

UWTSD MBA HKBM7009
(UWMBA-30013-2024-1-SS)

Global Business Challenges (4-1)

International Trade and Market Protection

Che Cheong POON
25 January 2025; Saturday 13:00 to 16:00pm

Lecture Agenda:

- Global Trading Patterns
- International Trade Theories: Rationale behind International Trade
- Trade Restriction and Protection
- A theoretical Illustration of Trade Implications of COVID-19
- The WTO

Global Trading Patterns

International trade refers to trade between countries, it includes import and export of goods and services.



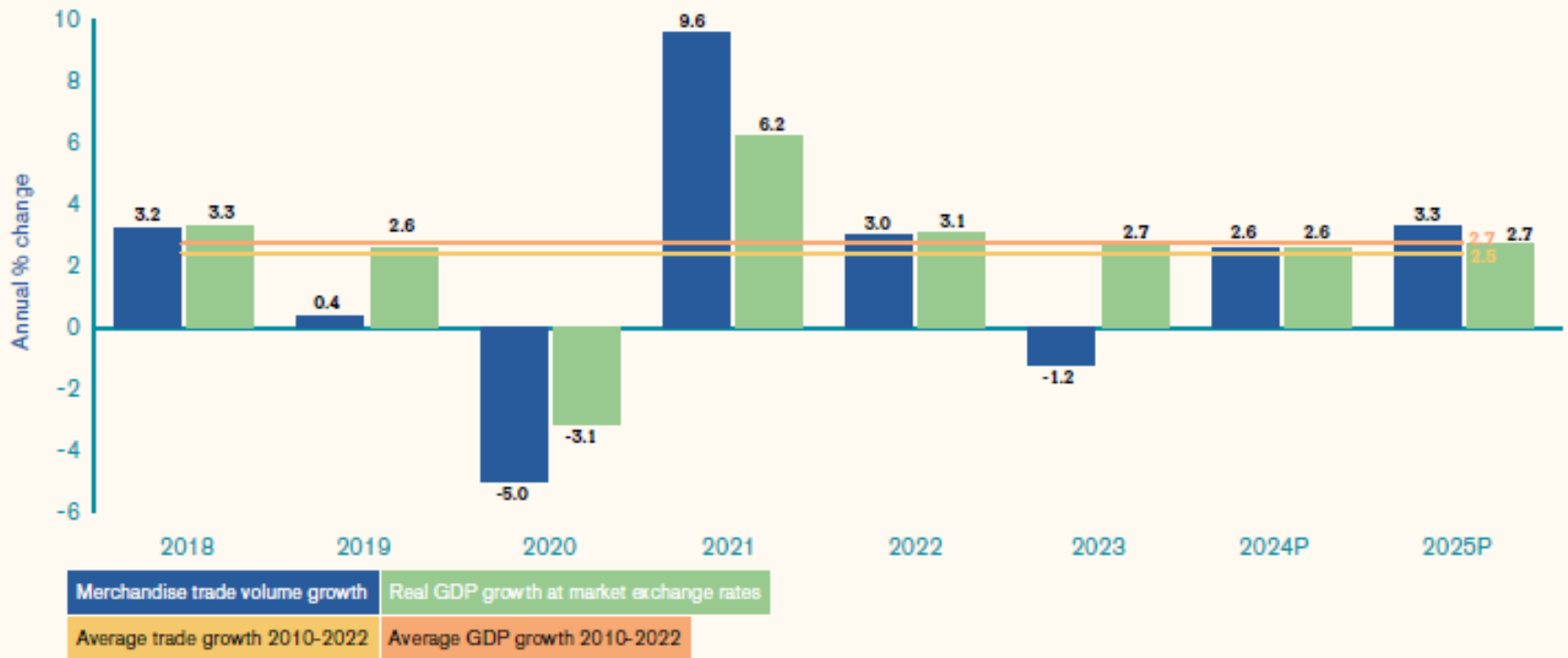
What are the benefits to countries and firms of international trade?

Which goods should a country export and which should it import?

Do trade restrictions protect domestic producers from foreign competition?

Can trade restrictions enhance the overall welfare in an economy?

World merchandise trade volume and GDP growth: 2018-25 (Annual percentage change)

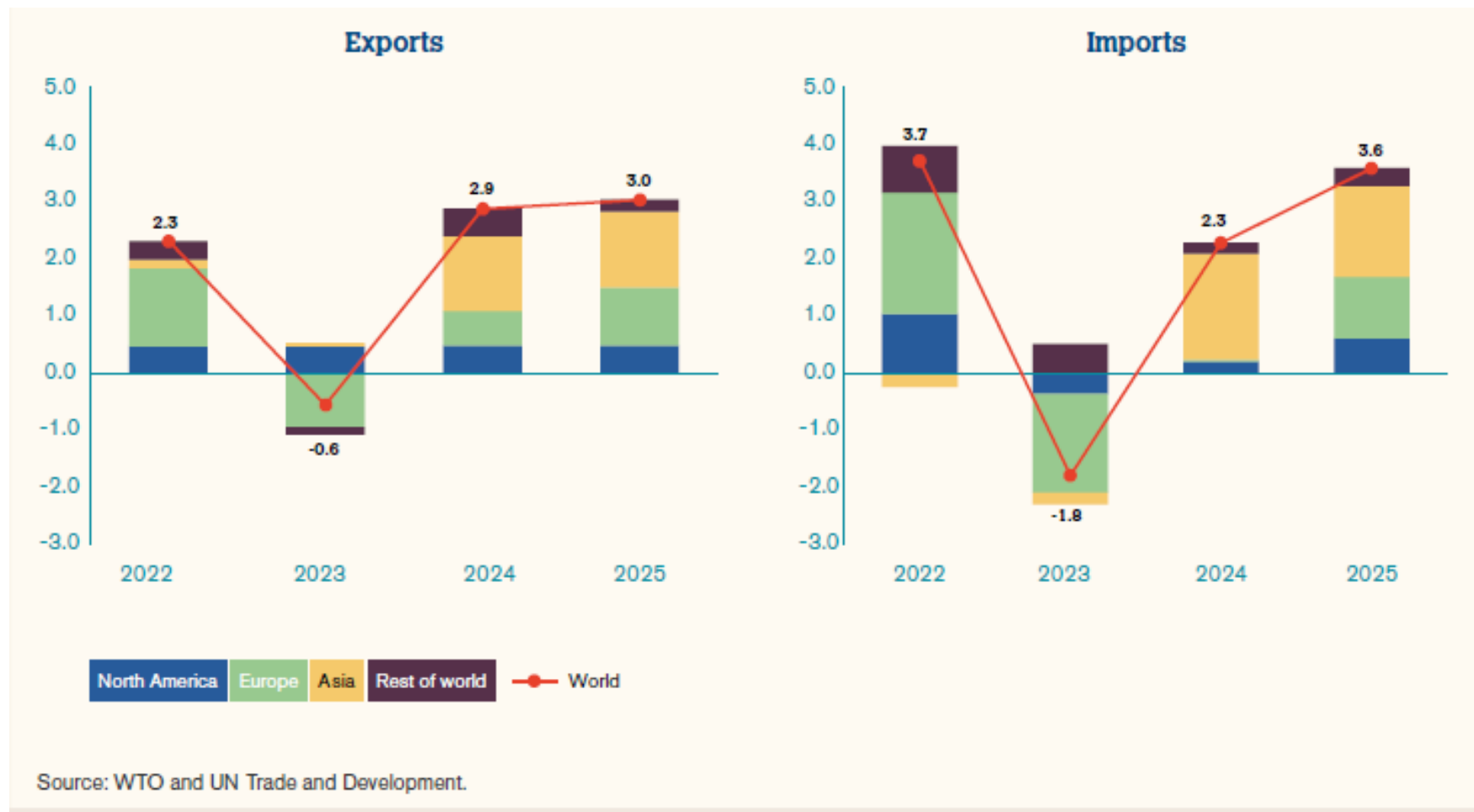


Note: Figures for 2024 and 2025 are projections. Merchandise trade grew 2.5 per cent per year on average between 2010 and 2023 while GDP growth averaged 2.7 per cent.

Sources: WTO for merchandise trade volume and consensus estimates for GDP.

