UNIVERSITY ASSIGNMENT

MODULE: ECO2014 — International Economics & Trade Policy

International Trade and Economic Development

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Submission: [Month Year]

Learning Objectives

By the end of this presentation, the audience will be able to:

1. Critically evaluate classical trade theories — Absolute Advantage (Smith, 1776), Comparative Advantage (Ricardo, 1817), and the Heckscher-Ohlin model (1933) — and assess their relevance to contemporary international trade patterns.

2. Apply Krugman's New Trade Theory (1979) and the gravity model of trade to explain the dominance of intra-industry trade between similarly endowed advanced economies.

3. Analyse the mechanisms by which international trade drives economic development — technology transfer, economies of scale, capital accumulation, and structural transformation (Frankel & Romer, 1999).

4. Critically evaluate trade policy instruments — tariffs, quotas, subsidies, and non-tariff barriers — and their implications for development, welfare, and distributional equity (Rodrik, 2001).

5. Assess two contrasting case studies — South Korea's export-led industrialisation and Sub-Saharan Africa's commodity dependence — drawing out lessons for development strategy.

6. Evaluate contemporary challenges in international trade: the WTO multilateral system, regional trade agreements, protectionist trends, and the role of trade in achieving the SDGs.

Introduction: The Case for International Trade

Defining the Field

International trade — the exchange of goods, services, and capital across national borders — has been the engine of modern economic development. From the mercantilist doctrines of the 17th century through Adam Smith's Wealth of Nations (1776) to the World Trade Organization's (WTO) 164-member rules-based trading system, the fundamental question remains contested: does free trade unconditionally promote development, or do the gains from trade accrue asymmetrically, entrenching structural inequalities between developed and developing economies?

Global merchandise trade reached $24 trillion in 2023 (WTO, 2024), with services trade adding a further $7.8 trillion. Yet the distribution of these gains remains profoundly unequal — Sub-Saharan Africa represents just 2.2% of global trade despite constituting 14% of world population (World Bank, 2023).

Rodrik (2001) argues that the relationship between trade liberalisation and economic development is contingent on institutional quality, complementary policies, and the sequencing of reforms — challenging the Washington Consensus assumption that open trade unconditionally promotes growth. This presentation examines the theoretical and empirical evidence for that claim.

$24T

Global merchandise trade in 2023 — 50x the 1970 level (WTO, 2024)

32%

of global GDP attributable to exports of goods and services (World Bank, 2023)

800M

people estimated to have escaped poverty partly through export-led growth in East Asia since 1990 (World Bank, 2022)

Theoretical Framework

Four foundational theories explaining the causes and consequences of international trade:

Absolute Advantage (Smith, 1776)

Adam Smith's Wealth of Nations argued that nations should specialise in goods they can produce more efficiently than trading partners — abandoning mercantilist zero-sum thinking. Where Portugal can produce wine more cheaply than England, and England cloth more cheaply than Portugal, both benefit from specialisation and exchange. This established the theoretical foundation for free trade, though it fails to explain trade between unequally efficient nations.

Comparative Advantage (Ricardo, 1817)

David Ricardo's Principles of Political Economy extended Smith's insight: even if one country is absolutely more efficient in all goods, both benefit from specialisation according to relative (comparative) efficiency. A country should produce the good in which its opportunity cost is lowest. This elegant result remains the most powerful theoretical argument for free trade, though its static assumptions — fixed factors, no economies of scale — limit its real-world applicability (Krugman, 1979).

Heckscher-Ohlin Model (1919, 1933)

Heckscher and Ohlin's factor endowment theory predicts that countries export goods that intensively use their abundant factor (capital or labour) and import goods that intensively use their scarce factor. Capital-abundant USA exports capital-intensive manufactures; labour-abundant Bangladesh exports labour-intensive garments. The Leontief Paradox (1953) — finding the USA exported labour-intensive goods — was an early empirical challenge, triggering decades of refinement.

