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Macroeconomics

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"Measurement Problems in Macro-Variables"

GDP: The size of a country's overall economy is usually measured by its Gross Domestic Product (GDP) of It is the value of all final goods and services produced in a country in a given specific year. The measurement of GDP involves counting the production of millions of different goods and services. The measurement of this is simple, they take all the quantities produced, multiply by the price at which each product was sold, and add the total. Each market transaction incorporated into GDP must involve both buyers and sellers. An economy's GDP can be measured either by the total dollar value of what is bought in that economy, or by the total dollar value of what is produced in that economy. When thinking about what the economy produces, many non-economists quickly turn to rugged, durable goods like cars and computers. However, the majority of GDP is accounted for by the service sector. Moreover, the share of services to GDP has increased over time. A detailed breakdown of major service industries includes healthcare, education, legal and financial services. It's been decades since most of the U.S. economy involved the manufacture of his solid objects. Instead, the most common jobs in the modern economy involunge workers looking at

paper and computer screens, meetings with colleagues, customers or suppliers and phone calls.

Statisticians calculating GDP need to avoid double-counting errors, where output is counted more than once as it moves through stages of production. For example, what would happen if a government statistician first counted the value of tires made by his manufacturer, and then counted the value of new trucks with his tires sold by automakers? In this example, the tire price is included in the price of truck, so he is counted twice. To avoid this problem of grossly overestimating the size of the economy, government statisticians only count the value of final products and services in the production chain that are sold for consumption, investment, government and commercial purposes. Intermediate products, ie goods used in the production of other goods, are excluded from the calculation of GDP. In the example above, only Ford truck values are counted. The value that a company provides to other companies is captured in the final product at the end of the production chain. The concept of GDP is very simple: it is simply the dollar value of all final goods and services produced in the economy in a year. In our decentralized, market-oriented economy, actually calculating the US GDP of over \$16 trillion would require a full brigade of trillion dollar government statisticians, with changes that change every few months. It's a difficult almost impossible job to do exactly correct.

Economic Growth: Economic growth increases national efficiency and the supply of public goods. As the economy grows, the state taxes these revenues, providing the capacity and resources necessary to provide the public goods and services that citizens need, such as health care, education, social protection, and basic public services you

can get. The world is so complex that it is very difficult to measure development. When measuring development, we need to take into account the various factors that contribute to the shape and formation of a country. Social, political, ecological and economic factors. The usual approach to measuring economic growth uses the aggregate production function to estimate how much of per capita economic growth is attributable to physical and human capital growth. These two inputs can be measured at least roughly. The portion of growth not accounted for by the measured input, called residuals, is due to technology growth. The exact numerical estimate of varies from study to study and country to country, depending on how researchers measured these three key factors over time.

First, technology is usually the most important contributor to US economic growth. Growth in human and physical capital can often explain only half or less of the economic growth that occurs. New ways to do things are very important. Second, while investing in physical capital is essential for labor productivity and GDP per capita growth, building human capital is at least as important. Economic growth is not just about increasing machines and buildings. The third lesson is that these three elements work together: human capital, physical capital, and technology. Highly educated and skilled workers are often better at creating new innovations. These innovations are often ideas that cannot be ramped up in production until they become part of new investments in physical capital. New machines embodying technological innovation often require additional training to further hone the skills of workers. For any recipe for

economic growth to succeed, the economy needs all elements of the aggregate production function.

Unemployment: Unemployment is people who are jobless, actively seeking work, and available to take a job. The official unemployment rate for the nation is the number of unemployed as a percentage of the labor force (the sum of the employed and unemployed). Should all unemployed people count as unemployed? of course not. For example, children should not count as unemployed, Indeed, pensioners should not be counted as unemployed. Many full-time college students only have part-time jobs or no jobs at all, but it seems inappropriate to consider them as victims of unemployment. Some people are unable to work due to childcare, sickness, vacations, parental leave, etc. The point is that the adult population is not only divided into those who are employed and those who are unemployed. There is a third group people are unemployed and not interested in work for some reason (pension, child care, voluntary leave before starting a new job). It also includes people who are looking for a job but are discouraged by not finding a suitable job and have stopped looking. Economists call this third group of people unemployed or economically inactive. US unemployment rate based on monthly US statistics. The Census Bureau,, asks a series of questions to classify the adult population as employed, unemployed, or inactive. To be classified as unemployed, an individual must be unemployed, currently able to work, and actively looking for work in the last four weeks. For example, someone who is unemployed but is currently unable to find a job, or who has not been actively looking for work in the last

four weeks, is counted as unemployed. The official unemployment rate for the nation is the number of unemployed as a percentage of the labor force (the sum of the employed and unemployed).

Inflation: Inflation is a general and sustained increase in price levels across the economy. Inflation does not refer to changes in relative prices. If the price of tuition goes up and the price of laptops goes down, there will be a relative price change. Inflation, on the other hand, means that most markets in the economy are under price pressure. Also, a price increase in the supply and demand model is a one-off event and represents a shift from the previous equilibrium to the new one. Inflation means a sustained rise in prices if inflation occurs for years and then stops. As with many problems in economic measurement, the conceptual answer is reasonably straightforward: Prices of a variety of goods and services are combined into a single price level; the inflation rate is simply the percentage change in the price level. To calculate price levels, economists start with the concept of a basket of goods and services consisting of

different items that individuals, businesses, or organizations typically purchase. The next step is to look at how the prices of these items change over time. When considering how to aggregate individual prices into overall price levels, many of his find that their first instinct is to calculate price averages. However, such calculations can easily be misleading, as some products are more important than others. Changes in prices of goods on which people spend most of their income are more important than

changes in prices of goods on which people spend less of their income. The U.S. Bureau of Labor Statistics (BLS) uses the Consumer Price Index (CPI) to measure inflation. The index gets its information from a survey of 23,000 businesses. 2 It records the prices of 80,000 consumer items each month. 3 The CPI will tell you the general rate of inflation. Difficulties in measuring inflation include. Changes in the quality of goods. Changes in the quality of goods mean that price rises may not reflect inflation, but just the fact it is an improved good.