PART VII

THEORY OF BUSINESS CYCLES

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BUSINESS/TRADE CYCLES

"These cyclical fluctuations are characterized by alternating waves of expansion and contraction. They do not have a fixed rhythm, but they are cyclical in that the phases of contraction and expansion recur frequently and in fairly similar patterns. These patterns are most marked in those countries which are built up on 'business' rather than agriculture, and have been particularly notable in England and the United States for over one hundred years."

—James Arthur Estey, *Business Cycles*, p. 11.

MEANING AND DEFINITION OF BUSINESS CYCLES

An important feature of the working of a capitalist economy is the existence of alternating periods of prosperity and depression generally referred to as "business cycle". (The British economists call it "trade cycle".) A business cycle is a very complex economic phenomenon, and the economists have not been able so far to discover any comprehensive explanation for this phenomenon. The business cycle is associated with sweeping fluctuations in economic activity, such as, production, prices, employment, etc.

What is a business cycle ? In the words of W.C. Mitchell, "Business cycles are a species of fluctuations in the economc activities of organized communities. The adjective 'business' restricts the concept to fluctuations in activities which are systematically conducted on a commercial basis. The noun 'cycles' bars out fluctuations which do not recur with a measure of regularity."[1] Prof. Mitchell, thus, insists upon a measure of regularity in cyclical fluctuations.

According to Keynes, "A trade cycle is composed of periods of good trade characterized by rising prices and low unemployment percentages, altering with periods of bad trade characterized by falling prices and high unemployment percentages."[2] Keynes has, thus, specified two indices, namely, prices and unemployment, for measuring the *upswing* and *downswing* of the business cycles. In the words of Frederic Benham, "A trade cycle may be defined, rather badly, as a period of prosperity followed by a period of depression. It is not surprising that economic process should be irregular, trade being good at some time and bad at others."[3]

The business cycle, in short, is an alternate expansion and contraction in overall business activity, as evidenced by fluctuations in measures of aggregate economic activity, such as, the gross product, the index of industrial production, and employment and income.

Generally speaking, the cyclical fluctuations have a tendency towards simultaneous appearance in all the branches of the national economy. But sometimes they may be confined only to individual industries or individual sectors of the economy. Cyclical fluctuations in such cases are referred to as specific cycles.

CHARACTERISTICS OF BUSINESS CYCLES

The main characteristics or features of business cycles are as follows –

(1) A business cycle is a *wave-like movement.*

1 Mitchell, W. C., *Business Cycles*, Vol. I, p. 468.
2 Keynes, J. M., *A Treatise on Money*, Vol. I, p. 78.
3 Benham, Frederic, *Economics*, p. 341.

(2) Business cycles *operate periodically* at fairly regular intervals of 10 to 12 years.

(3) Business cycle is of an *all embracing nature*, i.e., it prevails in all industries, all occupations including agriculture and all areas in a country.

(4) Expansion and contraction in a business cycle are *cumulative in effect.*

(5) Business cycles are *all-pervading in their impact.*

(6) A business cycle is characterised by *downward and upward movements.*

(7) In business cycles cyclical fluctuations are recurrent in nature.

CLASSIFICATION OF BUSINESS CYCLES

Prof. James Arthur Estey has classified business cycles under the following heads :

1. *Major and Minor Cycles.* Major cycles may be defined as the fluctuations of business activity occurring between successive crises. The term "crisis" may be interpreted here to mean the major "breakdowns" or "downturns" that interrupt from time to time the relatively even tenor of economic activity. So the major cycles constitute the intervals between successive major downturns of business activity or between major recessions. On this basis, Prof. Hansen recognizes twelve major cycles in the U.S.A., during the period from 1837 to 1937, with an average duration of 8.33 years. The major cycles are sometimes referred to as *Juglar Cycles,* after the name of Clement Juglar, a French economist of the nineteenth century, who, on the basis of his investigation, established the *cyclical* nature of business fluctuations.

