INFLATION: CAUSES AND CURES

With Special Reference to Developing Countries

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CALCUTTA
THE WORLD PRESS PRIVATE LIMITED

Mrityunjoy **Banerjee**, 1920—

First Published: May, 1967
Reprinted : 1975

Published in India by S. Bhattacharjee for The World Press Private Ltd., 37A College Street, Calcutta-700012 and Printed by P. C. Roy at Blue Line Printing Industry, 50 Sitalatola Lane, Calcutta-700011.

Preface

With the net of inflation cast wider and its hold getting stronger, a study of the subject has assumed great importance in recent years. But there is hardly any comprehensive book—which deals with its nature, causes, consequences and possible cures. There is equal dearth of analytical studies to project the picture of developing countries, which are faced with the problem of inflation as a concomitant of growth.

This book is an attempt, ambitious though, at filling both these voids at the same time. Obviously some strong constraints have made this task a formidable one such as the sporadicalness of theoretical expositions that have appeared so far, their wide divergences, the lack of data about the developing countries, the differences in their approaches and experiences. In view of these, the resulting product may not have been so appealing as a decorated piece of architecture or gorgeous as a multi-storied edifice. It may rather be looked upon as a simple cottage useful for habitation.

The author will consider his labour rewarded if the book serves to provide answers to some of the questions generally haunting the minds of the lay public, help to the student community in understanding the complicated facets of inflation and guidance to the administrators in tackling its problems practicably.

M.B.

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CHAPTER I

Nature of Inflation

The best way to destroy the capitalist system is to debauch the currency. Lenin

UNIVERSALITY

"The fluctuations in the value of money since 1914", observed J. M. Keynes, "have been on a scale so great as to constitute, with all that they involve, one of the most significant events in the economic history of the modern world. The fluctuation of the standard, whether gold, silver or paper has not only been of unprecedented violence, but has been visited on a society of which the economic organisation is more dependent than that of any earlier epoch on the assumption that the standard of value would be moderately stable."[1] Indeed, it was World War I, itself an event of great importance, that for the first time put inflation on the centre of the stage. It provided the climax which was followed in turn by an anti-climax. The opposite number of inflation, *viz.*, deflation entered the stage about a decade later and held it on for some length of time. But inflation is no longer a mere war-time phenomenon nor the problem of a specific region or society. It has established itself firmly on the economic arena of the world and none can afford to ignore its feats and exercises, even its gestures and postures. It is also a kind of constant companion to the underdeveloped countries that are engaged in war against unemployment, poverty and distress.

"It is probably no exaggeration to say", pointed out the United Nations in 1957, "that the world has never been so acutely sensitive as in recent years to the danger of

[1] *A Tract on Monetary Reform*, Macmillan & Co. Ltd., London, 1923.

inflation. Nearly a generation of experience with the social and economic costs of war-time and post-war inflation seems to have transformed the economic psychology of the world community; old fears of depression and unemployment apparently gave way to new anxieties over wage-price spirals and erosion in the value of money."[2] According to the International Monetary Fund[3], the most complex and serious set of economic problems to confront national governments and the international community since the end of World War II consists of "virulent and widespread inflation, a deceleration of economic growth and a massive disequilibrium of international payments." "One of the most thought-provoking aspects of the inflationary phenomenon", wrote Irving S. Friedman, "is that it is found in all kinds of societies, at every stage of economic development, under every variety of government and within all kinds of political, economic and social ideologies."[4] Even in a country like U.S.A. the question has been raised 'How good is the dollar?' "Americans have become uneasily aware that the longer they hold money, the less they will get for it. At stake is the preservation of the fabric of the free economy and free society."[5] Former President Nixon in a statement on September 10, 1973 observed that "no issue was of greater concern to the American public than rising consumer prices." To President Gerald R. Ford inflation was America's enemy No. 1. Similar apprehensions have been expressed by responsible persons in other countries. West Germany's Chanceller Helmut Schmidt thought that the polititcal and social strains caused by inflation "might be too violent for the fabric of our democratic institutions." According to Prime Minister Michel Debre of France, 'current rates of inflation could be the death blow to democracy and the future of our western world.'

[2] *World Economic Survey*, 1957, New York, 1958, p. 4.

[3] See *Annual Report*, 1974.

[4] See *Inflation A World-Wide Disaster*, Hamish Hamilton, London, 1973, pp. 13-14.

[5] See Special Report by Miroslav A. Kriz, *Encyclopaedia Britannica*, Book of the Year 1972, pp. 262-63.

Like Lord Shiva of the Hindu Trinity inflation can easily destroy what others have taken years to build, alone undo what several others together have done. Where others fail, it can also come to the rescue of the helpless. The advance move of many a battalion can be thwarted by this single force. On the other hand, many a passive instrument can be fired into action by the forward thrust of its trigger, many a dying muscle energised by its ultra-sonic ray.

DEFINITION

It is, therefore, very much necessary to know what this great force is; what are its parapharnalia; how far it can be prevented or its actions controlled in case it cannot be prevented outright; and so on. It is natural that there would be differences of opinion about such a world-wide epoch. As A. J. Brown put it, despite its painful familiarity, inflation is from the economist's point of view an elusive phenomenon or perhaps more correctly an elusive and bewildering *variety of phenomena.*[6] That is why Sir Roy Harrod wanted to outlaw the use of the term itself.[7]

Its definers can be grouped under two broad classes—(1) those who are guided by their hindsight and mix up the identity with the explanation, the disease with the diagnosis; and (2) those who just point to its principal symptom, who go by outward appearance rather than internal composition.

(1) The general level of prices, wrote Gustav Cassel long ago, "is a measure of the extent of inflation. If no scarcity in commodities exists, the rise in prices is to be accounted for as a result of the more plentiful supply of currency —in other words as a result of inflation".[8] J. M. Keynes defined inflation as 'an expansion in the supply of money

[6] *The Great Inflation, 1939-1951*, Oxford University Press, London, 1955, p. 4.

[7] See *Economic Dynamics*, The Macmillan Press Ltd., London, 1973, p. 81

[8] *Money and Foreign Exchange after 1914*, London, 1922

relatively to the supply of things to purchase'.[9] Emile James, a French scholar meant by it 'a self-perpetuating and irreversible upward movement of prices caused by an excess of demand over capacity to supply'.[10] According to Bent Hansen, 'a monetary pressure of inflation exists if there is monetary excess demand in either the composite commodity-market or the composite factor-market or in both these composite markets so long as neither of them exhibits monetary excess supply'.[11] Inflation in my book, wrote W. C. Mullendore, is an increase in the supply of the media of exchange, money and bank deposits, brought about through the perversion of the power of issue and through misuse and abuse of credit.[12]

(2) On the other hand, George Leland Bach gave a simple definition in these words: "Inflation is a rise in the price-level, that is, a fall in the purchasing power of the dollar".[13] According to Charles L. Schulze, "the term inflation is generally used to mean a rise in the general level of prices".[14] George N. Halm identified it with considerable and sudden variations of the value of money.[15] To Harry G. Johnson, it is 'a sustained or persistent rise in prices'.[16] Inflation or deflation, observed the *Encyclopaedia Britannica,* cannot be defined more precisely than an increase or decrease of more than an acceptable minimum amount in an acceptable index of the price level.

[9] *A Tract on Monetary Reform,* 1923

[10] "A General Survey of Post-War Inflation", paper presented at the conference of the International Economic Association held at Elsinore in 1959

[11] *A Study in the Theory of Inflation,* Rinehart & Co., Inc., New York, 1951, p. 20.

[12] "Are Wages Inflationary?" *Management Record,* xix, August, 1957, p. 272.

[13] See *Economics An Introduction to Analysis and Policy,* Prentice-Hall Inc., Englewood Cliffs, 1955, p. 93.

[14] See *National Income Analysis,* Prentice-Hall Inc., Englewood Cliffs, 1964.

[15] *Monetary Theory : A Modern Treatment of the Essentials of Money and Banking,* The Blakiston Coy., Philadelphia, 1946, pp. 16-17.

[16] *Essays in Monetary Economics,* George Allen & Unwin Ltd., London, 1967, p. 104.

There are, however, some limitations of this second approach, too. (1) All price rises may not be inflationary. For instance, foodgrains may be dearer due to crop failure in a particular year, but other prices may remain steady. (2) When the economy moves upwards from the bottom of a recession to a higher level of business activity, there will be some rise in prices but it may not pose any serious problem. (3) In a normally progressing economy the prices of services generally move forward, even though consumer goods prices might be stable or even declining. Similarly improvements may take place in the quality of existing goods which may lead to rise in their prices or new products may come out, replacing them, which may be more costly. On both these grounds prevalent price indices may have an upward bias, but this would not be inflationary. A group of experts who examined the course of prices in Western Europe, Canada and the United States concluded that their upward movement had not been significant enough due to inadequate allowance for quality improvement in the calculation of price indices.[17]

That is why Martin Bronfenbrenner defined inflation as a rise in price levels with a number of additional characteristics or conditions, *viz.*,

(*a*) it does not increase real output and employment;
(*b*) it leads (through cost changes) to further price movements;
(*c*) it is faster than some 'safe' rate;
(*d*) it arises from the side of money;
(*e*) it is measured by prices net of commodity taxes and subsides;
(*f*) it has been imperfectly anticipated.[18]

Some of the important characteristics of inflation deserve elucidation. (1) Inflation *per se* is a process. It is associated not merely with high prices but *rising* prices. Thus it is not a static condition but a movement; a kind of

[17] Organisation for European Economic Co-operation, *The Problem of Rising Prices*, Paris, 1961.

[18] Article on Inflation and Deflation, *International Encyclopedia of the Social Sciences*, The Macmillan Coy and the Free Press, Vol. 7, 1968, p. 290.

imbalance or disequilibrium. It is a dynamic process which has to be observed over some length of time. (2) The price rise is pervasive. It is not a specific group of commodities but all commodities in general as well as services that become costlier. For the real change is a fall in the over-all purchasing power of money. The general price-level is just the reciprocal of the value of money. (3) There is an element of artificiality in inflation. It originates from some deliberate action on the part of the government, the central bank, the businessmen, trade unions or others. In other words, it is not natural but man-made.

CLASSIFICATION

Inflation is of various kinds. Keynes differentiated between 'semi-inflation' and 'pure inflation'.[19] "The points, where a further increase in effective demand in terms of money is liable to cause a discontinuous rise in the wage-unit, might be deemed from a certain point of view, to be positions of *semi-inflation.*" "When a further increase in the quantity of effective demand produces no further increase in output and entirely spends itself on an increase in the cost-unit fully proportionate to the increase in effective demand, we have reached a condition which might be appropriately designated as one of *true inflation.*" A. H. Hansen also defined *pure inflation* as a condition in which prices rise without any appreciable increase in output.[20] His contention was that "at no time in our history, nor indeed in that of any other country, can it be shown that price increases have injured the economy and the general welfare if in the period in question the increase in aggregate output has exceeded percentage-wise the increase in prices."

The Encyclopedia Americana drew a distinction between open and suppressed inflation. "*Open inflation* simply

[19] See *The General Theory of Employment, Interest and Money*, Macmillan & Co. Ltd., London, 1936.

[20] *The American Economy*, McGraw-Hill Book Coy, Inc., New York, 1957, p. 43.

means an upward movement of the price level. *Suppressed inflation* refers to a situation in which an upward movement of the price level would occur if maximum limits established by law for prices, wages, rents and the like were removed. Several kinds of evidence indicate this potential upward movement of prices (long queues of shoppers, sale at controlled prices, black market, government subsidies)."[21]

Keynes also divided inflation into two broad categories: (*i*) income inflation and profit inflation and (*ii*) commodity inflation and capital inflation.[22] (*i*) *Income inflation* means rise in the rate of efficiency earnings, that is, the average rate of remuneration which is paid by entrepreneurs to the factors of production. It thus corresponds to increase in the costs of production of commodities. Over the long period the purchasing power of money depends on the money rate of such remuneration. In the short period the actual purchasing power may rise or fall below the long-period equilibrium level. *Profit inflation* takes place when the money value of current investment exceeds current savings. In other words profits are a balancing factor between the volume of savings and the value of net investment, both being measured in terms of money. (*ii*) Profit again comprises two elements—one, on the output of consumption goods and another, on that of capital goods. When there is rise in the price of consumption goods relative to their cost of production, it is a case of *commodity inflation*. On the other hand, when the price of capital goods goes up in relation to their cost of production, it is *capital inflation*. Commodity or capital inflation by definition leads to profit inflation. But profit inflation has a tendency to cause income inflation because of the eagerness of entrepreneurs to secure further the services of the factors of production. There is a special significance of capital inflation because it ultimately produces commodity inflation by influencing the output of capital goods.

[21] See Clifford L. James, write-up on Inflation, *The Encyclopedia Americana*, Americana Corporation, New York, 1973, Vol. 15, p. 152.

[22] See *A Treatise on Money*, Macmillan & Co. Ltd., London, 1950, Vol. I.

An important division of inflation is between demand-pull and cost-push inflation. *Demand-pull inflation* is that type of inflation which arises from the demand for goods exceeding their supply. The demand for goods may rise as the result of an expansion in the supply of money or from other influences such as changed attitudes towards the spending of money or not holding it in the form of idle balances (money supply remaining constant).

On the other hand, prices may rise due to a deliberate *increase in the cost of production* of goods, although both their demand and supply may remain steady. Such increase may be caused by a rise in wages through trade union action or in the costs of any other input entering into production. In the latter case the initial increase in price may be just the result of administrative action such as the exercise of monopoly power by suppliers or the joint decision of a group of producers, to raise the price of an input, leading ultimately to 'cost-push' for the final product.

Cost-push inflation has been described by some as the *new inflation,* characterised by a combination of unemployment and high prices, prevalent in the industrially advanced countries. "Post-war experience destroyed the identification of full employment with the economy's inflation threshold. The profession, the press and the public discovered the 'new inflation' of the 1950's, inflation without benefit of growth labelled but scarcely illumined by the term 'cost-push'."[23] "The values of economics are not working in quite the way they used to. Despite extensive unemployment in our country, wage rate increases have not moderated. Despite such idle industrial capacity, commodity prices continue to rise rapidly. This is a new rigidity in our economic structure."[24]

Others have introduced an altogether new term 'stagflation' to depict the new situation. "In the years following

[23] James Tobin, -'Inflation and Unemployment", *The American Economic Review,* March, 1972 (Presidential address before the 84th meeting of the American Economic Association).

[24] Arthur F. Burns, Evidence before the Joint Economic Committee of U.S. Congress given on July 23, 1971 (reported in *Federal Reserve Bulletin,* August, 1971).

the period of reconstruction after the Second World War, a *new* kind of inflation was discovered, characterised by the disconcerting persistence of significant and even substantial unemployment, notwithstanding a relatively rapid rise in prices. It appears that there is no clearly defined middle road between the separate worlds of inflation and unemployment. Instead, these two worlds can co-exist to a certain extent and a new word *stagflation* has been coined to describe the phenomenon".[25] '*Stagflation* is a new name for a new disease', wrote Paul A. Samuelson, 'stagflation involves inflationary rises in prices and wages at the same time that people are unable to find jobs and firms are unable to find customers for what their plants can produce'.[26] The term has gained currency particularly in the developing countries. "We are in the classic situation of inflation without growth. This has been rightly described as 'stagflation'."[27] Inflation is written into our operations, embedded as it were in them, by the law of nature".[28] Stagflation, after all, is nothing else than a combination of inflation and stagnation.

Inflation is said to be *creeping* when the price rise is intermittent or moderate, if continuous. The United Nations called it 'modest but persistent'.[29] It is a case of hyperinflation or galloping inflation if the prices rise in very large proportions, voluntary savings are negligible, the government is forced into continuous money creation, the velocity of circulation is high and output falls due to some bottlenecks or distortions in the production process. *Hyper-inflation* has been defined as a kind of inflation in which the rate of price increase is such that "the public

[25] See Jean Mouly, "Prices, Wages, Unemployment: Inflation in Contemporary Economic Theory", *International Labour Review*, Vol. 108, No. 4, October, 1973, p. 330

[26] Memorandum submitted in 1973 to the West German Council of Economic Advisers, adapted and quoted in *Commerce*, August 24, 1974.

[27] G. L. Mehta, "Planning, Prices and Inflation", *Swarajya*, October 20, 1973.

[28] E. P. W. Da Costa, "Planning, Prices and Inflation", *Swarajya*, November 24, 1973.

[29] See *World Economic Survey*, 1957.

generally becomes unwilling to hold the national money at all, and foreign currencies or physical commodities tend to replace it as a medium."[30] According to Friedrich Baerwald, *galloping inflation* is "a completely unchecked and ever-accelerating rise in prices brought about by a continuous increase in money supply and credit. It is a surrender to the inherent monetary pressures in economic development. There are a number of examples in recent history (Germany in 1923 and 1948, Indonesia in 1959) in which inflationary situations were terminated outright by retirement of the inflated currency and replacement with new money at a drastically lower denomination".[31] *Runaway inflation* is also similar. In this case the price rise is so enormous that the monetary authorities have no control over it.

Inflation is said to be *repressed* when the authorities try to remedy the effects of inflation through a freezing of prices and wages, a measure which implies rationing and production control as well. The effect of inflation is not eliminated, but inflation is driven underground, so to speak. Totalitarian countries undergoing planned development have adopted this as a normal measure.

Others[32] have suggested a new type of inflation, *viz., controlled inflation,* in which case the authorities frankly admit that prices are bound to rise but try to meet the situation through crash programmes. They also try to keep the rise of prices within limits.

Theories of Inflation

To principles, sooner or later, the subtlest craftsman has to bow his head; for even while his hand is on his tools, by theory contingencies and complications are being defeated and eliminated, and processes shortened and economised. T. E. Allbutt

Theories of inflation can be divided into four broad categories:

I. MONETARY, II. KEYNESIAN, III. COST-BASED, AND IV. STRUCTURAL

I. MONETARY THEORIES

This group of theories ascribes changes in prices to changes in the supply of money.

DAVID HUME AND OTHERS

The earliest exponent of this idea was David Hume who in his *Political Discourses* (1752) pointed out that changes in the quantity of money 'are not immediately attended with proportionable alterations in the price of commodities. There is always an interval before matters can be adjusted to their new situation'. But in the end 'prices of commodities are always proportional to the plenty of money'.

Sir William Petty summed up the theory thus: 'If a man can bring to London, an ounce of Silver out of the Earth from Peru in the same time that a bushel of Corn, then one is the natural price of the other.'[1] He had also calculated that the money sufficient for a nation is equal to one-half a year's rent from all land, plus one-fourth

[1] *Economic Writings*, Cambridge, 1899, Vol. I.

of the annual rent from housing, plus one week's expenditures of all the people, plus one-fourth of the value of a year's exports. After him John Locke estimated the desirable money supply to be equal to one-fiftieth of the annual wage bill plus one-fourth of the yearly income of landowners plus one-twentieth of the annual income of brokers. According to Richard Cantillon, this amount was equal to one-ninth of the net national product or what was roughly equivalent to one-third of the annual produce of land. Even Alfred Marshall once stated that 'in every state of society there is some fraction of their income which people find it worth while to keep in the form of currency, it may be a fifth, or a tenth or a twentieth'.

IRVING FISHER

It was Irving Fisher[2] who first formulated a comprehensive version of the Quantity Theory of Money. According to him, if M stands for the amount of money in the hands of the public; V, its velocity of circulation, that is, the number of times a unit of money changes hands during a given period; P, the price-level; and T, the 'real' volume of transactions, as represented by the number of units of goods and services sold against money;

then $MV=PT$

The above formula is called *an equation of exchange* and based on the transactions-velocity approach. For MV simply represents the total amount of money spent on goods and services and PT the value of such goods and services. A flow of money thus exchanges against a flow of goods and services. An increase in the first flow leads to a rise of prices; a rise in the second brings about their decline.

According to Fisher, experience showed that the velocity of circulation remained fairly stable over long periods. So between two periods, if the volume of goods and services remains constant, changes in the price level will be exactly proportionate to changes in the quantity of money.

[2] "Appreciation and Interest", *The American Economic Review*, 3rd series, 7th August, 1896

ALFRED MARSHALL

Alfred Marshall modified the Quantity Theory by introducing the element of *desire to hold money.*[3] According to him $M=k\times PO$ or $P=\frac{M}{kO}$ where M represents the quantity of money; P, price-level; O, output; and k, that fraction of real income over which people wish to hold command in the form of money. Thus in the Marshallian approach the desire of the people to hold cash balances, 'liquidity preference', enters as an important factor. Drastic and sudden shifts in the desire to hold money, reflected in a change in k may produce large and quick changes in the levels of income and prices. Psychological change must be taken into account along with changes in the supply of money. A shift in k in an upward direction represents a decreased demand for goods, a movement away from goods towards money. So it is k which holds the stage. The above is sometimes called the *cash balances equation of exchange.*

MILTON FRIEDMAN

In recent years the Quantity Theory has been re-stated by Milton Friedman and other economists of the Chicago School.[4] According to them, it is a theory of the demand for money, not of output, money income or prices; money is an asset or capital good so that the demand for it is a problem in capital theory. Its basic postulates are as follows:—

(*i*) there is a stable demand function for money in real terms;

(*ii*) the rate of inflation enters into this function as a cost of holding real balances;

(*iii*) this cost influences the quantity of real balances held;

[3] *Money, Credit and Commerce,* The Macmillan Company, New York, 1923.

[4] See M. Friedman (ed). *Studies in the Quantity Theory of Money,* University of Chicago, 1956.

(*iv*) with the aforesaid function as given, the rate of increase of the nominal stock of money determines the rate of inflation;

(*v*) the public eventually expects this rate of inflation and adjusts its stock of real balances to it;

(*vi*) in order to maintain its real balances constant in the face of inflation, the public has to accumulate money balances at a rate equal to the rate of inflation;

(*vii*) this accumulation means sacrifice of current real income from the standpoint of consumption;

(*viii*) the benefit of this goes to the businessmen.

In Friedman's analysis,[5] the amount of money that people wish to hold depends chiefly upon two factors—the level of money income and the cost of holding money. The latter has got two determinants—the rate of interest and the rate of change in the general price-level. Neither the rate of interest nor the expectation of changes in the price-level appears to have significant influence on the demand for cash in normal times.

Empirical studies suggest that there may be a tendency for people to increase their demand for money M slightly more than in proportion to their money income PY if real income Y rises. This arises from the need to carry on increased volume of transactions at the new income level. In other words, the desired value of the ratio $\frac{M}{PY}$ rises slightly when real income increases. Since $MV=PY$, where V=income velocity, over the long period there is a secular rise in real income. Thus V has a downward drift.

Suppose at a particular time the supply of money is increased, so $\frac{PY}{M}$ becomes less than desired. That is, people are holding more money than they wish in relation to the money income (PY). They will then proceed to spend

[5] See his Evidence before the Joint Economic Committee of U.S. Congress, 1st session, 1959.

part of the money, thereby driving up prices (or output) until the desired ratio is established. This tendency of people to spend when the purchasing power of their cash balances is higher in relation to their income is called 'the real balance' effect. A decline in the quantity of money will drive prices (or output) down by an analogous process.

Criticism of the Quantity Theory

1. The Quantity Theory assumes that other things remain equal. But this may not be the case. (*a*) Thus an increase in the amount of money during a period of unemployment may result in increasing employment as well as output. In the end there may be little or no change in price-level. (*b*) The quantity of money may remain the same but prices may rise due to a sudden influx of population or due to an increase in wage-cost brought about by trade union action.

2. The Quantity Theory assumes that a larger supply of money leads to increased spending. It is presumed that people hold money only for transaction purposes. But money may also be held in the form of idle balances in which case it will have little effect on prices.

3. The concept of 'a general price-level' is said to be a hotchpotch. The total effect of an increase in money supply on it may be far from definite or symmetrical. Thus in a country where the greater part of monetary transactions involves purchase and sale of securities, the connection between the total supply of money and retail prices is remote. It is quite possible that the quantity of money may increase but retail prices decline.

Paul A. Samuelson has pointed out[6] that there is a qualitative aspect of money, too. "It is like a catalyst in a chemical reaction, which makes the reaction go faster and better, but which like the oil in the widow's cruse, is never used up. In order that the supply of money may

[6] See "What classical and neo-classical monetary theory really was", *Canadian Journal of Economics*, Vol. 1, No. 1, February, 1968.

have a proportionate effect on prices, it has to enter the economic system in certain homogeneous ways. Doubling money will have to double all long-run prices and values and this change in the price level will have to have no effect on real output-inputs, on price-ratios or terms of trade, on interest rate and factor shares generally. For this certain assumptions have to be made, too. Thus 'we are all exactly alike. We are perfect competitors. Our inelastic labour supply is fully employed. We have built-in rates of subjective time preference. We are in long-run equilibrium without technical change or population growth. We equally own land and capital goods'. This rock-bottom simplicity or perfect symmetry is a far cry from the stream of contemporary history."

4. R. S. Sayers challenged the concept of 'money' itself. "To label something as money", wrote he, "the supply of which is to behave according to rules laid down by legal authority is to build on shifting sand... There is no hard and fast line between what is money and what is not money. When we worry ourselves about changes in the supply of money, our concern is in fact with the shifting liquidity position of the economy. There is not even finality in the list of financial institutions whose behaviour is relevant. New financial institutions arise to exploit new opportunities. It is idle to say that one can somewhere find an ultimate form of money and rule that off as the ground regulator of the economic situation, a regulator that can be made to behave properly by legislator's orders."[7]

5. The Quantity Theory assumes that the velocity of circulation remains comparatively stable over long periods. But as Nicholas Kaldor pointed out, "in the U.K. there has been a spectacular rise in the velocity of circulation, particularly since 1955 which fully compensated for the failure of the money supply to expand *pari passu* with the rise in prices. The 'money supply' has been kept constant (indeed it has been slightly falling) while the annual percentage rise in the money value of the national product

[7] *Central Banking after Bagehot*, Clarendon Press, Oxford, 1957, pp. 5-6.

has been as great or greater than in previous years when the money supply was rising".[8] According to Raymond Rodgers, "the over-emphasis on quantity was at the bottom of the pump-priming policies of many governments during the 1930's, but in general it failed as it disregarded the basic fact that velocity of circulation of money was largely controlled by the public. In fact, as the government increased the quantity of money, the public decreased the velocity".[9]

6. The oversimplification and exaggerated version of the Theory constitute an important weakness. It may be that an increase in money supply would bring about a rise in prices. But it is only a pious expectation that if the supply of money is doubled, the price-level will be exactly halved. However, as Milton Friedman pointed out, the Quantity Theory need not be so much rigid.

Merits of the Quantity Theory

There are still some good points in the theory.

(1) It focusses attention on an important determinant of the price-level, *viz.*, the quantity of money, provided of course other factors like the supply of goods and services, their costs of production etc. remain constant. In the words of M. L. Burstein, 'impressive simple uniformities would appear if only the parameters of the system (other than money stock) would stay put and if we account for the influence of relatively few other variables. As a matter of fact, almost all theories have an element of *ceteris paribus* or other things being equal. If the price-level is regarded as the reverse of the value of money, its inverse relation to the supply of money is unavoidable.'

(2) By implication the theory suggests that an important means of controlling the price-level is regulation of the supply of money. As Frederic Benham put it, 'it is useful in showing that when a marked inflation takes

[8] See *Memoranda of Evidence* before the Radcliffe Committee on the Working of the Monetary System (in U.K.), 1958.

[9] See article on Money, *The Encyclopedia Americana*, Americana Corporation, New York, 1972, Vol. 19.

place, there is a causal connection between the large increase in the quantity of money and the large fall in its value and in pointing to the corollary that the way to stop the inflation is to stop increasing the quantity of money.'

(3) There are some who justify the Quantity Theory on the ground of empirical evidence. Thus Gottfried Haberler urged with great emphasis: "Let us start from the basic fact that there is no record in the economic history of the whole world, anywhere or at any time, of a serious and prolonged inflation which has not been accompanied and made possible, if not caused, by a large increase in the quantity of money. This generalization holds true of developed as well as under-developed countries, capitalist, pre-capitalist and even centrally planned economies."[10] According to J. R. Hicks, "monetary theory is less abstract than most economic theory, it cannot avoid a relation to reality which in other economic theory is sometimes missing. *It belongs to economic history.*"[11]

Empirical Evidence

Over the long period, in a general way prices rose with increase in the supply of money and fell with its decline. Thus when the world was under the gold standard, the influx of Spanish gold from the Americas to Europe caused a steep rise of prices in the 16th century. The discoveries of gold in Australia and the United States in the 1840's were followed by high rise in prices in the 1850's. In the 18th century gold production in the world declined; prices fell because a smaller quantity of money had to perform a greater amount of work. Between the later part of the 18th and early part of the 19th century prices rose in Great Britain since the Bank of England suspended gold payment and the paper currency was considerably expanded. During World War I currency notes and bank credit more than

[10] See his pamphlet *Inflation Its Causes and Cures*, American Enterprise Association, Washington, 1961.

[11] *Critical Essays in Monetary Theory*, Clarendon Press, Oxford, 1967, Ch. 9.

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doubled in many countries and the price-level also nearly doubled.

But if short periods are taken into account, there was no strict correlation between the supply of money and the price-level. For instance, the changes in the supply of money, national income and price-level stood as follows in U.S.A. during the period 1800-1947[12]:—

TABLE 1

COMPOUND RATES OF PER CENT INCREASE PER ANNUM

Period	Deposits and currency	National income	Ratio of money to national income	Price trend
(1) 1800-1840	5	2½	2¾	Falling
(2) 1840-1870	5¾	5	¾	Rising
(3) 1870-1900	6½	3	3½	Falling
(4) 1900-1947	6½	5½	1	Rising

Thus during the first period the money supply rose by 5 per cent but prices showed a declining trend. The same is true of the third period. On the other hand, in the second and fourth periods, money supply and national income increased almost in the same proportion but prices are known to have risen only slightly.

In recent years, the position has been as follows:—

TABLE 2

INDEX NOS. (Base 1958=100)

	1959	1960	1961	1962	1963	1964
Canada—						
Money Supply ..	97	102	114	118	127	138
Cost of Living ..	101	103	103	105	106	108
France—						
Money Supply ..	111	126	146	173	198	214
Cost of Living ..	106	110	114	120	126	127

[12] See Alvin H. Hansen, *Monetary Theory and Fiscal Policy*, McGraw-Hill Book Coy, New York, 1949, Ch. I.

	1959	1960	1961	1962	1963	1964
Germany (West)—						
Money Supply ..	112	119	137	146	157	170
Cost of Living ..	102	103	106	109	113	115
Italy—						
Money Supply ..	114	130	150	178	202	218
Cost of Living ..	102	103	106	113	120	128
Japan—				..		
Money Supply ..	117	139	165	193	259	296
Cost of Living ..	101	104	113	118	126	132
U.K.—						
Money Supply ..	106	108	112	116	117	123
Cost of Living ..	100	102	106	109	110	116
U.S.A.—						
Money Supply ..	100	100	103	105	109	114
Cost of Living ..	100	103	104	105	107	108
Argentina—						
Money Supply ..	143	184	205	211	271	386
Cost of Living ..	202	226	269	354	412	533
Brazil—						
Money Supply ..	142	196	295	482	791	1471
Cost of Living ..	143	189	271	436	790	1460
Chile—						
Money Supply ..	132	173	195	250	336	553
Cost of Living ..	133	141	154	196	285	396
India—						
Money Supply ..	143	184	205	211	271	386
Cost of Living ..	104	104	108	112	119	138
Israel—						
Money Supply ..	110	133	147	190	244	259
Cost of Living ..	103	106	116	128	134	138
Mexico—						
Money Supply ..	116	126	135	153	177	208
Cost of Living ..	100	108	105	108	108	111
Pakistan—						
Money Supply ..	105	112	112	118	136	159
Cost of Living ..	112	113	115	113	116	124
Philippines—						
Money Supply ..	106	110	128	147	169	165
Cost of Living ..	101	104	106	113	122	133
Thailand—						
Money Supply ..	107	119	131	131	141	153
Cost of Living ..	96	101	104	105	106	107

(Source: International Monetary Fund, *International Financial Statistics*, December, 1966, Vol. XIX, No. 12).

money value of the GNP. The ratio fell in some relatively 'inflationary' countries (*e.g.* in U.S.A. from 37 to 30 per cent, in the U.K. from 36 to 27.5 per cent, in Mexico from 16 to 13 per cent) as well as in some 'non-inflationary' countries (*e.g.* in Switzerland from 62 to 54 per cent). It rose in some relatively 'non-inflationary' countries (*e.g.* in Germany from 14 to 18 per cent, in Belgium from 40 to 46 per cent) as well as some 'inflationary countries' (*e.g.* in France from 31 to 36 per cent and in Brazil from 35 to 38 per cent).

