Chapter 3
Interdependence and the Gains from Trade,
P. 37 in packet

Outline:

I. Introduction to specialization and exchange

II. The Principle of Comparative Advantage

III. Determining specialization when opportunity costs are constant

IV. International Trade

I. Introduction to specialization and exchange

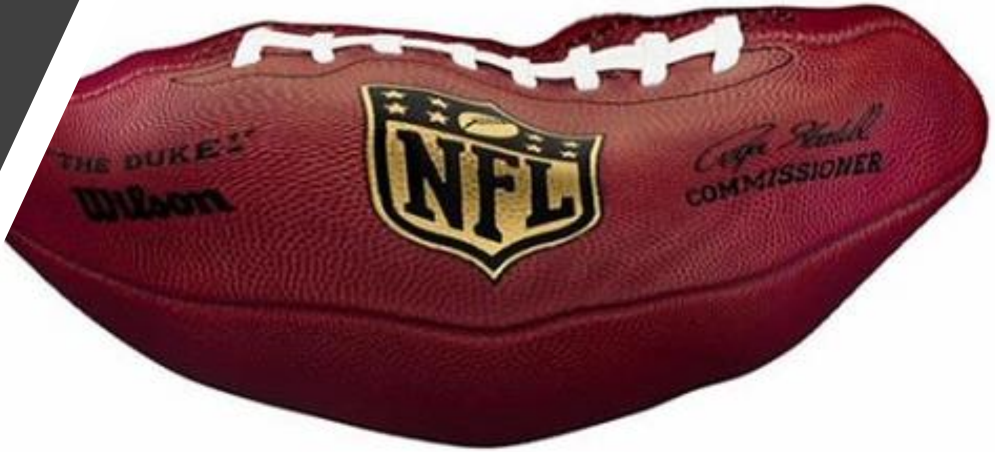
A. Shipwrecked

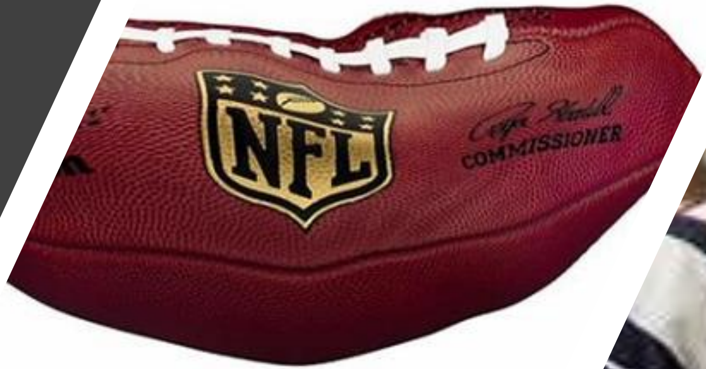
- P. 38
- Self-sufficiency
- Specialization and trade
- Gains from specializing
- Barter
- Mutual Coincidence of Wants
- Mediums of Exchange

When deciding how to specialize – what if one person is better at doing everything?

B. Should Tom Brady mow his own lawn?, p. 38

- **Tom Brady needs to mow his lawn.**
- **He can mow it in 2 hours.**
- **He could spend the next 2 hours filming commercial - paid $20,000.**
- **He could hire his nephew to mow. He can mow in 4 hours and charges $20 per hour.**
- Who should mow?
- **Cost if the nephew mows?**
- **4 X $20 = $80**
- **If Tom mows, is the cost zero?**
- **opp. cost $20,000**





II. The Principle of Comparative Advantage, p. 38

- Absolute Advantage –if you can produce more of a good with the same amount of resources as someone else. (due to previous experience and/or natural endowments) **-or if you can produce the same amount of good as another producer, but using fewer resources.**
- **(Tom has absolute advantage at mowing.)**

- Comparative Advantage – if you have the lowest opportunity cost of producing something
- (Tom's nephew has lower opportunity costs for mowing than Tom.)

Principle (or Law) of Comparative Advantage

individuals, firms, regions, or nations can gain by specializing in the production of goods that they produce cheaply (at a low opp. cost) and exchanging them for goods they cannot produce at a low opportunity cost

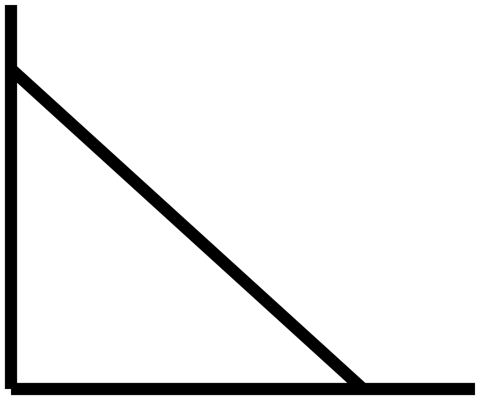
David Ricardo

1817 *Principles of Political Economy and Taxation*

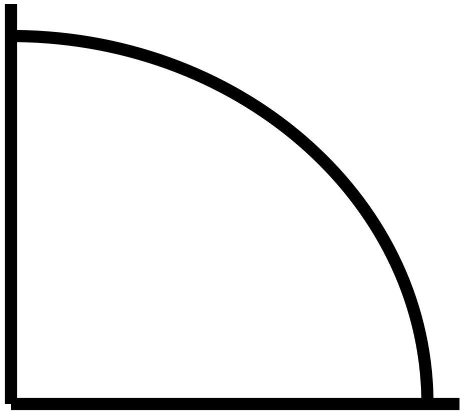
III. Determining specialization when opportunity costs are constant, p. 39