Sources: WTO Annual Report 2024, pp17

Contribution to world trade volume growth by region: 2022 to 25 (Annual percentage change)



World and Regional Tables: Balance of Payments and International Investment Position by Indicator (US Dollars, Millions)

	2012	2014	2016	2018	2020	2021	2022	2023
World Total	383,631	387,854	289,047	371,724	346,565	827,523	480,017	435,226
France	-32,875	-27,546	-13,306	-20,463	-53,042	7,245	-33,069	-30,334
Germany	258,787	285,240	314,858	342,182	250,193	301,423	184,777	268,670
Australia	-68,559	-44,852	-41,521	-31,889	30,964	48,838	14,293	4,402
Canada	-64,582	-41,874	-47,263	-41,150	-33,287	257	-7,622	-15,631
China, P.R.: Hong Kong	4,147	4,057	12,688	13,514	24,126	43,659	36,525	34,901
China, P.R.: Macao	16,772	17,956	11,954	18,146	3,559	2,683	2,845	16,955
Japan	60,117	36,351	197,049	177,269	150,029	196,525	90,277	150,691
Korea, Rep. of	48,791	83,030	97,924	77,467	75,902	85,228	25,829	35,488
Singapore	52,064	56,519	56,827	60,210	57,957	86,137	89,701	99,128
Taiwan Province of China**	42,925	60,607	71,264	71,814	98,094	118,298	101,032	105,076
United Kingdom	-85,197	-153,585	-147,869	-112,616	-79,781	-13,852	-70,962	-66,448
United States	-418,112	-369,978	-396,219	-439,851	-601,207	-867,984	-1,012,103	-905,378
China, P.R.: Mainland	215,392	236,047	191,337	24,131	248,836	352,886	443,374	252,987
India	-91,471	-27,314	-12,114	-65,599	32,730	-33,422	-79,051	-31,962
Indonesia	-24,418	-27,510	-16,952	-30,633	-4,433	3,511	13,215	-2,138
Philippines	6,949	10,756	-1,199	-8,877	11,578	-5,943	-18,261	-11,817
Sri Lanka	-4,009	-1,988	-1,742	-2,799	-1,187	-3,284	-1,448	1,559
Thailand	-4,899	11,643	43,438	28,479	20,933	-10,722	-17,162	7,412
Vietnam	9,429	9,359	625	5,899	15,060	-4,628	1,402	25,833

Sources: <https://data.imf.org/regular.aspx?key=60961513>

Changes in trade value of major countries: 2012 to 2022

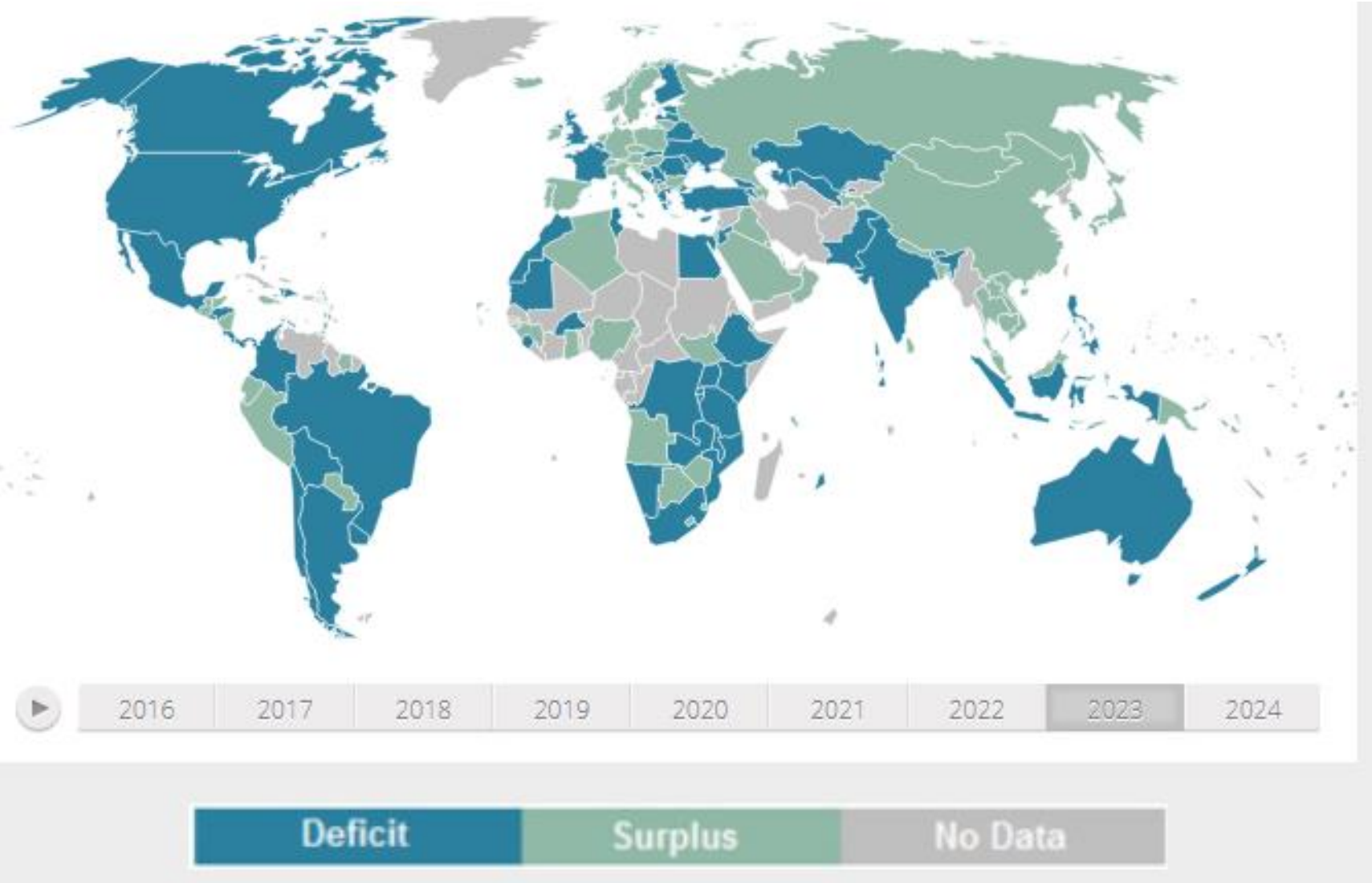
Billions of US Dollar

Country	2012		2022	
	Good Export	Good Import	Good Export	Good Import
World	17968 (100)	17735 (100)	24272 (100)	24094 (100)
USA	1563 (8.7)	2304 (13.0)	2090 (8.6)	3273 (13.6)
Japan	777 (4.3)	830 (4.7)	752 (3.1)	869 (3.6)
China	1974 (11.0)	1662 (9.4)	3347 (13.8)	2678 (11.1)
India	298 (1.7)	500 (2.8)	459 (1.9)	725 (3.0)
Vietnam	115 (0.6)	105 (0.6)	371 (1.5)	346 (1.4)

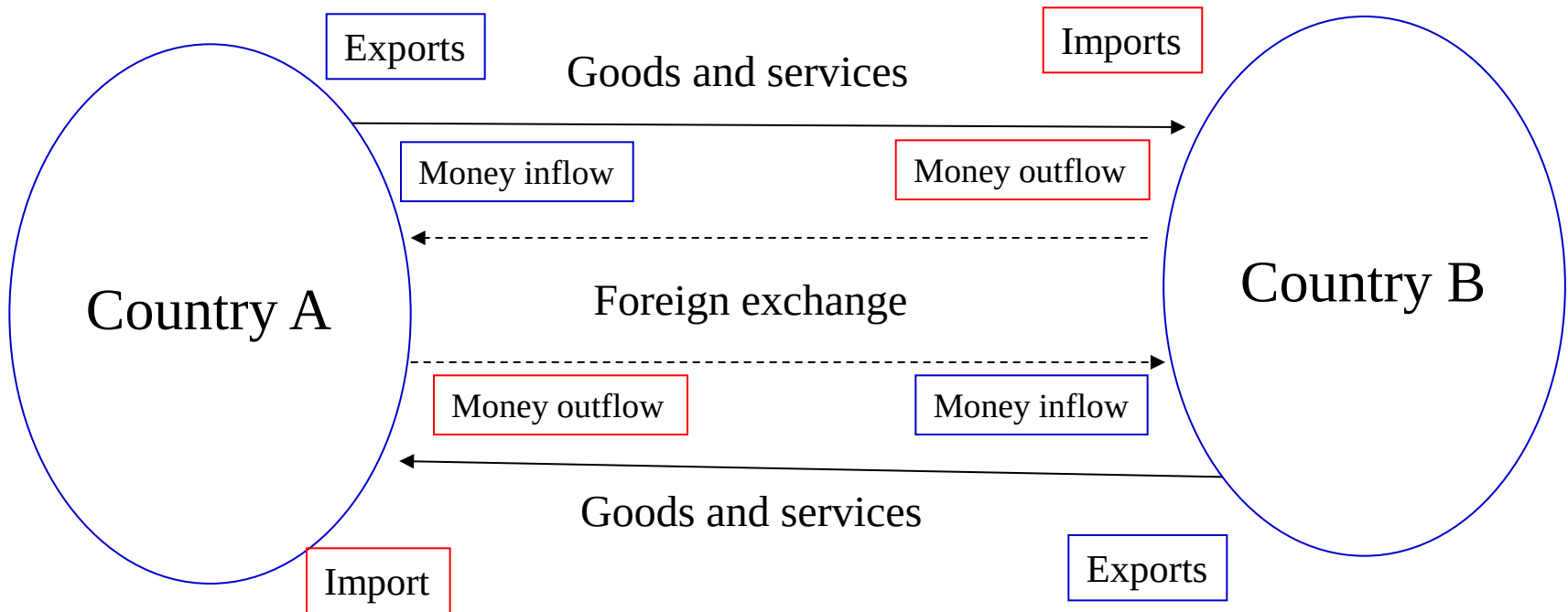
Note: Figures in parentheses are percent to total

