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Fall 2009

Lecture notes at www.sfu.ca/~friesen

# BUEC 280 INTRODUCTION TO LABOUR ECONOMICS

# About this course

**Goal:**

To provide you with an overview of Canadian labour market policies and institutions

To develop your ability to think critically about labour market policy

# About this course

**Grading:**

| | | |
|---|---|---|
| Assignments: | 20% | (4, each worth 5%) |
| Participation: | 10% | (tutorials) |
| Midterm: | 30% | (October 20, one hour) |
| Final: | 40% | |

# About this course

**Readings and lectures:**

Assigned weekly readings from both texts are required

Ehrenberg, Smith and Chaykowski should be on reserve

Lectures will incorporate material from readings with additional explanation and examples

Lecture notes online at www.sfu.ca/~friesen by Monday evening (the day before class)

# About this course

**Tutorials:**

Assigned weekly tutorial questions

Participation grade depends on attendance at and participation in discussion of assigned questions

Tutorial questions posted online at www.sfu.ca/~friesen by Wednesday evening for following week

# How do economists think?

- We try to think like scientists
  - Why do I say "try"?
    - Economics is a social science
- Scientific reasoning has 3 key features:
  1. **Observing and collecting** facts
  2. **Explaining** facts
  3. **Predicting** future events

# So what are facts anyway?

- Facts are things that are demonstrably and repeatedly true
- Example: "The unemployment rate is lower today than it was in 1994"
  - Given *some* measure of unemployment, this is true
  - What  is the definition of the unemployment rate?
  - Does it correspond to what we want to know?

# How do we explain facts?

- We use **theory** (hypotheses)
- Theories tell "stories" about the way things are
  - e.g. the unemployment rate is lower because productivity is higher than it was in 1994
- Theories are not immutable
  - They can always be refuted
- The scientific method tells us we need to discard theories that are proven wrong

# Economics relies heavily on theory

- Theories arise from observation
- In economics, they are based on mathematical models of behaviour
- Theory is **very** important. Economists share a bunch of assumptions that we all use all of the time:
  - Individualism: individuals make decisions
  - Rationality: individuals use calculations to make decisions (they optimize)

# How do we make predictions?

- Theory might tell us something like:
  *if productivity rises, unemployment will fall*
  (this is a prediction)
- We test theory by checking whether its predictions are true
  - e.g. are there periods when productivity rises, but so does unemployment?
- Predictions are also useful for designing government policy, making decisions, etc.

# What's different about the social sciences?

- Social science studies human behaviour
- Not the same as studying particles or bacteria:
  - Hard to conduct experiments
    - e.g. can't "experiment" with tax cuts because they have real consequences
    - Hard to control for outside influences
  - Sometimes difficult to avoid value judgments

# Positive vs. normative statements

- Economists strive to be value-free
- Economics has both positive and normative features
- Positive statements describe how things *are*
- Normative statements describe how things *should be*
- Positive: "*competitive markets result in minimal deadweight loss*"
- Normative: "*competitive markets are great, so we should have them*"

# The Pareto criterion

- How do we evaluate two alternatives without using value judgments?
- Consider two alternatives, A and B
- We say A is **Pareto preferred** if:
  - everyone is *at least as well off* under A as they are under B, and at least one person is *better off* under A
- Pareto criterion: choose Pareto optimal alternatives – no one can be made better off without making someone worse off (efficiency)

# Example of the Pareto criterion

| | Alternative | | |
|---|---|---|---|
| **Utility** | **A** | **B** | **C** |
| Me | 10 | 11 | 9 |
| You | 10 | 10 | 13 |

- B Pareto dominates A (I'm better off, you're no worse off)
- We cannot Pareto rank C vs. A or B (even though the "pie is bigger")

# More about the Pareto criterion

- *Raising everyone's income by $1 pareto dominates the status quo*
  - Positive or normative?
- *We should raise everyone's income by $1*
  - Positive or normative?
- Lots of things cannot be pareto ranked
  - e.g. each of you gives me $1

# So what about labour economics?

- Labour economics:
  - is the application of economic theory and methods to the study of labour markets
  - sits at the intersection of microeconomics and macroeconomics
  - sits at the intersection of theoretical and empirical work
- We have great data on labour market activity, so it's a fertile ground to test economic theory.

