Trade opportunities in a shifting global landscape

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Ideas for increasing productivity and prosperity

- ***Should we start a trade war?***

- ***If someone else starts a trade war, should we retaliate?***

Elements of trade war and retaliation

- US Reciprocal tariffs
  - 2 April: Tariffs up to 50% charged on some trading partners: Lesotho 50%; Lao 48%; Viet Nam 46%
  - 9 April: 2 April tariffs suspended until 9 July, replaced with 10% tariffs
  - 6 Aug: updated "reciprocal" tariffs

- US Tariffs on commodities:
  - Steel, aluminum, copper: 25% ⟶ 50% by 6 Aug
  - Motor vehicles: 25%

- US Tariffs on specific trading partners
  - China, Hong Kong, Macau: 145% ⟶ 34% by 6 Aug
  - Canada, Mexico: 25% on non-USMCA compliant trade ⟶ 35% on CAN

- Retaliatory tariffs
  - China, Canada and Mexico always retaliate; Japan, South Korea and Australia never retaliate

Policy context and modelling scope

Dynamic CGE model GTAP-FIN

- ***GTAP-FIN***. GTAP + stock/flow linkages, industry-specific I & K, sticky-flexible labour markets; bilateral financial stocks/flows; long-run consumption dynamics.

- ***55 sectors*** (full detail for tariffed goods, 10 aggregated services). 31 regions.

- ***Annual baseline***. Tracks regional macros over historical and forecast (2018-29). WAP(r) and ALAB(r) 2030-40. MAcMap schedules + 2018-20 trade war tariffs. U.S. import sourcing shares match U.S. Census data.

- ***Annual policy case:*** Regional consumption linked to regional income. Labour market transition sticky-flexible. Regional industry investment endo. Private / public consumption linked. Tariffs implemented in 2025. Auto input exclusions.

2025 & 2040 impacts: selected regions and macro variables (% dev'n from baseline)

	2025						2040					
	No-retaliation			Retaliation			No-retaliation			Retaliation		
	Apr 2	Apr 9	Aug 6	Apr 2	Apr 9	Aug 6	Apr 2	Apr 9	Aug 6	Apr 2	Apr 9	Aug 6
U.S.												
Real consump	-1.50	-1.03	-0.91	-2.14	-1.62	-1.17	-0.37	-0.23	-0.01	-1.17	-0.93	-0.24
Real GDP	-1.94	-1.37	-1.36	-2.24	-1.65	-1.48	-2.12	-1.52	-1.53	-2.24	-1.62	-1.55
Real investment	-6.66	-4.67	-5.27	-6.22	-4.35	-5.19	-4.26	-3.00	-3.43	-3.99	-2.83	-3.42
Exports	-16.47	-11.07	-14.95	-24.13	-18.26	-17.69	-20.72	-14.28	-18.05	-25.86	-19.18	-19.82
Imports	-18.27	-12.18	-15.57	-24.67	-18.37	-18.05	-16.55	-10.88	-14.59	-24.95	-18.80	-17.49
Terms of Trade	2.89	2.06	2.83	-0.94	-1.25	1.49	4.65	3.43	3.95	-0.23	-0.75	2.37
Employment	-1.92	-1.31	-1.52	-2.25	-1.65	-1.70	0.00	0.00	0.00	0.00	0.00	0.00
Capital	0.00	0.00	0.00	0.00	0.00	0.00	-2.73	-1.93	-2.17	-2.63	-1.87	-2.17
Australia												
Real consump	0.26	0.09	0.11	0.47	0.28	0.14	-0.04	-0.08	-0.10	0.11	0.05	-0.09
Real GDP	0.24	0.11	0.14	0.32	0.20	0.17	0.11	0.07	0.07	0.24	0.19	0.11
Real investment	1.47	0.95	1.06	2.26	1.68	1.29	0.28	0.16	0.16	0.64	0.53	0.27
Exports	-0.46	-0.54	-0.48	-0.77	-0.79	-0.56	0.28	0.04	0.08	0.83	0.55	0.23
Imports	1.06	0.36	0.46	1.97	1.21	0.67	-0.06	-0.35	-0.41	0.78	0.43	-0.24
Terms of Trade	0.22	-0.03	-0.12	1.29	0.88	0.07	-0.15	-0.30	-0.38	0.47	0.24	-0.30
Employment	0.34	0.16	0.20	0.46	0.28	0.23	0.00	0.00	0.00	0.00	0.00	0.00
Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.18	0.18	0.60	0.48	0.27