II. KEYNESIAN THEORY

J. M. Keynes approached the problem from the sides of income, expenditure and employment. Increases in the quantity of money need not always be spent. People and firms want to hold money for three important reasons—(*i*) for current transactions, (*ii*) as a precaution for the future and (*iii*) for speculative activities. (*i*) They need money to meet their day-to-day expenses (*e.g.* individuals for purchase of necessities of living; firms for buying raw materials, paying wages etc.). (*ii*) There may arise unforeseen circumstances in the future when money will be required. One has to make provision for them. With the habits of the community known, the amount that will be held for these two purposes may be assumed as given. (*iii*) In addition to the above, a certain amount will be held in absolutely 'liquid' form, that is, in such a form as to be readily available at a moment's notice—in order to take advantage of gainful operations as soon as it arises—'knowing better than the market what the future will bring forth.' This will depend on the liquidity-preference of the community, which is closely linked to the rate of interest. When the rate of interest is high, people will want to hold less money in the form of liquid cash and vice versa. An increase in the quantity of money will lead people to buy securities since they had already been holding as much money as they thought worthwhile in 'liquid form'. A general move to buy securities will cause a decline in the rate of interest.

There will be an opposite sequence when the supply of money is reduced.

On the expenditure side, there are three causative factors —(*a*) government outlay, (*b*) private investment on capital goods and (*c*) private spending on consumption goods. Of them government outlay and private investment are in large measure determined autonomously. The level of income has little effect on them. But they are particularly important to the generation of income. For when government outlay and private investment increase, there is rise in the net national product, which causes an increase in the disposable incomes of individuals and therefore, in consumption expenditure.

It is not the quantity of money but expenditure that determines what happens to the price-level. The quantity of money is, however, an important determinant of total expenditure. A change in the quantity of money affects (*a*) the schedule of the marginal efficiency of capital (through the psychological reaction of businessmen with reference to future expectations), (*b*) the rate of interest and (*c*) the consumption function.

Income is generated by outlays on investment as well as consumption. An increase in income in turn leads to a rise in expenditures. It may be noted here that as income rises, consumption rises also but at a slower rate. At low levels of income almost all the increase therein is spent on consumption needs. But at higher levels a proportion is saved.

An increase in expenditure will cause a spurt in effective demand. When there are depression and unemployment, manufacturers feel happy if there are more buyers at current prices and they are more interested in expanding output than raising prices. In this case therefore, employment will rise faster than prices. As full employment is approached, however, the opposite trend will appear, *viz.*, prices will rise rather than employment.

There are some who have traced two different theories of inflation in the writings of Keynes. It has been pointed out that *The General Theory of Employment, Interest and*

Money emphasises inflation as a situation of excess demand and his later booklet *How to Pay for the War,* inflation as the result of autonomous increases in cost. It has also been argued by some that these two expositions are not mutually exclusive but can be reconciled. Accordingly models have been constructed in which the two are mixed together in a manner which broadly satisfy the accepted Keynesian principles.[14]

Gunnar Myrdal has summed up the Keynesian approach in these words:[15]

"It allows for the existence of unemployed and under-utilised productive resources, for the effects of changes in interest rates and other credit conditions, and generally for the motivation of expenditure flows and the way by which money and credit are introduced into the economy. But it is also aggregative and envisages a ceiling to aggregate demand in real terms that is set by aggregate supply. If aggregate money demand rises above this limit, expenditure plans might be realised and prices rise or shortages occur; the result is inflation.

This approach can also be formulated in terms of savings and investment. Investment generates demand for consumption goods (through increase in the incomes of those who provide labour, materials or other resources for investment) without adding to currently available consumption goods while *ex-ante* savings are that part of expected income not used for consumption. If planned investment exceeds *ex-ante* savings, plus net capital inflow from abroad, aggregate demand runs into the ceiling, prices rise and the gap between aggregate money demand and real supply, or between *ex-ante* savings and *ex-ante* investment

[14] See S. Weintrub, "The Keynesian Theory of Inflation: Two Faces of Janus", *International Economic Review,* May, 1960; R. J. Ball, *Inflation and the Theory of Money,* George Allen & Unwin Ltd., London, 1964, Ch. IV. See also J. D. Pitchford, "Cost and Demand Elements in the Inflationary Process", *Review of Economic Studies,* October, 1966.

[15] ASIAN DRAMA, *An Inquiry into the Poverty of Nations,* A Twentieth Century Fund Study, Allen Lane, The Penguin Press, London, 1968, Vol. III, p. 1924.

is eliminated *ex-post,* either by forced savings, *i.e.,* an unplanned reduction in consumption or by unplanned disinvestment (*e.g.* running down of inventories) or by a curtailment of fixed investment. The price rises and shortages of such an inflationary process are usually considered to be undesirable and much thought and effort are devoted to keeping investment down to *ex-ante* savings."

Difference between Quantity Theory and Keynesian Theory

(1) The classical theory was concerned more with the analysis of the price level and economic fluctuations than the level of employment and the theory of interest. Keynes shifted the subject-matter of monetary theory, placing emphasis on the level of employment as the central theme. Correspondingly, he relegated the price-level to a relatively minor position. In his drama the price-level was not Hamlet but a Polonius.

(2) The classical theory assumed a tendency towards full employment. Keynes indicated the possibility of equilibrium at a level below full employment. He was not concerned with cycles. Instead he developed a static theory. According to him, savings and investment would be equated at any level of the rate of interest and not necessarily at the level of full employment.

(3) The Quantity Theory emphasised long-term relations. In other words, it said that over the long period there was a direct and precise relationship between the quantity of money and the price-level. Keynes focussed attention on the short period. Liquidity-preferences change in the short-period with changes in the rates of interest. An increase in the supply of money lowers the rate of interest. As the rate of interest declines, people want to hold more money in the form of cash. This in turn has an upward pressure on the rate of interest. Thus interest-rates are comparatively stable over the long period.

(4) The Quantity Theory relates to the effect of changes in the supply of money. It is a *particular* aspect of this medium of exchange. But Keynes developed a kind of

general theory of employment as well as interest and money. Thus classical theory may be regarded as a special case of Keynesian theory, applicable to conditions of full employment.

Inflationary and Deflationary Gaps

Keynes was much worried about the prevailing unemployment. The so-called *deflationary gap* was the greatest problem of his time. It meant a situation in which plans to spend fell short of the level needed to absorb full-capacity output. As a remedy for the prevailing depression Keynes recommended deficit spending by government. Correspondingly, the same analysis can be extended to show that if the various plans to spend add up to a total in excess of the value of full employment output calculated at current prices, there is an *inflationary gap*. The inflationary gap thus represents the difference between the anticipated effective demand of the people for consumption goods and the supply of such goods at pre-inflation prices.

As R. F. Harrod pointed out, if the *actual* rate of growth is greater than the *warranted* rate, that is, the rate required for the full utilisation of the growing stock of capital, actual capital accumulation will be less than what is required for steady advance and there will be a deficiency of capital. This will lead to a chronic *inflationary gap*, desired investment would be greater than desired saving and production would be less than aggregate demand.

The Keynesian concept of the inflationary gap made a contribution to the procurement of resources for the war effort. It involved forecasting total production and the prospective demands on it, the difference constituting the prospective excess of demand over supply as a basis for devising policies to trim the demand to fit the supply. It helped in keeping the effects of inflation within some limits during World War II. In order to wage it most of the countries had to incur expenditures. But the rise of price was kept well below 50 per cent through the mechanisms of price control, rationing, food subsidy and so on.

For peace-time development the inflationary gap can be taken to mean the amount by which money incomes may have to be reduced in order that the volume of output targeted in the development programmes can be bought at prevailing prices. More specifically, it would refer to the amount by which voluntary saving would be short of planned investment, including public investment. If rise in prices is to be prevented, this amount will have to be taken away in the form of increased taxation. The flow of expenditure on consumption goods would then be equal to the value of output of such goods.

Merits of the Keynesian Theory

(1) The Keynesian theory was a landmark in economic thinking. "It undermined the presumption that economic activity would run in a regular cyclical pattern. It made crystal clear the significance of unemployed persons for inflation. It finally disposed of the argument for wage reduction as a way to recovery by showing that its only general effect would be to make money relatively abundant. Through the concepts of the consumption function and the multiplier, it provided the framework for a systematic quantitative assessment of the government's impact on the economy".[16] Before Keynes the word 'spending' had bad connotation being associated with adjectives like 'loose', 'reckless' or 'wild'. He gave it a new meaning and propounded that government spending was useful in promoting recovery and increasing employment.

(2) Keynes brought about a correspondence between monetary theory and value theory. In the words of Joan Robinson he had "broken down the compartments of 'real' and 'monetary' theories. He showed what part monetary and financial institutions play in the functioning of the economy". "As a theory for dealing with problems of employment, inflation and economic planning", wrote

[16] See Alan Sweezy, "The Keynesian Revolution and its Pioneers", paper presented at the 84th annual meeting of the American Economic Association held in New Orleans in December, 1971.

Harry G. Johnson, "it (the Keynesian theory) constitutes in my opinion a great and pervasive advance, the essence of which is to look at the relations between aggregate demand for and availability of, resources rather than at the quantity of money. In monetary theory its main contribution has been to emphasise the function of money as an asset, alternative to other assets, and to break the quantity-theory assumption that there is a direct connection between money quantity and aggregate demand".[17] A change in the quantity of money leads to a change in the level of output. As the level of output changes, costs change. As costs change, prices change. So the theory of money and prices cannot be isolated from that of output and income.

(3) The concepts of the 'circular flow of income' from consumption to business and back to consumption and of equilibrium of saving and investment within the aggregate level of income are also a welcome novelty. "The savings-investment equilibrium condition provided a direct approach to the question of inflation in terms of the demand for and supply of goods, this of course is the main attraction of the Keynesian theory—it does go right to what seems fairly common-sensical and understandable—the aggregate demand for goods and what determines it . . . If the levels of money prices or wages can be related by some mechanism to the amount of saving or investment measured in real terms, the savings-investment equilibrium condition provides an apparatus for analysing the effects of inflationary shocks on the level of wages and prices . . . the savings-investment equilibrium condition is simple to understand and can be very easily adapted to conditions in which money prices and wages rather than real output are the variables that bring about equilibrium".[18]

(4) Keynes's theory has got good practical utility. "I am impressed by the worth of Keynesian economics", wrote R. W. Clower, "as a guide to practical action which is in such sharp contrast to the situation of general price theory.

[17] *Money, Trade and Economic Growth*, George Allen & Unwin Ltd., London, 1964.

[18] See Harry G. Johnson, *op. cit.*, p. 116

As physicists should and would have rejected Eienstein's theory of relativity, had it not included Newtonian mechanics as a special case, so we would do well to think twice before accepting as 'useful' or 'general' doctrines, which are incapable of accommodating Keynesian economics".[19]

It is because of the realities of his approach that Keynes could formulate some practical proposals both for controlling war-time inflation and tackling depressionary situations. In the words of Nicholas Kaldor, "As a result (of the Keynesian Revolution) we think of day-to-day problems—of inflationary or deflationary tendencies... we think of the pressure of demand and we seek to regulate the economy by interfering at various points with the process of income generation; by offsetting net inflationary or deflationary trends emanating from the private sector or the overseas sector by opposite changes in the net income generating effect of the public sector".[20]

(5) Though the Keynesian approach was meant originally for advanced countries, it has its lessons for the developing ones as well such as the prevalence of unutilised resources, the importance of capital accumulation and the potentiality of bank credit. It was Keynes who advocated extensive public works to combat unemployment. Economic planning can be regarded as just an extension, on a comprehensive scale and continuing basis, of public works policy.

(6) Another contribution of the Keynesian approach, though indirect, is the capital budget for development and its corollary, *deficit financing*. The tradition of sound public finance was that the budget would be a balanced one. By and large, all current expenditure would be covered by taxes and all expenditures of a non-recurring capital nature would be met by borrowing in the capital market. But for the purpose of economic development developing countries, of which the main handicap is shortage of

[19] "The Keynesian Counter-Revolution. A Theoretical Appraisal" in F. H. Hahn and F. Brechling (ed.), *The Theory of Interest Rates*, Macmillan and Co. Ltd., London, 1965

[20] "The New Monetarism", *Lloyds Bank Review*, July, 1970

capital, have introduced some vital modifications to the above process. The current budget is not merely balanced but it yields a surplus, a kind of government saving which is transferred to the capital budget as a contribution towards financing development. On the other hand, the capital budget which is primarily a development budget is not fully balanced by that surplus plus government borrowing. There is a deficit which is left to be covered by bank credit. As the ECAFE observed, "the major sources of financing (development) are government saving, government borrowing from the private sector, external assistance and deficit finance".[21]

According to Gunnar Myrdal, "The introduction of a deficit into the budget represents the most conspicuous innovation to the established code of 'sound finance' inherited from the doctrine of the capital budget. It is assumed that when the development budget—and thus the total budget—relies for its balance not only on the current account surplus, loans in the capital market and net sales of assets but also on deficit financing, the public expenditure is financed to the extent of the deficit by the banking system which creates additional means of payment". In the words of an Asian scholar, "As all the (traditional) methods of financing development have their limitations in practice, it is natural for governments to resort to borrowing from the central bank. This is deficit finance in its true sense. As far as inflationary impact is concerned, the main difference between taxation and genuine borrowing from the private sector on the one hand and borrowing from the central bank on the other, is that the former represents transfer of purchasing power, whether active or idle, from the private sector to the government, while the latter involves the creation of new purchasing power, with its possible secondary wave of credit expansion".[22]

[21] *Economic Bulletin for Asia and the Far East*, Vol. XIII, No. 3, December, 1961, p. 13.

[22] Shu Chin Yang, "Deficit Financing for Development and its Inflationary Impact", *Ekonomi dan Keuangan Indonesia*, May 1, June, 1959, p. 179.

Limitations of the Keynesian Theory

(1) Keynes's theory is too general. There are peculiarities in the market conditions of particular goods, the technicalities of their production and even in the conditions of their demand. The theory gives inadequate consideration to them. Propositions expressed in terms of total demand, total output are no more than the first steps to a theory of prices.

(2) Keynes argued that the level of output can be changed by changing the quantity of money through the rate of interest. But this will hold good only if a number of other conditions is fulfilled. Such may not always be the case. His formal analysis, like that of the Quantity Theory is limited by an array of assumptions. In his own words, "we have taken as given the existing skill and quantity of labour, the existing quality and quantity of available equipment, the existing technique, the degree of competition, the disutility of different intensities of labour and of the activities of supervision and organisation",[23] and so on.

(3) Full employment is a vague and illusive term. There is no such thing as a limit to productivity in this dynamic world. Workers may decide to work harder and longer in which case output may go up. Under war conditions sense of patriotism and all-out efforts at mobilisation may raise output much above peace-time levels. The strength of organised trade unions is an important factor. In industries where there are strong unions, pressures for higher wages develop long before full employment is reached. In present-day economics prices, once they go up, develop a tendency to resist downward pressures. So the deflationary gap may be less active than the inflationary one.

(4) "The Keynesian approach concentrates on the redistribution of income in the inflationary process. For the war period, one could without much trouble verify that there were substantial redistributions of income away

[23] See *The General Theory of Employment, Interest and Money*, Ch. 18.

from those who had started the period with assets the income on which was fixed in money terms. But for the post-war inflation period there is little indication of any substantial redistribution of income attributable to the inflationary process. It is possible to detect some redistribution among particular groups; but for this type of model to be useful for the analysis of inflation it would be necessary to establish that the inflationary mechanism works by redistributing income among major income receiving groups".[24]

(5) "The theory as presented by Keynes is misleading in many ways and needs much adaptation to fit non-depression conditions and the Keynesian approach does tend to play down the influence of monetary conditions which may at times be very important".[25] That is why in practice it has led to adverse consequences in many countries. According to Milton Friedman, "Under the influence of Keynesian ideas, country after country followed an easy-money policy designed to keep interest rates low in order to stimulate, if only slightly, the investment regarded as needed to offset the shortage of demand that was universally feared. The result was an intensification of the strong inflationary pressure inherited from the war a pressure that was brought under control only when countries undertook so-called orthodox measures to restrain the growth in the stock of money, as in Italy beginning in August, 1947, in Germany in June, 1948 and the United States in March, 1951, in Great Britain in November, 1951 and in France in January, 1960".[26]

III. COST-BASED THEORIES

The cost-based theories of inflation originate from the sequence that prices rise due to increase in the cost of production. There are three causative factors behind the cost

[24] Harry G. Johnson, *op. cit.*, pp. 121-22.

[25] *Ibid.*

[26] Article on "Money: Quantity Theory" in *International Encyclopedia of the Social Sciences*, The Macmillan Coy. and the Free Press, 1968.

increase, pinpointed by three different schools of thought—(A) wage-cost, (B) administered price, (C) sector inflation.

(A) The first and the most important school emphasises that due to collective bargaining by strong trade union organisations there is an upward pressure on wages, which exceeds the improvement in productivity. This leads to a rise in prices. The latter in turn causes a further increase in wages, which increases prices again. There is thus a wage-cost-price spiral.

James L. Laughlin focussed attention on this as early as 1910 before a meeting of the American Economic Association thus: "There has been a market advance in wages which has had its effects in raising prices (in the last decade).... There seems to be an influence independent of prices which has acted to raise the rate of wages. And that influence undoubtedly is due in greater or less part to the pressure of labour unions". In recent times J. K. Galbraith pointed out the 'countervailing power' of big trade unions as against the monopoly power of big business.[27] "It is hardly an exaggeration to say", observed J. R. Hicks, "that instead of being on a Gold Standard we are on a Labour Standard".[28]

In many countries, pointed out S. H. Slichter,[29] labour unions have become so powerful that they are able to get every year or every other year wage increases (including fringe benefits) greatly in excess of the over-all average increase in output per man-hour. Even if in some industry the wage increase is not greater than the increase in productivity of that particular industry and could possibly be granted without raising the price of the products of that industry, these wage increases are inflationary if they exceed the over-all increase in productivity for industry as a whole. The reason is that wage increases granted in the more progressive industries (say some manufacturing

[27] See *American Capitalism*, Houghton Mifflin Coy., Boston, 1952.

[28] "Economic Foundations of Wage Policy", *Economic Journal*, LXV, September, 1955.

[29] See "The American Wage System. Its Effect upon the Economic System", *The Commercial and Financial Chronicle*, July 31, 1958.

industries) where output per man rises faster than elsewhere (say the service trades) will sooner or later be generalised more or less over the whole economy, including those industries where output per man has risen less than the over-all average.

Sidney Weintraub has developed what he has called the Wages—Income Theory to explain the wage-push inflation and an equation as follows[30]—

$$P = \frac{kw}{A}$$

where P=average price, k=the average mark-up of price over unit labour cost, w=the average wage per employee and A=the average real output per employee (that is, $\frac{Q}{N}$ where Q stands for aggregate output and N for total number of employees). The symbol k is relatively stable over long periods. So every change in w, results in a direct and proportional change in the price-level.

WAGE-COST-PRICE SPIRAL

A rise in wages in one sector brings about rises in other sectors. The general rise in wages leads the entrepreneurs to react by raising their prices. Faced with a fresh increase in prices and hence in the cost of living, workers again demand higher wages. So a new cycle begins to operate. Logically there is no reason why the process should come to a stop at all. As one author put it, "capitalists and wage earners win and lose alternately in the inflation game. Inflation goes on indefinitely satisfying their demands in turn... A society is composed of (say) five groups. The income of each group is 20. The aim of each group is to earn 25. Five times 25 makes 125".[31] According to Gardner Ackley, "inflation is the by-product

[30] *Some Aspects of Wage Theory and Policy*, Chilton and Coy., Philadelphia, 1963

[31] P. Simonhot, *L'avenir du systeme monetaire*, Robert Laffont, Paris, 1972 (quoted by Jean Mouly in *International Labour Review*, Vol. 108, No. 4, October, 1973, pp. 344-41)

of a struggle over income distribution in which entrepreneurs and wage earners fight to preserve or increase their share of the national income, by using whatever 'market power' they can summon up".[32]

W. A. Lewis has analysed the sequence thus[33]: "Our economics have become much more unstable than they were ever before. If for any reason prices move from what may in some sense be an equilibrium level, there are no forces to bring them back. It (the spiral) has three contributory parts—wages, budgetary deficits and devaluation. First comes the *original cause* which starts the mechanism working. This may be a rise in the price of domestic foodstuffs or a rise in import prices or an increase in the quantity of money or a rise in the price of exports or anything provided it is something which causes a *rise in the cost of living*. Then the mechanism starts. Wages rise and this raises prices more, wages more, prices more and so on. Secondly, in those countries where the marginal ratio of government receipts to national income is below the average ratio, the price rise opens up a *budget deficit*, because government costs rise faster than government revenue. This gives an extra twist to the spiral. Then thirdly, the rise in prices forces *devaluation* and this raises import prices proportionately to the devaluation and domestic prices in somewhat smaller proportion. So a third twist is given to the spiral."

Merits of the Wage-Cost Theory

(1) Cost-push inflation is supported by empirical evidence. In recent periods as trade unions have become stronger and stronger, it is their unilateral action in asking for wage increases that has raised prices in most countries. Once prices rise, it is only natural that employees would ask for higher emoluments in order to neutralise the effects of that rise. In the United Kingdom an auto-

[32] "An incomes policy for the 1970's", *Review of Economics and Statistics*, August, 1972.

[33] Speech at the conference on Inflation and Growth held in Rio de Janeiro in January, 1968.

matic sliding scale for wages, based on prices, was introduced into the mines of Durham and Northumberland as early as 1870. In U.S.A. the famous bargaining agreement entered into between General Motors Corporation and United Automobile Workers in May, 1948 stipulated a rise or fall of 1 per cent an hour for every rise or fall of 1.14 points in the BLS consumer price index.

The inflation in that country in the 1950's had been ascribed by many to increase in wages due to trade union bargaining power. According to Slichter, during the past ten years hourly compensation of employees in private industry outside agriculture has risen more than twice as far as output per man-hour.[34]

"One of the established facts about the American economy is the long-run tendency for prices on an average to rise at about the same rate as unit labour costs on the average. Put in another way, apart from temporary aberrations the general price-level tends to rise by the excess of wage increases over productivity increases".[35]

Lionel Robbins expressed a similar opinion about post-war Britain. "The first part of the post-war inflation in Great Britain up to 1954 might be explained by demand-pull. But since then wage-push became more important".[36] It is also estimated that between 1958 and 1966 the nationally negotiated weekly wage rates in Great Britain went up by 35 per cent and retail prices, by about 26 per cent.

(2) Another argument for the theory is the policy inference that in a pressure-group economy inflation can be controlled only through direct regulation of prices and wages. As *The Economist* (London) wrote,[37] there was an 'uneasy triangle' consisting of full employment, strong labour organisation and stable prices, of which no more than two could prevail at a time. William G. Bowen re-

[34] "Argument for Creeping Inflation", *New York Times*, March 8, 1959.

[35] U.S. President's Council of Economic Advisers, *Inflation Alert 2*, December, 1960

[36] "Thoughts on the Crisis", *Lloyds Bank Review*, April, 1958

[37] See issues of August 9, 16 and 23, 1952

ferred to it as 'the dilemma model' which leads to 'the conclusion that free collective bargaining, stable prices and full employment are incompatible. Society must choose among these things and cannot have all three simultaneously'.[38]

Limitations of the Wage-Cost Theory

(1) There are many industries in which trade unions are weak. If prices of their products rise, it is more due to excess demand from the consumers than any trade union pressure.' (2) Trade union power is also not unlimited. Restraints may be imposed by the government. Public opinion may also go against rise of prices merely on the ground of wage increase. (3) Still there is another important limiting factor—elasticity of demand. The more elastic the demand for the product in question, the greater the threat of shrinking employment when wages are pushed up. (4) Another related factor is the share of labour cost in total cost. The larger this share, the lesser the scope for unions to push up wages.

(B) The second school lays stress on the concept of *administered price* charged by monopolists or oligopolistic producers. 'Administered price' has been defined by *The New Encyclopaedia Britannica* (1974, Vol. I) as 'price determined by an individual producer, or seller and not purely by market forces'. It is regarded as 'mark-up' or 'pre-determined' price as distinct from 'reactive' or 'market-determined' price. Generally monopolists move up their prices so as to reap the maximum profit during periods of prosperity which they more or less stick to even during those of recession.

Gardiner C. Means with the help of this theory explained the rigidity of the prices in U.S.A. during the 1930's in industries like steel, machinery and vehicles, chemicals, fuel and power which were in the nature of concentrated oligopolies, and the failure of these prices to fall or to fall

[38] *The Wage-Price Issue A Theoretical Analysis*, Princeton University Press, N.J., 1960, p. 36.

as much as other prices. The inflation of these industries during 1955-58 was also ascribed by him to the same factor.[39] J. K. Galbraith lent support to this thesis.[40] According to him, in late 1950's there existed some 'unliquidated monopoly gains'. That is, the concentrated industries had their prices set below the optimum for fear of either government interference or labour union pressure. A general inflationary situation provided them a welcome camouflage for raising prices to the optimum.

Criticism of the Mark-up Theory

(1) In respect of administered prices it may be pointed out that monopolists keep prices higher than they would be under competition. But there is no reason to assume that such monopoly prices would be pushed up higher and higher. In other words, there may prevail high prices, but a situation of *rising prices* on this ground may be far from reality.

(2) It has been pointed out by quite a few that there is no single obvious explanation for steep rise in prices. 'We clearly have a combination of cost-push and demand-pull inflation'.[41] 'The so-called demand-pull, cost-push dichotomy is false in the sense that both factors have been important causes of wage inflation and that they have interacted on one another'.[42] The two theories (cost-push and demand-pull) are not independent and self-contained theories of inflation but rather theories concerning the mechanism of inflation in a monetary environment that permits it.[43]

[39] See his statement before the Anti-Trust and Monopoly Committee of the U.S. Senate and Joint Economic Committee of the Congress in 1959.

[40] "Market Structure and Stabilisation Policy", *Review of Economics and Statistics*, May, 1957.

[41] Friedrich A. Lutz, 'Cost- and Demand-Induced Inflation', *Banca Nazionale del Lavos*, No. 44, March 1, 1958.

[42] James S. Duesenberry, "The Co-ordination of Policies for Full Employment and Price Stability" in H. C. Hague, *Inflation*, Proceedings of a conference held by the International Economic Association, Macmillan & Co. Ltd., London, 1962.

[43] Harry G. Johnson, *op. cit.*, p. 128.

(C) The third school's main argument is *sectoral demand shift.*[44] In a growing economy demand keeps shifting from one sector to another. Prices rise readily in the sector to which demand has been shifted but do not fall as readily in the sector from which demand has been shifted. There is thus a general process of escalation of prices based neither on cost-push nor on the pull of excess demand.

This theory apparently seeks to effect a kind of compromise between the cost-push and demand-pull theories and provides an explanation of how prices would rise in spite of an absence of general excess demand.

LIMITATIONS

But there are serious limitations to this approach. (1) There is no empirical evidence to show that sectoral price increases lead to upward shifts of demand in general. Rather, the evidence is in the opposite direction. (2) By ignoring the monetary preconditions for inflation it suffers from the same defects as the concept of wage-price spiral or administered prices. (3) It is also marked by lack of precision about the notions of full employment and general excess demand.

IV. STRUCTURAL THEORY

The structural theory originating mainly from developing countries bases itself on certain structural rigidities and social tensions as the prime cause of inflation. As Raul Prebisch pointed out, "Economic development calls for constant changes in the form of production, in the economic and social structure and in patterns of income distribution. Failure to make these changes in time or to undertake them partially and completely leads to maladjustments and stresses which release the ever-latent and extremely power-

[44] See Charles L. Schultze, *Recent Inflation in the United States,* Study Paper No. 1 for Joint Economic Committee on Study of Employment, Growth and Price Levels, Washington, 1959.

ful inflationary forces in the economy".[45] According to Robert de Oliveira Campos, "The structural school stresses 'the structural vulnerability' of (developing) economies because of two basic *rigidities*. The first one is the slow and unstable rate of growth which is chronically inadequate to support the needed rate of development, the sluggish growth rate makes necessary a continuous and sharp effort of import substitution, creating a cost-push, because of the substitution effort itself. The second one is the inelasticity of agricultural production, due largely to defective patterns of land tenure which decrease the responsiveness of food production to price stimuli. The cost-push in developing economies would thus come from a fourfold direction; cost of import substitution; rise in agricultural prices; deterioration of the terms of trade; and exchange rate devaluation".[46]

Difference Between Structural Theory and Monetary Theories

There is a clear distinction between this school and the foregoing monetary school. The structuralists take the position that monetary policy is ineffective in curing inflation, because it touches only the symptoms. If more money is injected, it cannot be absorbed due to rigidities and tensions prevalent in the economic system. "Inflation is a manifestation of economic and social change", wrote Raul Prebisch, "an essentially dynamic phenomenon. Consequently, campaign to prevent or combat it cannot be waged through autonomous monetary measure but must form part of a vast and deliberate effort to channel economic and social forces toward the attainment of clearly defined objectives".

[45] "Economic Development or Monetary Stability: The False Dilemma", *Economic Bulletin for Latin America*, Vol. VI, No. 1, March, 1961.

[46] "Economic Development and Inflation with Special Reference to Latin America" in *Development Plans and Programmes*, OECD, Paris, 1964.

The monetarists believe that social tensions and structural rigidities are a result of money expansion inducing richer sections to buy land and hold it idle and trade unions to fight for increased wages as a safeguard against high prices. According to them, it is correction of inflation which leads to growth. To the structuralists it is growth through removal of rigidities that can cure inflation.

Criticism of the Structural Theory

The structural theory suffers from a number of weaknesses. (1) One cruel fact about the theory is that the remedies it suggests are long-drawn processes if at all they are applicable in practice. Changes in the social or economic structure cannot be brought about overnight, at least in the constitutional way. But the pains of inflation are such that they require immediate treatment and quick results. The policy recommendations are no better than pious wishes. They are 'not serviceable recipes for the short-run cure of inflation'. That is why 'a structuralist' is sometimes described as 'a monetarist without policy-making responsibility'.

(2) The so-called structural rigidities of underdeveloped economies are greatly exaggerated. They might be the cause of moderate inflationary pressures but not the massive price rise which overtook some of the Latin American countries or Indonesia or Israel. If structural rigidities were so effective, all the developing countries would have fallen prey to persistent hyperinflation. But this is not so. There are structural rigidities of one kind or another in some of the developed countries, too. Yet they have been comparatively free from chronic and widespread inflation.

