

Topic 6.1 Unemployment Measurement

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Economics 471

Unemployment

- ◆ In general, those not currently employed but who indicate that they want to work at the prevailing wages and working conditions.
- ◆ The most common measure is obtained from the monthly Labour Force Survey (LFS)
- ◆ In this survey people are asked about their labour market activities in the week prior to the survey
- ◆
- ◆ The unemployed also includes those who were on temporary layoff or had a job starting within 4 weeks
- ◆

Unemployment

Why is there unemployment?

- ◆ The Neoclassical model suggests that prices should adjust to reach an equilibrium in which all those wishing to work find employment.
- ◆ To see why some unemployment might be expected even with our simple supply and demand model let's look at the different types of unemployment.
- ◆ However, we will need more than this to explain the existence and persistence of unemployment.
- ◆ We will examine some of the explanations proposed to explain persistent unemployment as well.

Types of Unemployment:

(i) Frictional Unemployment:

- ◆ Unemployment associated with normal turnover in the labour force.
- ◆ Thus, unemployment would prevail even in a well functioning labour market.
- ◆ New jobs open up, others disappear, workers return to school.

Frictional Unemployment

- Often associated with job search which takes time.
How much time? → "Optimal Search"
- Job vacancies and job seekers exist because of imperfect information.

Costs:

-
-

Benefits:

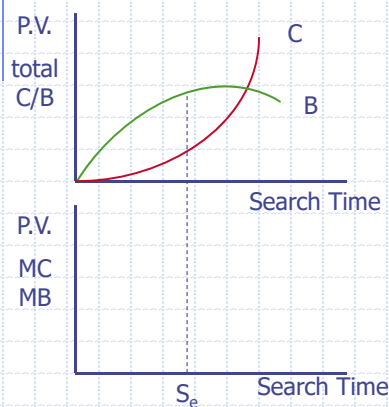
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Optimal Search

- Assume that individuals choose search activities to maximize expected utility



- Initially MC of search is low
- More costly methods will be necessary as search continues
- MB likely declines with search time
- Equilibrium search time = S_e
- "expected" amount of search

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Frictional Unemployment

It may not be beneficial to reduce frictional unemployment.



Temporary layoffs due to

- ◆ changes in product demand
 - ◆ weather
 - ◆ work stoppages
- are part of frictional unemployment

Types of Unemployment:

(ii) Structural Unemployment:

- ◆ Results when the skills or location of the unemployed are not matched with the characteristics of job vacancies.
- ◆
- ◆ Like with frictional unemployment, unemployed workers and job vacancies co-exist.

Structural Unemployment

Here, successful matching requires more than the acquisition of information.



Solutions:



Structural Unemployment

Whether frictional or structural depends on whether changes in demand are permanent or temporary.

Permanent →

Temporary →

◆ Not always clear which is the case.

Types of Unemployment:

(iii) Demand Deficient Unemployment:

- ◆ When there is insufficient aggregate demand in the economy to generate sufficient job vacancies.
- ◆ Doesn't arise because of a lack of the correct skills or by being in the wrong labor market or because of search.

Supply =

Demand =

Demand Deficient Unemployment

- ◆ Usually associated with the business cycle "cyclical unemployment".
- ◆ Could be chronic as opposed to short-term.

Types of Unemployment:

(iv) Seasonal Unemployment:

- ◆ Associated with insufficient demand in a particular season.
- ◆ Different from demand deficient unemployment in that it is not a shortage of aggregate demand but rather a shortage in a particular season.
- ◆ Usually predictable over the year and specific to particular industries.

e.g. Unemployment increases in the winter in:

- ◆
- ◆
- ◆

Seasonal Unemployment

Labour supply may also increase

- ◆ Seasonal unemployment is analogous to temporary layoffs in several ways – often included in frictional unemployment.

Seasonally adjusted unemployment rate:

- ◆
- ◆

Types of Unemployment:

(v) Involuntary Unemployment:

- ◆ It is important to distinguish between voluntary and involuntary unemployment.