It has been established from the records of business fluctuations that each major cycle is made up of two or three *minor* cycles. The upswing of business in the major cycle is often interrupted by minor downswings. Likewise, the downswings of business in the major cycle may be interrupted by minor upswings. These shorter cycles in major cycles are sometimes referred to as minor cycles. The duration of the minor cycles averages close to 40 months. These minor cylces have actually operated both in Great Britain and the U.S.A. Since the distinction between major and minor cycles was observed by Prof. Joseph Kitchin, the minor cycles are sometimes referred to as *Kitchin Cycles.*

2. *Building Cycles.* This refers to the cycle of building construction. The duration of the building cycle is *longer* than that of the business cycle.

It has been discovered that the building industry is also subject to fluctuations of a fairly regular duration. There are upswings and downswings in the building activity. The duration of the building cycle varies between fifteen to twenty years. The average of the building cycles is 18 years – just twice the length of the business cycles. Between 1830 and 1934, there were six complex building cycles in the U.S.A.

3. *Kondratieff Cycles (or, Long Waves).* They are sometimes referred to as "long waves" occurring in a 50 or 60 year cycle. The long waves in economic activity were discovered by the Russian economist, Kondratieff. Hence, these long waves are called Kondratieff Cycles. Kondratieff, on the basis of statistical data pertaining to the period 1780-1920, was able to establish $2\frac{1}{2}$ long cycles in England and France, each full cycle being of the duration of 60 years.

Summing up, the fundamental changes in economic activity include three kinds of cycles – the short or minor or the Kitchin cycles of the duration of 40 months or so, the major or the Juglar cycles, composed of three minor cycles and of the duration of 10 years or so, and finally, the Kondratieff cycles (or, long waves), made up of 6 Juglar cycles and of the duration of 60 years.

PHASES OF A TYPICAL BUSINESS CYCLE

A typical or standard business cycle is characterized by five different phases or stages – depression, recovery (or, revival), prosperity (or, full employment), boom (or, overfull employment) and recession.

Depression

This constitutes the first stage of a business cycle. It is a protracted period in which business activity in the country is *far* below the normal. It is characterized by a sharp reduction of production, mass unemployment, low employment, falling prices, falling profits, low wages, contraction of credit, a high rate of business failures and an atmosphere of all-round pessimism and despair. A decline in output or production is accompanied by a reduction in the volume of employment. All construction activities come to a more or less complete standstill during a depression. The consumer goods industries, such as, food, clothing, etc., are not so much affected by unemployment as the basic capital goods industries. The prices of manufactured goods fall to low levels. Since the costs are "sticky" and do not fall as rapidly as prices, the manufacturers suffer huge financial losses. Many of these firms have to close down on account of accumulated losses.

The fall in prices distorts the relative prices structure. The prices of agricultural commodities and raw materials fall to a greater extent than the prices of finished manufactured goods. The agriculturists are hit *more* than the manufacturing classes.

The two longest depressions in the U.S. history were those of 1873-1879 (65 months) and 1929-1933 (44 months).

Recovery (or, Revival)

It implies increase in business activity after the lowest point of the depression has been reached. During this phase, there is slight improvement in economic activity, to start with. The entrepreneurs begin to feel that economic situation was, after all, not so bad as it was in the preceding stage. This leads to further improvement in business activity. The industrial production picks up slowly and gradually. The volume of employment also steadily increases. There is a slow, but sure rise in prices accompanied by a small rise in profits. The wages also rise, though they do not rise in the same proportion in which the prices rise. Attracted by rising profits, new investments take place in capital goods industries. The banks expand credit. The business inventories also start rising slowly. The pessimism and despair of the preceding period is replaced by an atmosphere of all-round cautious hope.

The recovery continues until business activity reaches approximately the same level that it had achieved before the decline set in. The rate of recovery, it has been found, is generally related directly to that of the preceding depression. The more severe the depression, the more rapid will the recovery be. Nothing definite can be said about the duration of the recovery period. It depends upon the strength of the forces which initiated the recovery. The recovery could be initiated by new innovations, government expenditure, changes in production techniques, investment in new regions, exploitation of new sources of energy, etc.

Prosperity (or, Full Employment)

This stage is characterized by increased production, high capital investment in basic industries, expansion of bank credit, high prices, high profits, a high rate of formation of new business enterprises and full employment. There is a general feeling of optimism among businessmen and industrialists.

The longest sustained period of prosperity occurred in the U.S.A., between 1923 and 1929 with some minor interruptions in 1924.