2025 & 2040 impacts: selected regions and macro variables (% dev'n from baseline)

	2025						2040					
	No-retaliation			Retaliation			No-retaliation			Retaliation		
	Apr 2	Apr 9	Aug 6	Apr 2	Apr 9	Aug 6	Apr 2	Apr 9	Aug 6	Apr 2	Apr 9	Aug 6
China												
Real consump	-0.25	-0.35	-0.14	-0.59	-0.70	-0.16	-0.43	-0.42	-0.29	-0.67	-0.70	-0.29
Real GDP	-0.13	-0.18	-0.07	-0.43	-0.50	-0.10	-0.11	-0.13	-0.06	-0.34	-0.39	-0.08
Real investment	0.62	0.33	0.52	0.37	0.09	0.50	-0.15	-0.20	-0.07	-0.29	-0.36	-0.05
Exports	-3.11	-3.02	-2.34	-3.00	-3.08	-2.38	-0.98	-1.28	-0.72	-0.88	-1.40	-0.82
Imports	-1.71	-2.34	-1.16	-1.55	-2.31	-1.10	-2.12	-2.34	-1.46	-1.88	-2.34	-1.44
Terms of Trade	-0.92	-1.13	-0.50	-0.57	-0.83	-0.30	-1.16	-1.15	-0.73	-0.73	-0.82	-0.53
Employment	-0.11	-0.19	-0.04	-0.33	-0.42	-0.05	0.00	0.00	0.00	0.00	0.00	0.00
Capital	0.00	0.00	0.00	0.00	0.00	0.00	-0.02	-0.08	0.02	-0.09	-0.17	0.03
EU												
Real consump	0.01	0.02	0.04	-0.07	-0.04	0.03	-0.21	-0.13	-0.16	-0.15	-0.07	-0.14
Real GDP	0.08	0.07	0.09	0.11	0.10	0.12	0.12	0.09	0.10	0.25	0.22	0.16
Real investment	1.67	1.11	1.41	1.89	1.35	1.59	0.30	0.25	0.29	0.70	0.63	0.46
Exports	-0.75	-0.42	-0.58	-0.30	-0.05	-0.43	0.08	0.11	0.14	0.76	0.70	0.40
Imports	-0.07	0.03	0.02	0.35	0.40	0.20	-0.39	-0.19	-0.23	0.31	0.42	0.03
Terms of Trade	-0.04	0.00	-0.01	0.09	0.14	0.04	-0.27	-0.16	-0.19	-0.08	0.02	-0.14
Employment	0.11	0.10	0.13	0.20	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00
Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.22	0.26	0.56	0.47	0.37

Real consumption impacts - no retaliation (average of 2025 – 2040 % deviations)

	Apr 2	Apr 9	Aug 6		Apr 2	Apr 9	Aug 6
Mexico	1.23	-0.35	0.50	Middle East and N Africa	-0.16	-0.12	-0.22
Russian Federation	0.13	0.07	0.11	India	-0.19	0.03	-0.25
Rest of Asia	-0.22	0.08	0.09	China	-0.41	-0.41	-0.27
USA	-0.26	-0.17	0.08	Latin America	-0.12	-0.22	-0.30
United Kingdom	0.04	-0.07	-0.01	Thailand	-0.75	0.00	-0.33
Hong Kong	0.01	-0.06	-0.06	Korea, Republic of	-0.45	-0.21	-0.36
Indonesia	-0.14	0.04	-0.07	Brazil	-0.04	-0.11	-0.39
Australia	0.01	-0.05	-0.07	Malaysia	-0.48	0.00	-0.41
Sub-saharan Africa	-0.06	-0.02	-0.10	Canada	-0.01	-0.37	-0.42
European Union	-0.21	-0.13	-0.16	Singapore	-0.46	-0.52	-0.48
Japan	-0.26	-0.16	-0.18	Chinese Taipei	-0.85	-0.25	-0.58
Rest of the World	-0.18	-0.12	-0.19	Switzerland	-0.62	-0.31	-0.64
Philippines	0.10	0.10	-0.20	Viet Nam	-4.91	0.90	-1.49

