International Trade



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Essentials of international trade



- Purchase, sale, or exchange of goods and services across national borders
- International trade is one of the driving forces of globalization
 - Economic meaning of globalization is the increased openness of economies to international trade, financial flows, and foreign direct investment
- International trade enhances economic growth
 - Increases the efficiency of the allocation of resources
 - Provides larger capital and product markets,
 - Assists specialization based on comparative advantages
 - Increases the efficiency of the flow of capital among countries
- Importance of international trade to a nation can be examined by its trade volume relative to its total output

Terminology of international trade



- Imports are goods and services that a domestic economy purchases from other countries
- **Exports** are goods and services that a domestic economy sells to other countries
- The **terms of trade** is the ratio of the price of exports to the price of imports
 - Increasing terms of trade indicate improvement.
 - Decreasing terms of trade indicate deterioration.
- **Net exports** = Exports Imports
 - If positive, there is a trade surplus
 - If negative, there is a trade deficit

Terminology of international trade



- A country that does not trade with other countries is referred to as a **closed economy** or being in **autarky**; the price of goods and services is the **autarkic price**
- An economy that is not closed is an open economy
 - If there are no restrictions to trade, the price of goods and services is the world price
- **Free trade** is the case in which there are no restrictions on a country's trade with other countries
 - Trade protections are restrictions on trade that prevent pricing based on supply and demand.
 - Capital restrictions are limits on the flow of funds into or out of a country

Benefits and costs of international trade



BENEFITS

- Gain from exchange and specialization
- Greater economies of scale
- Greater product variety
- Increased competition
- More efficient resource allocation
- More jobs and new entrepreneurial opportunities

COSTS

- Greater income inequality
- Loss of jobs in developed countries
- Adjustments as resources are reallocated

Trade and world output



- Total volume of international trade in merchandise and services was 20.44
 trillion USD in 2016
 - 15.71 trillion USD (76.9%) merchandise and 4.73 trillion USD (23.1%) services
- World output impacts international trade as growing output stimulates growth in trade and vice versa
- World trade grows faster than world output
- Persistent pattern of merchandise trade among nations
 - Trade between the world's high-income economies accounts for roughly 60%
 - Trade between high-income countries and low- and middle-income nations accounts for around 34%
 - Trade between low- and middle-income nations accounts for only about 6%

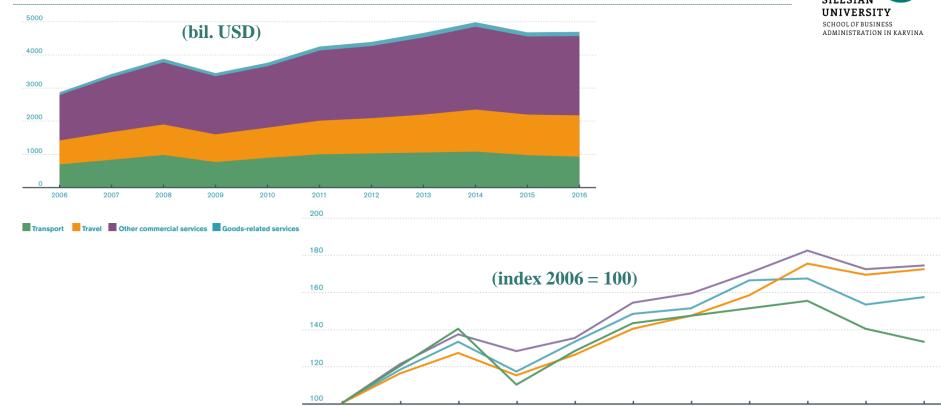
Product groups of world merchandise trade (2006-2016)





Product groups of world services trade (2006-2016)

