US Tariffs in a Model with Trade and FDI

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Key messages

- Universal US tariffs can raise US welfare, but they do **not** automatically generate an investment boom.
- How tariff revenue is used (transfers vs investment subsidies) can flip welfare effects at home and abroad.
- Tariff-jumping FDI matters: some production relocates behind the tariff wall and FDI flows to the US increase.

Context and Relevance of Tariff Policies

Motivation

- **Rising Protectionism**: Recent years have seen an increase in trade protectionist measures, particularly by major economies such as the United States
- These measures affect not only trade flows, but also **production location, global value chains, and multinational firms' decisions**.
- A key policy idea in the current debate is to use tariff revenue to cut taxes or subsidize domestic investment.

Research question

- How do universal US tariffs affect trade, FDI, investment, and welfare?
- Does tariff-jumping FDI change the macroeconomic effects of tariffs?
- How important is the use of tariff revenue for the domestic and global impact?

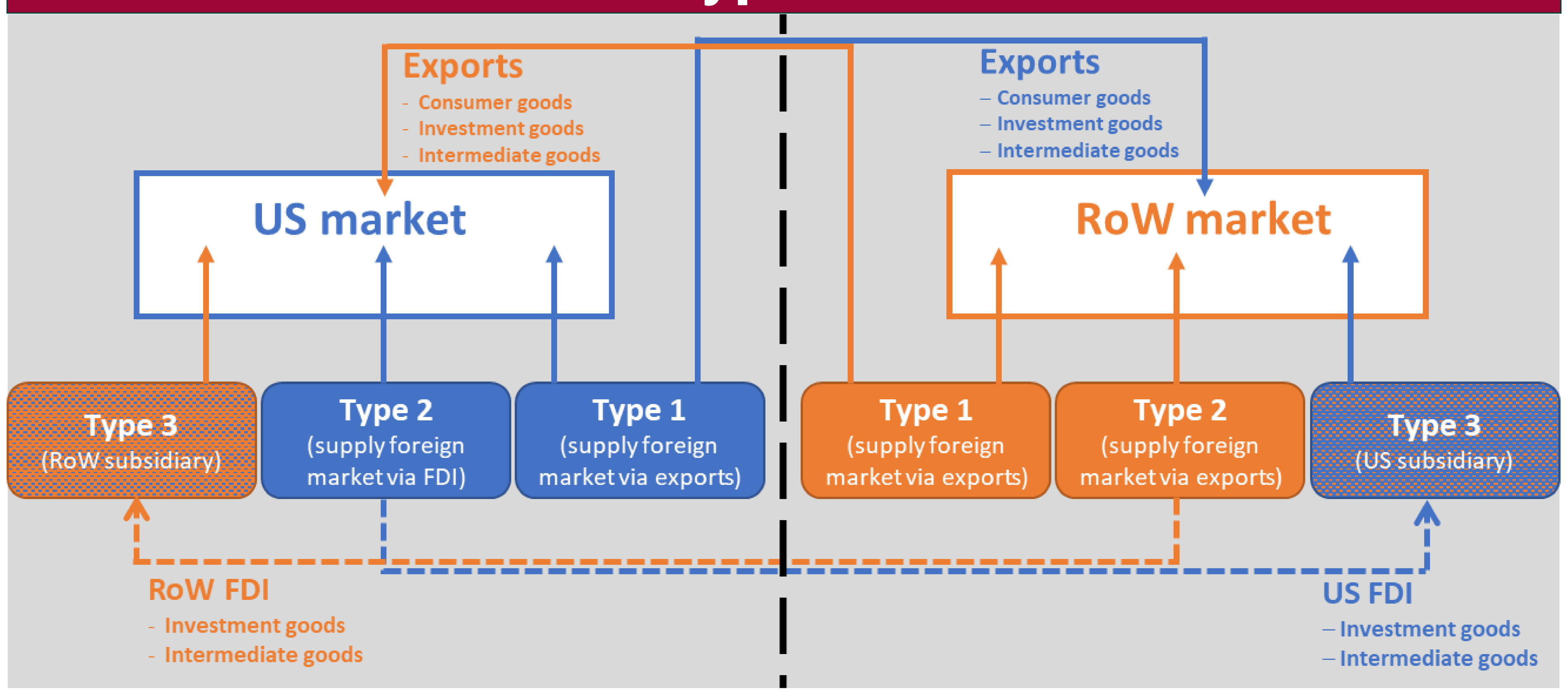
Trade & FDI Model: Key Advantages

- **Trade *and* FDI channels**: Firms can export or set up foreign affiliates → captures tariff-jumping behaviour.
- **Investment block**: Capital formation responds to tariffs, subsidies, and interest-rate shifts.
- **Intermediate-goods linkages**: Cross-border inputs flow through the model → captures supply-chain cost shocks.
- **Endogenous exchange rate & world interest rate**: Lets us trace spill-overs from one large economy to the RoW.
- **Flexible revenue recycling (transfers vs. subsidies)**: Directly matches the policy choices in Trump 2.0 rhetoric.

