International Trade and Monetary Systems

Prof. Dr. Dennis A. V. Dittrich

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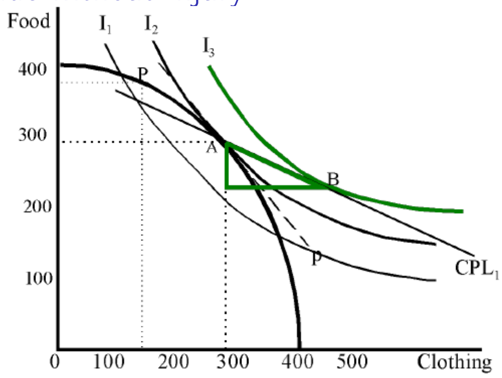
Homework Question 1

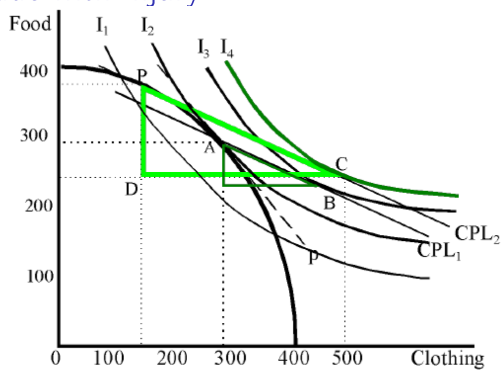
Explain verbally and graphically, using a general equilibrium model of a Rsmall economy,R why a country cannot gain the full welfare bene, ts from trade liberalization if it maintains a policy of Rno injuryR to any of its industries. Explain why a shift to free trade necessarily implies injury to some industries.

Trade without Injury



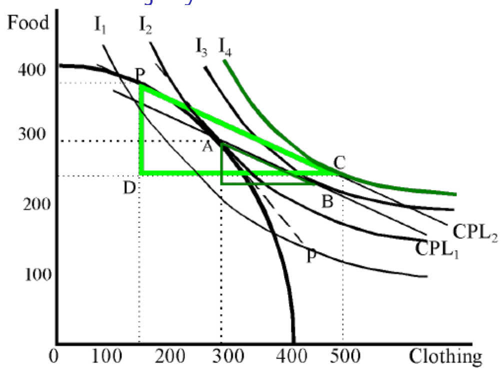
- The no injury rule e: ectively limits the gains from trade to the gains from exchange without specialization.
- There are gains, but they are small compared to the full gains from trade.

Trade with Injury



- Letting the economy specialize by shifting production from A to P raises real income to the level of consumption possibilities frontier CPL_2, and permits consumption at point C.

Trade with Injury



- Point C lies on the higher indi: erence curve.
- Specialization causes domestic production of food to decline, causing alleged Rinjury.R

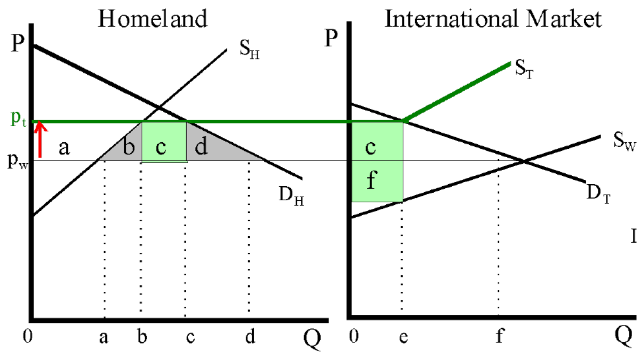
Homework Questions 2+3

Explain with the help of a suitable graphical model why the welfare e: ects of a regional trade bloc, such as a regional free trade area, are ambiguous.

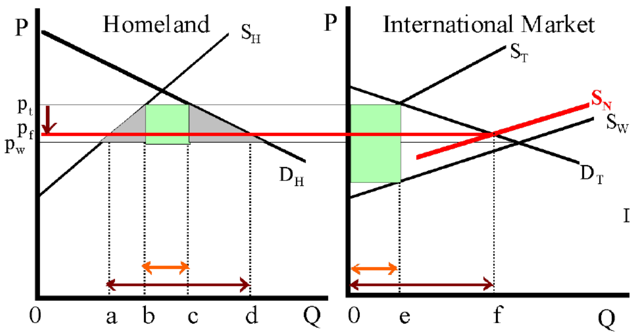
Illustrate how a regional free trade area both creates trade and diverts trade.