Slope of the PPF represents the opp. cost - Squeeze in on page 39

- Linear PPF
- Constant slope
  constant opp. cost



- Curved PPF
- Changing slope
  changing opp. cost

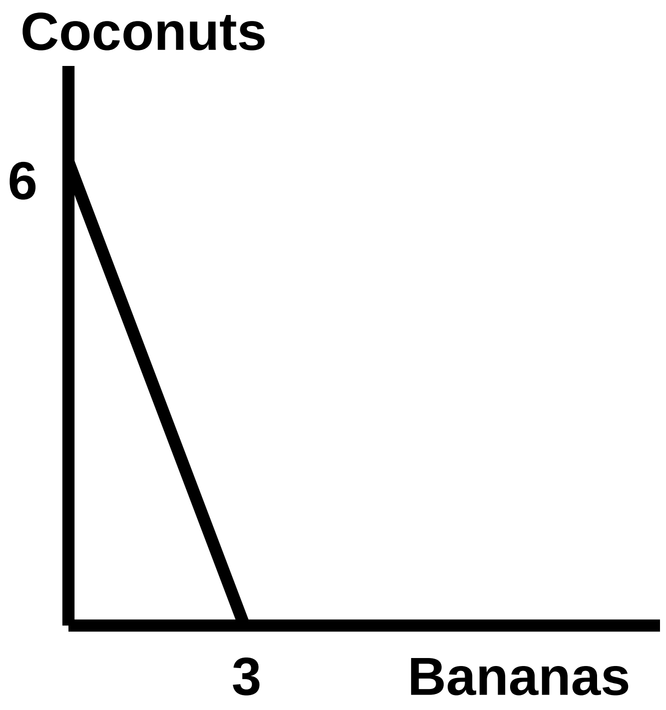


Gilligan and Skipper each produce coconuts and bananas

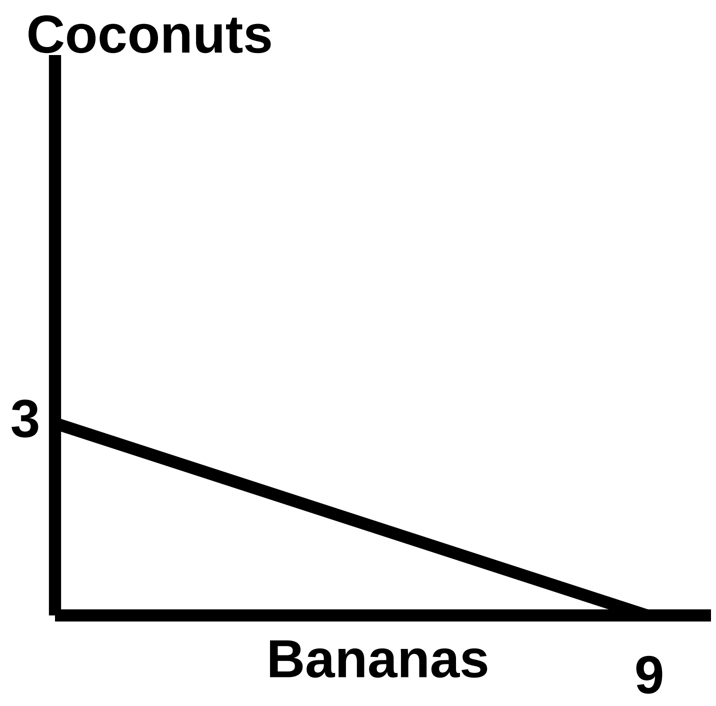
Production Possibility Frontier Points			
Gilligan		The Skipper	
Coconuts	Bananas	Coconuts	Bananas
0	3	0	9
2	2	1	6
4	1	2	3
6	0	3	0

a) Gilligan and Skipper each produce coconuts and bananas

- Gilligan's PPF



- Skipper's PPF



ICLICKER – REEF POLLING

In-Class Quiz #6

iClicker

1) If C represents coconuts and B represents bananas, which equation represents Gilligan's PPF?

a. $C = 2 - 6B$

b. $C = 6 - 2B$

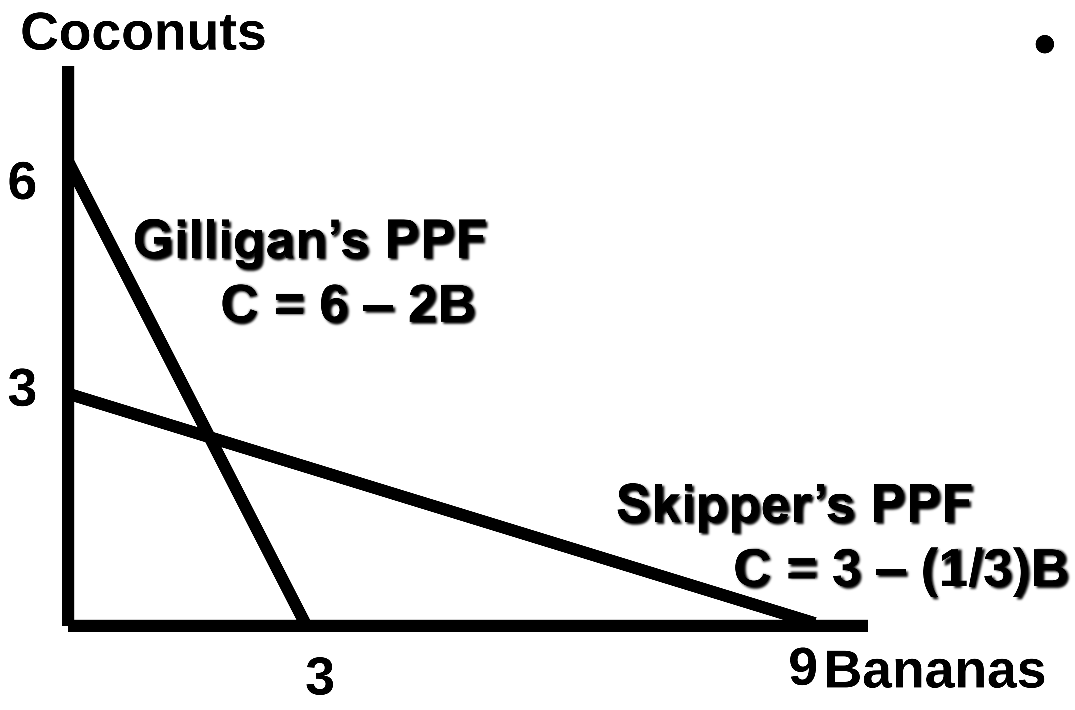
c. $B = 6 - 2B$

d. $C = 6 - 3B$

- B) Gilligan $Y = 6 – 2X$
- or $C = 6 – 2B$
- Skipper $Y = 3–(1/3)X$
- or $C = 3 – (1/3)B$
- The slope tells us the opportunity cost of 1 unit of the X variable in terms of the Y given up.
- P. 40
- C) Comp. Advantage Coconuts?
- Gilligan
- D) Comp. Advantage Bananas?
- Skipper
- E) Gilligan should specialize in coconuts and the Skipper in bananas and then they should trade.