Boom (or, Overfull Employment)

It is the stage of rapid expansion in business activity to new high marks, resulting in high stocks and commodity prices, high profits and overfull employment.

The prosperity phase of the business cycle does not end up with a stable state of full employment ; it leads to the emergence of boom. The continuance of investment even after the stage of full employment results in a sharp inflationary rise of prices. This causes undue optimism among businessmen and industrialists who make additional investments in the various branches of the economy. This puts additional pressure on the factors of production which are already fully employed, causing a sharp rise in their prices. Soon a situation develops in which the number of jobs exceeds the number of workers available in the market. Such a situation is known as *overfull* employment. Profits touch a new high. Attracted by the rising profits, the businessmen and industrialists further increase their capital investments. This adds fuel to the fire. Runaway inflation raises its head in all its ugliness. Prices rise sky-high. The tempo of the boom reaches new heights. There is an atmosphere of *overoptimism* all around.

But the developing boom carries with it the seeds of self-destruction. Bottlenecks begin to appear in the various sectors of the economy. Factors of production become scarce, causing further spurt in their prices. The cost calculations of the businessmen and the industrialists are completely upset. Some new hastily set-up firms collapse. This makes the businessmen overcautious. They now begin to stay away from new projects and even stop the expansion of the existing units. This prepares the ground for the succeeding stage. A boom, as it is said, is inevitably followed by a bust.

Recession

This feeling of overoptimism of the earlier period is replaced now by overpessimism characterized by fear and hestitation on the part of the businessmen. The failure of some businesses creates panic among businessmen. The banks also get panicky and begin to withdraw loans from business enterprises. More business enterprises fail. Prices collapse and confidence is rudely shaken. Building construction slows down and unemployment appears in basic, capital goods industries. This initial unemployment then spreads to other industries. Unemployment leads to fall in income, expenditure, prices and profits. The recession, it should be remembered, has cumulative effect. Once a recession starts, it goes on gathering momentum and finally assumes the shape of depression – the first phase of the business cycle is complete.

The 1957-58 recession in the U.S.A. was a severe one.

The various phases of the business cycle can be illustrated by the following Diagram.

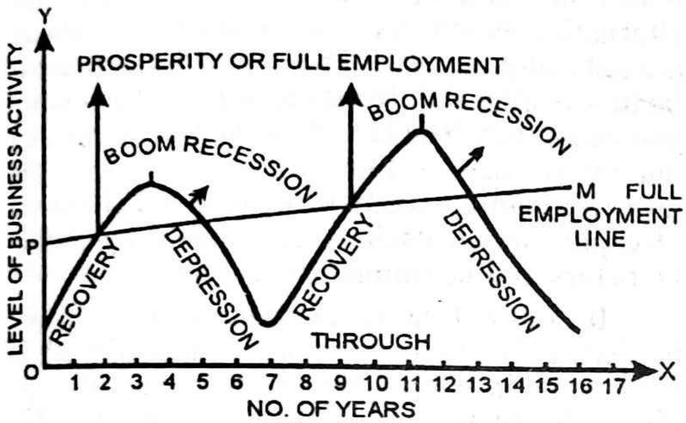

Fig. 33.1

In this diagram, *PM* is the full employment line. Above this line, we have two stages of the business cycle – a boom in the upswing and a recession in the downswing. Below this line, again, we have two stages of the business cycle – recovery in the upswing and depression in the downswing. The business cycle, as shown in the diagram, passes through five stages. It starts with depression to be followed by recovery, prosperity, boom, recession and ultimately ends up again with depression.[1]

These are the five phases or stages of a *typical* business cycle. It does not, however, imply that every business cycle passes through these five stages in the *same* order. It is possible that the recovery stage may be followed by the recession stage without the business cycle entering into the prosperity and boom stages, as it actually happened in the U.S.A. in 1937. Likewise, we cannot say anything definite about the *duration* or *length* of the various stages of the business cycle. It is possible that the depression phase is a prolonged one to be followed by quick recovery. It is also possible that the depression is a short one, but is followed by prolonged recovery.

