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A Brief Introduction to Macroeconomics and Its Application

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ABSTRACT:

An important area of economics called macroeconomics focuses on the analysis of overall economic performance and behaviour. It examines aspects of the economy as a whole, including factors like inflation, unemployment, economic growth, and governmental policies. The practical applications of macroeconomics in several branches of economics are examined in this chapter. First of all, macroeconomics serves as the basis for study of monetary and fiscal policy. Governments use fiscal policy, which includes taxing and expenditure, to affect total demand and maintain economic stability. Controlling the money supply, interest rates, and the availability of credit are the main objectives of monetary policy, which is carried out by central banks.

KEYWORDS:

Aggregate Demand, Business Cycle, Economic Growth, Fiscal Policy, Interest Rates.

I. INTRODUCTION

Macroeconomics is the study of the entire economy, taking into account all of the goods and services produced, all of the revenue generated, how much of the productive resources are used, and how prices typically behave. The most effective ways to impact policy objectives including economic growth, price stability, full employment, and the achievement of a sustainable balance of payments can be determined through macroeconomic analysis.Up until the 1930s, the majority of economic research was focused on specific businesses and industries. However, the discipline of macroeconomics started to grow with the advent of the Great Depression in the 1930s (for further information, see the Great Depression note at the end of this chapter). John Maynard Keynes' theories, which used the idea of aggregate demand to explain changes in output and unemployment, were particularly important[1], [2].

Macroeconomic

The main contributor to modern macroeconomics is J.M. Keynes. In his 1936 book The General Theory of Employment, Interest, and Money, he conducted an analytical investigation into the factors that contribute to significant and protracted changes in the level of employment. Macroeconomics is concerned with system aggregates. Macro is short for big. Thus, macroeconomics examines how diverse economic variables behave when they are applied to the economy as a whole. These factors include total national income, total employment, and the percentage of resources in the economy that are fully used, total saving and investment, and the overall level of prices in the economy. Therefore, macroeconomics is the study of the economy as a whole. Macroeconomics deals not with individual quantities as such but with aggregates of these quantities writes Kenneth E. Bounding. It deals not with individual income but with national income; it deals not with individual prices but with price levels; and it deals not with individual outputs but with national output.

Macroeconomics and Microeconomics Difference

The two main subfields of economic theory are microeconomics and macroeconomics. Prof. Ragnar Frisch of Oslo University is the author of these two terms. Since just a small portion of the economy is covered by microeconomics, this is already known. It investigates how each individual unit a person, a business, or an industry behaves economically. Product and factor pricing, as well as the notion of economic wellbeing, are all studied in microeconomics. Due to the fact that it focuses primarily on the costs associated with various variables, it is occasionally referred to as pricing theory. On the other hand, macroeconomics examines the aggregates of the entire economy. In other words, it is a study of every unit taken as a whole. It is an examination of the economy as a whole. It addresses aggregates including overall employment and income, general price level, overall output, consumption, and investment, among others. Therefore, theories of income, output, employment, and growth are studied in macroeconomics. A diagram can also be used to clarify the difference. Consider the entire economy as a circle. Every time we examine a topic within the circle, macroeconomics is involved. Say there are four companies/firms in the economy: A, B, C, and D. We are studying microeconomics if we are examining the price of goods sold, the employment created, or the production produced by firm A. Moreover, if A and B combine to form one industry denotes a broad field[3], [4].

Large Depression

From 1929 through 1941, there was a significant global economic downturn known as the Great Depression. It resulted in significant bank failures, severe unemployment, as well as sharp declines in the gross domestic product (GDP), industrial production, stock market share prices, and pretty much all other indicators of economic progress. It peaked in 1933, but it wouldn't be until far after World War II that metrics like industrial production, stock prices, and global GDP would approach their levels from 1929. For economic historians, it continues to be one of the most researched historical occurrences. Major hypotheses include the 1929 stock market crash, the demise of the gold standard, and the Smoot-Hawley Tariff Act's impact on international trade, Federal Reserve policy, and numerous other factors. Which factors contributed to the Great Depression, and consequently, policy decisions may have contributed to or should have been made to prevent, mitigate, or terminate the Great Depression, are the central questions in economic theory.

The link between production, consumption, and credit, as well as individual motivations and purchasing decisions, are the core topics of theories from traditional capitalist economics. These ideas make an effort to organize the series of events that led to the collapse of the monetary system and trade relations of the industrialized world. Marxist or Marxian economic theories place a strong emphasis on the connections between wealth accumulation and production control. Marxists view the Great Depression as the type of catastrophe that capitalism is predisposed to experiencing, hence its emergence is not unexpected. The Great Depression was largely brought on by the breakdown of global trade as a result of unfair trade policies everywhere. While many countries saw a fall, the speed and severity varied from one nation to the next. For instance, while France did not experience its lowest point until April 1937, Britain saw its lowest point in the third quarter of 1932[5], [6].