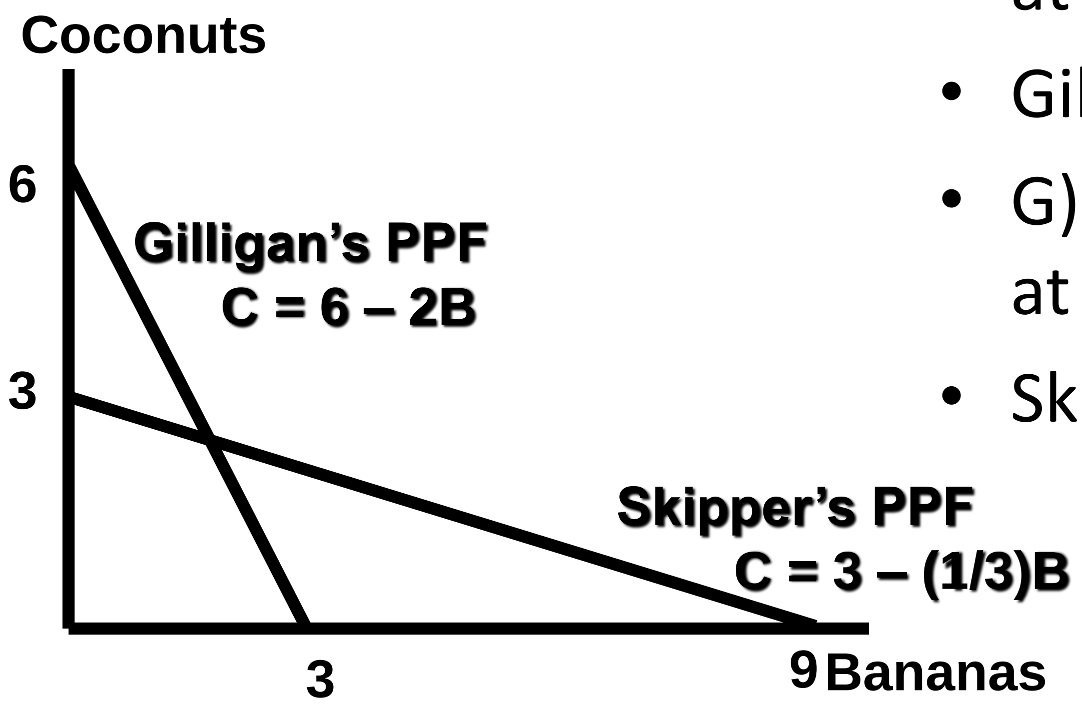
	Opp. Cost Of 1 Coconut	**Opp. Cost of 1 Banana**
Gilligan	**½ banana**	**2 coconuts**
Skipper	**3 bananas**	**1/3 coconut**

Comparative advantage-by looking at graph?



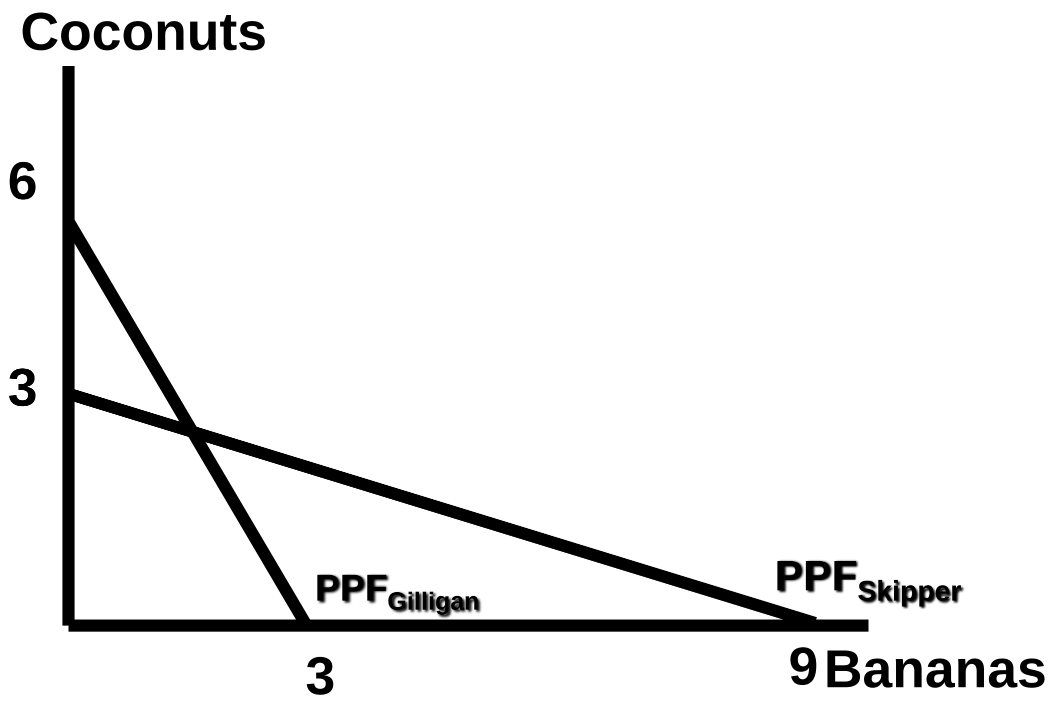
- Slope of PPF indicates opportunity cost
- Whoever has flattest slope with respect to X axis has lowest opportunity cost of producing X

Absolute Advantage



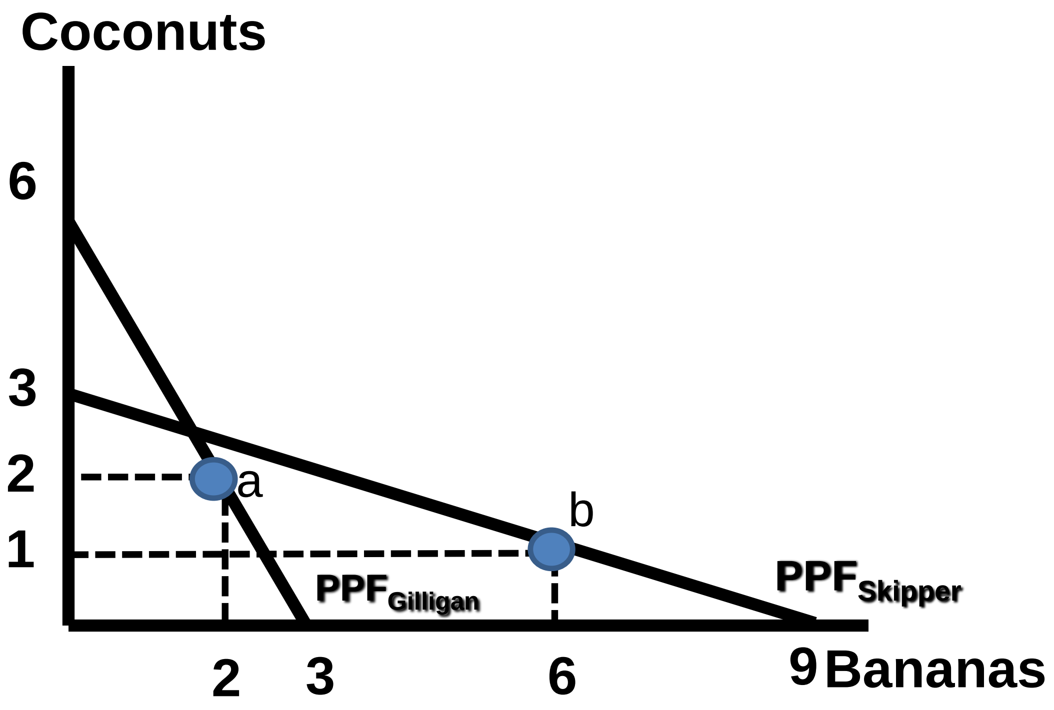
- P.40
- F) Who has absolute advantage at gathering coconuts?
- Gilligan (look at intercepts)
- G) Who has absolute advantage at gathering bananas?
- Skipper