Involuntary unemployed:

Voluntary unemployed:

Unemployment in Canada

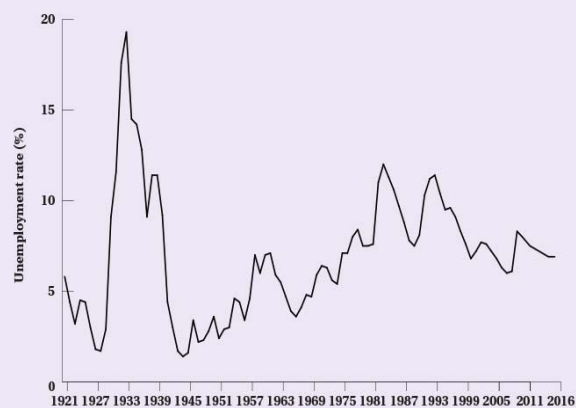


Figure 16.1 Unemployment in Canada, 1921–2015

Unemployment in Canada

- ◆ Canada's unemployment rate fluctuated a great deal during this period
- ◆ Typically because of cyclical fluctuations
- ◆ Great depression began in 1929 and the unemployment rate soared up to almost 20%
- ◆
- ◆
- ◆

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Unemployment in Canada

- ◆ From the 1960's on unemployment rates have trended upward
- ◆
- ◆ This trend broke somewhat in recent years as unemployment rates fell to levels not seen in almost 30 years

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Hidden Unemployment (marginal labor force attachment)

- ◆ Refers to situations in which individuals may be without work yet desire to work but are not classified as unemployed



Examples:

1. "discouraged worker" phenomenon:

- ◆ Individual would work at the going wage but does not seek work because he/she believes there is no work available



Examples of Hidden Unemployment

2. Those waiting for recall after 6 months of layoff

3. The underemployed

- ◆ Those working fewer hours than they desire

- ◆ There is evidence of significant hidden unemployment

- ◆ Some labour force surveys identify those who want to work, are available but not seeking



Should they be “unemployed”?

Yes:

- ◆
- ◆
- ◆

No:

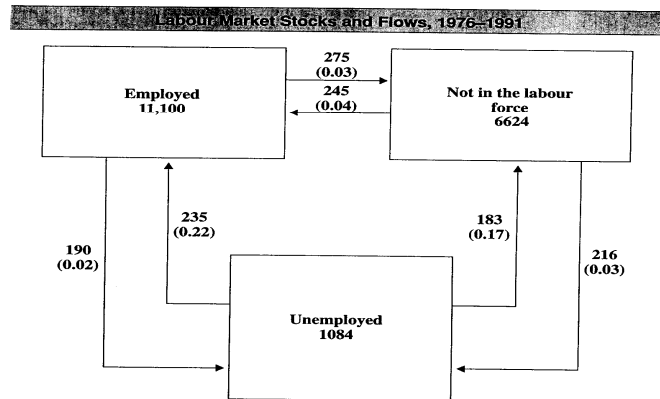
- ◆
- ◆

Note: the number of discouraged workers increases during recessions

Labour Force Dynamics

- ◆ The measures we have discussed so far provide a snapshot at a point in time
i.e. an estimate of the stock of persons in each labour force state
- ◆ However, even if the stocks remain constant it could be a mistake to say that the labor force hasn't changed
- ◆ Figure 17.2 gives the monthly flows between three labor force states: employed, unemployed and the non market sector between 1976 and 1991

Labour Force Dynamics



Notes:

1. All numbers are in thousands.

2. All flows and stocks are averages of monthly values from 1976 to 1991.

Source: Stephen R.G. Jones, "Cyclical and seasonal properties of Canadian gross flows of labour." This article first appeared in Vol. XIX:1 March 1993 of *Canadian Public Policy—Analyse de Politiques*. By permission.

Labour Force Dynamics



Even though the number of employed changes only marginally from month to month, many of the unemployed in one month are no longer unemployed the next month

Incidence and Duration

- ◆ It is important to understand how stocks and flows influence unemployment

Incidence of unemployment:



Duration of unemployment:



i.e. Incidence measures the probability of becoming unemployed and duration the length of time the individual can be expected to remain unemployed

Incidence and Duration

- ◆ The unemployment rate is affected by both incidence and duration
- ◆ In general, we find that those with the highest incidence and low duration of unemployment have the highest unemployment rates

e.g. high youth unemployment



low unemployment among older workers

