

I've never believed protectionism will lead us anywhere. There is not a shred of doubt in my mind that when you open an economy you should do it in totality. Foreign investment adds a sense of competition; we should see this as a wake-up call to modernize and upgrade. Companies that do not will undoubtedly die.

-Ratan Tata



# US Trade Patterns

The US is the largest player in global product and resource markets.





# Imports

- The US imported more than \$2.8 trillion worth of goods and services in 2014.
- *Imports* are goods and services purchased from foreign sources.





# Exports

- We exported \$2.3 trillion in goods and in services in 2014.
- *Exports* are goods and services sold to foreign buyers.





# Trade Balances

The trade balance is the difference between the value of exports and imports.

$$\textit{Trade balance} = \textit{exports} - \textit{imports}$$





# Trade Balances

- ***Trade deficit*** is the amount by which the value of imports exceeds the value of exports in a given time period.
- ***Trade surplus*** is the amount by which the value of exports exceeds the value of imports in a given time period.





# Trade Balances

Any imbalance in America's trade must be offset by reverse imbalances elsewhere.





# Table: US Trade Balance, 2014

Product Category	Exports (in \$billions)	Imports (in \$billions)	Surplus or (Deficit)
Goods	1,635.1	2,371.9	(736.8)
Services	<u>710.3</u>	<u>478.5</u>	<u>231.8</u>
Total Trade	2,345.4	2,850.4	(498)

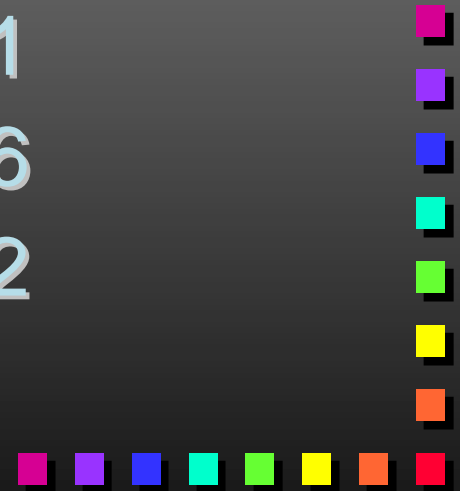






# Table: Largest Deficit Countries, 2011

Country	Deficit (in billions of nominal US dollars)
US	-784.775
UK	-162.973
India	-154.401
France	-117.676
Turkey	-105.862



# Table: Largest Surplus Countries, 2011

Country	Surplus (in billions of nominal US dollars)
Germany	+219.938
Russia	+198.760
China	+155.142
Saudi Arabia	+132.316
UAE	+80.000





# Motivation to Trade

Why trade when . . .

. . . we import many of the things we also export?

. . . we could produce many of the things we import?

. . . we seem to worry so much about trade imbalances?





# Specialization

- Trade allows nations to specialize and specialization increases total output.
- Trade increases world output and the standards of living in all trading countries.





# Production Possibilities

- The gains from trade can be illustrated using production possibilities curves.
- *Production possibilities* – the alternative combinations of final goods and services that could be produced in a given time period with all available resources and technology





# Consumption Possibilities

- In the absence of trade, a country's consumption possibilities are identical to its production possibilities, i.e. it consumes what it produces.
- ***Consumption possibilities*** - the alternative combinations of goods and services that a country could consume in a given time period



