2017-02-06

The Three Goals of Any Economy

1. Promote economic growth

   - Provide more jobs for more people

2. Limit unemployment

   - Unemployment limits growth by inhibiting production and decreasing consumer spending

3. Limitm inflation

   - High inflation discourages long-term investment

How Do We Check Up On the Economy?

- Economists love them some statistics on production, income, investment, and savings

  - **National income accounting** = a method of economic analysis that looks at the overall health of an economy by analysing certain figures

- **Gross Domestic Product(GDP)** = the market value of all final goods and services produced *domestically* annually

  - Only accounts for **final goods**

    * **Final goods** = the end-result of production/labor

      · This prevents GDP from being inflated by counting each step in production as its own good

  - Formula for calculating *change*

$$\% = \frac{GDP_f - GDP_i}{GDP_i} \times 100$$

  - GDP is just a metric of total domestic production

    * This leads us to believe that larger countries are "better" than smaller production

      · To avoid that misconception, we use GDP-per-capita

$$GDP_{per-capita} = \frac{GDP}{population}$$

      · According to the almighty authority on economis, GDP-per-capita is the *best* indicator of standard of living

1

Why Do Certain Nations Have Higher GDP's?

- The ultimate authority says: **productivity**
    - **Economic system** = capitalism is inherently superior to your inferior commie system
    - **Property rights** = because the factors of production are privately owned, we are all somehow more efficient
        * *Don't ask why.*
    - **Capital**
        * **Capital stock** = esentially just a synonym for physical capital
        * **Human capital** = knowledge, skills, education, etc
    - **Natural resources** = oil af

What Doesn't GDP Measure?

- GDP doesn't account for
    - Intermediate goods
    - Non-productive transactions
        * *e.g.*
            · Stock market purchases
            · Used goods
    - Illegally traded goods

2017-02-07

Calculating GDP

- There are generally two methods
    1. **Expenditures approach** = sum up all expenses that qualify for GDP
    2. **Income approach** = sum up all incocme that qualifies for GDPa
- Ideally *both* of these approaches should be roughly equal

Four Parts of GDP

1. Consumer spending(~70%)

   - Essentially just private individuals using income to purchase and consume goods and servicecs

2. Investment(~15%)

   - NOTE: this is **not** stock market purchases or bonds, as those do not qualify for domestic production
   - Rather, investment is when businesses invest capital back into the economy
     - Examples
       * Loans
       * Self-driving cars

3. Government spending(20%)

   - **NOT** transfer payments
   - Rather, things like schools and military equiptment

4. Net exports

   - Formula is essentially just

$$\Sigma X = X - M$$

   - where X is imports and M is imports

2017-02-08

Income Appraoch to Calculating GDP

- The model essentially boils down to 4 **factor payments**

  1. Labor income = essentially just the wages individuals earn
  2. Rental income = the income generated by owning something and renting it out
  3. Interest income = the income generated by interest on loans
  4. Profit = the income generated by exploiting the working class

Nominal GDP vs Real GDP

- **Inflation** = a rise in costs
- **Nominal GDP** = non-inflation adjusted GDP

    - For example, the nominal GDP-per-capita of the United States in 1970 was 5,246.96 USD-1970

- **Real GDP** = inflation-adjusted GDP

    - This is what's actually used to make comparisons in purchasing power between periods

Business Cycle

- **Business cycle** = a model of the economy that relates real GDP with time

    - The curve has an overall increasing trend line
        * However, the economy goes through periods of boom and bust
        * Visually, the curve snakes around an "ideal" line of full employment
            · Periods of time where the curve is above the line is **inflation**
            · Periods of time where the curve is below the line is **unemployment**
    - **Recession** = a period of decline in real GDP that lasts for 6 months
        * If significantly longer, it is a **depression**

2017-02-09

Unemployment

- **Unemployment rate** = the ratio of the able-bodied population that is looking for a job but hasn't gotten hired yet

$$\%_{Unemployed} = \frac{Q_{unemployed}}{Q_{laborforce}} * 100$$

- where $Q_{unemployed}$ is the number of unemployed persons in an economy and $Q_{laborforce}$ is the number of persons that are in the **labor force**

    - **Labor force** = the part of the population that is considered as employed or potentially employable

* Must be above 16 years old
* Able and willing to work
* Not institutionalized
    · *i.e.* prison, mental hospitals, etc
* Not serving in military, a full-time student, or retired

Three Types of Unemployment

1. **Frictional unemployment** = a type of unemployment characterized by apt workers that are between jobs or temporarily unemployed

   - **Seasonal unemployment** = a type of **frictional unemployment** characterized by working periods being *seasonal*
     - *e.g.* a Santa clause impersonator

2. **Structural Unemployment** = a type of unemployment characterized by the skills of the labor force becoming obselete

   - Especially relevant *now*, as automation changes the economic landscape
   - **Creative destruction** = a term that describes the process of these kinds of jobs disappearing
   - **Technological unemployment** = a specific type of **structural unemployment** driven by automation

3. **Cyclical unemployment** = a type of unemployment that is caused by the effects of a recession

   - Due to recssions, consumer demand decreases across the board, and companies respond with a reduced demand for labor
     - Cyclical unemployment is also called "demand deficient unemployment"

Natural Rate of Unemployment

- **Natural Rate of Unemployment(NRU)** = the rate of unemployment that is deemed "normal" for an economy not in recession

  - Based on frictional and structural unemployment

- **Full employment output(Y)** = the real GDP generated if an economy does not experience cyclical unemployment

  - So, "full employment" is really just an "acceptable" unemployment calculated with frictional and structural unemployment rates
    * For the United States, "full employment" is at ~5% unemployment

2017-02-10

Shortcomings of Unemployment Metrics

- The **unemployment rate** does not consider **discouraged workers**
    - Thus, people that get exhausted and burnt out with looking for a job ultimately aren't captured in this metric
        * As such, the unemployment rate can drop just by an increase in discouraged workers
- **Underemployed worker(part-time worker)** = a worker that wants to work *more*, but cannot find that employment
- Inequality
    - Employment descrimination is technically illegal, but it still happens
    - Basis varies
        * Race
        * Age
        * Sex

2017-02-13

What is "Inflation"?

- **Inflation** = a general rise in the price of goods
    - In effect, inflation reduces the **purchasing power** of consumers
    - Each unit of currency is worth less in physical goods
- **Disenflation** = a lowering in the rate at which inflation happens
    - NOT a reversal, just a slowing down
- **Nominal wage** = a wage that *isn't* adjusted for inflation
- **Real wage** = a wage that is adjusted for inflation

How Do We Measure It?

- **Inflation rate** = the rate at which prices rise from year to year

$$\%_I = \frac{P_f - P_i}{P_i}$$

6

- The government keeps tabs on the fluctuations of costs for certain **market baskets**

  - **Market basket** = a collection of goods that is used to track inflation over time

- **Consumer Price Index(CPI)** = a metric of inflation that relies on this market basket approach

  - Essentially, CPI is just the inflation rate for a very specific collection of goods whose prices are thought to be related

Is it Good or Bad?

- Generally, economists see rampant inflation as *bad*

  - Because it discourages investment because of the volitility of the dollar

- However, some economists believe that short-term inflation can be beneficial to the economy

  - Especially if the economy is in a severe recession

- What about **deflation**?

  - **Deflation** = a general decrease in the price of goods
    * Can be very bad because resources are hoarded, inhibiting growth