International Trade: Prelims Notes

Introduction:

- Definition: International Trade is the exchange of goods and services between countries, involving the use of different currencies and crossing international borders
- Factors accounting for different conditions of production:
    - Different goods require different proportions of factor inputs in their production
    - Economic resources are unevenly distributed around the world
    - International mobility of resources is extremely limited

Theory of Comparative Advantage:

- Rationale: specialize in producing goods and services that one is best suited or most skillful at and using these to trade for other goods and services one needs and are relatively less efficient at producing
- Law of CA: countries would gain from trade if there are differences in the **relative** opportunity costs of producing specific goods (NOT absolute opportunity costs)
- Description:
    - Step 1: Production Pattern before Specializing (USA has absolute advantage in both goods, but it has a comparative advantage in production of wheat and comparative disadvantage for cloth)
    - Step 2: Opportunity Cost of Production (USA: to produce wheat and give up less cloth)
    - Step 3: Production Pattern with Specialization (USA partial specialization, China complete sp.)
    - Step 4: Consumption after Trade (assume terms of trade is 1:1)
        - *** Terms of trade must be between opportunity costs of production of both countries

- Sources of Comparative Advantage:
    - International Differences in Factor Endowment
        - Leads to differences in relative prices of factors which affects relative prices of goods
        - Specialize in producing goods that require factors for which they have abundant supply
    - Differences in Technology
        - Different stages of development -> different intensity of R&D
        - Ability to continually keep ahead in the technological race is the comparative advantage
    - Dynamic Comparative Advantage
        - Governments can establish policies to promote opportunities for changes in comparative advantage over time -> labour training and education policies + import capital goods + R&D funding
- Limitations of Free Trade
    - Artificial Barriers to Trade (Protectionism)
        - Government restrictions such as tariffs, quotas and preferential trading
    - High Transport Costs
        - Cost of moving goods lowers gains from trade -> can affect trade patterns if cost is high
    - Lack of Mobility of FOP
        - Theory assumes FOP can move freely into specialized industry BUT resources may not be mobile or efficient when used elsewhere -> structural unemployment
    - Increasing Costs of Production
        - Theory assumes constant returns to scale BUT in reality diminishing returns will raise average cost of production = no complete specialization
        - Expansion increases opportunity cost -> drive up factor cost + usage of less suitable factor inputs for production = tends towards partial specialization
    - Other Market Imperfections (imperfect knowledge of market conditions and opportunity costs)

Effects of International Trade

Microeconomic Advantages

- Greater world output and consumption = improve consumer welfare
    - Engaging in trade can increase quantities of goods and services consumed

    - No trade = consumption limited by ability to produce (on the PPC curve)
    - Specialization and trade = able to produce beyond PPC = gain from trade
- Lower unit cost = more profits, lower prices
    - IEOS provides cost and technological advantage
    - Small countries can focus on producing a limited range of products on large scale = reap available cost savings (vs too small to exploit IEOS by producing everything at higher costs)
    - EEOS due to industry expansion by developing industries with CA
    - Thus, cost savings reaped can be passed to consumers as lower prices = more consumer welfare
    - Profits can be put into R&D = improve quality of goods produced
- Lower prices + more consumer choice and satisfaction
    - Expose domestic producers to foreign competition = enjoy better prices and quality and variety
    - Trade can proliferate differentiated products with various brand names + sub product lines

Macroeconomic Advantages

- Stimulate economic growth and development
    - Enlarging markets: small open economies can produce for wider international market = more exports -> conducive environment for investment ---- increase X and I = increase AD (AG)
    - Facilitate transfer of technology and ideas: increase efficiency and increase productive capacity = PG ---- able to achieve price stability as AS increases and shifts right
- Lower inflationary pressure
    - Cheaper imports: lower CPI and inflation rate
    - Cheaper imported raw materials: lower COP = increase AS and dampen inflation
    - Increase competition: prevents complacency/monopoly control = local producers more efficient
- Dynamic Gains
    - More output and income = more saving and investment
    - Increase in imported investment good = higher productivity level and PG
- Improvements in BOP
    - Increase in trade of goods and services (exports) = current account improves
    - Inflow of foreign capital through FDI = financial account improves
- Promote beneficial political links (projects that involve cooperation between Governments)