# Table: Production Possibilities Without Trade



## US Production Possibilities

<i>Bread</i>	<i>Wine</i>
100	0
80	10
60	20
40	30
20	40
0	50

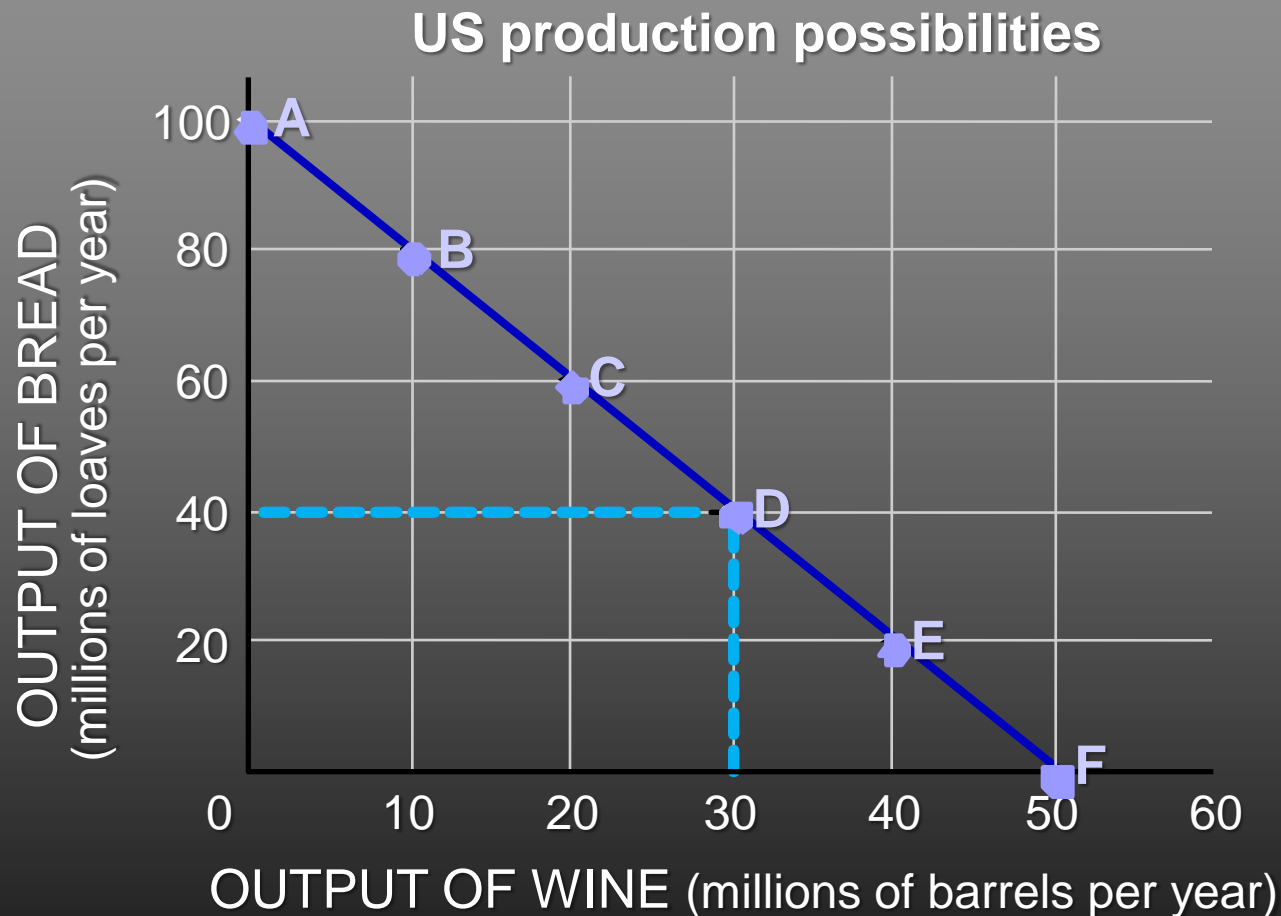
## French Production Possibilities

<i>Bread</i>	<i>Wine</i>
15	0
12	12
9	24
6	36
3	48
0	60



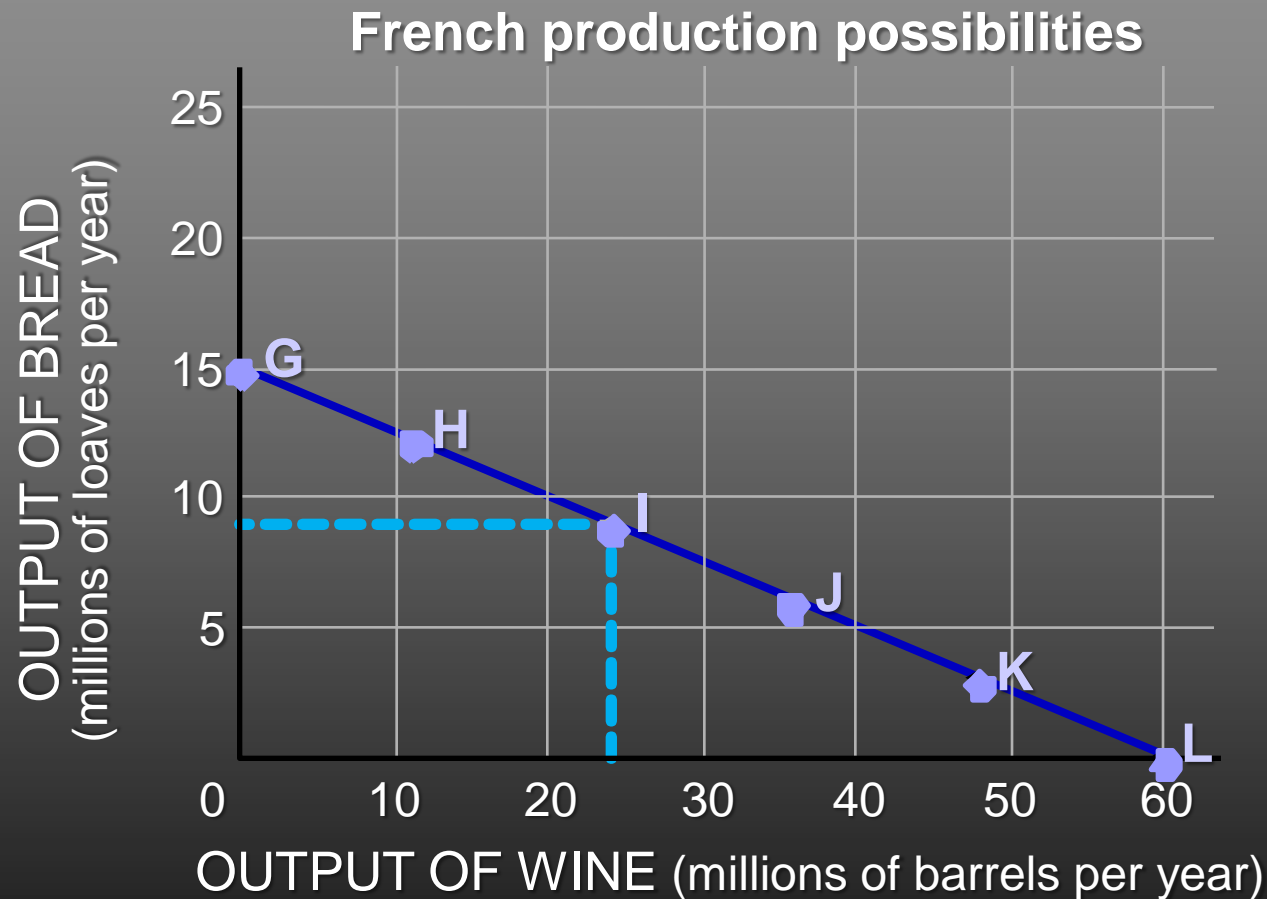


# Chart: US Production Possibilities Without Trade





# Chart: French Production Possibilities Without Trade



# Production and Consumption With Trade



- To assess the potential gain from trade, we need to consider the combined output of trading nations.
- By increasing the mix of output in each trading country, we can increase total world output.





# Mutual Gains

- Each country produces those goods it makes best, then trades with other countries to acquire the goods it desires to consume.
- When a country engages in international trade, *its consumption possibilities always exceed its production possibilities.*





# Table: Production Possibilities Without Trade

	Bread	Wine
US ( <i>at point D</i> )	40	30
France ( <i>at point I</i> )	9	24
World total	49	54

See charts on slides 16-17, 22-23.





# Table: Production and Consumption Possibilities With Trade

	Bread	Wine
US ( <i>at point C</i> )	60	20
France ( <i>at point K</i> )	3	48
World total	63	68