THEORIES OF BUSINESS CYCLE

To seek an explanation of the causes of business cycles, we have to study the important theories which have been put forward from time to time to throw light on this highly complex phenomenon of the capitalist world. These theories can be classified broadly into (I) *Non-monetary*, and (II) *Monetary* Theories. The *non-monetary* theories are the following :

(I) NON-MONETARY THEORIES OF BUSINESS CYCLES

(1) Meteorological (or, Sunspot) Theory

This is the oldest theory of business cycle. It is associated with the name of W. Stanley Jevons, the celebrated British economist, who in 1875 laid down the proposition that variations in the atmosphere of the sun, as evidenced in the frequency and magnitude of sunspots, determined the rhythmical fluctuations of business activity. At definite intervals certain dark spots appeared on the face of the sun which affected the transmission of heat to the earth. This affected the agricultural crops which, in their turn, influenced the level of business activity in the economy. When the agricultural crops failed, consequent upon the appearance of sunspots, the entire economy would be engulfed in a depression, the reason being that agriculture was an important branch of production. The depression in the agricultural sector soon spread to other sectors, and the entire economy became depressed. On the other hand, if the spots did not appear on the face of the sun and the rainfall was good, there might be excellent harvests in the country giving rise to a period of prosperity for the people. The variations in the rainfall, it was pointed out, were so regular that periods of poor harvests often alternated with periods of good harvests. Consequently, a period of depression was often followed by a period of boom.

In recent years, Prof. Henry L. Moore has discovered an eight-year cycle of rainfall in America which, according to him, causes variations in the yield of agricultural crops. The cycle of rainfall determined the cycle of crops, and the cycle of crops, in its turn, determined the cycle of business activity. Thus, according to this theory, agriculture is the medium through which

1 The "trough" is the lowest point of business activity or is the lowest point of the business cycle. Coming after a period of depression and before the period of recovery, the trough is usually of a short interval, lasting only a month or two.

The multiplier, as we know, is a function of the marginal propensity to consume (M.P.C.) and the M.P.C. cannot be expected to remain constant in response to cyclical changes in income during the different phases of the business cycle. The multiplier, therefore, keeps on changing as the economy moves from one phase of the business cycle to the other. Likewise, it would be wrong to assume that the accelerator remains constant over time. The accelerator, as we know, is a function of the rate of consumption in the economy. And the rate of consumption cannot remain constant during the different phases of the business cycle. Further, the capital-output ratio (which influences the size of the accelerator) does not remain constant over time. Barring this drawback, Hicks' theory may be said to command general acceptance among the present day economists.

THEORIES OF LONG WAVES

(Or, LONG BUSINESS CYCLES)

So far we have been discussing the theories of short business cycles. There are two important theories expanding the occurrence of long waves. One theory attributes the long waves to the impact of major wars ; the other considers the long waves to be the result of major innovations in industry.

Siberling, an American economist, has put forward the theory that the long waves are the result of major wars. A major war is accompanied by monetary inflation. The government's expenditure increases enormously. To finance this gigantic expenditure, the government resorts to taxation, borrowing and finally, the expansion of money supply. This inevitably results in inflation. Prices rise ; profits also rise. Business is stimulated. Agriculturists also benefit from high prices. There is an all-round prosperity in the country.

At the end of the war, there is a sudden decline in government's expenditure. Demand for industrial goods registers a fall. Prices fall. The extractive industries are more adversely affected than the manufacturers. These industries are then less able to buy goods from the manufacturing industries. There is a general reduction in business activity which may be referred to as the primary post-war recession. This recession, however, is shortlived ; the reason being that the wages of the industrial workers do not fall to the same extent as the prices in the immediate post-war period. Such workers become better off and more prosperous on account of the fall in prices. Their real wages move up. They are able now to satisfy their pent-up demand for durable consumer goods, such as, television sets, laundry machines, motor vehicles – goods which they were not able to buy during wartime. The increased demand for these goods compensates the manufacturing industries to some extent for the loss of wartime government orders and gives a strong stimulus to them. This brings the post-war primary recession to an early end, leading to a brief period of prosperity. The extractive industries, however, remain immune from this prosperity, because prices of their goods do not rise up sufficiently to compensate them for the preceding post-war recession. This unbalance between extractive and manufacturing industries upsets the equilibrium of the economy, and causes a long wave of depression which may last for decades.

