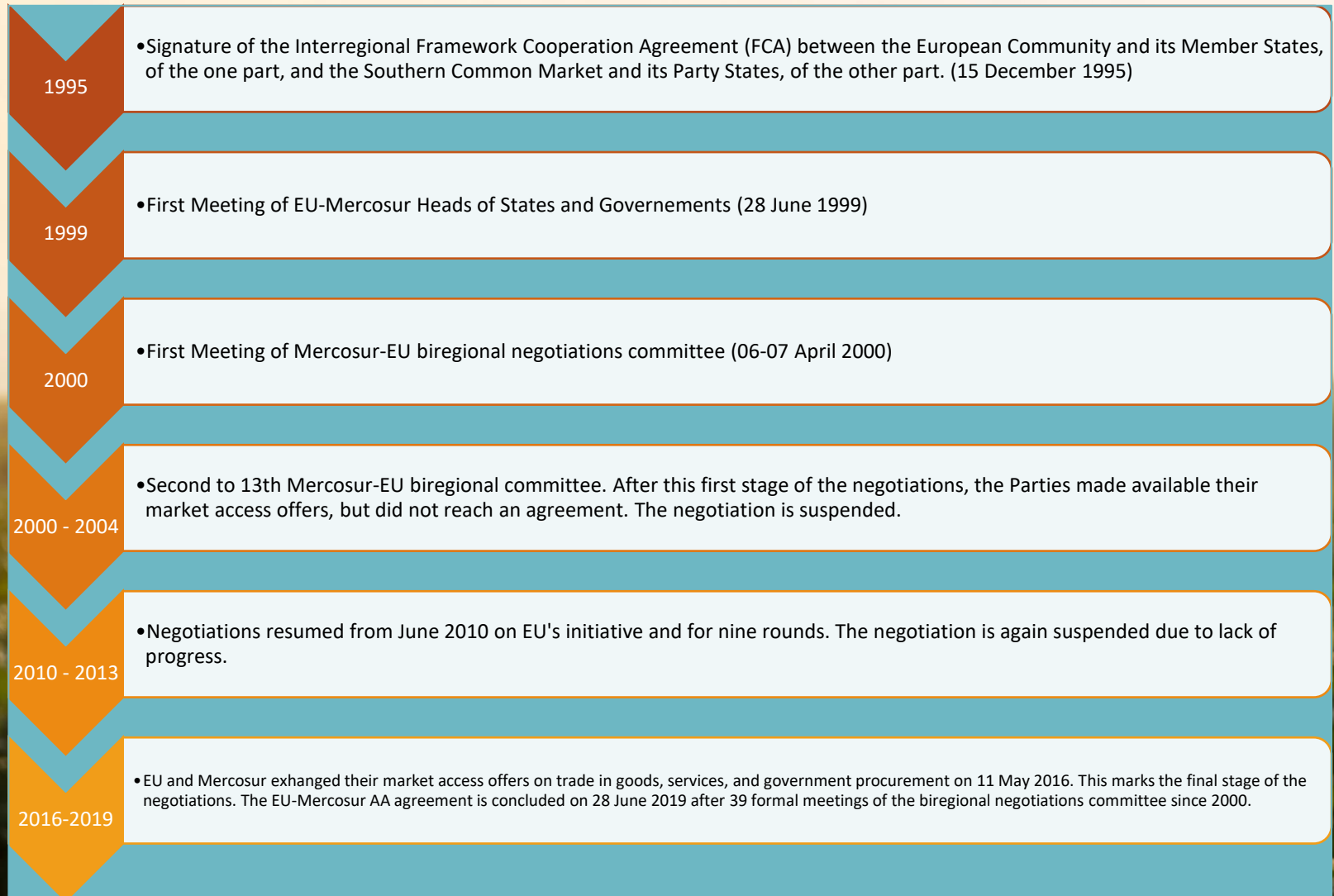
4. Conclusion

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History of negotiation



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The 2nd biggest trade bloc ever created

