ECC1100 Semester 2, 2019 notes

Contents

ECC1100 Week 1

Macroeconomics: The Bird's-Eye View Of The Economy

The Major Macroeconomic Issues

Productivity

- Average labour productivity – output per employed worker, or per hour of work

Recessions and expansions

- Recessions (contractions) – slowdowns in economic growth
- Depressions – particularly severe economic slowdowns
- During recessions, economic opportunities decline: jobs are harder to find, people with jobs are less likely to get wage increases, profits are lower and more companies go out of business. Recessions are particularly hard on economically disadv people, who are most likely to be thrown out of work and have the hardest time finding new jobs.
- Expansions – periods of rapid economic growth
- Booms – particularly strong expansions
- During an expansion, jobs are easier to find, more people get raises and promotions, and most businesses thrive.

Types Of Macroeconomic Policy

- Monetary policy – the determination of the nation's money supply
- Central bank – a gov institution which controls monetary policy
- Fiscal policy – decisions that determine the gov's budget, including the amount and composition of gov expenditures and gov revenues
- When govs spend more than they collect in taxes, the gov runs a deficit, and vice versa.
- Structural policy – gov policies aimed at changing the underlying structure, or institutions of the nation's economy

Aggregation

- The sum of individual economic variables to obtain economy-wide totals

Measuring Economic Activity: Gross Domestic Product And Unemployment

- GDP – the market value of the final goods and services produced in a country during a given period

Market value

- Goods and services are counted at their market value = market price x quantity. Public goods and services are estimated because they don't have a market price.

Final goods and services

- GDP only includes final goods and services. Intermediate goods are not counted in GDP.
- Final goods and services – consumed by the consumer
- Intermediate goods – used in the prod of the final good
- Value-added method for GDP – summing up the value added by each firm in the prod process

Methods For Measuring GDP

- All 3 approaches to calcing GDP should give the same answer:
  - Production approach
  - Income approach
  - Expenditure approach
- All current prod by firms must be either:
  - Bought by households, other firms, gov and foreigners, or
  - Left unsold as inventories bought by the firm that makes it
- GDP = C + I + G + NX
- Consumption expenditure – spending by households as private individuals for goods and services
  - Durables – long-lived consumer goods e.g. cars, furniture (excluding housing)
  - Non-durables – shorter-lived goods e.g. food, clothing
- Investment – spending by firms/employers on final goods and services, residential, and inventories
  - Business fixed investment – the purchase by firms of new capital goods e.g. machinery, factories
  - Residential investment – the construction of new homes and apartment buildings
  - Inventory investment – the addition of unsold goods to company inventories
- Gov expenditure – spending by the gov excluding transfer payments (e.g. welfare) and interest paid
- Net exports = exports – imports

GDP and the incomes of capital and labour

- When a good or service is sold, the revenues from the sale are distributed to the workers and owners of the capital involved in the prod.
- GDP = labour income + capital income from the prod
- Labour income – wages, salaries and self-employed income
- Capital income – payments to physical capital, intangible capital and profits

- Two-sector model – a simplified model of the economy in which there are only households and firms
    - The first set of flows relates to prod. Households send a flow of factors of prod to firms, either labour or capital services.
    - Firms use these factors of output to produce goods and services which are sold to households. The revenues produced by these sales enables firms to pay for their use of labour and capital services. These payments represent a flow of income to households.

Nominal Vs Real GDP

- Nominal GDP – when you multiply current products by current prices
- Real GDP – when you multiply current products by base year prices

Real GDP Is Not The Same As Economic Wellbeing

- Leisure time
- Non-market economic activities
- Enviro quality and resource depletion
- Quality of life
- Poverty and economic inequality
- GDP is related to economic wellbeing
- Availability of goods and services
- Life expectancy

ECC1100 Week 2

Measuring The Price Level And Inflation

The Consumer Price Index

- A weighted average of the % change in the prices of a basket of goods purchased by households
- CPI $= \frac{\text{Cost of base-year consumption basket of goods and services in current year}}{\text{Cost of base-year consumption basket of goods and services in base year}}$. This will always be 100 in the base year.

Inflation

- Rate of inflation – the annual % rate of change in the average price level, as measured by the CPI
- Relative price – the price of one good relative to other goods

Adjusting for inflation

- Deflating – using the CPI to convert quantities measured at current $ value into real terms
- Indexing – using the CPI to convert real quantities into current $ terms
- Real Q – a variable measured in physical terms
- Nominal Q – a variable measured in current value terms
- Real = nominal – inflation rate

Does The CPI Measure 'True' Inflation?

