Introduction to Economics 2

Syllabus:
- opportunity cost and its application through production possibility frontiers
- future implications of current choices by individuals, businesses and governments

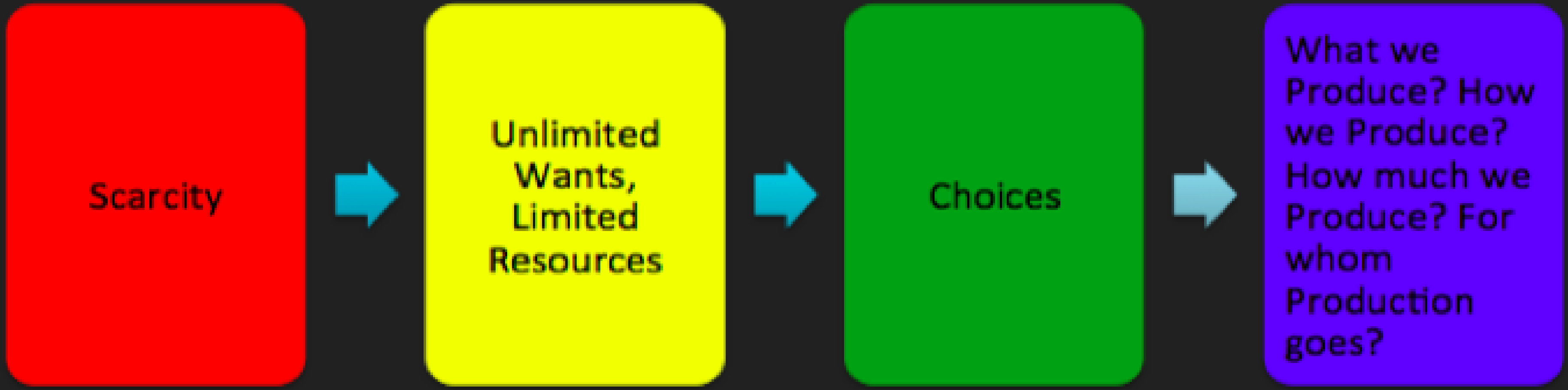
L.Thompson 2019

Economics is about scarcity.

Scarcity leads to choice.

Choice leads to cost.

Unlimited Wants, Limited Resources


Scarcity
Unlimited Wants, Limited Resources
Choices
What we Produce? How we Produce? How much we Produce? For whom Production goes?

1. Wants are **Unlimited**
2. Resources are **scarce**
3. So…we must **choose** which wants we will sacrifice
4. Some wants will be **unsatisfied**

How we answer the 4 Economic Questions determines where we direct resources

Economists use models or tools to examine these choices.

The first Model…

The PPF

(Production Possibility Frontier)

Or PPC

(Production Possibility Curve)

The PPF helps us understand Opportunity Cost.

It does this by showing us the various combinations of production that can take place.

“Graphical representation of all the possible combinations of the production of two goods or services that an economy can produce at any given period of time…”

Production Possibility Frontier

- **Enables greater analysis of the concept of opportunity cost.**
- **G**raphically shows the result of choices**(Opportunity cost)**
- Graphically shows the potential of a varied combination of two goods
- CAN show when an economy is **under –utilised**
- CAN show the Improved performance as a result of different technology etc…


WARNING
ASSUMPTIONS
AHEAD

Economics and Assumptions...

Economic theory is FULL of assumptions

This might seem unrealistic, but they are necessary to explain concepts.

Ceteris Paribus

The assumption that "All other variables are held constant…."

Assumptions on which PPF's are based

1. Only two goods or services can be produced at a time.
2. Resources can be switched between the production of either.
3. Technology is fixed or constant.
4. All of an Economy's resources are being used.

