

US trade policy and the new wave of de-Globalization

▷ Luca De Benedictis, *Universitas Mercatorum* and *Luiss*

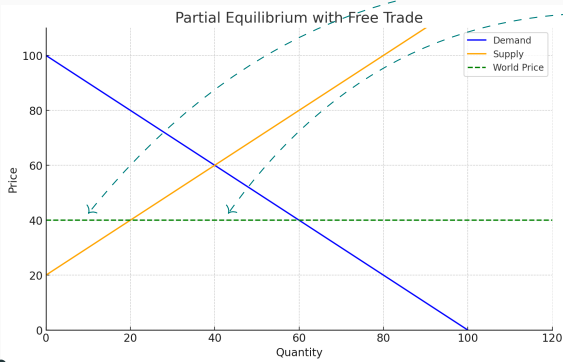
SIEPI Summer School
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Overview of the talk

- Tariffs: A Primer
- Trump's tariffs 2.0
- POTUS, TACO and Tt2.0 consequences
 - Uncertainty
 - Financial markets
 - The dollar and long terms US government bonds
 - The Grievance doctrine and the US Current Account
 - $CA = S - I$
 - Productivity
 - Openness
- What's next
 - What trade economists have to say?
 - Best strategies
 - Multi-level games and Geoeconomics
 - Rules of law
 - The end of multilateralism?
 - de-Globalization?
- Open discussion

Tariffs: A Primer

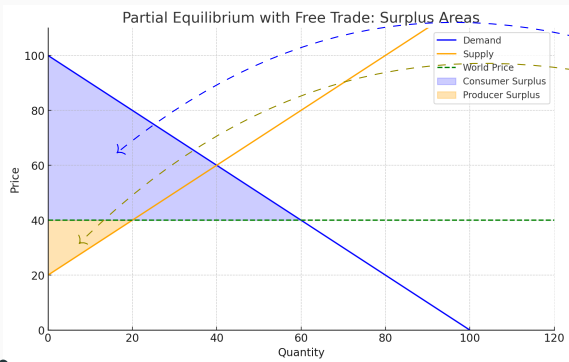
Free trade: Partial equilibrium



domestic production
imports

industry
conversion cost
rich partner
relationship
relationship
relationship
parents alive
income
wealth
profits
domestic reputation
international reputation

Free trade: Welfare maximization



domestic production
imports

supply

consumer surplus

producer surplus

relationship

relationship

relationship

parents alive

income

wealth

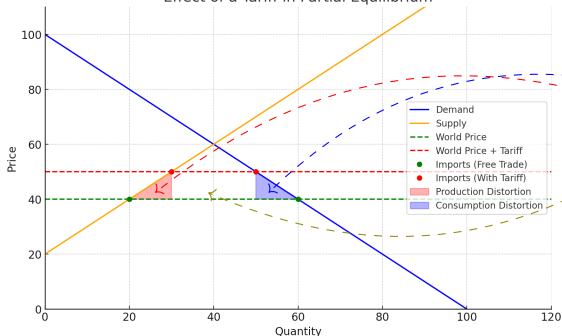
profits

domestic reputation

international reputation

Tariff: Small country case

Effect of a Tariff in Partial Equilibrium



domestic production
imports

tariff revenue

consumer surplus

producer surplus

consumer distortion

producer distortion

tariff revenue

domestic production

imports

tariff revenue

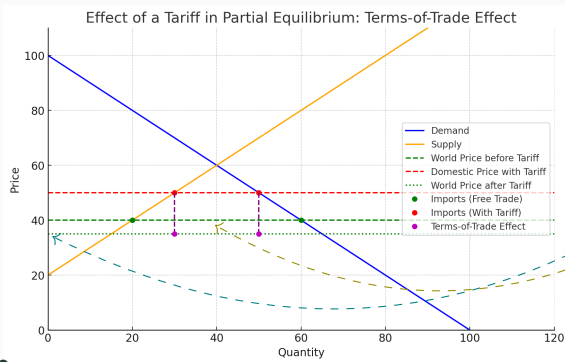
consumer surplus

producer surplus

domestic production

international reputation

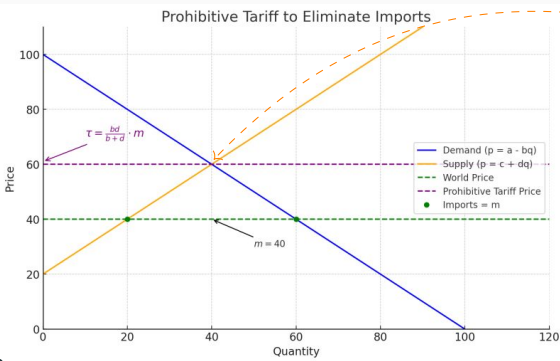
Tariff: Large country case



domestic production
imports
tariff
consumer surplus
producer surplus
consumer distortion
producer distortion
tariff revenue