Microeconomic Disadvantages

- Unfair competition and dumping
    - Selling of goods in overseas markets below MC of production = drive out rival producers = monopolization of market
    - IF production subsidized by (X) Government = unfair competition with producers of (M) country
- Import of harmful good
    - Adverse effects on consumption habits and social habits + negative externalities

Macroeconomic Disadvantages

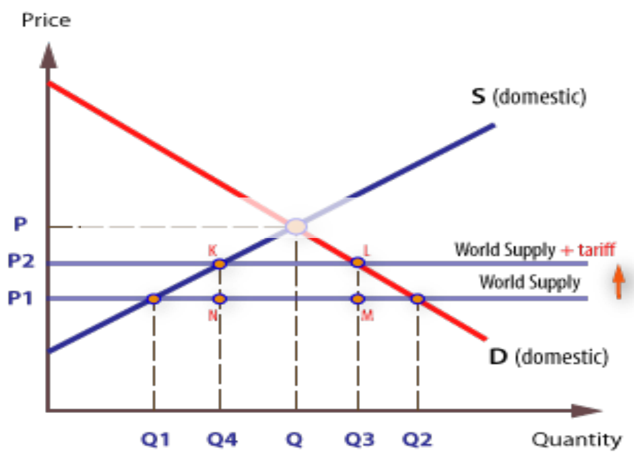
- Overreliance on foreign countries = more susceptible to external shock
    - Complete specialization = narrow economic structure = limited types of jobs available
    - IF change in market condition (decreased demand) = economic decline (*structural rigidity*)
    - Dependent on other countries for basic goods (food and water) = constraints on basic needs
    - Reliant on other countries as export markets = risk of externally induced cyclical unemployment
- Increased Structural Unemployment
    - Decline of industries unable to compete or adapt due to changing demand/more efficient competitors emerging in other countries = labour redundant in these industries cannot find job due to mismatch of skills
- Worsen BOP position
    - Countries face net outflow of capital + fall in net exports = worsen BOP + external instability
- Widening income disparity
    - Growth provides opportunities for those with skills and talents = income inequality exacerbated
    - Requires active redistribution of income to prevent social tension

General Pattern of Trade

- Pattern of Trade
  - Composition: what is being exported and imported (inter and intra-industry trade)
  - Direction of trade
- Determinants of Trade:
  - Inter Industry Trade
    - Different factor endowments: sources of CA
    - Demand side factor: taste and preference, population growth, income level
    - Other factor: BTE, transport costs, globalization, market imperfections
  - Intra Industry Trade
    - Demand factors: preference for different varieties
    - Exploit EOS -> specialize in producing differentiated good
- Demand and Supply Analysis
  - Country A which has comparative disadvantage imports = reduction of market prices
  - Country B which has comparative advantage exports = additional demand for X increase prices
  - Equilibrium is reached at world price
  - BUT small countries do not affect global market demand and supply = price taker
- Singapore's Pattern of Trade
  - CA: transportation and maritime trade services due to strategic location
  - High GDP per capita = afford capital intensive production + skilled labour resources
  - Diversification of economy where CA might arise: hub for clean energy, pharmaceuticals, biotech
  - Exports in services increasingly important (loss of CA in manufacturing to low cost producers)
  - Re-export economy: inevitable due to resource poor nature (this includes oil refinery)

Protectionism

- Definition: Sheltering domestic industries from foreign competition by imposition of trade barriers (M)
- Methods of Protectionism:
  - Tariffs
    - Specific tariff: fixed amount of money per unit of import
    - Ad valorem tariff: tax on imports calculated as fixed percentage of import price
    - P = domestic price no trade, P1 = world price free trade
    - Decrease in consumer surplus by P2(L)(Q2)(P1) + reduction in imports (Q1Q2 to Q4Q3)
    - Consumers cut expenditure to Q3 + switch to domestic substitutes + pay extra price
    - Domestic producers expand production Q1 to Q4, increase revenue, increase surplus
    - Government receives tax revenue KLMN = extra amount paid for imports
    - Deadweight Loss = Q1KN + Q2LM
    - ** Effects depend on PEDm + whether foreign suppliers choose to absorb tariff



