Monday, September 30, 2019

ECON 203

Chapter 4 - Definitions

- **Macroeconomics :** the study of the economy as a system in which interactions and feedbacks among sectors determine national output, employment, and prices.

Studies the whole national economy as a system. It examines expenditure decisions by households, businesses, and governments, and the total foes of goods and services produced and incomes earned.

- **Microeconomics :** the study of individual behaviour in the context of shortage.
- **Inflation :** A constant increase in the general price level. (Positive)
- **Deflation :** Negative value of inflation.
- **Disinflation :** Tendency to decrease but still positive value.
- **Recession :** Decline in economic activity. Two consecutive quarters of negative growth in real GDP.
- **Employment :** Number of adults (15 years +) employee full-time, part-time, and self-employed.
- **Unemployment :** Number of people 15 years + not working but actively seeking work.
- **Labour Force :** Adults who are employed and adults who are unemployed but actively looking for jobs.
- **Real Gross Domestic Product (GDP) :** Prices and inflation rates and employment and unemployment rates are indicators of macroeconomic activity and performance.
- **Fluctuations :** in the growth rate of real GDP, in inflation rates, and in unemployment rates are important aspects of recent economic performance in Canada.
- The **expenditure** by households, productions of goods and services by business, and incomes that result are illustrated by the circular flow of real resources and money payments.
- The **National Accounts provide** framework for the measurement of the output of the economy and the incomes earned in the economy.

- **Nominal GDP** : measures the output of final goods and services at market prices in the economy, and the money incomes earned by the factors of production.
- **Real GDP :** measures the output of final good and services produced, and incomes earned at constant prices.
- **GDP Deflator** : a measure of the price level for all final goods and services in the economy.
- **Per Capita real GDP** : Real GDP per person.
- **Real GDP** and **per capita real GDP** are approximate measures of national and individual welfare. They ignore non-market activities, the consumption of output, and the distribution of income among industries and households. (Per capita = Per person)
- **Economic Growth :** An increase in real GDP.
- **Rate of economic Growth :** The annual percentage change in the real GDP.
- **Price Level :** A measure of the average prices of all goods and services produced in the economy.
- **Price Index :** A measure of price level in one year compared with prices in base year.

    Check out page 165 4.1 for example.

- **Consumer Price Index (CPI) :** A measure of the cost of living in any one year compared to the cost of living in a base year. Change in prices from one year to the next.
- **Participation Rate :** Percent of the population that is either working or unemployed.
- **Circular Flow Diagram :** Shoes the rows of money, payments, real resources, and goods and services between households and businesses.
- **Factors of production :** Labour, land, capital, and entrepreneurship.
- **Final goods and services :** Goods and services are purchased by the ultimate users.
- **Value-added :** The difference between the market value of the output of the business and the cost of inputs purchased from other businesses.

- I**ntermediate Inputs** : Services, materials, and components purchased from other businesses and used in the production of final goods.
- **Net Indirect taxes :** The revenue generated by taxes applied to goods and services and included in final price.
- **Aggregate expenditure** : The revenue that producers receive to cover these costs.
- **Human development Index (HDI)** : Provides a summary measure of life expectancy, adult literacy, and real GDP per capita.

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Intro to Macroeconomics

Three indicators of the economy's performance and the explanation for their behaviour:

1- The rate of growth of real national income
2- The rate of inflation
3- The rate of unemployment

As measured by the three indicators, interest rates, foreign exchanges rates, wage rates, government budgets, capital investment, commodity prices, housing, etc are important to macroeconomic analysis considering they work to determine performance.

Macroeconomic Performance

Three key dimensions of macroeconomic activity

1- Output
2- Price
3- Employment

1- **Output** is a measure of the total quantity of goods and services produced in the economy and a measure of the incomes generated by that production. Output and its Arte of growth is measure in terms of Real GDP.

2- **Price / Price Level** is the weighted average of the market prices of all final goods and services produced, it reflects the costs of production in the economy.

3- **Employment** is a measure of number of jobs involved in the production of goods and services (Number of hours of labour input required to produce the economy's output.)

