Chapter 6: Business Cycle
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INTRODUCTION

The purpose of this topic is to study the nature, causes and characteristics of the two major economic problems: periods of severe unemployment and periods of inflation.

BUSINESS CYCLE

Business cycles are recurring periods of recession and prosperity which are widespread throughout a nation and which feed upon themselves. They must be distinguished from seasonal variations (lack of sales of coats in the summer) and long run secular trends (especially related to population, e.g. baby boom). The phases of a business cycle are peak, contraction, recession, trough, recovery, and expansion.

> The existence of a business cycle can be best observed in the number of people who are laid off and have a difficult time to find a job. During peak periods of economic activity, this is less likely to happen. But, in period of recession, this is very common.

RECESSION

A recession is a widespread decrease in economic activity. Such decrease usually causes many employees to be unemployed. A very serious recession is referred to as a depression. Causes for recession have been tied to excess inventories, decrease in consumption (attributable to fears about the future, for instance), lack of innovations and new capital formation, and random shocks.

> The worst recession on record is that of the 1930's. About one person out of 4 (or close to 25%) was unemployed. The hardship was more than just a lack of income, and, for some, consisted in broken lives and families.

POSTPONABLE DURABLES

Business cycles are significantly affected by changes in sales of items which last several years because their purchase can be postponed through additional maintenance and repair. Such postponable items are essentially the durable goods and new capital.

> The purchase of a car is most often delayed when insecurity about employment exists. If difficulties are encountered, monthly payments may be missed and the car could be repossessed.

UNEMPLOYMENT

Unemployment is the labor force seeking employment and unable to find it. The cost of unemployment can be measured by the deficiency in the potential output of a nation: both foregone production, income and consumption of needed goods. A less tangible, but more significant cost is present in the loss of social and cultural value of those unable to play an active role in society.

> Some of those who are unemployed have been laid off, while others are new entrants to the labor force, such as graduating young people and women, seeking their first jobs.

FRICTIONAL UNEMPLOYMENT

Frictional unemployment represents the employees switching jobs for more productive and higher paying positions. Such labor mobility is desirable since it assures that the labor force is more efficiently utilized and income is enhanced.

> Especially in the United States, it is common for any employee to seek employment with a different firm, if conditions or salary at the current employer are not satisfactory. In some respect, this employment switching is desirable since employees are able to make better use of their skills.

STRUCTURAL UNEMPLOYMENT

Structural unemployment is due to changes is various sectors of the economy. These continuous changing conditions in different industries are due to changes in tastes of consumers and are part of any changing society. While structural unemployment can be reduced by retraining, for most part it is desirable since it is a reflection of a society seeking improvements in its products.

> In the mid 1980's the decrease in the price of oil caused many oil related undertakings (in particular in Texas) not to be profitable any more. Some oil drilling and explorations were cut and the employees let go. Such employees would be considered as part of the structural unemployment of the country.

CYCLICAL UNEMPLOYMENT

Cyclical unemployment is attributable solely to a deficiency in the level of economic activity. This form of unemployment is the most undesirable because it is avoidable.

> The unemployment during the great depression of the 1930's,

was cyclical unemployment in its entirety. Everyone held on to the jobs they still had: friction unemployment was unlikely. Structural unemployment was also far less noticeable than the unemployment caused by people afraid to spend their money and by firms forced to cut back on their output.

RATE OF UNEMPLOYMENT

The rate of unemployment in the United States is obtained from a telephone survey of households in which the proportion of the labor force actively seeking and unable to find employment is determined. (In other countries, statistics are based on those registered with the unemployment office; thus international comparison may be inaccurate). Unemployment rates may be distorted by underemployment (part time work), discouraged workers and underground economy.

Some countries measure the unemployment rate using the proportion of those who filed for unemployment benefits. The survey (of those seeking employment) method used in the United States appears to be better because some people may file for unemployment while working for an employer "off the books".

DISCOURAGED WORKERS

The presence of discouraged workers causes the official rate of unemployment to be understating the real extent of unemployment. This is especially a serious problem during recessions because a larger number of discouraged workers will be leaving the labor force.

Because of the lack of skills or because of disabilities, some individuals are, unfortunately, very unlikely to be able to find full time employment no matter how hard they may seek work. Some may eventually give up looking for work. These are the individual classified as discouraged workers.

NATURAL RATE OF UNEMPLOYMENT

The natural rate of unemployment corresponds to the combination of frictional and structural unemployment which cannot be avoided even in a very high level of economic activity. This natural rate of unemployment has historically been around 4%, but it has risen slightly in recent years because of changes in labor force which now includes more women and young people (who take often more time to find jobs).

Changes in tastes or production methods are major causes for structural changes in our economy. These changes go on all the time. Some structural unemployment is just unavoidable. Some frictional unemployment is desirable. If, to these two forms of unemployment is added the unemployment caused by first time job seekers, it is clear that there will always a number of individuals seeking employment.

COSTS OF UNEMPLOYMENT

There are both economic and noneconomic costs to unemployment. The main economic cost is lost income and output which is measured in terms of the GNP gap. Okun's law is used to determine the GNP gap by using the following formula: for every 1% that the actual unemployment rate exceeds the natural rate of unemployment, there will be a 2.5% GNP gap. Another economic cost of unemployment is that its harm is not distributed equally: blue-collar workers and minorities experience higher rates of unemployment than the rest of society during recessions.