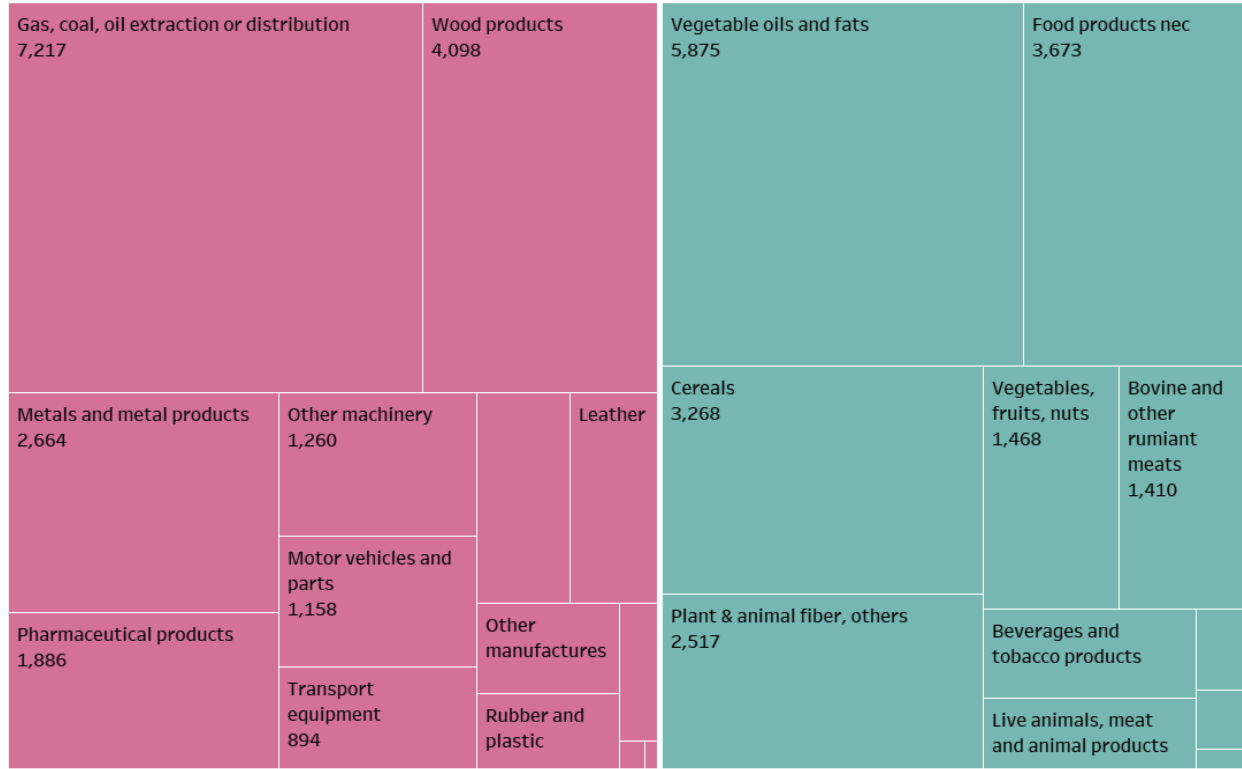
	Mercosur	European Union 27
Population, total (Million)	Argentina	44.90
	Brazil	221.30
	Paraguay	7.00
	Uruguay	3.50
	266.49	380.68
GDP (Billion constant 2010 USD)	Argentina	437.80
	Brazil	2 347.20
	Paraguay	37.40
	Uruguay	50.50
	2 873.00	13 683.90
GDP per capita (constant 2010 USD)	Argentina	9 742.50
	Brazil	11 121.70
	Paraguay	5 310.40
	Uruguay	14 597.30
	10 780.68	35 946.18
Exports of goods (Billion USD)	Argentina	65.12
	Brazil	224.00
	Paraguay	7.65
	Uruguay	7.82
	304.58	5 640.03
Imports of goods (Billion USD)	Argentina	49.13
	Brazil	177.34
	Paraguay	12.19
	Uruguay	8.31
	246.97	5 370.73

Source: World Development Indicators (for population and GDP data), Trademap.org (for trade statistics), April 2021.

Note: Imports and exports include intra-regional trade.

Market structures

European Union 27 imports (USD million) from the Mercosur in 2019



Mercosur's Imports (USD million) from the EU27 in 2019



Group

■ Agricultural and agro-industry products

■ Manufacturing

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Market access

Sectors	Argentina	Brazil	Paraguay	Uruguay	EU27
Beverages and tobacco products	21%	17%	17%	16%	13%
Cereals	8%	1%	1%	6%	8%
Bovine and other ruminant meats	7%	8%	8%	11%	34%
Forestry	5%	5%	5%	3%	0%
Dairy products	19%	16%	16%	20%	32%
Other animal products	2%	2%	2%	3%	4%
Plant & animal fiber, others	9%	8%	8%	7%	4%
Food products nec	15%	13%	13%	13%	11%
Live animals, meat and animal products	10%	15%	15%	10%	21%
Sugar	15%	26%	26%	23%	33%
Vegetables, fruits, nuts	9%	8%	8%	9%	11%
Vegetable oils and fats	18%	11%	11%	10%	8%
Pharmaceutical products	9%	7%	7%	8%	5%
Electronic products	6%	3%	3%	5%	1%
Gas, coal, oil extraction or distribution	0%	3%	3%	0%	0%
Wood products	10%	11%	11%	10%	1%
Leather products	32%	18%	18%	23%	9%
Metals and metal products	12%	13%	13%	11%	2%
Motor vehicles and parts	18%	12%	12%	17%	8%
Other machinery	13%	5%	5%	8%	2%
Other manufactures	17%	10%	10%	15%	3%
Transport equipment	11%	11%	11%	12%	2%
Petroleum, coal and other chemical products	1%	1%	1%	0%	2%
Rubber and plastic products	7%	7%	7%	7%	0%
Textiles	23%	11%	11%	16%	7%
Wearing apparel	34%	21%	21%	20%	11%

Source: Authors' calculation based on Tariffs data from Market Access Map and Imports from Trade Map, April 2021.