(3) The structural thesis is based on the assumption of two important rigidities—(*a*) inelasticity of the food supply and (*b*) inelasticity of exports. (*a*) Growth of population, rise in urban incomes and similar circumstances, it is alleged, tend to push up, first, the prices of

agricultural products; secondly, the general price-level; and thirdly, wages, leading to an inflationary spiral of a structural nature. But inelasticity of food supply may not be structural in origin at all. It may be the result of defective price or distribution controls or governmental mis-intervention, designed to protect urban consumers and depriving agriculturists of normal market stimuli. (*b*) It is argued that the world demand for primary products is inelastic. So the export capacity of developing countries is limited. Growth renders necessary an accelerated process of import substitution. Import-substitution tends to be inflationary because of the relative inefficiency of new industries in initial stages. The cost pressure also induces exchange devaluation. But all this is an overstatement of the sequence. The sluggishness of the export trade may not be really structural but it may stem from the failure to exploit export opportunities due to already overvalued exchange rates. Moreover, the export sector may not be so sluggish as it is alleged to be. According to W. A. Lewis,[47] between 1950 and 1960 the quantum of export trade in primary products actually grew by 6 per cent, that is, only 1 per cent less than that in manufactured goods.

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CHAPTER III

Consequences of Inflation

The impact of inflation and deflation is a complex question. It is often discussed with more heat than light. G. L. Bach

INFLATION AND GROWTH

Expert opinion is very sharply divided on the relationship of inflation to growth. Thus according to Earl Hamilton of the University of Chicago the Industrial Revolution in Europe was prompted by the rise in prices caused by the great influx of gold from the New World. In the case of Japan, it was opined by S. Okita of the Economic Planning Agency of Tokyo that "the inflation of the 1870's helped to monetise the economy for the take-off and the inflation of the 1930's helped to build up heavy industry and the military potential of the country".[1] On the other hand, Hans W. Singer considered it a great fallacy to believe that economic development could be financed by inflation. To him, there had never been yet a successful example of economic development combined with inflation. Howard Ellis of the University of California came to the conclusion on the basis of 'experience and judgement' that inflation was detrimental to economic growth.[2] There are quite a few who hold something like a neutral position. For instance, E. H. Phelps Brown and M. H. Brown of the London School of Economics have found that 'differences in the rate of inflation have not been systematically associated with differences in the rate of growth of real income per head, whether we compare different

[1] See Kenneth Berrill (ed.): *Economic Development.* Proceedings of the conference on Economic Development of East Asia, Macmillan & Co. Ltd., London, 1964, p. 270.

[2] *Ibid.*, pp. 255-72.

countries or different periods'.[3] Some 48 economists from 24 different countries who assembled at the annual round table conference of the International Economic Association in New York in 1959 arrived at the conclusion that "inflation was not a required condition for economic growth, although it would not necessarily destroy development".[4]

There are, however, many who believe that inflation is helpful to development if it is kept within limits. In other words, it is *a good servant but a bad master*. Thus Milton Friedman argued that 'a steady inflation while desirable is not inconsistent with economic development provided the inflation is open and moderate. Intermittent inflation, proceeding by fits and starts, is seriously adverse to economic development'.[5] Nicholas Kaldor had also expressed the view that a slow and steady rate of inflation provides a most powerful aid to the attainment of a steady rate of economic progress'.[6]

Generally five arguments are advanced in support of the proposition that inflation promotes investment and economic growth. In a nutshell they are as under[7]—

(1) With the help of additional money and credit created by the inflationary process the government itself can undertake industrial ventures. (2) By redistributing money through increased prices from the workers to entrepreneurs or from the poor to the rich, inflation increases the amount of savings available for investment. (3) The same redistribution by raising profits induces investors to invest in order to reap this benefit. It encourages entrepreneurship. (4) In the prevalent accounting system, by and large, inflation leads to understatement of real capital consumption since the depreciation allowances remain the same. This

[3] See *Economic Journal*, 1960, p. 745

[4] See *The American Economic Review*, Vol. 53, p. 764

[5] *Inflation: Causes and Consequences*, Asia Publishing House, Bombay, 1963

[6] See *Economic Journal*, 1959, p. 290.

[7] See Joseph W. Conrad & Others, *Inflation, Growth and Employment*, A Series of Research Studies prepared for the Commission on Money and Credit (U.S.A.), Prentice-Hall, Inc., Englewood Cliffs, 1959, p. 463.

causes over-statement of the rate of profits which provides another stimulus to investment. (5) The expectation of further inflation raises the anticipated yield on investment almost by more than the rise in interest rate caused by inflation. The gap between the two helps investment decisions.

Lord Keynes went so far as to suggest that inflation provides a climate favourable to cultural and literary development. According to him, Shakespeare died rich. In his last years according to tradition he spent at the rate of 'a thousand a year', which was high living in the early seventeenth century. And in England there was a sensational rise of prices after 1560. So Keynes offered it as a thesis for examination that "by far the larger proportion of the world's greatest writers and artists have flourished in the atmosphere of buoyancy, exhilaration and the freedom from economic cares felt by the governing class, which is engendered by profit inflation".[8]

So far as *growing economies* are concerned, it is said that inflation is not merely an inevitable process but it is necessary and beneficial, too.

(1) It provides the 'initial ignition'. A developing economy lacks capital. Credit creation frees investors from the voluntary abstinence routine of savers. 'Forced savings' become an important means of capital accumulation. During the war the disequilibrium system has proved effective in mobilising resources for winning it. So in peacetime why can it not be turned to do battle with underdevelopment by mobilising resources for capital formation?

As A. H. Hansen put it, "a certain volume of public spending will have the effect of setting the economy going on the way toward full utilization of resources on its own power".[9] In the words of Lord Keynes, "A government can live for a long time by printing paper only. That is to say, it can by this means secure the command over real resources, resources just as real as those obtained by taxa-

[8] *A Treatise on Money*, Macmillan & Co. Ltd., London, 1950, Vol. II, p. 137

[9] *Fiscal Policy and Business Cycles*, Norton and Coy, New York, 1948, p. 262.

tion. A government can live by this means when it can live by no other. It is the form of taxation which the public find hardest to evade and even the weakest government can enforce when it can enforce nothing else".[10] In a later writing he emphasised that a situation of inflation was preferable to one of deflation. "Real advantages may ensue if when a commodity inflation (rise in the prices of consumption goods relative to their cost of production) has passed over into an income inflation, no attempt is made to go back to the old state of affairs but stability is preserved at the new level of incomes. The state of affairs in which the supply of money allows the equilibrium price level to rise over the long period a little less than efficiency earnings (average remuneration paid to the factors of production), so that there is a progressive moderate bias in favour of commodity inflation is therefore vastly preferable to one in which the price level is slowly falling relatively to earnings. The advantages to economic progress and the accumulation of wealth will outweigh the element of social injustice, specially if the latter can be taken into account and partially remedied by the general system of taxation—and even without this remedy, if the community starts from a low level of wealth and is greatly in need of a rapid accumulation of capital".[11] According to Gunnar Myrdal, 'Although it is rarely said in the plans, almost everyone says unofficially and many say officially, that some inflation is inevitable in a country attempting development, some even say that it is healthy and desirable'.[12] "Inflation", wrote P. S. Lokanathan, "is an inevitable accompaniment of the process of rapid development. The country must

[10] *A Tract on Monetary Reform*, Macmillan & Co. Ltd., London, 1923, Ch. 2, Paragraph 1

[11] See *A Treatise on Money*, Macmillan & Co. Ltd., London, 1950, Vol. I, Ch. 19, Sec. I

[12] *ASIAN DRAMA. An Inquiry into the Poverty of Nations*, A Twentieth Century Fund Study, Pantheon, New York, 1968, Vol. I, p. 125.

accept the consequences of some inflationary pressures and develop certain degree of inflation tolerance".[13]

(2) Inflation for capital accumulation is a comparatively easy process. As the ECAFE pointed out, "The relevant issue is the choice of means whereby sacrifices are compulsorily elicited from the people. This can be done by: (a) making people work harder or longer without giving them more money income; (b) taking away more of the people's income through taxation or compulsory lending; (c) curtailing less desirable private investment; (d) forced savings through inflation. There are limits beyond which, for political or administrative reasons, the first three courses cannot be pursued. (But) it requires no administrative skill or machinery to engineer an inflation".[14] "If a government can persuade the Central Bank to create money to finance a development programme", wrote Graeme S. Dorrance, "or if the banking system freely makes loans to private investors for the finance of physical investment. the problem of expanding the community's real assets may appear to be easily solvable".[15]

(3) Through 'forced savings' and decline in real wages, due to rising prices and the wage lag, inflation would lead to increase in investible profits. So long as the deficit-finance-inspired inflation is relatively mild, as W. Arthur Lewis argued,[16] the price rises may well serve to increase the profits of the industrial and mercantile classes and by so doing increase their savings. In another way, by raising the rate of return on investment relative to the rate of interest, inflation would promote investment.

[13] "Pricing Policy", *Problems in the Third Plan—A Critical Miscellany*, Government of India, Ministry of Information and Broadcasting, New Delhi, 1961, p. 75.

[14] "Inflation and the Mobilisation of Domestic Capital in Under-Developed Countries of Asia", *Economic Bulletin for Asia and the Far East*, Vol. II, No. 3, 1951.

[15] See *The Effect of Inflation on Economic Development*, International Monetary Fund, Staff Paper, March, 1963.

[16] "Economic Development with Unlimited Supplies of Labour", *The Manchester School*, May, 1954; also *The Theory of Economic Growth*, George Allen and Unwin Ltd, London, 1963

To sum up, "first, inflation is said to transfer income from consumers to investors—whether government or private enterprise; second, it leads to fuller utilization of resources, particularly where bottlenecks hold back total production and stable prices would leave large amounts of resources outside the bottleneck areas underutilised; and finally it is easier to effect politically than taxation".[17] "A slightly increasing price level is on the whole desirable", argued P. S. Lokanathan, "it would give resilience to the economy, it would keep profits at a reasonable level and thereby act as a spur to further savings and production. It would neutralise the inefficiency of the public and private sectors to some extent".

Flaws in the Above Arguments

There are however flaws in some of the preceding arguments. (1) Economic development involves basic or capital goods. But it takes long gestation periods to produce them. So investment in such industries out of inflationary finance does not yield any immediate benefit. On the other hand, by making available purchasing power to those engaged therein, it may lead to a further rise in prices. There is thus a vicious circle. A situation of unstable prices and rising costs only increases the risk of investment and discourages it.

(2) Development also requires facilities in respect of social capital such as roads and bridges, dams and hydroelectric projects. Construction of these is generally undertaken on the basis of contracts. But rates thereof by their very nature cannot keep up with inflationary trends. Such trends, therefore, produce a damping effect on construction works.

(3) The ultimate effect of inflationary finance may be retardation of growth in the agricultural sector. As food prices go up, social unrest is generated and the government

[17] Robert de Oliveira Campos, "Inflation and Balanced Growth" in H. S. Ellis and H. C. Wallich (eds.). *Economic Development for Latin America*, St. Martin's Press, New York, 1961, pp. 86-87.

is led to impose controls on food products—price as well as distribution. They serve as deterrents to agricultural expansion.

(4) In most underdeveloped economies the use of money, particularly bank credit, is far from widespread. The preponderance of a non-monetised sector sets a limit to the amount that can be raised through inflationary process.

(5) There is no guarantee that more funds will go to the richer sections or the investing class. In a country where the majority are poor, more money may mean more expenditure on articles of consumption. Again, as Robert de Oliveira Campos put it, "Such transfer of resources as may take place from consumers to the government or to investors may be offset by luxury consumption of the entrepreneurial group, by the lower efficiency of government investments or by bottlenecks in the import capacity. While inflation encourages the adventurous entrepreneur, it tends to discourage risk-taking in basic enterprises of a long maturation period".[18]

(6) Even if it is assumed that inflation results in placing more funds in the hands of the investing class, there would be many constraints towards investment and more output such as lack of technical skill, raw materials, transport facilities and so on. In the words of Gerald M. Meier and Robert E. Baldwin, "Usually the most important limitations on a poor country's capacity to absorb capital are the lack of technology, the shortage of skilled personnel and the low geographic mobility of labour. The country is likely to be particularly deficient in managerial, technical, supervisory and skilled manpower. Such limitations on the supply of factors other than capital, especially managerial capacity and labour skills, result in a sharp decline in the marginal productivity of capital as capital accumulates. The marginal productivity of capital in poor countries may well be larger than in rich countries; however if the amount of investment is increased greatly, the marginal

[18] "Economic Development and Inflation with Special Reference to Latin America", *Development Plans and Programmes*, OECD, Paris, 1964

productivity may decline rapidly because of bottlenecks in production and may even become negative".[19]

(7) But the most serious drawback of the inflationary process is that once started, it is seldom held in check or kept within controllable limits. The fact is that once a government has come to rely on the printing press as the solution to economic and financial problems, it is extremely difficult, if not politically impossible, to reverse the trend. Inflation like narcotic drugs is repeated under a natural impulse. It is habit-forming and can become irresistible even if it runs into a course of destruction.

Thus according to the ECAFE, "the very simplicity and convenience of deficit financing create a danger of extravagance and ineptitude in spending money and of neglect of the possibilities that even in an underdeveloped economy exist for tapping savings or collecting high taxes".[20] "The forced savings device", argued Campos, "can act only temporarily for discontinuous inflation but has its efficacy lowered or destroyed when inflation is chronic and becomes a part of the expectation of wage-earners who devise defence mechanisms to prevent a decline in real wages".[21]

Further, in practice inflation does not proceed at a steady and anticipable rate. It is erratic with large variations in the rate of price increase. These give a new turn to the situation and divert the efforts of businessmen into speculating on the rate of inflation or hedging against its uncertainties. They damage the possibility of rational calculation of probable margin of profit, render infructuous long-term planning and even undermine the incentives to improve performance.

[19] *Economic Development Theory History Policy*, John Wiley & Sons, Inc., 1957, Ch. 16.

[20] "Inflation and the Mobilization of Domestic Capital in Underdeveloped Countries in Asia", *Economic Bulletin for Asia and the Far East*, Vol. II, No. 3, 1951

[21] "Economic Development and Inflation with Special Reference to Latin America", *Development Plans and Programmes*, OECD, Paris, 1964

EVILS OF INFLATION

The evils of inflation had been sharply pinpointed by two leading economists of the current century, though at two different periods and in two different countries—J. M. Keynes and J. K. Galbraith. Their lines of reasoning are also similar. Yet both are so forceful and interesting that the main arguments bear repetition.

J. M. Keynes

Dividing society into three classes—investing, business and earning, Keynes came to the conclusion[22] that inflation, causing rise in prices redistributes wealth in a manner very injurious to the investor, very beneficial to the business man and probably in modern industrial conditions, beneficial on the whole to the wage-earner.

Its striking consequence is its injustice to those who in good faith have committed their savings to titles to money rather than to things. But injustice on such a scale has further consequences. Inflation not only diminishes the capacity of the investing class but also destroys the atmosphere of confidence which is a condition of the willingness to save.

(1) During the nineteenth century there grew up a well-to-do class, the investing class, who owned no land, no buildings, no metals but titles to an annual amount in legal tender currency. Custom and favourable experience had acquired for such investments an unimpeachable reputation for security. But those small fortunes began to suffer loss from the rise in prices and also in the rate of interest towards the end of the nineteenth century which continued till after World War I. Between 1896 and 1914 the capital value of annuities declined by a third. Between 1914 and 1920 it again fell by more than a third. "The monetary events which have accompanied and have followed the War have taken from them (the investing class) about one half of their (investments') real value in England, seven-

[22] *A Tract on Monetary Reform*, Macmillan and Co. Ltd., London, 1923, Ch. 1.

eighths in France, eleven-twelfths in Italy and virtually the whole in Germany and the succession States of Austria-Hungary and Russia. Throughout the continent the pre-war savings of the middle class, so far as they were invested in bonds, mortgages or bank deposits, have been largely or entirely wiped out. What was deemed most secure has proved least so".

(2) The loss to the investing class is a gain to businessmen. "A period of rising prices acts as a stimulus to enterprise and is beneficial to businessmen". During an inflationary period when prices are rising month by month, the businessman has a further and greater source of windfall. If therefore month after month the stock on his hands appreciates, he is always selling at a better price than he expected and securing a windfall profit upon which he had not calculated. In such a period trade becomes unduly easy.

But there is a danger to it from the *social standpoint.* 'To the consumer the businessman's exceptional profits appear as the cause of the *hated* rise of prices'. What is still worse is that business takes a speculative character. 'Amidst the rapid fluctuations of his fortunes he (the businessman) himself loses his conservative instincts and begins to think more of the large gains of the moment than of the lesser but permanent profits of *normal business.* His excessive gains have come to him unsought and without fault or design on his part, but once acquired, he does not lightly surrender them and will struggle to retain his booty'. 'The businessmen, the prop of society and the builder of the future was now to suffer sidelong glances, to feel himself suspected and attacked, to become and know himself half-guilty, *a profiteer*'. 'To convert the businessman into the profiteer is to strike *a blow at capitalism*'. 'The businessman is only tolerable so long as his gains can be held to bear some relation to what roughly and in some sense, his activities have contributed to society'.

(3) Wages generally tend to lag behind prices with the result that the real earnings of the wage-earner are diminished during a period of rising prices. But the situation differs from country to country and wage-earners to wage-earners. In Great Britain and the United States due to the

organisation (of trade unions) among certain classes of labour—railwaymen, miners, dockers and others—they were able to take advantage of the situation (of rising prices) not only to obtain money wages equivalent in purchasing power to what they had before, but to secure a real improvement, to combine this with a diminution in their hours of work (and so far, of the work done)'. 'Thus the working class improved their relative position in the year following the War, as against all other classes except that of the profiteers'. 'In some important cases they improved their absolute position—that is to say, account being taken of shorter hours, increased money wages, some sections of the working class secured for themselves a higher real remuneration for each unit of effort or work done'.

[In the sphere of *production* however inflation influences its process through expectations about the future. A change in the measuring rod of value does not by itself alter the material wealth of the world, its productive capacity or the needs of the population. But its indirect psychological effects on these are far from negligible. If the businessman feels that prices having already risen will go up further, it stimulates his activity.

The borrowers of money constitute the active group who make the decisions that set production in motion. The lenders become inactive once they have lent their money. If the active group feels that prices are going to fall, it may pay them as a group to damp production down, although such enforced idleness impoverishes society as a whole. But if they expect a rise in prices, it may pay them to increase their borrowings and to swell production beyond the point where the real return is just sufficient to recompensate society as a whole for the effort made.]

J. K. Galbraith

"Through most of man's history", emphasised J. K. Galbraith,[23] "the counterpart of war, civil disorder, famine or other cosmic disaster has been inflation. It has been widely

[23] *The Affluent Society*, Hamish Hamilton, London, 1958, Ch. 15.

deplored and condemned". According to him, inflation—persistently rising prices—is obviously a phenomenon of comparatively high production. It can occur only when the demands on the economy are somewhere near the capacity of the plant and available labour force to supply them. When supply cannot be readily increased, as will be the case at capacity production, further increases in demand are capable of bringing about price increases. If production is at capacity, increased output will naturally require an increase in capacity. The increased investment that it implies will in form of wages, payments for materials, returns to capital and profits add to purchasing power and the current demand for goods. It does so before the added capacity resulting from the investment is in place to meet the demand. Thus the effort to increase production adds to the pressure on current capacity and to the prospect for inflationary price increases.

Price increases by industry lead to the exercise of *counter-vailing power* by trade unions which are quite strong in the present era. 'In the inflation drama it remains only to introduce Hamlet. That by common consent is the union. It is the *instigator presumptive* of that most familiar of economic phenomena, the wage-price spiral'.

At the other extreme are those whose incomes are largely unaffected because they are fixed by law, or custom or at a minimum by some one else. They suffer from rising prices because while they receive the same income, they have to pay more for the things they buy. Among them are the teachers, preachers, public servants, salaried, professional and white-collar personnel. Not all vendors of professional services, however, suffer. Some groups are able to take prompt advantage of the general increase in money wages and demand, to raise their own charges and revenues. Lawyers and doctors fall in such a category.

Most of the above arguments, though adduced in respect of the advanced countries of the West apply *mutatis mutandis* to the developing countries of Asia, Africa and Latin America. It is the last region in particular that had been the scene of widespread inflation in recent years.

Developing Countries

There are, however, some evil effects of inflation particularly conspicuous in the developing countries.

(1) The developing countries *ab initio* suffer from shortage of many commodities and consequent high prices. Yet the consuming sections are more numerous, though less articulate and organised, than the producing ones. Inflation by raising prices affects the already low standards of living of the common people.

(2) As G. M. Meier and R. E. Baldwin pointed out[24] inflation is a wasteful means of increasing investment. The fall in consumption is some multiple of the amount of investment produced through forced savings. People who can least afford to save are usually the ones that are forced to save. So while some forced savings may be effected in the short run, it becomes progressively difficult in the long run. Indeed, in a country where there has been considerable inflation for a long time, such as in Chile, it may be argued that if inflation were halted, increased investment might be financed from voluntary savings.

Inflation discourages long-term lending because the price rise wipes out the benefits of fixed interest income. It also causes misdirection of savings from short-term projects because of the uncertainty about price rises and towards the holding of stocks of goods, gold, foreign currency and real estate where the speculative element predominates over the productive.

(3) While the capacity of the government to control inflation through fiscal and other measures is limited, rise of price in a democratic set-up leads to increasing demands on welfare services. This exerts an upward push on public expenditure which leads to further inflationary pressures.

(4) The government of a developing country employing inflationary policies, observed Harry G. Johnson,[25] is likely to be under strong political pressure to protect important sections of the community from the effects of inflation

[24] *Economic Development Theory History Policy*, Asia Publishing House, Bombay, 1966, p. 358.

[25] *Essays in Monetary Economics*, George Allen and Unwin Ltd., London, 1967.

through control of food prices, rents, urban transport fares and so on. Such controls inevitably distort the allocations of resources within the economy and particularly their allocation to private investment in growth. Fixing of low prices for food inhibits the development of agricultural production and the improvement of agricultural technique; control of rents on the other hand may unduly hamper the construction of new housing to accommodate those who cannot find rent-controlled housing or to induce landlords to seek ways of evasion. Moreover, control of prices of food and particularly of fares in state-owned transport facilities, may involve the state in explicit subsidies on the one hand and budget deficits on the other, so that the proceeds of the inflationary tax are wasted in supporting the consumption of certain sections of the population rather than invested in development.

(5) Since under-developed countries are exposed to competition in and from the world economy, continued Johnson, inflation introduces a progressive tendency toward exchange rate overvaluation, balance-of-payments difficulties and resort to increasing protectionism which in turn results in the diversion of resources away from export industries and toward high-cost import-substituting industries and a consequent loss of economic efficiency. Eventually, the increasing overvaluation of the currency is likely to force a devaluation, coupled with a monetary reform involving drastic domestic deflation.

If capital accumulation, argued Meier and Baldwin,[26] exceeds the country's absorptive capacity, it is also likely to cause balance of payments difficulties. Moreover, if too rapid a rate of development spills over into inflation, export industries are confronted with constantly rising costs and balance of payments difficulties are aggravated. The situation is also likely to deter foreign investments in the country and to encourage capital flight. If such balance of payments difficulties emerge, the country's development will be handicapped because it will be impossible to import the necessary raw materials and equipment, or if the

[26] *Op. cit.*, p. 359.

country must service previous foreign investment, it will experience a transfer problem that may require for its solution a reduction in domestic consumption and investment.

In this connection it may be appropriate to refer to what is known as the *Prebisch effect.* Raul Prebisch, an economist of Latin America, propounded that most backward countries export primary products to the advanced ones and against them import industrial products. When demand rises in the latter through increase in purchasing power, it is the poor manufacturers of industrial products who gain. This leads to a rise in consumption of industrial raw materials. If the prices of such raw materials are raised, the manufacturers seek economies in use of substitutes. Conversely, when demand declines in the advanced countries, the same manufacturers reduce their expenditure on raw materials before they attempt to curtail demands or wages. Thus the exporters of primary products in the backward countries seldom or never reap the full benefit of the upward cyclical movement in the high-income countries but almost always bear the full brunt of the downward movement. The economic advantages of technical progress in the use of raw materials are not transferred to producers and commodity prices remain inelastic in the upward direction and unstable in the downward.

To sum up, "inflation reduces the level of voluntary savings, as income recipients are unwilling to hold money or claims payable in money of declining value. It distorts the pattern of investment by substituting for the criterion of productivity that of capacity to resist depreciation; real estate and especially, luxury housing, hoards of specie and jewellery and stocks of standardized commodities become prime objects of investment in contrast to industrial plant and equipment. And inflation tends to become cumulative as income recipients exercise what E. R. Walker (of the University of Chicago) calls 'extra-market' power and strike for higher wages, demand governmental stabilization of farm products or subsidies to farmers and industry etc. to protect their incomes in real terms and to push the burden of the extra spending on to others. In addition, an

open economy faces added disabilities of distorting incentives in favour of imports and against exports and in favour of the use of foreign capital instead of high-priced domestic labor. It serves at the same time to repel foreign capital and to encourage domestic savers to safeguard their wealth abroad".[27]

IMPACT IN PRACTICE

In the practical field, the position of inflation may be analysed with reference to some important issues.

(1) For instance, *what is the contribution of inflation to the economic development of different countries? Is it inevitable to economic development?*

The position in some of the developed countries is indicated as follows[28]

TABLE 4
GROWTH OF OUTPUT AND CHANGES OF PRICES IN SUCCESSIVE DECADES

	Growth of Output (Per cent)	Price Change (Per cent)		Growth of Output (Per cent)	Price Change (Per cent)
U.S.A.			1903-12	34.7	38.2
1879-88	88.0	—19.5	1913-22	45.3	86.5
1889-98	38.2	—12.9	1923-32	67.4	— 7.1
1899-1908	56.4	9.3	1933-42	52.1	28.6
1909-18	35.5	34.6	1950-54	10.6	1856.3
1919-28	39.2	46.3	*Netherlands*		
1929-38	6.2	—18.0	1914-23	25.1	58.3
1939-48	71.7	34.2	1924-33	40.1	—12.7
1950-54	29.0	34.5	1934-43	0.2	— 7.1
U.K.			1950-54	33.7	45.4
1885-94	37.6	—15.0	*Sweden*		
1895-1904	29.2	— 0.9	1874-83	30.6	7.5
1905-14	16.5	9.6	1884-93	21.7	—12.0
1915-24	—0.8	106.0	1894-1903	40.5	2.7
1925-34	21.1	—16.6	1904-13	40.3	13.9
1935-44	30.2	17.1	1914-23	25.1	99.2
1949-53	22.7	51.3	1924-33	23.2	—11.3
Japan			1934-43	36.3	13.0
1892-1902	64.8	35.4	1950-54	60.1	62.4

[27] Charles P. Kindleberger, *Economic Development*, McGraw Hill Coy, Inc., New York, 1965, Ch. 13.

[28] See Werner Baer and Isaac Kerstenetzky, *Inflation and Growth in Latin America*, Richard D. Irwin. Inc., Homewood, 1964, pp. 193-94

Source: Joint Economic Committee of the U.S. Congress, *Staff Report on Employment, Growth and Prices*, computed from data appearing in S. Kuznets, "Quantitative Aspects of the Economic Growth of Nations", *Economic Development and Cultural Change*, Vol. V, No. 1.

On the basis of the above data the staff of the Joint Economic Committee of the U.S. Congress concluded that "there is no simple relationship between changes in output and changes in prices. Rapid economic growth has at different times been associated with rising, constant and falling price levels, just as periods of slow growth or, indeed, of no growth, have been marked by every manner of price behavior".

In recent years, however, the rate of growth of output has exceeded that of inflation, as shown below:—

TABLE 5
ANNUAL COMPOUND RATE OF INCREASE

	1959-70	
	Price-level	Real GNP
Canada	2.6	4.8
France	4.4	5.8
Germany, West	3.1	5.3
Italy	3.9	5.8
Japan	4.7	11.3
U.K.	3.6	3.1
U.S.A.	2.4	4.2

Source: OECD, *Economic Outlook*, December, 1972

So far as the developing countries are concerned, the position over short periods during the fifties stood thus:

TABLE 6
GROWTH AND INFLATION

	Rate of—			Rate of—	
	Inflation	Growth per capita		Inflation	Growth per capita
	(Per cent per year)			(Per cent per year)	
Argentina			*Mexico*		
1948-52	27	—4	1947-54	8	2
1952-54	4	6	1955-59	8	8
1955-59	39	—6	*Israel*		
Brazil			1950-54	29	5
1947-50	4	5	*Venezuela*		
1950-53	17	—1	1949-53	1	4
1954-60	20	2	1954-60	2	5

Sources: (1) United Nations, *Year Books of National Accounts Statistics.*
(2) International Monetary Fund, *International Financial Statistics*
(3) U. Tun Wai, *The Relation between Inflation and Economic Development,* International Monetary Fund, Staff Papers, Vol. VII

According to U. Tun Wai, "the findings did prove to be inconclusive; but for most of the small number of individual countries for which the available statistics cover periods in which the rate of price increase differs significantly, the evidence suggests that the rate of growth was higher when the rate of inflation was lower".[29]

Over comparatively long periods in recent years inflation reached high proportions but growth has been only moderate. There have also been cases where inflation has been low and growth, moderate. Both these aspects will be clear from the following table:

TABLE 7

GROWTH AND INFLATION

Annual Average Compound Rate of Increase

	Price (1950-65)	Gross domestic product (1950-68)	Depreciation of the value of money (1960-70)	Real gross national product (1961-70)
	(1)	(2)	(3)	(4)
Argentina	25.0	3.0	17.5	2.3(*)
Brazil	31.0	5.3	30.6	5.5
Chile	33.0	4.0	21.0	—
Greece	5.0	6.4	—	—
Korea, South	19.8('53-65)	7.1	—	—
Mexico	6.2	6.2	2.6	7.1
Philippines	1.8	5.2	5.2	5.0(*)
Taiwan	6.6('52-65)	8.7	3.3	9.2(*)
Thiland	1.6('51-65)	6.5	—	—
Venezuela	4.9	6.3	6.9	5.4

(*) relate to 1958-67 average..

[29] *The Economic Journal,* 1960, p. 744

Sources: (1) For cols. 1 and 2, National Statistics of respective countries; also see Angus Maddison, *Economic Policy and Growth in Developing Countries*, George Allen and Unwin Ltd., London, 1970, pp. 93, 29

Sources: (2) For col. 3, *Encyclopaedia Britannica, Book of the Year 1972*

(3) For col. 4, OECD, *Economic Outlook*, December, 1972; also U. N. *Monthly Bulletins of Statistics*

(2) *What is the impact of inflation on wages? Do wages move in line with prices?*

In the developed countries, where trade unions are generally well-established, money wages have risen more than prices. In the developing countries wages have generally risen as much as prices.

