



International Economics: Trade, Exchange Rates, and Global Shocks

In this presentation, you will develop a comprehensive toolkit for analyzing real-world policy debates—from tariffs and currency movements to sanctions and supply chain resilience. We'll explore two fundamental themes that shape international economics:

Efficiency vs. Distribution

Trade can raise total national income while simultaneously redistributing wealth within countries, creating both winners and losers.

Open-Economy Constraints

Economic policy works differently when goods, capital, and currencies flow freely across borders, limiting domestic control.

Why Countries Trade

International trade isn't just about moving goods—it's about unlocking economic potential through specialization, scale, and strategic cooperation. While trade feels politically contentious because its costs are concentrated and visible, the aggregate benefits tell a compelling story.

Lower Costs Through Specialization

Countries can focus on producing what they're relatively good at, reducing overall production costs and increasing efficiency.

Increased Variety and Choice

Access to global markets means consumers enjoy more product options at lower prices than domestic production alone could provide.

Economies of Scale

Larger international markets enable specialization and production efficiencies impossible in domestic markets alone.

Risk Diversification

Multiple supply sources and export destinations help stabilize supply chains and spread economic risk—under normal conditions.

- ❑ Key insight: Trade can be win-win overall, even when distribution effects create domestic political tension. The challenge lies in managing who gains and who loses.

Comparative Advantage: The Foundation of Trade

Comparative advantage means having a lower opportunity cost in producing a good—it's about relative efficiency, not absolute capability. Even countries that are less efficient at everything can benefit from trade by specializing in what they sacrifice least.

A Simple Example

Consider two countries producing cloth and wine. Country A needs 2 hours per unit of cloth and 6 hours per wine. Country B needs 4 hours per cloth and 8 hours per wine.

Opportunity costs reveal the advantage:

- In Country A: 1 Wine = 3 Cloth ($6 \div 2$)
- In Country B: 1 Wine = 2 Cloth ($8 \div 4$)

Country B has comparative advantage in Wine (lower opportunity cost), while Country A has comparative advantage in Cloth.



- Through specialization and trade, both countries can consume beyond their individual production possibilities—this is the power of comparative advantage.

Building Competitive Advantage

Comparative advantage isn't just inherited—it can be deliberately constructed through strategic investments and policy choices. Understanding these sources helps explain why some nations dominate particular industries and how others can move up the value chain.



Natural Resources

Oil reserves, mineral deposits, and rare earth elements provide inherent advantages in resource-intensive industries.



Geography & Climate

Location, terrain, and weather patterns determine agricultural potential and transportation efficiency.



Technology & Innovation

Advanced manufacturing capabilities, R&D infrastructure, and proprietary knowledge drive high-value production.



Human Capital

Education systems, workforce skills, and specialized expertise create sustainable competitive advantages.



Infrastructure & Institutions

Reliable ports, logistics networks, legal systems, and regulatory quality enable efficient commerce.



Ecosystems & Scale

Supplier networks, industry clusters, and learning-by-doing effects create self-reinforcing advantages.

Real-world success stories demonstrate how countries build comparative advantage through deliberate policy: investing in education, developing infrastructure, supporting R&D, and fostering industrial ecosystems. This dynamic perspective raises a crucial question for developing economies—how to strategically climb the value chain.

Winners and Losers: The Distribution Challenge

While trade typically increases total national income, its benefits and costs are unevenly distributed—creating the political tension at the heart of trade debates. Understanding who gains and who loses is essential for crafting effective policy responses.



Consumers

Generally gain through lower prices, increased variety, and access to goods unavailable domestically.



Export Industries

Expand production, hire workers, and increase profits as new international markets open.



Import-Competing Sectors

Face shrinking markets, job losses, and wage pressure as cheaper foreign goods enter the market.



Regional Concentration

Effects cluster geographically—some communities thrive while others experience severe economic disruption.

The critical policy question isn't simply "Is trade good?" but rather "For whom, how fast, and how do we share the gains while managing adjustment costs?"

Adjustment costs are real and persistent: workers need retraining, families must relocate, and entire communities lose established economic networks. Effective trade policy must address both aggregate gains and distributional consequences.

Tools of Trade Protection

Governments employ various instruments to restrict or manage international trade. Each tool has distinct mechanisms and consequences, though all share common economic effects: higher domestic prices, reduced import volumes, and efficiency losses from foregone trade gains.

%

Tariffs

Taxes on imported goods (e.g., 10% on steel imports) that raise prices and generate government revenue.

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Quotas

Physical caps on imported quantities that create scarcity and can generate "quota rents" for license holders.

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Non-Tariff Barriers

Standards, licensing requirements, and local content rules that restrict trade—sometimes legitimately for safety, sometimes as disguised protection.



Typical Economic Effects

- Domestic prices increase
- Import volumes decline
- Protected domestic producers benefit
- Overall efficiency losses from reduced trade
- Consumer surplus decreases

Who Actually Pays a Tariff?

A common misconception is that tariffs are automatically paid by foreign exporters. In reality, the economic burden—the true **incidence** of a tariff—depends on market conditions and can fall on domestic consumers, foreign producers, or be shared between them.