New Trade Theory (Krugman, 1979)

Paul Krugman (Nobel, 2008) demonstrated that economies of scale and consumer preference for variety explain trade patterns that H-O cannot — specifically, why similar countries trade similar goods (intra-industry trade). Under increasing returns, first-mover advantages and path dependency shape which country dominates which industry. This provides the intellectual basis for strategic trade policy: governments can use subsidies and protection to shift advantage to domestic firms in industries with significant scale economies.

Literature Review: Key Academic Perspectives

Frankel & Romer (1999) — American Economic Review, 89(3)
Used geographic instruments (natural openness driven by country size and distance from trading partners) to establish a causal relationship between trade and income — finding that a 1% increase in the trade/GDP ratio raises income per capita by 0.5–2%. This landmark study provided some of the strongest empirical evidence for the trade-growth nexus, though debate continues over the mechanisms through which trade promotes development.

Rodrik (2001) — The Developing Economies, 39(4)
Challenged the Washington Consensus by demonstrating that trade liberalisation alone does not guarantee economic development. Analysed 35+ developing countries and found that the growth benefits of openness are contingent on complementary institutional reforms — property rights, rule of law, macroeconomic stability. Countries that liberalised without institutional prerequisites experienced increased volatility, not sustained growth — providing empirical support for heterodox trade policy.

Acemoglu, Johnson & Robinson (2005) — American Economic Review, 95(3)
Demonstrated that institutions — not geography or culture — are the fundamental determinant of long-run economic development. Using settler mortality as an instrument for historical institutional quality, they found that a one standard deviation improvement in institutional quality raises income per capita by 6–7 fold. This framework explains why trade cannot deliver development without parallel institutional reform, directly challenging pure comparative advantage theory.

Subramanian & Wei (2007) — Journal of International Economics, 72(1)
Provided the most comprehensive empirical assessment of WTO membership and trade flows. Found that WTO/GATT membership increased members' imports by 120% but that the benefits were highly asymmetric — accruing primarily to industrial sectors in developed economies, with developing countries' agricultural and textile sectors remaining systematically disadvantaged by developed-country protectionism despite WTO rules.

Trade Policy Instruments & Development Implications

Tariffs

Ad valorem (% of price) or specific (per unit) taxes on imports. Tariffs protect domestic industries, generate government revenue, and improve terms of trade for large economies. However, they raise consumer prices, reduce allocative efficiency (deadweight loss), and invite retaliation. WTO average applied tariff has fallen from 22% (1947) to 6.4% (2022) — but agricultural tariffs in developed economies remain 18% average.

Import Quotas

Quantitative limits on imports. Quotas protect domestic producers without generating government revenue (quota rents accrue to importers or foreign exporters). The EU's Common Agricultural Policy (CAP) historically used import quotas to shield European farmers — at significant consumer welfare cost. Under WTO rules, most quotas have been tariffied (converted to equivalent tariffs) to increase transparency.

Export Subsidies

Government payments to domestic exporters reducing their effective production cost. Agricultural export subsidies — historically large in the EU and USA — depress world agricultural prices, destroying developing-country farmer incomes and undermining comparative advantage in the only sector where many LDCs hold competitive advantage. WTO's 2015 Nairobi Ministerial eliminated agricultural export subsidies for developed economies.

Non-Tariff Barriers (NTBs)

Technical standards, sanitary/phytosanitary (SPS) measures, labelling requirements, and customs procedures that restrict imports without explicit tariffs. While some NTBs serve legitimate regulatory purposes, they disproportionately burden developing-country exporters who lack capacity to meet complex compliance requirements (Wilson et al., 2005). The cost of NTB compliance can exceed tariff costs for SME exporters.

