CHAPTER 2:

Scarcity, Choice and Economic Systems

Sasan Fayazmanesh

Summary

Summary: I will discuss two neoclassical concepts: opportunity cost and production possibilities frontier. You can skip the rest.

Def. **Opportunity cost**:

Opportunity cost means giving up something in order to get something else.

The opportunity cost of one good is the amount of another good that must be given up in order to obtain the first good.

This is the same as "trade off."

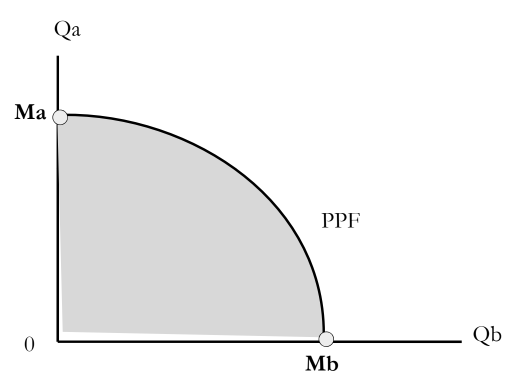
Def. **Production possibilities frontier (PPF)** or "transformation curve":

PPF shows the maximum amount of two goods that can be produced using the available resources and technology.

Example:

A farmer, using "factors of production," produces two goods: apples (a) and bananas (b).

Let Q_a and Q_b stand, respectively, for quantities of apples and bananas.



The shape of the curve:

Concave:

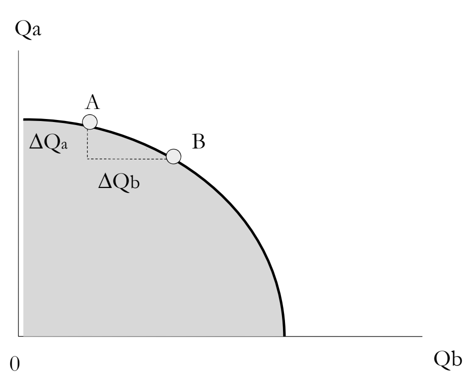
1) Negative slope

2) Changing slope

Moving down the curve, the slope of PPF increases in absolute value.

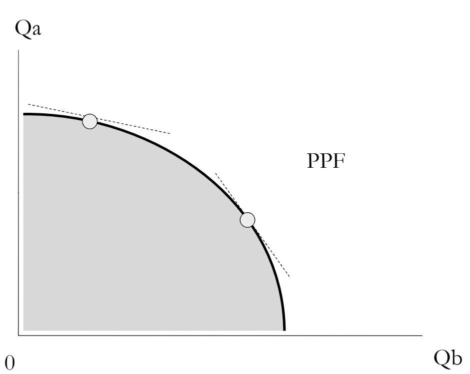
Negative slope implies:

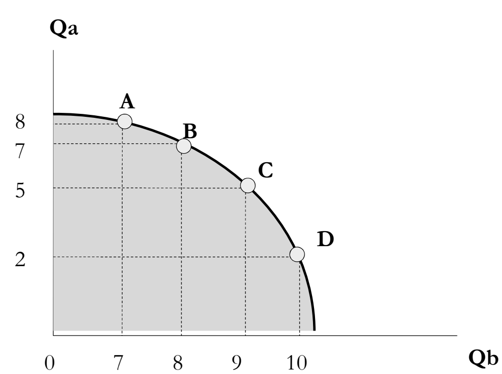
opportunity cost, producing more of one good means producing less of the other



Changing slope implies:

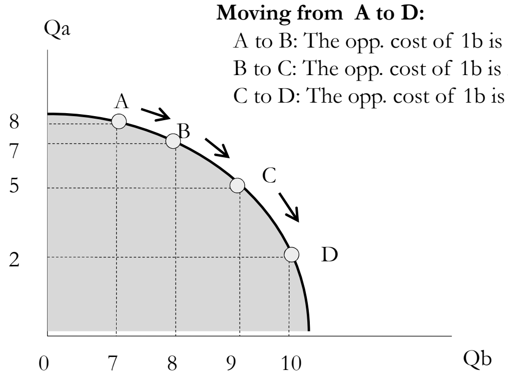
the so-called “law of increasing opportunity cost.”