Schumpeter's innovation theory also explains the long waves. According to him, the lesser waves of innovations cause the operation of the short business cycles. The major waves of innovations, on the other hand, cause the long waves (or, long business cycles). The major innovations, such as, the advent of steam power, new mechanical inventions on the eve of Industrial Revolution, the introduction of railways, the coming of electrical energy, produced profound and prolonged effects on economic progress. These innovations necessitated extensive investment in new plants and equipment, led to the expansion of bank credit, resulted in increased demand for factors of production, bringing in its wake a prolonged period of prosperity. This marked the beginning of the upswing (caused by innovations) of a long wave. Later on, as the effects of the innovations wore off, the rate of expansion slowed down ; the volume of investment fell off, reducing the demand for the factors of production. This marked the beginning of the downswing which continued till another wave of major innovations came along to reverse the trend.

CONTROL OF THE BUSINESS CYCLE

The business cycle, by creating cyclical fluctuations in economic activity, does a great deal of harm to the smooth and orderly progress of society. Efforts should, therefore, be made to check the operation of the business cycle. So far as the long waves (or, long business cycles) are concerned, it is perhaps not possible to check them since there is no international machinery to prevent major wars. Nor is it in the interests of society to prevent major innovations from taking place. Long waves are, therefore, inevitable in a capitalist society. But something can definitely be done to mitigate the ravages of the short business cycle.

(1) *Monetary Policy.* Whatever may be the cause of the short business cycle it is always *aggravated* by the monetary factors. The monetary factors may not *cause* the business cycle, but once the cycle occurs, the monetary factors do aggravate it. Monetary inflation, by leading to higher prices, higher profits and an optimistic outlook, strengthens the *upswing* of the cycle. Monetary deflation, on the contrary, by leading to lower prices, lower profits, and a pessimistic outlook, reinforces the *downswing* of the cycle. Some steps should be taken to check and control the monetary factors, which aggravate business fluctuations caused by the business cycle. For this, the government may evolve a suitable monetary policy to deal with the situation. So far as money supply is concerned, its undue expansion could be checked by insisting upon a proper and adequate cover against note issue. As regards bank credit, the Central Bank of the country could utilize the various weapons of control, such as bank rate, open market operations, reserve ratios, moral suasion, etc. to control it. Whenever there is a tendency towards an overexpansion of business activity, the Central Bank should utilize its weapons to check and control expansion of credit. On the contrary, whenever there is a tendency towards an undue slackening of business activity, the Central Bank should utilize its weapons to ensure an adequate expansion of credit. The bank rate weapon is being increasingly used in recent years in countries like Great Britain and the U.S.A., to combat inflationary trends in business activity. Monetary policy has, thus, an important part to play in curbing cyclical business fluctuations and contributing to economic stability.

(2) *Fiscal Policy.* It is possible that monetary policy, taken alone, may not suffice to check cyclical business fluctuations. It is, therefore, suggested that monetary policy should be properly *integrated* with a suitable fiscal policy to achieve the desired results. Keynes and the Keynesians, such as, Alvin Hansen and others, have recommended *compensatory finance* or *compensatory fiscal policy* to bring about stabilization of business activity. Governmental activity, of late, has expanded so much that the government is now in a position to exercise a very great influence on the total volume of putput in a country. It is, therefore, suggested that the government should regulate its activities in such a manner as to *offset* the cyclical fluctuations in private business activity. The three main instruments of fiscal policy—*taxation, spending* and *borrowing*—can be used by the government to achieve this purpose.