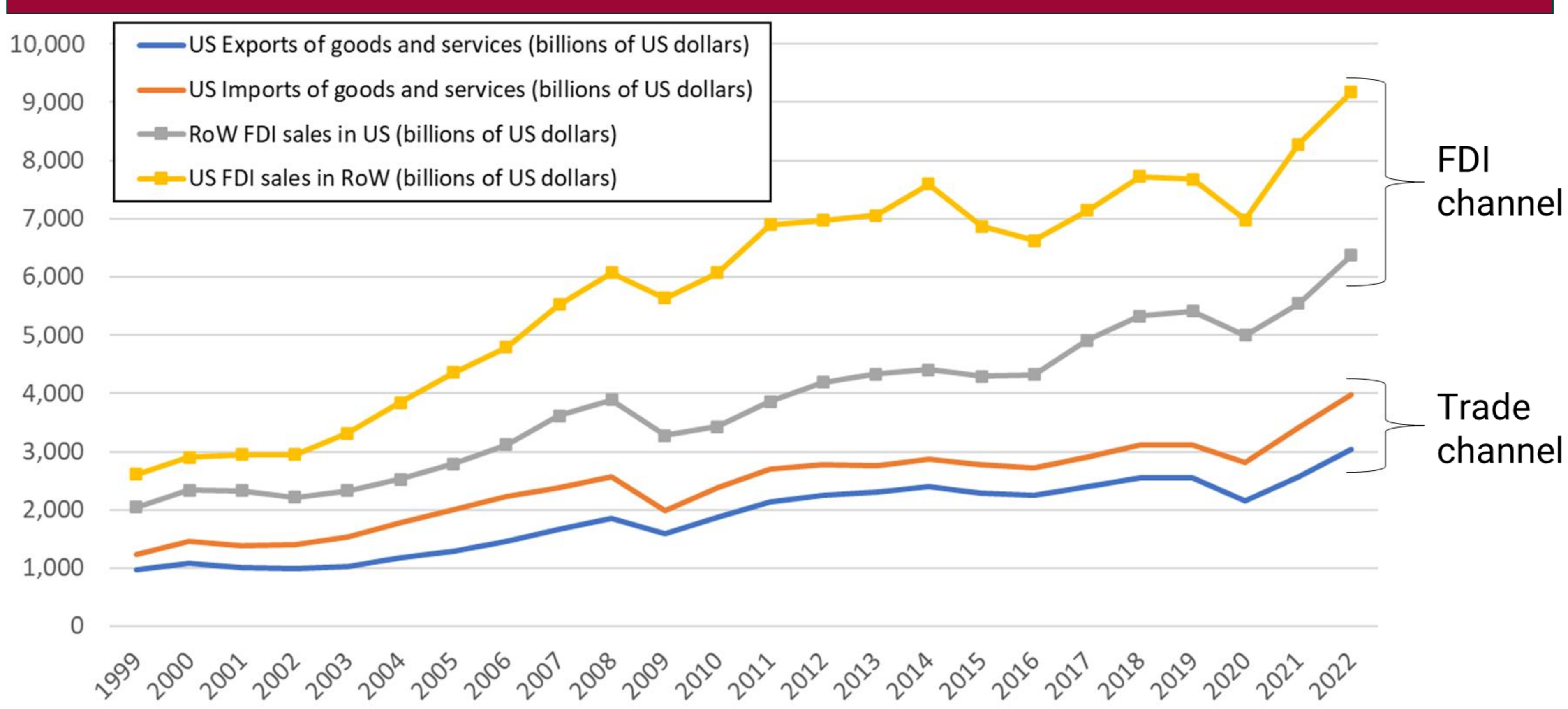
Economic Impact of US Tariffs

- **Cost & price channel**
  - Dearer imported inputs raise production costs and consumer prices
  - Increasing prices for intermediate & investment goods
- **Trade & FDI channel**
  - Multinationals "jump" the tariff
    - ➢Shrinking goods imports mirrored by rising affiliate sales
  - Higher inward FDI to the US; amplified by investment subsidies
- **Competitiveness, interest & exchange-rate response**
  - Dollar moves to offset part of the tariff, reshuffling demand between blocs
  - World interest rate rises when tariff revenue funds investment

Overview of Firm Types and Trade Patterns



Trade vs. FDI Channel



Scenarios for Tariff Shock Simulations

Unilateral US Tariff Shock (10%)

- The US raises tariffs by 10% on all imports, no retaliation by the Rest of the World (RoW).
- Examined both **without and with US investment subsidies**.

Tit for Tat – Full Retaliation (10%)

- The US implements a 10% tariff.
- The RoW fully retaliates with a 10% tariff on US goods.
- Scenarios explored both **without and with investment subsidies in the US and RoW**.

Tit for Tat – Partial Retaliation (10% US; 2.5% RoW)

- The US raises tariffs by 10%, but the RoW responds only partially with a 2.5% tariff.
- Again, examined both **without and with US investment subsidies**.