income
world price reduction
+ terms of trade
wealth
profits
domestic reputation
international reputation

Tariff: A Prohibitive tariff leads to Autarky



domestic production
imports

autarky

consumer surplus

producer surplus

consumer distortion

producer distortion

tariff revenue

income

world price reduction

+ terms of trade

wealth

growth

domestic reputation

international reputation

- Partial equilibrium results can be generalized to General equilibrium
- Exceptions: (1) optimal tariff with no retaliation; (2) infant industry
- Relevant elements:
 - Intermediate goods and I-O linkages
 - Elasticities of substitution
 - Pass-through, mark-ups and inflation
 - Fragmentation of production and FDI
 - Delocalization and Third country effect
 - Trade and Services
 - Long-term consequences of de-specialization (e.i. innovation)
 - Selection effect and market concentration (e.i. small firms exit)
 - Tariffs as regressive taxes
- Policy space
 - Violations of WTO rules: sectoral and country discrimination
 - Potential violation of domestic rules: International Emergency Economic Powers Act (IEEPA) vs Articles 201, 232, 301
 - Retaliation

Trump's tariffs 2.0



April 2nd, 2025: "Liberation day" and "Reciprocal Tariffs."

$$\Delta\tau_i = \frac{x_i - m_i}{\varepsilon \cdot \varphi \cdot m_i}$$

April 2nd, 2025: Where do "Reciprocal Tariffs" come from?

2 April tariffs meant to eliminate bilateral deficits.

Here "m" is the bilateral import, "x" is the bilateral export, p_m is the bilateral price of "m", and ε is the elasticity of import demand.

The elasticity of import demand is defined as:

$$\varepsilon \equiv \frac{dm/m}{dp_m/p_m}$$

The impact on imports of a change in import price

$$dm = \varepsilon \frac{dp_m/p_m}{m}$$

Here φ is the pass through elasticity.

The pass through elasticity of tariffs to the import prices is defined as:

NB: The tariff is in percentage point form already so we don't have the usual $(dx/d)/(dy/y)$ form.

$$\varphi \equiv \frac{dp_m/p_m}{\tau}$$

The impact of the tariff on p_m is:

$$dp_m = \varphi * \tau * p_m$$

Combining these yields the link between the tariff and US imports.

$$dm = \varepsilon \frac{\varphi * \tau}{m}$$

Next we assume that the whole change in the bilateral deficit will come from by reducing bilateral imports, namely: 1) there is no foreign retaliation, 2) offsetting exchange rate and general equilibrium effects are small enough to be ignored,

Size of import reduction necessary to close the deficit, call it, dm' , is:

$$dm' = x - m$$

Substituting and solving for the implied tariff, τ' , is:

$$\tau' = \frac{x-m}{(\varepsilon\varphi)m}$$

The authors take, $\varepsilon = 4$, and $\varphi = 0.25$, so their product disappears.

For reasons that are not explained, the tariff needed to close the deficit is divided by 2.

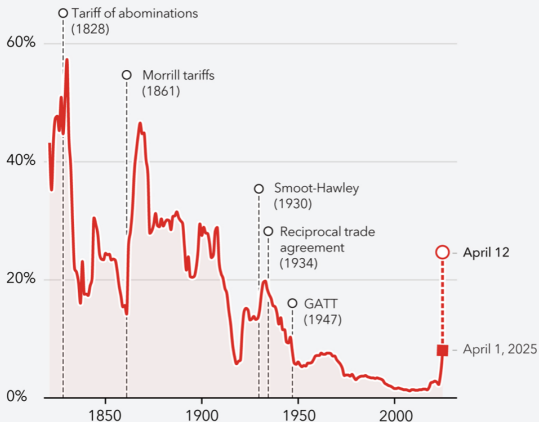
Source: https://ustr.gov/sites/default/files/files/Issue_Areas/Presidential%20Tariff%20Action/Reciprocal%20Tariff%20Calculations.pdf

April 2nd, 2025: The algebra of "Reciprocal Tariffs."