Trade Creation vs. Trade Diversion: The Ambiguous Welfare Eects of a Trade Bloc

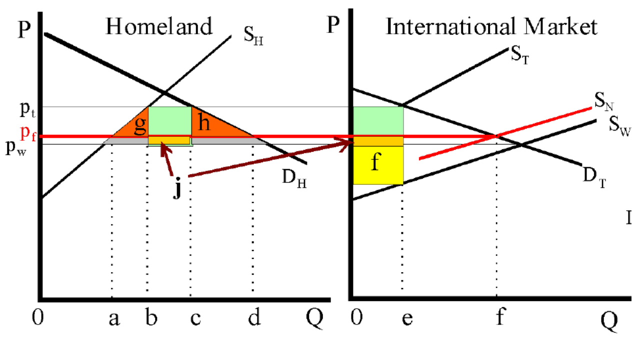
- A free trade area creates additional trade.
- But a free trade area is also likely to divert trade by inducing importers to buy from a higher cost producer in a free trade area country rather than from the world's true lowest-cost suppliers.
- In the general case of a world with some trade and some trade restrictions, the formation of a trade bloc has ambiguous welfare e: ects.



A tari: raises the domestic price from Pw to Pt, causes deadweight losses of b+d, and gains the domestic government tari: revenue f paid by foreign suppliers:

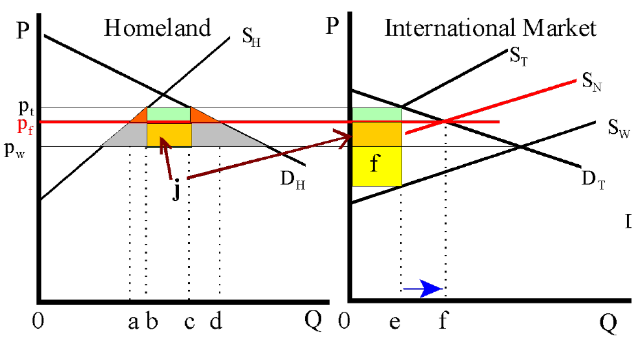


If a trade bloc is formed with a neighboring country whose producers have higher costs, as given by higher supply curve S_n, then the domestic price will fall to P_f and trade will expand to ad $=$ 0f $>$ bc $=$ 0e.



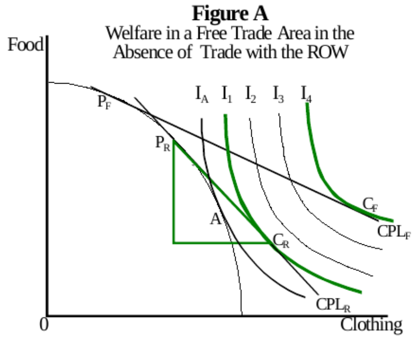
The trade bloc reduces deadweight losses by $g + h$, but tari: revenue f is no longer paid by foreigners and the price paid to foreigners is slightly higher, which causes an additional loss equal to j. Is $g + h > f + j$?

Is $g + h > f + j$



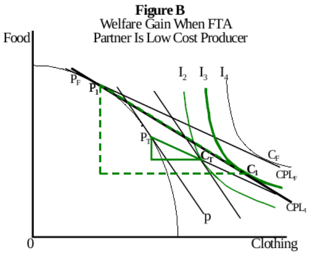
The trade bloc reduces deadweight losses by $g + h$, but tari: revenue f is no longer paid by foreigners and the price paid to foreigners is slightly higher, which causes an additional loss equal to j. Is $g + h > f + j$?