# Review of Economic Theory

We will rely primarily on supply and demand as our basic tools in this course.

Begin by reviewing some basic ideas.

# What is a market?

- A concept, rather than a physical entity
- A market is:
  - *the interaction of buyers and sellers, in which a price is determined and a product or service is exchanged*
- Can be local (farmer's market, gas station attendants), national (new cars, airline pilots), or international (natural resources, finance)
- Has two "sides": supply and demand

# What's "the" labour market?

- The market where **labour services** are exchanged
- As we'll see, it's really lots of specialized markets (gas station attendants vs. airline pilots)
- The price of labour services is called the **wage rate**
- Quantity can be measured in various units (hours, weeks, full-time workers)

# The demand side of a market for a product or service

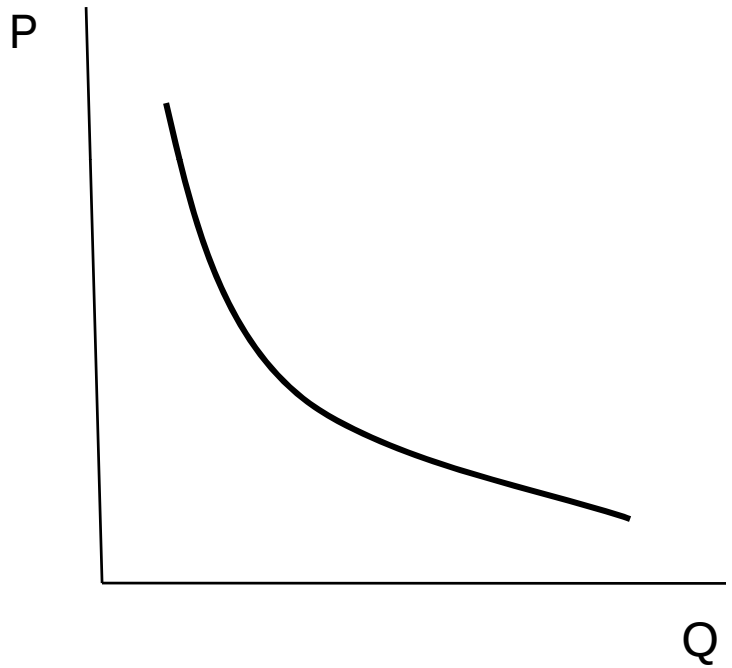
- The potential buyers of a good/service
- **Demand** is how much the potential buyers want to purchase at a given price
- **Assumptions:**
  - homogeneous, identical, anonymous **good**
  - Since good is homogeneous, only one **price**
  - Can add up the demand of all potential buyers to get **market demand**

# Market demand depends on …

- Own price
- Prices of other goods (complements & substitutes)
- Income or budget
- Expectations over future prices and income
- Tastes (preferences)
- Number of buyers

# The demand curve

- Measures the **quantity demanded** as a function of **own price**
- Downward sloping
  - Income effect:
    as price increases,
    → feel poorer
    → demand less
  - Substitution effect:
    as price increases,
    → demand cheaper substitutes instead