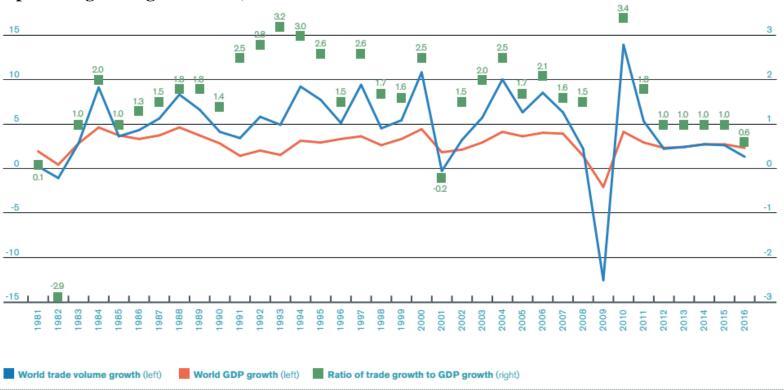




Growth of world merchandise trade and real GDP



(Annual percentage change and ratio)



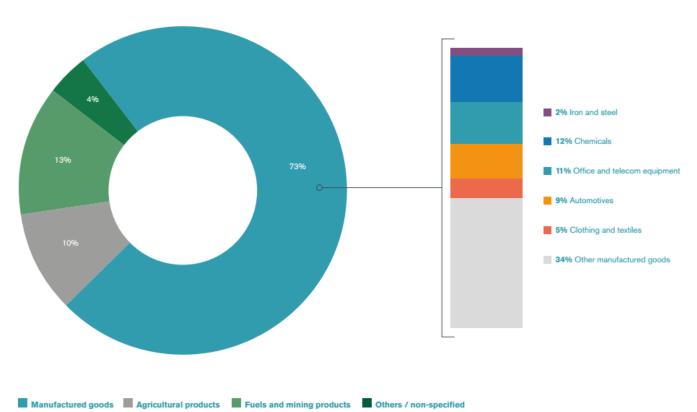
Leading exporters and importers in merchandise trade (2016)



Rank	Exporters	(bil. USD) Value	Share	Annual percentage change	Rank	Importers	(bil. USD) Value	Share	Annual percentage change
1	China	2098	13.2	-8	1	United States of America	2251	13.9	-3
2	United States of America	1455	9.1	-3	2	China	1587	9.8	-5
3	Germany	1340	8.4	1	3	Germany	1055	6.5	0
4	Japan	645	4.0	3	4	United Kingdom	636	3.9	1
5	Netherlands	570	3.6	0	5	Japan	607	3.7	-6
6	Hong Kong, China	517	3.2	1	6	France	573	3.5	0
	domestic exports	26	0.2	95					
	re-exports	491	3.1	-1					
7	France	501	3.1	-1	7	Hong Kong, China	547	3.4	-2
						retained imports a	121	0.7	-10
8	Korea, Republic of	495	3.1	-6	8	Netherlands	503	3.1	-2
9	Italy	462	2.9	1	9	Canada b	417	2.6	-5
10	United Kingdom	409	2.6	-11	10	Korea, Republic of	406	2.5	-7
11	Belgium	396	2.5	0	11	Italy	404	2.5	-2
12	Canada	390	2.4	-5	12	Mexico	398	2.5	-2
13	Mexico	374	2.3	-2	13	Belgium	367	2.3	-2
14	Singapore	330	2.1	-5	14	India	359	2.2	-9
	domestic exports	154	1.0	-5					
	re-exports	176	1.1	-5		<u> </u>			
15	Switzerland	303	1.9	5	15	Spain	309	1.9	-1

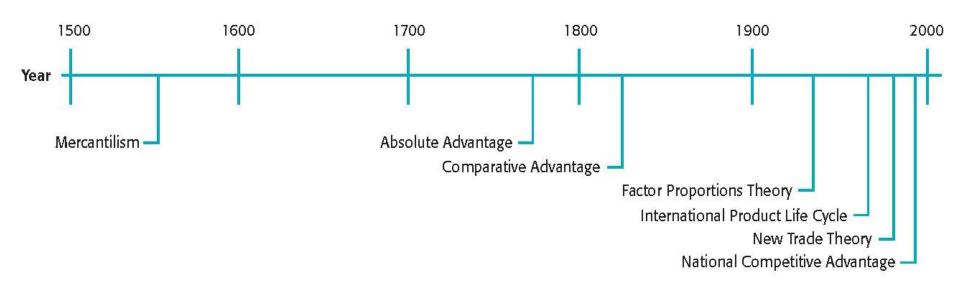
World merchandise exports by product groups (2016)





