International Trade and Policy

WEEK 16 – **Synthesis and Final Review: From Trade Models to Real-World Policy & The Future of the Global Trading System**

University: **Tajik State University of Commerce**
Lecturer: **Abduvaliev Mubinzhon, PhD**

Part I: Setting the Stage
Agenda

- **Part I:** Review of Core Trade Models (Weeks 1-5)
- **Part II:** From Theory to Policy – How Models Inform Real-World Decisions (Weeks 6-9)
- **Part III:** Deep Dive – Weeks 10-14 (Trade Policy Tools, WTO, Disputes)
- **Part IV:** The Future of the Global Trading System
- **Part V:** Cumulative Exam Prep – Key Takeaways & Application

Why This Review Matters

- Exams test **application**, not just memorization.
- Policy-makers use trade models to predict winners/losers, design compensation, and negotiate agreements.
- Future of trade: Geopolitics, climate, digital, and fragmentation.

Cumulative Scope – What's Emphasized

- Weeks 1-5: Foundations (Ricardo, H-O, Specific Factors, New Trade Theory)
- Weeks 6-9: Gains from trade, distributional effects, gravity model
- Weeks 10-14 (Emphasis): Tariffs vs. NTBs, WTO rules, trade disputes, regional agreements, industrial policy, supply chains

Key Question Driving the Course

Question: *“If trade models show net gains, why is there so much policy conflict?”*

Answer: Distributional effects > aggregate efficiency in political economy.

Brief Recap – Comparative Advantage (Ricardo)

- **Model**: Technology differences → specialisation → gains.
- **Policy insight**: Free trade raises global output, but not necessarily for all sectors.
- **Real-world limit**: Assumes full employment, no mobility costs.

Part II: How Trade Models Inform Policy (Heckscher-Ohlin (H-O) Model & Income Distribution

- Factor endowments (K/L) drive trade patterns.
- **Stolper-Samuelson Theorem:** Trade benefits owners of abundant factors, hurts scarce factors.
- **Policy use:** Predict which labor groups support/oppose trade deals (e.g., US skilled labor vs. unskilled).

Specific Factors Model – Short-Run Politics

- Factors are sector-specific (e.g., auto workers, farmers).
- Trade shocks → winners & losers by industry, not by factor.
- Policy relevance: Explains why protectionism is often sectoral (e.g., steel tariffs).

New Trade Theory (Krugman) – Economies of Scale & Variety

- Increasing returns, love of variety, first-mover advantage.
- Policy implication: Strategic trade policy – subsidies to capture rent (Airbus/Boeing).
- But risks retaliation & rent-seeking.

Gravity Model – The Workhorse of Applied Trade

- Trade $\propto$ ($GDP_i \times GDP_j$) / Distance_ij
- Predicts actual trade flows with high accuracy.
- Policy use: Estimate effects of trade agreements, Brexit, or trade wars.

Evidence – Does Theory Match Reality?

- Ricardo: Holds for broad aggregates (e.g., China–US), but not perfect specialization.
- H-O: Weak empirical support (Leontief paradox) – technology matters more than endowments.
- New Trade Theory: Strong for intra-industry trade (EU, NAFTA).

Trade Models & Tariff Setting – A Framework

- Optimal tariff argument: Large country can improve TOT by taxing imports.
- But retaliation eliminates gains (e.g., US-China 2018–19).
- Policy lesson: Small countries → free trade optimal; large countries → negotiate reciprocity.

Modeling Non-Tariff Barriers (NTBs)

- Quotas, standards, subsidies – equivalent to tariffs but more opaque.
- Evidence: NTBs have grown while tariffs fell (WTO data).
- Policy challenge: Harder to quantify and negotiate.

Trade & Labor Markets – What Models Miss

- Models assume frictionless adjustment; reality: job displacement, regional decay.
- Policy response: Trade Adjustment Assistance (TAA) – but underfunded, weak.
- Political consequence: Populist backlash.