  - Non-tariff barriers (import quotas – limits imposed on physical quantities to level below FT)
  - Export subsidies (cash grant to reduce COP = domestic producers sell more goods at low price)
  - Foreign exchange controls

- Embargoes (ban on certain imports/exports from or to certain countries)
- Trade Agreements (contracts between countries to buy from each other + restricted privileges)
- International cartels (collusive agreements to fix price and output policies = OPEC)
- New protectionist measures (disguished restrictions)
  - Implement technical specifications and standards which discriminate in favour of domestic producers (safety regulations)
  - Voluntary export restraints: exporting country persuaded to reduce exports under threats of all round trade restrictions

- **Economic Arguments regarding Trade Restrictions**
  - Protecting an infant industry
    - Infant industries incur heavy initial costs = time needed to develop EOS + potential CA -> price goods more competitively in future with lower COP
    - No protection = might cut off efficient source of supply
    - *** Difficult to identify with certainty industries which are now unprofitable but might acquire CA -> opp cost of spending on subsidies + failure of industries to compete thus high unemployment + perpetual infants that are inefficient due to complacency
  - Protect sunset/mature industries
    - Traditional industries lose CA in world markets due to new competitors = if unprotected can lead to massive structural unemployment -> temporary protection to buy time to switch resources to CA industries
    - *** Often due to trade union pressure: wages have risen faster than growth in productivity and products are priced out by cheaper alternatives
    - *** Does not increase total employment + perpetuate domestic inefficiency -> beggar-thy-neighbour since increased employment is at expense of trading partners
  - Reduce BOP deficit
    - Too much imports are undesirable = depletion of foreign reserves = protectionism
    - *** effectiveness depends on PED and PES of X and M + short term measure
    - *** better to look at root cause of problem -> raise productive capacity (supply side)
  - Protect against unfair trade practices
    - Dumping leads to monopolization = reduce domestic output and unemployment -> prices increased when local industry has collapsed
    - *** hard to identify if country is dumping – prices could be low due to CA
    - *** if price difference is due to different PED, then importing country can benefit in LR from lower import prices = protectionism not justified
  - Diversification of the economy
    - Undesirable consequences of narrow specialization and over-reliance on trade -> greater diversity and self-sufficiency reduces risk
    - Protectionism supports diversification especially when TOT has moved against products which these countries specialize in
    - *** not sound based on Theory of CA BUT balanced growth Is justified -> shift in CA
  - Protect against low wage foreign labour
    - No protection = import of cheap goods from countries with .low wag = fall in employment and standard of living
    - *** outright rejection of CA -> country should shut industries and divert resources
    - *** consumers are denied the opportunity to buy from cheaper source of supply
  - Increase domestic production and national income during recession
    - Emergency short run measure to avoid unemployment -> divert demand to domestic production (counter cyclical measure)
  - Increase Government revenue
    - Import tariffs from alcohol, tobacco can finance Government expenditure
    - *** to be effective, impose on goods with price inelastic demand or supply
  - Bargaining tool/retaliation
    - *** unhealthy for world trade -> all countries lose out due to trade wars

- **Non-Economic Arguments regarding Protectionism**
  - Political Reasons
    - Self produce armaments and aircrafts (non CA industry) since value of national defence is higher -> divert resources to from other consumer goods with CA
    - Trade is used as a weapon of foreign policy (embargo on enemies)
  - Social Reasons
    - Subsidize agricultural sector to avoid depleting population in rural areas + urbanization
    - Ban or restrict import of harmful commodities (drugs, tobacco)
- Conclusion
  - Tariffs distort and reduce differences in CA -> welfare loss + reduce in world trade
  - Protectionism causes misallocation of resources -> firms kept in business despite loss of competitiveness + firms have less incentive to respond to market conditions or reduce prices
  - ALTERNATIVE: improve export competitiveness by increasing productivity and lowering COP