Part h) p.41



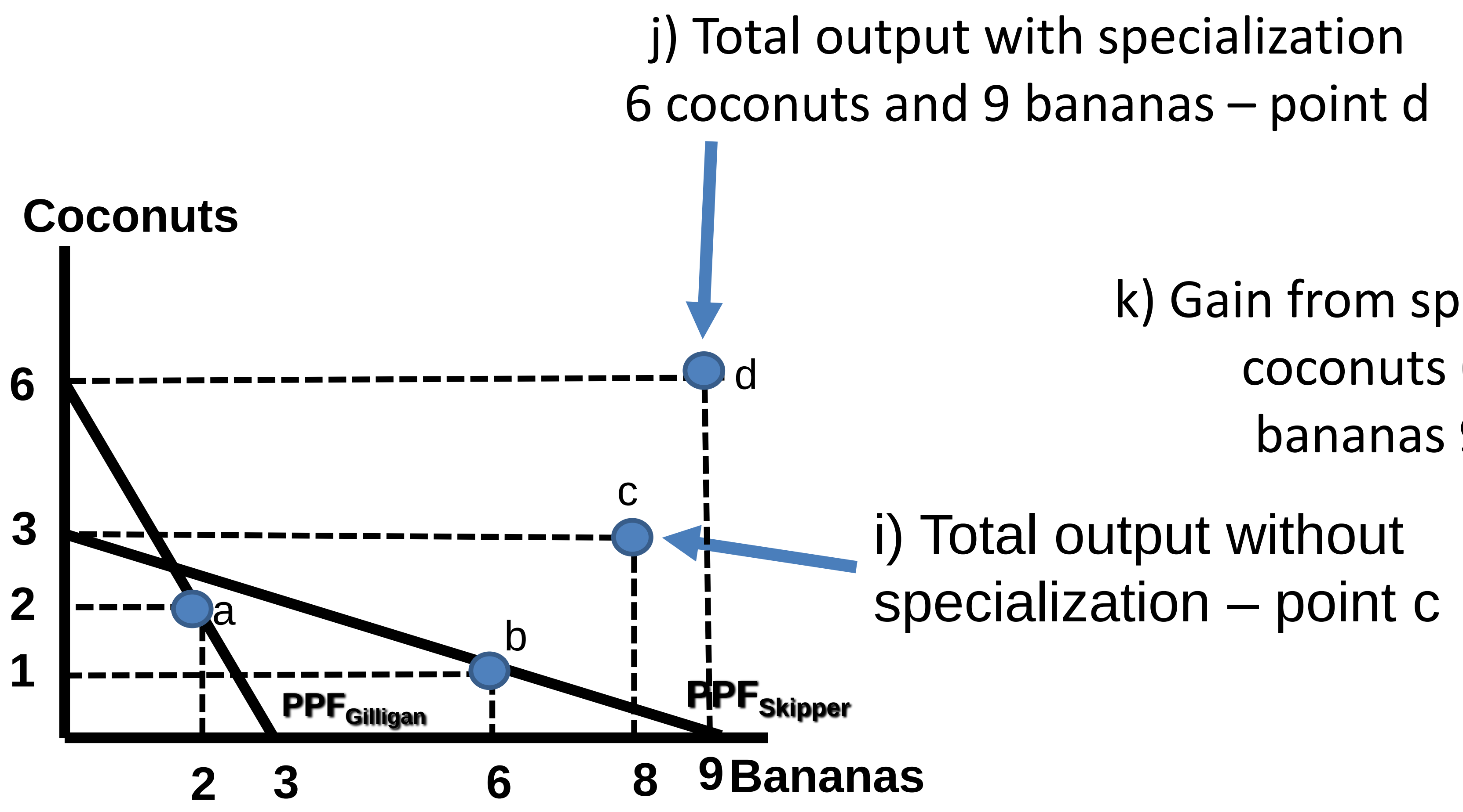
i) Self-sufficiency Output without specialization	coconuts	bananas	Point
Gilligan	2	2	a
Skipper	1	6	b
Total			

Part i)



i) Output without specialization	coconuts	bananas	Point
Gilligan	2	2	a
Skipper	1	6	b
Total	3	8	c