Trade theory timeline





Foundations of mercantilism



- Nations should accumulate financial wealth, usually in the form of gold, by encouraging exports and discouraging imports
- Three pillars of mercantilism
 - Maintain trade surplus
 - Government intervention
 - Exploit colonies
- Flows of mercantilism
 - World trade is a zero-sum game
 - Limits colonies' market potential
 - Constrains output and consumption

Absolute advantage



 Ability of a nation to produce a good more efficiently than any other nation (greater output using same or fewer resources)



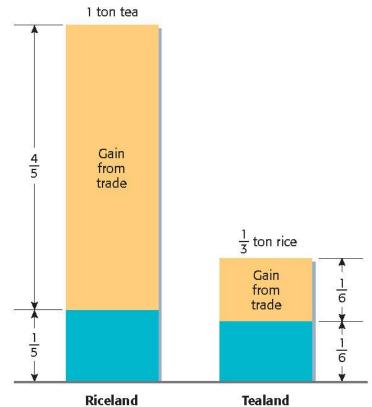


Specialization and trade allows each to produce and consume more

Trade gains: Absolute advantage



- Specialization and trade
 - Riceland gets five times more tea than it would have produced itself
 - Tealand gets two times more rice than it would have produced itself



Comparative advantage



- Inability of a nation to produce a good more efficiently than other nations, but an ability to produce that good more efficiently than it does any other good
 - A country is less efficient in the production of all goods, but it is *less inefficient* in the production of one good

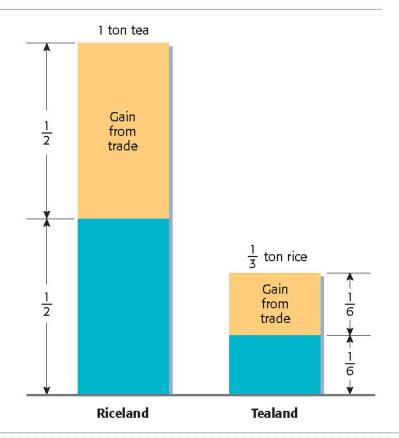




Trade gains: Comparative advantage



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Assumptions and limitations



- Nations strive only to maximize production and consumption
- Only two countries produce and consume just two goods
 - There are more than 190 countries and countless products are produced, traded, and consumed
- No transportation costs of traded goods
 - Transportation costs are a major expense of international trade
- Labor is the only resource used to produce goods and it cannot cross borders
 - Production clearly needs additional resources and labor is increasingly mobile
- Specialization does not create efficiency and improvement gain

Factor proportions theory



- Countries produce and export goods that require resources (factors) in abundance, and import goods that require resources in short supply
- It predicts that a country will specialize in products that require labor if its cost is low relative to that of land and capital, and vice versa
- Leontief Paradox: the United States exports require more, not less, labor-intensive production than its imports
- Possible explanations of Leontief Paradox
 - Theory assumes nation's production factors to be homogeneous, particularly labor, although labor skills vary greatly within a country
 - Theory is better predictor when expenditures on labor are considered

International product life cycle



 A company begins by exporting its product and later undertakes foreign direct investment as a product moves through its life cycle



New trade theory



Fundamentals

- Gains from specialization and economies of scale
- Companies first to market create barriers to entry
- Government may help by assisting home companies

First-mover advantage

- Economic and strategic advantage of being first to enter an industry
- May create a formidable barrier to market entry for potential rivals

National competitive advantage



- Nation's competitiveness in an industry depends on the industry's capacity to innovate and upgrade, which in turn depends on four main determinants (plus government and chance)
- Factor conditions
- Demand conditions
- Related and supporting industries
- Firm strategy, structure, and rivalry