Ideas for increasing productivity and prosperity

- ***Should we start a trade war?***
  - ***not a good idea***

- ***If someone else starts a trade war, should we retaliate?***
  - ***not a good idea***

Summary and future work

Tariffs hurt the U.S.: All simulations cut US GDP; employment in short-run; investment and capital in long-run; the extra "reciprocal" layer deepens the damage.

Reciprocal tariffs deepen general damage, and flip some outcomes: Vietnam moves from winner to loser. Reverse for Mexico. Reciprocal tariffs have large impact on relative prices of alternative sources in U.S. market**.**

Who gains depends on retaliation: Without retaliation, the U.S. enjoys a terms-of-trade gain. With retaliation, SE- and E-Asia bear heavy losses, while non retaliators (e.g. Australia) pick up modest gains.

Investor confidence channel: Introduce a risk-premium shock tied to tariff uncertainty.

Tariff on Pharmaceuticals.

Reorientation of trade amongst trading partners.

Thank you

Australia Main macroeconomic variables (% deviation from baseline)												
Year:	2025				2030				2040			
Retaliation scenario:		Retaliation				Retaliation				Retaliation		
Additional scenario detail:	No retaliation	n.a.	Australia retaliates	+ Pharma	No retaliation	n.a.	Australia retaliates	+ Pharma	No retaliation	n.a.	Australia retaliates	+ Pharma
Real GDP	0.14	0.17	0.02	0.17	0.05	0.07	-0.01	0.06	0.07	0.11	0.00	0.09
Employment	0.20	0.23	0.07	0.23	-0.03	-0.02	-0.03	-0.03	0.00	0.00	0.00	0.00
Capital	0.00	0.00	0.00	0.00	0.15	0.20	0.10	0.18	0.18	0.27	0.07	0.23
Real consumer wage	0.10	0.12	0.04	0.12	0.07	0.11	-0.06	0.08	0.01	0.05	-0.13	0.02
Real private consumption	0.11	0.14	0.02	0.14	-0.09	-0.07	-0.09	-0.07	-0.10	-0.09	-0.10	-0.09
Real investment	1.06	1.29	0.80	1.29	0.28	0.43	0.12	0.32	0.16	0.27	-0.03	0.21
Real public consumption	0.11	0.14	0.02	0.14	-0.09	-0.07	-0.09	-0.07	-0.10	-0.09	-0.10	-0.09
Export volumes	-0.48	-0.56	-0.70	-0.56	-0.04	0.00	-0.36	-0.04	0.08	0.23	-0.33	0.15
Import volumes	0.46	0.67	0.21	0.67	-0.24	-0.06	-0.42	-0.17	-0.41	-0.24	-0.66	-0.33
Terms of trade	-0.12	0.07	0.13	0.07	-0.23	-0.13	-0.06	-0.14	-0.38	-0.30	-0.24	-0.33