Overview of the Results

Long-Run Impact of Tariff Shocks on Key Economic Variables
Without Investment Subsidies

	Unilateral US Tariff Shock (10%)		Tit for Tat Tariff Shock (10%) with Full Retaliation by the ROW		Tit for Tat Tariff Shock with Partial Retaliation by the ROW (10% US Tariff; 2.5% ROW Tariff)	
	USA	RoW	USA	RoW	USA	RoW
GDP	-0.21%	-0.05%	-0.50%	-0.05%	-0.29%	-0.05%
Consumption	0.32%	-0.17%	-0.33%	-0.06%	0.14%	-0.14%
Investment	-0.88%	-0.20%	-2.03%	-0.22%	-1.19%	-0.20%
FDI production	0.93%	1.34%	1.02%	2.07%	1.02%	1.56%
Imports	-7.26%	-9.88%	-15.47%	-15.64	-9.56%	-11.46%

Long-Run Impact of Tariff Shocks on Key Economic Variables
Including Investment Subsidies

	Unilateral US Tariff Shock (10%) with US Investment Subsidy		Tit for Tat Tariff Shock (10%) with Full Retaliation by the ROW and US and ROW Investment Subsidies		Tit for Tat Tariff Shock with Partial Retaliation by the ROW (10% US Tariff; 2.5% ROW Tariff) and US Investment Subsidies	
	USA	RoW	USA	RoW	USA	RoW
GDP	3.02%	-0.24%	2.51%	0.61%	2.96%	-0.24%
Consumption	1.93%	-0.40%	1.04%	0.06%	1.75%	-0.37%
Investment	14.17%	-0.81%	12.05%	3.31%	13.71%	-0.81%
FDI production	5.10%	0.28%	4.57%	2.17%	5.10%	0.51%
Imports	-4.08%	-8.81%	-12.38%	-14.13%	-6.41%	-10.47%

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