

Chapter 2: Model Building and Gains from Trade



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The Scientific Method

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Review Question 1: Positive or Normative?

1. Moonlight is romantic.
2. Rich people pay less taxes than poor people.
3. Tax revenues sometimes fall when tax rates rise.
4. Australians donate more to charity than Europeans.
5. Get a job before you complain about how other people spend.
6. Government intervention in markets is bad.
7. Economics is the best class to take.
8. Sociology majors earn more on average than marketing majors.

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Modeling

- Models are simplistic, but they can emphasize key concepts.
- Change only one variable at a time - , or holding other things constant.
- Judge models by how well they work in real life.
- Endogenous and exogenous factors
- Watch out for faulty assumptions!

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Opportunity Cost Example

- Consider the true costs of traveling from Melbourne to Sydney by bus or plane. Suppose:
 - The bus ticket costs: and takes hours round trip
 - The plane costs: and takes hours round trip
- You value your travel time at an hour.
- Should you take the bus or the plane?

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Answer

- Learn to value time.
- Compare
- Cost savings:
- Time savings: hours – hours = hours
- Time valued at /hour.
- Giving up in value to save

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Review Question 2

- Now suppose that you do not know the value of the person's time. Can you find the \$/hour that makes bus and plane travel equally attractive?
- Given:
 - The bus ticket costs: and takes hours round trip
 - The plane costs: and takes hours round trip

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Review Question Answer

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More Practice!

What is your opportunity cost of attending the Drake concert?

- A. \$85
- B. \$95
- C. \$0
- D. \$180

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Answer

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Production Possibilities Frontier

- Production Possibilities Frontier
 - Combinations of outputs that a society can produce if all of its resources are being used
- Assumptions of this model

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Production Possibilities Frontier

Quantity of
pizzas produced

Quantity of
wings produced

Law of Increasing Relative Cost

- Not all resources are perfectly adaptable for producing
- PPF will have a slope.
- Increasing of production as you produce more of that good.
- Produce more of , give up amounts of

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PPF & Increasing Opportunity Cost

Quantity of
pizzas produced

D → C
Opp. Cost =

B → A
Opp. Cost =

Quantity of
wings produced

Economic Growth in *Limitless*

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Shift in the PPF (Economic Growth)

Quantity of
pizzas produced

Quantity of
wings produced

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Specialisation and Trade

- Specialisation and trade also creates
- Assume now
 - Two goods
 - Two people with different abilities in the

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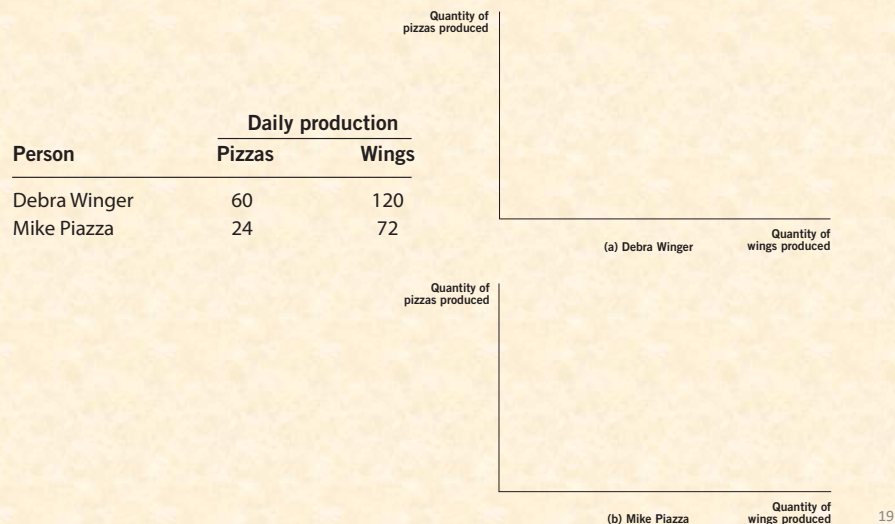
Specialisation and Trade

<u>Person</u>	 Daily Production 	
	<u>Pizzas</u>	<u>Wings</u>
Debra Winger	60	120
Mike Piazza	24	72

- Absolute advantage:
 - Who is
 - Who has the absolute advantage in

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Specialisation and Trade



Autarky (no trade)

Person	Good	Without Trade	
		Production	Consumption
Debra	Pizza	40	40
	Wings	40	40
Mike	Pizza	18	18
	Wings	18	18

- Without specialization and trade
 - Total production is
 - and each have to produce their own
 - Each person can only consume what they

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Specialisation and Trade

Person	Good	With Trade		Gains from Trade
		Production	Consumption	
Debra	Pizza			
	Wings			
Mike	Pizza			
	Wings			

- Production of both goods
- Pizza: from ; wings
- produces & gives to
- produces & gives to
- Each person consumes with trade

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Gains from Trade

(a) Debra Winger

(b) Mike Piazza

Opportunity Cost

Daily Production		
<u>Person</u>	<u>Pizzas</u>	<u>Wings</u>
Debra Winger	60	120
Mike Piazza	24	72

Opportunity Cost		
<u>Person</u>	<u>1 Pizza</u>	<u>1 Wing</u>
Debra Winger		
Mike Piazza		

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Opportunity Cost

Opportunity Cost		
<u>Person</u>	<u>1 Pizza</u>	<u>1 Wing</u>
Debra Winger	2 wings (120 ÷ 60)	1/2 pizzas (60 ÷ 120)
Mike Piazza	3 wings (72 ÷ 24)	1/3 pizzas (24 ÷ 72)

- Comparative advantage
 - : comparative advantage in production.
 - She gives up
 - : comparative advantage in production.
 - He gives up

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Comparative Advantage

- Comparative advantage:
 - What you do best (lower)
 - Gain by in producing what you do & exchanging (trading) this for another good.

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Cast Away – Life Without Exchange!

- Imagine a world in which there was no specialization and trade.
 - Your consumption = your production

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Production Possibilities Frontier: Consumption versus Investment in *A Knight's Tale*

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Capital Goods and Growth – A Knight's Tale

(a)

Quantity of
capital goods
producedQuantity of
capital goods
producedQuantity of
consumer goods
producedQuantity of
consumer goods
produced

Short-run PPF

Long-run PPF

Consumer goods:**Capital goods:**

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Capital Goods and Growth

(b)

Quantity of
capital goods
producedQuantity of
capital goods
producedQuantity of
consumer goods
producedQuantity of
consumer goods
produced

Short-run PPF

Long-run PPF

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Who should do the washing and cooking?

Here are the production possibilities for:

Kanye		Kim	
Washing	Cooking	Washing	Cooking
0	16	0	24
1	12	3	18
2	8	6	12
3	4	9	6
4	0	12	0

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Answer

- Work out the opportunity cost for each activity.
- **Washing:**
- Kanye:
- Kim:
- **Cooking:**
- Kanye:
- Kim:

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