Illustrative example

A country produces 2 goods: Tea and Chocolate

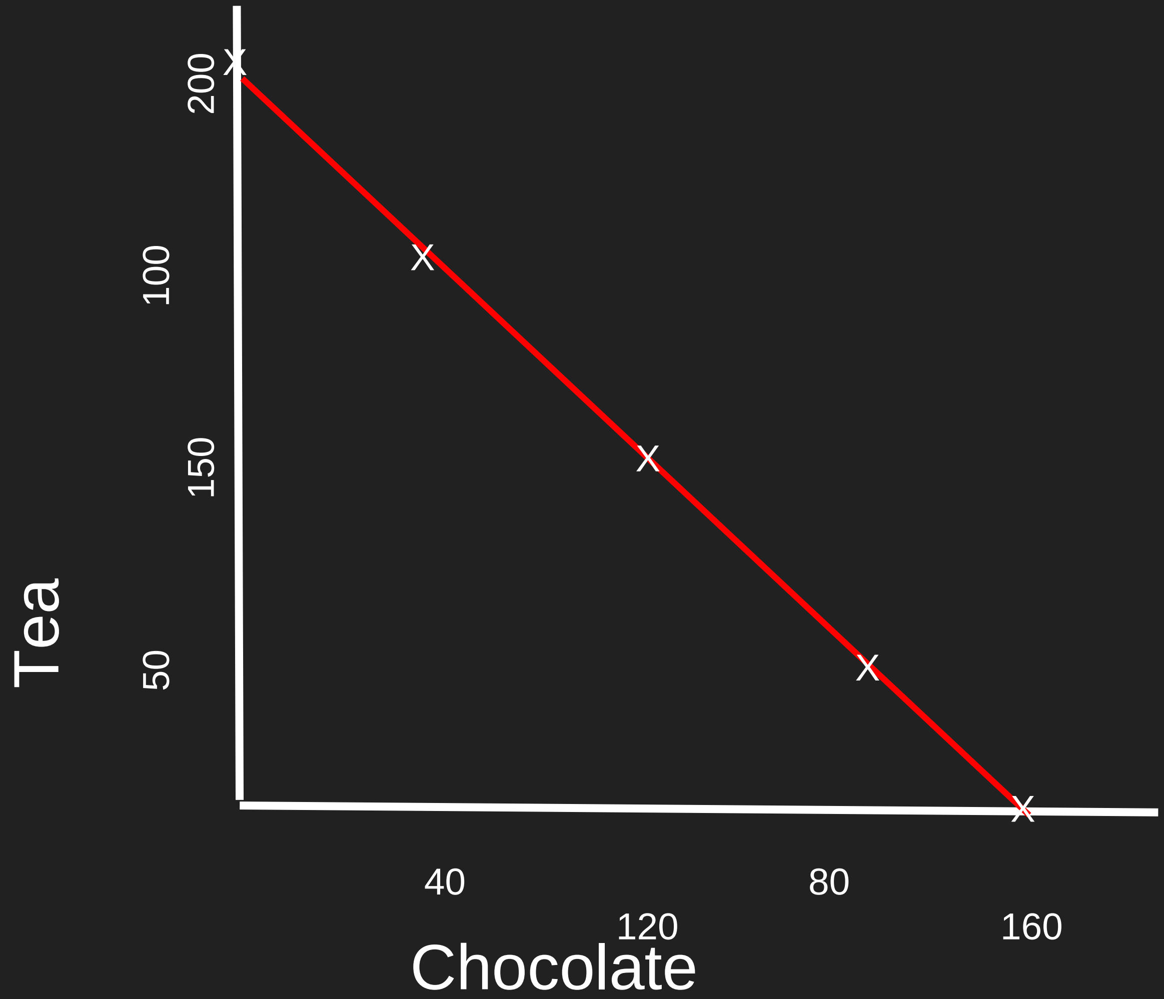
Remember:

- These are the only 2 things it can produce
- Technology is constant
- There are no more resources that can be used
- It is using all of the country’s resources

What are the possible combinations of these goods?