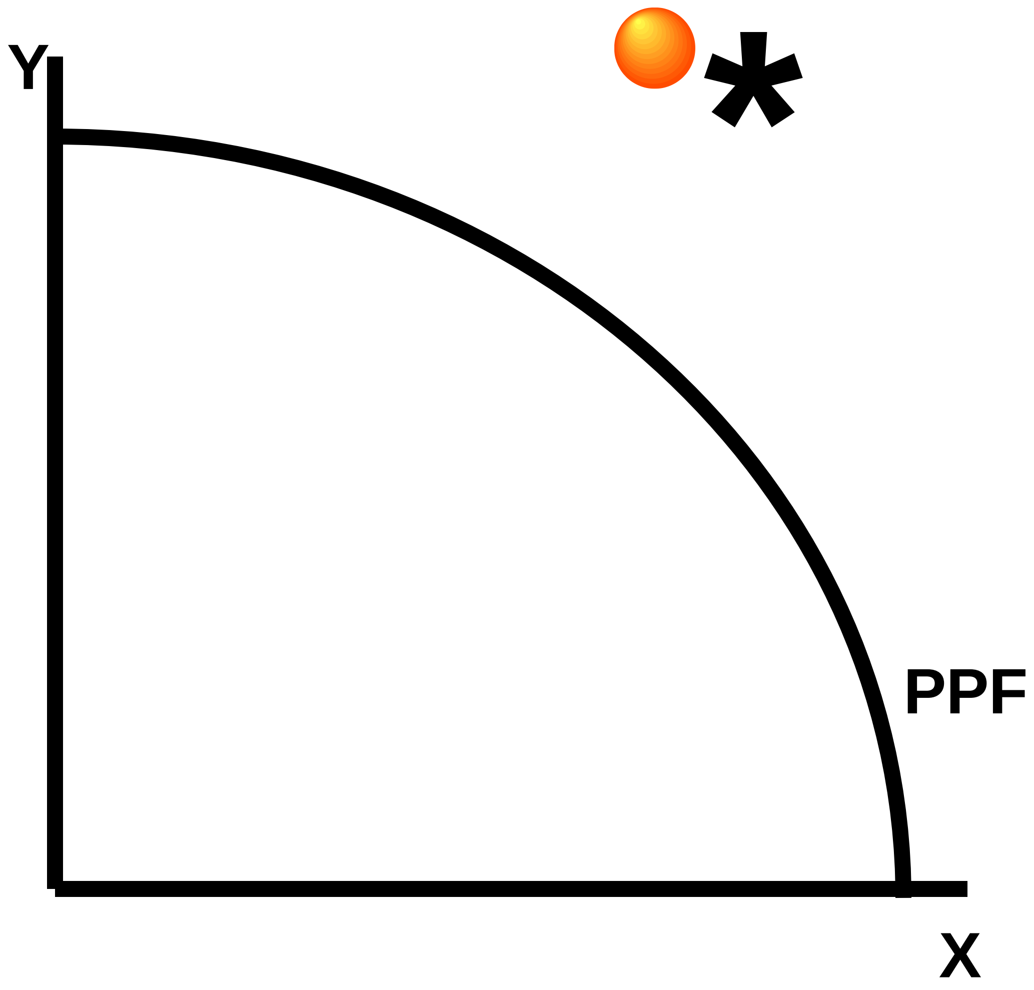
BEING ABLE TO SPECIALIZE AND TRADE ALLOWS YOU TO CONSUME BEYOND YOUR PPF!!!



k) Gain from specialization

coconuts 6-3=3

bananas 9-8=1



Specialization and foreign exchange allow a country to CONSUME beyond its PRODUCTIVE capacity, a point like *

Summary (p.41): Finding opportunity costs and using it to identify comparative advantage when PPFs are linear and exhibit constant opportunity costs:

- 1) Find the Linear Equation for the PPF - Get opportunity cost from the slope.
- 2) Calculate changes in numbers from a table that shows a PPF schedule.
- 3) “Eyeball" the graph and compare the slopes of two PPFs.

ICLICKER – REEF POLLING

In-Class Quiz #6

2) Wilson and Tom can each produce two goods, Food (F) and Clothing (C).
(#6 on green sheet)

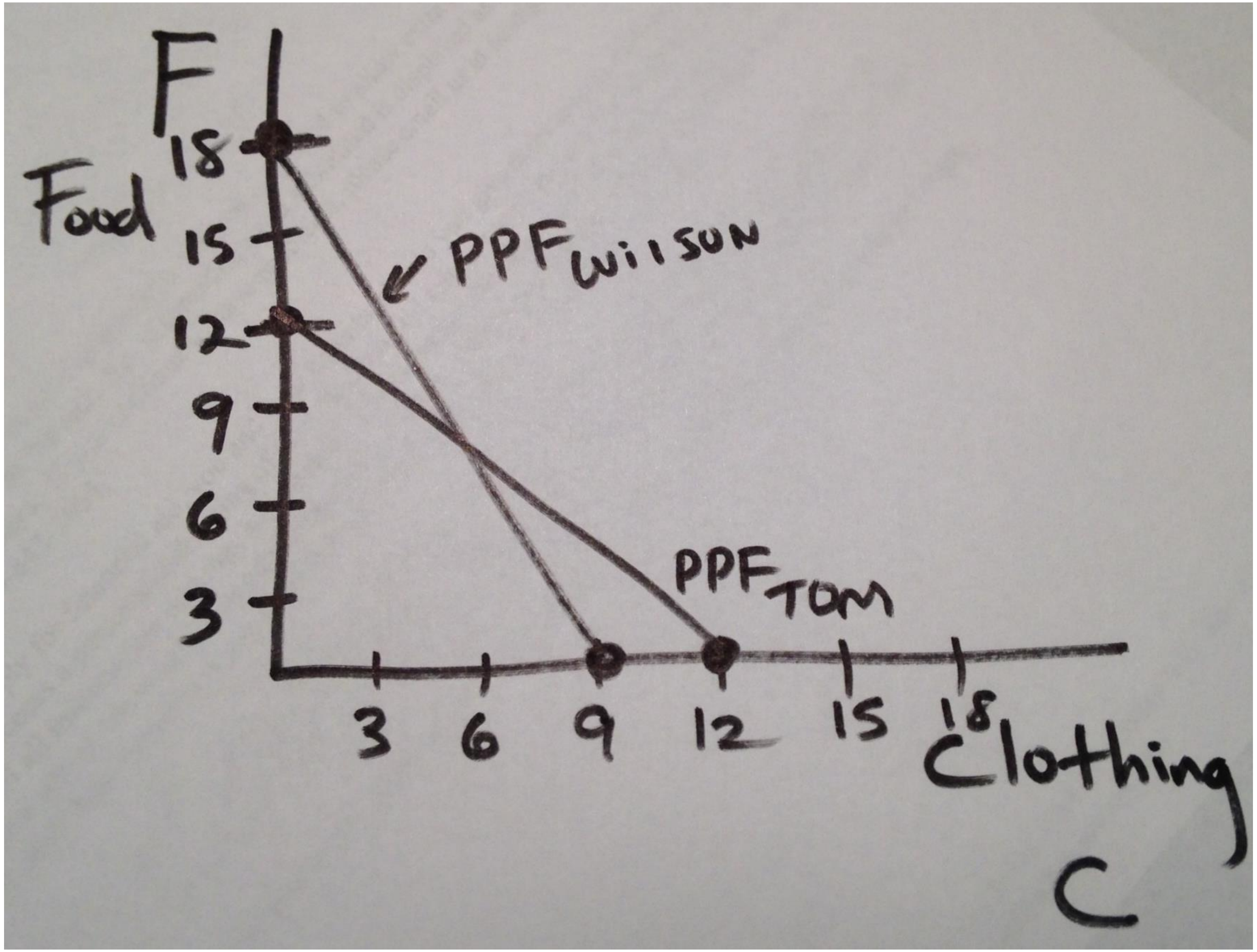
The equation for Wilson's PPF is:
F = 18 – 2 C