U.S.: Main macroeconomic variables (% deviation from baseline)												
Year:	2025				2030				2040			
Retaliation scenario:	No retaliation	Retaliation			No retaliation	Retaliation			No retaliation	Retaliation		
Additional scenario detail:		n.a.	Australia retaliates	+ Pharma		n.a.	Australia retaliates	+ Pharma		n.a.	Australia retaliates	+ Pharma
Real GDP	-1.36	-1.48	-1.49	-1.48	-1.08	-1.11	-1.12	-1.32	-1.53	-1.55	-1.56	-1.73
Employment	-1.52	-1.70	-1.71	-1.70	-0.11	-0.11	-0.11	-0.08	0.00	0.00	0.00	0.00
Capital	0.00	0.00	0.00	0.00	-1.09	-1.09	-1.09	-1.01	-2.17	-2.17	-2.16	-2.00
Real consumer wage	-0.76	-0.85	-0.86	-0.85	-1.55	-1.76	-1.77	-2.27	-1.92	-2.12	-2.13	-2.50
Real private consumption	-0.91	-1.17	-1.18	-1.17	0.27	0.03	0.01	-0.23	-0.01	-0.24	-0.26	-0.48
Real investment	-5.27	-5.19	-5.17	-5.19	-3.57	-3.56	-3.55	-3.10	-3.43	-3.42	-3.41	-3.24
Real public consumption	-0.91	-1.17	-1.18	-1.17	0.27	0.03	0.01	-0.23	-0.01	-0.24	-0.26	-0.48
Export volumes	-15.0	-17.7	-17.9	-17.7	-18.5	-20.3	-20.4	-22.8	-18.0	-19.8	-19.9	-21.5
Import volumes	-15.6	-18.0	-18.2	-18.0	-14.1	-16.9	-17.0	-18.5	-14.6	-17.5	-17.7	-19.2
Terms of trade	2.83	1.49	1.42	1.49	3.96	2.41	2.32	3.10	3.95	2.37	2.27	2.90

Australian export shares (%) (change from baseline)

Year:	2025				2030				2040			
Retaliation scenario:	No retaliation	Retaliation			No retaliation	Retaliation			No retaliation	Retaliation		
Additional scenario detail:		n.a.	Australia retaliates	+ Pharma		n.a.	Australia retaliates	+ Pharma		n.a.	Australia retaliates	+ Pharma
European Union	0.02	0.00	0.00	0.00	0.04	0.01	0.01	0.01	0.05	0.03	0.02	0.02
Japan	0.10	0.06	0.07	0.06	0.13	0.09	0.11	0.12	0.11	0.08	0.10	0.10
South Korea	0.04	0.02	0.02	0.02	0.09	0.05	0.06	0.07	0.08	0.04	0.05	0.06
Taiwan	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
China (PRC)	-0.02	0.19	0.21	0.19	-0.25	-0.05	0.00	-0.03	-0.25	-0.06	0.00	-0.02
India	0.00	-0.01	0.00	-0.01	-0.04	-0.05	-0.05	-0.05	-0.06	-0.07	-0.06	-0.06
USA	-0.26	-0.39	-0.41	-0.39	-0.08	-0.20	-0.23	-0.34	-0.07	-0.17	-0.20	-0.31
Brazil	0.00	-0.01	-0.01	-0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.01
UK	0.07	0.06	0.06	0.06	0.07	0.07	0.06	0.07	0.06	0.06	0.05	0.06
Rest of world	0.05	0.07	0.05	0.07	0.04	0.08	0.04	0.12	0.06	0.09	0.04	0.13

Policy context and modelling scope

U.S. tariffs on steel, aluminium, auto + base & "reciprocal" tariffs (@ mid May)

- U.S. base tariffs x (with / without retaliation)
- U.S. "reciprocal" tariffs x (with / without retaliation)
- U.S. fiscal consolidation, with retaliation x (base & reciprocal tariffs)

= 6 policy sims

Dynamic CGE model GTAP-FIN

- 55 sectors (full detail for tariffed goods, 10 aggregated services).
- 26 regions.
- Annual baseline 2018 – 2040.
- Policy results are reported as deviations from baseline.

Focus today on headline macro results

- Selected macros for U.S., China, EU and Australia. Real consumption for 26 regions.

GTAP-FIN: theory & key features

Dynamic: Based on standard GTAP, but augmented with CoPS innovations: stock-flow linkages; industry-specific capital; sticky-flexible labour markets; bilateral financial stocks/flows; long-run consumption dynamics.

Bilateral financial module: 160 x 160 asset-liability matrix records who owns financial claims; optimisers allocate savings across domestic & foreign assets.

Industry-specific capital: new capital invested into a chosen sector and remains industry-bound; inter-sectoral investment responds to relative rate-of-return signals.

Sticky-wage labour markets: regional wages sticky in the short-run, employment deviates from baseline; wages transition to flexibility, employment returns to baseline.