Globalization

Introduction

- Definition: Growing economic interdependence of countries worldwide through increasing volume and variety of cross-border transactions, largely in goods and services, free flows of international capital, spread of technology and labour migration
- Causes of Globalization
  - Reduction in <u>costs of transportation and communication</u> -> break down of artificial barriers
  - <u>Policies</u> to open economies domestically and internationally
    - WTO reductions to barriers to trade and commerce
    - International industrial and financial business structure -> ease of commerce
  - <u>Technology</u>
    - Tools to identify economic opportunities, faster and informed analysis of economic trends, easy transfer of assets, collaboration with far flung partners
    - Transportation: allows fragmentation of production process taking advantage of varying cost conditions throughout the world
  - Singapore: high dependence on two way flows of trade and investment (open economy dependent on trade -> supports rule-based multilateral trading system)

<u>International Trade Flows</u>

- Introduction
  - Economic integration through economic interdependence by preferential trading agreements
  - FTA eliminates trade tariffs vs Economic Union has common system of taxation, currency, laws
  - FTA allows member nations to have individual trade barriers against non-members vs Customs Union requires common trade barriers against non-member countries
- Free Trade Agreement and Effects
  - **Trade Creation** (shift in trade from higher cost producer to lower cost member country = welfare gains due to more efficient resource allocation)
  - **Trade Diversion** (shift in trade from lower cost non-member to higher cost member country = shift away from CA principle and away from more efficient producer)
    - Welfare reducing and discriminates towards members of FTA
  - FTA beneficial or not depends on relative strength of trade creation vs trade diversion
  - BUT integration likely to be positive if:
    - More closely the prices in member countries approach low cost world price
    - Higher initial tariff rate (if original tariff so prohibitive that import = 0, no trade diversion)
    - More price elastic supply and demand are in country with high costs
    - Greater number of participating countries (less countries where trade is diverted from)

<u>Foreign Direct Investments</u>

- Introduction
    - FDI is the movement of capital involving foreign ownership and control of production facilities
    - Carried out by MNCs since they operate in more than one host country
- **Benefits to Recipient Country:**
    - Short Run
        - Improved financial and capital account in BOP -> offset deficit by inflow of investments
        - Supplement insufficient domestic investment -> increase fixed capital formation (AG)
        - Create job opportunities thus reducing unemployment + add to total demand of workers thus rise in wages for all workers
        - Generates corporate tax revenue for host Government
    - Long Run
        - More investment = more capital accumulation + infuse technical and managerial expertise + production technologies which are transferred to local workforce -> improvement in quality and quantity of resources -> enhance productive capacity
        - If foreign firm is exported oriented, recipients exports will increase -> improve BOT, BOP
- **Costs to Recipient Country:**
    - Microeconomic Effects
        - Creation of dual economy -> pockets of wealth from FDI but domestic sector is poor -> unequal growth -> raise income disparity
        - Labour exploitation where MNCs seek out countries where labour has minimal power
        - Environmental destruction causing negative externalities -> poor regulation of activities of foreign investors
        - Increase in monopoly power -> large foreign firm undercuts competitive local industry
    - Macroeconomic Effects
        - Decrease domestic investment due to crowding out effect -> less AD growth
        - Dutch Disease: capital inflow leads to appreciation -> exports more expensive = loss of price competitiveness
        - Instability in BOP and exchange rate
- **Benefits to Source Country:**
    - Export of machinery and capital goods -> equipment from source country -> stimulate X and increase in AD and increase in NY due to multiplier effect
    - Rising exports of source country -> recipient FDI countries are better employed = purchase more goods and services = higher X sales
    - Generates return flow of income such as interest and dividends -> improve current account
- **Costs to Source Country**
    - SR: worsening capital and financial BOP account + declining employment if there is outflow of I
    - Exports from source country falls if new plant set up abroad to supply exports to foreign market directly -> displacement of trade
    - If FDI = outsourcing -> fall in job opportunities and loss of employment = worsen current account and decrease in AD, unemployment and incomes
    - Source country can experience of loss of tax revenue