The above will be clear from the following tables:

TABLE 8

PRICES AND REAL WAGES

Percentage change per year

(1957-65)

	Prices (1)	Money wages (2)	Real wages (3)
Canada	1.6	3.5	1.9
France	5.4	7.8	2.3
Italy	3.6	7.8	4.0
Sweden	3.4	7.6	4.0
U.K.	2.8	6.1	3.3
U.S.A.	1.4	3.1	1.6

Sources: International Labour Office, *Year Book of Labour Statistics, 1967*

TABLE 9

PRICES AND WAGES, 1960-68

Percentage increase

(average annual rate)

	1960-65		1965-68	
	Consumer prices	Hourly earnings	Consumer prices	Hourly earnings
Canada	1.6	3.7	3.8	6.6
Germany, West	2.8	9.5	2.3	5.2
Japan	6.2	10.1	4.8	13.2
U.K.	3.6	7.3	3.7	6.0
U.S.A.	1.3	2.9	3.8	4.8

Source: OECD, *Present Policies against Inflation*, A Report by Working Party No. 4 of the Economic Policy Committee, Paris, June, 1971, p. 16

TABLE 10

PRICES AND WAGES, 1968-73

Developed Countries

..	1968	1969	1970	1971	1972	1973
Canada—						
Consumer prices*	92.6	96.8	100.0	102.9	107.8	116.0
Hourly earnings in manufacturing (dollars)	2.58	2.79	3.01	3.28	3.54	3.86
Germany, West—						
Consumer prices*	94.9	96.9	100.0	105.3	111.1	118.8
Hourly earnings in manufacturing (marks)	4.79	5.28	5.96	6.66	7.24	8.03
Japan—						
Consumer prices*	88.3	92.9	100.0	106.1	110.9	123.9
Monthly earnings in manufacturing (.000 yen)	52.7	61.8	71.4	81.0	93.6	115.9
U.K.—						
Consumer prices*	89.2	94.0	100.0	109.4	117.2	128.0
Weekly earnings in manufacturing (index)	86.2	90.9	100.0	112.5	127.8	144.4
U.S.A.—						
Consumer prices*	89.6	94.4	100.0	104.3	107.7	114.4
Hourly earnings in manufacturing (dollars)	3.01	3.19	3.36	3.56	3.81	4.07

*base 1970=100

Source: United Nations, *Monthly Bulletin of Statistics*, August, 1974

TABLE 11

PRICES AND REAL WAGES, 1957-65

Percentage change per year

	Prices	Money wages	Real wages
	(1)	(2)	(3)
Brazil	48.4	48.7	0.2
Ceylon	1.1	6.2	5.0
Colombia	10.9	18.0	6.5
Ghana	7.7	7.0	—0.7
South Korea	10.4	11.1	0.6
Pakistan	2.4	4.6	2.1

Source: International Labour Office, *Year Book of Labour Statistics, 1967*

TABLE 12

PRICES AND WAGES, 1968-73
Developing Countries

	1968	1969	1970	1971	1972	1973
Brazil—						
Consumer prices*	68.1	84.0	100.0	121.1	—	—
Monthly wages (cruzeiro)	252.7	341.1	429.2	—	—	—
Chile—						
Consumer prices*	57.8	75.5	100.0	120.1	213.5	—
Monthly wages (escudo)	525.2	722.4	1041.6	1480.7	2408.2	—
Israel—						
Consumer prices*	92.0	94.3	100.0	102.0	126.0	—
Daily earnings in manufacturing (I.L.)	22.6	23.4	26.2	29.0	33.0	—
Mexico—						
Consumer prices*	92.5	95.1	100.0	103.3	109.8	127.9
Monthly wages in manufacturing (peso)	1544	1621	1703	1851	1956	2197
Philippines—						
Consumer prices*	92.2	94.8	100.0	123.3	—	—
Monthly wages in manufacturing (peso)	182	190	215	275	—	—
Sri Lanka—						
Consumer prices*	87.9	94.4	100.0	102.7	109.8	—
Hourly earnings in manufacturing (rupee)	0.81	0.84	0.91	0.93	1.09	—

* base 1970=100

Source: United Nations, *Monthly Bulletin of Statistics*, August, 1974

Further, it may be noted that in almost all the underdeveloped countries the economies are predominantly agricultural, that is, the majority of the working population are engaged in agriculture. In the field of agriculture wages have generally lagged behind prices, much to the disadvantage of landless labourers. Even agriculture cannot provide jobs throughout the year.

(3) *What is the effect of inflation on savings or capital formation?*

It will be seen from the following tables, that there is hardly any correlation between the price-level and capital formation. Even in underdeveloped countries which experienced a high rate of inflation the rate of capital formation was not higher to any extent on that ground. While Brazil and Chile with an annual price rise of 31 and 33 per cent respectively had only 12.5 and 11.7 per cent increase in gross fixed investment, Israel with a price rise of 11.3 per cent pushed up the rate of investment to 17.3 per cent of national income; Mexico and Philippines with price rises of 6.2 and 1.8 per cent, to 13.2 and 10.7 per cent respectively.

TABLE 13

PRICES AND SAVINGS

Developed Countries

	1954	1956	1958	1960	1962
Canada					
Consumer prices (base 1952=100)	102	107	113	116	125
Total savings as % of GDP	8.0	12.5	8.6	8.6	10.0
France					
Consumer prices (base 1952=100)	130	134	157	173	189
Total savings as % of GDP	9.3	8.6	10.6	12.7	11.6
Germany, West					
Consumer prices (base 1952=100)	108	114	118	121	129
Total savings as % of GDP	16.9	18.6	17.4	19.4	17.4
U.K.					
Consumer prices (base 1952=100)	126	138	147	150	162
Total savings as % of GDP	6.6	8.3	7.0	10.7	9.0
U.S.A.					
Consumer prices (base 1952=100)	111	113	120	122	126
Total savings as % of GDP	7.3	10.4	6.6	8.4	7.9

Sources: (1) For consumer prices, International Labour Office, *Year Book of Labour Statistics*
(2) For savings, *Year Books of National Accounts Statistics*

TABLE 14

PRICES AND INVESTMENT

Developing Countries

	1950-65 Increase in prices (*average per cent per annum*)	1950-66 Non-residential gross fixed investment as percentage of GDP (*average per annum*)
	(1)	(2)
Argentina	25.0	14.3
Brazil	31.0	12.5
Chile	33.0	11.7
Greece	5.0	11.1
India	2.3	11.2
Israel	11.3	17.3
Korea, South	19.8*	8.8
Mexico	6.2	13.2
Philippines	1.8	10.7
Taiwan	6.6**	12.2
Thailand	1.6***	13.9

Source: Angus Maddison, *op. cit*, pp. 93 and 37

*(1953-65) **(1952-65) ***(1951-65)

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Control of Inflation

Creeping inflation is the malaria of the modern mixed economy. But unlike the case of malaria there seems to be no known cure for creeping inflation that is better than the disease.

Paul A. Samuelson

There are three broad categories of policy for the control of inflation—I. Monetary, II. Fiscal and III. Incomes.

I. *Monetary policy* is the name given to the collection of principles relating to the quantitative and qualitative supply of money which the government and the central bank of a country keep before themselves in order to fulfil its general economic goals. 'Monetary measures', as the Radcliffe Committee (that enquired into the working of the monetary system in the U.K.) observed in its Report (August, 1959), 'are not so much a policy in themselves as *a part of the general economic policy* which includes amongst its instruments fiscal and monetary measures and direct physical controls'. The broad objectives of monetary policy are thus dependent on the general economic policy of the country—growth, stability, full employment, some unemployment and some stability, and so on.

In advanced countries money consists not only of paper currency and coins but predominantly of bank deposits against which individuals and firms draw cheques to make most of their payments. Since those that receive them deposit them back to banks, the banks can create good quantities of money on the strength of keeping a small portion ready in the form of cash or first-class securities. Basically, therefore, in those countries monetary policy relates to control by the central bank over the amount of money that is created, the nature of that creation and its cost in terms of interest.

II. *Fiscal policy* refers to 'the manner in which the different elements of public finance, while still primarily

being concerned with carrying out their own duties (as the first duty of a tax is to raise revenue), may collectively be geared to forward the aims of economic policy'.[1] These may be 'stability at a high level of employment on the one hand and on the other the steady increase of productivity so as to obtain the maximum growth from the available resources'.

Fiscal policy consists in manipulation of the fisc or the government budget. In earlier days the government budget used to comprise 5 to 10 per cent of the national income. But in recent times its size has increased greatly. About 20 to 30 per cent of national income now flows through the public economy. The state is in a position to influence the volume of national expenditure as a whole and thus the demand for goods and services by increasing its quota to the national figure or by drawing upon the national quota through taxation and other ways.

Thus while monetary policy affects aggregate demand more indirectly via control of the supply of money, fiscal policy has a more direct bearing because in this case the government itself enters into the market for goods and services through its own public expenditure or withdraws from the market through its curtailment of expenditure.

III. *Incomes policy* is a still more *direct form* of limiting the upward pressures of income of different sorts—wages, salaries, profits and even costs as a whole and prices. Broadly, it comprises three kinds of approach—moral persuasion or the jawbone approach, wage-price guide posts and wage-price control. The first relies on public opinion and the sense of responsibility of setters of wages and prices in order to induce them to moderate their demands and lessen cost-push inflation. The second lays down some outlines for the guidance of those who fix wages and prices. It is based on the general consideration that the increase in wages should equal the increase in productivity of the economy as a whole. The third approach pushes the methods further from 'moral persuasion' and 'guidelines' to direct

[1] Ursula Hicks, *Public Finance*, James Nisbet & Co. Ltd. and Cambridge University Press, 1958, p. 269

regulation by the government of wages, profits and prices through mandatory ceilings.

I. MONETARY POLICY

There is an array of monetary weapons in the armoury of the central bank. Of them three are outstanding—(1) Bank Rate, (2) open-market operations and (3) selective credit control. While the first two are directed at regulating the total supply of money or credit, the third aims at controlling its flow to particular channels.

(1) *Bank Rate.* The commercial banks, when they need cash, can borrow from the central bank. The latter offers to them the facility of re-discounting first-class bills of exchange. For this it charges from them a rate which is usually set penally above the market rate of discount. It is known as the Bank Rate. By tradition a change in the Bank Rate is followed by a corresponding change in the rates of discount charged and rates of interest paid, by commercial banks and other financial institutions. Thus through manipulation of the Bank Rate the central bank can initiate a considerable chain of repercussions throughout the banking system which affect the supply of money.

(2) *Open-market operations.* These imply the sale or purchase of securities—bills or bonds—by the central bank in the open market. When the bank sells securities, the individuals or institutions that purchase them draw money from their respective banks. There is thus a reduction in the deposits of commercial banks and consequently in their minimum cash reserves. To make up for the shortage they have to call back a part of their short-term loans to the market. In this way ultimately there takes place a decline in the supply of money. Purchase of securities by the central bank leads to an increase in the supply of money through a sequence of opposite kind.

(3) *Selective credit control.* This type of control is directed at the use which is made of the money made available by banks. By virtue of its authority granted by the government the central bank can issue directives to commercial banks to restrict its loans for particular purpose,

say the keeping in stock of essential commodities or to liberalise its loans for certain specified activities, say housing construction. Thus selective credit control goes one step further than Bank Rate or open-market operations which limit the supply of money as a whole but do not try to influence what type of use the additional money will be put to. On this score its efficiency is limited, too. (*i*) It is difficult to keep a thorough check on the use of banks' advances. (*ii*) It has no control over the use of bank money which is already there from beforehand for the particular purpose which is attempted to be restricted.

Merits

1. Monetary policy has this merit that it exercises only general control over the money supply, leaving the consumers or investors free to act in their own way, of course, generally toeing the line of the monetary authorities. From this standpoint it is regarded by some as 'gentlemanly'. True, monetary policy also envisages certain types of selective credit control. But in this respect the control extends to the sphere of credit only. The consumers or investors can take the help of other instruments or institutions.

2. There is special justification for selective credit controls in those economies in which there is an excessive pressure of demand in certain key sectors of the economy due to unbalanced development among the sectors. Thus in most underdeveloped countries there is a 'demand-pull' inflation in respect of food prices but a 'cost-push' inflation in the industrial sector. For a situation like this selective credit control provides a good remedy.

3. Another merit of monetary policy is that it operates 'anonymously', that is, through the market mechanism and is administered at the base level by the banking and credit institution rather than by the government itself. 'Having set the general scene through its control' over the central bank, 'the government can then sit back and watch the details of its policy be etched out through the relationships

of the central bank with the other financial institutions'.[2] It is certain that under monetary policy the governmental authorities have only indirect and much less than total control over the monetary system. This is conducive to free enterprise and efficient allocation of resources on competitive grounds.

Criticism

1. The above features of monetary policy themselves provide the ground or background for its ineffectiveness in the modern situation. It has been pointed out by many that a true gentleman is unfit for the complex situation of present-day business. Thus the success of the Bank Rate depends on the amounts by which the Rate is manipulated. A small change will be scarcely taken notice of by the economic system in general. A sharp and sudden increase in the Rate may have a significant impact on aggregate spending and effective demand. But it may result in shaking the public confidence altogether. Once the confidence is shaken and the atmosphere vitiated, it becomes difficult to restore them. Indeed, as Alvin Hansen put it, "the monetary weapon to curtail an over-all excess of effective demand has the peculiar characteristic that it is scarcely at all effective unless the brakes are applied so vigorously as to precipitate a collapse. It would be interesting to know how high the interest rate would have to be pushed in a period of inflationary pressure, before it could have any substantial effect on investment and consumption outlays. Those who glibly talk about controlling the inflation by monetary policy have failed to consider that moderate monetary measures by themselves alone are relatively ineffective, while drastic measures may easily turn the economy into a tail spin". So when "moderately used, it courts the failure of effectiveness; pushed to the needed fanatical

[2] See Peter Donaldson, *Economics of the Real World*, British Broadcasting Corporation and Penguin Books, Harmondsworth, 1973, p. 51

extremes, it courts disaster".[3] That is why R. Opie described monetary policy as 'either useless or vicious'.[4]

It may be analysed a bit closely how far monetary policy, particularly *Bank Rate, influences consumption and investment.*

(*a*) It is generally true that what people spend on consumption depends much more on the amount they earn and the institutional channels through which they save and much less on the interest which their savings get. That is why very few would take notice of changes in Bank Rate to the extent of 1 or 2 per cent or notice so seriously as to change their rate of consumption. Of course if the rate of interest were to shoot up abnormally say from 5 to 15 per cent, it is sure to attract even the saver's interest. This however resembles the case of preventing a man from becoming excessively corpulent just by strangling him to death.

(*b*) Similarly investment decisions are influenced by many other considerations than the rate of interest for securing money. (*i*) The future uncertainties and risks of business are vital. (*ii*) Interest cost is only a minor factor in investment. It is dwarfed by annual capital repayments. (*iii*) Investment plans are neither formulated nor implemented hurriedly. They constitute a long-term strategy which is difficult to adjust against short-term changes of any factor. Moreover, the impact of rising interest rates, if any, is specially cushioned in an inflationary situation and can be passed on to the consumers with comparative ease.

The Radcliffe Committee rightly pointed out that it was clearly difficult to encourage spending by making credit easily available if business prospects were so poor that no investment looked profitable. It had been alleged by many that a wrong monetary policy of contraction by the U.S. banking authorities accentuated the Depression of

[3] *Monetary Theory and Fiscal Policy*, McGraw-Hill Book Co. Inc., New York., 1949, Ch. 11

[4] See "The Future of Monetary Policy", in P. P. Streeten (ed), *Unfashionable Economics*, Weidenfield & Nicolson, 1970, p. 273

1929-32. But when banks were failing in large numbers and confidence of the investing sections and even the people in general had been rudely shaken, it is doubtful if an opposite policy of expansion could have averted the rapid decline in prices.

On the other hand, when business conditions are bright, high interest rates may not have a depressing effect. Thus in West Germany during the period 1950-70 interest rates on commercial loans went up by 10 to 12 per cent but the country maintained a reasonable stability of prices, a high growth rate of 11 to 12 per cent at current prices and an average rate of profits of 20 per cent or more on investment. Similarly the policy of credit squeeze in the United Kingdom introduced in the early part of 1955 did produce a change in the size of cash balances held in relation to turnover by businessmen but it did not cause any contraction in the size of physical stocks in relation to turnover. The (real) rate of investment in stocks in each of the three years 1955 to 1957 was substantially higher than in the preceding three-year period.

2. "An increase in the money supply resulting from open-market purchases of securities by the banking system has the effect of monetizing a part of the liquid assets held by the non-banking investors. It does not involve a change in the volume of total liquid assets in the possession of the public. Only the composition of the assets is affected. An increase (or decrease) in the volume of total liquid assets held by the public would tend to raise (or lower) the consumption function. But this situation is not involved in the case of pure monetary policy".[5] Even to this limited extent, the effectiveness of open-market operations depends on the existence of a diversified and active market of government securities. While in underdeveloped countries such markets are in a poor state, in some of the developed ones they are so sensitive that large-scale purchases may cause disorder. As John M. Culbertson put it, "not only can open-market operations be conducted that do not reflect any change in monetary policy, but changes in

[5] See A. H. Hansen, *op. cit*, Ch. 12

monetary policy can be made without any open-market operations".[6]

3. Selective credit controls are also ineffective because bank credit is not the only form of financial assistance available to business in the present era. As Peter Donaldson pointed out, "putting the pressure on one part of the market merely forces potential borrowers to seek funds elsewhere and there are various alternative sources available—insurance companies, finance houses, extended trade credit and so on".[7]

It follows from the above that the *three* principal *instruments* of monetary policy have got *more disabilities than capabilities, more limitations than efficacies.* In the words of Nicholas Kaldor, 'monetary and credit policy represents at best a crude and blunt instrument for controlling inflationary and deflationary tendencies in the economy which should be employed only in circumstances in which and to the extent to which, no superior instrument of control is available'.[8] According to Alvin Hansen, "The conception that the rate of spending can be rigorously controlled by increasing and decreasing the money supply, extending and curtailing credit, is based on a very primitive notion of the role of money and liquid assets in modern societies. In the modern community tangible wealth is typically represented by claims (securities). Thus there is a vast volume of liquid assets which shade off into near-money. Moreover, the growth of the public debt has added enormously to the liquid assets, of which the short-term obligations are very close to being money. In addition there is a vast volume of saving deposits. Money is no longer an easily separable and distinctively marked-off category of wealth. In these circumstances it is no simple matter to control the rate of spending by controlling the quantity

[6] *Money and Banking*, McGraw-Hill Book Coy., Inc., New York, 1972, Ch. 8

[7] *Op. cit.*, p. 53

[8] See *Monetary Policy, Economic Stability and Growth*, Memoranda of Evidence before the Radcliffe Committee on the Working of the Monetary System, Her Majesty's Stationery Office, London, 1958

of money. In the nature of the case it cannot be the primary measure."

Conclusion was drawn by a leading economist thus[9]:

"All in all, the history of monetary policy during the post-war years has been a disappointment to its devotees. Far from being an anonymous, non-selective and delicate instrument of control, it has turned out to be blunt, harshly discriminative and difficult to administer effectively. Sometimes it has failed to work at all, sometimes it has succeeded by clumsy overskill and revealed further defect—its irreversibility. As an element in the Keynesian battery of demand management techniques it must now surely be relegated to a minor role subordinate to the other major weapon of fiscal policy." It was also the view of the Radclifie Committee that "the more conventional instruments (*e.g.* Bank Rate) have failed to keep the system in smooth balance. The obstructions to particular channels of finance have had no effect on the pressure of total demand but have made for much inefficiency in financial organisation. Every now and then the mounting pressure of demand has in one way or another (generally via the exchange situation) driven the government to take action and the quick results then required have been mainly concentrated on the hire-purchase front and investment in the public sector wihch could be cut by administrative action".[10]

There are special difficulties of monetary control in the underdeveloped countries arising out of the insufficient development of the money market including the banking system. As Gerald M. Meier and Robert E. Baldwin pointed out, "deposit banking plays a much smaller role in the poor countries than in the rich countries and central banking may be non-existent or of recent origin with only limited powers. The capacity of the money market is extremely limited and there is not the large variety of sub-markets that constitute an important characteristic of developed money markets. Most of them lack an organised, highly liquid call-loans market and few possess a commercial bill

[9] Peter Donaldson, *op. cit*, p. 54

[10] See paras 469 and 472 of their Report

market of any significance. There is often only a loose connection among different parts of the money market and there is little integration in the structure of money rates. In some countries where subsistence agriculture prevails, large segments of the indigenous population remain completely outside the money economy".[11] In the words of U. Tun Wai, "in view of the fact that the unorganised money market is larger than the organised money market and since the two markets are not closely connected, the use of orthodox monetary policy as an instrument of economic policy has very limited possibilities in underdeveloped countries".[12]

II FISCAL POLICY

Fiscal policy, as already pointed out, is based on manipulation of the budget. In earlier days the budget used to be regarded merely as a means of raising funds in order to meet the expenses of running the administration and performing other allied functions. But in recent times the budget is also looked upon as a powerful weapon for influencing the national economy.

The budget has two sides—income and expenditure. The basic framework of fiscal policy is compensatory action for making up the deficiencies or absorbing the surpluses in private income or spending, depending on the needs of the situation. Its chief instruments are: *taxes, public loans* and *public expenditure.*

The fiscal *mechanism* is simple enough. (1) In an inflationary situation the task is to reduce the level of total spending. This can be done principally in a number of ways. (*a*) The government can squeeze the amount of its own expenditure through economy and other measures. Its

[11] *Economic Development Theory History Policy,* Asia Publishing House, Bombay, 1966, pp. 306-7

[12] "Interest Rates in the Organised Money Markets of Underdeveloped Countries", International Monetary Fund, Staff Papers, Vol. V, No. 2, August, 1956; also "Interest Rates outside the Organised Money Markets of Underdeveloped Countries", *op. cit.,* Vol. VI, No. 1, November, 1957

aim should be budgetary surplus. (*b*) It can impose higher direct taxes on the community and thus curb its purchasing power. (*c*) It can go to the market as a borrower and thus draw away funds from it by offering lucrative interest rates. (*d*) To relieve the hardships of the lower income groups it can make available free welfare services or subsidised amenities to an increasing extent through selective expenditure.

(2) On the other hand, if there is a situation of unemployment and depression, the government can take a number of steps to remedy it. (*a*) It can itself undertake spending so as to provide more purchasing power to the people. Useful public works are a good item for the purpose. (*b*) It can cut down taxes in general so as to leave more money in the hands of the public. (*c*) It can adopt a discriminatory tax measure, allowing relief to the richer sections and thus augmenting their capacity to save.

Special Features

Fiscal policy has got certain special features which give it comparative advantage over monetary policy. (1) It is initiated and operated by the government which is more powerful than banks. Its economic functions have been increasing over the years even in a free-enterprise country. (2) The government has got unique powers to break the so-called tie-up between revenue and expenditure. Other economic units must balance their budgets, at least in the long run. The government can finance deficits in its transactions with its own citizens either by printing new notes or incurring interest-bearing debt. While the amount of public debt is limited by the lending capacity or mood of the citizens, deficit spending through currency expansion can be carried to practically any length, though too much of it leads to other complications. (3) Further, the government can direct its taxation policy against or its expenditure policy in favour of, particular classes. In other words, fiscal policy has a strong redistributory aspect which is almost absent in monetary policy.

Thus "the government's ability to tax the community and to spend on its behalf gives it *a major* lever on the level of activity in the economy. Particular taxes and forms of spending can be adjusted to influence private consumption and investment. And there is also the impact of the budget on the economy—how much the government spends in relation to how much it receives in taxation".[13] According to James Tobin, the central government can act as *a balance wheel.* The key to stabilising the economy by fiscal policy is for the government to act differently from other economic units.[14]

Merits

There is an element of *automatic stabilisation* in the present-day fiscal system. This is particularly true of advanced countries. In times of recession the tax collections by themselves go down and the after-tax incomes left with the taxpayers increase. At the same time among the lower-income groups more people become eligible for unemployment relief and other benefits. In boom periods more people come within the range of assessment while the rates of those already paying taxes go up. Further, due to improvement of economic condition of the lower-income groups there is a reduction of expenditure on relief and assistance. Thus *built-in* stabilisers of the fiscal system comprise tax collections and social insurance contributions on the one hand and subsidies and transfer payments on the other. It is their chief characteristic that they do not wait for any policy decision or deliberate action but they come into operation in response to needs of the situation almost in the manner of *a thermostat.*

Safeguards and Limitations

Certain *conditions* have however to be fulfilled if there is to be automatic stabilisation. (*i*) The government budget

[13] See Peter Donaldson, *op. cit.*, p. 54

[14] Talk on "Can the U.S. Avoid Depressions and Inflation? Fiscal Policies", Broadcast by the Voice of America in 1966.

must cover a large proportion of national income and expenditure. (*ii*) The income side should rely more on progressive taxation, both on corporate profits and personal income. (*iii*) There should be a similarly progressive social security scheme for the poorer sections.

But automatic stabilisers have their *limitation*. The existence of 'built-in counter-cyclical elements in government taxation and expenditure' is no guarantee that the economy will be stable and run smoothly. They cannot prevent ups and downs in business but can only moderate them. Their effect is only partial so far as the forces generating inflation or deflation are concerned.

Automatic stabilisers have to be supplemented by deliberate adjustment of the budget to changing economic situations. Some of the *discretionary stabilisers* may be subjected to closer analysis.

CHIEF INSTRUMENTS

(1) *Taxation*. There are some taxes like excise and sales tax which have an inflationary effect in general. To the extent they are borne by producers, they lead to a reduction of output and employment. If the burden is shifted to the consumers, this means further rise in prices.

The personal income and corporate profit taxes are, however, deflationary. They take away purchasing power from the people, thereby reducing the amount of spending. But if just idle funds are mopped up through taxes, the effect on the price-level is negligible unless the government utilises them for developmental purposes, particularly, for producing those commodities that are in short supply. Thus in an inflationary situation the tax policy of the government should be so devised as to curtail consumption, mobilise savings and utilise and direct them to channels that are conducive to production of articles of consumption.

The expenditure tax is also a good inflation fighter, because it puts an immediate premium on 'not spending'. Even a small change in its rate can be a good means of expanding or reducing consumption. It can also be assessed

at highly progressive rates on cumulative total expenditure throughout the year.

(2) *Borrowing.* Like taxation borrowing also draws money from the national economy. So it is deflationary. But it is much different from taxation. Government loans are more likely to draw on idle funds than taxes. To the extent they succeed in so doing, deflationary effect will be reduced. Secondly, loans create public bonds which unlike tax receipts increase to some extent the holdings of semi-liquid assets by the public. In this sense the debt may be regarded as a stock of 'latent inflationary tinder' which may at any time burst into conflagration. This happened in U.S.A. during the period 1947-48 when the owners of liquid Government securities which they had acquired during the war tried to spend them on the scarce civilian goods, of which it had deprived them.

There are some positive *weaknesses* of the public debt, particularly if it has assumed large proportions.

(i) A large debt involves large annual interest-transfer payments. These in general exercise a deflationary pressure on the level of employment and inevitably generate friction in the system. Thus the public debt of the Federal Government in U.S.A. is estimated at about $400 billion and annual interest charges thereon, at over $25 billion which exceeds the full budget of the 1920's. In the U.K. the National Debt stood at about £37000 million in March, 1973 and interest payment was of the order of £2350 million. (ii) As a matter of practical policy, resort to public debt invites easy spending. But ultimately it has to be repaid. Borrowing passes on the burden to future generations.

(3) *Public expenditure.* (i) This in general generates an inflationary pressure, although different types of expenditure produce difficult types of effect. (*a*) Thus an increase in expenditure on welfare services by mitigating the hardships of poorer sections helps in dampening the inflationary effect. Direct payment of gratuitous relief has long been regarded as the simplest anti-depression device. (*b*) Expenditure on public works like roads, bridges, flood control has a counteracting effect on depression. It also helps in

creating useful assets for the nation, the infrastructure necessary for economic development. (*c*) Public investment on consumption goods industries has a two-way effect. On the one hand, it corrects the deflationary situation by placing additional purchasing power in the hands of the people that provide factors of production to these industries. But on the other it exerts a downward pressure on the already low price-level, thus worsening the deflationary situation. (*d*) Most important is the public investment on capital goods and construction industries. It is in this sector that depression generally is most centred and the leverage effect on the rest of the economy is high. Since they involve long gestation periods, the fear of immediate flow of goods into the market is eliminated.

(ii) Public expenditure has also got a self-financing effect. Thus if there is spurt in employment and industrial activity as a result, the tax receipts accruing to the government, even with existing rates unchanged, go up and become available for repaying the initial borrowings.

There are, however, some important *weaknesses* of *public expenditure.*

(i) Expenditure on relief has a demoralising effect. It fosters idleness. Once people start living on charity, they become averse to labour of any kind. It is also difficult to keep such expenditure within control, particularly in periods of acute depression. (ii) Expenditure on projects is often the subject-matter of political manoeuvring. Once a project is started in a particular area, demands pour in for similar projects from other areas. (iii) The operation of such projects is not so economical because of the governmental administrative system, bureaucratic procedures and so on. The products of the public sector generally cost more. So the effect is inflationary. (iv) Public works are a time-consuming process. As such they lack flexibility. Both their preparation and execution require time. In the majority of cases the demands for resources expand gradually so that it is a matter of months or even years before the peak demand for labour and materials is reached.[15]

[15] See Ursula Hicks, *op. cit.*, p. 287

Criticism

(1) Fiscal policy in general suffers from the limitation that once a measure is adopted, it is difficult to withdraw or put a halt to it. This is particularly applicable to the case of borrowing or deficit spending. Both are tempting. How far anti-depression fiscal policy should be carried to is a vexed problem. (2) There is a political aspect of fiscal policy. The government of the day has to decide which taxes are to be levied, how much and when. But taxation by itself is an unpopular measure. So there may be hesitation on political grounds to go the whole way in fiscal policy. But a half-way step may lead to worse consequences than no step at all. Many pressure groups may not be enthusiastic at all to dampen a boom, since it brings gain to large numbers. So legislators who would vote for heavier taxation against their opinion may not have a happy political life. As Peter Donaldson put it, the 'natural' business cycle has been accentuated by the superimposition of a new 'political' or 'electoral' cycle.[16] A government going to the polls naturally wishes to do so in the most auspicious circumstances. So the attempt 'to get the economy right' at the appropriate political moment gives it an artificial boosting which is against all fiscal norms. It is dangerous, too. In a federal government there is the problem of co-ordination between the federation and the member states. Thus in the 1930's increased spending by the Federal Government to stimulate revival in U.S.A. was more than offset by reduced expenditures by State and local Governments until 1936.

Further, there will be monopolists and other vested interests who will turn the fiscal applecart mainly to their own gain rather than allow it to boost up the economy as a whole.

III. INCOMES POLICY

Whatever shapes they might take, "ranging from strict authoritarianism to the framing of recommenda-

[16] *Op. cit.*, p. 65

tions to employers and workers", incomes policies almost universally comprise "the fixing of wage increase 'norms', a ceiling being set on such increases by linking them to the increase in productivity, measured at a level of aggregation (undertaking, branch of industry, economy as a whole). This type of wage regulation is most frequently accompanied, at least in its more authoritarian form, by price regulation and sometimes by price freezing".[17] An incomes policy in simple language means a policy of freezing wages, incomes and prices. It is only recently that it has found its way to the anti-inflation armoury of most of the developed and some of the developing countries. It is still in an experimental stage and has been used, by and large, as a short-term step, though of an extreme type.

SWEDEN

Sweden is one of the pioneers in this field. The Basic Agreement of 1938 between the employers' organisations and trade unions laid the foundation for an incomes policy. Indeed, so much importance is attached to this document that many cases of employer-employee co-operation in Sweden are nicknamed 'Saltsobadsanda' after the suburb 'Saltsjobaden' where the Basic Agreement was executed. The trade union movement is very strong in Sweden. To prevent legislation happens to be the principal motive of both employers' organisations and trade unions. What happens is that the two central organisations of employees (*Lands Organisationen*, LA) and employers (*Senska Arbetsgivare Foreningen*, SAF) work out separately their own estimates of the probable increase in the national product, of the trend of profits, industrial costs and so on. The former presents its overall wage claim, supported by its calculations of what extra real resources are going to be produced in the country. The SAF then works out all the implications of the trade union's demand and prepares and

[17] Jean Mouly, "Prices, Wages, Unemployment: Inflation in Contemporary Economic Theory", *International Labour Review*, Vol. 108, No. 4, October, 1973, p. 341

presents its comments on it. Ultimately, through expert bargaining about percentage points of wages and profits, a nationally agreed figure is arrived at for the basic wage increase. This is the base. But increases are provided for in industries in which wages have lagged behind the national average due to weak bargaining power of their labour. It is in this way that 'wage solidarity' is maintained.