Source: <https://data.imf.org/regular.aspx?key=60961513>

World current account balance in 2024



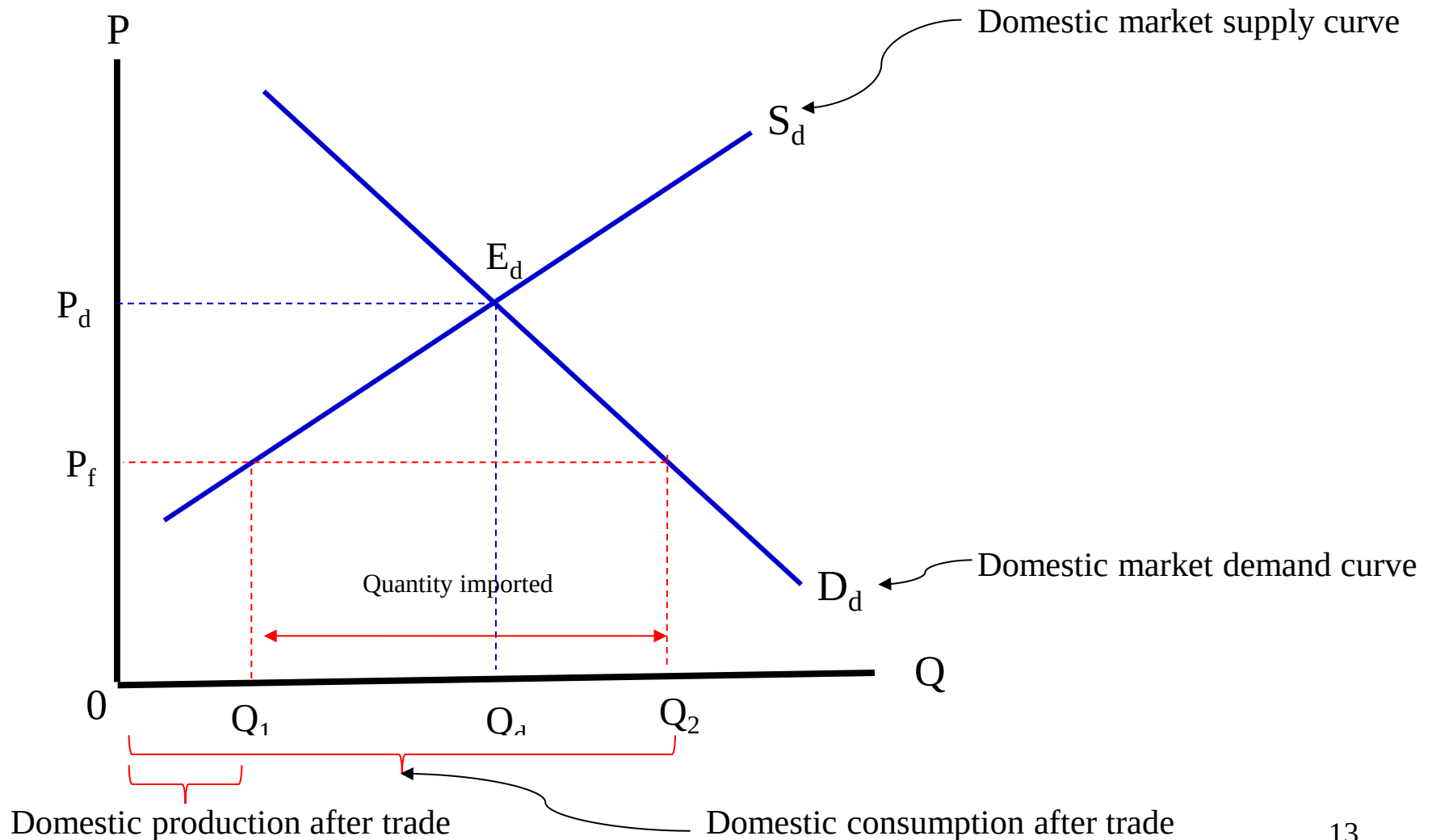
International Trade Theories: Rationale behind International Trade



————→ Physical flow (The scope of international trade)

-----→ Money flow (The scope of international finance)

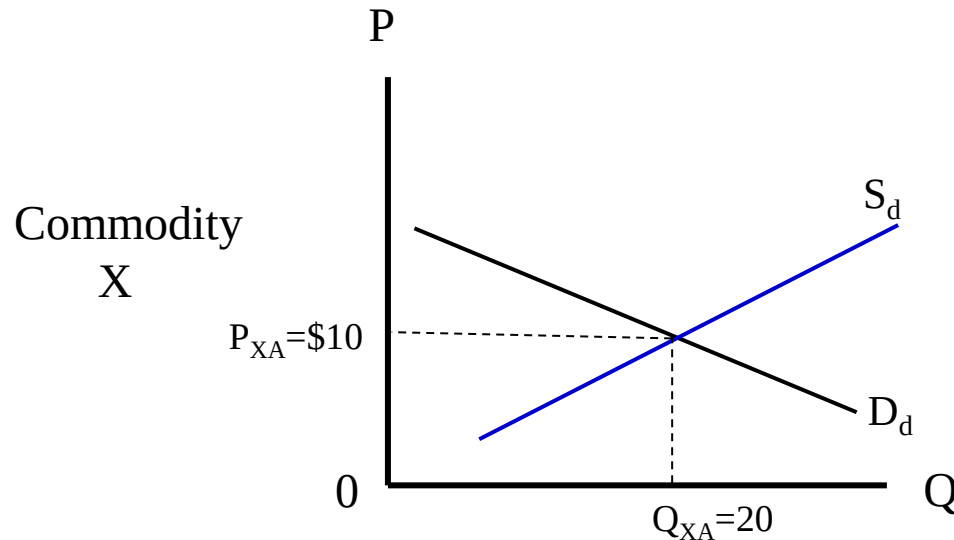
Effects of the opening of trade in the market for a single goods