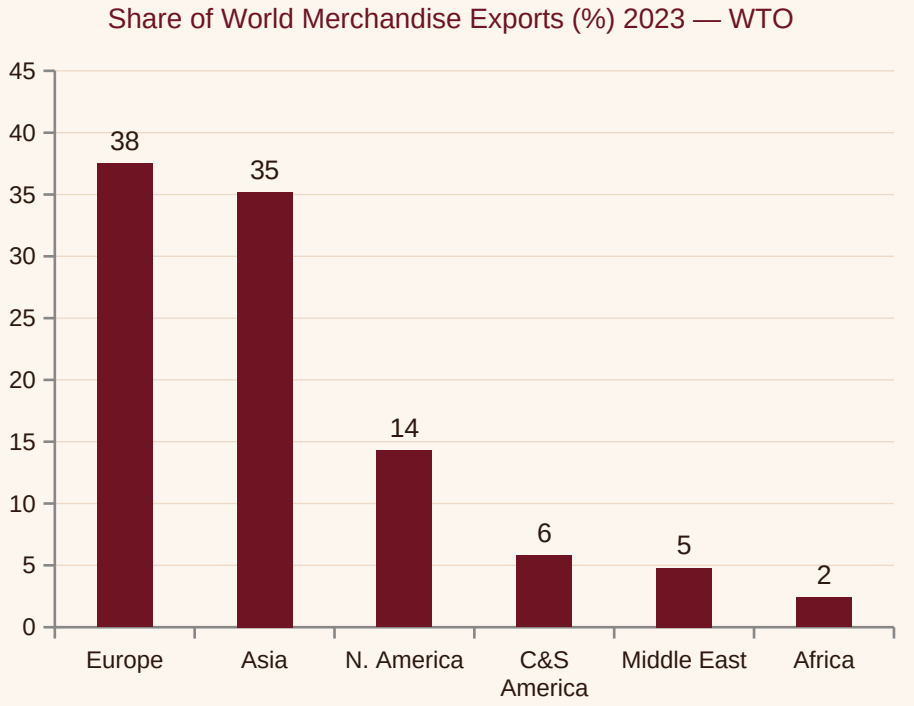
Strategic Trade Policy

Krugman's New Trade Theory (1979) provides the intellectual basis for strategic industrial policy: in industries with economies of scale and oligopolistic competition, first-mover advantages justify temporary protection and R&D subsidies. South Korea's POSCO (steel) and Samsung (electronics) were incubated under strategic industrial policy before achieving global competitiveness — challenging pure free-trade prescriptions.

Free Trade Agreements (FTAs)

Bilateral or regional preferential trade liberalisation — USMCA, EU Single Market, CPTPP, AfCFTA. While FTAs reduce intra-bloc barriers, Viner (1950) identifies trade diversion: preferential liberalisation may divert trade from globally efficient producers to less efficient FTA partners, reducing overall welfare. AfCFTA (2021) aims to increase intra-African trade from 15% to 52% of total, potentially transforming development prospects.

Global Trade Patterns & Value Chain Integration



Source: WTO World Trade Statistical Review 2024

Global Value Chains (GVCs)

GVCs — where production is fragmented across multiple countries — account for 70% of world trade (OECD, 2021). The iPhone's supply chain spans 43 countries: design (USA), chips (Taiwan/TSMC), screens (South Korea/Samsung), assembly (China/Foxconn). GVCs enable developing economies to integrate into global production through specialised tasks rather than full manufacturing capability.

The "Smile Curve" of Value

Shih (1992) identified that value added in GVCs follows a U-shaped "smile curve" — highest at upstream activities (R&D, design, IP) and downstream (marketing, brand, retail) — with manufacturing and assembly capturing minimal value. China's share of iPhone retail price: ~$10 of a $1,000 phone. The structural challenge for developing economies: escaping the low-value assembly trap.

AfCFTA & South-South Trade

The African Continental Free Trade Area (2021) creates a 1.3 billion-person single market — potentially the world's largest by country count. Intra-African trade is only 15% of total exports (vs. 60% intra-EU). AfCFTA targets 52% intra-African trade by 2035, requiring infrastructure investment, customs harmonisation, and industrial policy to shift Africa from commodity export to value-added manufacturing.

Digital Trade & Services

Digital services trade — software, financial services, data, platform services — is the fastest-growing trade category, reaching $3.8T in 2023. Crucially, it exhibits lower barriers to entry for developing-economy firms: Kenya's M-Pesa and Andela demonstrate that Sub-Saharan African firms can achieve global competitiveness in digital services without the capital requirements of manufacturing-led development.