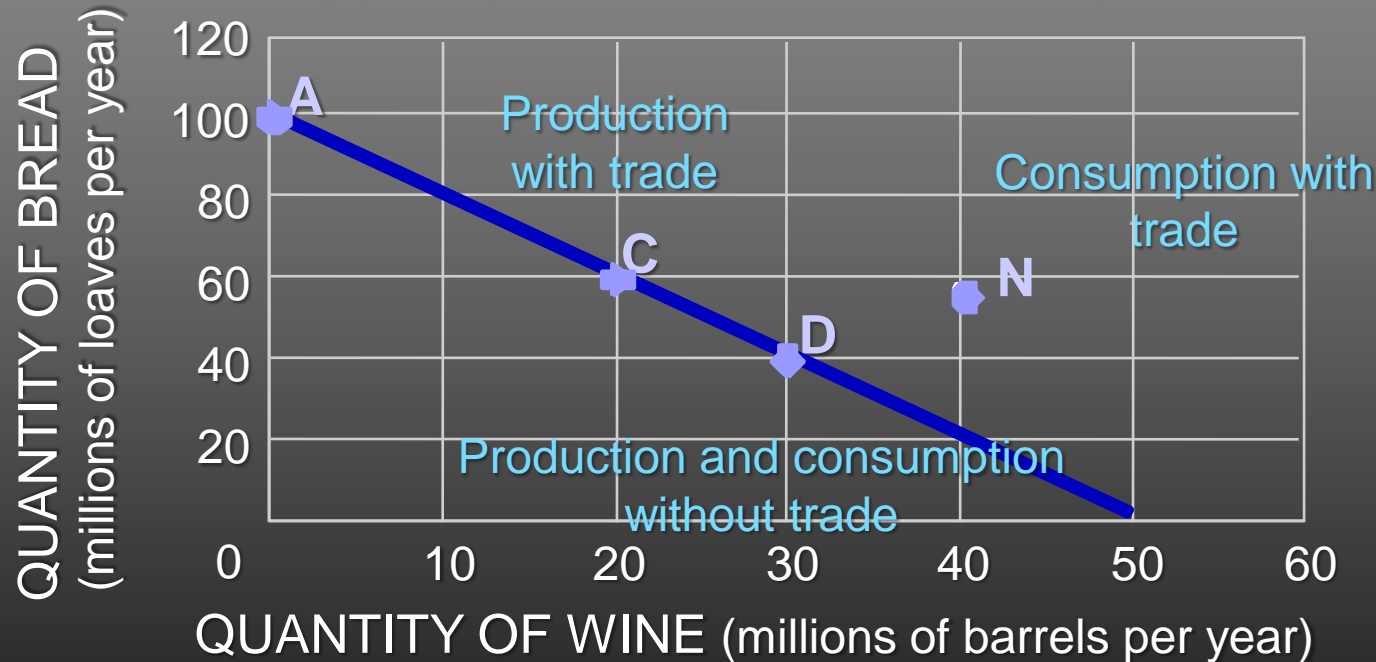
See charts on slides 22-23.