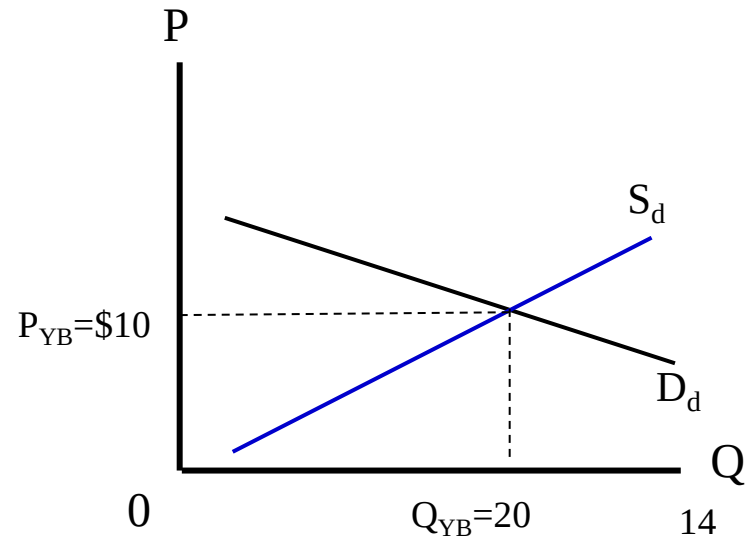
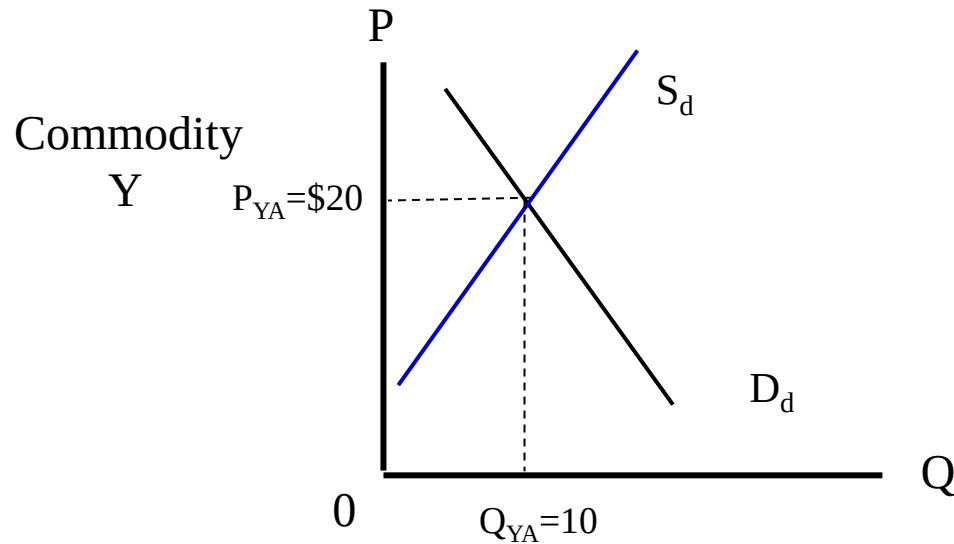
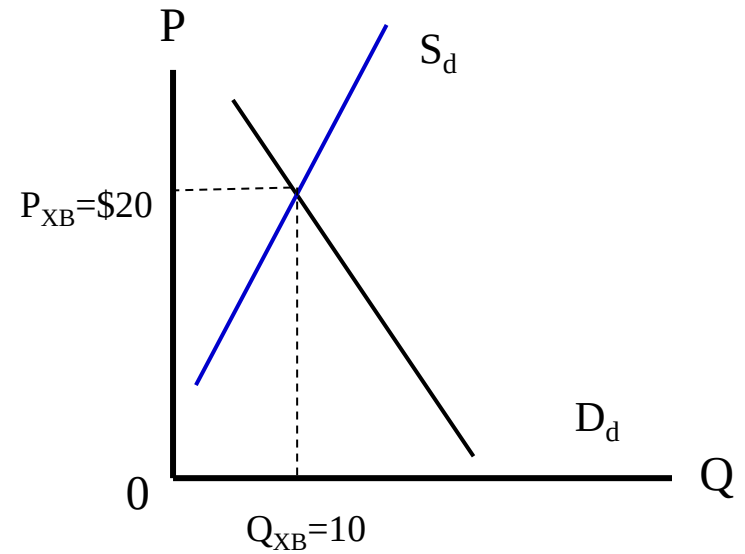
Before trade

Total world revenue = Total world expenditure = \$800;
Total world output = $30X + 30Y$