Case Study 1: South Korea — Export-Led Industrialisation

Region: East Asia | Focus: State-Led Export Strategy & Structural Transformation | Period: 1960–2000

Background

In 1960, South Korea had a GDP per capita of $158 — comparable to Ghana. By 2023, it reached $33,000. This transformation — one of the most rapid in economic history — was driven by deliberate state-led export promotion, first in light manufacturing (textiles, shoes), then heavy industry (steel, shipbuilding), then high-technology (semiconductors, automobiles). The Korean Development Bank channelled subsidised credit to strategic sectors (chaebols: Samsung, Hyundai, LG).

Trade Strategy

South Korea pursued a heterodox development strategy combining export orientation with selective protectionism — directly contradicting Washington Consensus free trade prescriptions. The government set export targets for firms, subsidised exporters, maintained undervalued exchange rates, and protected infant industries from import competition while simultaneously forcing exposure to world market price discipline. This is Krugman's (1979) strategic trade policy applied at national scale.

Measured Outcomes

South Korea's merchandise exports grew from $33M (1960) to $632B (2023) — 19,000-fold growth. Manufacturing share of GDP rose from 14% (1960) to 32% (1988) before transitioning to services. Technological upgrading drove the shift from textile exports (1960s) → ships/steel (1970s) → electronics (1980s) → semiconductors (1990s–present). Korea now holds 60%+ of global DRAM chip production.

Critical Analysis

South Korea's success challenges the comparative advantage orthodoxy: Korea had no initial comparative advantage in steel or semiconductors — it was created through industrial policy. Rodrik (2004) argues Korea's success reflects state capacity to implement conditional industrial policy, not market liberalisation alone. Critics note the chaebols' debt-fuelled expansion contributed to the 1997 Asian Financial Crisis, exposing the financial fragility of export-led industrial policy without adequate regulatory governance.

Case Study 2: Sub-Saharan Africa — The Commodity Trap

Region: Sub-Saharan Africa | Focus: Commodity Dependence, Trade Barriers & Development Constraints | Period: 1980–2023

Background

Sub-Saharan Africa (SSA) holds 30% of global mineral reserves, 60% of uncultivated arable land, and receives less than 2.2% of world trade flows (World Bank, 2023). This paradox — resource abundance paired with development deprivation — is partly explained by commodity dependence: 70% of SSA's export earnings derive from primary commodities (oil, minerals, agricultural raw materials), making development trajectories hostage to volatile global commodity prices.

Trade Challenges

SSA faces structural barriers to trade-led development: (1) Agricultural subsidy distortions — EU and US agricultural subsidies of $400B+ annually depress world commodity prices, eliminating SSA's comparative advantage in agriculture; (2) Tariff escalation — developed economies apply low tariffs on raw commodities but high tariffs on processed goods, discouraging SSA value-added manufacturing; (3) Infrastructure deficits — intra-African transport costs are 50-100% higher than in Asia, making regional integration prohibitively expensive (AfDB, 2023).

Consequences

The "resource curse" (Sachs & Warner, 1995) hypothesis argues that commodity wealth reduces incentives for institutional development and diversification — explaining Nigeria's oil-dependent stagnation, Angola's Petro-dollar inequality, and the Democratic Republic of Congo's mineral-fuelled conflict. Prebisch-Singer Hypothesis (1950) further predicts that commodity terms of trade decline secularly relative to manufactures, locking primary exporters into structural deterioration.

Critical Analysis

Acemoglu & Robinson's (2005) institutional framework suggests SSA's trade challenges are fundamentally institutional rather than geographic or endowment-based. Colonial extractive institutions — designed to extract resources rather than build inclusive economies — created path-dependent governance failures that persist, limiting the benefits of trade liberalisation. AfCFTA (2021) represents the most ambitious attempt to break the commodity trap through regional market integration and industrial policy coordination.