(*) Aggregation methodology: World trade weighted (2017-2019)

Group

Agricultural and agro-industry products

Manufacturing

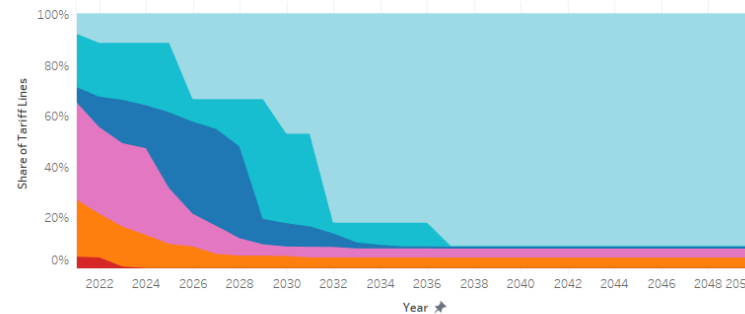
Tariff liberalization schedules - Mercosur

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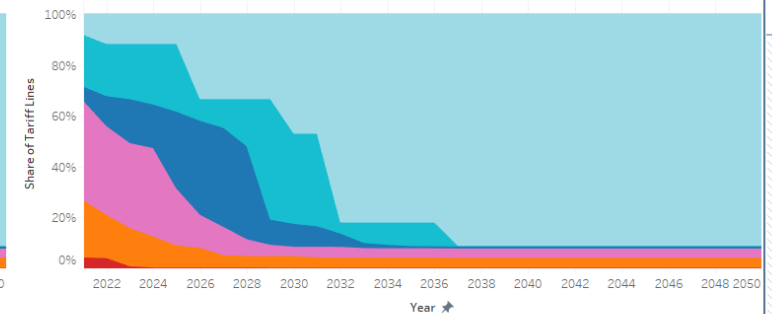
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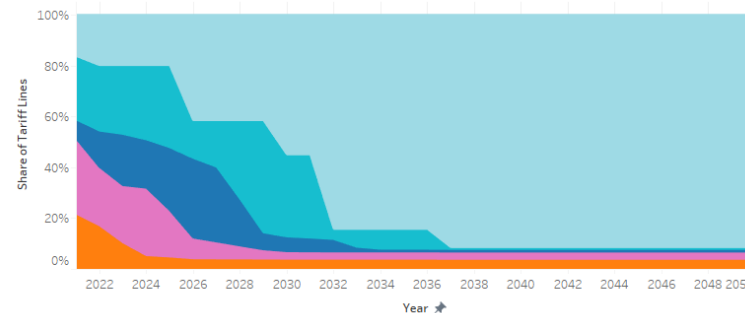
Tariff Reduction Schedules of Argentina under the EU-Mercosur Association Agreement
(Assuming an entry into force of the agreement in 2022)



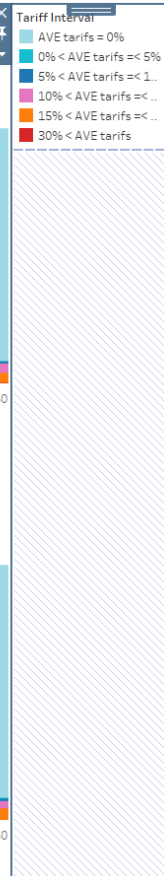
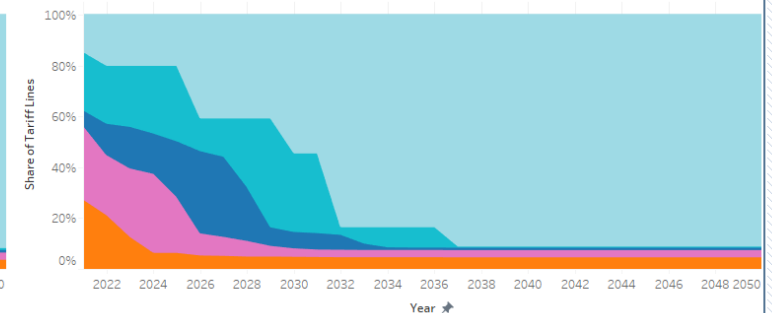
Tariff Reduction Schedules of Brazil under the EU-Mercosur Association Agreement
(Assuming an entry into force of the agreement in 2022)



Tariff Reduction Schedules of Paraguay under the EU-Mercosur Association Agreement
(Assuming an entry into force of the agreement in 2022)



Tariff Reduction Schedules of Uruguay under the EU-Mercosur Association Agreement
(Assuming an entry into force of the agreement in 2022)