# Chart: US Production and Consumption Possibilities With Trade



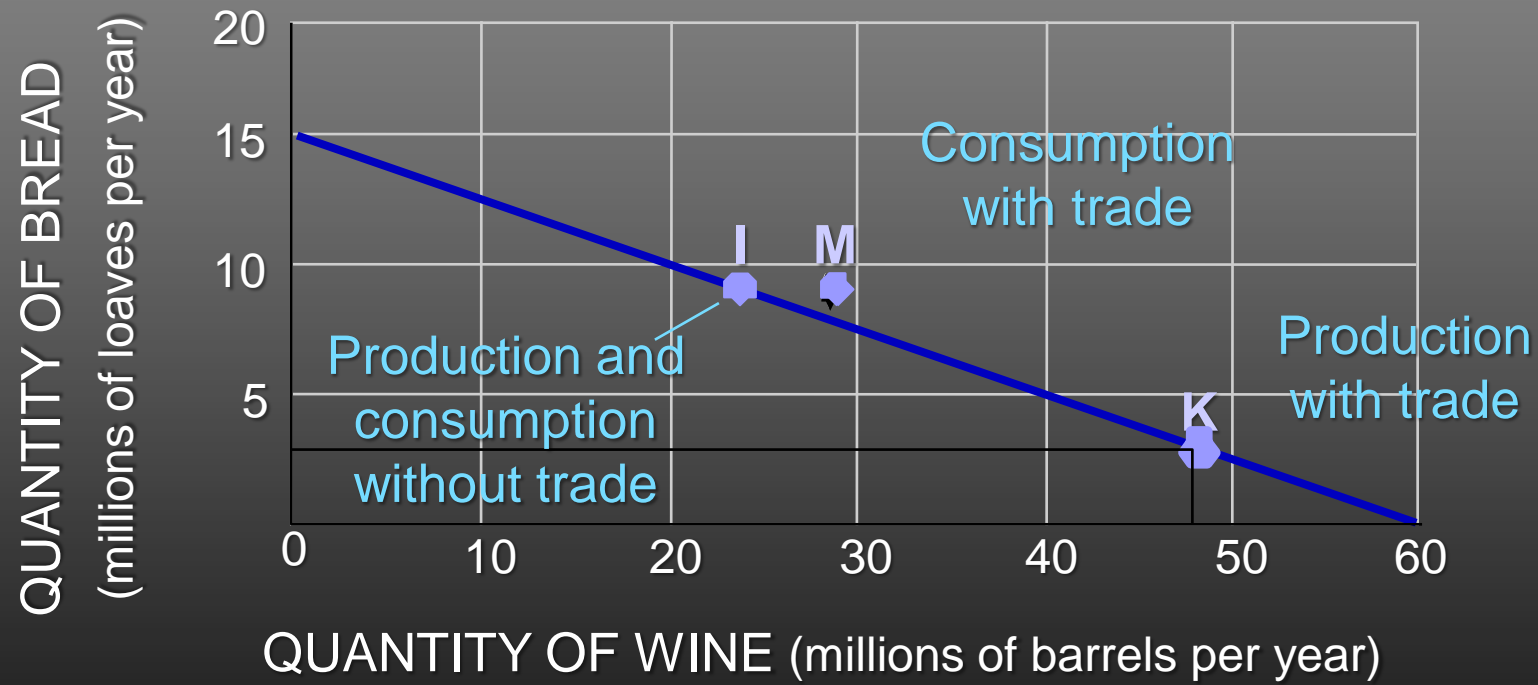
(a) US production and consumption



# Chart: French Production and Consumption Possibilities With Trade



(b) French production and consumption





# Table: Gains from Specialization

	Old Mix of Output		New Mix of Output	
	<i>Bread</i>	<i>Wine</i>	<i>Bread</i>	<i>Wine</i>
US	40	30	60	20
	<i>(point D)</i>		<i>(point C)</i>	
France	9	24	3	48
	<i>(point I)</i>		<i>(point K)</i>	
World total	49	54	63	68

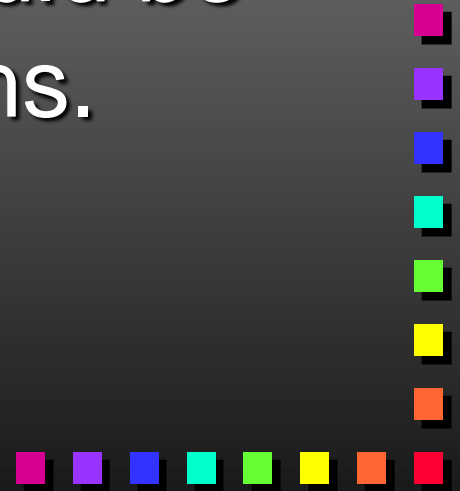




# Pursuit of Comparative Advantage



Although international trade can make everyone better off, it's not obvious which goods should be traded or on what terms.





# Opportunity Costs

- The decision to export is based on comparative advantage.
- ***Comparative advantage*** - the ability of a country to produce a specific good at a lower opportunity cost than its trading partners
- ***Opportunity cost*** - the most desired goods or services that are forgone in order to obtain something else





# Comparative Advantage

- Comparative advantage refers to the relative (opportunity costs) of producing particular goods.
- World output, and thus potential gains from trade, will be maximized when each country pursues its comparative advantage.



# Absolute Advantage Doesn't Count



- The absolute advantages in production do not matter.
- *Absolute advantage* – the ability of a country to produce a specific good with fewer resources (per unit of output) than other countries





# Terms of Trade

- The terms of trade establish the trading rate.
- *Terms of trade* is the rate at which goods are exchanged – the amount of good A given up for good B in trade.