A	B	C	D	E	F	G
Country	Claimed Tariffs	U.S. Reciprocal Tariffs	TRUMP MATH = (Trade Balance/Import)/2	Imported to U.S. in 2024	Trade Balance in 2024	NOTES
China	67%	34%	-33.64886726	\$ 438,947,386,145.00	\$ (295,401,646,638.00)	
Vietnam	90%	46%	-45.20428959	\$ 136,561,155,809.00	\$ (123,463,000,688.00)	
Taiwan	64%	32%	-31.79279415	\$ 116,264,026,887.00	\$ (73,927,165,468.00)	
Japan	46%	24%	-23.09843575	\$ 148,208,566,623.00	\$ (68,467,721,077.00)	
India	52%	26%	-26.11852881	\$ 87,416,448,578.00	\$ (45,663,780,610.00)	
South Korea	50%	25%	-25.08848521	\$ 131,549,187,120.00	\$ (66,007,396,702.00)	
Thailand	72%	36%	-36.00998053	\$ 63,328,180,222.00	\$ (45,608,930,737.00)	
Switzerland	61%	31%	-30.32174889	\$ 63,425,318,602.00	\$ (38,463,331,684.00)	
Indonesia	64%	32%	-31.83693976	\$ 28,084,737,884.00	\$ (17,882,642,164.00)	
Malaysia	47%	24%	-23.63202531	\$ 52,534,847,955.00	\$ (24,830,097,128.00)	
Cambodia	97%	49%	-48.72992225	\$ 12,661,806,815.00	\$ (12,340,177,232.00)	
United Kingdom	10%	10%	8.707473754	\$ 68,084,468,332.00	\$ 11,856,874,421.00	FLAT 10%
South Africa	60%	30%	-30.14777679	\$ 14,655,786,588.00	\$ (8,836,787,656.00)	
Bangladesh	74%	37%	-36.76771466	\$ 8,365,766,327.00	\$ (6,151,802,185.00)	
Singapore	10%	10%	3.273934373	\$ 43,203,722,903.00	\$ 2,828,923,069.00	FLAT 10%
Israel	33%	17%	-16.71082469	\$ 22,217,484,849.00	\$ (7,425,449,889.00)	
Philippines	34%	17%	-17.21132388	\$ 14,177,628,116.00	\$ (4,880,314,987.00)	
Chile	10%	10%	5.155941309	\$ 16,469,479,956.00	\$ 1,698,313,441.00	FLAT 10%
Australia	10%	10%	53.66284539	\$ 16,685,509,840.00	\$ 17,907,838,697.00	FLAT 10%
Turkey	10%	10%	-4.337494067	\$ 16,745,664,057.00	\$ (1,452,684,370.00)	FLAT 10%
Colombia	10%	10%	3.807908049	\$ 17,690,348,963.00	\$ 1,347,264,444.00	FLAT 10%
Peru	10%	10%	9.935769707	\$ 9,363,192,761.00	\$ 1,860,610,540.00	FLAT 10%
Nicaragua	36%	18%	-18.18716968	\$ 4,622,325,539.00	\$ (1,681,340,378.00)	
Costa Rica	17%	10%	-6.414839327	\$ 11,634,905,331.00	\$ (1,958,117,179.00)	FLAT 10%
Dominican Republic	10%	10%	37.14796895	\$ 7,505,430,838.00	\$ 5,576,230,234.00	FLAT 10%
United Arab Emirates	10%	10%	130.4104093	\$ 7,474,432,624.00	\$ 19,494,876,354.00	FLAT 10%
Argentina	10%	10%	14.65587194	\$ 7,092,161,169.00	\$ 2,078,836,117.00	FLAT 10%
Ecuador	12%	10%	-5.822482671	\$ 8,524,306,263.00	\$ (992,652,510.00)	FLAT 10%
Tunisia	55%	28%	-27.58274504	\$ 1,123,215,612.00	\$ (619,627,397.00)	
Kazakhstan	54%	27%	-26.89375868	\$ 2,330,749,420.00	\$ (1,253,652,249.00)	
Serbia	74%	37%	-37.11494015	\$ 814,350,544.00	\$ (604,491,434.00)	
Egypt	10%	10%	69.63908361	\$ 2,546,000,141.00	\$ 3,546,022,334.00	FLAT 10%
El Salvador	10%	10%	48.5706179	\$ 2,311,212,791.00	\$ 2,245,140,667.00	FLAT 10%
Côte d'Ivoire	41%	21%	-20.60301149	\$ 1,014,676,411.00	\$ (418,107,795.00)	
Laos	95%	48%	-47.48635132	\$ 803,320,155.00	\$ (762,934,862.00)	
Botswana	74%	37%	-37.12399908	\$ 405,123,674.00	\$ (300,796,218.00)	
Trinidad and Tobago	12%	10%	-5.805883986	\$ 3,325,677,971.00	\$ (386,193,233.00)	FLAT 10%
Morocco	10%	10%	88.29306392	\$ 1,904,884,441.00	\$ 3,363,761,674.00	FLAT 10%