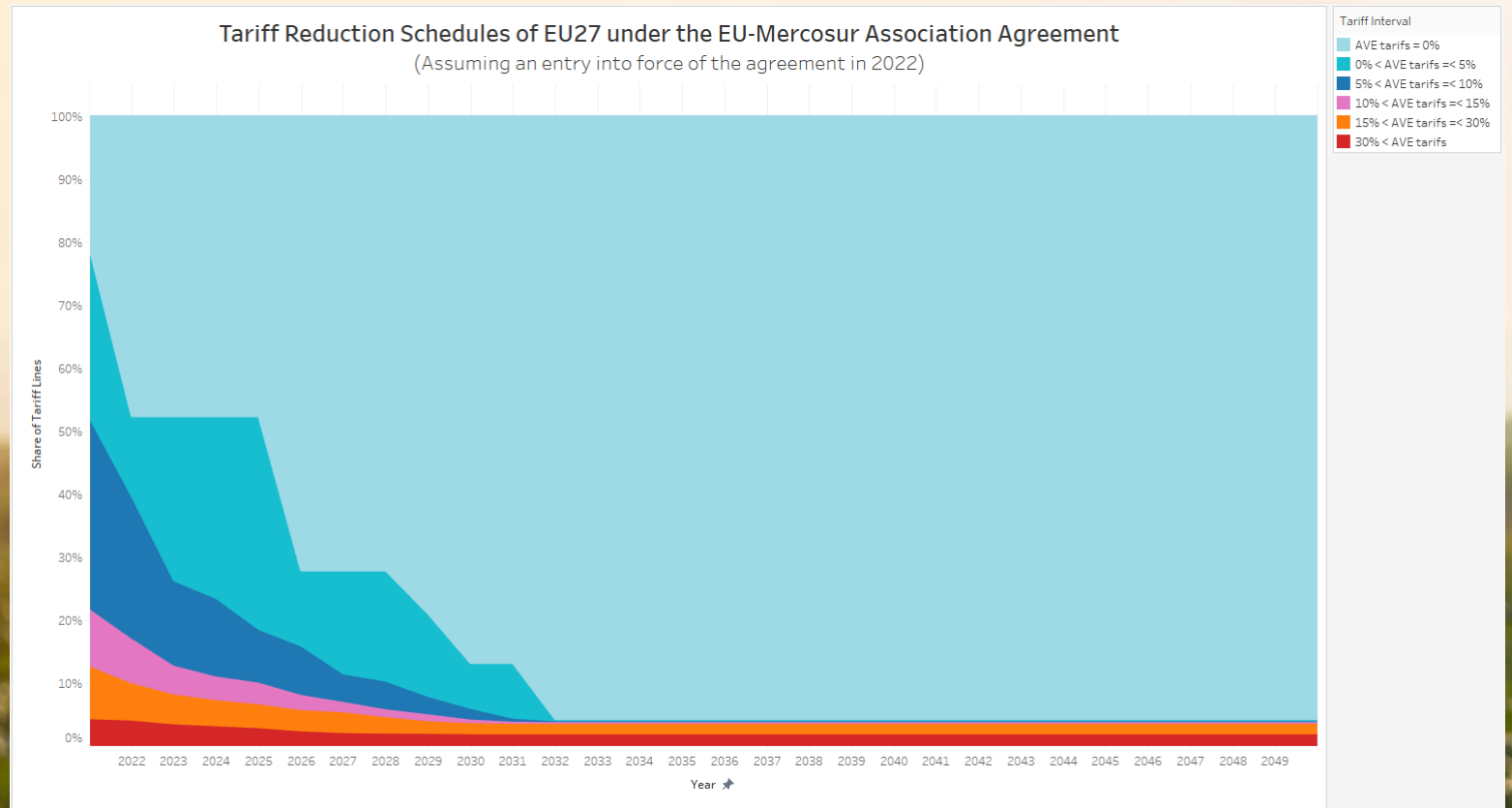


Tariff liberalization schedules – EU27

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Literature

Carmen Estrades (2012)
LSE Consulting (2020)
Calil and Ribera (2020)

→ have in common that:

- They used scenarios which make broad assumptions of the tariffs cut.
- They neglected or missed the quantification of NTMs.
- They did not include the treatment of Tariff Rate Quotas (TRQ), which is a key component of the treaty.



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Literature vs Our contributions

Literature on EU-Mercosur AA have in common that:

- They used scenarios which make broad assumptions of the tariffs cut.
→ **We use staged preferential tariffs computed based on the texts of the agreement.**
- They neglected or missed the quantification of NTMs.
→ **We incorporate NTMs into the model through their AVE estimates, which are their tariff equivalent expressed in the form of percentage**
- They did not include the treatment of Tariff Rate Quotas (TRQ), which is a key component of the treaty.
→ **We include TRQ into the model through their AVE estimates.**

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Model and Assessment strategies – Staging of Preferential tariffs

Elements of a Tariff Offer:

- Product code (NTLC)
- Base duties
- Staging categories



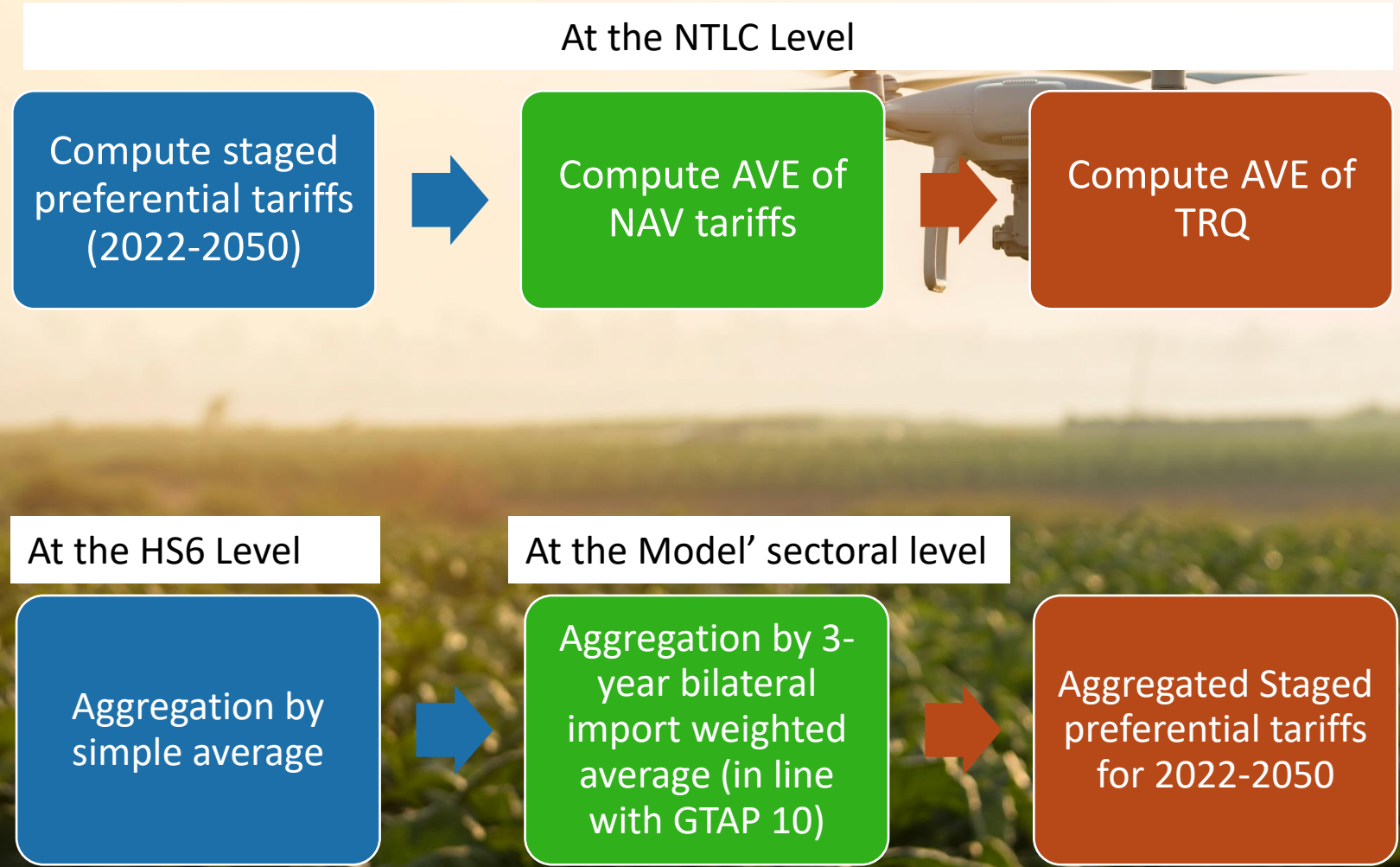
COM SEC	CN 2013	Description short	Base rate	28 June 2019	Notes
agri	01012100	Pure-bred breeding horses	Free	0	
agri	01012910	Horses for slaughter	Free	0	
agri	01012990	Live horses (excl. for slaughter, pure-bred for breeding)	11,5	7	
agri	01013000	Live asses	7,7	4	
agri	01019000	Live mules and hinnies	10,9	7	
agri	01022110	Pure-bred breeding heifers "female bovines that have never calved"	Free	0	
agri	01022130	Pure-bred breeding cows (excl. heifers)	Free	0	
agri	01022190	Pure-bred cattle for breeding (excl. heifers and cows)	Free	0	
agri	01022905	Live cattle of the sub-genus Bibos or Poephagus (excl. pure-bred)	Free	0	
agri	01022910	Live cattle of a weight <= 80 kg (excl. pure-bred for breeding)	10,2 + 93,1 €/100 kg/net	10	
agri	01022921	Cattle of a weight > 80 kg but <= 160 kg, for slaughter	10,2 + 93,1 €/100 kg/net	10	
agri	01022929	Live cattle of a weight > 80 kg but <= 160 kg (excl. for slaughter)	10,2 + 93,1 €/100 kg/net	10	
agri	01022941	Cattle of a weight > 160 kg but <= 300 kg, for slaughter	10,2 + 93,1 €/100 kg/net	10	
agri	01022949	Live cattle of a weight > 160 kg but <= 300 kg (excl. for slaughter)	10,2 + 93,1 €/100 kg/net	10	
agri	01022951	Heifers "female bovines that have never calved" of a weight > 80 kg	10,2 + 93,1 €/100 kg/net	10	
agri	01022959	Live heifers "female bovines that have never calved" of a weight > 80 kg	10,2 + 93,1 €/100 kg/net	10	
agri	01022961	Cows of a weight > 300 kg, for slaughter (excl. heifers)	10,2 + 93,1 €/100 kg/net	10	
agri	01022969	Live cows of a weight > 300 kg (excl. for slaughter and pure-bred)	10,2 + 93,1 €/100 kg/net	10	
agri	01022991	Cattle of a weight > 300 kg, for slaughter (excl. heifers and cows)	10,2 + 93,1 €/100 kg/net	10	
agri	01022999	Live cattle of a weight > 300 kg (excl. for slaughter, pure-bred)	10,2 + 93,1 €/100 kg/net	10	
agri	01023100	Pure-bred buffalo for breeding	Free	0	
agri	01023910	Live domestic buffalo (excl. pure-bred for breeding)	10,2 + 93,1 €/100 kg/net	10	
agri	01023990	Live buffalo (excl. domestic species and pure-bred for breeding)	Free	0	