Baseline consumption dynamics: Track data and forecasts to 2029. Thereafter, APCs converge slowly across regions, and rise with wealth.

Baseline construction 2018-2040

Starting framework: GTAP-v11 2017 data augmented with a 160 x 160 region asset-liability matrix of international financial positions to initialise GTAP-FIN's global financial module.

Time horizon & phases:

- Historical 2018-22: regional macro outcomes constrained to observed data.
- Forecast 2023-29: keyed to IMF/UN regional forecasts.
- Projection 2030-40: regional WAP projections & labour productivity convergence.

Trade policy path: Bilateral tariffs updated annually using MAcMaps schedules, plus additional shocks to implement 2018-20 U.S.-China trade-war tariffs**.**

U.S. import sourcing shares: Cost-neutral CES technology shifts in U.S. import sourcing patterns to match U.S. Census data trade partner shares.

Policy simulation: model closure

Macro consumption mix: Regional ratios of real private / public consumption are fixed at baseline values. Hence, the two aggregates move together in % dev'n terms.

Consumption spending rule: Each region's nominal (private + public) consumption tracks nominal regional income via APCs that stay on baseline paths. In the "fiscal consolidation" scenario, an exo rise in U.S. savings rate matches extra tariff revenue.

Investment endogenous, finance integrated: Investment follows sector-level returns; the finance module redirects global capital accordingly, passing regional gains/losses to foreign asset owners.

Labour market dynamics: Short-run wage stickiness allows employment to deviate from baseline. Gradual wage adjustment returns employment to baseline.

Other policy & structural variables follow baseline: Tariff rates, CES sourcing parameters, demographics, regional labour productivity**.**

Policy simulation: tariff & fiscal shocks

With "reciprocal" tariffs: The U.S. implements commodity-specific tariffs (iron, steel, aluminium, motor vehicles); supplementary tariffs on Canada, Mexico and China, together with so-called "reciprocal" tariffs targeting a range of countries.

Without "reciprocal" tariffs: Same as above, but with a flat 10% tariff on most regions except China, Canada and Mexico which retain their country-specific rates. Commodity-specific tariffs (e.g. steel, aluminium, autos) remain as above.

Retaliation: Most regions match U.S. tariffs with equal retaliation. Exceptions: China, Canada, Mexico and the EU follow region-specific schedules. Australia, Japan and South Korea do not retaliate.

Implies 6 policy simulations:

4 = (with "reciprocal" , without "reciprocal") x (with retaliation , without retaliation)

2 = (with "reciprocal" , without "reciprocal") x with retaliation & fiscal consolidation

Policy simulation: tariff shocks

US Tariffs are applied on commodities:

- Motor vehicles: Proclamation 10908 imposed a 25% tariff on all imports of passenger vehicles and light trucks from all countries, effective 3 April. In NAFTA trade, U.S. content was exempt
- Steel and aluminum: Proclamations 10895 and 10896 imposed 25% tariffs on imports of iron, steel and aluminium from all countries, effective 12 March 2025

US Tariffs are applied on countries:

- "reciprocal" tariffs 2 April 2025: EO 14257, "Regulating Imports With a Reciprocal Tariff To Rectify Trade Practices That Contribute to Large and Persistent Annual United States Goods Trade Deficits" – minimum increase in tariffs of 10%, up to almost 50% (46% for Viet Nam, Russia exempt)
- China tariffs: China, Hong Kong and Macau face "reciprocal" tariffs of EO14257, together with other executive orders which ultimately raised their rates by 145%
- NAFTA tariffs: Canada and Mexico subject to increase in tariff rates of 25% on non-USMCA compliant imports (10% on energy imports from Canada)

Policy simulation: tariff shocks

Some special cases:

- Motor vehicles: tariffs applied on non-USMCA compliant automobile imports not including US content. U.S. content share in Canadian and Mexican vehicle exports to the U.S. is 0.332 and 0.243 respectively, resulting in “net tariffs” on mvh of 16.70% and 18.92% respectively. Proclamation 10908 exempted iron and steel used in automobile and auto parts production and introduced a tariff offset capped at 3.75% of the value of a U.S.-made car in the first year and 2.5% in the second