If business activity shows signs of slackening down or there are symptoms of a downswing, the government should at once enforce its three instruments of fiscal policy to check the downtrend and ensure stability in the economy. At such a time, the government should not levy any new taxes on the people. Even the existing taxes should be substantially reduced. This would leave more money in the hands of the people who should be encouraged to spend it on buying additional goods and services to offset the decline in demand and business activity. At the same time, the government itself should embark on a vast spending programme to stimulate business activity in the economy. The government, at a time of depression, should initiate *public works projects* of various kinds involving expenditure of money and additional employment of labour. The government is expected to keep ready a number of public works schemes, such as, construction of roads, canals, parks, schools, hospitals, etc., and execute them at the first sign of the coming depression. These public works projects, by giving employment to the unemployed workers, provide them with purchasing power to buy consumer goods. This would help in offsetting the decline in effective demand and business activity. The funds to finance the public works projects should be obtained either by printing more paper money or by borrowing from the banks. In either case, more money would be created and put into circulation, thus, offsetting the deflationary effect of reduced business spending. The government should, at such a time, follow the policy of *deficit budgeting,* which, alone, will increase the flow of income stream into the economy. The increased government outlay consequent upon a deficit budget shall inject fresh purchasing power into the economy, helping it to fight depression and unemployment. Public borrowing can also be employed by the government as an instrument to fight depression and unemployment. The deficits caused in government's budget as a result of the adoption of public works programme shall have to be met partly, if not wholly, through public borrowings. The government should try, as far as possible, to borrow from those sections of the people with whom the funds are lying idle. The idea is to utilize those funds through borrowing for productive purposes.

When the economy recovers and a wave of prosperity sets in, the government should follow an exactly opposite policy. Now it should raise the existing taxes, nay, even levy new taxes to check private spending. It should reduce its expenditure on public works and similar projects. It should retire paper money and pay off its debts to the banks and the public, thereby reducing the quantity of money in circulation. The idea is that the government, at a time of boom, should follow a policy of *surplus budgeting.*

It is, thus, evident that a compensatory fiscal policy followed by the government would help to maintain a constant circuit flow by bringing about stabilization in the economy.

(3) *Automatic Stabilizers.* The monetary and fiscal policies outlined above rely a good deal on the discretion of the government. They also presuppose a certain amount of alertness and promptness on the part of the government to enfore them at the *right* moment. What is required is that the government should act promptly with the right type of taxation, monetary and spending measures to check business cycle fluctuations. It is perhaps too much to expect the government officials to display the alertness and promptness required to deal with cyclical fluctuations. The economists have, therefore, suggested the introduction of a number of *automatic stabilizers (or, built-in stabilizers)* to deal with the business cycle. *An automatic stabilizer (or, built-in stabilizer) is an economic shock absorber that helps smooth the cyclical business fluctuations of its own accord, without requiring deliberate action on the part of the government.* One such device in the U.S.A. is the federal progressive income tax. This tax is so devised that people in higher income brackets are taxed at a progressively higher rate than those in the lower income brackets. For example, a rich man with a very high income may have to pay a tax of 50 per cent, whereas a person with a low income may have to pay 5 per cent of his income. Such a progressive type of income tax tends automatically to offset cyclical fluctuations, because in an *upswing,* when incomes are rising, people would pay more taxes to the government and, thus, their expenditure would be checked ; and in a *downswing,* when incomes are declining and tax percentage is low, people would pay less taxes to the government, leaving more funds for them to spend.

Still another built-in stabilizer in the U.S.A. is *unemployment insurance.* During the period of prosperity the employers pay taxes to the government at enhanced rates, but the government does not pay doles or unemployment allowances to the unemployed persons (becuase there is hardly any unemployment worth the name at such a time). Money, therefore, accumulates with the government. To that extent, the spending of the people is checked. On the other hand, during the period of depression, the government lowers the taxes, but pays out doles or unemployment allowances to the unemployed persons thereby making available more money to the people, which automatically tends to offset the reduction in the circuit flow. Thus, consumers' buying power is strengthened and recessionary pressures are tampered. In combination, these built-in stabilizers have played a key role in the prompt reversal of U.S. reductions since the Second World War.

The superiority of the automatic stabilizers lies in the fact that they go into action immediately whenever the economy is confronted with economic fluctuations. Discretionary policy, on the contrary, involves a certain amount of delay in reacting to the new situation. But the main limitation of automatic stabilisers is that they provide only a *partial* solution of the problem. Empirical research conducted in the U.K. and the U.S.A. suggests that automatic stabilizers can control not more than 50 per cent of the economic fluctuations in the economy. Hence, it is essential to *supplement* the automatic stabilizers with discretionary policy to secure effective and lasting stability in the national economy.

SUGGESTED READINGS

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6. Robert A. Gordon, *Business Fluctuations* (1961), Chapters 8-11 and 14-16.