The equation for Tom's PPF is:
F = 12 – C

According to the law of comparative advantage, if Wilson and Tom wanted to specialize and trade,

A. Tom should produce food

B. Wilson should produce food


F
Food
18
15
12
9
6
3
PPF WILSON
PPF TOM
3
6
9
12
15
18
Clothing
C

Wilson’s PPF: $F = 18 – 2C$

Tom’s PPF : $F = 12 – C$

- Slope tells opp. cost of one unit of clothing
- Wilson: 1C=2F or 1F = 1/2C
- Tom: 1 unit of C = 1 unit of F
- Wilson’s opp. cost for food lower than Tom’s so he should produce food

ICLICKER – REEF POLLING

In-Class Quiz #6

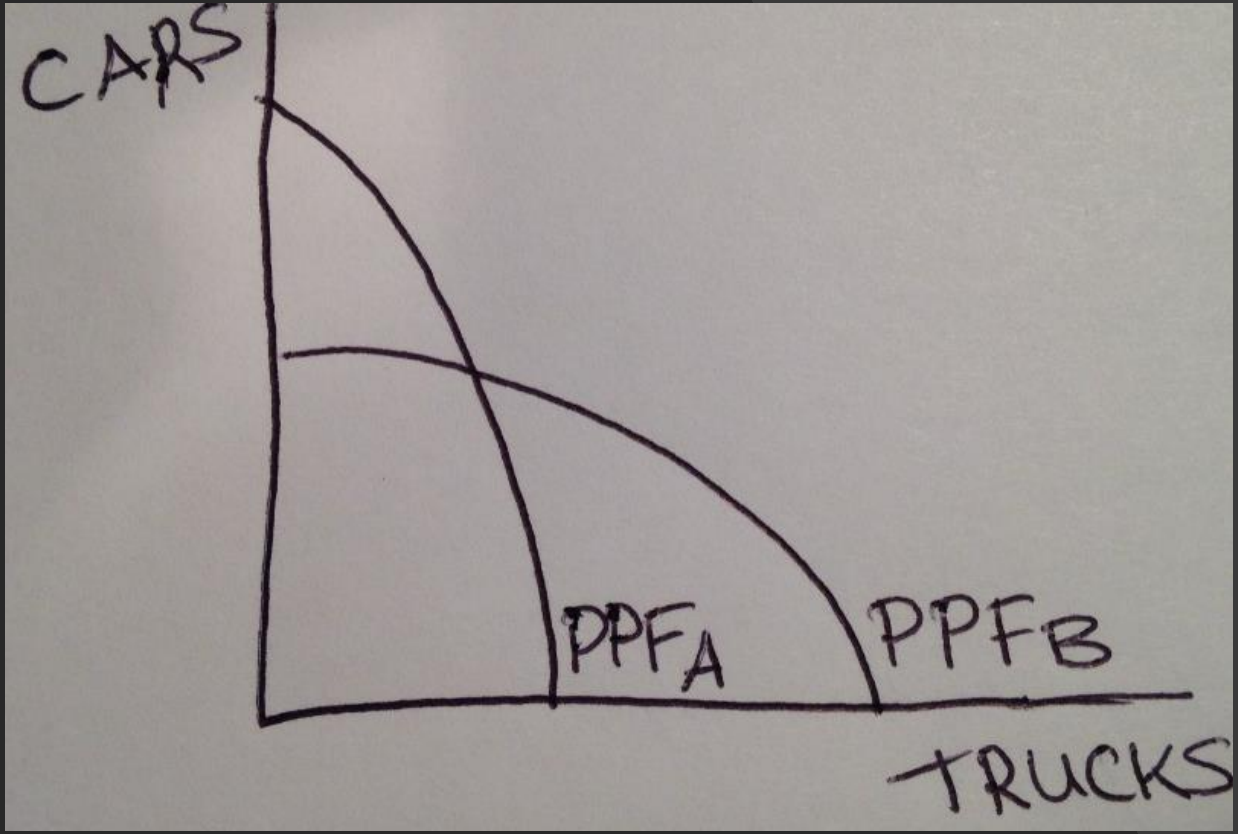
3) Which country should produce trucks AND why?

A. Country A should produce trucks <u>because</u> it has absolute advantage at truck production.

B. Country B should produce trucks <u>because</u> it has absolute advantage at truck production.

C. Country A should produce trucks <u>because</u> it has comparative advantage at truck production.

D. Country B should produce trucks <u>because</u> it has comparative advantage at truck production.



IV. International Trade, p. 42

- Imports: goods produced abroad and sold domestically
- Exports: goods produced domestically and sold abroad