II. DISCUSSION

Macroeconomics is a subfield of economics that focuses on the behaviour of the economy as a whole, including the markets, firms, customers, and governments. Macroeconomics studies trends in the economy as a whole, including inflation, price levels, economic growth rates, national income, GDP, and changes in unemployment.What causes unemployment is one of the important issues that macroeconomics deals with. Why does inflation occur? What fuels or encourages economic expansion? Macroeconomics makes an effort to gauge an economy's performance, comprehend the factors that influence it, and forecast how it can change. Macroeconomics, as the name suggests, is an area of study that examines an economy from several angles. This entails taking a close look at elements like inflation, GDP, and unemployment. Macroeconomists also create models that depict the connections between various variables. Governmental organizations utilised these models and the forecasts they provide to help develop and assess economic, monetary, and fiscal policy. Investors use the models to forecast and prepare for moves in different asset classes, while businesses use them to establish strategies for domestic and international markets. When used correctly, economic theories can shed light on how economies work as well as the long-term effects of various policies and choices. Through a fuller grasp of the impacts of general economic trends and policies on their own industries, individual businesses and investors can also benefit from using macroeconomic theory to guide their actions.

Macroeconomics' Past

Although the word macroeconomics is relatively new, many of its fundamental ideas have been the subject of research for much longer. Since the discipline's inception in the 1700s, issues including unemployment, prices, growth, and trade have been of interest to economists. Adam Smith and John Stuart Mill wrote previously about topics that are now known to fall under the macroeconomics umbrella. Macroeconomics is frequently defined as having its modern origins in John Maynard Keynes' 1936 book The General Theory of Employment, Interest, and Money. Keynes provided an explanation of the effects of the Great Depression, including the unsold commodities and joblessness. Prior to Keynes' views becoming widely accepted, economists rarely distinguished between micro- and macroeconomics. According to Leon Walrus, the same microeconomic principles of supply and demand that govern specific good markets also interact across markets to bring the economy to a state of general equilibrium. Economists like Knut Wick sell, Irving Fisher, and Ludwig von misses explained how the special role that money plays in the economy as a medium of exchange relates to large-scale financial factors like price levels and interest rates.

Contrasting Macro- and Microeconomics

Microeconomics, which focuses on tiny aspects that influence decisions made by people and businesses, differs from macroeconomics. Microeconomic and macroeconomic factors frequently interact with one another. The fact that macroeconomic aggregates may react very differently from or even the reverse of comparable microeconomic variables is a key contrast between microeconomics and macroeconomics. Keynes cited the so-called Paradox of Thrift, which contends that people save money to increase their wealth, as an example. The economy may slow down and there may be less overall wealth if everyone tries to raise their savings at once. This is due to the fact that less spending would occur, which would have an impact on corporate revenues and reduce worker wages. Microeconomics, on the other hand, examines economic trends, or what can occur when people do particular actions. Subgroups of people, like consumers, sellers, and business owners, are often defined. Utilizing money and interest rates as price mechanisms for coordination, these players communicate with one another in accordance with the rules of supply and demand for resources.

Macroeconomics' Limitations

Understanding the constraints of economic theory is also crucial. Theories frequently lack precise real-world elements like taxation, regulation, and transaction costs since they are developed in a theoretical vacuum. In addition to being extremely complex, the real world also contains ethical and social issues that resist quantitative study. It is crucial and desirable to monitor significant macroeconomic indices like GDP, inflation, and unemployment despite the limitations of economic theory. This is due to the fact that the economic environment in which businesses operate has a big impact on both their performance and, consequently, the value of their stocks. Understanding the ideologies that are prevalent and influencing a certain government administration can also be extremely useful. How a government approaches taxation, regulation, spending, and other related measures will depend in large part on its fundamental economic tenets. Investors can at least obtain a peek of the likely future and take confident action by having a deeper understanding of economics and the effects of economic decisions [7], [8].