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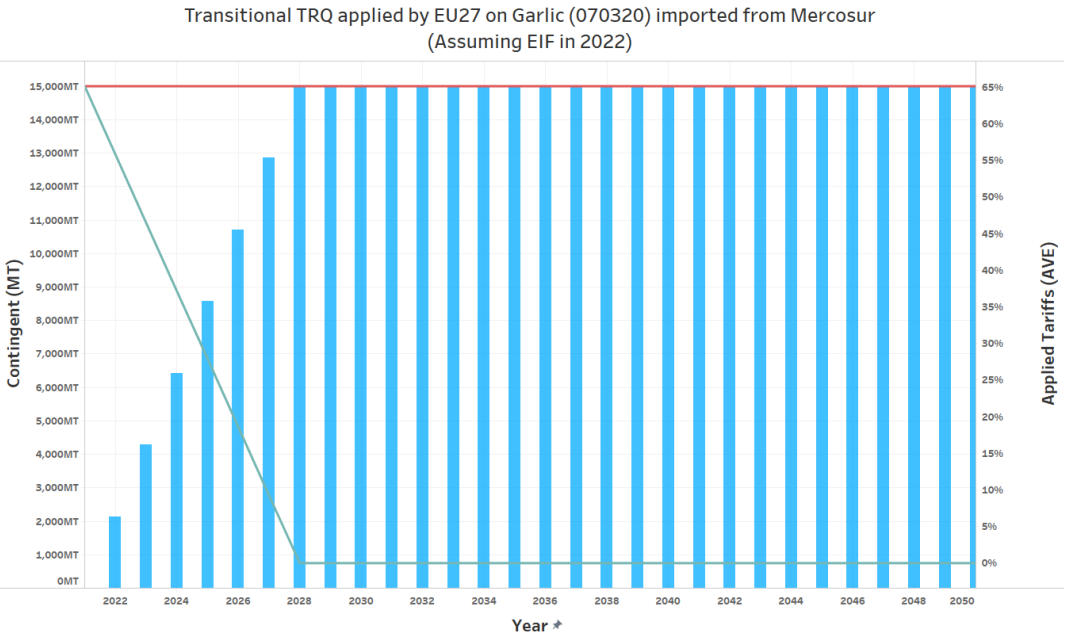
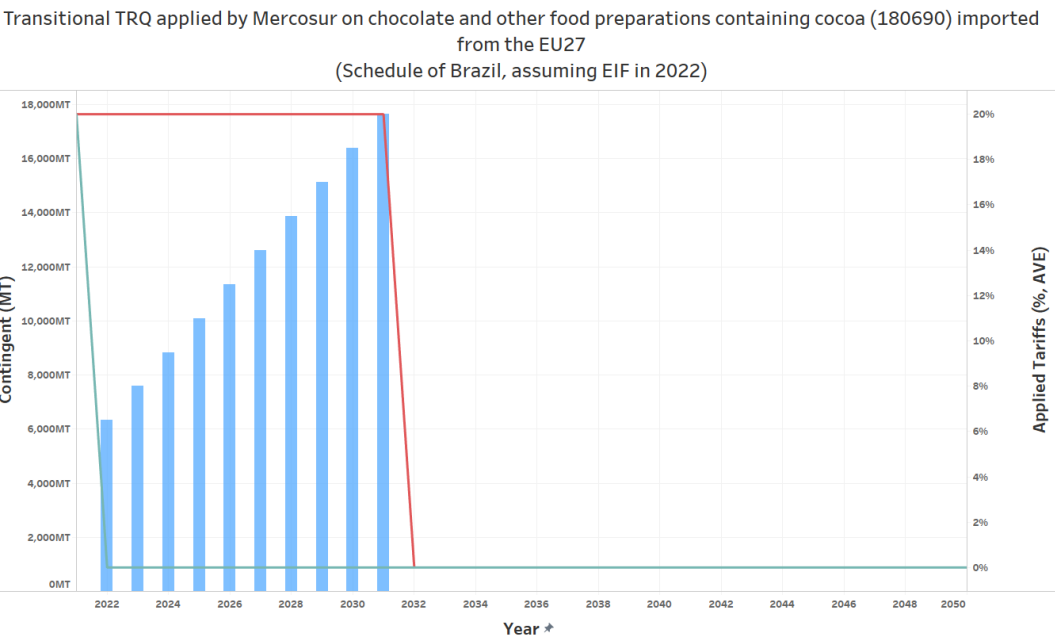
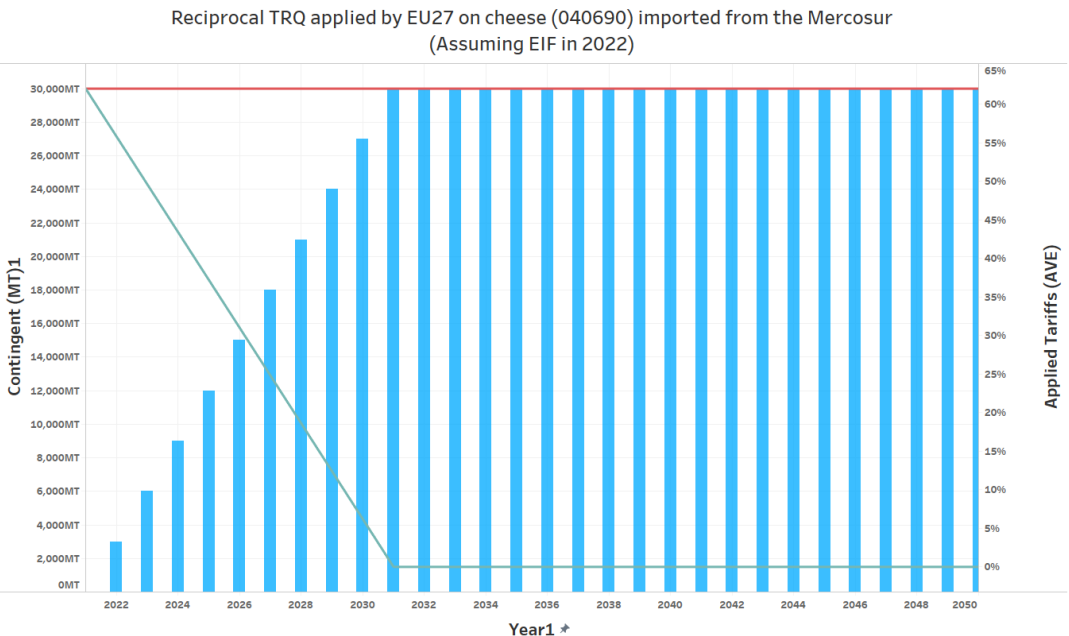
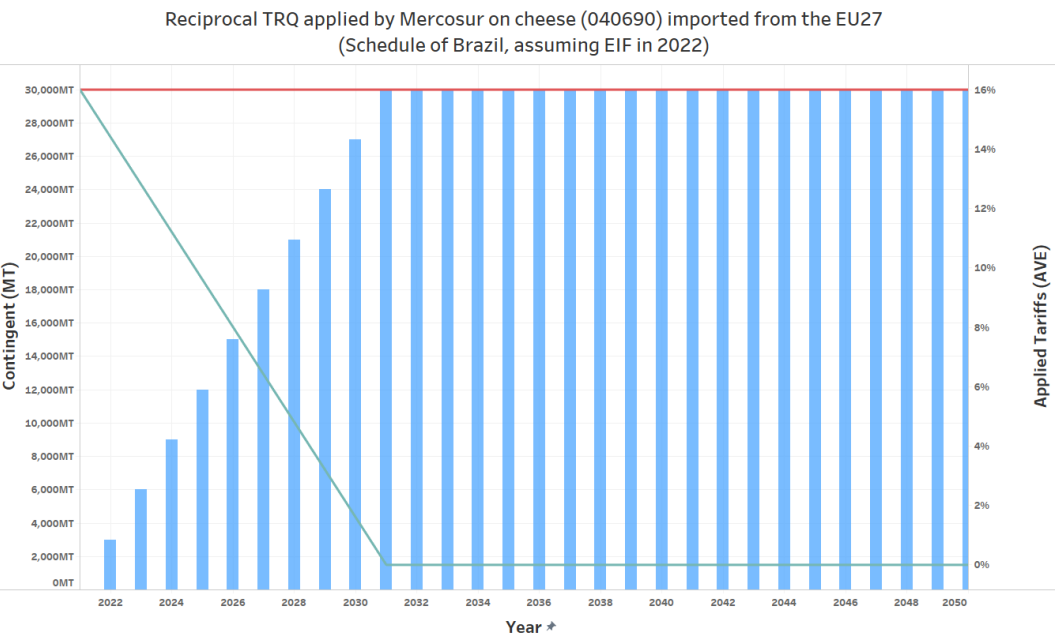
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Model and Assessment strategies – Staging of Preferential tariffs