Processing scrap metal in China

ICLICKER – REEF POLLING

In-Class Quiz #6

iClicker

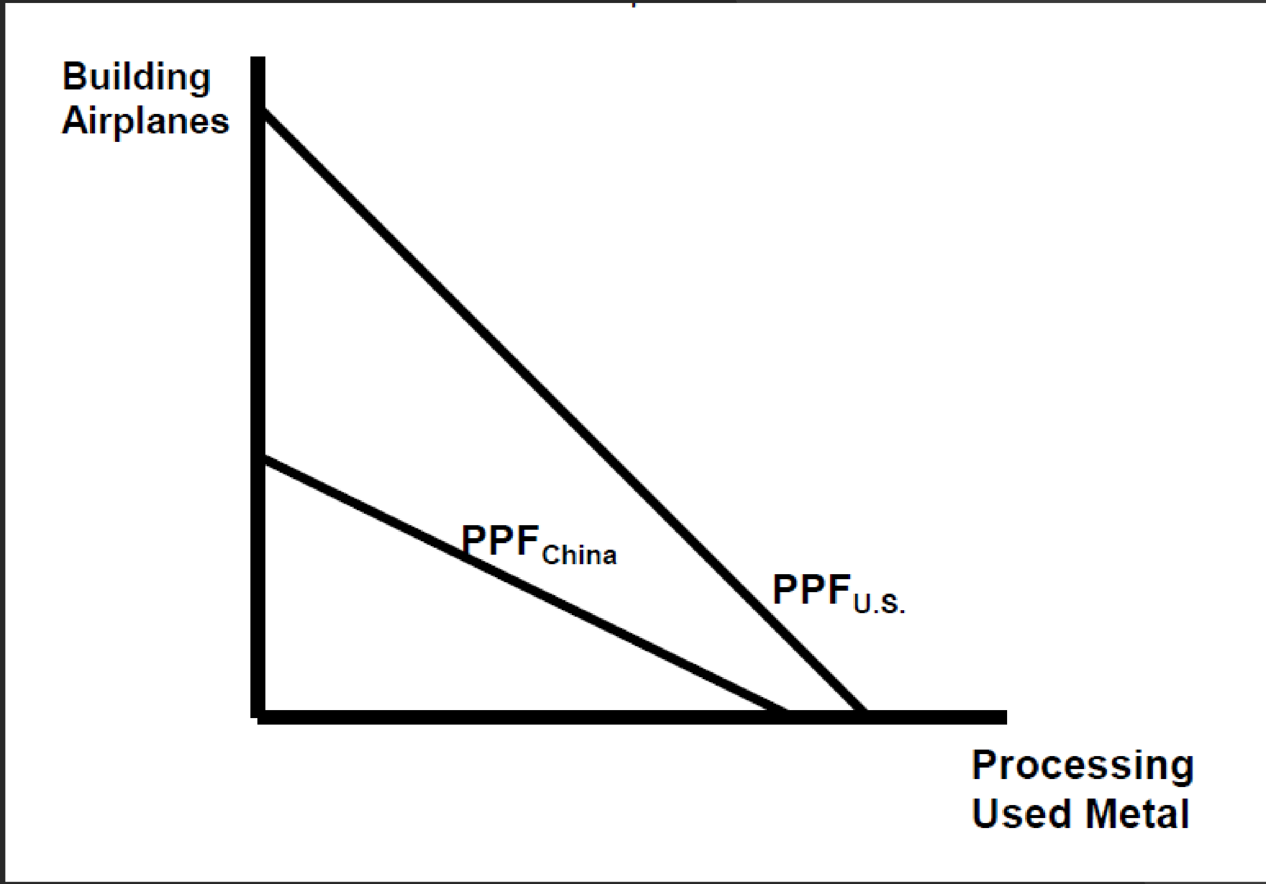
4) All of the following statements are TRUE EXCEPT..? (or which ONE of the following statements in FALSE.)

A. The U.S. cannot benefit from specializing and trading with China in these two markets.

B. The U.S. has the absolute advantage at airplane production.

C. China has comparative advantage at processing used metal.

D. The U.S. has the absolute advantage at processing used metal.



GOLD FARMING IN CHINA

Why does so much gold farming take place in China?
P.42

Outsourcing: The practice of having workers in foreign lands perform tasks (typically services) that have traditionally been performed by domestic workers.

Additional Arguments in Favor of Trade
p.43 in packet
(last 9 pages of ch. 9 in textbook)

- 1) Increased variety of goods
- 2) Lower costs through economies of scale
- 3) Increased competition
- 4) Enhanced flow of ideas

ARGUMENTS IN FAVOR OF TRADE RESTRICTIONS OR ARGUMENTS AGAINST INTERNATIONAL TRADE, p. 43

- 1) U.S. Job loss
- 2) National security
- 3) Infant-Industry
- 4) Unfair-Competition
- 5) Protection-as-a-Bargaining Chip
- 6) Foreign workforce abuse – sweat shop labor
- 7) Damage to environment

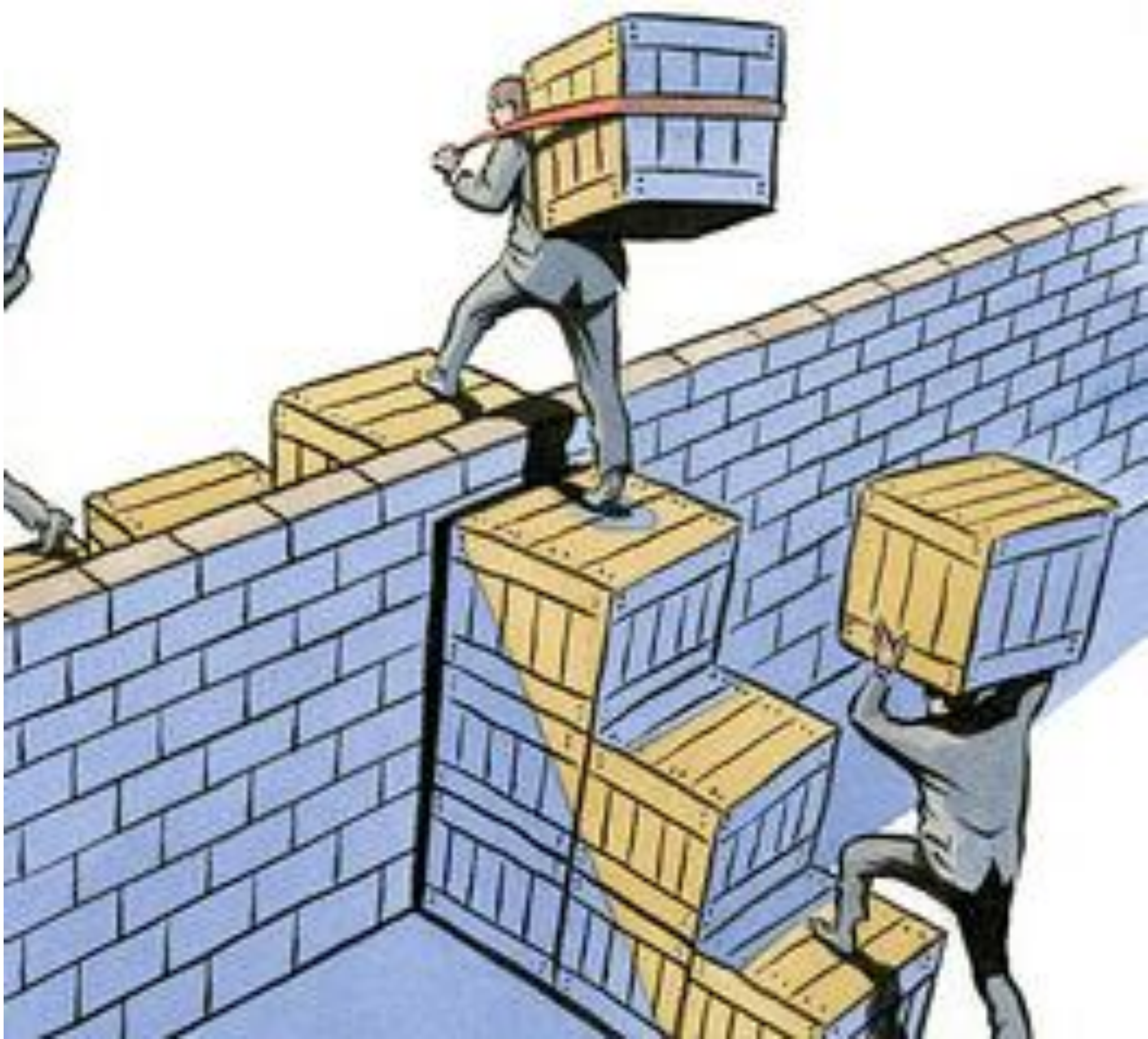
Barriers to Trade (TRADE RESTRICTIONS) (PROTECTIONIST TRADE POLICY) p. 44