<u>International Mobility of FOP/Migration</u>

- Introduction
    - Productive factors more from nations in abundance to where they are scarce -> productive factors flow in response to differences in returns
    - Labour scarce = import labour intensive products or import labour itself
- **Benefits to Recipient Country**
    - Willingness of migrant workers to supply labour at lower wages -> increase in labour supply will lower wage rate which benefits producers -> lower COP = shift AS downwards
    - Increased labour supply increased both quantity and quality of labour -> rightward shift of AS
    - Rising labour inflows = increase in actual growth and potential growth + manage inflation
- **Cost to Recipient Country**

- Widening income gaps whereby gains from increase in output is not equally distributed -> migrant workers wiling to work for lower pay = depressing local wages + effect is on unskilled domestic workers BUT wages increase for natives whose jobs are complementary = inequality
- Drain on Government resources since unskilled workers suffer greater employment instability -> higher social maintenance cost -> countries with welfare payments could induce influx of unproductive people who enjoy benefits
- Illegal immigration *** LT benefits since children of immigrants enter workforce and pay taxes
- Increase in external costs -> extra noise, conflict, crime, strain on public infrastructure

- **Benefits to Source Country** (where cheap labour originates)
  - Increase in remittances to families -> estimated 516 billion in 2016
    - Major contribution to GNP -> finance consumption of goods -> improve living standard
    - Source of capital for small businesses + save excess money which are sources of funds -> future investment -> actual and potential growth
    - Improvement in BOP position (transfer in the current account)
- **Costs to Source Country**
  - Loss of export competitiveness -> currency appreciation due to increase demand for local currency through remittances -> reduce price competitiveness of exports
  - Brain Drain -> emigration of highly educated and skilled = loss of resource -> limits potential EG
  - + opp cost even larger if skilled workers generate positive externality ie improve technology
- **Benefits to World Economy** (enhance global efficiency -> workers flow to more productive areas)
- **Equalization of wages**
  - Wages between countries with FTAs with equilibrate due to migration
- **Increase in world output**
  - Underutilized FOP can be attracted overseas to expand output in recipient countries without output reduction in source countries (where employment opportunities are low)
  - Nations which can manage labour flow can mitigate its negative effects
  - Countries with aging population and shrinking labour force could face constraints on EG without labour inflow of foreign talent

Globalization for Singapore

- Free Trade Agreement
  - Strategy: support its entrepot and regional export platform functionalities by maintain and developing Singapore-based access to key international markets
  - Enhance competitiveness of exports in the face of global competition from low cost producers
  - Greater export revenue + local companies have access to cheaper inputs (no need to outsource)
- Benefits to Singapore (MacroEconomic)
  - CA and specialization = expose country to larger export market -> increase X -> increase AD -> AG
  - Increase demand for exports = increase in derived demand for labour = less unemployment
  - Economic integration stimulate inflow of investment (increased rate of return with FTA) -> increase I -> increase AD
  - Dynamic gains LR due to increased investments -> more capital accumulation, skills transfer -> higher productivity + increase productive capacity -> enhance PG
  - Entry of China has decreased import prices + FTA diversifies import partners -> reduce imported inflation (cost push)
- Benefits to Singapore (MicroEconomic)
  - Larger markets -> can enlarge production (more than small domestic consumption) -> reap EOS
  - Open markets -> reduce potential for collusion with more competitors -> domestic producers compete to survive -> improve productivity + remain cost efficient -> cheaper, better qlty goods
- Costs of Globalization
  - Susceptibility to external shocks (global meltdown) with reliance on exports -> decrease in AD
  - Competition from low cost producer -> shift to higher value goods in SG -> structural unN (inability to transfer skills)
  - Rising income inequality -> rich gain more with their skills, knowledge that command a premium