Tea	Chocolate
200 OR	0
150	40
100	80
50	120
0	160

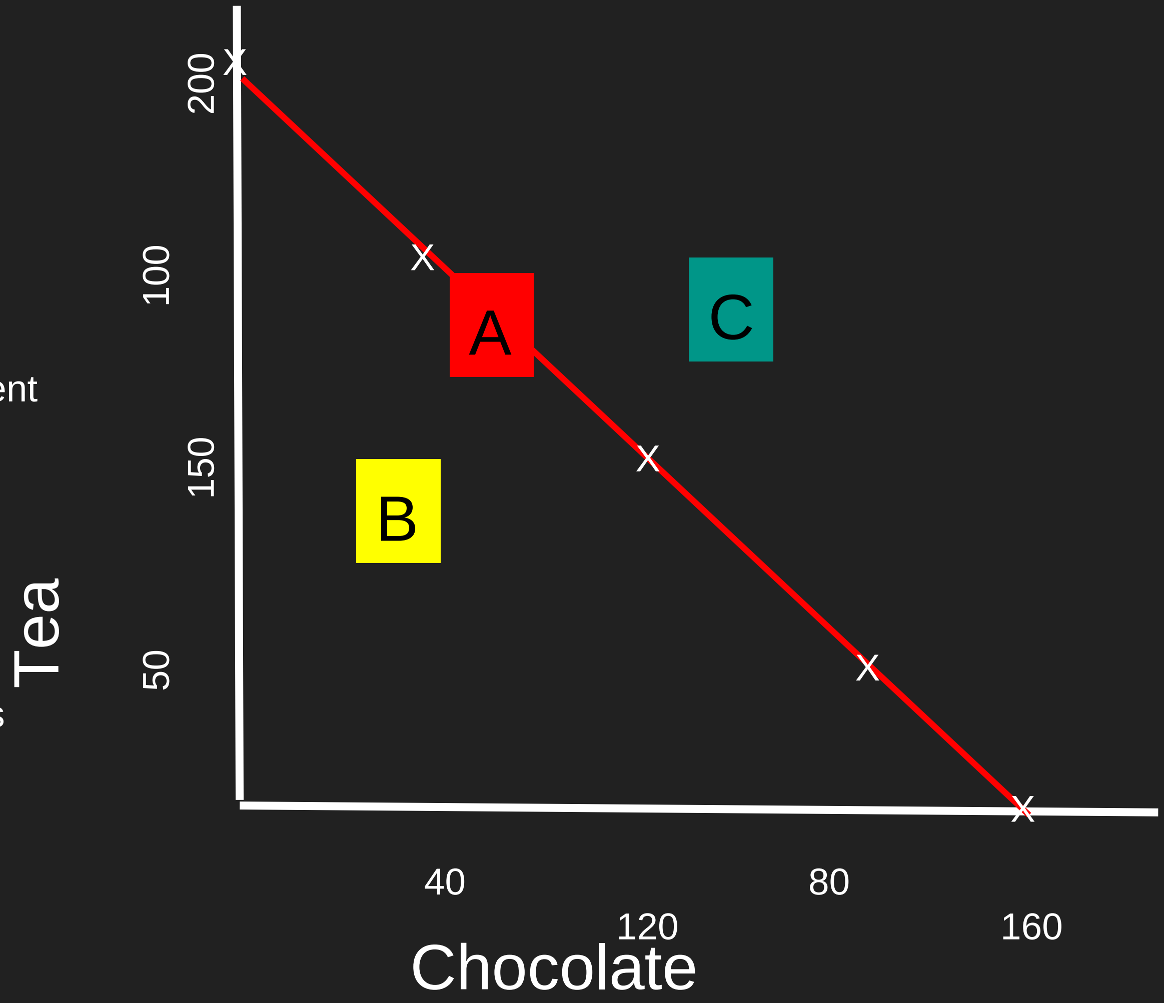
Tea	Chocolate
200	0
150	40
100	80
50	120
0	160