April 2nd, 2025: Directionality in "Reciprocal Tariffs."

US EFFECTIVE TARIFF RATE JUMPS UP SHARPLY



Sources: The White House, US Bureau of Economic Analysis; and IMF staff calculations.

IMF

Source: IMF (2025).

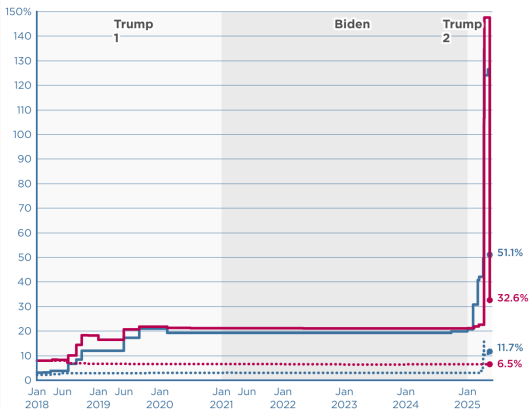
US-China tariffs ping pong **announcements**

US-China trade war tariffs: An up-to-date chart

Last updated May 14, 2025

a. US-China tariff rates toward each other and rest of world (ROW)

— Chinese tariffs on US exports — US tariffs on Chinese exports ... Chinese tariffs on ROW exports ... US tariffs on ROW exports

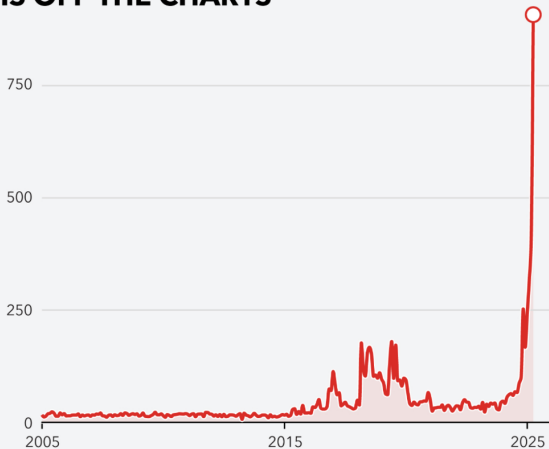


Source: PIIE (2025); Chad Bown:

<https://www.piie.com/research/piie-charts/2019/us-china-trade-war-tariffs-date-chart>.

POTUS, TACO and Tt2 consequences

TRADE POLICY UNCERTAINTY IS OFF THE CHARTS



Sources: Caldara et al. (2020); and IMF staff calculations.

Note: October 2024 = 100. Monthly data; April reflects average to April 14.

IMF

Source: IMF (2025).

AS TRADE TENSIONS FLARED GLOBAL STOCK PRICES DROPPED



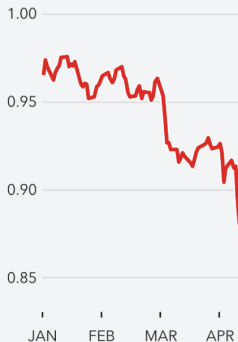
Sources: Haver Analytics; and IMF staff calculations. Note: Data as of April 15, 2025.
China: Dow Jones Shanghai, Germany: DAX, Japan: Nikkei 225, and US: S&P 500.