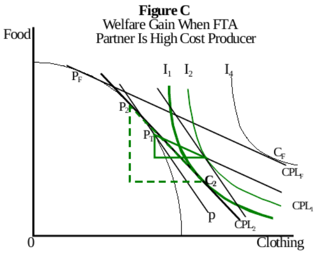
Figure A
Welfare in a Free Trade Area in the Absence of Trade with the ROW



- Under completely free trade, Homeland would face the world price ratio represented by CPL_F. Its welfare would be represented by I_4
- The FTA-Neighbor is not the lowest cost producer of clothing, and Homeland has to supply more food to acquire clothing when it trades with Neighbor. Welfare is only at I_1

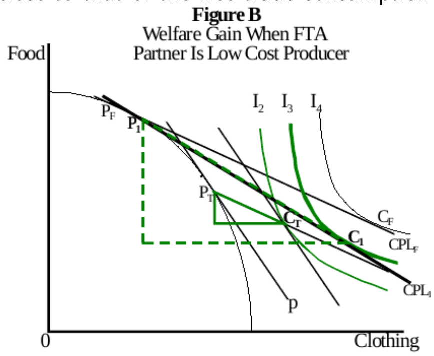
Compared to a uniform tari: on all trade partners, an FTA or CU could increase or decrease Homeland's national welfare.





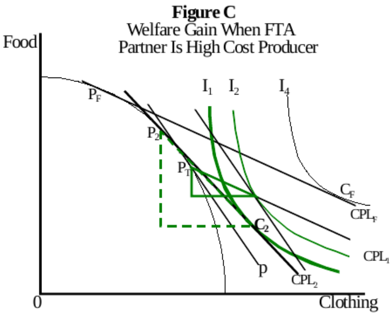
- complete free trade with all other countries: consumption is at C_F
- uniform tari: : consumption is at C_T

Neighbor produces clothing at a cost only slightly higher than the lowest-cost producers in the world, and CPL_1 has a slope close to that of the free trade consumption possibilities line CPL_F.



- tari: on all but FTA-partners: consumption is at C_1;
- In this case, trade creation adds more to welfare than trade diversion takes away.

- Neighbor produces clothing at a cost higher than the lowest-cost producers in the world but still lower than they would be in a closed Homeland
- free trade area's trade diversion reduces welfare by more than its trade creation adds to welfare.



- The much steeper consumption possibilities line CPL_2, relative to the free trade CPL_F, implies that the equilibrium level of consumption C_2 lies on the indi: erence curve I_1, which lies below the indi: erence curve I_2 attainable when a common tari: is levied on all trading partners indiscriminately.

Gains from international trade

- The Heckscher-Ohlin model suggests that the gains from international trade are greatest between countries that are very dissimilar in terms of resource, their technology, and consumer preferences and purchasing power.
- Heterodox economists argue that unequal exchange between dissimilar trade partners, such as between rich and poor countries, or militarily powerful and weak countries, can bring about unequal shares of the gains and losses from international trade.
- Throughout history institutional structures have developed, or been imposed, that caused international trade to harm entire nations and economies.

Mercantilism and Colonialism

- Over the past 500 years, much international trade was carried out under colonialism.
- Colonialism is an arrangement where one party to the exchanges uses the coercive power of government to extract disproportionate gains at the expense of other trade partners.
- Colonialism includes the military conquest of one of the trading partners and subsequent administrative control of the economy.
- More generally, colonialism was one manifestation of mercantilism, a political and economic arrangement in which commercial interests control the power of government.

Mercantilism and Colonialism

- Mercantilism is an active rent-seeking society in which commercial interests bid for, and gain control of, government mechanisms that provide them with special privileges and monopoly powers over sectors of the economy.
- In 1500s Europe, mercantilism solidi, ed national monarchs over the local power bases that remained from earlier feudal societies.
- When these alliances between central governments and commercial interests were extended overseas, mercantilism became colonialism, which was essentially the joint government/private conquest of foreign territory and resources.

Mercantilism and Colonialism: Brazil

- Brazil's choice of explicit trade and investment restrictions after World War II was an obvious reaction to the country's colonial and post-colonial experiences.
- A feature of colonialism that did not escape many Brazilian intellectuals was that trade relationships did not become more fair or equitable when formal colonial links were severed.
- Brazil, and virtually all other colonies and former colonies remained exporters of raw materials and importers of industrialized products even after political independence.

Mercantilism and Colonialism

- There is evidence suggesting that trade and investment between European countries and their colonies had not been beneficial for the colonies.
- When per capita incomes rose persistently in Europe and the United States during the 1800s and early 1900s, the developing countries and colonies remained poor.
- This is the period when incomes across countries diverged sharply.
- As in the example of Brazil, it was only when the country effectively cut itself off from international trade by means of its 1930 devaluation that the country experienced rapid industrialization.