1. Any point ALONG the line suggests a full employment of resources (such as point A)

2. Any point WITHIN the line suggests there is an unemployment of resources (such as point B)

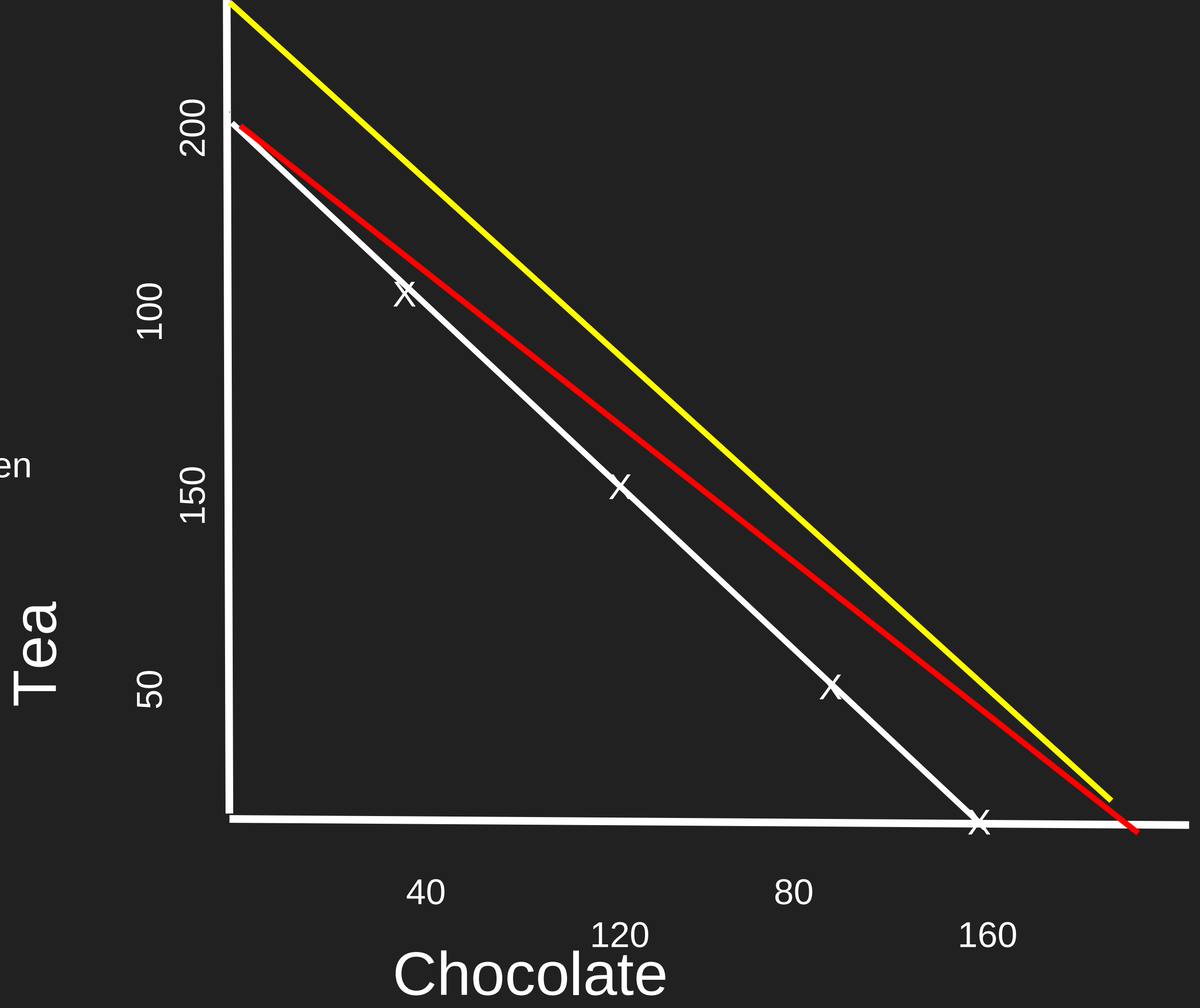
3. Any point BEYOND the line is not achievable with the current level of technology and resources (such as point C)