Schools of Thought in Macroeconomics

There are numerous schools of thought within the discipline of macroeconomics, each having a unique perspective on how the markets and the people who participate in them function. Building on Adam Smith's initial views, classical economists believed that prices, wages, and rates are flexible and that markets tend to clear unless impeded by governmental interference. In reality, the phrase classical economists refer to past economic theorists who Karl Marx and John Maynard Keynes both disagreed with, not a particular school of macroeconomic theory. The foundation of Keynesian economics, which established macroeconomics as a distinct field of study from microeconomics, was largely based on the writings of John Maynard Keynes. Keynesians emphasize that the main driver of problems like unemployment and the business cycle is aggregate demand. According to Keynesian economists, the business cycle can be actively controlled by fiscal policy, in which governments increase spending during recessions to increase demand or cut spending during expansions to decrease it. They also support monetary policy, in which a central bank uses lower interest rates to encourage lending or higher rates to restrain it. The supply and demand gap should be properly cleared, according to Keynesian economists, but certain systemic rigidities, particularly sticky prices, prevent this from happening.

Monetarist

The works of Milton Friedman are primarily responsible for the Keynesian school of thought known as the monetarist school. Monetarists contend that monetary policy is typically a more effective and desirable policy tool to manage aggregate demand than fiscal policy, working within and expanding Keynesian models. Monetarists aim to stick to policy guidelines that support stable inflation rates because they recognize that monetary policy has limitations that make adjusting the economy unwise. The fundamental focus of the New Classical School and the New Keynesians is the reconciliation of the glaring theoretical inconsistencies between macroeconomics and microeconomics. Microeconomics and models built on it are important, according to the New Classical School. In their macroeconomic models, New Classical economists integrate the presumption that all actors seek to maximize their utility and have reasonable expectations. According to New Classical economists, monetary policy may be used to manage inflation, but discretionary fiscal policy destabilizes and unemployment is mostly a voluntary phenomenon.

A fresh Keynesian

The New Keynesian School makes an additional effort to strengthen conventional Keynesian economic theories with a focus on microeconomics. Although New Keynesians acknowledge that businesses and people follow reasonable expectations, they continue to believe that there are a number of market failures, such as sticky prices and wages. Due to its stickiness, the government can alter the macroeconomic environment through monetary and fiscal policy.

Austrian

An older school of economics, the Austrian School, is experiencing some popularity growth. Microeconomic phenomena are mostly covered by Austrian economic theories. They never strictly distinguished between microeconomics and macroeconomics, just as the so-called classical economists. Important implications of Austrian ideas also apply to topics that are typically thought of as macroeconomic. Due to monetary policy and the function that money and banks play in connecting markets to one another and across time, the Austrian business cycle theory specifically explains essentially synchronized swings in economic activity across markets. Despite being a rather vast science, macroeconomics is best represented by two particular research areas. The first area is what influences long-term economic growth or rises in the level of the national income. The second focuses on the factors that contribute to and are affected by short-term changes in employment and national income, generally referred to as the economic cycle.

Economic Expansion

An economy is said to be experiencing economic growth when its total output rises. To support economic policies that will support growth, progress, and growing living standards, macroeconomists work to understand the elements that either encourage or delay economic growth. Numerous indicators can be used by economists to gauge economic performance. Ten categories can be constructed from these indicators:

1. Indicators of the gross domestic product. Calculate the output of the economy.

2. Spending by consumers indicators. Calculate the amount of capital that consumers contribute to the economy.
3. Savings and income indicators. measures the earnings and savings of consumers
4. Indicators of industry performance. assesses the GDP by industry.
5. Indicators of international commerce and investment show the balance of payments between trading partners, the volume of trade, and the amount of international investment.
6. Indicators of prices and inflation. Describe changes in the amount paid for products and services as well as the buying power of different currencies.
7. Indicate the amount of capital invested in fixed assets by using these metrics.
8. Indicators of employment. Displays employment by state, county, industry, and other sectors.
9. Government indicators. Displays the amount spent and received by the government.
10. Other economic indicators, like the distribution of personal income, global value chains, healthcare spending, the health of small businesses, and more, are special indicators.

The Economic Cycle

The levels and rates of change of important macroeconomic indicators, such as employment and national production, fluctuate over long-term macroeconomic growth trends. Expansions, peaks, recessions, and troughs are the names given to these oscillations; they also take place in that order. These oscillations, when plotted on a graph, demonstrate that firms operate in cycles; hence, it is known as the business cycle. GDP and Gross National Income are used by the National Bureau of Economic Research (NBER) to date the business cycle. The NBER is the organization that also announces the start and end of recessions and expansions. Given the breadth of macroeconomics, it is difficult and takes a lot longer to have a beneficial impact on the economy than it does to alter certain microeconomic behaviors. Therefore, each economy must have a unit tasked with investigating and identifying methods that can affect significant improvements.