Mercantilism and Colonialism: Dependency Theory

- An interpretation of the persistence of colonial structures after national independence is known as dependency theory.
- A leading dependency theorist,Andre Gunder Frank, challenged the idea that today's developing countries are in an early stage of development, one that today's developed countries already passed through.
- He claimed that today's poor countries are in a unique, unprecedented state which he called underdevelopment.
- Frank argued that today's developed countries never passed through a stage where they had to co-exist with much wealthier and more highly industrialized countries and be forced to play the role of subservient provider of the wealthy countries' economic needs.

Mercantilism and Colonialism: Dependency Theory

- Frank's argument that countries are all part of a greater global economic system is not what distinguishes his thesis from mainstream economists.
- Orthodox trade models show economic interdependence.
- Rather, Frank and the other dependency theorists distinguished themselves by claiming that economic interdependence with wealthy countries prevents today's less developed economies from ever developing.
- Dependency theorists hypothesized that trade is the channel through which rich center countries exploit poor peripheral countries and effectively perpetuate the unequal distribution of world income.

Dependency Theory & The Structuralist School

- Dependency theory was closely related to the Structuralist school.
- Structuralists argued that human behavior is holistically inducened by, among other things, culture, institutions, and psychological factors that lead people to favor the status quo.
- Structuralists argued that developing economies were plagued by structural rigidities, such as culture and institutions, that prevented smooth adjustments.
- Structuralists were convinced that if developing countries followed their current comparative advantages, they would forever be locked into exporting primary products and deteriorating terms of trade.

Development Economics: Import Substitution Industrialization

- In addition to the dependency theorists and the structuralists mentioned above, other important intellectual supporters of protectionist trade policies after World War II were the development economists Arthur Lewis (1954), Gunnar Myrdal (1956), and John Fei and Gustav Ranis (1964).
- These protectionist policies came to be know as Import Substitution Industrialization (ISI) policies.
- They were actively promoted by the United Nations Economic Commission for Latin America (ECLA).
- The director of ECLA, the Argentinean economist, Raúl Prebisch (1950, 1959), presented a detailed rationale for ISI policies in Latin America and other developing regions of the world.

Import Substitution Industrialization is a necessary short-run cost

- Prebisch predicted that the terms of trade of countries that exported primary products would, in the long run, continually deteriorate.
- ...deteriorating terms of trade would make international trade serve as an Rengine of growthR only for industrialized countries, not for the underdeveloped primary product exporters.
- ISI policies that closed a country's borders and intentionally de, ed its current comparative advantage were thus a Rnecessary short-run costR to force a long-run structural change in the economy.
- Structuralists and Prebisch claimed that the forced structural change would more than pay for itself in the form of higher rates of economic growth in the long run.

Import Substitution Industrialization: Brazil

- ISI policies usually consisted of a broad assortment of trade bans, quotas, and high tari: s on imports, intended to RprotectR domestic industries so that they could defy comparative advantage and RsubstituteR domestic industrial production for imports.
- Brazil, e.g., formally adopted ISI as its trade policy after World War II, when rising demand for its primary products was raising the value of its currency and making imports less expensive for Brazilian consumers.
- Rather than let its new industries die, Brazil opted to protect them, and to provide incentives for new ones to arise.
- Brazil passed its Law of Similars to send a clear signal to entrepreneurs: Produce locally, and you will be protected.

Import Substitution Industrialization

Henry Bruton (1989; p. 1641) concluded:

> *The idea that some form of protection is in order to enable a country to establish its place in the world economy, in order to establish an economy that is exible and resilient, is a fundamental idea. To get the form of this protection right and to get the changes that take place behind this protection to produce this kind of economy, is what import substitution is all about.*

Import Substitution Industrialization & Globalization

- Opponents of globalization want permanent barriers to trade, and free market proponents prefer to throw open the borders and let private initiative bring economic development.
- The successes of ISI policies in transforming formerly resource-based economies into industrial societies makes it clear that policymakers managing the complex and dynamic process of economic development would be well advised to retain the temporary protection of speci, c industries as a policy option.
- The e: ectiveness of ISI policies depends on how they are applied.