NETHERLANDS

At the other extreme is the Netherlands where in early fifties incomes policy started with the Government exercising a strong influence on wage-fixing. It, however, originated with the idea of keeping Dutch wages deliberately below the West European standards in order to face competition with industries in world markets. The trade unions acquiesced in it in the long-period interest of labour, otherwise it would face unemployment. The agreements between workers and employers were ratified by the Government. The Government also took additional powers in 1963 to fix retail ceiling prices of products. But incomes policy in the Netherlands has become liberalised subsequently. Thus in 1967, wage-fixing was decentralised and made a matter for discussion between employers and employees in individual branches of industry, with the Government reserving the right to intervene in difficult cases which would affect equilibrium in the national economy.

U.K.

In the U.K. it started with exhortations made by many Ministers from time to time in the late 1950's for restraints on wage and price increases. In July, 1961 the Chancellor of the Exchequer specifically called for a 'pause' in wages, salaries and dividend payments and made it clear that the Government intended to use such power as it had to influence the amount and timing of wage and salary awards. A White Paper was issued in February, 1962 which outlined the objective of incomes policy as to

keep the rate of increase in incomes within the long-term rate of growth of national production, which was about 2 to 2½ per cent per year. It just pleaded that the increase of wages and salaries should be kept within this figure.

Late in 1962 a National Incomes Commission was set up, of which the functions were more recommendatory than regulatory.

The Labour Government in 1964 set up a Department of Economic Affairs which was made responsible for its income policy. Its policy was developed in three stages in consultation with representatives of management and industry. First, the Joint Statement on Productivity, Prices and Incomes was signed in December, 1964 in which the Trade Union Congress and the employers' organisations undertook to co-operate with the Government in producing an effective machinery for the implementation of an incomes policy. In the second stage a National Board for Prices and Incomes was formed in April, 1965, consisting of an independent chairman, a businessman, a trade unionist and a number of experts. The Board was to advise the Government in matters relating to incomes policy and investigate all questions of productivity, prices and incomes that would be referred to it by the Government.

The third stage was the issue of a White Paper on Prices and Incomes Policy. Apart from setting out general guidlines, it indicated a norm of 3 to 3½ per cent as an average rate of annual increase per head which was consistent with stability in the general level of prices. Above average increases could be justified under four criteria: (a) manpower shortage, (b) much low pay compared with similar work elsewhere, (c) too low a rate of pay to maintain a reasonable standard of living, (d) direct contribution to increased productivity.

In practice, however, persuasive incomes policy achieved little success. It was evident from the fact that weekly wage rates rose on an average by no less than 6 per cent between 1965 and 1966; and all of this rise took place before July, 1966. So in September, 1965 the Government announced its intention of introducing legislation for the purpose. The Prices and Incomes Act came into force in

August, 1966. It gave powers to the Government for a period of twelve months to require notification of increases in prices and charges, company distributions and the terms and conditions of employment.

In July, 1966 a voluntary standstill was announced, under which increases in prices and incomes were to be avoided as far as practicable until the end of 1966. In addition to wages and prices the standstill covered other forms of remuneration such as directors' fees and company distributions. For the most part the standstill was observed and wage-rates were stabilised. Under part 2 of the aforesaid Act the Government could impose a standstill on a proposed pay increase for a period of up to three months. Acts were passed in 1967 and 1968 which gave powers to extend the standstill for further periods of three and eight months respectively.

The Act of 1968 also gave revenue powers to enforce dividend restraint, to moderate and phase increase in house rents and to require price reductions in certain cases. But these powers were not utilised much.

By late 1969 the incomes policy of the Government had broken down and wage settlements had been large and became longer. During the first half of 1969 wage bills rose by about 12 per cent and national prices, by 7 per cent.

A fresh lot of incomes policy was taken up towards the end of 1972 when prices had risen by about 8 per cent and wages, by about 18 per cent compared with the preceding year. The contributory factors included higher world prices for food and raw materials and the lower international purchasing power of sterling. In July, 1971 the Confederation of British Industry called upon the 200 largest member companies to undertake to do their utmost not to raise prices in the 12 months ending July 31, 1972. This helped restrain prices for some time but did not work long.

The Counter-Inflation (Temporary Provisions) Act was passed in November, 1973 which had three main objectives: to steady prices, to be fair and to sustain a faster rate of economic growth. It provided for a 90-day standstill on prices and incomes. The Act also provided for the

establishment of a Price Commission and a Pay Board with powers to control movements of pay and prices for three years in the first instance. Manufacturers were not permitted to increase their prices except to the extent they had to meet unavoidable cost increases. They had to seek prior approval from the Price Commission.

U.S.A.

In U.S.A. also incomes policy has received increasing importance in recent years. It started with the laying down of wage-price guideposts by the Council of Economic Advisers to the President's Administration in 1962. The general rule to be followed was that the average increase in wage rates, including fringe benefits, should equal the increase in productivity for the economy as a whole. Supplementary rules provided that wages and prices could rise by more than the standard amount where shortages existed but should rise by less where there were surpluses. The effect of these rules would be to make wages and prices behave as if they were set in competitive markets. In 1964 the Council was more specific and set the average rate of growth in productivity at 3.2 per cent. But there was little success of this sort of persuasive policy. So it was abandoned in 1969.

Ultimately in August, 1971 the U.S. Administration under President Nixon imposed a 90-day freeze on wages and prices which was to be followed by a new programme to limit wage-price push and permit reduction to occur along with a decline in the rate of inflation. Increases in wages and costs were in future to be permitted by a set of boards. The highest of such boards was the Cost of Living Council consisting only of high government officials. Wage increases were to be supervised by a wage board, consisting of representatives of labour, business and the public. Besides, a Price Commission was formed to set standards for permissible increases in prices and rents and an Interest and Dividend Committee to set standards in interest rates and dividends.

In U.S.A. it has been said, "the absence of any statutory enforcement or of any serious effort to enlist the support of organised labour presumed that such power could be neutralised with the aid of little more than official attempts at education and exhortation. A tiger there was but *a paper tiger*, not too different really from no tiger at all".[18]

Rationale of Incomes Policy

The rationale of a national incomes policy is extremely simple, as Peter Donaldson pointed out. "Wages and dividends, which are incomes to their recipients, are also costs of production which firms will try to recoup in their selling prices. Price stability therefore means that incomes should not be allowed to rise faster than the consequent increase of costs can be absorbed by improvements in productivity".[19] "Incomes policy is sensible", argued Gottfried Haberler in a similar vein, "because in a smoothly competitive economy the price level would in fact remain approximately stable if money wage granted were equal to productivity growth. The reason is that as a historical fact (not a theoretical necessity) the share of national income going to labour is a fairly constant or very slowly moving magnitude".[20] As a matter of fact the genesis of the aforesaid argument may be traced in the following words of J. M. Keynes, which he wrote against wage increase in general: "A demand on the part of the trade unions for an increase in money rates of wages to compensate for every increase in the cost of living is futile and great to the disadvantage of the working class. It is true that the better organised sections might benefit at the expense of other consumers. But except as an effort

[18] Lloyd Ulman, "Cost-push and some Policy Alternatives", paper presented at the 84th annual meeting of the American Economic Association held in December, 1971

[19] *Guide to the British Economy*, Penguin Books, Harmondsworth, 1967, p. 199

[20] "Incomes Policy and Inflation. Some further Reflections", paper presented at the 84th annual meeting of the American Economic Association

at group selfishness, as a means of hustling someone else out of the queue, it is a mug's game to play".[21]

Sir Roy Harrod has made a forceful plea for incomes policy in these words:[22]

"Neither, (monetary or fiscal policy) nor both together, can correct the great evil of wage-price spiralling; for this we need a third instrument of policy and to date, the only one known to us is direct interference with wage bargains and price fixing (incomes policy). For dealing with the much larger and disproportionate wage and price increases of the recent period . . . what is needed is a direct confrontation. We are just not going to allow you to destroy so much that is valuable in our society by your excessive activism. The method is 'incomes policy'. If effective voluntary agreement cannot be obtained, then methods with legal sanctions must be adopted. The evil (of wage-price spiralling) is too great to be tolerated. That is surely the opinion of the democracy".

LIMITATIONS

But there are many limitations of this policy.

(1) Generally an incomes policy turns in practice into a mere wage control policy. But if only wages are held in check, leaving out salaries as well as earnings of professional people, profits, interest rates and so on, the very purpose is frustrated. True, the proportion of wages to the national income is fairly high and number of wage-earners in a community, quite large. But so far as demand for a limited supply of goods and services is concerned, the ability of other sections to exert influence on it cannot be altogether ignored.

(2) A wage policy, unaccompanied by salary, profit, interest, professional and other incomes policies is unjust, too. "Equity demands that a wage policy is coupled with an equally severe attitude towards profits and managerial

[21] *How to Pay for the War*, Macmillan and Co. Ltd., London, 1940

[22] *Economic Dynamics*, The Macmillan Press Ltd., London, 1973, pp. 92-3, 183

incomes. Very reasonably wage-earners will want to know the details of such an attitude before they commit themselves to restraint of their own incomes".[23]

(3) In addition to wage there are many fringe benefits provided to wage-earners such as free lunch, quarters, leave with pay, medical service which may differ from industry to industry, establishment to establishment. Controlling them is well-nigh impossible. At the same time if they are left undisturbed, it again militates against justice and equity.

(4) It is also argued by quite a few that inflation is only one of the symptoms of an unplanned society, an unchecked market mechanism. The central issue is that of inequality in the distribution of income and wealth. So the freezing of incomes at their present level is tantamount to an attempt at perpetuation of such inequality. It touches only a fringe of the problem. That is why it is not only unsound in principle but ineffective, too. "The policy of checking inflation by administrative controls on incomes", emphasised B.C. Roberts, "has the added disadvantage of requiring the establishment of a national income structure. Since incomes must bear the right relation to each other if they are to fulfil the basic economic function of allocating resources to where they are required, it would be necessary to work out the levels at which each wage, salary and dividend should be fixed".[24] "Only when a new social consensus emerges", wrote Peter Donaldson "concerning the old-fashioned but crucial question of equality, will incomes policies become viable and assume their proper role as a permanent measure of economic justice. And only then, incidentally, will inflation become controllable".[25] According to him, income policies as they have been practised by successive post-war governments have failed, because they have always been introduced in response to an *immediate*

[23] Peter Donaldson, *op. cit.*, p. 202

[24] *National Wage Policy in War and Peace*, George Allen and Unwin Ltd., London, 1958, p. 21

[25] *Economics of the Real World*, British Broadcasting Corporation and Penguin Books, 1973, pp. 201-2

and urgent crisis, have been solely directed towards the solution of the problem of inflation and have always been regarded by large sections of the population as *profoundly unfair*.

In the words of Andrew Shonfield, "Labour is really being asked to give its consent to *a particular type of social order*. But what a full-fledged incomes policy really implies is the equivalent of a new Social Contract: it presupposes a society in which the different interest groups have marked out a sufficient area of agreement about the present distribution of wealth to deny themselves the right to try in the future to obtain certain advantages at each other's expense. A practical approach to a more rational wages policy must be deliberately and extensively political. It must stand ready to include in the bargain a wide range of issues concerned with the ordinary man's notions of social justice".[26]

(5) Incomes policy has also been criticised because of the reactions that follow in its wake. Thus according to Arnold R. Weber, "the imposition of the freeze creates a set of conflicting forces which introduces considerable instability into the postfreeze problem. On the one hand, a hard freeze creates pressures for the development of an elaborate and restrictive postfreeze programme. On the other hand, by damming up many wage and price adjustments that must take place in the period subsequent to the freeze, conditions have been created which make it virtually impossible to maintain a tough approach".[27]

Summing up the weaknesses of incomes policy, Gottfried Haberler observed:

"A mechanical and uniform enforcement of the guidepost target, be it at zero or at 3-4 per cent corresponding to productivity growth would freeze the pattern of relative wages (wage structure) with progressively deleterious

[26] *Modern Capitalism The Changing Balance of Public and Private Power*, Oxford University Press (paperback), London, 1969, pp. 218-19

[27] "Wage-Price Freeze as an Instrument of Incomes Policy or the Blizzard of 1971", paper presented at the 84th annual meeting of the American Economic Association

consequences .... the incomes policy degenerates into more or less general and detailed wage and price fixing. The long-run disadvantages of this system are insidious and numerous. They include gradual distortion of the wage and price structure; creation of the nucleus of a new bureaucracy with a tremendous growth potential; wholesale diversion of entrepreneurial and managerial talent and energies from productive work to unproductive but time-consuming and tiring attempts to comply with or to evade and circumvent the controls; and growing uncertainty, reflected in lagging investment and the slump of the stock market".

PRICE CONTROL

Price control is a form of direct control imposed by a government on the price charged by sellers for the article sold. Of course, in its wider sense the term would denote not only the direct measures taken by Government to keep down prices but also all indirect measures which aim at preventing prices from rising or falling abnormally. The objective then would be the operation of a more or less stable price level.[28] According to Paul Einzig, the aim of price control is to prevent normal economic factors from producing their natural effect on the price level or to moderate its effect, that is, to achieve *inflation without tears* by suppressing its natural effect on prices.[29] Price control, therefore, has the effect of transforming a 'free-economy into a regulated one' in a particular sector. It replaces competition by artificial price fixation. But since price is an important part of the economy, control over it has a far-reaching impact on the economy as a whole.

Measures of price control generally take three forms. (*a*) *Price freeze*, that is, maintenance of relative prices at existing levels. It represents usually the first step in a situation when price rise is to be arrested quickly and there

[28] See D. Bright Singh, *Inflationary Price Trends since 1939*, Asia Publishing House, Bombay, 1961, p. 245

[29] *How Money is Managed*, Penguin Books, Harmondsworth, 1954, p. 283

is no time to make a scientific study of the factors which enter into price and fix it accordingly. (b) *Cost plus method* which takes into account the factors which enter into the cost of production and fixes the price on their basis, after allowing for a suitable margin of profit. Its aim is to safeguard the interests of producers. The interests of consumers naturally suffer. (c) *Ceiling method* according to which the maximum price chargeable for an article is laid down by the authorities. In fixing the same, consideration is given both to the cost of production and the state of demand for the article.

The first method is easy in theory but difficult to enforce. It also overlooks the dynamic nature of the economy. The second is a bit flexible and just to the producer but hard to administer. The problem is to sell the product at 'mark up' price. The third is most common. It is advantageous to the consumers. For they get their articles of necessity at prices not exceeding particular limits. But if they are fixed at a level which is not much higher than the costs of production, producers are hit. They may not bring out the articles in the market. On the other hand, if the prices fixed are much above the costs of production, the articles may be sold at less than fixed prices. This method is also inequitable to the extent it does not consider the relative efficiency of different firms producing the article.

In order that price control may be successful, it is often supplemented by a number of *indirect measures*, the aim of which is to lend economic support to the artificially fixed price through manipulation of the basic forces of supply and demand. (i) Thus rationing may be introduced to make available the controlled article in at least limited quantities. It reinforces price control by regulation of supply and distribution. (ii) A monetary policy may be so devised as to influence effective demand in relation to supply—cheap money to keep up the 'mark up' price or dear money to keep it below the maximum fixed. (iii) Fiscal policy may be adopted to mop up purchasing power in case of scarcity in supply of commodities and vice versa. (iv) Steps may also be taken to increase domestic supply by

restricting exports and liberalising imports or decrease supply by opposite process.

ARGUMENTS FOR PRICE CONTROL

(1) J.K. Galbraith rightly emphasised that price controls though 'still far from being universally so accepted, does have an important and perhaps an indispensable place in the pharmacopoeia of inflationary remedies'.[30] "This establishes the base and gains the time necessary to wheel into position the more durable machinery of systematic allocation and rationing and fiscal measures that do stop inflation".[31]

(2) Extending the argument further, J.E. Meade pointed out that 'between regimented planning and perfect free-play of prices a *via media* is possible. This makes full use of the money and price systems but controls that system in such a way that prevents inflation; that brings about better distribution of wealth and income; and that controls the emergence of monopolistic organization'.[32]

(3) In a developing economy some inflation is inevitable as a sequel to expenditure on plans and projects of various kinds. This can be kept in check by a direct form of control like price control. If the inflationary pressure is not checked in time, it gathers momentum, dislocates the economy, hampers investment and production and defeats the very purpose of planned development. Price control, apart from helping development, prevents a fall in the standards of living of the poorer sections.

(4) Price-controls, as R.G. Kulkarni pointed out[33] serve a two-fold purpose. In addition to the direct effect of check-

[30] *A Theory of Price Control*, Harvard University Press, Cambridge, Mass, 1952

[31] J. K. Galbraith, "Price Control", *The American Economic Review*, March, 1943

[32] *Planning and the Price Mechanism*, George Allen and Unwin Ltd., London, 1967

[33] *Deficit Financing and Economic Development with special reference to Indian Economic Development*, Asia Publishing House, Bombay, 1966

ing the rise in prices as a whole, they have also the indirect effect of restraining the demand of wage-earners for a rise in their wages in consequence of the rise in prices. Moreover, a stable price level will not distort the cost-structure of the plan schemes. Checking the prices of consumer goods will also help in the successful operation of investment schemes, as government may obtain the support of the masses in planning activities.

Case Against Price Control

(1) Price control is unwise, because it cannot solve the real problem which is inadequacy of supply. It only keeps suppressed excess demand for an article and thus blocks the road to development. As D. Bright Singh pointed out, 'the guaranteeing of a fixed price quite often leads to wasteful use of materials and resources. The more comprehensive and strict the system of controls, the more do cost-price relations become rigid. This rigidity is inimical to progress'.[34]

(2) Price control cannot be effective unless it is comprehensive. If some commodities are uncontrolled and the demand for them is high, there will be a shift of resources to their production from that of the controlled commodities. If the price of the raw material is controlled, but not that of the finished product, the producer of the latter will make profit at the expense of that of the former. Similarly control of necessities, without that of luxuries, may lead to the increased production of the latter, thus causing an imbalance in the economy.

(3) Again, for the success of price control it may be necessary to control supply and distribution. This is particularly true in case of the basic necessities of life. 'Unaccompanied by control of distribution and consumption through some form of rationing, price control may lead to cornering of stocks, penalising the honest producer, rewarding the black marketeer, enriching the middleman,

[34] *Op. cit.*, p. 292

conferring no benefit to the poor consumer and depriving the exchequer'.[35]

(4) An elaborate system of price control, distribution and rationing requires a large and efficient organisation for proper enforcement. Where trained people are scarce, as in India, their deployment in this field means loss to development departments of the Government. On the other hand, if control is incompletely enforced or haphazardly applied, its effects are more harmful than if there were no control. The success of price control, as J.K. Galbraith observed, depends to a considerable extent upon its administration, for bad imposition is worse than no imposition at all. This is because 'small black market reflecting the prices which sellers can get and some buyers are willing to pay rather than do without, will become a larger black market and eventually it becomes the only market'.[36]

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CHAPTER V

History of Inflation

There is an almost unbroken chronicle in every country, which has a history back to the earliest dawn of economic record, of a depreciation in the real value of the successive legal tenders which have represented money. J. M. Keynes

Ancient Times

It is said that there was some form of price regulation in Babylonia as early as the middle of the 3rd millennium B.C.[1] Prices of staple goods there seem to have been held fairly steady over long periods. The first record of inflationary trend relates to the Greek world of 6th century B.C. when prices rose to the extent of 50 per cent. Thereafter the rise was higher as a result of Alexander's conquests and consequent influx of precious metals from the East. By 300 to 320 B.C. the prices reached a level which was double that of the preceding century. In the Roman Empire they appear to have remained steady in early years. But they increased sharply after the 2nd century A.D. Indeed, the increase was so much that Emperor Diocletian had to issue an edict in 301 A.D. fixing maximum retail prices of a wide range of commodities. Not much data are, however, available concerning the medieval period from the later part of the Roman Empire to the 12th century.

Price Revolution

There is again evidence of an upward movement of prices

[1] See *Chambers's Encyclopaedia*, New Edition, George Newnes Limited, Vol. XI, 1950, p. 195

between the middle of the 12th century and the last quarter of the 14th. Thereafter, however, prices showed a downward trend. This was followed by what is known as 'a price revolution' which started from about 1540 and reached its peak in 1650. As far as evidence is available, during this period prices rose nearly 500 per cent in Spain and about 200 per cent in England and France. An important cause of this was the import of treasures from the New World.

In the 17th century in England and France there was price rise to the extent of 200 to 300 per cent. From the later part of the 17th century to the first half of the 18th prices showed a downward trend.

18th and 19th Centuries

This was followed by rapid rise in prices in both Europe and America during the French Revolution and Napoleonic War, covering the period 1792-1815. It is said that the long-period upward trend was something like 160 per cent in U.S.A. and 200 per cent in U.K. From 1815 to 1850 there was however a decline in prices to the extent of 50 to 60 per cent in these countries. From the middle of the 19th century to the eve of World War I there was again a general rise of prices. The rise was particularly high from 1896 onwards. It is said that between 1847-50 and 1873-74 wholesale prices advanced between 40 and 50 per cent in Germany and England. In U.S.A. they advanced by more than 150 per cent during the period 1843-64. There were two important factors behind this—rapid economic progress and large supplies of gold from Australia and California.

Early 20th Century

The movement of the cost of living from the end of the

18th century to the eve of World War I is shown in the following tables:

TABLE 15

CHANGES IN THE COST OF LIVING INDEX[2]

	U.K. (A) (1791=100)	*U.S.A.* (B) (1791=100)		*U.K.* (C) (1900=100)	*U.S.A.* (D) (1900=100)
1779	106	—	1863	—	114
1780	108	—	1865	—	111
1785	96	—	1870	136(1871)	130
1790	100	—	1875	140	126
1795	126	148	1880	129	119
1800	159	150	1885	107	103
1805	160	149	1890	103	103
1810	176	154	1895	91	85
1815	166	173	1900	100	100
1820	124	109	1905	98	105
1825	118	112	1910	109	125
1830	93	95	1914	117	122
1835	100	109			
1840	108	97			
1845	88	88			
1850	84	93			

Sources: (A) N. J. Siberling's Index of Wholesale Prices from *Business Cycles, 1773-1850*, (Harvard Economic Service, 1923), based on records preserved at the British Board of Trade.

(B) 1795 to 1820 from data compiled by A. H. Hansen published in the *Bulletin of the United States Department of Agriculture*, August, 1921 (used by U. S. Bureau of Labour Statistics).

(C) British Board of Trade, *Memoranda on British and Foreign Trade and Industry*.

(D) United States Bureau of Labor Statistics.

[2] See *Chambers's Encyclopaedia*, New Edition, 1950, Vol. XI, pp. 196-97

TABLE 16

RISE IN WHOLESALE PRICES[3]

Country	Period	Rise (per cent)
Canada	1897-1914	48
France	1896-1914	44
Great Britain	,,	33
Russia	,,	52
U.S.A.	,,	50

A. J. Brown differentiated between *four great periods of world-wide inflation.*[4] The first covered a long period of something like a century during which the treasure of the Spanish Indies served to raise prices throughout Western Europe, quintupling them in Spain, trebling them in England and more than doubling them in France. The other three great modern inflations have all been associated with general wars.

World War I

Indeed, it was during World War I that inflation took place in a big way. The principal cause was the heavy expenditure involved in the War. Thus it was estimated that the total expenditure of the United Kingdom Government reached the level of £10,000 million which was higher than the total for the whole of the preceding two centuries. In U.S.A. public expenditure of the Federal Government rose from $9 million in 1940 to $95,000 million in 1944. At the beginning of the century it was only $500 million. These were the only two countries that met the war expenditure by increased taxation of significant proportions. Other countries resorted mainly to the printing press and expanded their currencies heavily. Many of them incurred debts, too. The national debts of 40 leading countries in-

[3] See *Encyclopaedia of the Social Sciences*, The Macmillan Coy., New York, 1951, Volume Eleven

[4] See *The Great Inflation 1939-1951*, Oxford University Press, London, 1955

creased by about $30,000 million during the period 1913-1919.

The trends of prices in different countries during and after World War I are shown in the table below:[5]

TABLE 17

INDEX NUMBER OF WHOLESALE PRICES[5]

(Base 1913=100)

Monthly average	United Kingdom	France	Italy	Germany	U.S.A.	Canada	Japan	Sweden	India
1913	100	100	100	100	100	100	100	100	—
1914	100	102	96	106	98	100	95	116	100
1915	127	140	137	142	101	109	97	145	112
1916	160	189	201	153	127	134	117	185	128
1917	206	262	209	179	177	175	149	244	147
1918	227	340	409	217	194	205	196	339	180
1919	242	357	364	415	206	216	239	330	198
1920	295	510	624	1,486	226	250	260	347	204
1921	182	345	577	1,911	147	182	200	211	181
1922	159	327	562	34,182	149	165	196	162	180
1923	159	411	582	7,65,000	157	167	192	166	179

Source: *Monthly Bulletins of Statistics* of the League of Nations

Thus it may be noted that from the beginning of the War to the peak period in the respective countries prices rose by about 500 per cent in Italy, 400 per cent in France, 250 per cent in Sweden, 200 per cent in Great Britain, 160 per cent in Japan, 150 per cent in Canada, 125 per cent in U.S.A. and a little more than cent per cent in India. In Germany the price-level surpassed all proportions. Further, while a few countries showed deflationary trends after 1920, in most others inflationary pressures continued long after the War. In the U.K. and U.S.A., however, not merely the boom came to an end but there was also a tremendous crash in the price-level as indicated below.[6]

[5] J. M. Keynes, *A Tract on Monetary Reform*, Ch. I

[6] J. P. Day, *An Introduction to World Economic History since the Great War*, Macmillan and Co. Ltd., London, 1939, pp. 46-47

TABLE 18

INDEX NUMBER OF PRICES (Base 1913=100)

	Date Highest Point of the Rise	Index No.	Date Lowest Point of the Fall	Index No.
J.K.	May, 1920	247	January, 1922	138
J.S.A.	April, 1920	313	September, 1922	150

At the same time there developed the most critical inflationary situations in a few countries, leading to an unprecedented maladjustment in the world economy. As Keynes pointed out, there had been "the progressive and catastrophic inflation practised in Central and Eastern Europe, as distinguished from the limited and oscillatory inflation, experienced for example in Great Britain and the United States".[7] The German case was the worst. Its currency, the mark, collapsed in 1923, when its value dropped something like 60,000-fold compared with 1920 due to a 2000 times increase in the volume of note issue as may be noted from the following table.[8]

TABLE 19

INFLATION IN GERMANY

Period	Volume of note issue in milliard paper marks	Number of paper marks=1 gold mark
December, 1920	81	17
December, 1921	122	46
September, 1922	331	349
December, 1922	1,293	1,778
March, 1923	4,956	4,950
June, 1923	17,000	45,000
August, 1923	116,000	1,000,000

It has been said that "the depreciation of the mark of 1914-23 was the most colossal thing of its kind in history; it must bear responsibility for many of the political and economic difficulties of our generation. Hitler is the foster-

[7] *A Tract on Monetary Reform*, Ch. 2, para 1
[8] See Keynes, *op. cit.*, Ch. 2

child of the inflation".[9] Shortly after coming to power, he himself took recourse to deficit spending to cope with the unemployment problem, though his idea was that it would taper off as private investment would come up to maintain a high level of activity.

The story of the Russian rouble is equally distressing, as shown in the table below:[10]

TABLE 20

INFLATION IN RUSSIA

Date	Volume of note issue in milliard paper roubles	Number of paper roubles=1 gold rouble
January, 1919	61	103
January, 1921	1,169	2,600
January, 1922	17,539	172,000
July, 1922	320,497	4,102,000
October, 1922	815,486	6,964,000
January, 1923	213,870	15,790,000
June, 1923	8,050,000	97,690,000

Source: (1) Moscow Economic Institute
(2) GOSPLAN

Still it failed to produce any violent repercussion because of the totalitarian nature of Soviet controls and the Iron Curtain. Soon after the revolution of 1917 the new Government had been faced with a budget deficit of over 22 million roubles which was met to the extent of 75 per cent by the issue of paper currency. Inflation took place to such an extent that by 1921 the rouble fell to one-eighty-thousandth part of its 1913 value. In the State budget of that year it was all expenditure but no money revenue. The New Economic Policy of 1921 introduced a new currency—chervonetz, equivalent to ten gold roubles. But the Government also continued to issue paper roubles. By 1923 they again depreciated to such an extent that the peasants refused to sell their produce.

[9] Constantino Bresciani-Turroni, *The Economics of Inflation*, 1937, p. 5

[10] See Keynes, *op. cit.*, Ch. 2

The Great Depression

After the big inflation of World War I, leading ultimately to the collapse of a few currencies there came the Great Depression of 1929-32. The decline in prices was as follows[11]:—

TABLE 21

INDEX NUMBER OF WHOLESALE PRICES

(Base 1926=100)

	1929	1932		1929	193
Austria	106	91	Italy	74	50
Canada	96	67	Japan	93	67
France	90	62	Switzerland	98	66
Germany	102	72	U.K.	92	66
India	95	61	U.S.A.	95	65

Source: League of Nations, Economic Intelligence Service.

Both in the U.K. and U.S.A. wholesale prices in 1929 had stood at a level about 35 per cent higher than in 1913. But by 1932-33 they had fallen to nearly 10 per cent below the level of 1913.

Without going into the very many controversial theories that had been put forward to explain the Depression, a few developments of an empirical nature may be noted in this connection.

(1) The starting point was a tremendous crash on the New York Stock Exchange on October 29, 1929. For some time before speculative activities had been rampant in U.S.A. This might have been encouraged by the continued prevalence of prosperity, evident in a stable price-level and mass production of many articles of common use.

(2) During the 20 months ending September, 1929 the value of all shares listed on the Exchange went up by over $51,000 million. But in October the speculators found that the securities they had bought largely on borrowed money

[11] *Encyclopaedia of the Social Sciences*, The Macmillan Coy., New York, 1951, Volume Eleven

were no longer rising. A hurricane of bank liquidations hit the market. It is said that in less than a week the value of some 240 representative securities declined by more than $15,000 million.

(3) Payments for war debt, imports and other obligations had led to a great inflow of gold into U.S.A. This produced a crisis of credit in other countries. There was a flight of foreign funds from London. In two months August and September, 1931, over £200 million were withdrawn from the London money market. One country after another went off the gold standard. The United Kingdom led in September, 1931. By the end of 1932 some 35 countries followed suit. The U.S.A., France, Switzerland, Holland and Belgium were the only important countries left on gold. Banks also failed, one after another. The Boden Creditanstalt, the Viennese bank, the most important financing institution in Central and Eastern Europe became insolvent in May, 1931. The great Danat Bank of Germany closed its doors on July 13, 1931. Ultimately the United States also fell in. Commercial and bank credit gradually diminished. In early 1933 banking moratorium had been declared in many stalls. Finally on March 6 a national emergency was declared and all banking operations were suspended throughout the country. U.S.A. virtually went off the gold standard.

A World Economic Conference was organised in June, 1933 in London. An earlier conference held at Geneva in 1927 aimed at *consolidating prosperity*. The one in London, it is said, was called at the depth of the Depression to *rescue civilisation*.[12]

World War II

World War II witnessed a *big inflation*, as A. J. Brown termed it. According to him, "the inflation of 1939-51 in any sense was one of the greatest, if not the greatest in

[12] See J. P. Day, *op. cit.*, p. 111

the history of the world economy".[13] The rise of prices was as follows[14]:—

TABLE 22
INDEX NUMBER OF WHOLESALE PRICES

	December, 1942 index as per cent of January-June, 1939	August, 1945 index as per cent of December, 1942	Change in dollar value of currency —1948 value as per cent of 1937
Canada	131.8	107.7	100
Denmark	195.1	98.4	94
France	230.3	180.0	12
Germany, West	105.0	—	74
Japan	128.8	293.3	9.6
U.K.	166.1	106.0	82
U.S.A.	132.5	103.9	100
Argentina	186.5	112.6	83
Chile	192.8	114.8	90
India	158.0	154.4	81
Mexico	119.2	175.3	74

The price rise varied from country to country. There were five countries—Australia, New Zealand, South Africa, Norway and Venezuela—where the rise was of the order of 70 to 80 per cent between 1939 and 1948. In six countries, viz., Canada, Switzerland, Costa Rica, the United States, the United Kingdom and Eire, the price rise varied between 110 and 130 per cent. There were countries like Argentina, Mexico, Peru and the Netherlands, in which the rise was about 150 to 200 per cent. There was still another group of countries which showed price increase between 200 and 400 per cent—Chile, Brazil, Bolivia, Belgium, Czechoslovakia, Egypt, India, Iran, Spain and Turkey.