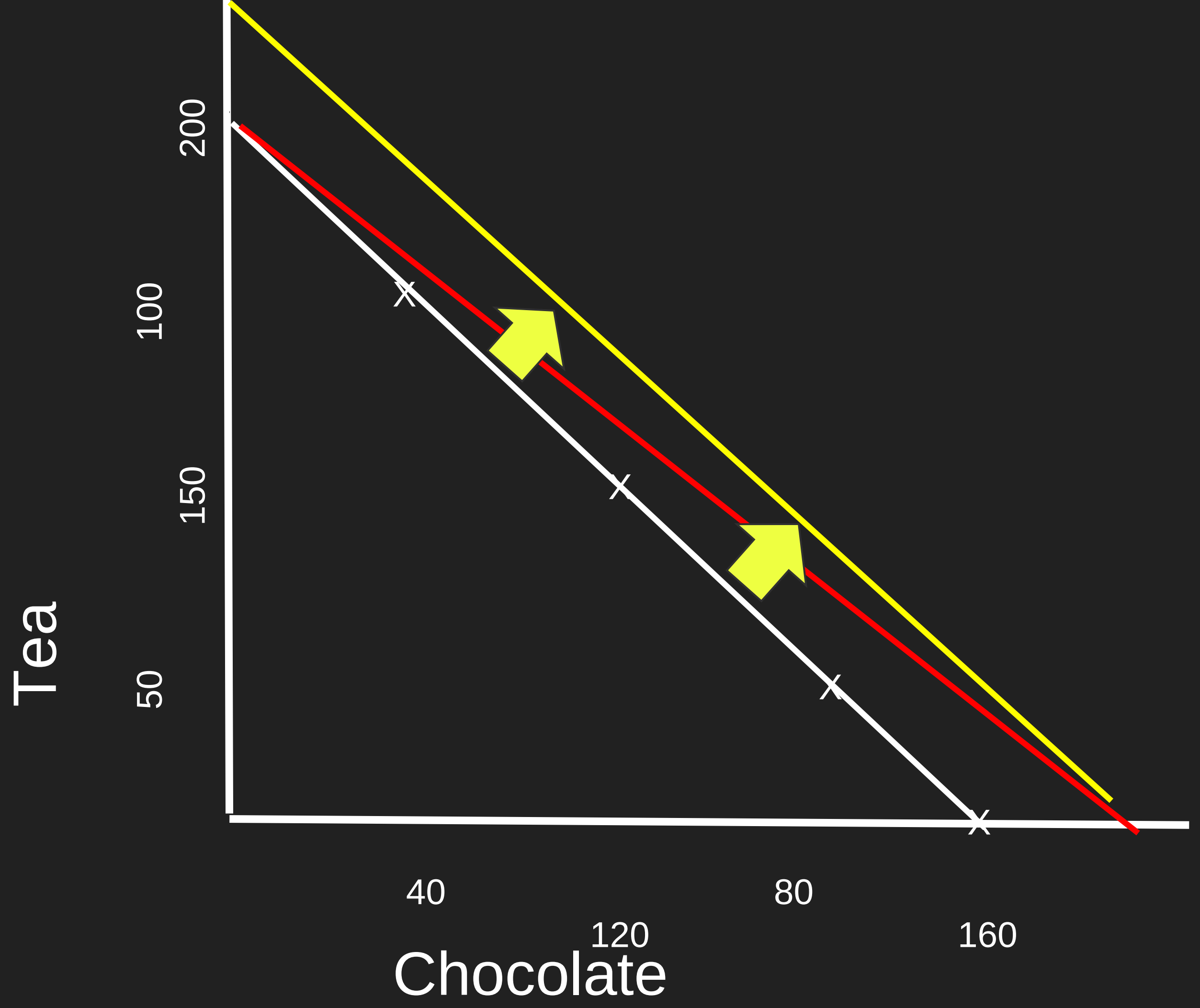
1. If technology improves in the production of BOTH goods, the whole curve will shift to the right