- Tariff – a tax on an imported good (increases price of import)
- Trade Quota – limit on the amount of an imported good
- Embargo – ban on the imported good
- Product standards
- Subsidies to domestic producers

Other Terms

- Trade Surplus (value of exports > imports)
- Trade Deficit (value of imports > exports)
- Trade War
- Executive Order

- Trade Agreements
- NAFTA: North American Free Trade Agreement (reduces trade restrictions between Canada, Mexico, and the US)
- WTO: World Trade Organization (promotes trade and economic development by reducing trade restrictions)



Impetus for Trump Administration Trade Restrictions

- National security
- Protect essential domestic producers
  (State-owned enterprise in China – subsidized)
- Other countries stealing US technology – and requirements to share trade secrets
- Protecting US jobs
- Concerns about running a trade deficit

Headline- The New York Times

"Trump Hits China With Tariffs on $200 Billion in Goods, Escalating Trade War" Sept. 2018

Trade wars: Tariffs on bourbon, Harleys and blue jeans (and orange juice)

"How the world plans to retaliate against Trump and Republicans on trade"

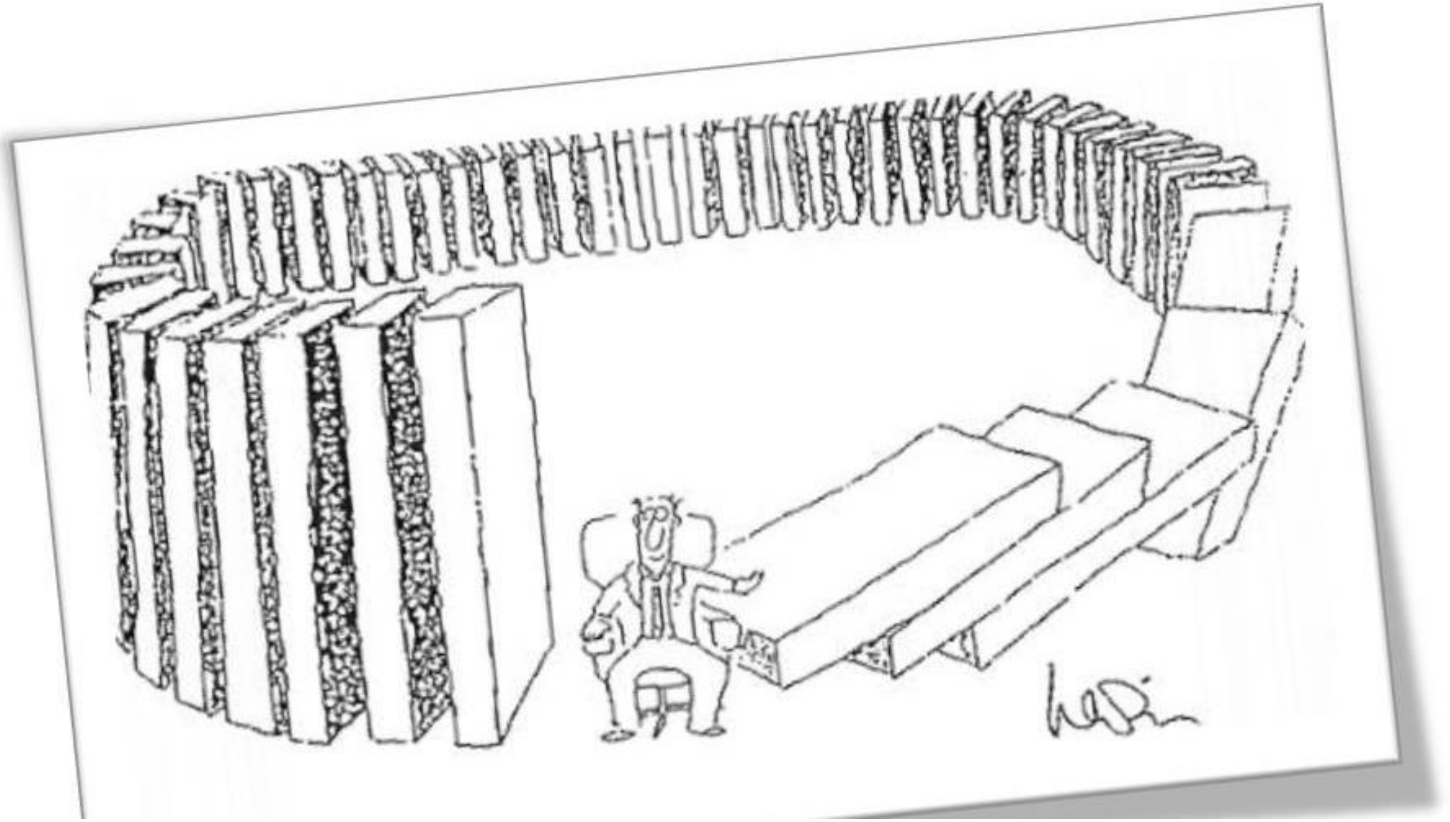
Tariffs Affecting Kentucky

TARIFFS ON BOURBON

In addition to orange juice and Harley Davidson motorcycles, bourbon has been hit with a 25% tariff in retaliation for the tariffs the U.S. imposed on steel and aluminum imports. In this case, the E.U. was looking to make a statement just as much political as economic.

TARIFFS ON SOY BEANS

"China has responded to the Trump Administration imposing a 25% tariff on around $34 billion dollars of Chinese product at the beginning of July by imposing a new tariff on pork and soybeans."



Unintended Consequences of Trade Restrictions

- Higher input costs for domestic producers
- Follow up subsidies to domestic producers affected by foreign trade restrictions
- Movement of US companies
- Higher product prices
- Secondary job loss
- More SMUGGLING

Microeconomic Impact VS Macroeconomic Impact of Trade War