Country A



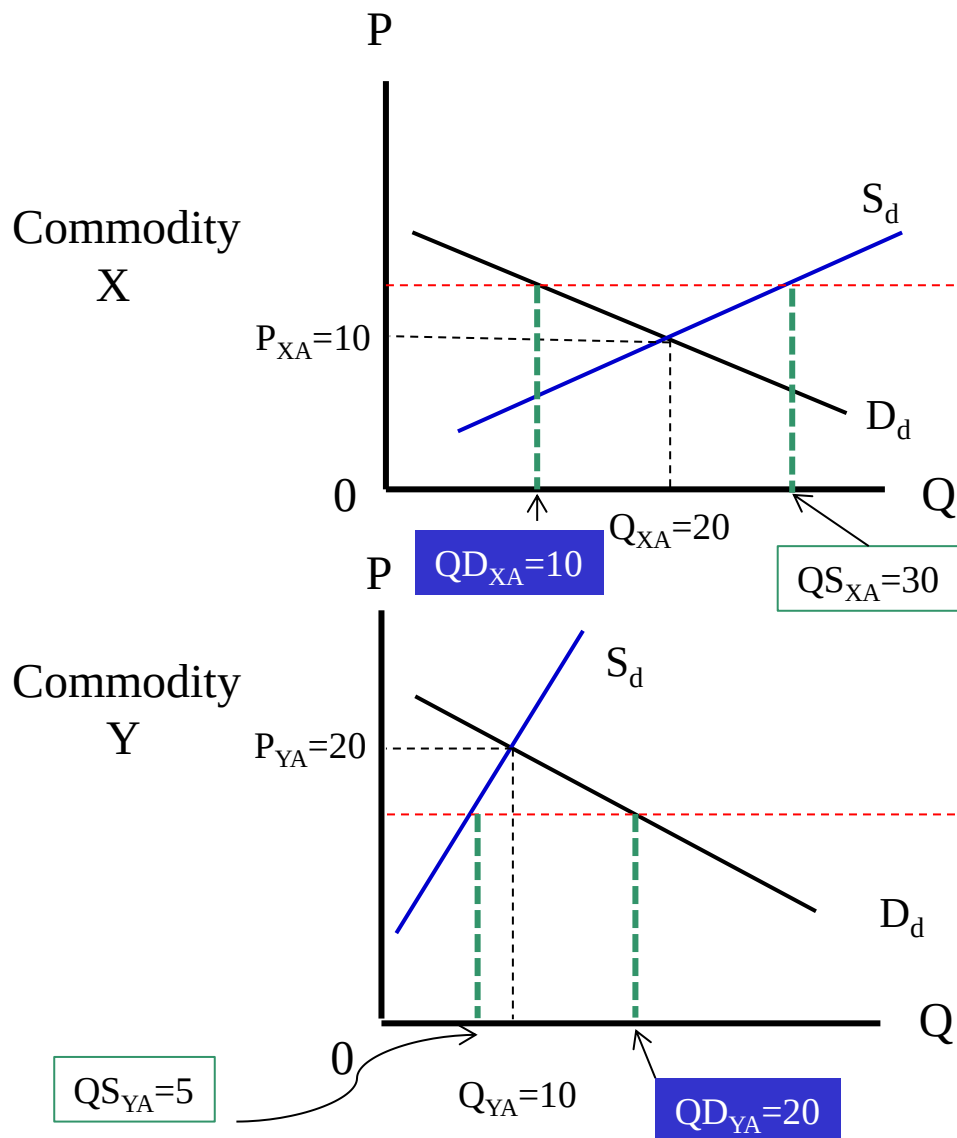
Country B



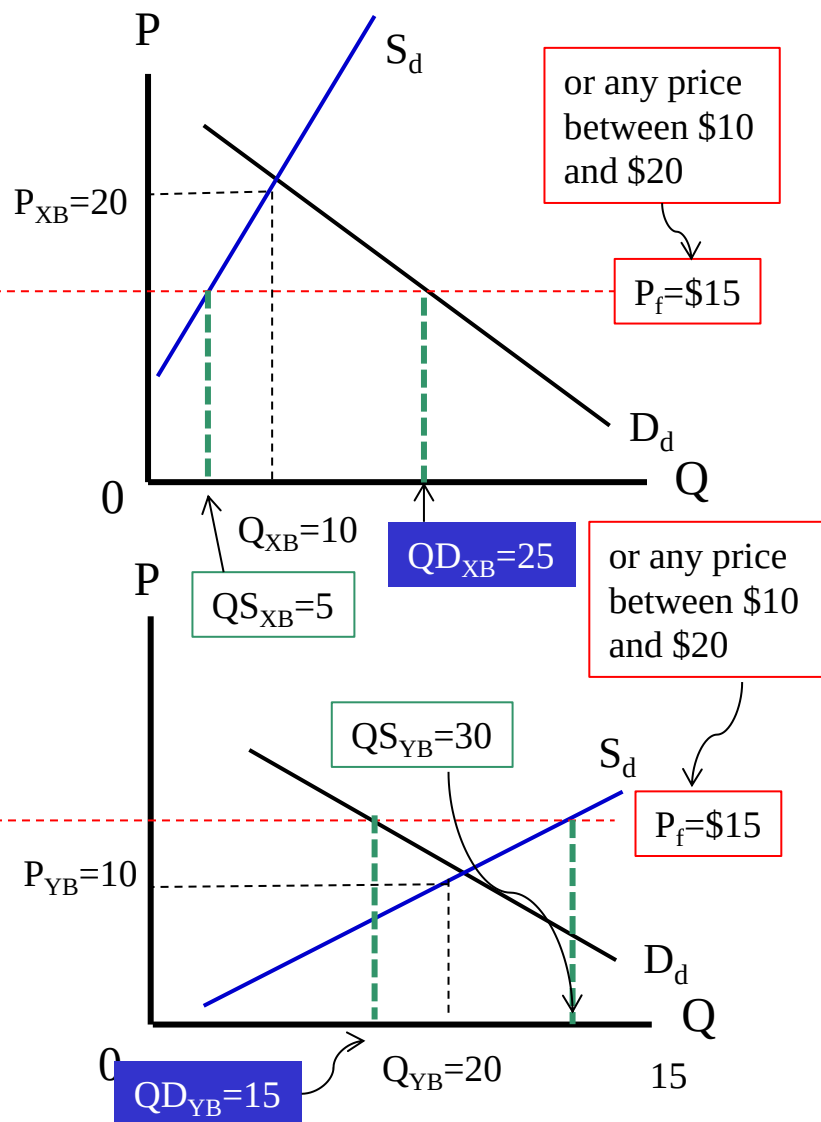
After trade

Gains from trade: Increase in world output = $5X + 5Y$
 Increase in world consumption = $5X + 5Y$

Country A



Country B



Theory of Absolute Advantage

- Adam Smith: *Wealth of Nations* (1776).
- Assumptions:
 - A two-country and two-commodity model
 - Labor is the only factor of production
 - Labor is perfectly mobile within a country but completely immobile internationally
 - There is no transactions cost
 - The economy is operating under perfect competition
- Trade will occur and will be beneficial whenever there are international differences in cost of production.
- If country A is more efficient in producing commodity X and country B is more efficient in producing commodity Y, they will both profit if each produces what it is more efficient in producing and then exchange.

Theory of Comparative Advantage

- David Ricardo: *Principles of Political Economy* (1817)
- Efficiency of resource utilization leads to more productivity.
- When a country has an absolute disadvantage in the production of both commodities with respect to the other , mutually advantageous trade still take place.
- The less efficient country should specialize in the production of and export the commodity in which its absolute disadvantage is less.

Heckscher-Ohlin Factor Endowment Theory

- Eli Filip Heckscher: *The effect of foreign trade on the distribution of income* (1919).
- Bertil Ohlin: *Interregional and international trade* (1933)
- The theory postulates that comparative advantage of a country depends on its endowment of inputs (factors of production) to produce goods
- A nation will export goods which it produces with resources that are relatively abundant.
- A nation will import goods which it produces with resources that are relatively scarce.

Factor Endowment - Example

Resource	Country A	Country B
Capital	100 machines	20 machines
labour	200 workers	1000 workers

- Country A: capital/labor ratio = 0.5 (100/200)
- Country B: capital/labor ratio = 0.02 (20/1,000)
- Since Country A has relatively more abundant capital $\frac{K_A}{L_A} > \frac{K_B}{L_B}$, it will produce capital-intensive goods with Country B producing goods that are more labor-intensive $\frac{K_A}{L_A} < \frac{K_B}{L_B}$.

Assumptions of the Heckscher-Ohlin Model

- There are two countries and two goods model
- Production and consumption conducted under perfect competition
- No transportation costs, taxes, or other obstructions to trade
- International trade does not cause complete specialization
- Consumers in both countries have equal tastes and preferences
- Both countries are endowed with homogeneous factors of production, capital (K) and labor (L), and both are used in production
- Technology for production is the same in both countries and produced under constant returns to scale
- Capital and labor are mobile domestically
- Labor and capital cannot move between countries

Price Difference Theory

How much a McDonald's Big Mac costs around the world?



CITY/COUNTRY	COST OF A BIG MAC	CITY/COUNTRY	COST OF A BIG MAC
Moscow, Russia	\$2.29	London, United Kingdom	\$4.32
Johannesburg, South Africa	\$2.53	Toronto, Canada	\$4.38
Hong Kong, Hong Kong	\$2.87	New York, United States	\$5.09
Bangkok, Thailand	\$3.85	Paris, France	\$5.37
Dubai, United Arab Emirates	\$4.08	Zurich, Switzerland	\$6.89
Buenos Aires, Argentina	\$4.22		

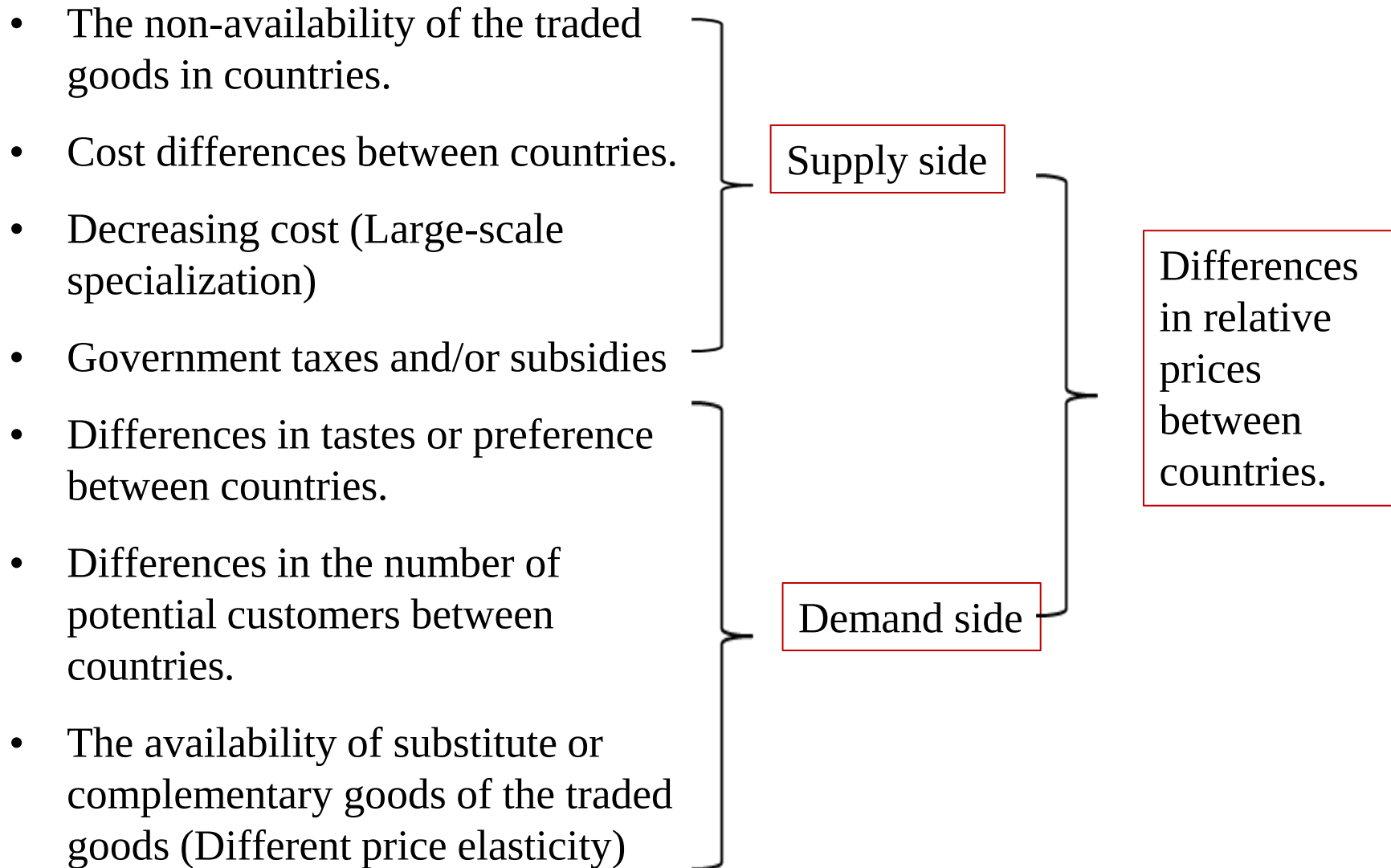
In USD and
in May 2018

Why the same goods have different prices around the world?