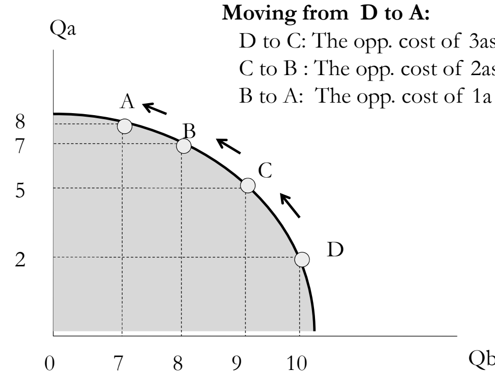
Moving from A to D:

A to B: The opp. cost of 1b is 1a.
B to C: The opp. cost of 1b is 2as.
C to D: The opp. cost of 1b is 3as.



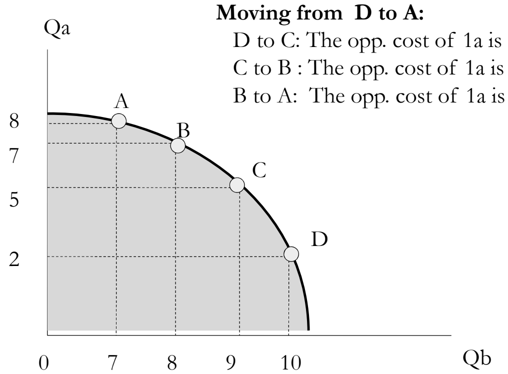
Moving from D to A:

D to C: The opp. cost of 3as is 1b.
C to B : The opp. cost of 2as is 1b.
B to A: The opp. cost of 1a is 1b.

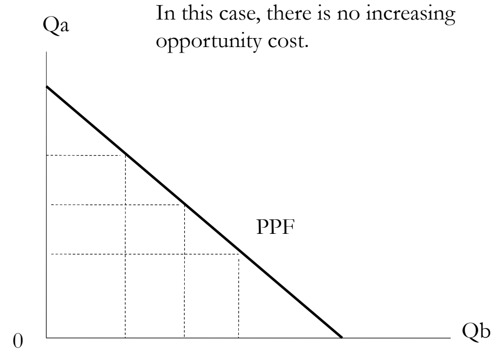


Moving from D to A:

D to C: The opp. cost of 1a is 1/3 b.
C to B : The opp. cost of 1a is 1/2 b.
B to A: The opp. cost of 1a is 1b.



Note : PPF could be linear.
In this case, there is no increasing opportunity cost.

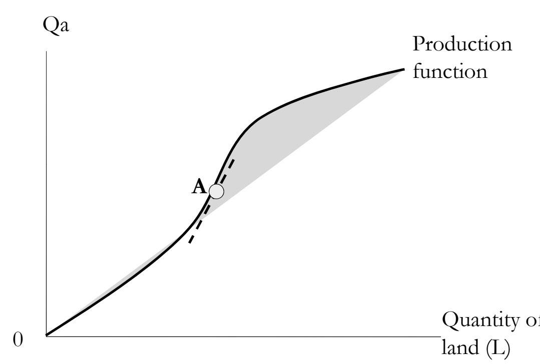


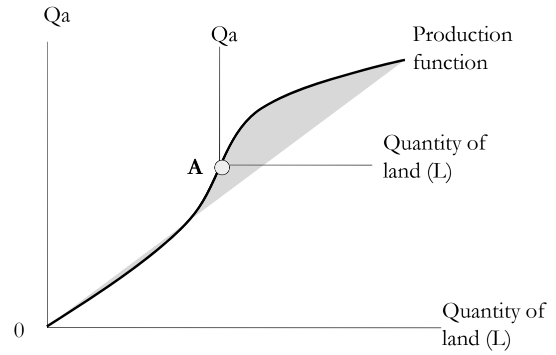
What lies behind "increasing opportunity cost"?