National competitive advantage – determinants



Factor conditions

- Basic conditions are primarily natural endowments of resources
- Advanced factors result from a nation's innovation and education, including the skill levels of the workforce and the quality of its technological infrastructure

Demand conditions

- Sophisticated home-market buyers drive companies to improve existing products and develop entirely new products and technologies
- This should improve the competitiveness of the entire group of companies in a market

National competitive advantage – determinants



- Related and supporting industries
 - Companies in an internationally competitive industry do not exist in isolation
 - Supporting industries form "clusters" of economic activity in the geographic area
 - Each industry reinforces the competitiveness of every other industry in the cluster
- Firm strategy, structure and rivalry
 - Highly skilled managers are essential because strategy has lasting effects on firm competitiveness
 - Domestic industry whose structure and rivalry create an intense struggle to survive strengthens competitiveness

Trade and capital restrictions



- A tariff is a tax levied by a government on imported goods
 - Intended to protect domestic industries
 - Increases welfare of domestic country if (1) there is no retaliation, and (2) the deadweight loss is less than the benefit from improving trade
- An import quota is a restriction on the quantity of a good that can be imported
 - Controlled through import licenses
 - Importers earn quota rents if they charge a higher price with a quota
- An export subsidy is a payment by a government to a firm when it exports a specified good
 - Encourages firms to shift to export goods, increases the domestic price
 - A voluntary export restraint is a voluntary limit on goods exported to a specific country
 - Allows exporter to earn quota rents

Trade and capital restrictions



- Domestic content provisions are requirements that a specific portion of value-added or components be produced domestically.
- Capital restrictions are controls placed on ownership of assets, either of foreign assets or of ownership of domestic assets by foreign persons or firms.
- The effect of restrictions on trade and capital depends on whether the country is a price taker or can affect price:
 - A small country in the context of international trade is a price taker.
 - A large country in this context can influence the price.

Trade and capital restrictions – summary of effects

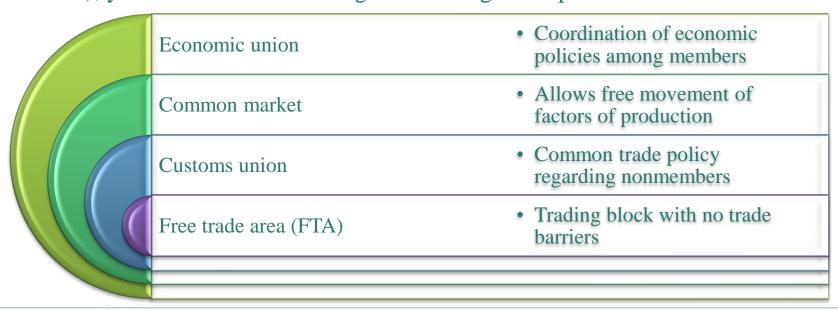


	Tariff	Import Quota	Export Subsidy	Voluntary Export Restraint (VER)	
Impact on	Importing country	Importing country	Exporting country	Importing country	
Producer surplus	+	+	+	+	
Consumer surplus	_	_	_	_	
Government revenue	+	Mixed	_	0	
National welfare					
Small country	_	_	_	_	
Large country	+	+	_	_	
Price	+	+	+	+	
Domestic consumption	_	_	_	_	
Domestic production	+	+	+	+	
Trade					
Imports	_	_		_	
Exports			+		

Trading blocs



• A trading bloc is an agreement among countries to work toward eliminating trade barriers. Trading blocs may be regional (e.g., NAFTA, EU), yet there are different degrees of integration possible



Why trading blocks?



- Increased competition
 - Lowers prices and increases quantity
- Cost of production declines
 - Easier access to natural resources and technology
- Increased access to technology and knowledge
- Increased specialization
- Greater opportunity for economies of scale
- Increased employment
- Increased income
- Increased interdependence among members
 - Less chance of conflicts



THANK YOU FOR YOUR ATTENTION