It may be noted from the foregoing table that there were *two phases of the inflation*—the first, from 1939 to December, 1942 which was a period of mobilisation, leading to higher price rise; and the second, from late 1942 or

[13] *Op. cit.*, preface, p. v
[14] *Op. cit.*, pp. 202-3, 308

early 1943 to the end of the War, a period of controls on price, distribution etc. which resulted in somewhat restraining the price rise.

Public expenditure was the most important cause of inflation in both the phases. The United Kingdom, the United States, Canada, Japan, Germany—all had budget deficits amounting to 30 per cent or more of their national incomes. In India net public and foreign expenditure rose from 3.5 per cent in 1939-40 to 15 per cent of national income in 1942-43. In some Latin American countries, also though there was not much of military expenditure, substantial deficit in government budget was the main factor.

The increase in the quantity of money during the period of World War II was as follows[15]:—

TABLE 23

INDEX OF QUANTITY OF MONEY

(Currency & Current Deposits)

	Quantity in December, 1942 as per cent of December, 1938	Quantity in August, 1945 as per cent of December, 1942		Quantity in December, 1942 as per cent of December, 1938	Quantity in August, 1945 as per cent of December, 1942
Canada	250	130	U.S.A.	173	160
Denmark	221	166	Argentina	167	162
France	327	138	Chile	194	157
Japan	236	371	India	303	196
U.K.	190	136	Mexico	299	224

In the United Kingdom rent control was introduced at the outbreak of the War. Price control was imposed in January, 1940 with the object of limiting profits to pre-war level. Specific price fixing was done from July, 1941. In all the important countries that introduced price control goods became cheaper in relation to hourly earnings—to the extent of 25 per cent in U.K., 15 per cent in U.S.A.,

[15] A. J. Brown, *op. cit.*, pp. 306-7

12 per cent in Canada, 4 per cent in West Germany and so on.

RECENT INFLATION

In the post-war period there had been almost persistent inflation even in advanced countries of the world. And the rate of inflation has gone up considerably in the last two or three years. This will be evident from the following tables:—

TABLE 24

PRICE INCREASE IN 1960-73 (Per Cent)

	Annual Average			Increase over preceding year				
	1960-65	1965-70	1960-70	1969	1970	1971	1972	1973
Canada	1.9	4.2	3.0	4.5	4.8	3.1	4.8	7.6
France	4.1	4.4	4.3	6.6	5.5	5.4	5.7	7.2
Germany (West)	3.6	3.4	3.5	3.6	7.1	8.0	6.0	6.0
Italy	5.5	3.5	4.5	4.3	6.6	6.6	5.8	10.5
Japan	4.9	4.7	4.8	4.1	6.7	4.5	5.1	12.1
U.K.	3.5	5.0	4.2	5.4	7.3	8.9	7.7	7.5
U.S.A.	1.4	4.0	2.7	4.8	5.4	4.5	3.4	5.6

Source: International Monetary Fund, *Annual Report*, 1974.

TABLE 25

CONSUMER PRICE INDEX NUMBERS, 1972-74

(Base 1970=100)

					Increase (per cent) in—	
	Dec., '72	June, '73	Dec., '73	June, '74	Dec., '73 over Dec., '72	June, '74 over June, '73
Canada	110.5	115.4	120.6	128.5	9.2	11.3
France	115.5	119.2	125.3	135.8	8.5	13.9
Germany (West)	114.0	119.0	122.9	127.2	7.8	6.9
Italy	115.0	122.9	129.4	143.3	12.5	16.6
Japan	113.4	123.0	135.1	152.0	19.1	23.6
U.K.	121.4	127.6	134.2	148.7	10.5	16.6
U.S.A.	109.5	113.8	119.1	126.5	8.8	11.2

Source: United Nations, *Monthly Bulletin of Statistics*, September, 1974.

The recent price rise can be divided into *two phases*—the rise during the sixties which can be regarded as 'creeping' inflation and that in early seventies as 'near-galloping' inflation. This will help the identification of contributory factors that have led to such a situation. To put it briefly, the ground has already been prepared by the first for the second. How much more serious the second is than the first will be evident from the following statement of an eminent legislator in U.S.A.[16]—

> The post-war average—1946-72—price increase in the GNP deflator was about 3 per cent; so far this year it has risen at an annual rate of 6.6 per cent.
>
> The post-war average increase for the consumer price index was about 3 per cent; so far this year consumer prices have risen at an annual rate of about 10 per cent.
>
> The post-war average for the wholesale prices has been about 3 per cent; so far this year wholesale prices have increased at a 20 per cent annual rate.

EXPLANATIONS

Various explanations have been put forward for the current inflation. The monetarists as usual have emphasised the growth of money supply as the sole or prime cause. Some others have traced the cause to the general devaluation of currencies *vis-a-vis* gold that have occurred in the last few years. For still others the villain is the 'wage explosion' that has occurred so widely in recent years attributed to various structural changes in the labour market. But as Paul Samuelson has rightly pointed out,[17] the list of such *monistic* explanations may make for dramatic reading, but the claims of one factor to be the sole cause invalidate such claims for the rest. There is partial truth in each of the explanations cited above, so

[16] Opening statement on September 2, 1973 made by Hubert H. Humphrey, Chairman of the Sub-Committee on Consumer Economies of the Joint Economic Committee of U.S. Congress.

[17] See the memorandum submitted by him before the West German Council of Economic Advisers, Morgan Guaranty Survey, New York, June, 1974

that all of them taken together provide something like the whole truth. This is indicated by the following data.

The principal economic indicators of the advanced countries stood as follows:—

TABLE 26

U.K.

For all indices, base 1963=100	1965	1967	1969	1971
Consumer price index number ..	108	115	127	148
Index of money supply (end of period)	113	131	144	—
Wages per week (males) in £ ..	20.2	21.9	25.5	31.4
Unemployment (per cent of labour force)	4.5	3.8	3.5	5.9
Index of total product at constant prices	109	113	120	120
Index of labour productivity in industrial sector	109	114	125	134

U.S.A.

For all indices, base 1963=100	1965	1967	1969	1971
Consumer price index number ..	103	109	120	132
Index of money supply (end of period)	110	122	134	—
Wages per week in $	20.2	21.9	25.5	31.4
Unemployment (per cent of labour force)	1.5	2.3	2.5	3.4
Index of total product at constant prices	109	113	120	124
Index of labour productivity (manufacturing)	111	111	119	125

France

For all indices, base 1963=100	1965	1967	1969	1971
Consumer price index number ..	106	112	124	138
Index of money supply (end of period)	118	133	146	—
Wages per hour (francs) ..	3.0	3.4	4.2	5.2
Unemployment (number-thousands)	142.1	196.0	223.0	338.2
Index of total national product ..	112	124	139	—
Index of labour productivity (industrial sector)	112	127	148	168

Germany, West

For all indices, base 1963=100	1965	1967	1969	1971
Consumer price index	106	111	116	127
Index of money supply (end of period)	117	131	150	—
Wages per week (marks) ..	182.0	194.0	232.0	287.0
Unemployment (per cent of labour force)	0.6	2.1	0.8	0.8
Index of total national product ..	113	116	134	146
Index of labour productivity (industrial sector)	112	119	143	150

Japan

For all indices, base 1963=100	1965	1967	1969	1971
Consumer price index	111	121	134	153
Index of money supply (out of period)	134	175	237	—
Wages per month (thousand yen) ..	36.1	45.6	61.8	81.0
Unemployment (per cent of labour force)	0.8	1.3	1.1	1.2
Index of total national product ..	119	149	191	224
Index of labour productivity (industrial sector)	116	153	197	227

Sources: (1) United Nations, *Statistical Year Book*, 1972, New York, 1973.
(2) International Labour Office, *Year Book of Labour Statistics*, 1973.
(3) International Monetary Fund, *International Financial Statistics*, Vol. XXV, No. 1, January, 1972.

Thus it may be noted that not only the consumer prices increased but along with them money supply, wages and unemployment also went up. The rate of increase in wages surpassed that of other factors. It is also remarkable that total product and productivity rose almost in the same proportion.

It seems that some of the traditional concepts have been falsified by the recent inflation, or as some one has put it, *the rules of the game have changed altogether*. Previously it used to be believed that if prices rose, unemployment would decline. But the opposite is true in respect of the past two decades. Again, if the productivity of labour went up, prices would remain stable even if wages in-

creased. But this too did not apply to the case of the recent inflation.

The above trends, therefore, point to *some inherent weakness of the present socio-economic system,* to which attention has been rightly drawn by some experts. "The approach is societal", pointed out Irving S. Friedman, "the causes of persistent inflation are just as much social and political as economic, so are its effects. Solutions, therefore, have to deal with these social causes and aim to eliminate the unwanted social effects".[18] According to Paul Samuelson, the present inflation is rooted deep in the nature of the mixed economy. And it is the mixed economy —which is not *laissez-faire* capitalism any more than it is centrally controlled state socialism—that characterises most of the world today; North America, Western Europe and Australasia, Japan and much of the developing world outside of Eastern Europe and mainland Asia.[19]

"Inflation has occurred largely", wrote the *Time* on April 8, 1974, "as a devastating by-product of two trends —the rise of world affluence and commitment of major governments to full employment... in order to keep employment up, most major countries have pushed for ever greater economic expansion. That policy has resulted in a burst of global affluence, prolonged high employment and rising prices... But the affluence has had serious inflationary consequences. As prosperity increased, so did people's expectations for bigger houses, more travel, better education... an important element of business costs—wage rates go ever upwards... another consequence of affluence, the increasing cost of essential services. Another major effect of affluence is the growing pressure of world demand on the resource base of raw materials."

The more recent part of the inflation can be ascribed to *a few important contributory factors* such as crop failures in many countries, shortage in world supply of many commodities and the oil embargo. As the International Monetary Fund has pointed out, 'After more than

[18] *Inflation A World-Wide Disaster*, Hamish Hamilton, London, 1973, p. 7

[19] *Op. cit.*

a decade of generally rising rate of price increase inflation accelerated rapidly in the past two years. The acceleration was compounded by the upsurge of most primary commodities in the wake of the widespread economic boom and by the recent sharp escalation in the price of oil'.[20]

The production of important food crops and raw materials either declined in the world as a whole or increased at a slower rate than in the preceding period, as shown below:

TABLE 27
PRODUCTION
(million tonnes)

	Africa	North and Central America	South America	Asia	Europe	U.S.S.R.	World
			RICE				
1961-65 (average)	5.54	4.05	8.06	2.33	1.52	3.90	253.1
1971	7.56	5.35	9.24	2.81	1.81	14.3	309.1
1972	7.29	5.32	10.12	2.66	1.58	16.5	291.8
1973	7.51	5.70	11.06	2.93	1.93	17.7	321.1
			WHEAT				
1961-65 (average)	6.33	49.99	10.05	55.9	59.35	64.2	254.3
1971	8.91	60.50	9.83	85.7	81.34	98.8	353.9
1972	9.99	58.27	10.30	94.0	82.14	86.0	347.6
1973	8.61	65.71	9.84	89.3	81.94	109.7	377.1

Source: Food and Agriculture Organization of the United Nations, *Monthly Bulletin of Agricultural Economics and Statistics*, February, 1974.

The oil situation featured (*a*) limitations on oil production imposed during October and November, 1973 by members of the Organisation of Arab Petroleum Exporting Countries (OAPEC); (*b*) a tripling of average export prices for oil, reflecting sharp increases in posted prices of crude oil in October and particularly in December by members of the Organisation of Petroleum Exporting Countries (OPEC); (*c*) the easing of cutbacks in oil production that were announced by OAPEC in December, 1973 and the further lifting of embargo restrictions against the sale of oil to certain countries in March-April, 1974, and

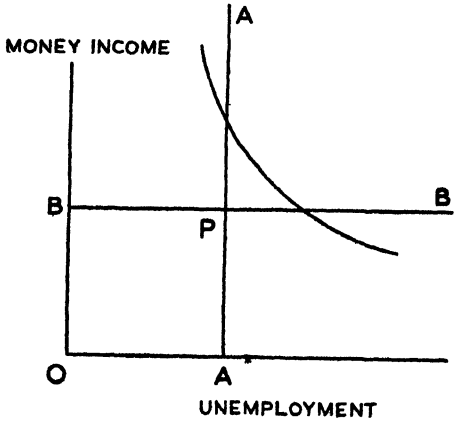
[20] *Annual Report*, 1974, p. 1

(*d*) a host of other measures to conserve oil and otherwise control the demand for it by all countries, dependent on foreign sources of oil.[21]

PHILLIPS CURVE

The current inflation in a sense points to the futility of what is known as the Phillips curve. This curve was prepared by the New Zealand economist A. W. Phillips from an empirical study of data covering a century of the British economy.[22] He bypassed the controversy on the causes of inflation and instead concentrated on the *dynamics* of the market for labour. The Keynesian concepts on anti-inflationary policies laid stress on the central notion that the rate of wage increase was in part at least a function of the rate of unemployment such that wages and prices tended to rise faster, the lower the rate of unemployment. Phillips took his clue from this and developed a functional relationship between the rate of wage increase and the percentage of unemployment, based on British economic history.

An idealised version of the curve is shown below[23]—



[21] See International Monetary Fund, *op. cit.*, pp. 3-4

[22] "The Relation Between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957", *Economica*, New Series, XXV, November, 1958

[23] *Ibid.*; also "Stabilization in a Closed Economy", *The Economic Journal*, June, 1954

If the vertical line A is a maximum politically acceptable rate of unemployment (possibly 4 per cent) and the horizontal line B, the maximum economically possible rate of non-inflationary wage increase, the Phillips curve passes outside their intersection at P. This illustrates the dilemma of the policy-maker in a basically free economy under a democratic system. In simple language the curve implies that percentage changes in money wage rates can be explained largely by the level of unemployment and the rate of change of unemployment. In other words, price stability can be purchased only at the cost of unemployment, or higher employment can be provided only if some allowance is given for inflation. The poor politician is left with a choice of two evils: (1) *checking inflation but leaving unemployment to worsen itself* or (2) *reducing unemployment but allowing inflation to aggravate.*

The *objectives* of monetary and fiscal policies have expanded over the years. In the early thirties of this century the principal objective was price stability. In the late thirties and early forties the importance shifted to full employment for which price stability might even be sacrificed. In the late forties a new objective was added—debt management. The fifties introduced another vital item—rapid economic growth. In recent times with balance of payments difficulties still another objective has come to the forefront—foreign economic policy. Thus over the years many conflicting objectives have acquired importance such as price stability, full employment, rapid growth, favourable balance of payments. This means that policy-makers must sacrifice or 'trade-off' a lesser objective against a bigger one. The Phillips curve expresses the terms, on which high-level employment and price stability can be traded off against each other. Attempts have even been made in some studies to extend the use of the Phillips curve to the case of economic growth as by Lawrence R. Klein for the Commission on Money and Credit in U.S.A. and by Tibor and Anne Scitovsky. These have not however borne good results.

Uses of the Curve

The utility of the curve lies in the fact that with a given rate of productivity increase it is possible to determine the level of unemployment necessary to achieve price stability —a level of 2½ per cent for the United Kingdom and 7 to 8 per cent for the United States.[24]

The curve substitutes a kind of empirical relationship between the rate of inflation and the percentage of unemployment for the vague literary and notional ideas about how much reduction in employment would be necessary to halt inflation. It provides the authorities with a range of second-best choices. In the end it depicts the state of an economy at any particular time with reference to the rate of unemployment and that of change in price-level.

Limitations

There are however some limitations of the Phillips curve in respect of economic policy. As Harry G. Johnson pointed out, "on the one hand, the curve represents only a statistical description of the mechanics of adjustment in the labour market, resting in a simple model of economic dynamics with little general and well-tested monetary and value theory behind it. On the other hand, it describes the behaviour of the labour market in a combination of periods of economic fluctuation and varying rates of inflation, conditions which presumably influence the behaviour of the labour market itself, so that it may reasonably be doubted whether the curve would continue to hold its shape if an attempt were made by economic policy to pin the economy down to a point on it."[25]

Edmund S. Phelps and Milton Friedman have argued[26] that the demand for and supply of, labour is a function of

[24] See A. W. Phillips, "Employment, Inflation and Growth", *Economica*, Vol. 29, No. 113, February, 1962

[25] *Essays in Monetary Economics*, George Allen & Unwin Ltd., London, 1967, pp. 132-33

[26] "Money-Wage Dynamics and Labour Market Equilibrium", *Journal of Political Economy*, July-August, 1968; "The Role of Monetary Policy", *The American Economic Review*, March, 1968

real wage in the economy. The rate of unemployment corresponding to a real wage at which the labour market is cleared is 'the natural rate'. Reduction in unemployment below this rate by increasing aggregate demand would push up prices and thus result in lowering the real wage. This would induce employers to expand employment and output. Workers would in turn demand higher wages. Ultimately, therefore, a rate of unemployment below the natural rate can be maintained only by accepting an ever increasing rise in prices. In other words, the inverse relationship between unemployment and inflation in reality turns out to be a purely transitional one, instead of a stable, long-period trend as Phillips wanted to depict. J. Tobin has pointed out[27] that there is 'a natural rate' of unemployment which is compatible with any rate of inflation, since it results from the structural characteristics of the labour and commodity markets.

An economist of the ILO[28] has drawn attention to the deterioration of the Phillips curve in recent years. Thus the rate of inflation required to hold the unemployment rate at 4 per cent in the late 1960's was 1.5 points higher than that required to produce the same result in the mid-1950's. According to this author, the curve is based on averages and presupposes the existence of a single labour market but careful empirical evidence suggests the co-existence of several markets with different lines of communication. Moreover, the over-all level of unemployment as recorded and reflected in graphs based on Phillips curves does not cover the same proportions now as it did a few years ago, since the proportion of young persons under 20 years of age and women in the working population is now substantially greater.

In recent years both inflation and unemployment have

[27] "Inflation and Unemployment", *The American Economic Review*, March, 1972

[28] See Jean Mouly, "Prices, Wages, Unemployment", *International Labour Review*, October, 1973

increased simultaneously to the great discomfiture of the Phillips curve. This is evident from below[29]—

TABLE 28

INDICES OF PRICES (P) AND UNEMPLOYMENT (U) IN SELECTED COUNTRIES

(Base 1963=100)

Year	Canada		U.S.A.		U.K.		France	
	P.	U.	P.	U.	P.	U.	P.	U.
1955	87.5	4.4	87.6	4.4	79.4	1.1	78.2	160
1960	95.9	7.0	96.8	5.6	90.5	1.6	103.6	131
1965	104.3	3.9	103.1	4.5	108.2	1.5	106.0	142
1966	108.2	3.6	106.0	3.8	112.5	1.5	108.9	147
1967	112.0	4.1	109.1	3.8	115.3	2.3	111.8	196
1968	116.6	4.8	113.6	3.6	120.7	2.5	116.9	253
1969	121.8	4.7	119.7	3.5	127.2	2.5	124.4	223
1970	125.9	5.9	126.8	4.9	135.3	2.6	130.9	262
1971	129.5	6.4	132.3	5.9	148.1	3.4	138.1	338

(U refers to per cent of the economically active population, except in thousand numbers for France)

Sources: ILO, (1) *Year Books of Labour Statistics.*
and (2) *Bulletins of Labour Statistics.*

This has been shown pointedly in another study, as follows—

TABLE 29

CHANGE IN UNEMPLOYMENT AND WAGE RATES IN THE BRITISH ECONOMY[30]

Year	Unemployment rate	Change in wage rates predicted by Phillips' quotation	Actual change in wage rate
1958	2.1	2.5	3.6
1959	2.2	2.3	1.1
1960	1.6	4.1	4.1
1961	1.5	4.6	3.4
1962	2.0	2.8	4.4
1963	2.5	1.8	4.3
1964	1.6	4.1	3.8
1965	1.4	5.2	4.6
1966	1.5	4.6	3.3
1967	2.4	1.9	5.9
1968	2.4	1.9	7.1
1969	2.4	1.9	5.7

[29] See J. Mouly, *op. cit.*, pp. 330-31

[30] See Allan Charles Lynn Day, *The Economics of Money*, Oxford University Press, 1970

Sources: (1) *Employment and Productivity Gazettes*, HMSO, U.K.
(2) *Annual Abstracts of Statistics*, HMSO, U.K.

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Inflation in Developing Countries

The heart of the country is being eaten away by inflation.
John Gunther

After World War II there appeared inflationary trends in most of the developing countries in the wake of their big efforts at economic break-through. The extent of inflation, however, varied from country to country. In general it assumed serious dimensions in some of the countries in Latin America and Indonesia. In recent years, however, it has become acute in almost all the developing countries.

An idea of the post-war inflation in the developing countries can be had from the following tables:—

TABLE 30

AVERAGE ANNUAL RATE OF INCREASE IN PRICES (PER CENT)

	1950-60 (1)	1961-69 (2)	1970-73 (3)
Argentina	27.0	22.0	80.7
Brazil	18.3	47.0	8.9
Chile	36.5	26.0	288.8
Colombia	7.8	9.6	17.6
India	0.4	6.4	9.4
Indonesia	—	15.6	15.2
Israel	13.5	5.5	17.1
Mexico	7.8	2.4	9.3
Pakistan	2.1	3.3	13.3
Philippines	0.5	4.0	17.6
South Korea	28.5	—	10.3
Sri Lanka	—0.05	2.6	6.5
Taiwan	7.8	—	—

Sources: (1) Col. 1, calculated mainly from National Accounts Statistics (see Angus Maddison, *Economic Policy and Progress in Developing Countries*, George Allen and Unwin Ltd, London, 1970, p. 93)

(2) For col. 2, United Nations, *World Economic Survey*, 1971, pp. 93-95

(3) Col. 3, calculated from consumer price index numbers, quoted in United Nations, *Monthly Bulletin of Statistics*, August, 1974

TABLE 31

CONSUMER PRICE INDEX NUMBERS (ALL ITEMS)
(Base 1970=100)

					Increase (Per Cent)		
	1972	1973	June, 1973	June, 1974	1970-1972	1972 to June, 1974	June, 1973 to June, 1974
Argentina (Buenos Aires)	213.5	342.2	345.6	414.3	113.5	94.0	19.6
Brazil (Sao Paulo)	100.0 (Base)	115.5	114.8	143.8	—	43.8	25.2
Chile (Santiago)	213.5	966.7	648.0	5213.8	113.5	—	—
India	109.8	128.3	126.0	163.6	9.8	49.0	29.8
Indonesia (Djakarta)	111.1	145.6	142.4	204.4	11.1	84.0	43.5
Israel	126.4	151.6	149.9	206.8	26.4	63.6	37.3
Korea, South	126.8	130.8	129.3	159.7	26.8	26.0	23.5
Mexico	109.8	127.9	124.3	165.2*	9.8	50.4	32.9
Pakistan	114.0	139.8	134.3	—	14.0	—	—
Peru	114.5	125.4	125.7	144.8*	14.5	27.0	15.2
Philippines	142.7	152.8	145.4	200.3†	42.7	40.3	37.8
Sri Lanka (Colombo)	109.2	119.7	119.2	132.9	9.2	21.7	11.5
Thailand	106.1	118.5	118.4	148.9	6.1	40.3	25.8

(* May, 1974) († April, 1974)

Source: United Nations. *Monthly Bulletin of Statistics*, Vol. XXVIII, No. 10, October, 1974

Thus during the period 1972 to June, 1974 the price-level rose by over 40 per cent in nine out of the thirteen countries listed above. Correspondingly during 1970-72 it was higher by 40 per cent in barely two or three of them.

While a detailed analysis will be made in the following section of the inflation in some select countries, a few

factors may be noted below which were generally behind the widespread price rise in the developing countries, particularly those in Latin America.

CAUSES OF INFLATION

(1) There was an increase in money supply in almost all the countries where prices rose significantly. This is shown below:—

TABLE 32

INCREASE IN MONEY SUPPLY

	Percentage (annual average)			
	1953-55	1955-60	1961-65	1966-73
	(1)	(2)	(3)	(4)
Argentina	23.2	41.0	22.6	130.4
Brazil	23.7	48.1	62.9	86.4
Chile	—	52.5	33.8	331.2*
Mexico	11.3	10.1	10.6	20.9

(* relates to 1966-72)

Sources: (1) For cols. 1 to 3, Claudio Veliz (ed.), *Latin America and the Caribbean*, Anthony Blend, London, 1968, p. 509

(2) Col. 4, calculated from data furnished in United Nations, *Monthly Bulletin of Statistics*, August, 1974

TABLE 33

INCREASE IN MONEY SUPPLY

	Percentage (annual average)	
	1960-68	1969-73
	(1)	(2)
India	9.3	18.6
Indonesia	162.5	53.8*
Pakistan	11.5	18.9
Philippines	14.6	22.6
South Korea	39.1	58.6

(* relates to 1969-72)

Sources: (1) For col. (1), International Monetary Fund, *International Financial Statistics*, November, 1971

(2) Col. (2), calculated from data furnished in United Nations, *Monthly Bulletin of Statistics*, August, 1974

It has already been revealed in Tables 2 and 3 (on pp. 21-23 in Ch. II ante) how intimate was the connection between money supply and cost of living or consumer prices. There was almost a close race between the two, sometimes money supply increasing faster than price and sometimes the opposite. This is also corroborated by the following table.

TABLE 34

INDEX NUMBERS OF MONEY SUPPLY (M.S.) AND CONSUMER PRICES (C.P.)

(Base 1970 quarterly average=100)

		1969	1971	1972	1973
Argentina ..	M.S.	88	125	171	319
	C.P.	88.0	134.7	213.5	342.2
Bolivia ..	M.S.	92	112	137	185
	C.P.	96.3	103.7	110.4	145.2
Brazil ..	M.S.	78	130	176	244
	C.P.	84.0	121.1	100.0	115.5
Chile ..	M.S.	64	202	415	—
	C.P.	75.5	120.1	213.5	996.7
Guatemala ..	M.S.	94	102	117	145
	C.P.	97.7	99.5	100.0	114.1
India ..	M.S.	90	113	127	130
	C.P.	95.1	103.3	109.8	128.3
Israel ..	M.S.	94	124	161	—
	C.P.	94.3	120.0	126.4	151.6
Pakistan ..	M.S.	91	117	141	162
	C.P.	94.9	104.7	114.0	139.8
Peru ..	M.S.	70	124	152	193
	C.P.	95.2	106.8	114.5	125.4
Philippines ..	M.S.	88	116	136	174
	C.P.	94.8	123.3	142.7	152.8
Sri Lanka ..	M.S.	96	107	114	130
	C.P.	94.4	102.7	109.2	119.7
Thailand ..	M.S.	96	110	124	152
	C.P.	99.2	102.0	106.1	118.5
Venezuela ..	M.S.	93	111	134	157
	C.P.	97.5	103.3	106.4	110.6

Sources: (1) International Monetary Fund, *International Financial Statistics*
(2) United Nations, *Monthly Bulletins of Statistics*

Further, it may be noted from Tables 35 and 36 below that the rise in consumer prices was very high in those countries where large increase took place in money supply against a low rate of growth of product per capital. On the other hand, the rise in prices was nominal in cases where both money supply and per capita product registered moderate increases.

TABLE 35

AVERAGE ANNUAL INCREASE (Per Cent)

	Money Supply (1963-70)	G.N.P. per capita	Food Production per capita (1961-70)	Consumer Prices (1963-70)
India	13.1	1.3	—0.2	9.0
Israel	30.0	4.7	2.7	5.8
Pakistan	2.9	3.7	—0.3	5.7
Philippines	11.9	2.5	—0.4	8.0
Sri Lanka	4.3	1.8	1.4	3.7
Thailand	9.5	4.8	2.2	2.3

Sources: (1) International Monetary Fund, *International Financial Statistics*
(2) World Bank *Atlas*

The above table shows that prices in India and Philippines went up by 9 and 8 per cent respectively in principal consequence of about 13 and 12 per cent rise in money supply against only about 1.3 and 2.5 per cent growth in per capita product. But the rise in prices was only about 2.3 and 3.7 per cent in Thailand and Sri Lanka respectively, due mainly to 9.5 and 4.3 per cent increase in money supply being attended with 4.8 and 1.8 per cent improvement in product per capita.

TABLE 36

INFLATION IN LATIN AMERICAN COUNTRIES[1]
(1950-69)

Mean figures
(Per cent per year)

	Rate of Inflation	Increase in Money Supply	Growth of Real Income
Uruguay	43.0	40.1	0.7
Bolivia	41.3	41.6	3.0
Brazil	35.1	38.2	3.9
Chile	28.2	35.2	4.6
Argentina	26.4	24.6	2.4
Paraguay	12.5	15.4	5.5
Colombia	9.2	16.5	5.4
Peru	8.5	13.4	5.7
Mexico	5.3	11.3	6.9
Nicaragua	3.4	8.6	3.7
Ecuadar	3.0	8.8	4.7
Honduras	2.1	8.0	4.0
Costa Rica	1.9	9.0	5.7
Guatemala	1.1	5.9	3.9
Venezuela	1.1	7.9	6.8
El Salvador	0.3	3.5	4.6

(Inflation is measured by the consumer price index; money supply is currency plus demand deposits; real income is nominal GNP deflated by the consumer price index)

It is evident from the above that the rate of inflation was generally high in cases where money supply increased much against very moderate or low growth of real income. But it was quite low in most of those cases where the rise in money supply was only moderate and the growth of income, appreciable.

(2) There was a large inflow of funds from abroad in the form of grants, loans, capital investment and other remittances. Thus the per capita receipts stood as follows during 1960-65—

[1] See Robert C. Vogel, "The Dynamics of Inflation in Latin America, 1950-69", *The American Economic Review*, March, 1974, p. 103

TABLE 37*

INFLOW OF FUNDS

($ per annum)

	Economic Aid	Private capital and remittances		Economic Aid	Private capital and remittances
Argentina	1.6	8.1	Mexico	1.3	6.9
Brazil	2.4	2.0	Pakistan	3.6	0.6
Chile	13.2	9.7	Philippines	1.7	3.1
Colombia	3.7	4.7	South Korea	9.7	2.7
India	2.0	0.2	Taiwan	6.3	2.3
Israel	46.2	166.2	Thailand	1.4	2.7

(* See Angus Maddison, *op. cit.*, pp. 240, 219)

There was also considerable augmentation of expenditure during the same period on account of military grants and loans from the United States, which, however, included disposal of surplus military stocks. This is shown below—

TABLE 38

MILITARY EXPENDITURE (1960-65)

($ million)

Argentina	..	54	Mexico	..	10
Brazil	..	143	Philippines	..	134
Chile	..	76	South Korea	..	1,187
Colombia	..	50	Taiwan	..	815
Israel	..	19	Thailand	..	280

Source: U.S. Overseas Loans and Grants, AID Report for the House of Representatives for Foreign Affairs Committee, March, 1967

The inflow of funds for developmental purposes in recent years was as follows:—

TABLE 39

NET OFFICIAL RECEIPTS OF FOREIGN AID ($)
(Annual average per capita)

	1966-68	1968-70
Argentina ..	—2.0	—0.11
Brazil ..	2.4	2.42
Chile ..	16.3	8.78
Colombia ..	6.6	4.26
India ..	2.3	1.68
Israel ..	30.7	22.83
Mexico ..	2.6	—
Pakistan ..	4.0	3.62
Philippines ..	2.8	3.90
South Korea ..	8.5	11.67
Taiwan ..	5.4	5.83
Thailand ..	1.9	2.91

Source: OECD, *development assistance, 1969 Review,* December, 1969; and *1971 Review,* December, 1971

(3) Corresponding to increase in money supply the rise in domestic product, as also food production, was much less. Food production per capita even suffered decline on the whole in some cases. This will be evident from the following tables—

TABLE 40

GROWTH OF GROSS DOMESTIC PRODUCT AND FOOD PRODUCTION PER CAPITA
(Average annual rate per cent)

	Gross Domestic Product 1950-67 (1)	Food Production 1961-70 (2)
Argentina	1.1	1.0
Brazil	2.1	1.4
Chile	1.6	—0.6
Colombia	1.3	0.3
India	1.6	—0.2
Israel	5.0	2.7
Mexico	2.8	1.3
Pakistan	1.5	—0.3
Philippines	1.8	—0.4
Sri Lanka	0.8	1.4
Thailand	3.2	2.2

Sources (1) For col. 1, Angus Maddison, *op. cit.,* p. 32

to be explored. It is one of the 'few frontiers still left on earth', as one scholar put it. Thus Brazil may have modern cities like Rio de Janeiro and Sao Paulo which date back to the 1500's but it is otherwise a land of wild forests and 'unsocial soils'. It is roughly estimated that only about 4 per cent of the territory is used in agriculture and about 20 per cent in pasture.