2. If technology improves in the production of just ONE good, then the curve will pivot

3. If the level of resources increases,
the whole curve will shift to the right



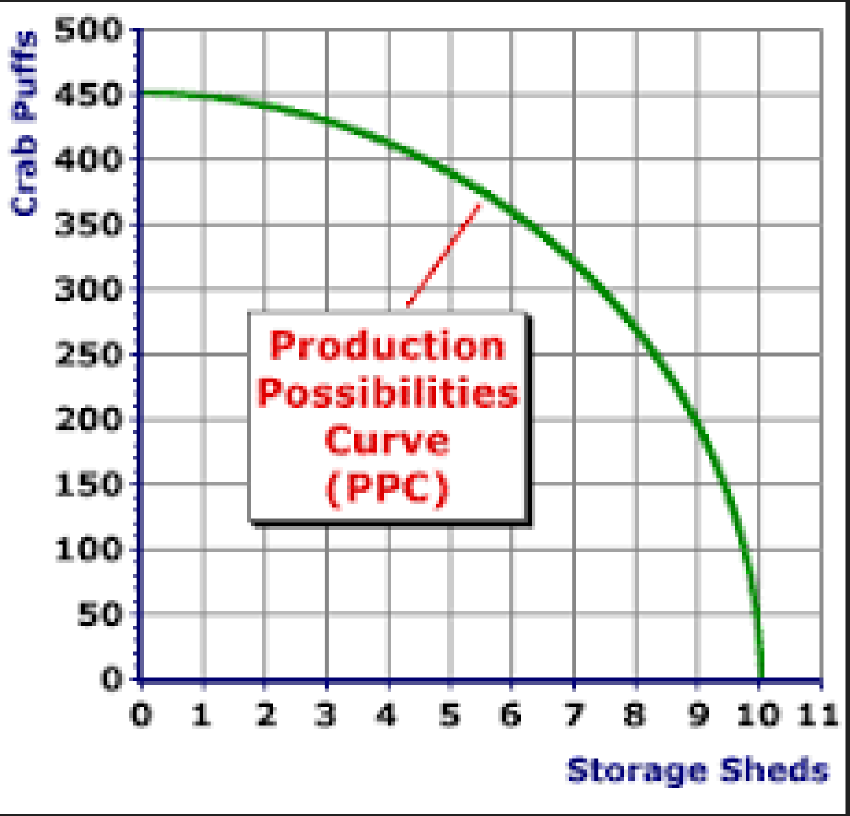
Outward movement of the curve represents **Economic Growth**



The shape of the PPF

So far we have used straight PPF’s…
This means that resources can be interchanged directly, the opportunity cost is constant.

But in reality, the PPF will be a PPC



Why???

Because Opportunity Costs will not always be constant

As we move more and more resources into the production of something, generally, the resources will become less productive…..

We can use the PPC to calculate opportunity cost

This process allows a society to make an informed CHOICE about which goods it should produce

In economic theory, societies should produce those goods which have the LOWEST opportunity cost.

PPC’s and Opportunity Cost

Tea (Tons)	Chocolate (Tons)
200	0
150	40
100	80
50	120
0	160

Our Example

What is the opportunity cost of producing 50 Tea?

Answer: 40 chocolate

Therefore, the opportunity cost of producing 50 Tea is 40 chocolates

BUT, we need to reduce this to a ratio of 1 Tea to 'x' Chocolate

So 50 Tea = 40 Chocolate

1 Tea = 40/50 = 4/5 = 0.8

THEREFORE, the opportunity cost of producing 1 ton of Tea = 0.8 Tons of Chocolate

What is the Opportunity Cost of producing 1 ton Chocolate?