Economic performance is judged by how these measures change over time

Gross Domestic Product (GDP)

What is GDP?

GDP sums up the prices of all finished goods and services

-Two way GDP can increase :

1- Prices can increase, GDP number goes up but the economy isn't actually producing more goods and services, it is inflation that is driving the higher GDP. The increase of GDP might look good on paper, but is a mirage, a nominal increase only.

2-Produce more valuable goods and services, could either mean more or better goods and services, more highly valued goods and services. This is the type of increase in GDP that we want, it is a real increase in GDP.

-GDP is measure over three-month and one-year time periods, reported as quarterly GDP and annual GDP.

Real GDP vs Nominal GDP

- Real GDP measures the second type of growth, the real GDP statistic, it controls for inflation by adding up all the goods and services produced in an economy using the same set of prices over time. Real GDP tells us if the prices of goods and services hadn't changed, how much would GDP have increased or decreased. IE:

…For a given real GDP, the larger the population, the lower the productivity and the smaller the quantity of goods and services per person.

It is the quantity of final goods and services produced by the economy in a specific time period.

Economic Growth = Increase in Real GDP

- Nominal GDP is measured using market prices and a specific time period. It is the market value at current prices of all final goods and services.

Three measurements of Nominal GDP

1- Output-based GDP (supply side)
2- Income-based GDP (supply side)
3- Expenditure-based GDP (demand side)

1- **Output-based GDP** is the sum of value added by all industries in Canada => Market value of output - Inputs purchased from other businesses. (i.e. intermediate input/good = bread for sandwich.)

Method to measure output in the economy + the contribution of the particular businesses and industries to that output = Value-added approach.

- This method recognizes that businesses buy inputs to production from other businesses and households. (ie. Car companies (like Honda) buy parts such as tires and windshields from other businesses while including those costs of this inputs in the prices of the finished cars they sell.
- Method used to avoid double-counting.

2- **Income-based GDP** records the earnings generated by the production of goods and services. (Sum of payments to factors of production.)

Classification of factor income corresponds to : Labour income, corporate profit, unincorporated business income plus investment income, and depreciation.
Income categories = Employment consumption, gross operating surplus (corporate profit), gross mixed income (unicorporated business income plus investment income), and net indirect taxes.
3- **Expenditure-based GDP** is the sum of expenditure on final goods and services produced. Classified in Five main categories = Consumption, investment, government expenditure, exports, and imports.

-If we want to compare our economy over time, we need to control for changed in prices, so we do not want to look at nominal GDP, we are interest in real GDP. GDP is made of 4 components … C+I+G+X-IM

-**GDP Deflator** is an index that includes what is happening to the prices of all these different goods and services.
-Essentially used to deflate the dollar value of current year output to what value it would be in base year prices.
-Used to convert Nominal GDP to real GDP in the prices of the base year.

-**Per Capita real GDP** gives a better look of the measurement of standard of living in the economy per person. (Adjusts for population)
It is basically real GDP per person.

Limitations of Real GDP

- When including all productions in GDP, several problems are encountered.
Some productions cause noise, pollution, and congestion… Which DO NOT contribute to the economic welfare.

-Not marketed and hard to measure, excluded from GDP.
ex: Home cleaning, maintenance, improvements households & unreported jobs and incomes.

….However adding these would make GDP more accurate.

Not included in GDP :

- **Intermediate Goods** - Goods that are involved in the production of final goods. (ie : radio in car cost 100$, doesn't count because then would be double counting in the price, already paying for car, it is included in GDP)
- **Non Production Transactions :** If it wasn't produced it is not included in GDP (ie : used good purchased by another person, those products count for the year they were produced.)
- **Non-Market Activitie**s : Things thats happen within the economy that are not a part of the traditional economy, aka under the table markets (ie: selling and

buying drugs or labour that is being done under the table such as Manago hostesses lolololol. Household production doesn't not count either.