On the other hand, the majority of the population, over three-fourths, cluster near the Atlantic coast where the density exceeds 90 per sq km. A large number live in the north-eastern region which is an almost perennial calamity area. People flee their homes whenever there is 'secca' or drought. Besides, the country is predominantly agricultural. Over 60 per cent of the gainfully employed population depends on agriculture while about 15 per cent, on mining and manufacturing. But land distribution is uneven. About one-third of agricultural lands is controlled by 1 to 2 per cent of landowners. Some 60 per cent of the peasants is no better than agricultural labourers.

Most of the cash crops have, however, to depend on foreign countries for markets. It is said that about 95 per cent of cocoa, 30 per cent of tobacco, 25 per cent of rubber and 20 per cent of cotton are exported. World War II provided a great stimulus to exports. As a result, the country's foreign exchange reserves went up from $ 71 million in 1939 to $ 708 million in 1945. But these were exhausted soon after the War when there was no restriction on imports. The balance of payments turned negative for the first time in 1947.

Inevitability of Inflation

For an economy of this type, inflation was thought an efficacious remedy. As a matter of fact, an inflationary model was drawn up by an economist Werner Baer for the development of Brazil. "The inflationary process", wrote he, "is a *natural concomitant* of a country which faces continuously declining export earnings, which is committed to a high rate of growth and which meets its ex-

ternal situation by promoting import-replacement industries and new export industries".[2] In the words of Celso Furtado, "inflation set in operation machinery which channelled into the hands of the entrepreneurs a growing part of the mass of income which improvement in terms of trade had generated within the economy".[3]

The Economic Commission for Latin America summed up the trends (prior to 1964) as follows:[4]

The introduction of an industrial system with a predominantly primary economy—the transformation into a type characteristic of a mature economy "was accompanied throughout by a marked inflationary process, the struggle against which, save for brief periods, was dependent upon development policy".

There were five distinct *phases of policy*:

(i) 1948-50—marked by external behaviour pattern;
(ii) 1951-54—a first approach to development policy and recrudescence of inflation;
(iii) 2nd half of 1954 to end of 1955—transition resulting from inflation and changes in political spectrum;
(iv) late fifties—a target plan to construct higher strata of a vertically integrated industrial pyramid;
(v) early sixties—external bottleneck and intensification of inflation, shift of emphasis from industrialisation to curbing of price increase, attempt to seek regional development, reorganisation of agricultural sector.

[2] *Industrialization and Economic Development in Brazil*, a publication of the Economic Growth Center, Yale University, Richard D. Irwin, Inc., Homewood, 1965, p. 115

[3] *The Economic Growth of Brazil, A Survey from Colonial to Modern Times*, University of California Press, Berkeley and Los Angeles, 1963, pp. 248-49

[4] "Fifteen Years of Economic Policy in Brazil", *Economic Bulletin for Latin America*, Vol. IX, No. 2, December, 1964

GROWTH WITH INFLATION

The rate of inflation and growth of real output are indicated below.[5]

TABLE 44

PRICES AND DOMESTIC PRODUCT

Percentage Changes Over Preceding Years

Year	Wholesale prices	Cost of living (Rio de Janeiro)	Money supply in the hands of the public	Real rate of growth (GDP)
1947	--1	6	3	1.8
1948	12	4	18	9.5
1949	17	6	18	5.6
1950	14	11	48	5.0
1951	12	11	22	5.1
1952	10	21	15	5.6
1953	25	17	21	3.2
1954	24	26	24	7.7
1955	9	19	19	6.8
1956	26	22	21	1.9
1957	3	13	20	6.9
1958	28	17	20	6.6
1959	36	52	23	7.3
1960	33	24	8	6.3

Sources: (1) *Revista Brasilieira de Economica*, 1962
(2) *Conjunctura Economica*, Janeiro, 1963

It may be noted from the above table that the economy grew simultaneously with rise in prices, but much more slowly than the latter. The growth was possible in a number of ways. (1) Through exchange controls reintroduced in June, 1947, and continued until January, 1953, imports of articles of consumption were generally restricted except essential foodstuffs and goods like drugs and fertilisers. On the other hand, machinery and equipment were given priority in the import list. Similarly, repatriation of capital was limited to 20 per cent and remittance of interest, to 8 per cent of registered capital. (2) As a

[5] See Werner Baer, *op. cit.*, pp. 104, 109

result, between 1945 and 1951 while imports went up by only 83 per cent, imports of equipment increased by as much as 338 per cent. (3) Although domestic prices rose, import prices were kept within check. Thus between 1945 and 1953 the price-level of imports rose by about 10 to 15 per cent, whereas the general price-level in the economy increased more than 130 per cent. Again, between 1945 and 1953 the rise in the prices of domestically produced industrial goods rose by 60 per cent, whereas agricultural prices rose by about 25 per cent. In consequence, the rise in the cost of living between 1947 and 1953 was limited to about 67 per cent. (4) Thus the relative price-levels were such that there was a transfer of funds in general from the consuming to the producing class. The rate of savings went up from 13.9 per cent of national income during 1946-48 to 16.0 per cent during 1949-51. During 1952-54, however, it dropped to 15 per cent. (5) Whereas during 1947-53 the domestic currency 'cruzeiro' was kept at the unrealistic level of 18.5 units to the dollar, in October, 1953 a new exchange system was introduced which was multiple in character. Direct quantitative controls were abolished. Instead auctions were made and imports, classified into five categories on the basis of their essentiality. Each category had a different exchange rate which was determined by the auction of exchange certificates in that category. (6) This helped to some extent the process of currency devaluation which had been deliberately avoided in the immediate post-war period. It gave flexibility to the exchange procedure and made possible a better channelisation of imports.

There was a kind of *big push* during the period 1955-1961 under the presidency of Juscelino Kubitschek who made a serious attempt at planned development. During this period publicly-controlled investment rose from 0.5 per cent to 5 per cent of gross national product. Foreign capital imports in the private sector went up from $ 109 million to $ 300 million. Public utilities like electricity and transport and heavy industries like steel, cement and shipbuilding underwent rapid development. The automobile in-

dustry expanded almost from scratch. An idea of the progress can be had from the following:—

TABLE 45

GROWTH OF BASIC INDUSTRIES

Industry	Unit	1950	1958	1960
Petroleum	million			
production	barrels	0.3	18.9	29.6
refining	,,	—	48.4	63.7
	thousand			
Iron ore	tonnes	1,987	5,185	9,345
Coal	,,	1,959	2,240	2,330
Steel ingots	,,	789	1,659	2,282
Cement	,,	1,386	3,790	4,474
Automobiles	numbers	—	61,129	133,078

Source: Celso Furtado, *Diagnosis of the Brazilian Crisis*, University of California Press, Berkeley, 1965

It follows from the above that *inflation played an important part in the economic development of Brazil during the fifties*. But, as Celso Furtado put it, there were two sides of the inflationary process. There were some *bad effects* of continuous inflation over a decade. Due to neglect of agriculture and public utilities there developed some rigidities in the economy which it was difficult to overcome unless the main direction was changed. Wages in general lagged behind prices and there was growing dissatisfaction among the working class. Regional imbalances continued with vigour. The north-east region with about 30 per cent of the population got barely 15 per cent of national income. The southern region with about a third of the total population enjoyed about half of the total income. The per capita income in the north-east was below 50 per cent of the national average while that in the State of Guanabara was over 300 per cent of that average. True, minimum wages rose from CRs 1200 in 1952 to CRs 9600 in 1960 but the cost of living index (Rio de Janeiro) increased much more, from 87 to 437 (base 1953=100). The ratio of wages paid to value added by manufacture also declined, as shown below:—

TABLE 46

RATIO OF WAGES TO VALUE ADDED

	Textiles	Machinery	Food products	All manufacturing industries
1949	23	32	14	23
1955	24	32	18	24
1959	19	24	14	19

Source: Institute Brasileiro de Geqgrafia Estatistica (IBCC), *Industrial Census*

On the whole, agricultural prcductivity recorded little improvement as evident from the following table—

TABLE 47

YIELD PER HECTARE OF PRINCIPAL CROPS

	1950	1955	1960
Cotton ..	443	490	549
Rice ..	1,638	1,488	1,617
Cocoa ..	554	429	347
Coffee ..	402	419	436
Corn ..	1,287	1,190	1,298
Wheat ..	816	921	625

Source: Ministry of Agriculture, *Statistics of Production*

The rate of capital formation also registered decline, as shown below:—

TABLE 48

CAPITAL FORMATION

	Gross National Product (billion CRs)	Gross Fixed Capital Investment (billion CRs)	Gross Fixed Capital Investment as % of Gross National Product
1947	164.6	28.0	17.00
1948	186.4	30.1	16.15
1949	215.6	32.2	14.94
1950	254.0	34.0	13.39
1951	307.8	56.1	18.23
1952	353.3	65.3	18.48
1953	429.8	54.8	12.75
1954	555.8	77.6	13.96
1955	691.3	99.0	14.32
1956	880.9	123.1	13.97
1957	1,042.7	136.0	13.04
1958*	1,260.6	158.9	12.61

* Preliminary

Source: National Income Statistics in *Revista Brasileira de Economica*

Steps to Control Inflation

Two Presidents succeeding Kubitschek, one after another, could not bring about any recovery. The people's resentment ran high which was taken advantage of by the Army to assume power. In April, 1964, there was an Army coup which was even supported by the Governors of some States. Marshall Castelo Branco installed himself as President in consequence. He considered his main task to be *stabilisation of the economy.* A kind of plan was drawn up for the period 1964-66, which envisaged (i) a 6 per cent annual increase of gross national product, (ii) a substantial stepping up of infrastructure investments, (iii) an improvement in the balance of payments and (iv) an increase of employment. There was also a temporary plan based on the need to reduce regional and sectoral imbalances. An expert like Roberto Campos was called upon to undertake an orthodox deflationary programme to win the confidence of the World Bank. The Central Bank was also founded in 1964 for better control of credit, foreign exchange and other transactions. Among the specific anti-inflationary measures were (i) increase of taxation, (ii) restriction of bank credit, (iii) control of prices, wages and other cost factors (electricity, fuel, freight etc.), (iv) reduction of customs tariff and (v) increase in productivity.

According to *The Economist*[6] there were *six important policy instruments* that achieved a *miracle* in Brazil. These were: (i) neutralising inflation, (ii) promoting exports, (iii) orienting private investment through tax incentives, (iv) increasing national savings, (v) maintaining foreign confidence and (vi) investing in infrastructure. Some of them are explained below.

[6] Supplement of September 2, 1972 on 'The moving frontier, a survey of Brazil'

(1) In 1967 the Government decided to tolerate a rate of inflation higher than 20 per cent rather than continue with deflationary measures, e.g., (tight control of private credit and monetary supply). That is why it has been said that Brazilians decided 'to live with inflation' rather than subjugate it. The two principal devices adopted for neutralising inflation were (a) monetary correction and (b) a crawling peg pattern of periodic currency devaluations.

(a) The scheme of *monetary correction,* also called index linking, introduced in 1965, is based on the principle that none would lose or win through inflation if capital, earnings, pensions, rents, savings, loans, Government bonds, private securities, fixed assets—in short, things valued in terms of a paper currency—are revalued every year. The adjustments are made on the basis of the official wholesale price index. The wage-earner, pensioner, bank depositor, bond-holder and so on are compensated to the extent prices go up. In other words, there is a kind of 'internal devaluation' of the currency.

(b) The *crawling peg* system protects Brazil's trading position in the world market. The cruzeiro is revalued at irregular but frequent intervals on the basis of a monthly assessment of inflationary trends inside the country. So instead of a big devaluation there are many mini-devaluations. There were some seven in 1971 and eight in 1972. In this way the shock of a sudden change is avoided. At the same time since the rate of devaluation is only marginal, it takes away much of the incentive for frenzied speculation.

(2) The Government (i) introduced a series of tax incentives and subsidies for exports, (ii) improved the 'corridors' such as harbour facilities and transport services and (iii) initiated diplomatic steps to open new markets abroad, particularly within the Latin American Free Trade Area. Export industries could claim an income-tax rebate of up to 60 per cent according to the share of exports in their total sales.

(3) Tax incentives were also offered to investors for the purpose of regional development, expansion of some priority sectors and the growth of a capital market. Those, who would invest in the north-east and Amazonian regions, could reclaim up to 50 per cent of their corporate income-tax. Those interested in tourism and fishery could get back up to 8 and 25 per cent respectively. Similarly every taxpayer could get a rebate if he deposited the money in an investment bank. In this way, some 1 million taxpayers became its share-holders. It is estimated that about half of the corporate income-tax was returned to private investors through the incentive system.

(4) Large investment was directed to public works which were designed to open up new areas for industrial growth and agricultural settlement, build up sources of energy and improve power facilities. Thus Trans-Amazonian Highways were constructed which provided additional paved roads of about 35,000 kms between 1963 and 1971. The figure was to reach 50,000 kms by March, 1974.

(5) The new Government also encouraged foreign investment. As a result, the Alliance for Progress promised $ 150 million in 1965 for the stabilisation of Brazil's finances and $ 100 million for development projects. The U.S. Government committed $ 54 million in a foreign exchange loan. The International Bank for Reconstruction and Development also offered substantial credit.

In the four years 1968-72, net foreign capital investment quadrupled. Foreign exchange resources also went up. Foreign investment at the end of 1972 was estimated at about $ 5 million.

Some Beneficial Results

As a result of the new measures, improvements were noticed as follows:—

TABLE 49

	COST OF LIVING Annual rate of inflation per cent			WAGES Index of minimum wages (Guanabara)—increase (per cent)	
1960	23.8	1967	24.5	1960	60.3
1961	43.3	1966	41.1	1964	99.6
1962	55.2	1968	24.0	1966	27.3
1963	80.6	1969	24.2	1968	23.4
1964	86.6	1970	20.9	1970	20.0
1965	45.4	1971	18.1	1972	20.5
1966	41.1	1972	14.0		

Thus there was a progressive decline in the rate of inflation including rise in wages. The gross national product on fixed price basis (base 1970=100), both aggregate and per capita, went up as follows:—

TABLE 50

GROWTH OF GNP

	Aggregate (million $)	annual growth rate (%)	Per capita ($)	annual growth rate (%)
1968	30.1	9.3	344	6.3
1969	32.8	9.0	364	5.9
1970	35.9	9.5	387	6.4
1971	40.0	11.3	419	8.2
1972	44.2	10.4	450	7.3

TABLE 51

SOME ECONOMIC INDICATORS

	1964	1970	Percentage increase
Production			
Steel & iron (million tons)	5.2	9.6	84.6
Cement (million tons)	5.2	9.0	73.1

Aluminium ingots (000 tons)	27.0	62.0	128.6
Automobiles (000 tons)	180.0	416.8	131.6
Oil (million m^3)	5.3	9.7	83.0
Power (million Kwh)	29.0	45.5	56.9
Exports (US $ million)	1400.0	2,739.0	95.6

Source: Booklet *Brazil Challenge and Response*, published in 1972 by the Brazilian Embassy in U.K.

According to a Chilean daily,[7] Brazil performed a *miracle* through a 9 per cent annual increase in production from 1968 to 1970, a reduction of the rate of inflation from 86.6 per cent to 19 per cent and an accumulation of U.S. $ 1.5 billion in monetary reserves. The U.S. Department of Commerce itself referred in October, 1971 to a *booming* Brazilian economy with an extremely healthy market. The *Business Week* observed that if the Brazilian economy could be compared to a race car, it would certainly be classified among the Formula I category. After eight years of power, pointed out *The Economist*[8] of London, Brazil's military rulers could take credit not only for cutting the rate of inflation to less than 20 per cent but for doubling the output of steel, electricity and cement; for trebling automobile production; for raising the value of exports from $ 1.4 billion to $ 3.5 billion; and for increasing national savings from 10 per cent of the GDP to more than 20 per cent. In a message to Congress in March, 1972, President Medici pointed out that everything had changed in the last eight years; the country had *matured*.

SNAGS STILL

There remained, however, some snags in the process. As the *Wall Street Journal* commented, the booming economy

[7] *El Mercurio*, October 13, 1971
[8] Supplement of September 2, 1972, p. 28

might not have had any impact over half the country's citizens. It is said that 5 per cent of the population enjoys a third of the national income. According to the Census of 1970, during the preceding decade the share of those earning over $ 180 a month increased from 3.4 to 5 per cent of the total earnings of the people. By contrast, the share of those earning between $ 40 and $ 90 per month dropped from 32 to 18 per cent. The National Development Plan document pointed out that whereas nearly 33 per cent of the population was economically active in 1950, the figure fell to 32.3 per cent by 1960 and 31.7 per cent by 1970. An opposition deputy[9] charged the Government that it was 'confiscating salaries' to increase national savings and the real minimum wage in 1970 was 30 per cent lower than in 1960. Celso Furtado in a recent book[10] has criticised the Brazilian Government for failing to transfer the benefits of economic growth to ordinary workers, which he called 'the lack of basic feedback'. The concentration of income, he predicted, would lead to a new period of stagnation. Even Robert McNamara, the then President of the World Bank, criticised the economic inequality prevalent in Brazil at the UNCTAD Conference held in Santiago in April, 1972.

Agriculture was still in a backward state. Its increase compared to industry was much less as shown below:—

TABLE 52

INCREASES IN VALUE OF PRODUCT AT CONSTANT PRICES

Year		Agriculture	Industry
1960	..	4.9	9.6
1964	..	1.3	5.2
1966	..	3.2	11.7
1968	..	1.4	15.5
1970	..	5.6	11.1
1972	..	4.2	13.8

[9] Speech in the Brazilian Congress in June, 1972

[10] *Analise do Modelo Brasilelro*, Civilizacao Brasileira, Rio, 1972.

In 1967 agriculture contributed 18.1 per cent of the gross domestic product at 1960 prices. It dropped to 15.7 per cent in 1971. Many critics have argued that low incomes and high unemployment stemmed from the emphasis on industrial development rather than on agricultural.

INDONESIA

A Strange Case of Survival with Hyper-inflation and Chequered Growth

In-Built Factors

A few aspects of Indonesia's geography, economy and political condition deserve special mention on the ground that they add to the difficulties of her progress.

(1) Indonesia represents the largest archipelago of the East, comprising some 6000 islands, spread over an area of about 2 million sq kms. She was once described by a Dutch poet as 'a girdle of emeralds around the equator'. The minimum lengths are 5000 kms from east to west and 2000 kms from north to south. This at once makes cohesion difficult and the communication problem an acute one.

(2) She has got probably the highest and lowest densities of population in the world—about a thousand per sq km in Java and less than two per sq km in West New Guinea. The former with about three per cent of the total area of the country has to maintain about two-thirds of its population. About 90 per cent of the industrial labour force is concentrated in this region. That is why Ellsworth Huntington has called Java 'the despair of Malthus'.

(3) Rainfall is very high. It is rare that any area receives less than 1000 mm a year. Over 3000 mm a year are common for many regions. But rainfall is more a curse than a blessing. For heavy showers impoverish the soil.

The soil of Java is however quite fertile on account of volcanic activity.

(4) The economy is very much uneven among regions. The island of Java, though densely populated, is advanced in both plantations and industry. Sumatra is three times as big as Java with plenty of resources, mostly untapped. The biggest of islands is Borneo, but it is much underdeveloped.

(5) The economy is dependent on foreign trade. Its value constitutes about one-fifth of gross domestic product. Previously spices constituted chief export items. Gradually they lost importance to plantation products. In recent years petroleum has become the chief foreign exchange earner. The oil bonanza of 1973 has benefited Indonesia greatly. Value of petroleum exports in 1974 is estimated to have doubled over 1972. Indonesia has also to import food and clothing to meet her domestic requirements. Her imports of rice were of the order of 6 lakh tonnes in 1969 and 9.6 lakh tonnes in 1970. Recently the value of her imports has also gone up due to the rise in prices of food and industrial materials like steel and cement in the internatlonal market.

(6) Her industry and trade had been in foreign hands for long, including the Dutch and the Chinese. When Indonesia achieved her Merdeka or Independence, there was some $ 2 billion of Dutch capital invested in her economy. The Standard Vacuum Oil Company of U.S.A. had an investment of about $ 65 million in 1946.

It was only natural that an economy of this type would suffer most with the end of the Korean boom in 1952. As Benjamin Higgins and Jean Higgins pointed out, "prices of Indonesian exports dropped drastically. The rupiah was beginning to sag on the free market and the cost of living, to mount. All the symptoms of cumulative inflation had already appeared. In mid-1952 she was losing foreign exchange at a faster rate than any country in the world".[11]

[11] *Indonesia: The Crisis of the Millstones*, Van Nostrand Coy, Inc., Princeton, 1963, p. 80

POST-MERDEKA DEVELOPMENTS

Since Merdeka there had been some developments in the country which contributed to instability. (1) Internal peace was disturbed by incidents of violence, the frequency of which was not negligible. The situation in 1958 was so serious that it could be described as civil war. It was in that year that the value of exports from Indonesia dropped to about one-third of their former level. It is said that during the eighteen months ended August 24, 1958, the Government had put into circulation Rp. 12,000 million to meet the increasing expenditure, of which a major part went to campaign against rebels. So "the budget deficits and import restrictions during the rebellions of 1957 and 1958 caused the inflation, which had been *endemic*, to become *epidemic*".[12] This is not the only instance of political instability. There was a coup in 1965 when some six army generals and several other persons lost their lives.

(2) With Merdeka the urge for national development became strong. One of its manifestations was the take-over of foreign concerns. Though at times opinion was sharply divided into two schools—*developmentalists* who were in favour of their continuance and *nationalists* who wanted to do away with them, it was the latter who held sway. So almost all foreign enterprises were taken over, the only exception being those in the petroleum industry in which they were allowed to continue under a 60:40 profit-sharing arrangement. An extreme case was that in August, 1956 the entire debt to the Netherlands, estimated at over Rp. 4000 million was derecognised.

On principle there was nothing wrong in nationalisation of foreign enterprises. But a kind of sustained hostility against them and delayed take-over damaged the economy. What was all the more ruinous was that filling up of the vacuum was most disorganised. Those who took over did not have the necessary managerial and technical abilities to run them efficiently. In some cases joint firms of Ali

[12] Ibid.

Baba type (Ali for Indonesian and Baba for Chinese) came into being. But there were hostilities against the Chinese, too, whose vested interests were no less strong. It is said that in 1950 a Benteng system was introduced by which certain categories of imports were reserved for Indonesian firms. But the result was that most of the 'brief case' importers sold their permits at high premia to the Chinese. So those who actually used the imported materials either in industry or trade only compensated themselves by raising the prices of products.

A foreign observer summarised the *problems* of Indonesia thus:

(1) widening discrepancy between the growth rates in food supply and population;

(2) disorganisation and de-capitalization of its estate operations;

(3) the run-down condition or disappearance of the plantations that used to produce most of its export crops;

(4) the disrepair, diminished capacity, incompetence and corruption in its industrial, mine, trade and financial sectors;

(5) the huge budgetary deficits;

(6) the big balance of payments deficits;

(7) above all, the complete disappearance of the entrepreneurial, managerial, technical and professional class that once developed Indonesia's natural resources, manned its major productive activities and until ten years ago was still holding the fort against heavy handicaps.[13]

According to the ECAFE, a continuing rise in internal prices was the result of "falling imports, domestic business disorganization, declining estate production, speculative psychological tendencies, leading to capital flight and a steadily rising money supply due largely to mounting budget deficits".[14]

[13] See Roger A. Freeman, *Socialism and Private Enterprise in Equatorial Asia. The Case of Malaysia and Indonesia.* The Hoover Institution on War, Revolution and Peace, The Leland Stanford Junior University, 1968

[14] *Economic Survey of Asia and the Far East,* 1959, p. 45

There is force in both these viewpoints, but probably the most important causative factors behind the aforesaid ills were the *in-built weaknesses* of Indonesia's economy and the *wrong policies* adopted by her Government in the immediate post-Independence period.

Programmes of Development

Attempts were made to remedy the situation through economic planning over the years. Thus the Economic Urgency Programme drawn up in 1951 laid down the main lines for industrial development—a complex of power plants, an aluminium plant, a fertiliser factory, a pulp and paper plant, small industries, power generation of nearly a million kwh. It also envisaged development of the Asahan Valley in North Sumatra. It called for a total investment of Rp. 8 billion over the 5-year period 1955-59 of which the foreign exchange requirement was estimated at $ 350 million. The Welfare Plan of 1952 aimed at self-sufficiency in food by expanding acreage, improving methods of cultivation, using better seeds, importing fertilisers and implements and reconstructing irrigation facilities. An over-all National Development Plan was drawn up for the period 1961-69 based on five important goals—(1) increase in the production of articles of consumption, (2) better distribution of daily necessities, (3) more production of foreign-exchange-earning finished goods, (4) utilisation of imports for creation of employment opportunities and output of foreign-machinery-substituting products and (5) development of basic industries. It involved an investment at the rate of 12 per cent of national income. The Plan document, it is said, ran into 5000 pages. Obviously it was over-ambitious.

But there was no technical assessment of resources nor any scientific laying down of targets in any of the plans. Their implementation was also far from satisfactory. So most of the targets remained only pious wishes.

By 1958 only five out of some 61 power projects materialised. Rice imports went up from 128 million tons in 1955

to 681 million tons in 1958. There was of course some rise in industrial production and decline in imports of some consumer goods, particularly clothing. Of the 8-year overall Plan the first four years produced little. The B projects (in oil, timber, copra, tin, rubber, aluminium etc.) were to supply most of the finance for the 335 A projects (comprising food, clothing, communication etc.). But by the end of 4 years only 200 of them could be taken up and fewer, completed.

In 1950 the Government budget was somehow balanced but in each of the succeeding six years expenditures exceeded revenues (including foreign aid, loans etc.) by 15 to 25 per cent. The deficit gradually turned bigger and bigger. In 1958 and 1959 public outlays were 50 per cent greater than revenue; in 1962 and 1963 they were twice; in 1964 and 1965 they were about two and a half times; and in 1966 they were more than three times, as large. Total money supply climbed from 4.3 billion rupiah in 1950 to 11 billion in 1954, 19 billion in 1957, 48 billion in 1960 and 28,000 billion in early 1967.

HYPER-INFLATION

The combined result of poor economic growth, huge budgetary deficits and enormous rise in money supply was hyper-inflation of the worst type. Consumer prices doubled between 1950 and 1954, more than doubled between 1954 and 1958 and again between 1958 and 1961. From 1961 to 1964 prices multiplied fourteen times; from 1964 to 1965 again seven times; and in the succeeding year more than eight times. Since the inception of the Republic prices have multiplied about 10,000 times.

Indonesia applied a few *shock treatments* to overcome the situation. In 1952 the rupiah was devalued from 11.4 to 31.7 units to the dollar. In August, 1959 all 500 and 1000 rupiah notes were devalued to 10 per cent of their face value; and 90 per cent of the money above Rp. 25,000 in every bank account was frozen. In May, 1963 its value was lowered further to 315 to the dollar. In December,

1965 it was replaced by a new rupiah at the ratio of 1:1000. But all these proved of no avail.

Still what was remarkable was that *"a country which by every logical standard should have long since arrived at a state of total economic collapse survived.* The cure was ineffective—inflation continued to mount, but the patient survived these".[15] In the words of Albert Waterston, 'Indonesia represents an extreme case of *institutional* adaptation, including extensive nationalization and major alterations in the price system'.[16]

In almost all other countries which underwent a process of persistent inflation there was some growth still. But in Indonesia growth was chequered from the very beginning. The average annual growth rate of her per capita product in the decade 1950-60 was negative and in 1960-69 only 0.8 per cent, compared with Malaysia's 3.8 per cent and Thailand's 4.7 per cent. Her case fairly resembles the German situation after World War I.

An attempt is made below to summarise the principal trends on rough chronological basis with the help of as much statistics as available.

TABLE 53

PRICES, MONEY SUPPLY & BUDGET DEFICITS

Consumer price index (1953=100)

Year ended December 31	(Based on domestic retail prices of 19 food items) (1)	(Based on wholesale prices of 44 imported items) (2)	Money in circulation —billion Rp (old) (3)	Budget deficit— billion Rp (old) (4)
1950	53	—	4.3	1.7
1951	89	—	5.1	1.2
1952	94	95	6.7	2.8

[15] See Jeanne S. Mintz, *Indonesia A Profile*, Von Nostrand Coy, Inc., Princeton, 1971, pp. 180-81, 183

[16] *Development Planning Lessons of Experience*, The John Hopkins Press, Baltimore, 1968, p. 17

	(1)	(2)	(3)	(4)
1953	100	100	7.4	2.1
1954	106	110	11.1	3.6
1955	141	144	12.2	2.1
1956	161	136	13.3	4.6
1957	177	161	18.9	5.0
1958	258	249	29.3	15.8
1959	311	—	34.8	17.6
1960	—	—	47.8	6.9

Sources: (1) For col. (1), United Nations, *Statistical Abstracts*, 1956, 1962
(2) For col. (2), Government of Indonesia, Central Bureau of Statistics, *Monthly Survey*, February, 1961
(3) For cols. (3) and (4), Bank of Indonesia, *Annual Reports*

Thus it may be seen from the above table that between 1950 and 1958 consumer prices increased about five times, while the money supply about seven times. There was almost a close connertion between the two.

It may be noted that between 1950 and 1960 there was very little expansion of national and per capita product. This will be evident from the following figures:

TABLE 54

GROSS PRODUCT, NATIONAL & PER CAPITA

INDEX OF	1953	1956	1958	1959
Gross national product (1952=100)	106	122	127	—
Per capita product (1958=100)	98	101	106	98

Sources: (1) Bank of Indonesia, *Annual Reports* and *Quarterly Bulletins*
(2) United Nations, *Statistical Year Books*

TABLE 55

Year ending March 31	Cost of Living Index			Money in circulation (in terms of old Rp) billion	Budget deficit (in terms of old Rp) billion
	Food (1)	Clothing (2)	All Items (3)		
1961	220	504	239	67.8	25.0
1962	841	798	730	131.1	50.0
1963	1,257	2,754	1,344	265.0	181.1
1964	3,793	4,017	3,271	615.0	886.6
1965	7,458	10,862	7,444	2,982.4	1,300.0
1966	87,673	92,273	89,704	—	—

Sources: (1) For cols. 1, to 3, Government of Indonesia, Central Statistical Office
(2) For other cols., Bank of Indonesia, *Annual Reports*

TABLE 56

PRODUCTION

Principal Estate

	Principal Food Crops (000 tons)		Products (000 tons)			Minerals (000 tons)		
	Rice	Maize	Sugar	Rubber	Tea	Tin Ore	Manganese	Bauxite
1961	15,900	2,238	640	229	45	18.5	13.0	420
1962	17,214	3,201	584	213	47	17.6	7.2	490
1963	15,080	2,391	650	217	39	13.1	4.8	506
1964	17,350	3,160	660	220	40	16.6	5.2	648
1965	19,300	2,400	720	—	—	14.9	7.2	668

Source: Government of Indonesia, Central Statistical Office

The two foregoing tables show that between 1961 and 1965 the cost of living index went up about 30 times and money supply about 44 times. So the former lagged behind the latter. During the same period neither food nor plantation crops registered any appreciable rise, while there was a decline in the production of minerals like tin and manganese.