Model and Assessment strategies – AVE of TRQ

Components of a TRQ: IQTR, OQTR, Contingent or Quota, Administration Method



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Model and Assessment strategies – AVE of TRQ

To evaluate the extent of TRQ, we opt for an estimation of their AVE for each of the NTLC impacted following the methodology developed by Anderson and Neary (2005) who consider three possible equilibria situation:

- Regime-1: Demand with supply below the quota
→ marginal tariffs (AVE) = IQTR
- Regime-2: Demand with supply at the quota
→ marginal tariffs (AVE) = IQTR + quota premium
- Regime-3: Demand with supply over the quota.
→ marginal tariffs (AVE) = OQTR

Model and Assessment strategies – AVE of TRQ, example

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year	reporter	ntlc	ave_IQTR	ave_OQTR	Contingent	AVG_QJ26	regime	ave
2022	076	07032090	0.3	0.35	2143	17314.3	3 - Over Quota	0.35
2023	076	07032090	0.25	0.35	4286	17314.3	3 - Over Quota	0.35
2024	076	07032090	0.2	0.35	6429	17314.3	3 - Over Quota	0.35
2025	076	07032090	0.15	0.35	8571	17314.3	3 - Over Quota	0.35
2026	076	07032090	0.1	0.35	10714	17314.3	3 - Over Quota	0.35
2027	076	07032090	0.05	0.35	12857	17314.3	3 - Over Quota	0.35
2028	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2029	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2030	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2031	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2032	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2033	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2034	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2035	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2036	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2037	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2038	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2039	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2040	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2041	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2042	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2043	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2044	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2045	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2046	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2047	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2048	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2049	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35
2050	076	07032090	0	0.35	15000	17314.3	3 - Over Quota	0.35