- Canada and Mexico: As no detailed list of U.S. tariffs on imports from Canada and Mexico is available, we use Canada’s retaliatory tariff schedule for all U.S. imports from Canada and Mexico

- China: EO 14266, announced 9 April, suspended tariffs on many electronic and machine products from China, Hong Kong and Macau for 90 days

Policy simulation: tariff shocks

Retaliation:

- China applies tariffs of 125% on imports from US, exemption for electronic and machine products
- Canada applies retaliatory tariffs announced on 4 March, 13 March and 9 April. As no detailed retaliatory tariff list exists for Mexico, we use Canada's schedule as a proxy
- EU Member States approved the European Commission's proposal to impose tariff countermeasures against the U.S., beginning 15 April
- Assume all other countries impose duties on U.S. imports that match the rates imposed on them by the U.S
- Assume that Australia, Japan, and South Korea do not retaliate

Policy simulation: tariff shocks - summary

With "reciprocal" tariffs: The U.S. implements commodity-specific tariffs (iron, steel, aluminium, motor vehicles); supplementary tariffs on Canada, Mexico and China, together with so-called "reciprocal" tariffs targeting a range of countries .

Without "reciprocal" tariffs: Same as above, but instead of the "reciprocal" tariffs, the tariff increases against all countries except China, Canada and Mexico are set at 10%. China, Canada and Mexico continue to receive their country-specific tariffs. Commodity-specific tariffs (e.g. iron and steel, aluminium, motor vehicles, etc.) are set at their specific rates as above.

Retaliation: In general, regions impose tariffs on U.S. goods equal to those imposed by the U.S. on them. Exceptions are China, Canada, Mexico and the EU, for which we have region-specific retaliation schedules, and Australia, Japan and South Korea, who do not retaliate.

2025 & 2040 impacts: selected regions and macro variables (% dev'n from baseline)

	2025 Impacts						2040 Impacts					
	Without reciprocal tariffs			With reciprocal tariffs			Without reciprocal tariffs			With reciprocal tariffs		
	No retal'n	Retal'n	Retal + fiscal	No retal'n	Retal'n	Retal + fiscal	No retal'n	Retal'n	Retal + fiscal	No retal'n	Retal'n	Retal + fiscal
U.S												
GDP	-1.37	-1.65	-1.72	-1.94	-2.24	-2.35	-1.52	-1.62	-1.24	-2.12	-2.24	-1.67
Consumption	-1.03	-1.62	-2.44	-1.50	-2.14	-3.35	-0.23	-0.93	-1.41	-0.37	-1.17	-1.86
Investment	-4.67	-4.35	-3.75	-6.66	-6.22	-5.32	-3.00	-2.83	-0.59	-4.26	-3.99	-0.72
Employment	-1.31	-1.65	-1.73	-1.92	-2.25	-2.36	0.00	0.00	0.00	0.00	0.00	0.00
Capital	0.00	0.00	0.00	0.00	0.00	0.00	-1.93	-1.87	-0.95	-2.73	-2.63	-1.27
ToT	2.06	-1.25	-1.97	2.89	-0.94	-2.05	3.43	-0.75	-1.07	4.65	-0.23	-0.72
China												
GDP	-0.18	-0.50	-0.46	-0.13	-0.43	-0.36	-0.13	-0.39	-0.26	-0.11	-0.34	-0.15
Consumption	-0.35	-0.70	-0.64	-0.25	-0.59	-0.50	-0.42	-0.70	-0.68	-0.43	-0.67	-0.64
Investment	0.33	0.09	0.40	0.62	0.37	0.82	-0.20	-0.36	0.03	-0.15	-0.29	0.30
Employment	-0.19	-0.42	-0.36	-0.11	-0.33	-0.23	0.00	0.00	0.00	0.00	0.00	0.00
Capital	0.00	0.00	0.00	0.00	0.00	0.00	-0.08	-0.17	0.09	-0.02	-0.09	0.30
ToT	-1.13	-0.83	-0.71	-0.92	-0.57	-0.39	-1.15	-0.82	-0.74	-1.16	-0.73	-0.62