Market mechanism:

Market supply and market demand of a product determine its market price.

Causes of international trade





Would it be possible for a firm to export its product to a foreign market if the market price there is lower than that in the home market?

Answer: whenever it is profitable to export the product.

Trade restriction and protection

Why do countries restrict trade?

The benefits of free international trade

Importing countries	Exporting countries
1. They can enjoy a wider range of goods	1. It allows a country to specialize in the manufacture and export of products that can be produced most efficiently in that country; that is, specialization and mass production are possible
2. The danger of scarcity or drastic swings in prices are reduced	2. It enables resources to be fully employed.
3. Lower commodity prices through competition among domestic and foreign suppliers.	3. Since the price elasticity are lower in foreign markets than that in the domestic market, it allows firms to set a higher price as relative to the price determined in the domestic market.

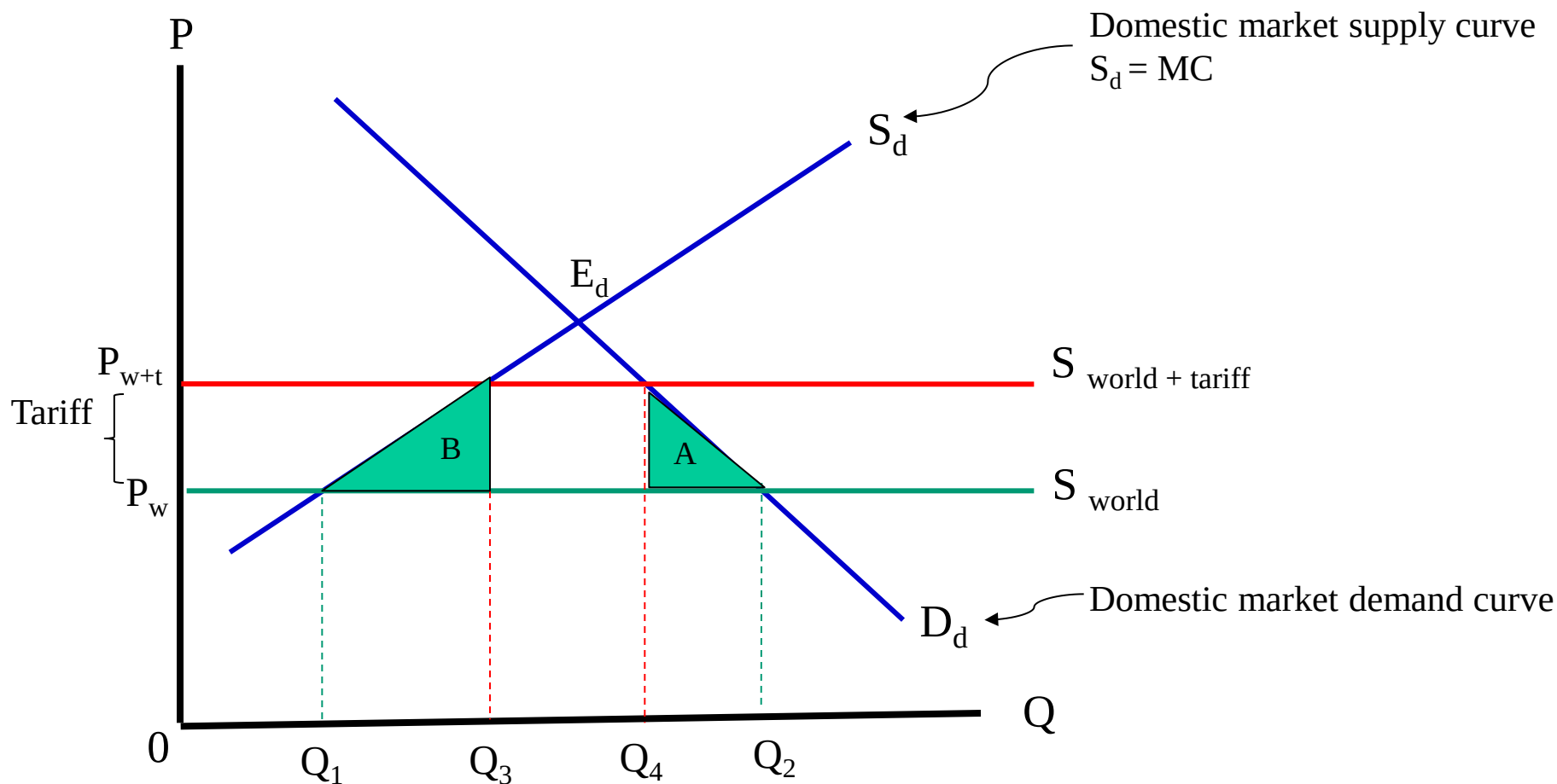
- A trade policy is a government policy that affects the number of goods and services a country exports and imports.
- Free trade is when there are no government restrictions on trade.
- Protectionism is when governments set trade restrictions to help domestic industries.
- Trade protection is the deliberate attempt to limit imports or promote exports by putting up barriers to trade.

Possible barriers to imports

- Custom duties (or tariffs) on imports
- Restrictions on the amount of certain goods that can be imported (quotas)
- Subsidies on domestic products to give them a price advantage over imports
- Administrative regulations designed to exclude imports, such as customs delays or excessive paperwork
- Government favoring domestic producers when purchasing equipment.

The cost of trade protection

Assumption: The good that is partly home produced and partly imported, and the country is too small to affect world prices.



Area A represents the loss of consumer surplus by the reduction of consumption from Q_2 to Q_4 .

Area B represents the extra costs of producing $Q_1 - Q_3$ at home rather than importing it.

Arguments in favor of restricting trade

- To protect the infant industry.
- To reduce reliance on goods with little dynamic potential.
- To prevent dumping and other unfair trade practices.
- To prevent the establishment of a foreign-based monopoly.
- To prevent the spread of the risk of fluctuating markets.
- To reduce the influence of trade on consumer tastes.
- To prevent the importation of harmful goods.
- To take account of externalities.

A theoretical illustration of trade implications of COVID-19

Barua, S. (2020). COVID-19 pandemic and world trade: Some analytical notes.
Available at https://mpra.ub.uni-muenchen.de/99761/1/MPRA_paper_99761.pdf

Figure A: Essential goods (such as medical products and food)

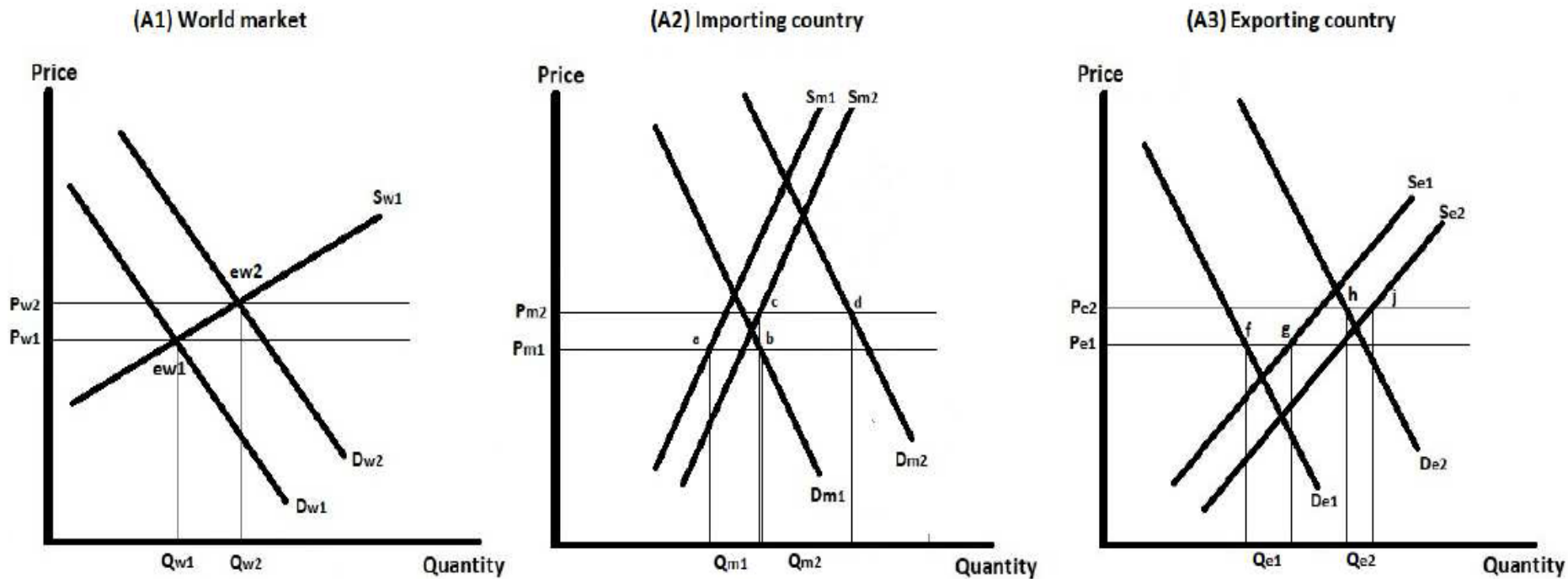


Figure 3 panel A shows the trade effects for essential goods.