IMF

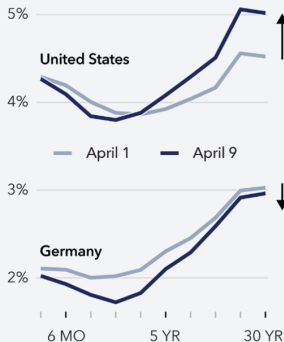
Source: IMF (2025).

DOLLAR DEPRECIATION AND US YIELD CURVE STEEPENING

Euro/USD Exchange Rate



Government Bond Yields by Maturity



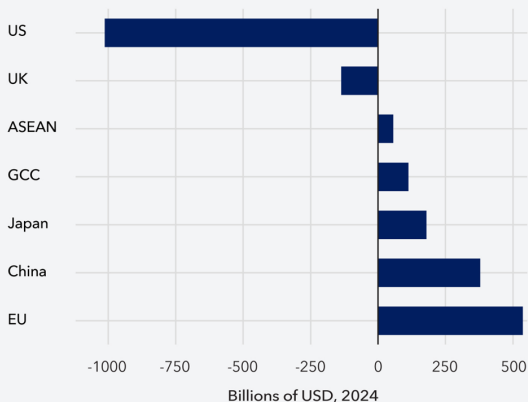
Sources: Haver Analytics; Bloomberg Financial, L.P.; and IMF staff calculations.

IMF

Source: IMF (2025).

The Grievance doctrine and the US Current Account

CURRENT ACCOUNT BALANCES VARY SUBSTANTIALLY



Sources: ASEANstat; Eurostat; IMF, World Economic Outlook; and IMF staff calculations. Note: ASEAN (2023 data) and GCC balances exclude intra-bloc trade, but not intra-bloc factor transactions. Savings calculated as a residual.

IMF

Source: IMF (2025).

The fundamental **identity** in macroeconomics links the **current account (CA)** to **national saving (S)** and **investment (I)**. This identity is derived from the national income identity in an open economy:

$$Y = C + I + G + CA \quad (1)$$

where: Y = national income (GDP), C = consumption, I = investment, G = government spending, CA = net exports (exports – imports).

National saving is defined as:

$$S = Y - C - G \quad (2)$$

Substituting this into the income identity:

$$Y - C - G = I + CA \quad (3)$$

$$S = I + CA \quad (4)$$

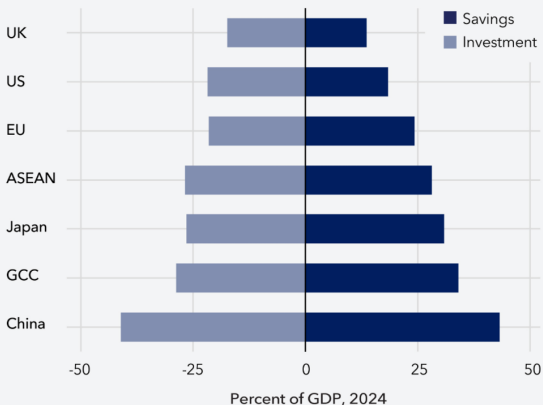
$$\Rightarrow CA = S - I \quad (5)$$

US case:

- If the country is a **net borrower** from the rest of the world ($S < I$), it runs a current account **deficit**.

$$CA = S - I$$

SAVINGS-INVESTMENT BALANCES TILT ONE WAY OR ANOTHER



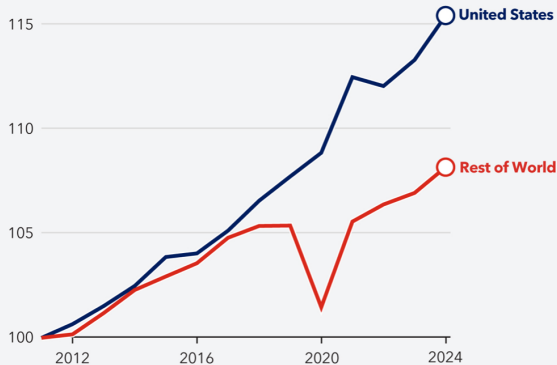
Sources: ASEANstat; Eurostat; IMF, World Economic Outlook; and IMF staff calculations. Note: ASEAN (2023 data) and GCC balances exclude intra-bloc trade, but not intra-bloc factor transactions. Savings calculated as a residual.