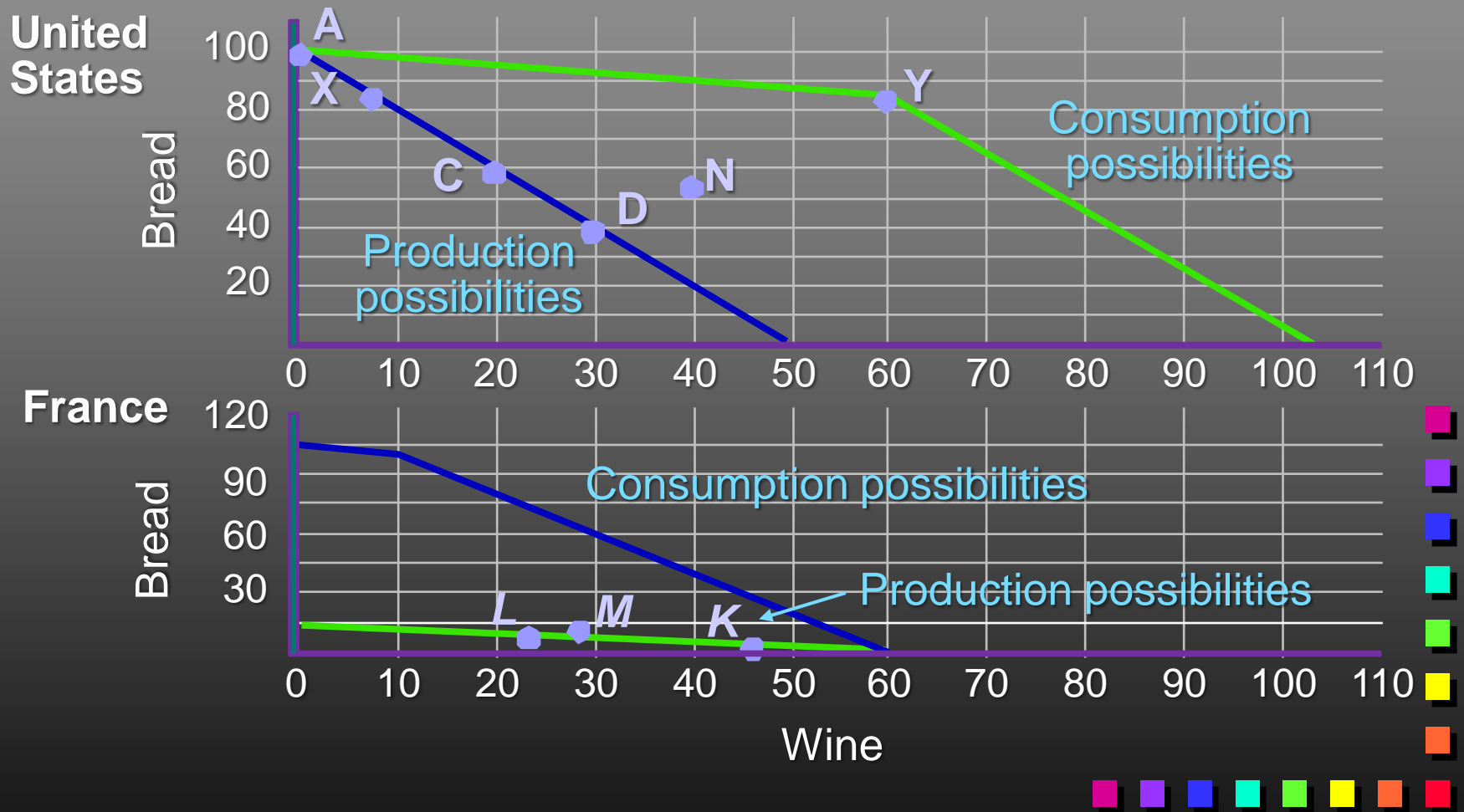


# Limits to the Terms of Trade

- A country will not trade unless the terms of trade are superior to domestic opportunities.
- The terms of trade between two countries will lie somewhere between their respective opportunity costs in production.



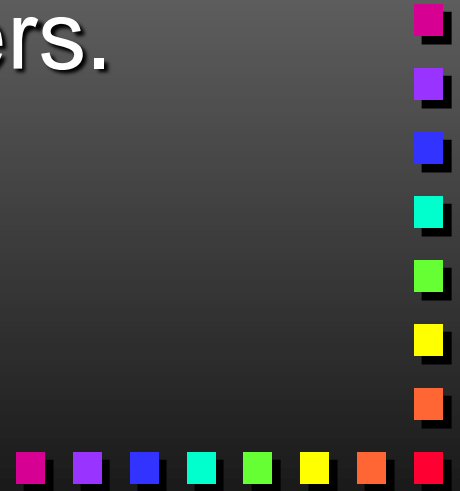
# Charts: Searching for the Terms of Trade



# The Role of Markets and Prices



The decision to import or export a particular good is often left up to the market decisions of individual consumers and producers.

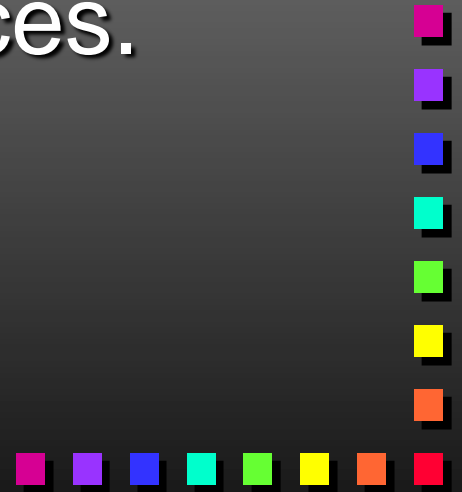




# The Role of Markets and Prices



The terms of trade, like the price of any good, will depend on the willingness of market participants to buy or sell at various prices.





# Protectionist Pressures

- Although the potential gains from trade are impressive, not everyone favors free trade.
- Imports typically compete with a domestic industry.



# Continued In *INTERNATIONAL TRADE PART II*