# The supply side of the market

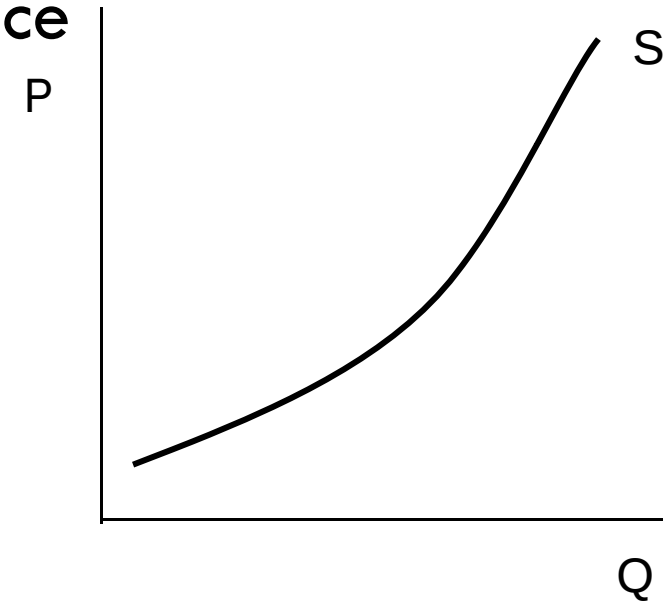
- The potential sellers of a good/service
- **Supply** is how much the potential sellers are willing to sell at a given price
- **Same Assumptions:**
  - homogeneous, identical, anonymous **good**
  - Since good is homogeneous, only one **price**
  - Can add up the supply of all potential sellers to get **market supply**

# Market supply depends on …

- Own price
- Production costs (or preferences for alternatives)
- Prices of other goods (complements and substitutes)
- Expectations over future prices and costs
- Technology
- Number of suppliers

# The supply curve

- Measures how much all the potential sellers are willing to sell at a given price
- Upward sloping
  - As price increases,
    → willing to increase production (costly)
    → supply more

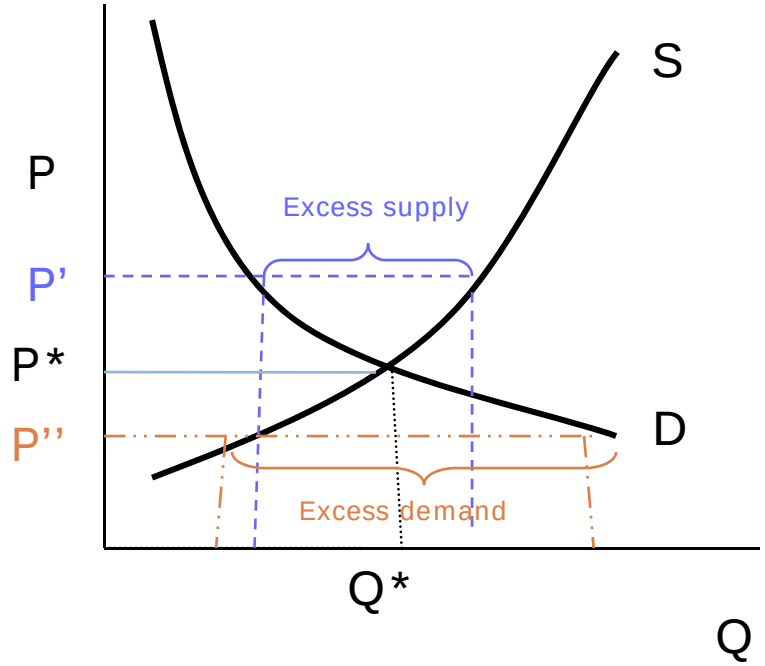


# The short run and long run

- In the short run, at least one factor of production is **fixed** and cannot be changed
- In the log run, all factors of production can be changed
- Example: gasoline
  - In short run, supply and demand may be quite inelastic (we already have gas-guzzler cars, oil wells are drilled).
  - In long run, we can switch to hybrid cars & producers can drill new wells.