Import Substitution Industrialization & Agglomeration

- Economic development is usually an agglomerating process that causes certain economic activities, like industry and innovation, to concentrate in certain regions or countries.
- International economic integration means agglomeration becomes a global process that tends to concentrate economic activities in certain countries.
- The agglomeration of economic activity, especially the highest income jobs and the most pro, table business activities, means that the gains from the international economic integration, which enables this process of agglomeration, are not equally shared among countries.

Economic Development and International Economic Integration

- Reinert (2007) models the combined processes of economic development and international economic integration as a combination of increasing cost and increasing returns to scale industries.
- Those countries who end up with increasing cost industries gain the least from economic development.
- The countries who end up with the increasing returns to scale industries gain the most.
- Trade policy, therefore, should focus on protecting increasing returns to scale industries until they mature.
- Rising cost industries, like agriculture, should not be protected.

Economic Development and International Economic Integration

- Reinert (2007) argues that free trade favors those countries who now harbor the world's increasing returns to scale industries.
- Increasing returns to scale industries are not perfectly competitive, and they earn exceptionally high pro, ts.
- Poor countries have a comparative advantage in primary product production, agriculture, and routinized manufacturing, which all generate low incomes and pro, ts.
- Countries thus get locked into a disadvantage through free trade.
- ISI policies attempted to address this situation, but now it is illegal to engage in them!

Transnational Corporation: Mercantilism

- That increasing returns to scale industries are likely to be dominated by a few large , rms means that pro, ts are high and production is under the control of transnational corporations (TNCs).
- Also, trade in the products produced in increasing returns to scale industries is in the hands of TNCs, as is international investment in those industries.
- TNCs employ the most educated and most talented people to perform the management, research, and marketing jobs that enable TNCs to grow and prosper.
- Also important are the transnational , nancial corporations (TFCs), who inﬂuence the allocation of savings.
- Perhaps most important is the fact that the dominance of TNCs means that trade policy is set in a mercantilistic economic/political system.

Transnational Corporation: Modern Mercantilism

- One of the criticisms of TNCs is that they, through their concentrated wealth, acquire political as well as economic power.
- Many heterodox economists see the growth of modern TNCs, which increasingly shape government policies across countries, as a new phase of mercantilism.
- As a result of the political clout of wealthy TNCs, the internationally integrated economic system is increasingly characterized by institutions that increase TNC pro, ts and reduce political and economic opposition to corporate power and pro, t.
- Modern mercantilism puts economic policy in the hands of what are inherently autocratic organizations that tolerate little dissent from their pursuit of pro, ts.

Modern Mercantilism and Social Justice

- Modern mercantilism is potentially very destructive of democracy and social justice.
- Under the implicit mercantilist system of Rone dollar, one vote,Rit becomes less likely that trade policy will be used to improve (all) human well-being.
- ISI policies that favor broad structural economic changes may have been a somewhat unique historical event, one that ﬂourished during the brief period after the Great Depression and World War II when mercantile power was at a low.
- How do we create a more just human society if we are back in a mercantilist system?

Infant Industries and ISI

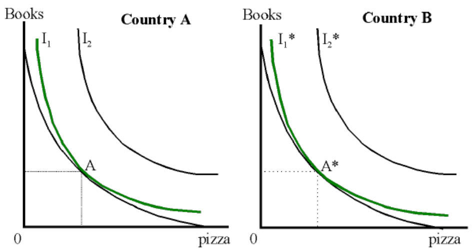
- When promoting or criticizing import substitution industrialization (ISI) policies, the infant industry argument for protection is often brought up.
- It is important to understand that ISI policies and infant industry protection are not identical or even compatible.
- The infant industry argument dates back to the early nineteenth century.
- Young (infant) industries are not yet ee cient, they cannot immediately compete with well-established foreign , rms.
- They therefore require RprotectionRwhile they grow up.
- This protection can take many forms, but if it is international competition that most threatens infant industries, then trade protection is the appropriate policy for nurturing infant industries.
- The United States, e.g., used infant industry protection very successfully.

The Assumptions Underlying the Infant Industry Argument

- The industry to be protected eventually becomes competitive and gains a comparative advantage (the Mill test).
- The short run costs of protection are less than the discounted future bene, ts from enabling the industry to survive (the Bastable test).
- There is no better way to help the infant industry.
- There is some market failure that prevents private individuals from carrying out investments in industries that will become competitive in the future.
- The government has accurate information about future comparative advantage at home and abroad, and it objectively acts on this information.
- There is no foreign retaliation.