The "law of diminishing returns":

As you increase an input, holding all other inputs fixed, a point (**A**) will be reached beyond which the **increase** in output would diminish, or, alternatively, the increase in productivity would decline.

Def **Productivity**: output per unit of input.



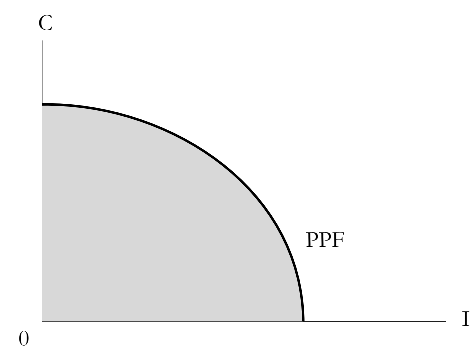


Applying PPF to the economy as a whole

Suppose we divide all goods in society into two parts: **consumption goods (C)** & **investment goods** (I) or **capital goods**.

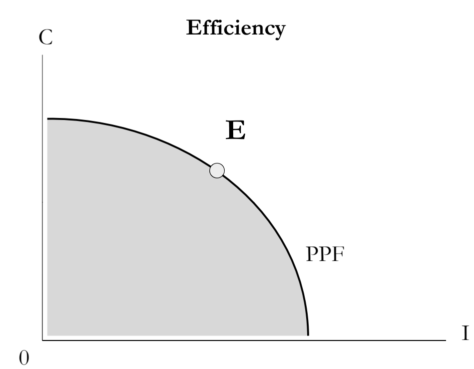
Def. **Investment goods** (**Capital goods**): all those human-made goods that are used to produce other goods.

Def. **Consumption goods**: all other goods, goods used by consumers.



Efficiency

Any point on PPF is efficient:
all resources are fully employed.

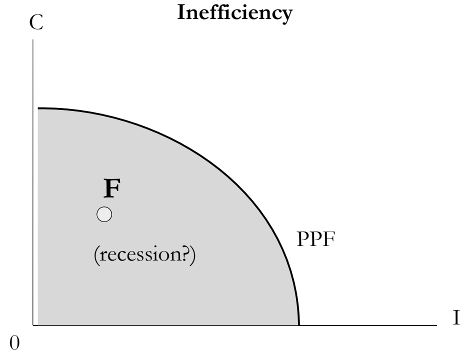


Inefficiency

Any point inside PPF is inefficient:
some resources are unemployed or underemployed.

Def: Underemployed resource:
a resource misallocated, not used in a way that is best suited.

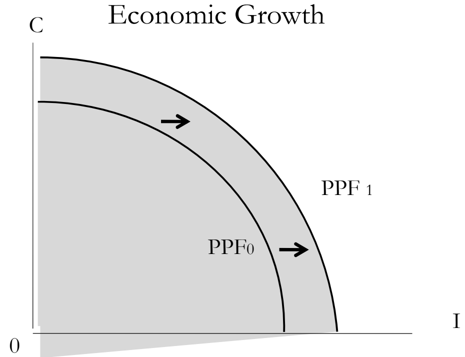
Inefficiency



Economic Growth

A rightward shift in PPF

Economic Growth

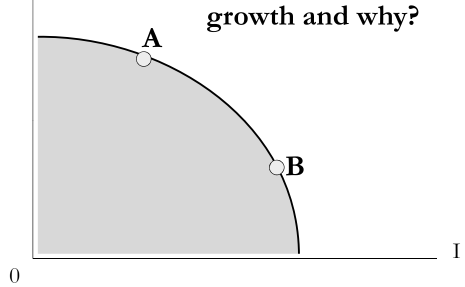


What can cause economic growth?