- In Figure A1, the initial world market equilibrium is at e_{w1} at price p_{w1} and quantity traded at p_{w1} .
- During the pandemic, demand for essential goods sharply increases, leading the world demand curve move from D_{w1} to D_{w2} .
- The world now reaches a new equilibrium of e_{w2} , where a greater quantity of Q_{w2} is traded at price P_{w2} .
- Although demand increases, supply in the world market is not likely to increase since almost all counties of the world are affected by the pandemic and there is an increasingly excess demand for essential goods within every country.
- This situation drives counties to consume any increases in supply domestically rather than exporting; and in most cases, countries will rather import in bulk since domestic supply falls largely short of demand for these goods.
- Also, in the short-run, producers are unable to bring in new technology or investment to increase supply to the world market.
- In a free trade environment, the increased price P_{w2} in the world market forces countries to import essential goods at a price higher than the previous level (P_{w1}).

Figure A2 shows the case of an importing country.

- In the normal times, the country imports quantity Q_{m1} (equal to distance ‘ab’) at international price P_{m1} which equals to P_{w1} .
- Due to the pandemic, demand for essential goods increases in the country, leading demand curve to shift from D_{m1} to D_{m2} ; faced by the increased demand, there could be some increases in local productions targeting primarily the local shortage of essential goods, leading the supply curve to shift from S_{m1} to S_{m2} .
- The increase in supply happens as many producers may begin switching productions from non-essential to essential goods to help the nation during the emergency (for example, in the US, companies including General Motors begin producing ventilators, and in China, many companies started producing medical supplies).

- The increase in supply however is not likely to be too large for at least two reasons: (1) producers shifting from other trade (e.g., automobile) may not have perfect technology, skill, and experience, and (2) many producers believe the pandemic will not last for a long time (a short time effect) and thus they do not want to increase their production scale.
- Combined with increased import prices and increased demand and supply, the country moves to a new equilibrium where it now imports more quantity of essential goods at Q_{m2} (equal to the distance 'cd').
- The country now consumes more of essential goods, with a higher level of imports ($Q_{m2} > Q_{m1}$) at a higher world price ($P_{m2} > P_{m1}$).

Figure A3 shows the case of an exporting nation that normally exports essential goods at a quantity Q_{e1} (equal to the distance 'fg').

As the pandemic spreads worldwide, the exporting nation also faces similar sharp increases in demand for essential goods, leading the demand curve to shift from D_{e1} to D_{e2} .

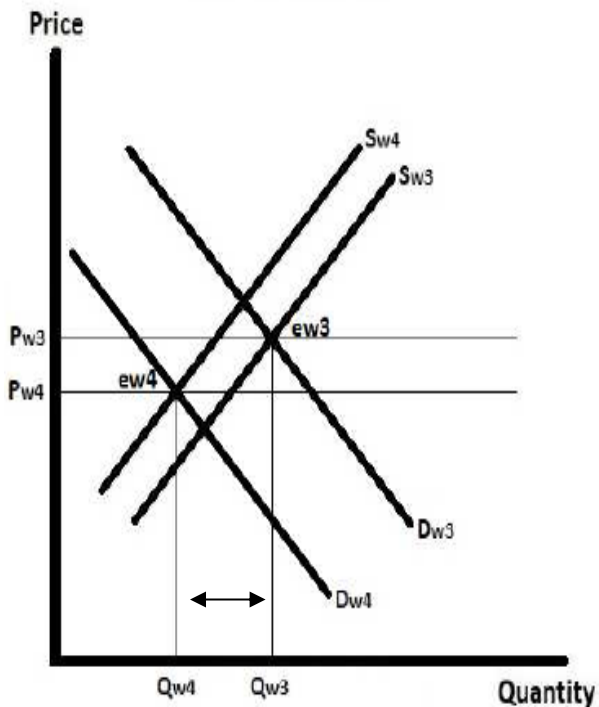
Faced with increased demand both locally and export demand globally, some producers may intend to produce more, leading the supply curve shift from S_{e1} to S_{e2} .

The country now moves to a new equilibrium where it now consumes more locally and exports Q_{e2} (equal to the distance 'hj') quantity which is lower than what it normally used to export ($Q_{e2} < Q_{e1}$) and export at international price (P_{e2}) which is higher than previous price P_{e1} .

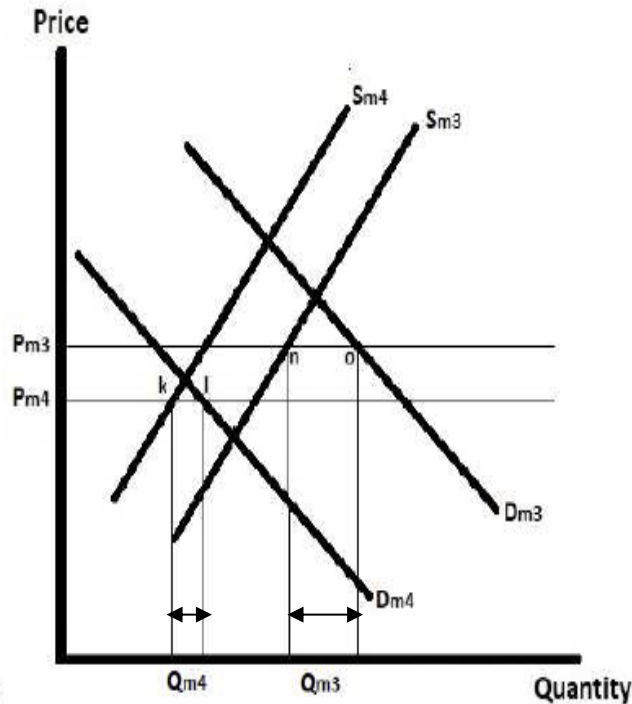
A lower export indicates that the country uses more of its produced essential goods to meet the local demand, which is what countries are expected to do (as a priority) to protect their citizens during an emergency like the COVID-19 pandemic.

Figure B: Non-essential goods (such as electronics, luxury items)