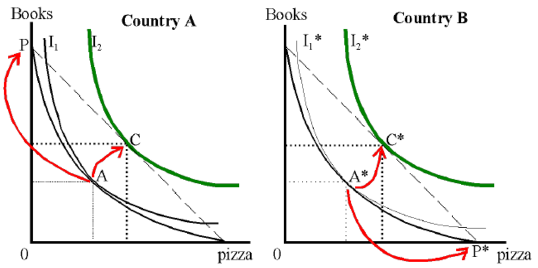
ISI and Strategic Trade Policy

- There is an additional category of trade policies that are often mentioned as providing support for ISI: Strategic trade policy.
- We can illustrate strategic trade policy to the increasing returns to scale model of trade.
- Increasing returns imply that an industry becomes more competitive the higher its level of output and that the PPF curve is convex to the origin (bowed in).



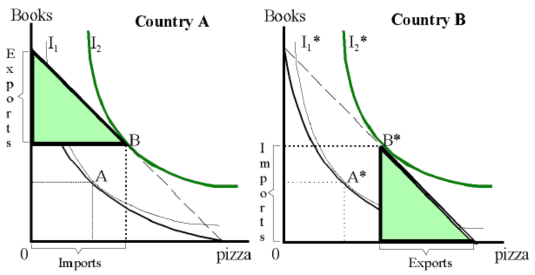
The Strategic Trade Argument for Protection

- Under increasing returns, two otherwise identical economies can gain from trade by specializing.
- It does not matter which country chose to produce books and which one chose pizza.
- By arbitrarily concentrating on producing one product and then exchanging output, both countries gained welfare.



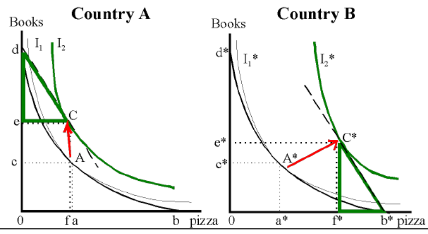
The Strategic Trade Argument for Protection

- Each country reaches a higher indi: erence curve.
- Each country produces only one good, but both countries seem to consume the same bundle of two di: erent goods.
- But, do imperfectly competitive increasing returns countries always share the gains from trade so equally?



The Strategic Trade Argument for Protection

- What if the relative prices at which the trade occurs brings two countries very di: erent gains from trading, with Country A gaining relatively less than Country B?
- Country B is able to use trade and specialization to increase its welfare much more than Country A.
- Country A's citizens would have been better o: if their country had chosen to specialize in pizza.
- Strategic trade policies are protectionist trade policies to induence the growth of preferred domestic industries.



The Assumptions Underlying the Strategic Trade Argument

- Governments have accurate information with which to predict the future performance of industries so that they can correctly Ppick winners.R
- Governments make economic decisions objectively and free from the induence of special interests.
- Other countries do not retaliate by protecting the same targeted industries.

Protection and Economic Development

- In sum, the infant industry and strategic trade arguments for protection are closely related to the rationale for ISI.
- ISI was e: ectively a decision to use trade policy in order to favor one sector of the economy over another V industry over agriculture or mining.
- ISI also had RnfancyR in its strategy V although ISI did not necessarily require that all protected industries become individually competitive in world markets.
- ISI was above all a strategy to transform an economy from a slow-growing economy to a faster growing economy.
- ISI was holistic, an example of abstract thinking, and it anticipated reshaping the dynamic path of economic development of an entire economy and its society.

Strategic Trade Policy & The optimal tarih

...is the tari: that causes the area of Y to exceed the areas of b plus d by the greatest amount.

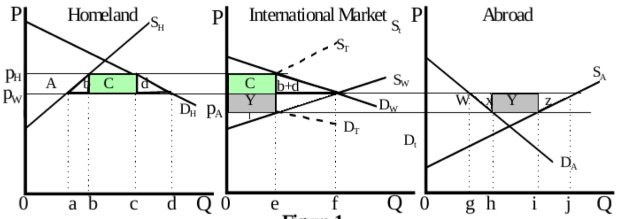


Figure 1
The Welfare Effects of a Tariff