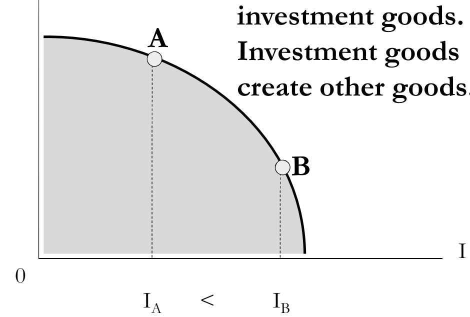
1) Increasing resources
2) Technological improvements

Def. Technology: The way inputs or resources are combined.

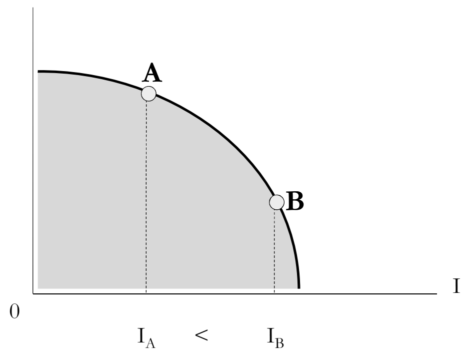
Which point, A or B, will lead to greater growth and why?

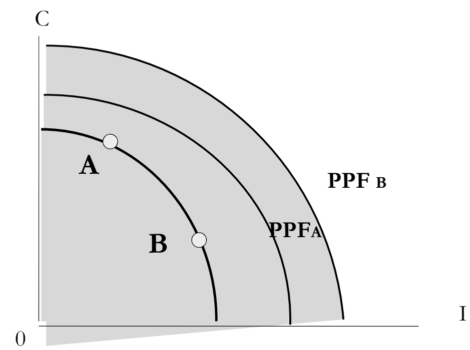


B, because this bundle contains more investment goods. Investment goods create other goods.

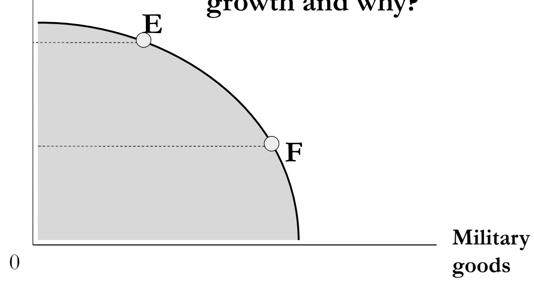


Draw your explanation!

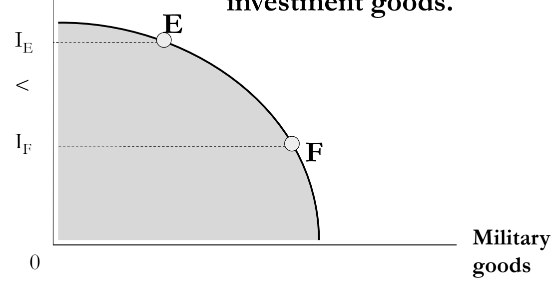




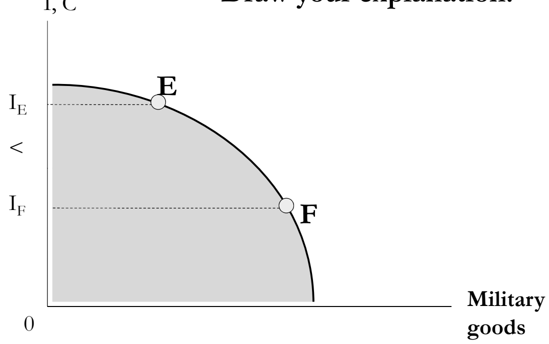
Which point, E or F, will lead to greater growth and why?



E, because this bundle seems to contain more investment goods.



Draw your explanation!



Next stop: Chapter3!