Model and Assessment strategies – Sample AVE of preferential tariffs (Brazil – EU)

Sector description	Group	2021	2022	2027	2032	2037	2042	2047	2052
Beverages and tobacco products	Agricultural and agro-industry products	0.21	0.16	0.06	0.01	0	0	0	0
Pharmaceutical products	Manufacturing	0.08	0.07	0.04	0.01	0.01	0.01	0.01	0.01
Cereals	Agricultural and agro-industry products	0.09	0.07	0.04	0.02	0	0	0	0
Bovine and other ruminant meats	Agricultural and agro-industry products	0.06	0.05	0.01	0	0	0	0	0
Electronic products	Manufacturing	0.09	0.08	0.05	0.01	0	0	0	0
Forestry	Agricultural and agro-industry products	0.04	0.03	0	0	0	0	0	0
Gas, coal, oil extraction or distribution	Manufacturing	0	0	0	0	0	0	0	0

Model and Assessment strategies – Sample AVE of preferential tariffs (EU – Brazil)

Sector description	Group	2021	2022	2027	2032	2037	2042	2047	2052
Beverages and tobacco products	Agricultural and agro-industry products	0.08	0.08	0	0	0	0	0	0
Pharmaceutical products	Manufacturing	0.05	0.04	0	0	0	0	0	0
Cereals	Agricultural and agro-industry products	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Bovine and other ruminant meats	Agricultural and agro-industry products	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Electronic products	Manufacturing	0.01	0	0	0	0	0	0	0
Forestry	Agricultural and agro-industry products	0	0	0	0	0	0	0	0
Gas, coal, oil extraction or distribution	Manufacturing	0	0	0	0	0	0	0	0

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Model and Assessment strategies

Standard CGE model with 8 regions and 36 sectors.

- Baseline scenario (a world without EU-Mercosur)
- FTA scenarios where the treaty is implemented at different points in time: on the date of entry into force, five, ten, and 15 years later.
- The quantitative impacts of the agreement are obtained by comparing the projections under the baseline and the FTA scenarios.



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Model and Assessment strategies – Regional Aggregation

Region	Description
Argentina	Argentina
Brazil	Brazil
Paraguay	Paraguay
Uruguay	Uruguay
EUR	European Union 28 without the UK
China	China
United States of America	United States
ROW	Rest of the world



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Model and Assessment strategies – Sectoral Aggregation

Sector Number	Code	Description	Group
1	CER	Cereals	Agricultural and agro-industry products
2	V_F	Vegetables, fruits, nuts	Agricultural and agro-industry products
3	SGR	Sugar	Agricultural and agro-industry products
4	OCR	Plant & animal fiber, others	Agricultural and agro-industry products
5	CMT	Bovine and other ruminant meats	Agricultural and agro-industry products
6	OAP	Other animal products	Agricultural and agro-industry products
7	MIL	Dairy products	Agricultural and agro-industry products
8	FRS	Forestry	Agricultural and agro-industry products
9	GAS	Gas, coal, oil extraction or distribution	Manufacturing
10	OMT	Live animals, meat and animal products	Agricultural and agro-industry products
11	VOL	Vegetable oils and fats	Agricultural and agro-industry products
12	OFD	Food products nec	Agricultural and agro-industry products
13	B_T	Beverages and tobacco products	Agricultural and agro-industry products
14	TEX	Textiles	Manufacturing
15	WAP	Wearing apparel	Manufacturing
16	LEA	Leather products	Manufacturing
17	L_P	Wood products	Manufacturing
18	PCH	Petroleum, coal and other chemical products	Manufacturing
19	BPH	Pharmaceutical products	Manufacturing
20	RPP	Rubber and plastic products	Manufacturing
21	OMF	Other manufactures	Manufacturing
22	MMP	Metals and metal products	Manufacturing
23	ELQ	Electronic products	Manufacturing
24	OMA	Other machinery	Manufacturing
25	MVH	Motor vehicles and parts	Manufacturing
26	OTN	Transport equipment	Manufacturing
27	OSE	Other services	Services
28	CNS	Construction	Services
29	AFS	Hotels and Restaurants	Services
30	WTP	Maritime Transport	Services
31	ATP	Air Transport	Services
32	CMN	Communication	Services
33	OFI	Banking	Services
34	INS	Insurance	Services
35	OBR	Business Services	Services
36	ROS	Personal Services	Services

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Implication on CGE results and Conclusion



→ More accurate assessment of the potential impacts of a trade liberalization as forward-looking values of preferential tariffs are used instead of broad assumptions on tariff cuts.

→ Reduce the risks of over-estimation of the effects of a trade integration, especially on agricultural products when liberalization takes the form of TRQ.

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THANK YOU FOR YOUR ATTENTION

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