COSTS OF UNEMPLOYMENT

Noneconomic costs tend to be high during cyclical unemployment. Unemployment can lead to family disintegration, loss of job skills, loss of self-confidence, social unrest, mental illness, increase in crime, and a decline in morale. History is full of examples where severe unemployment has brought about violent social and political changes.

INFLATION

Inflation is a widespread pattern of price increases. The rate of inflation is equal to the rate of change in a price index such as the consumer price index (CPI). Historically, inflation has been considered serious when it has approached or exceeded 10% per year.

Going to the store and finding higher prices is inflation. Some countries are accustomed to very high rates of inflation: in excess to 100%, which means that price would double within one year.

DEFLATION

Deflation is a widespread pattern of price decreases. Historically, deflation is less common that inflation, but it is also more feared because the loss of revenues of a large number of firms may result in widespread bankruptcies and decrease in economic activity (as it happened, for instance, during the great depression of the 1930's).

Periods of deflation have been rather rare in most countries of the world. During the great depression of the 1930's, prices did go down. The consequences were quite devastating: many companies went out of business for lack of revenues.

DEMAND-PULL INFLATION

One of the possible explanations of inflation is that it is caused by excessive demand on the part of consumers while firms are unable to expand output beyond their productive capacity. This is referred to as demand pull inflation.

During the late 1960's, the United States experienced a period of high economic activity brought about by overall economic growth and the Vietnam war. Producers could not increase their production, while costumers were eager to buy more with their high income. The result was a period of demand pulled inflation.

COST-PUSH INFLATION

A common cause of increases in prices are increases in costs. For instance, demands by unions for higher wages have been labeled as wage push inflation. At other times, increases in commodity prices were attributable for inflation, for instance, in the case of the oil crisis of the 1970's.

The oil crisis of 1979-1980 caused oil prices to jump drastically in the early 1980's. The increased energy costs were passed on to consumers in the form of higher prices. In great part, that inflationary period was of cost push inflation nature.

MEASURING INFLATION

Inflation is commonly measured with the consumer price index. The consumer price index reports the general level of prices of a basket of 300 consumer goods and services. It is stated as a ratio of prices in a given year divided by the prices of the same basket of goods and services in a base year. The base year index is set at 100. The rate of inflation is calculated for any given year with the formula:

(current year index - previous year index)/previous year index

RULE OF 70 The rule of 70 is used to determine how long it will take for prices to double at the current rate of inflation. The number of year for prices to double is determined by dividing 70 by the annual rate of inflation. (The rule of 70 can also be used to determine how long it will take for savings or GNP to double).

INFLATION REDISTRIBUTION EFFECT

The effect of inflation (if it is not anticipated) is to redistribute wealth and income from savers and those on fixed income to debtors and those on variable income. This happens because the purchasing power of a fixed money amount decreases, and because borrowers repay lenders their debt in cheaper dollars.

A borrower who pays an interest rate lower than the inflation rate, is in fact paying back less in purchasing power to the lender than what he had borrowed. The borrower gains and the lender loses as long as the interest rate is not adjusted for the rate of inflation.

REAL INCOME

Real income is nominal income adjusted for the rate of inflation. For instance, real interest is equal to nominal interest less rate of inflation.

What income can really buy in terms of the quantity of goods and services, also known as purchasing power, is real income. If prices increase while income is unchanged, less and less can be purchased.

ANTICIPATED INFLATION

If inflation is fully anticipated, the redistribution effect of inflation is nonexistent. This can be accomplished with cost of living adjustments for income to offset the loss of purchasing power, and by indexing nominal interest rates (i.e. increasing the nominal interest by the rate of inflation). The drawback of using various schemes of anticipated inflation is that it perpetuates inflation.

In the 1980's, variable interest rates for mortgages became increasingly popular. Both borrowers, i.e. home buyers, and lenders, i.e. banks, can benefit from the arrangement. With interest tied (or indexed) to inflation, home buyers see their payments reduced if inflation slows down. But, banks are also protected from the loss of purchasing power of the repayments should inflation speed up.

INFLATION OUTPUT EFFECT

Depending on its severity, inflation may have a mild stimulative effect (called forced saving) or a serious recessionary effect (especially in hyperinflation). Most commonly, continuous price changes make consumers not sure of what the real value of products is, and the uncertainty reduces the volume of purchases.

Historically, periods of inflation have been associated with peaks of economic activity. The high price of products and the uncertainty about what the real value of product should be, has been identified as a cause of the slow down in purchases in the inflationary years of 1970-80 in the United States. But, some countries manage to adjust to high rates of inflation.

INFLATION OUTPUT EFFECT

In the case of a mild inflation (4-6% per year), the additional revenues over costs for most firms allows them to undertake new investment which is expansionary. (This is called forced saving).

HYPERINFLATION

Hyperinflation is the most severe and destructive form of inflation. When money decreases in value so fast that it ceases to be a medium of exchange, the economy returns to barter and the economic activity may come to a halt. Such danger may be present even in a moderate inflation because inflation expectations may produce spirals of cost push and demand pull inflation leading to hyperinflation. However, some countries manage with very high inflation.

The classical example of hyperinflation is that of Germany during the 1920's. It is reported that money was losing so much of its value that the weight of money paper needed to buy products exceeded the weight of products that could be bought. It is no wonder that people preferred to avoid using money in their transactions when they could.