2025 & 2040 impacts: selected regions and macro variables (% dev'n from baseline) - continued

	2025 Impacts						2040 Impacts					
	Without reciprocal tariffs			With reciprocal tariffs			Without reciprocal tariffs			With reciprocal tariffs		
	No retal'n	Retal'n	Retal + fiscal	No retal'n	Retal'n	Retal + fiscal	No retal'n	Retal'n	Retal + fiscal	No retal'n	Retal'n	Retal + fiscal
EU												
GDP	0.07	0.10	0.15	0.08	0.11	0.19	0.09	0.22	0.53	0.12	0.25	0.71
Consumption	0.02	-0.04	0.00	0.01	-0.07	-0.02	-0.13	-0.07	0.02	-0.21	-0.15	-0.01
Investment	1.11	1.35	2.10	1.67	1.89	2.98	0.25	0.63	1.82	0.30	0.70	2.46
Employment	0.10	0.19	0.27	0.11	0.20	0.32	0.00	0.00	0.00	0.00	0.00	0.00
Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.47	1.09	0.30	0.56	1.48
ToT	0.00	0.14	0.20	-0.04	0.09	0.18	-0.16	0.02	0.04	-0.27	-0.08	-0.06
Australia												
GDP	0.11	0.20	0.28	0.24	0.32	0.43	0.07	0.19	0.39	0.11	0.24	0.54
Consumption	0.09	0.28	0.39	0.26	0.47	0.62	-0.08	0.05	0.15	-0.04	0.11	0.25
Investment	0.95	1.68	2.39	1.47	2.26	3.29	0.16	0.53	1.41	0.28	0.64	1.94
Employment	0.16	0.28	0.39	0.34	0.46	0.62	0.00	0.00	0.00	0.00	0.00	0.00
Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.48	0.96	0.29	0.60	1.30
ToT	-0.03	0.88	1.10	0.22	1.29	1.61	-0.30	0.24	0.34	-0.15	0.47	0.61

Real consumption impacts (average of 2025 – 2040 % deviations). Without retaliation. Without fiscal consolidation.

	Without reciprocal tariff	With reciprocal tariff
Singapore	-0.52	-0.46
China (PRC)	-0.41	-0.41
Canada	-0.37	-0.01
Mexico	-0.35	1.23
Switzerland	-0.31	-0.62
Taiwan	-0.25	-0.85
Rest of C. & Sth America	-0.22	-0.12
South Korea	-0.21	-0.45
USA	-0.17	-0.26
Japan	-0.16	-0.26
European Union	-0.13	-0.21
M. East & Nth Afr.	-0.12	-0.16
Rest of World	-0.12	-0.18

	Without reciprocal tariff	With reciprocal tariff
Brazil	-0.11	-0.04
UK	-0.07	0.04
Hong Kong SAR	-0.06	0.01
Australia	-0.05	0.01
Sub-Saharan Africa	-0.02	-0.06
Malaysia	0.00	-0.48
Thailand	0.00	-0.75
India	0.03	-0.19
Indonesia	0.04	-0.14
Russian Federation	0.07	0.13
Rest of Oceania	0.08	-0.22
Philippines	0.10	0.10
Viet Nam	0.90	-4.91

Summary and future work

Tariffs hurt the U.S.: All six simulations cut U.S. GDP and consumption; the extra "reciprocal" layer deepens the damage.

Reciprocal tariffs deepen general damage, and flip some outcomes: Vietnam moves from winner to loser. Reverse for Mexico. Reciprocal tariffs have large impact on relative prices of alternative sources in U.S. market**.**

Who gains depends on retaliation: Without retaliation, the U.S. enjoys a terms-of-trade gain. With retaliation, SE- and E-Asia bear heavy losses, while non retaliators (e.g. Australia) pick up modest gains.

Fiscal consolidation: Attenuates GDP losses outside the U.S., but makes the U.S. real consumption hit larger. Capital flow to the rest of the world offsets some partner damage.

Investor confidence channel: Introduce a risk-premium shock tied to tariff uncertainty.

Thank you