Tea (Tons)	Chocolate (Tons)
200	0
150	40
100	80
50	120
0	160

Do the calculation yourself!

The answer is 1.25

Therefore, the opportunity cost of producing ONE ton Chocolate is 1.25 tons of Tea

So What?

Of what use is this model?

We can now use these numbers to decide which product this society should produce.

The answer will be the product with the LOWEST opportunity cost

Remember:

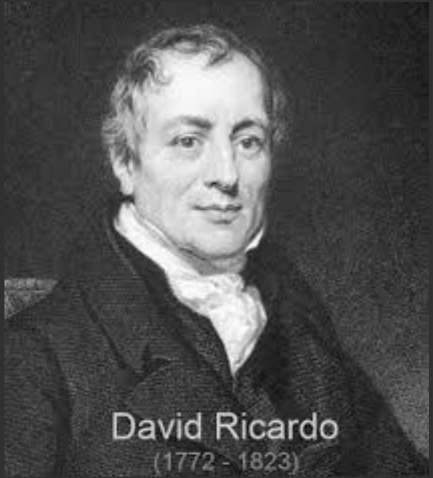
The Opp Cost of producing one Ton of Tea was 0.8 Tons Chocolate

The Opp Cost of producing one Ton Chocolate was 1.25 Tons of Tea

Therefore, this society should produce…Tea!

Riccardo's Theory of Comparative Advantage

Old Dude. Important theory.
We should all produce and trade what we have the lowest opportunity cost in. That way there will be more STUFF for everyone.
(We'll talk more about this later.)



To Do…

1.Outline the assumptions on which production possibility curves are based.

2. Based on the production possibility schedule below, answer the following questions.

Food	0	20	40	80	100
Clothing	150	110	70	40	0

a. What is the opportunity cost of producing the first 20 units of food?

b. What is the opportunity cost of producing the last 20 units of food?

To Do…

3. Draw a production possibility curve based on the previous data and label:

a) a point of production where there is some unemployment of resources
b) a point of production where there is maximum use of resources
c) a point of production that is currently unattainable

The PPF helps us to understand the implications of choosing to produce one thing over another.

Such as...

The choice between consumer and capital goods

Capital Goods

Those items not produced for immediate consumption but will be used for the production of other goods

Consumer Goods

Those items produced for the immediate satisfaction of individual and community needs and wants

An economy that focuses more on the production of capital goods will increase its productive capacity and experience higher economic growth.

The implications of choices

Implications can be looked at for the Individual, Business and Government

Decisions by all these groups are designed to provide the maximum satisfaction from the resources available – this is known as:

allocative efficiency

The Individual

- Which current needs & wants to satisfy
- How much of present income to save for future consumption, eg for a house or retirement
- Australians are poor savers.

Government

- How much to collect in taxes & revenue
- What collective wants to satisfy with these funds
- Government choices will affect both business and Individuals

Factors influencing choices

Individuals

- Income levels
- Spending Vs Saving
- Age
- Work and retirement
- Work-life balance ....leisure
- Expectations – future plans
- Family circumstances
- Personality and risk profile
- Political influences

Business

- Resource use and cost efficiency
- Pricing and market competition
- Production alternatives (capital Vs labour)
- Ethical / moral issues
- Environmental issues
- Industrial relations

Government

- Affect on individuals and businesses
- Taxes to discourage consumption
- Production bans and penalties
- Subsidies and incentives to encourage some activities
- Direct provision of goods and services

More saving will raise future living standards, while more current spending will satisfy immediate wants/needs

To Do…

1. Define the Economic problem.
2. Explain how individuals, business, and the Government are all faced with the economic problem.
3. Identify the factors that influence how each group seeks to address this problem.