- Quality adjustment bias – causes measured inflation to overstate changes in the cost of living caused by the failure to adjust adequately for improvements in the quality of goods and services
- Substitution bias – causes measured inflation to overstate changes in the cost of living caused by the failure to take into account people's substitution towards relatively less expensive goods and services

The True Costs Of Inflation

Shoe-leather costs

- When faced with a loss in purchasing power, people typically leave as much money as possible in bank accounts where the interest paid acts to insulate money's purchasing power from the effects of inflation.
- However, this makes it more likely that individuals will visit banks or ATMs more frequently in order to withdraw the cash needed to complete transactions. The inconvenience associated with this is a real cost of inflation.
- In recent times, this could include database storage and running costs, and additional employees required to manage these customers.

Noise in the price system

- When inflation is high, a supplier must question whether a price increase represents a true increase in demand, or is just a result of general inflation.
- If the price rise reflects only inflation, the relative price has not changed, and the supplier should not change the Q they bring to the market.
- To discern whether the increase is due to demand or inflation, the supplier need to know what is happening to the prices of other goods and services. Since this info takes time and effort to collect, the supplier's response to the change in prices is likely to be more tentative than usual.

Distortions of the tax system

- Indexed tax system – where taxes are based on real magnitudes
- Bracket creep: without indexing, an inflation that raises people's nominal incomes would force them to pay an increasing % of their income in taxes as they move into higher tax brackets, even though their real incomes may not have increased.

Unexpected redistribution of wealth

- Inflation may redistribute wealth from one group to another, arbitrarily creating winners and losers. The loss in buying power is exactly matched by an unanticipated gain in buying power because the real cost is less than anticipated.
- Unexpectedly high inflation rates help borrowers at the expense of lenders, because borrowers are able to repay their loans in less valuable $.

Interference with long-run planning

- Inflation has a tendency to interfere with the long-run planning of households and firms. Many economic decisions take place within a long-time horizon.

Menu costs

- The act of changing prices itself can impose signif costs. Any firm that publicly lists its prices in some form will incur costs when those prices are changes.

Hyperinflation

- When the inflation rate is extremely high
- Hyperinflation greatly magnifies the costs of inflation. With prices changing daily or even hourly, markets work quite poorly, slowing economic growth. Massive redistributions of wealth take place, impoverishing many and enriching only a few.

Inflation And Interest Rates

- During periods of high inflation, interest rates tend to be high as well.
- The real interest rate – the annual % increase in the purchasing power of an asset

Deflation

- Where the prices of most goods and services are falling over time so that inflation is negative
- Creditors will now gain at the debtor's expense, since any loan will have to be repaid in $ worth more in real terms than when the debt was originally incurred.
- A high interest rate can cause problems for the economy, as this tends to discourage various important types of expenditure such as firms' investment in plant and equipment. Consumers also tend not to spend, instead choosing to wait, preventing firms from earning revenue to spur prod.

- When the rate of deflation matches the real interest rate, the nominal rate of interest would be 0%.

Wages, Employment And The Labour Market

Unemployment

- Each person in a household who is 15 years or older is placed in 1/3 categories:
  - Employed – worked full time or part time for at least one hour during the past week, or was on vacation or sick leave from a regular job
  - Unemployed – did not work during the preceding week but was available for work and actively seeking work
  - Out of the labour force – did not work during the past week and was not unemployed e.g. full-time students, unpaid homemakers, retirees, and people unable to work because of disabilities
- Unemployment rate – number of unemployed people/labour force
- Labour force – the total number of employed and unemployed people in the economy
- Participation rate – the % of the working-age pop in the labour force

The costs of unemployment

- The main cost of unemployment is the output that is lost because the workforce is not fully utilised.
- Unemployed workers stop paying taxes and start receiving gov support payments.
- The psych costs are felt primarily by unemployed workers and their families. This includes a loss of self-esteem, depression, or stress for both them and their families.
- The social costs are a result of the economic and psyh effects. People tend not only to face severe financial difficulties, but also tend to cause increased crime rates, domestic violence and other social problems.