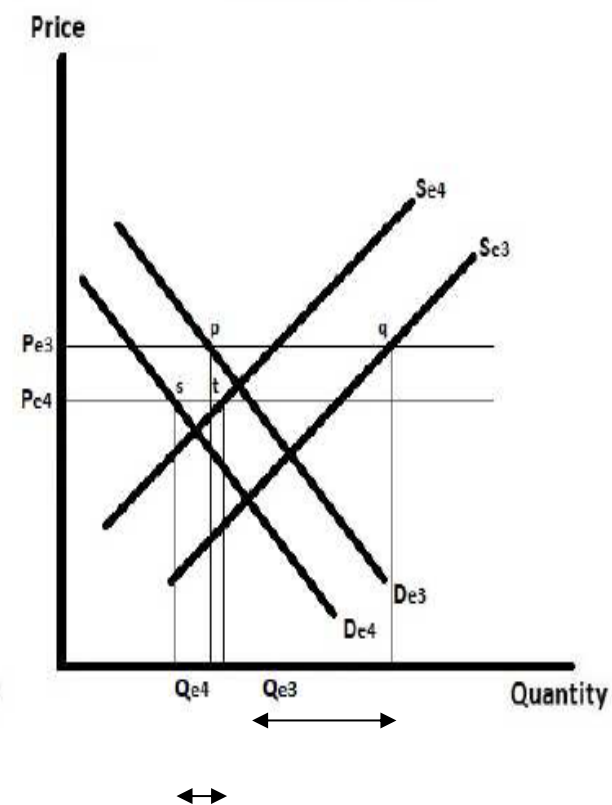
(B1) World market



(B2) Importing country



(B3) Exporting country



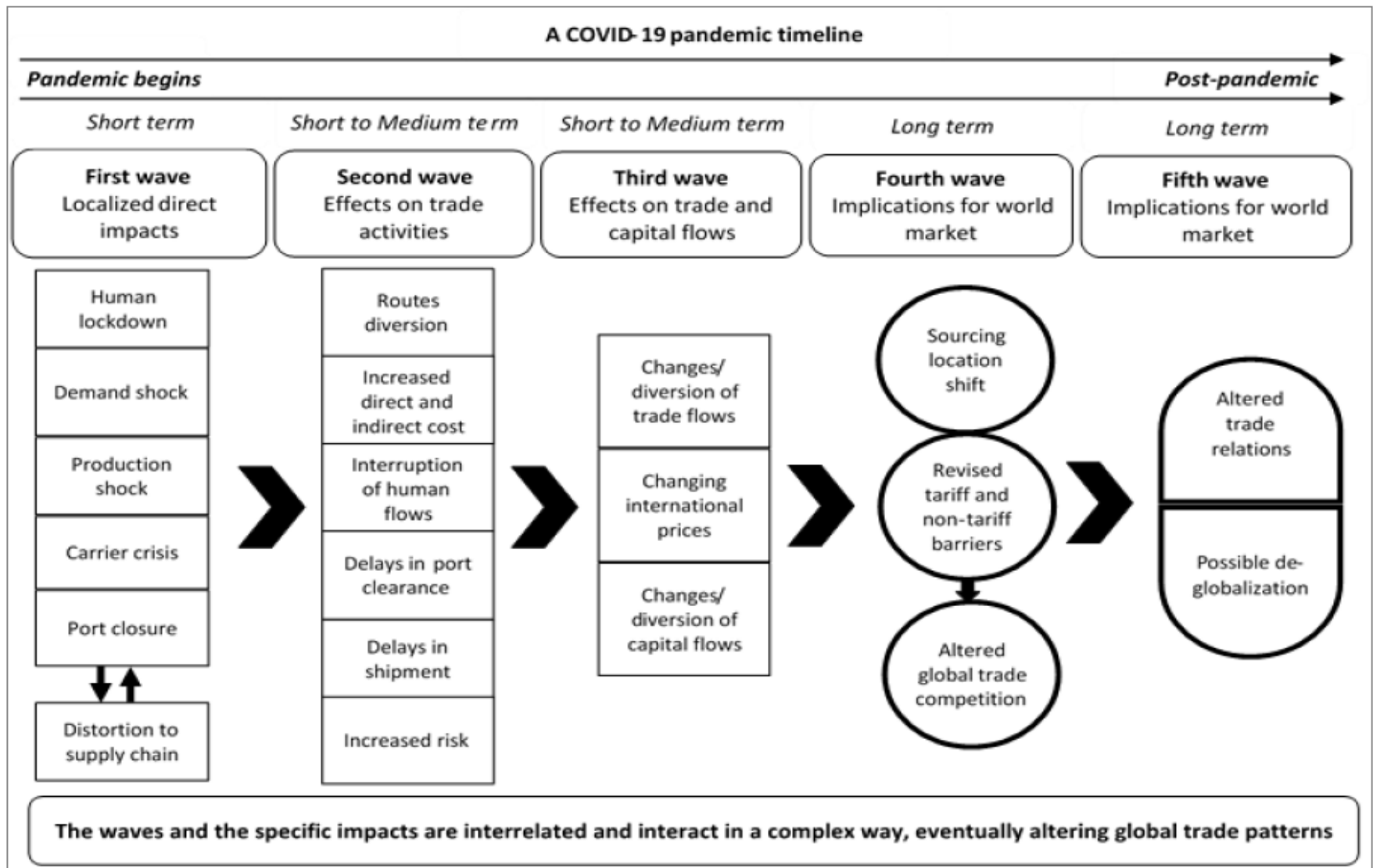
- **Figure B1** shows the world's normal equilibrium is at e_{w3} at price P_{w3} and quantity Q_{w3} .
- During pandemic, both supply of and demand for non-essential goods face big slump worldwide, leading both the world demand and supply curves shift leftward from D_{w3} to D_{w4} and from S_{e3} to S_{e4} , respectively.
- Both demand and supply fall as borders close, factory shutdowns. business closures, and people remain lock down at homes and movement of human and goods become heavily restricted, in response to the outbreak.
- At the new equilibrium, the world now trades fewer quantity of non-essential goods at Q_{w4} ($Q_{w4} < Q_{w3}$) at a lower price P_{w4} ($P_{w4} < P_{w3}$).
- The worldwide demand and supply fall extends to both non-essential goods markets in importing (**Figure B2**) and exporting (**Figure B3**) nations.

- **Figure B2** shows that in normal times, the country imports Q_{m3} quantity (equal to the distance 'no') at international price P_{w3} .
- However, as both demand and supply decreases sharply domestically and globally, now the country's import shrinks to Q_{m4} quantity (equal to the distance 'kl') at lower international price P_{m4} .
- The figure signifies that during the pandemic, total consumption of non-essential goods will be lower than the normal times with a lower import demand or quantity of imports.

- **Figure B3** shows the case for an exporting nation, where in normal times the country exports Q_{e3} quantity (equal to the distance 'pq') at world price P_{e3} .
- When both domestic and international demand for non-essential goods sharply decrease, demand curve shifts leftward from D_{e3} to D_{e3} .
- Furthermore, factory shutdowns, restrictions of movement of goods and human, and business closures cause production to fall, leading the supply curve to shift leftward from S_{e3} to S_{e4} .
- The overall outcome is a new equilibrium where total consumption of non-essential goods decreases in the country and exports shrink to quantity Q_{e4} (equal to the distance 'st') which is much smaller than the normal time exports quantity Q_{e3} .
- The effect overall signifies that the country will face a lower domestic consumption of and export demand for non-essential goods.

The overall outcome in the world market is an increased level of trade for essential goods at a higher price, while a reduced level for non-essential goods at a lower price. Increases in demand for essential goods are not likely to improve total trade volume at the world level since global trade for essential goods is significantly smaller compared to that for nonessential goods.

A general mapping of the likely trade implication of the COVID-19 outbreak



The WTO

<https://www.wto.org/>

WTO



The primary purpose of the WTO is to
open trade for the benefit of all.

The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to help producers of goods and services, exporters, and importers conduct their business.

- General Agreement on Tariffs and Trade (GATT)
 - It was first signed in 1947
 - It covers international trade in goods.
- WTO
 - Location: Geneva, Switzerland
 - Established: 1 January 1995
 - Created by: Uruguay Round
 - Covers broad areas, including services and IP

WTO has 166 members since 30 August 2024

European Communities 1 January 1995

Hong Kong, China 1 January 1995

Macao, China 1 January 1995

China 11 December 2001

Chinese Taipei 1 January 2002

China and the WTO

https://www.wto.org/english/thewto_e/countries_e/china_e.htm

Background information

- Trade profiles
- Tariff profiles
- Trade policy review
- Preferential Tariff Analysis

RTAs in force

ASEAN - China

Asia Pacific Trade Agreement (APTA)

Australia - China

Chile - China

China - Costa Rica

China - Georgia

China - Hong Kong, China

China - Korea, Republic of

China - Macao, China

China - Mauritius

China - New Zealand

China - Singapore

Iceland - China

Pakistan - China

Peru - China

Switzerland - China

Accessions

Asia Pacific Trade Agreement (APTA) - Accession of China

RTAs for which an early announcement has been made

- The Cross-Straits Economic Cooperation Framework Agreement (ECFA)
- China - Norway
- Republic of Moldova - China

The WTO can ...

- 1 ... cut living costs and raise living standards;
- 2 ... settle disputes and reduce trade tensions;
- 3 ... stimulate economic growth and employment;
- 4 ... cut the cost of doing business internationally;
- 5 ... encourage good governance;
- 6 ... help countries develop;
- 7 ... give the weak a stronger voice;
- 8 ... support the environment and health;
- 9 ... contribute to peace and stability; and
- 10 ... be effective without hitting the headlines

Thank you for your
attention!