Summary Table – Model → Policy Insight → Real-World Example

Model	Core Insight	Policy Use	Example
Ricardo	Specialization gains	Free trade advocacy	NAFTA gains
H-O (SS)	Factor distribution	Compensation design	EU cohesion funds
Specific Factors	Sectoral coalitions	Safeguard tariffs	US steel 2018
New Trade Theory	Scale economies	Strategic subsidies	Airbus vs. Boeing
Gravity	Proximity & size	Trade agreement effects	Brexit estimates

Part III: Weeks 10-14 – Deep Dive
Weeks 10-14 Focus Areas

- WTO structure & rules
- Trade disputes & settlement mechanism
- Regional trade agreements (RTAs)
- Industrial policy & supply chains
- Trade and climate change
- Future challenges

The WTO – Core Principles

- Most-Favored Nation (MFN): No discrimination among members
- National Treatment: Treat foreign goods like domestic after entry
- Binding commitments & transparency

WTO’s Dispute Settlement Understanding (DSU)

- Process: Consultation → Panel → Appellate Body (now defunct) → Arbitration
- Success: Over 600 disputes, high compliance (~90%)
- Crisis: The US has blocked Appellate Body appointments since 2019.

Case Study – US–China Tariff War (2018–2020)

US Section 301 (alleged IP theft) → tariffs on $350B Chinese goods.

China retaliated.

Model prediction: Welfare losses for both (US: -0.5% GDP; China: -0.8%).

Evidence: Trade diversion to Vietnam, Mexico; US farmers hurt.

Case Study – Airbus vs. Boeing (WTO Dispute DS316/353)

- EU & US each accused of illegal subsidies.
- WTO rulings: Both guilty → authorized retaliation (7.5BUS,7.5*BUS*,4B EU).
- Ceasefire (2021) shows limits of litigation.

Proliferation of Regional Trade Agreements (RTAs)

- Over 350 RTAs in force (vs. 50 in 1990).
- Models explain: Deeper integration (services, IP) beyond WTO.
- Trade creation vs. diversion – evidence shows net creation but hub-spoke effects.

RTA Case – USMCA (replacing NAFTA)

- New rules of origin (auto: 75% N.A. content, 40-45% high-wage labor).
- Labor & environment enforcement.
- Model estimate: Modest trade creation, some reduction with China.

Industrial Policy Returns – Why Now?

- Post-COVID supply chain fragility, national security concerns.
- US CHIPS Act ($52B), EU Green Deal, China’s subsidies.
- Trade models caution: If subsidies distort, can spark subsidy wars.

Supply Chain Resilience – Modeling Rerouting

- Gravity model + shocks: COVID & war → diversification vs. friend-shoring.
- Evidence: FDI shifting to Vietnam, India, Mexico.
- Policy trade-off: Resilience vs. efficiency (cost increase 10-20% estimated).

Trade & Climate Change – Uncharted Territory

- Border Carbon Adjustments (BCAs): EU CBAM (2026).
- Trade model logic: Correct carbon leakage, but risks protectionism.
- WTO compatibility: Likely allowed if non-discriminatory.

Digital Trade – What Models Don’t Capture

- Data flows, cross-border e-commerce, digital services taxes.
- WTO e-commerce moratorium (no tariffs on digital transmissions).
- Future: Could WTO rules adapt? (Joint Initiative on E-commerce stalled).

Key Evidence from Weeks 10-14 – Summary

- WTO dispute settlement is effective but now crippled.
- RTAs are the new “frontier” of trade rules.
- Industrial policy is back – with risks.
- Climate and digital trade are the next battlegrounds.

Exam-Style Question on Weeks 10-14

- **Prompt:** “The WTO is no longer relevant for modern trade policy.” Agree or disagree using evidence from dispute settlement, RTAs, and industrial policy.
- **Answer framework:** Disagree – WTO still sets baseline rules, but yes, its negotiating function is weak; RTAs fill gaps.