The duration of unemployment

- Unemployment spell – a period during which an individual is continuously unemployed
- Duration – the length of an unemployment spell
- Long-term unemployed workers have been out of work for 6 months or more. Short-term unemployed workers will either:
  - Find a permanent job after searching for a few weeks (economic costs are low)
  - Leave the labour force
  - Take a short-term or temp job that leads to unemployment again
- The duration of unemployment rises during recessions, reflecting the greater difficulty of finding work during those periods.
- Chronically unemployed – workers whose unemployment spells are broken up by brief periods of employment or withdrawals from the labour force

The unemployment rate vs true unemployment

- Discouraged workers – people who say they would like to have a job but have not made an effort to find one in the past four weeks
- Because they have not sought work, discouraged workers are counted as being out of the labour force rather than unemployed.
- Involuntary part-time workers – people who say they would like to work full-time but are only able to find part-time work

Types of unemployment and their costs

- Natural rate of employment – the part of the total unemployment rate that is attributable to frictional and structural unemployment
- This occurs when cyclical unemployment is zero so that the economy has neither a contractionary nor expansionary output gap.

Frictional unemployment

- Short-term unemployment associated with the process of workers searching for the right job
- This may be economically beneficial, since it is short-term, and the search process may lead to a better fit between worker and job, leading to higher output in the long run.
- A public perception that the economy is declining can create fear which prevents people from looking for a new job (and they therefore stay at their old job).

Structural unemployment

- Long-term and chronic unemployment that exists when the skills or aspirations of workers are not matched to the jobs avail in the economy
- Several factors contribute to structural unemployment:
    - Lack of skills
    - Discrimination
    - Language barriers
    - Economic changes may create a long-term mismatch between the skills some workers have and avail jobs
    - Structural features of the labour market that act as barriers to employment:
        - Unions
        - Minimum wage laws
- Because these workers do little productive work over long periods, there can be substantial economic losses both to the unemployed workers and to society.

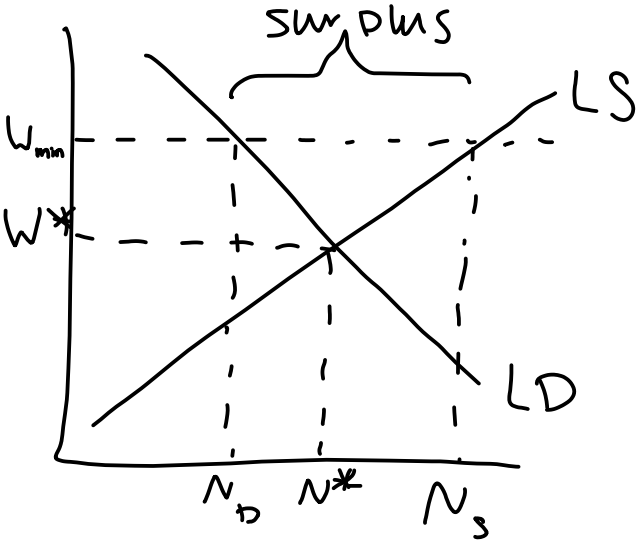
Cyclical unemployment

- The extra unemployment that occurs during periods of economic contraction and especially recessions
- Increases in cyclical unemployment, although relatively short-lived, are associated with signif declines in real GDP and are therefore quite costly economically.

Impediments To Full Employment

Minimum wage laws

- The perfectly comp model of the labour market predicts that if the min wage law has any effect, it must raise the unemployment rate.
- Workers who do find jobs at the min wage will earn more than they would have otherwise because the min wage is higher than the market-clearing wage.



Labour unions

- Through the threat of a strike, a union can often get employers to agree to a wage that is higher than the market-clearing wage. As in the case of a min wage, a union wage that is higher than the market-clearing wage leads to unemployment.
- Those workers who get jobs as union members will be paid more than they would otherwise. However, their gain comes at the expense of other workers, who are unemployed as a result of the artificially high union wage.

Unemployment benefits

- The avail of benefits allows the unemployed to search longer and less intensively for a job, which may lengthen the average amount of time the typical unemployed worker is without a job.
- Unemployment benefits should be generous enough to provide basic support to the unemployed, but not so generous as to remove the incentive to seek work actively.

Other government regulations

- Health and safety regulations establish the safety standards employers must follow, and rules that prohibit racial or gender-based discrimination in hiring.
- In some cases, the costs of complying with regulations may exceed the benefits they provide, decreasing the demand for labour, lowering real wages and contributing to unemployment.