Demand Elasticity

How easily can buyers find substitutes? Inelastic demand means consumers bear more of the burden through higher prices.



Supply Elasticity

Can foreign producers cut prices to maintain market share? Elastic supply shifts burden toward exporters.



Market Structure

Market power, contract terms, and competitive dynamics determine who has leverage to pass costs along.

Common Outcomes

Consumers Pay Most

When domestic demand is inelastic, retail prices rise substantially and households bear the primary burden.

Exporters Absorb Cost

When domestic demand is elastic, foreign producers may cut margins to maintain sales volume.

Shared Burden

Most commonly, the cost is distributed between importers, exporters, and final consumers based on relative bargaining power.

- ❑ Key insight: While importers write the check to customs, economic incidence reveals who truly bears the cost. The answer depends on market elasticities, not legal responsibility.

The Hidden Trade-Offs of Tariffs

Tariffs are blunt instruments with complex ripple effects throughout the economy. While they can achieve specific policy objectives, they simultaneously create unintended consequences and economic distortions that policymakers must carefully weigh.

Potential Benefits

- **Sector Protection**

Shield targeted industries and preserve specific jobs, particularly in politically sensitive regions.

- **Domestic Production**

Encourage local manufacturing and reduce dependence on foreign suppliers.

- **Bargaining Leverage**

Create negotiating power in trade discussions and diplomatic relations.

Hidden Costs

- **Input Cost Inflation**

Raise costs for downstream industries (e.g., steel tariffs increase car and construction prices).

- **Trade Retaliation**

Trigger counter-tariffs that harm export sectors, often targeting politically sensitive products like agriculture.

- **Deadweight Loss**

Create economic inefficiency by preventing mutually beneficial trade.

- **Rent-Seeking**

Intensify lobbying and special-interest pressure, distorting policy priorities.

Critical perspective: Tariffs shift resources but don't automatically create productivity. Protection can preserve jobs in one sector while destroying them in industries that depend on those inputs.

Exchange Rates: The Price of Money

An **exchange rate** is the price of one currency in terms of another (e.g., 1 EUR = 1.10 USD). These prices are fundamental to international economics, influencing everything from inflation to competitiveness to debt burdens.

Why Exchange Rates Matter



Import Prices

Currency appreciation makes imports cheaper, reducing inflation. Depreciation raises import costs, feeding into consumer prices.



Export Competitiveness

Appreciation makes exports more expensive for foreign buyers. Depreciation improves price competitiveness abroad.



Debt Burdens

For countries with foreign-currency debt, depreciation dramatically worsens balance sheets and repayment costs.

What Drives Exchange Rates

In the short run, capital flows often dominate trade flows in determining currency values. Multiple factors interact to set exchange rates:

- **Interest rates and expected returns** — Higher rates attract capital inflows, strengthening the currency
- **Inflation expectations** — Expected higher inflation typically weakens a currency
- **Risk and credibility** — Political stability and safe-haven status affect demand
- **Commodity prices and trade balance** — Resource exporters see currencies tied to commodity cycles
- **Central bank actions and expectations** — Monetary policy and forward guidance shape currency values

Global Shocks: Resilience, Vulnerabilities, and Policy Tools

International interdependence creates a paradox: the same global networks that generate efficiency also create vulnerability. Supply chains that cross borders multiple times, concentrated chokepoints, and complex dependencies mean local disruptions can cascade globally.

Building Resilience: Strategic Approaches



Diversify Suppliers

Avoid single-source dependencies and build redundant supply options across multiple regions.



Strategic Buffers

Maintain inventories and spare capacity in critical sectors, accepting higher costs for security.



Regionalization

Friend-shoring and near-shoring reduce distance and political risk in supply chains.



Domestic Capacity

Preserve or rebuild production capabilities in strategically critical industries.

- The fundamental trade-off: **Resilience ↑ typically means Cost ↑**. Redundancy and buffers require investment and reduce efficiency. Policy must balance security against economic competitiveness.

Economic Sanctions as Policy Instruments

Sanctions operate through multiple channels with varying effectiveness and spillover effects:

- Trade restrictions** — Export/import bans targeting specific goods or sectors
- Financial limits** — Freezing assets, blocking transactions, excluding from payment systems
- Technology controls** — Restricting access to advanced technologies and know-how

Critical consideration: Sanctions create global spillovers, particularly in energy and food markets, that can harm third countries and complicate international cooperation.



Lab Activity: Policy Analysis Exercise

Choose one scenario to analyze in depth, tracking first-order and second-order effects:

Scenario A: Tariff Shock

Analyze a 25% tariff on imported goods. Track domestic prices, import quantities, government revenue, and distributional impacts across producers, consumers, and regions.

Scenario B: Currency Crisis

Model a 30% currency depreciation. Examine effects on import prices, inflation risk, export competitiveness, and foreign-currency debt burdens.

Your policy recommendation must: State clear objectives, acknowledge constraints and trade-offs, identify who benefits first and who pays first, and analyze second-round effects throughout the economy.