# Market equilibrium

- Intersection of market supply and demand



# How is the labour market different?

- In most product markets that **you** participate in, you are the buyer/demander.
- In the labour market, **you** are the seller/supplier of labour services.
- Firms are the demanders in the labour market – demand for labour is *derived* from the production decision

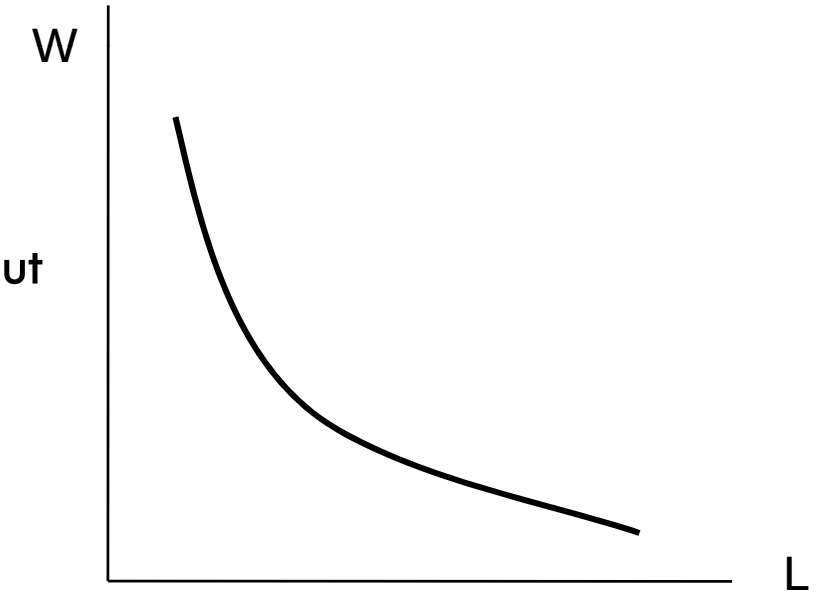
# What else is different?

- Labour services are inseparable from people (buyer doesn't own it)
- Highly regulated (minimum wages, overtime laws)
- People care about who they work with and for (gasoline doesn't care)
- Fairness matters
- Incentives ("price structure")
- People care about working conditions
- Employment relationships last a long time
- Workers and jobs are *very* diverse
- Information is incomplete (who/where are the good jobs/workers?)

⇨**"The" labour market is really many specialized markets**

# The labour demand curve

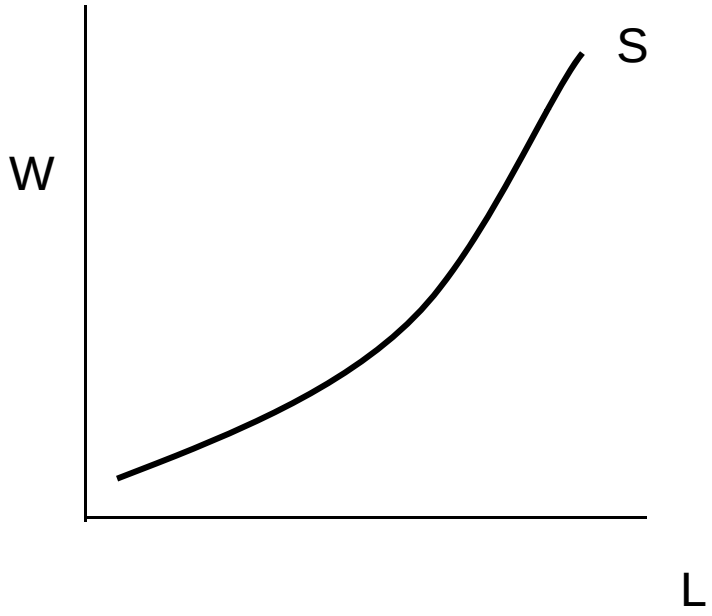
- Measures the **quantity of labour services demanded** as a function of **the price of labour (w)**
- Downward sloping
  - Scale effect:
    as wage increases,
    → firms produce less output
    → demand less labour
  - Substitution effect:
    as wage increases,
    → firms use other inputs
    instead (e.g. more capital) and less labour



# The labour supply curve

- Measures how much labour all the potential sellers are willing to provide at a given price
- Upward sloping ??
  - Substitution effect: as wage increases, people want to spend more time working and less time doing other things

  Income effect: as wage increases, people buy more leisure and work less



# Labour market equilibrium

- Intersection of labour supply and demand