Labour Market

Three key labour market indicators:

1- The participation rate
2- The unemployment rate
3- The employment rate

1- **The participation rate** is the proportion of the surveyed population that is either employed or unemployed. Measures the size of the labour force relative tp the surveyed population. Can change unemployment rate & cannot change employment rate.

2- **The unemployment rate** *(Natural unemployment rate)* is the number of unemployed persons expressed as a percentage of the labour force.

Three important components :

1- Cyclical unemployment : Eliminated by a higher level of economic activity (without putting increased pressure on wage rates and inflation.)

2- Frictional unemployment : Exist in any economy due to the people being in the process of moving to one job or another (Voluntarily or Fired).During a recession, Frictional unemployment drops because workers are afraid to quit their jobs even if they do not like them…they know it will be difficult to find better ones.

3- Structural unemployment : Reflects differences in labour force characteristics and employment opportunities as the structure of the economy changes.

3- **The employment rates** is a measure of the extent to which available labour resources are being used. Not affected by changes in participation rate.

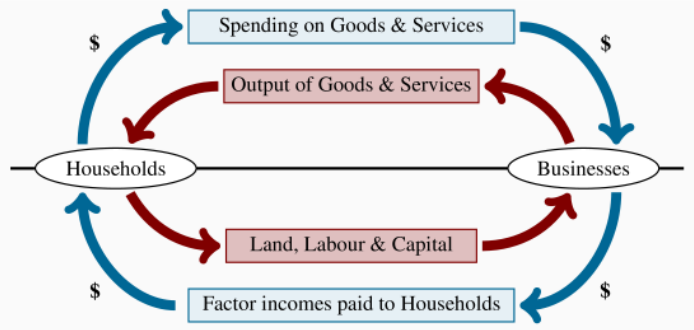
If some people become discouraged and stop looking for work the participation rate, the labour force, and the unemployment rate decline, however, the employment rate is unchanged.

National accounts

-National accounts provide the framework that is essential for consistent definitions and measurements of spending, output, and incomes. It is an accounting system that describes the economy.

It involves all households, businesses, and governments that make decisions about employment, output, and expenditure.

Circular Flows in the economy



- Inner loop : The flow of real factor services

Households provide factor services to businesses and in return, get goods and services… Nowdays (Modern economy) , this exchange of factor services for goods and services is facilitated by the use of money as a means of payment.

- Outer loop : The flow of money payments

Businesses buy factor services and household buy goods and services produced by business.

Business pays wages, rent, interest, and profits to households and finances those costs with their receipts from sales to households.

Four ways to measure economic activity

1- The output of goods and services at market prices;

2- The total expenditure on goods and services at market prices;

3- The inputs to the production of goods and services costed at market prices;

4-The incomes received by households for providing factor inputs to production.

- The circular flow model illustrates the basic accounting principle:

Market value output = Total expenditure, Market value of factor services, and household income.

…..However, it is not applied to the complexity of the actual economy.

Formula Sheet

GDP = C+I+G+X-IM

Income-based GDP = W+GCS+GMI+T_{IN}

Rate of growth of Real GDP = Real $GDP_{year\ 2}$ - Real $GDP_{year\ 1}$ / Real $GDP_{year\ 1}$ x100

GDP Deflator = Nominal GDP / Real GDP x 100

Per Capita real GDP = Real GDP / Population

Consumer Price Index = Cost of Market Basket in Current Year / Cost pf Market Basket in Base Year x100

Inflation Rate = CPI_{year2} - CPI_{year1} / CPI_{year1} x 100

Participation Rate = Labour Force / Population (15 years +) x100

Unemployment Rate = Labour force - Employment / Labour force x 100
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Employment Rate = Employment / Population (15 years +) x 100

Value added / Net output = the value of the final product - the costs of the goods and services purchased from other businesses and industries.

Y = output

Nominal GDP converted to Real GDP :

$$\text{Real GDP}_{\text{year } t} = \frac{\text{GDP}_{\text{year } t}}{\text{GDP deflator}} \times 100$$

Indirect Taxes : TVH & TVQ - Taxes on profit and

taxes on income