IMF

Source: IMF (2025).

STRONG US PRODUCTIVITY GROWTH WHILE OTHERS SLIP BEHIND

Total Factor Productivity Index; 2011=100

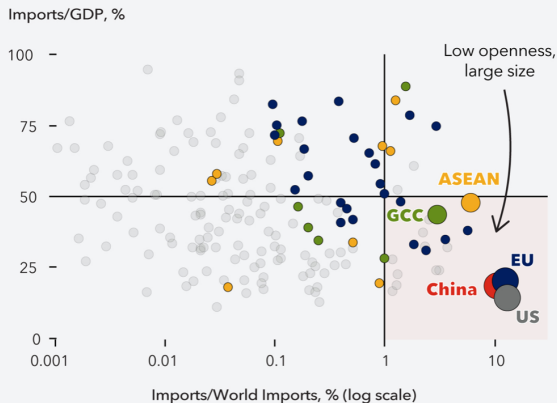


Sources: ILO; Penn World Tables; UN; and IMF staff calculations.

IMF

Source: IMF (2025).

CHINA, EU, AND US ARE THE THREE LARGEST IMPORTERS



Sources: ASEANstat; Eurostat; IMF, Direction of Trade Statistics; and IMF, World Economic Outlook. Note: 2024 data. ASEAN, EU, and GCC imports exclude intra-bloc imports. ASEAN intra-bloc imports are based on latest available figures for 2023.

IMF

Source: IMF (2025).

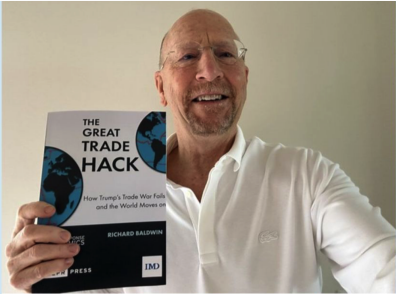
What's next

- What's next
 - What trade economists have to say?
 - Best strategies
 - Multi-level games and Geoeconomics
 - Rules of law
 - The end of multilateralism?
 - de-Globalization?

What trade economists have to say? **Richard Baldwin**

New eBook (free download).

Trump's Trade War Explained.



THE GREAT TRADE HACK
How Trump's Trade War Falls and the World Moves on
RICHARD BALDWIN
IMD PRESS

Richard Baldwin
Professor of International Economics,
IMD Business School, Lausanne



Source: <https://www.linkedin.com/in/richard-baldwin-imd/>.

What trade economists have to say? **Caliendo, Kortum and Parro**

Tariffs and Trade Deficits
Lorenzo Caliendo, Samuel S. Kortum, and Fernando Parro
NBER Working Paper No. 34003
July 2025
JEL No. F10, F11, F13, F40

ABSTRACT

We develop a dynamic multi-country Ricardian trade model with aggregate uncertainty, where countries trade goods and assets, leading to trade imbalances. We introduce a method for computing counterfactuals in this setting without specifying the stochastic process of shocks or solving for asset prices. Applying the model to tariff shocks, we quantify their effects on prices, income, expenditure, and trade imbalances. We find that higher U.S. tariffs reduce the U.S. trade deficit through general equilibrium adjustments, but raise domestic prices and lower real consumption. Our findings highlight that movements in trade imbalances are shaped by the structure of global trade and finance, and that attempts to influence external balances through changes in trade barriers carry significant implications for real economic outcomes.

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Source: NBER.

What's that next generation of economist can do

- What's next
 - What trade economists have to say?
- Topics for future research
 - Political uncertainty in economic models: theory and empirics
 - Best strategies
 - Pareto optimality and relative gains
 - Multi-level games and Geoeconomics
 - The end of multilateralism (rules of law)
 - Global public goods and fairness
 - Global issues: environment and global warming; migration; pandemics; AI and technological shocks; anti-trust
 - de-Globalization? Winners and losers (and measurement).
 - China
 - A trade regime without the US
 - EU: cohesion, leadership and the role of the Euro
 - Emerging countries and LDCs
 - Services
 - Shocks: Financial crisis, Covid19, International conflicts

Open discussion