Part IV: The Future of the Global Trading System
Four Mega-Trends Reshaping Trade

1. Geopolitical fragmentation (US-China decoupling)
2. Climate imperatives (carbon borders, green subsidies)
3. Technological change (digital, AI, services)
4. Rise of state capitalism (industrial policy, state-owned enterprises)

Scenario A – Fragmentation (WTO weak, blocs emerge)

- Western bloc (US, EU, allies) vs. Eastern bloc (China, Russia, non-aligned).
- Model prediction: Large welfare losses (WTO estimates 5% global GDP).
- Evidence: Trade growth between geopolitical rivals slowed post-2022.

Scenario B – WTO 2.0 (Reform and Revival)

- Reforms needed: Appellate Body fix, new rules for digital/ climate.
- Plurilateral agreements (joint initiatives) as pathway.
- Possible? Political will lacking, but necessary for global public goods.

Trade & National Security – The New Loophole

- GATT Article XXI allows any trade restriction for essential security.
- Increasingly invoked (US steel, China tech).
- Risk: Erodes rules-based system – trade as weapon.

Future of Supply Chains – Predicted Path

- Near-shoring (Mexico, Turkey) and friend-shoring (allies only).
- Essential goods (semiconductors, medical supplies, critical minerals).
- Model insight: Efficiency loss but stability gain – depends on risk preference.

What Should Policy-Makers Do? (Evidence-Based)

- Compensate losers (TAA, place-based policies) – reduces backlash.
- Pursue WTO reform + plurilateral deals.
- Use tariffs only for genuine externalities (carbon, security).
- Avoid subsidy races – negotiate rules on industrial policy.

Your Role – Using Trade Models as a Policy Analyst

- Step 1: Identify relevant model (Ricardo for efficiency, H-O for distribution, Gravity for flows).
- Step 2: Gather evidence (trade elasticities, adjustment costs, political constraints).
- Step 3: Predict winners/losers, design complementary policies.
- Step 4: Evaluate feasibility (WTO law, retaliation risk).

The Core Takeaway

- Trade models do not give simple “free trade good/protectionism bad” answers. They give **structured ways to trace consequences** – efficiency, distribution, stability, legality. Good policy integrates all four.

Part V: Cumulative Exam Preparation
Sample Cumulative Exam Questions

- **Short answer:** Explain Stolper-Samuelson using China-US trade.
- **Essay:** How do the Specific Factors and New Trade Theory models explain opposition to TPP differently?
- **Policy memo:** You advise the EU on imposing a carbon border adjustment. Use WTO rules and trade models to justify/ critique.

How to Integrate Theory + Evidence in Your Answers

- State the model → Predict outcome →

  Cite empirical study (e.g., Autor et al. on

  China shock) → Acknowledge limitations

  → State policy implication.

Key Empirical Papers to Remember

- Broda & Weinstein (2006) – Gains from variety
- Autor, Dorn & Hanson (2013) – China trade shocks & US labor
- Bown & Irwin (2021) – Trump’s tariffs & retaliation
- WTO World Trade Report 2023 – Geopolitics & fragmentation

Final Advice

Focus on **mechanisms** (not just conclusions).

For policy questions, always ask: “Compared to what?” (free trade, no deal, alternative RTA).

Bring models to life with **real cases** (US-China, USMCA, Airbus).

References

1. **Autor, D. H., Dorn, D., & Hanson, G. H. (2013).** "The China Syndrome: Local Labor Market Effects of Import Competition in the United States." *American Economic Review*, 103(6), 2121-2168.
2. **Krugman, P. (1980).** "Scale Economies, Product Differentiation, and the Pattern of Trade." *American Economic Review*, 70(5), 950-959.
3. **Stolper, W., & Samuelson, P. (1941).** "Protection and Real Wages." *Review of Economic Studies*, 9(1), 58-73.
4. **Melitz, M. (2003).** "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity." *Econometrica*, 71(6), 1695-1725.
5. **Bown, C. P., & Irwin, D. A. (2021).** "Trump's Tariffs and the WTO." *Peterson Institute for International Economics Working Paper*, 21-10.
6. **World Trade Organisation. (2023).** *World Trade Report 2023: Re-globalization for a Secure, Inclusive and Sustainable Future*. Geneva: WTO Publications.

Good luck on the exam!