The Federal Reserve, the nation's central bank, has the responsibility of fostering maximum employment and price stability. These two elements have been recognized as being crucial for successfully influencing macroeconomic change. The tools the Fed has created over the years, which seek to affect its dual missions, are used to administer monetary policy in order to affect change. It can use the following tools. A target range established by the Fed to direct interest rates on overnight lending between depository institutions in order to increase short-term borrowing Open Market Activities to alter the supply of reserves, buy and sell securities on the open market. Loans to depository institutions are made at a discounted rate to assist banks in managing their liquidity.

Keeping reserves to support banks' liquidity will be decreased to 0% in 2020. Encourages banks to maintain reserves for liquidity and rewards them with interest for doing so. By selling securities and repurchasing them the next day at a better rate, the Overnight Repurchase Agreement Facility is an additional tool used to assist manage the federal funds rate. Reserve deposits with a term called term deposits are used to draw reserves out of the banking system. Regional Bank Liquidity Swaps: To enhance liquidity conditions for central banks in the United States and participating countries, swap lines were established. International and foreign monetary authorities a mechanism enabling institutions to make repurchase agreements with the Fed to serve as a liquidity safety net is known as a repo facility. Standing a tool to encourage or dissuade borrowing above a certain rate, which aids in regulating the effective federal funds rate, is the overnight repurchase agreement facility. The Fed maintains a list of 14 additional previously utilised tools that it can use once more if necessary. The Fed regularly modifies the instruments it employs to affect the economy.

Macroeconomics in Economics

1. Macroeconomics is the study of how an economy functions as a whole.
2. The three main macroeconomics concerns
3. The unemployment rate, inflation, and economic expansion are three main macroeconomic worries.

Macro conics

A government can use macroeconomics to assess an economy's performance and determine what steps to take to speed up or halt growth. A study area called macroeconomics is used to assess performance and create policies that can strengthen an economy. It is the goal of economists to comprehend how particular variables and behaviors impact output, input, spending, consumption, inflation, and employment. Although the study of economics has a long history, it wasn't until the 1700s that the discipline began to take on its modern form. Decision-making in industry and government today heavily relies on macroeconomics.

Application

1. Macroeconomics offers a framework for evaluating and putting into practice fiscal and monetary policy. Fiscal policy is a tool used by governments to affect aggregate demand, stabilize the economy, and accomplish particular economic goals like reducing inflation or fostering economic growth. Central banks administer monetary policy, which aims to impact economic activity by regulating the money supply, interest rates, and credit availability. Macroeconomic models assist decision-makers by enabling them to comprehend the effects of various policy options on the economy.
2. Business Cycles Macroeconomics researches business cycles, which are cyclical changes in the economy. For governments, companies, and investors to make informed decisions, they must comprehend the factors that contribute to and define business cycles. The present stage of the business cycle is shown by macroeconomic indices including GDP (Gross Domestic Product), unemployment rates, and consumer spending. Strategic decisions like resource allocation, risk management, and investment planning are made easier with the aid of this knowledge.
3. Macroeconomics studies the factors that contribute to long-term economic growth. It examines elements that lead to long-term increases in national output, such as productivity, technical progress, investment, and human capital development. Macroeconomic tools are used by governments and policymakers to identify growth constraints and develop strategies for promoting productivity, innovation, and structural changes that improve economic performance.
4. Understanding international trade patterns and currency rates requires an understanding of macroeconomic fundamentals. The effects of trade policies, such as tariffs or quotas, on domestic industry, employment, and overall economic wellbeing are examined using macroeconomic models. Macroeconomics also looks at the variables that affect currency exchange rates and their effects on capital flows, trade, and competitiveness.
5. Macroeconomic Stability By tackling problems like inflation, unemployment, and financial crises, macroeconomics aims to ensure the stability of the economy. It investigates the origins and effects of inflation and aids in the development of policies by policymakers to control inflation. The Phillips curve, a link between unemployment and inflation that is explored in macroeconomics, helps decision-makers create policies that find a balance between these two variables.
6. Economic forecasting and risk assessment Macroeconomics is important for both of these processes. Future economic trends, such as GDP growth, inflation rates, or interest rates, can be predicted using macroeconomic models and indicators. These projections aid in the decision-making process and risk management of organizations, investors, and governments.

III. CONCLUSION

Understanding and analyzing the behaviour and performance of entire economies requires a thorough understanding of macroeconomics, a crucial subfield of economics. Macroeconomics offers a thorough framework for understanding and addressing important economic events by looking at aggregate variables including inflation, unemployment, economic growth, and governmental actions.There are many and varied practical uses for macroeconomics. It aids decision-makers in creating efficient fiscal and monetary policies to maintain economic stability, control aggregate demand, and accomplish particular economic goals. Using macroeconomics, firms, investors, and regulators can better manage risks and navigate the peaks and valleys of business cycles.

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