Critical Analysis: Trade, Development & Distributional Equity

Evidence FOR Free Trade

- Frankel & Romer (1999): trade causally raises income per capita
- East Asian miracle: trade-led growth lifted 800M+ from poverty
- WTO tariff reductions: average tariff 22% (1947) → 6.4% (2022)
- Consumer welfare: lower prices, greater variety, import competition

Evidence AGAINST Pure Liberalisation

- Rodrik (2001): trade liberalisation contingent on institutional quality
- Prebisch-Singer: commodity terms of trade deteriorate secularly
- WTO asymmetry: developed economies retain agricultural subsidies
- Deindustrialisation: premature liberalisation hollows manufacturing

Contemporary Opportunities

- AfCFTA (2021): potential to transform intra-African trade from 15%→52%
- Digital trade reducing barriers for services and knowledge exports
- Green trade: carbon border adjustments incentivising clean manufacturing
- South-South trade corridors bypassing traditional Northern intermediaries

Contested & Ethical Dimensions

- Carbon leakage: trade liberalisation may offshore emissions, not reduce them
- Labour standards arbitrage — comparative advantage in "race to the bottom"
- Technological protectionism: US-China chip war reordering trade architecture
- Trade and inequality: gains from trade concentrated; adjustment costs diffuse

Seminar Discussion Questions

Q1 Ricardo's (1817) theory of comparative advantage predicts that free trade is mutually beneficial even when one country is absolutely more efficient in all goods. To what extent does this static model — which assumes fixed factor endowments, no economies of scale, and perfect factor mobility — provide adequate guidance for 21st-century trade policy in a world of GVCs, knowledge economies, and strategic sectors?

Q2 South Korea's export-led industrialisation succeeded through deliberate strategic industrial policy — contradicting Washington Consensus free-trade prescriptions. To what extent does the Korean "miracle" provide a replicable development model for Sub-Saharan African economies, and what institutional conditions would need to be present for such a strategy to succeed in a different context?

Q3 Rodrik (2001) argues that the growth benefits of trade liberalisation are conditional on complementary institutional reforms. Using evidence from both case studies and the academic literature, critically evaluate whether the sequencing of trade liberalisation and institutional reform matters for development outcomes — and what this implies for WTO conditionality.

Q4 Subramanian & Wei (2007) find that WTO membership asymmetrically benefits developed-economy manufacturing while leaving developing-country agricultural sectors disadvantaged. Evaluate the extent to which the WTO multilateral trading system represents a rules-based development tool or an institutional architecture that systematically entrenches developed-economy advantage.

Conclusion

This presentation has critically examined the relationship between international trade and economic development through theoretical, empirical, and comparative case study analysis. The classical theories of Smith (1776) and Ricardo (1817) establish the conceptual foundation for free trade's mutual gains, while Krugman's New Trade Theory (1979) explains the more complex reality of economies of scale and strategic advantage. The empirical evidence — Frankel & Romer (1999), Rodrik (2001), Acemoglu et al. (2005), and Subramanian & Wei (2007) — consistently demonstrates that trade's development benefits are real but contingent: they depend on institutional quality, the sequencing of reforms, complementary industrial policy, and the degree to which the international trading architecture permits developing economies to pursue heterodox strategies. South Korea's transformation from $158 per capita GDP (1960) to $33,000 (2023) demonstrates what is possible with state capacity and strategic trade policy; Sub-Saharan Africa's commodity trap illustrates the structural constraints that purely market-mediated trade liberalisation cannot overcome. The emerging AfCFTA, digital trade, and green economy transitions represent genuine opportunities for a more equitable global trade architecture — but their realisation requires

1. Classical trade theory provides enduring insight but rests on assumptions (static endowments, perfect competition, no scale economies) that limit its prescriptive power for development policy in a world of GVCs and knowledge economies.

2. Frankel & Romer (1999) establish trade as causally linked to income growth, but Rodrik (2001) demonstrates that institutional quality is a binding constraint: liberalisation without governance reform generates volatility, not sustained development.

3. South Korea's success challenges comparative advantage orthodoxy — it manufactured comparative advantage in semiconductors and electronics through state-directed industrial policy, not market-mediated specialisation.

4. The WTO multilateral system embeds asymmetries (agricultural subsidies, tariff escalation) that systematically disadvantage developing economies — requiring reform alongside the AfCFTA and South-South trade architecture to deliver equitable development outcomes.

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