ON THE WAY TO STABILISATION

It was after the mid-sixties when following the murder of six army generals (in September-October, 1965) Presi-

dent Sukarno was forced to give full power to Lt. General Suharto that attempts were made to seriously contain the hyper-inflationary trends, though with very limited success. Towards the end of 1966 a programme was put in operation of which the primary objectives were decrease and ultimate elimination of inflation, restoration of production and encouragement of capital inflow.

The position of prices and money supply stood as follows during the late sixties:

TABLE 57

	Consumer Price Index (Base 1963=100) (1)	Money supply (million Rp) at end of year (2)
1965	830	2,572
1966	9,502	122,208
1967	25,612	51,372
1968	57,712	112,303
1969	61,250	114,245

Sources: (1) For col. 1, Government of Indonesia, Central Statistical Office
(2) For col. 2, Bank of Indonesia, *Annual Reports*

The above table shows that the rate of inflation abated moderately in 1967 and 1968 and to a great extent in 1969. The increase in money supply was practically halted in the year 1969.

After the formal assumption of power by Suharto as President in March, 1968 the situation took a more favourable turn. In his inaugural address he pledged to give meaning to independence by rehabilitating the shattered economy. The chief objective which he laid before the administration was *economic stabilisation.*

A five-year plan was drawn up for the period 1963-73, REPELITA I as it was called. Its principal targets were as follows:—

(1) supply of sufficient food and clothing of good quality which would be within the purchasing power of the common people;

(2) supply of housing materials and other necessary facilities for their benefit;

(3) more extensive and better infrastructure;

(4) greater and more equally distributed welfare services; and

(5) expansion of employment opportunities.

It aimed at increase of national product at the rate of about 7 to 8 per cent per year, for which an investment of 13 to 14 per cent of national income was necessary every year.

The policies advocated for the purpose included (1) removal of foreign exchange controls; (2) allowing the rupiah to depreciate and settle down at its free market level; (3) balancing of the routine budget; (4) raising of the interest rate; (5) partial restoration of an internal free market economy; (6) allowing private foreign investment in the primary export sector. Of them, the most important was the *open door policy.* It was summed up by the Foreign Minister Adam Malik in these words: 'Indonesia has opened its doors wide to private foreign investment, when it fulfils suitable pre-requisites, to exploit natural resources particularly in such fields as mining, industry and forestry'.

As a result of these steps there was a distinct improvement in the situation. There was a definite lowering of the inflationary pressure, as evident below:

TABLE 58

	1969	1970	1971	1972 (Sept.)
Increase in money supply (per cent) ..	58.0	33.9	29.7	25.7
Increase in total bank credit (per cent) ..	26.0	48.3	18.0	19.8
Consumer price index (Djakarta, September, 1966=100) ..	575.0	626.0	641.0	658.0
GDP growth rate (per cent) ..	7.1	6.9	7.0	7.5

Sources: (1) Central Bureau of Statistics, *Monthly Reports*
(2) Bank of Indonesia, *Annual Reports* and *Monthly Bulletins*
(3) Appendix to the State Address of the President to the Members of Parliament on August 16, 1972

The two important sectors, agriculture and mining, registered progress as under—

TABLE 59

AGRICULTURAL PRODUCTION
(000 tonnes)

	1968	1969	1970	1971
Rice	14,858	15,553	17,529	18,585
Sugarcane	9,190	8,260	9,785	9,709
Coffee	157.3	177.0	184.8	180
Cocoa beans	0.7	1.6	1.5	1.6
Natural rubber	730	788	780	834

Source: Government of Indonesia, Central Statistical Office; (also see *The Europa Year Book, 1973*, A World Survey, Vol. II)

TABLE 60

OUTPUT OF MINERALS

	Crude Petroleum (000 tonnes)	Bauxite (000 tonnes)
1967	25,152	91.2
1968	29,712	879.0
1969	36,624	76.5
1970	42,108	122.8
1971	43,788	123.8
1972	54,084	127.8
1973	67,086	—

Source: United Nations, *Monthly Bulletin of Statistics*, Vol. XXVIII, No. 10, October, 1974

The balance of trade as well as the balance on capital account showed surpluses as follows:—

TABLE 61

BALANCE OF TRADE AND ON CAPITAL ACCOUNT

(million $)

	1969	1970	1971	1972
Exports	995	1,039	1,204	1,374
Imports	993	1,071	1,102	1,284
Balance of trade	2.0	—32	102	90
		1969-70	1970-71	1971-72
Official transfer of capital		359	369	419
Balance on capital account		449	367	552

Sources: (1) Bank of Indonesia, *Annual Reports* and *Monthly Bulletins*
(2) Central Bureau of Statistics, *Monthly Reports*

ISRAEL

A CASE OF HIGH DEVELOPMENT FEVER WITH IMPORT SURPLUS

Israel presents an example of the worst type of inflation in modern times—worst both in magnitude and complexity. A few items randomly chosen will prove it easily. The domestic price-level tripled during the fifties. Import prices increased more than five times. The Israeli pound IL fell to roughly one-sixth of its value, judged by its number that had to be paid for a dollar. It was devalued in terms of the dollar nearly half a dozen times in course of two decades. There was a kind of black market in foreign exchange which was almost officially permitted. As Alex Rubner, former Adviser to the Ministries of Finance, Trade and Industry in Israel pointed out, "The first ten years of an independent Israeli economy robbed the IL of more than two-thirds of its 1948 purchasing power. Parallel to the abandonment of the IL as the currency in which

Israel's external trade was carried out, the IL is no longer used as a standard of measurement within the country for medium-or long-term contracts; the epidemic of value-linking has spread to all spheres of economic life".[17] That is why E. M. Bernstein of the International Monetary Fund observed[18] that the single feature which impeded the healthy growth of the economy was inflation. Economists associated with the Economic Advisory Staff of the Government also regarded the system of linking wages to the cost-of-living index as the most important factor which retarded the country's economic growth. Of course, such a system was the *result* rather than the *cause* of inflation; it was a way of escape, though not the correct way, from the downward pressure of rising prices on the standards of living of the wage-earners.

IN-BUILT HANDICAPS

There are, however, some peculiarities of the Israeli economy which have to be taken into account in order to have a proper perspective of its inflationary trends. (1) Israel is a small country with only about 21,000 sq. kms of area and limited resources in cultivable land and irrigation water. Her farming is predominantly dry. A recent land-utilisation survey graded the country as 3.39 million dunams under dry farming and 3.94 million dunams under irrigation suitable for all types of cultivation. (2) Yet her geographical position is very strategic. She remains the powder 'keg' of the Middle East. This accounts for her huge expenditure on defence. In 1953-54 it constituted 30 per cent of the total Government expenditure on current account, compared with about 29 per cent in U.K., 37 per cent in France, 22 per cent in Italy and 51 per cent in U.S.A. In recent years, it has exceeded 40 per cent of the total. (3) In spite of her small size she has been flooded with immigrants since her statehood. As a result her popu-

[17] *The Economy of Israel—a Critical Account of the First Ten Years*, Frank Cass & Coy Ltd, London, 1960, p. 233

[18] See *Survey*, Bank of Israel, August, 1957

lation more than trebled during the period 1948-70. Its density rose from about 18 persons per sq km in 1948 to about 55 per sq km in 1964 and 145 per sq km in 1971. (4) Immigration has taken place in such dimensions that in 1965 those born in Israel accounted for only 40 per cent of the total population; the rest had their birth-place outside. (5) From the very beginning she was faced with the problem of rehabilitation of immigrants. Its seriousness can be judged from the fact that almost all her political parties maintained 'colonisation departments' for the organisation of co-operatives among new settlers. The cost of rehabilitation for the period 1950-58 had been roughly estimated at 465 million IL at 1952 prices. (6) Her foreign trade is perennially deficit. Over the years she imported nearly twice as much as she exported, the deficit being met by funds from abroad.

Thus the small but strategic State of Israel has since its birth been faced with a double challenge—the burden of enormous immigration and the almost perpetual threat of war. It is a kind of 'survival' crisis. Superimposed on it is the 'aspiration' crisis as well, stemming from the demonstration effect of American goods and high pressure drive towards an American standard of living. Many of her active leaders have been trained in U.S.A. As two scholars observed, "The Pelion of an aspiration crisis has been piled upon the Ossa of a survival crisis. The former—with affluence and its inevitable disillusionments still far away —has not yet abated".[19]

INFLATION—THE ONLY REMEDY

Applying Arnold Toynbee's scheme of 'challenge and response', it may be said that Israel found a wayout from this initial predicament in inflation of a peculiar type, an improvisation of her own. Ben-Gurion was more than right when he challenged a gathering of Israeli and foreign eco-

[19] See the Prefatory Comment by Bertram M. Gross to Benzamin Akzin and Yehezkel Dror, *Israel High-Pressure Planning*, Syracuso University Press, 1966, p. xi

nomists in 1957 and asked them to re-examine economic laws in the light of Israel's experience. In his view 'the rules of a balance sheet do not apply when people are working in a state of high-development fever'. Indeed, it is inconceivable that any similar variables could ever combine in the same permutation in the case of any other country as they did in Israel.

No less an authority than the Governor of the Bank of Israel admitted[20] that 'control of inflation was perhaps less than adequate but it did slow down the inflationary spiral and spared the country's growth and more damaging effects of that spiral'. Peculiar situation called for peculiar remedies. A host of devices were adopted except physical controls—'stepping up competition, liberalizing trade, abolishing administrative restrictions, pegging wages, raising taxes, issuing compulsory loans, tightening credit and operating in the open market. These barriers against what might have proved a very serious situation were fortified by the currency devaluations of 1949, 1952, 1953, 1962, 1967 and 1971. Each readjustment helped to reinstate a medium of equilibrium, although only until incomes, wages and prices caught up with the new rates and started the infltionary process over again. Heavy taxation could not eliminate budgetary deficits, 'however, it did contract their dimensions. Apart from taxation, the encouragement of savings by the issue of Government securities, linked to foreign currency and the cost of living index, quantitative and qualitative credit controls and by no means the least, the series of currency devaluations—each made its contribution, to whatever containment of inflationary pressures was achieved'.

Of course there were the usual features of expansion in money supply, rise in prices and slow increase in real national product in Israel's economy, as will be evident from below—

[20] See David Horo witz, *The Enigma of Economic Growth. A Case Study of Israel*, Praeger Publishers, New York, 1972, pp. 112-113

TABLE 62

INDICES OF MONEY SUPPLY, PRICE, GNP AND REAL GNP

(1950=100)

	Money supply	Credit from banking system	Prices	GNP (at current prices)	Real GNP (at 1955 prices)
1950	100	100	100	100	100
1951	127	129	118	151	128
1952	136	159	171	292	136
1953	169-153	215	218	292	134
1954	184	229	242	387	160
1955	221	253	262	475	181
1956	273	292	287	569	198
1957	304	354	310	664	214
1958	348	420	330	763	231
1959	383	520	340	878	258
1960	464	657	352	985	280
1961	511	815	385	1,182	307
1962	662	1,055	418	1,422	340
1963	848	1,075	456	1,679	372
1964	958	1,244	478	1,963	411

Source: Bank of Israel

TABLE 63

INDICES OF MONEY SUPPLY, CONSUMER PRICES AND PRODUCTION

(Base 1963=100)

	Money supply	Consumer prices	Total product	Food production	Agricutural production
	(1)	(2)	(3)	(4)	(5)
1965	118	112	120		
1966	125	121	121		
1967	158	121	124	136	140
1968	180	123	144	142	146
1969	185	128	158	141	146
1970	210	141	169	147	151

Sources: (1) For cols. 1 & 2, International Monetary Fund, *International Financial Statistics*, January, 1972, Vol. XXV, No. 1

(2) For cols. 3 to 5, *The Statesman's Year Book, 1972*

Thus during the period 1950-64 money supply increased more than nine times and credit from the banking system, more than twelve times. Against this the rise of prices was less than five times; and that of gross national product more than four-fold. Again, during the period 1963-70 while money supply rose by about 110 per cent, prices increased by only about 40 per cent, total product by about 70 per cent and food production by 47 per cent. So there was some other important factor which absorbed an appreciable part of the money supply. It was the rapidly growing adverse balance of payments that is euphemistically called 'import surplus' in Israeli terms.

IMPORTANCE OF IMPORT SURPLUS

The extent of import surplus is indicated by the net deficit in balance of payments on current account analysed as follows:—

TABLE 64

BALANCE OF PAYMENTS
($ million)[21]

Year	Credit	Debit	Net deficit
1949 ..	43.0	263.0	220.0
1950 ..	45.8	327.6	281.8
1951 ..	66.6	426.1	359.5
1952 ..	86.4	393.2	306.8
1953 ..	102.3	365.2	262.9
1954 ..	135.2	373.2	238.0
1955 ..	143.9	426.6	282.7
1956 ..	177.9	534.5	356.6
1957 ..	220.0	557.2	335.2
1958 ..	235.4	569.4	334.0
1959 ..	286.3	601.7	315.4
1960 ..	259.1	695.8	336.7
1961 ..	425.1	859.9	431.8
1962 ..	503.2	957.8	454.6
1963 ..	606.7	1,011.1	404.4
1964 ..	655.7	1,225.0	569.3
1965 ..	749.9	1,271.0	521.1

[21] See Nallav Halevi and Ruth Klinov-Malul, *The Economic Development of Israel*, Frederick A. Praeger, New York (published in collaboration with the Bank of Israel), 1968

TABLE 65
EXTERNAL TRADE
($ million)

1966	..	832.6	503.3	329.3
1967	..	754.6	558.3	196.3
1968	..	1,081.0	640.2	440.8
1969	..	1,318.0	724.0	594.0
1970	..	1.431.0	730.0	701.0

Source: *The Statesman's Year Book, 1973-74*

Thus the so-called import surplus more than doubled between 1949 and 1965. Exports increased at a higher rate, viz., 18 per cent per year than imports which rose at 9.5 per cent per year. As a result the ratio of exports to imports went up from 22 per cent in 1952 to about 60 per cent in 1965. During the period 1966-70 also while the adverse balance of trade more than doubled, imports rose by about 60 per cent and exports by about 40 per cent. Yet the difference between them had been so large from the beginning that exports have not been able to catch up with imports.

The importance of import surplus can be assessed from the following table where it has been compared with domestic resources:—

TABLE 66

DOMESTIC RESOURCES VIS-A-VIS IMPORT SURPLUS

	Total resources	Consumption	Capital Formation Gross	Net	Import surplus
1950	576	433	143	125	118
1955	2,713	2,006	707	533	579
1960	5,143	3,925	1,218	854	779
1965	12,215	9,352	2,863	1,866	2,013

Source: Government of Israel, *Statistical Abstracts*

Thus if depreciation is taken into account, there is not much difference between net domestic capital formation and import surplus. As a matter of fact the latter exceeded

the former in two out of the four years mentioned above. It is because of this that *a measurement of Israel's economic growth in terms of national income,* as done in the case of other countris, *would be misleading.* Total available resources, that is, gross national product plus import surplus would be the more appropriate yardstick.

Compared with other countries Israel's position in this respect stood as follows:—

TABLE 67

RESOURCES AT DISPOSAL OF NATIONAL ECONOMY

1959-61 Average (Per cent)

	Gross domestic fixed capital formation	Import surplus		Gross domestic fixed capital formation	Import surplus
Argentina	19.8	2.3	*Israel*	*22.7*	*15.5*
Australia	26.0	2.5	Italy	22.2	—0.9
Canada	22.1	3.1	Japan	31.1	0.0
Costa Rica	16.9	4.7	Norway	27.5	3.3
France	17.9	—1.1	Puerto Rico	17.9	15.7
Germany, West	24.8	—2.9	U.K.	16.1	0.0
			U.S.A.	16.4	—0.6

Sources: (1) For Israel, *Statistical Abstract, 1966*
(2) For other countries, United Nations, *Year Books of National Accounts Statistics*

Two authors. Akzin and Dror, have remarked that 'one of the biggest economic resources of Israel is the continued mobilisation of net capital import'.[22] This has been made possible on the one hand by the tremendous efforts of both the Government and voluntary agencies for the procurement of foreign capital and on the other, the generosity of foreign Governments and the charitable organisations abroad, some of which have a large Jewish membership. The Ministry of Finance each year draws up an annual foreign currency budget which lists the anticipated re-

[22] *op. cit.*, pp. 55-6

ceipts of such currency and divides it into detailed allocations. When older sources dried up, the Government and other agencies have tried with success many new ones. Sale of Israeli bonds in American markets was a regular annual feature. There were occasions when the Prime Minister or other Ministers visited them personally for this purpose.

The import surplus is financed in two ways—unilateral transfers which create no indebtedness and capital transfers. Over the period 1949-65 out of a total surplus of $6011 million about $4208 million, that is, 70 per cent was in the nature of unilateral transfers. Of this amount again, about 1.5 per cent came from the World Jewry, located in U.S.A.; about 41.3 per cent from the German Government; and 7.4 per cent from the U.S. Government.

The long-term capital transfers were borne by the World Jewry and the U.S. Government in the shares of about 69 and 21 per cent respectively. But for the import surplus it would not have been possible for Israel to maintain a relatively high standard of living for her population. It enabled her to use more goods and services than she could herself produce. Of course, her gross national product also improved considerably by about 11.4 per cent on an average per year and GNP per capita by 6.3 per cent per year. But behind this progress the contribution of the import surplus was not small. For while the share of consumer goods in the import surplus gradually declined, the percentages being 31.7 in 1949 and 10.1 in 1965, that of raw materials went up from 40.1 per cent to 61.9 during the same period. Import of capital goods varied between 16 and 27 per cent on the whole.

An important bad effect of this has been the extreme dependence of the Israeli economy on foreign sources. For this reason it is said with a good deal of justification that Israel may have achieved political independence but *economically she is still a dependent country.* The burden of interest payment is appreciable. It was something like $30 million or about 10 per cent of the import surplus in 1958.

Frequent Devaluations and Multiple Exchange Rates

Another peculiarity of the Israeli economy was the frequency of currency devaluation and the multiplicity of exchange rates introduced on the occasion. Normally when domestic prices rise relative to prices abroad, the domestic currency is devalued in terms of foreign currencies so that exports are encouraged and imports discouraged. Israel resorted to devaluation as a regular policy but the rates which prevailed in consequence thereof were many and varied. Devaluations were carried on as many as half a dozen times between 1949 and 1971. Of these, the one in 1949 was genuine, in response to lead given by Britain. In September of that year the IL was devalued to the rate of 0.357 per dollar. But with rise in domestic prices this devalued rate soon proved to be unrealistically high. To encourage the import of capital which would otherwise be deterred by this unfavourable rate, the Government initiated the novel scheme of 'import without payment'. Thus began the long history of a policy of permission being officially granted to the importers to transfer their capital and thereby in fact to circumvent the official exchange rate.[23] The scheme was so called because licences were granted for certain types of commodities without any allocation of foreign exchange. The objects were: (1) to conserve officially held foreign exchange, (2) to give foreign investors or Israelis holding funds abroad the benefit of a higher exchange rate through the import of scarce goods and (3) to allow some imports of luxury goods at higher foreign exchange. This scheme was at its peak in 1949 and 1950. In the former year it accounted for about a quarter of all imports. However, it gradually declined in importance over the years.

The exchange rates in vogue were not one but many. For instance an Israelite holding dollars in U.S.A. in December, 1951 and wanting to have some of them con-

[23] Alex Rubner, *op. cit.*, p. 20

verted into Israeli pounds could follow one or other of these devices. (1) He could convert them straightway at the official rate of IL 0.357 to the dollar. That is, if he wanted IL 500, he had to surrender $1400. (2) He could transfer dollars through one of the smaller banking institutions which specialised in such deals. This would be the 'formal' rate. (3) He could purchase an article in U.S.A. which had great demand in Israel, but for which import licenses were not ordinarily granted. The price in U.S.A. might be $700 but in Israel it could be sold for IL 600. This was the 'black market' rate. (4) He could just negotiate with an impoter in Israel and see what rate he actually offered while paying him in IL for the dollars made available to pay for his imports. This was the 'effective' rate. (5) There could also be the 'equilibrium' rate at which demand and supply would be effected on the basis of competition. The multiple rates in a sense helped the process of discrimination between goods.

The official devaluations were in the nature of *ex post facto* recognition of what had already happened. They lagged behind the depreciation of the IL as measured by the internal price-level or the average rate. Thus each of the second, third and fourth devaluations of February 1952, January, 1954 and of 1956 was a long-drawn-out process and not an outright statutory measure. As the domestic price-level increased, traders abroad exerted pressure on the administration to grant special terms for exchanging foreign currency into IL. This was not resisted for long. Instead before change of the official rate the exporters abroad were given some concession. What induced the Israeli Government to give a *de jure* recognition to a *de facto* devaluation after the lapse of several months was the belief that by gradually working up to it, the blow of the devaluation could be cushioned and a sudden jump of the price-level, avoided.

While official devaluations took place occasionally, there were devaluations of a continuous nature through taxes and subsidies. Thus certain export items like tourism, shipping and aviation received premia on foreign exchange

earnings. The *pamaz* scheme of export subsidies was introduced in 1953 whereby exporters were allowed to enjoy the 'quota' profit on a variety of imports. The quota meant that the quantity imported was less than the demand at the effective rate of exchange paid by importers. Exporters were allowed to retain the proceeds of their exports in foreign currency bank accounts. The value of the direct import component was to be used to import the raw materials required to maintain the output of export goods. With the foreign currency value added the producer could import raw materials in his general line of production and could either use them to expand export or sell them in the local market. Taxes were imposed on certain imports with a view to discouraging them.

In favour of devaluation or the series of devaluations that took place in Israel, it may be said[24] that (1) the dimensions of the import and export volumes were unaffected by changes in the 'official' and 'average' rates; (2) the replacement ratio (between Israeli and foreign goods) was shifted to a more favourable position for Israeli products; and (3) the Polak-Chang formula[25] (which measured the efficiency of a devaluation by comparing the subsequent rise in the domestic price level with the rate by which the currency was depreciated) showed the first three devaluations to have been 58 per cent successful (the average rate of exchange rose by 400 per cent while the domestic cost of living index increased by 169 per cent). In particular, the salutary effects were reflected in an increased real value of Israel's domestic product and in a qualitatively improved composition of her imports. With each devaluation the composition of imports changed and changed for the better. For a higher proportion consisted of those goods which Israel was capable of manufacturing but only at a relatively high domestic cost of production. A lower proportion of those goods was imported which could be pro-

[24] See Alex Rubner, *op. cit.*, pp. 21-23

[25] See J. J. Polak and T. C. Chang, *Effects of Exchange Depreciation on a Country's Export Price Level*, Staff Papers, International Monetary Fund, Washington, February, 1950

duced at a lower cost domestically. As a result of transfer of production from high-cost to low-cost items, there was an increase in the real value of domestic product, that is, its value as judged in relation to a stable currency like the dollar. Another benefit was the fullest utilisation of idle resources, particularly machinery. With each step of devaluation a further stimulus was given to a more intense and rational employment of the given resources. It may be added[26] that in normal economies devaluations of such proportions would have severely curtailed the import volume and/or (at least in the short run) have lowered the standard of living of the country which devalued its currency so radically. In Israel the devaluations neither reduced the import volume nor caused the standards of living to fall but produced beneficial effect on both by raising the prices of foreign goods relative to local products.

There were however some *weaknesses of the devaluations.* (1) The most important of them was that they increased Israel's economic dependence. The Israeli currency was abdicated as a standard of measurement in favour of the dollar. Whether the economic performance of a domestic process of production or a planned export consignment was good or bad came to be judged in relation to the dollar and not the IL. (2) There was a kind of vicious circle. The inflationary (instead of deflationary) effects produced on the domestic price-level frustrated the very purpose of devaluation. One devaluation led to another. The race seems to be going on still. 'The policy, not of once-for-all, but continuous depreciation', pointed out Don Patinkin, 'led to the continuous expansion of bank credit and thereby the money supply which during certain periods represented the motive force of a demand inflation and during others represented the accommodation of the authorities to a cost inflation'.[27] Some members of the Economic Advisory Staff pointed out that in the absence of internal stability the

[26] See Alex Rubner, *op. cit.*, p. 51

[27] *The Israeli Economy The First Decade*, The Falk Project for Economic Research in Israel, Jerusalem, 1960, pp. 124-5

so-called improvement in trade balance through devaluation was quickly dissipated by price rises. S. S. Alexander and R. F. Mikesell referred to the growing disparity between imports and exports and the value-pegging epidemics. According to Abba P. Lerner, 'every devaluation of the IL by forcing up the domestic price-level automatically drives up nominal wage rates by a corresponding amount by C.O.L. (cost of living) allowance and therefore brings us back, by and large, to the former distorted relationship just at a higher turn of the spiral'.[28] Even the Polak-Chang formula showed only 58 per cent success, which means that the devaluations failed to the extent of 42 per cent —not a negligible proportion. Probably the recognition of failure was having its influence on Government policy. For although the internal price-level has risen in recent years, a feeling of reluctance has grown to adjust the foreign exchange price for fear of further inflation. (3) The multiplicity of exchange rates became a source of profit to speculators and illicit traders and gave rise to a flourishing black or 'grey' market, as it was called in foreign exchange. It conferred a tremendous discretionary power on the officials and led to personal and political favouritism and corrupt practices.

Linking of Wages to Cost of Living

Another peculiar feature of the Israeli economy is the linking of wages to cost of living index. Such linking is now-a-days common to industrially advanced countries but probably nowhere it is so universal and effective as in Israel. This is because of the fact that she has got a well-established, highly strong central trade union organisation which has also got affinity to the leading political party of the country—the *Histadrut* founded in 1920 as a socialist-led trade union. As Akzin and Dror put it, 'it is

[28] *Economics of Control*, The Macmillan and Coy, New York, 1946

a unique Israeli institution pre-eminently important in Israeli public life. It has a dual structure being a (central) trade union organising the large majority of workers (about 76 per cent in 1965) and comprising a majority of the population at large (about 58 per cent in 1965) as well as a center of economic, social and general political activity'.[29] It runs industries, too. In 1970 it had participating interest in 70 per cent of Israel's agriculture and 23 per cent of her industries (share of output). Income generated in enterprises and activities organised within the framework of the Histadrut amounted to about 29 per cent of the national income in 1956. In recent years it might have reached 40 per cent. Both labour and industry are badly dependent on it. Between 1954 and 1958 when there was a serious economic crisis, many firms approached the Histadrut for being bought out. It is also compulsory for a worker looking for a job to be its member. Simply, the stoppage of medical and other services provided by its remarkable agency Kupath Holim forced many reluctant workers to come back to its fold. The Histadrut has therefore been rightly described as a kind of 'State within State'.

The C.O.L. allowance has been a great inflationary factor in the Israeli economy. A. P. Lerner described it as an institutional device, which was expressly designed to perpetuate for 'ever the fundamental distortion in the Israeli economy'. It is an obstacle, remarked Halevi and Klinov-Malul, to anti-inflationary fiscal policy and successful devaluation. According to Alex Rubner, in more than one sense the C.O.L. index has become the 'golden calf of the economy'. Its movement is a headline news in the Holy Land. Almost invariably the increase in wages has been greater than the upward movement in prices. This is evident from the table below.

[29] *Op. cit.*, pp. 22-23

TABLE 68

WAGES AND PRICES
(Per cent change over preceding year)

	Nominal income per employed person	Consumer price index	Wages per employee	
			nominal	real
1956	14.2	6.5	11.0	4.2
1957	9.8	6.4	8.5	2.0
1958	12.6	3.4	11.4	7.7
1959	9.4	1.4	7.2	5.7
1960	7.3	2.3	6.3	3.9
1961	12.5	6.7	11.0	4.0
1962	11.6	9.5	13.0	3.2
1963	19.1	6.6	12.0	5.1
1964	11.3	5.2	12.0	6.5
1965	15.1	7.7	16.6	8.3

Sources: (1) *Statistical Abstract of Israel*. 1966
(2) Bank of Israel, *Annual Reports*

WIDESPREAD BLACK MARKETS

Inflation in Israel was so high and widespread that black markets flourished in different spheres. They were nurtured particularly during the early years of austerity, 1949-52 when physical controls were imposed in the shape of maximum selling prices, rationing of essential supplies and licensing of the allocation of materials. By 1952 it had reached such dimensions that 'it could no longer be dismissed as a marginal phenomenon, it had become so powerful and widespread to break down the dams erected to protect the price and physical controls'.[30] A report published by the Ministry of Finance in 1950 showed that the population was consuming 26 per cent more than the rations, paying for the excess 129 per cent more than the official prices. A group of American consultants reported in 1955 that 90 per cent of the meat consumed moved through the black market. Similarly about 90 per cent of the chocolate consumed was said to have originated in the black market. It was revealed in Israel's parliament that when the

[30] Alex Rubner, *op. cit.*, p. 60

maximum of controlled price per hay was IL 45 per ton, trading had been going on at IL 70 per ton. Even the Mayor of Tel-Aviv admitted before the City Council in 1951 that "the Municipality buys essential materials on the black market for the maintenance of its waterworks, hospitals and schools, necessary instructions to that effect have been given to the heads of the departments".

There prevailed black markets in credit, too, arising out of (*a*) the illegal activities of the banks, (*b*) the operations of the 'second' money market and loans of real resources at disguised interest rates. According to the report of a committee appointed by the Israeli Chamber of Commerce in 1954, while its members got barely 50 per unit of the credit at 9 per cent, some 15 to 35 per cent was provided by the banks at 22 per cent and the balance comprised loans at 24 to 26 per cent from the 'second' money market. The so-called second or Iraquian cash market had loanable funds of the order of IL 25 to 40 millions in 1955-56. Black markets in foreign exchange were also a regular feature.

The black market in credit was one of the reasons why banks could not exert any influence on the monetary system. Rather there was a flight from the banking system. The Bank of Israel made very little use of the two traditional devices viz. manipulation of interest rates and open-market operations. Thus between 1949 and 1957 bank notes and coins with the public rose by 437 per cent while demand deposits lagged behind with a growth rate of 356 per cent. For every IL 100 of total available resources bank credit available in 1949 was IL 16 but in 1957 it dropped to IL 8.

BALANCE-SHEET

The results of high and persistent inflation have been of a mixed type, some good and some bad. (1) Thus mainly through the inflationary process coupled with a growing import surplus, a poverty-ridden land of sand and rock could be transformed into an industrial, technology-oriented

country. (2) Resettlement of about a million refugees and substantial reduction of unemployment are two solid achievements. (3) The gross national product expanded by about 11 to 12 per cent annually. Between 1950 and 1970 agricultural production rose by more than 650 per cent and per capita product trebled. The irrigated area increased nearly five-fold. The number of tractors rose six times. The yield of wheat increased from about 300 kgs per acre in the 1940's to 740 kgs in 1969. In 1950 domestic agriculture was meeting up to about 50 per cent of the requirements of approximately one million people. In 1970 it could meet over 85 per cent of the needs of 3 million consumers and at a much higher level of nutrition. Agricultural exports stepped up from $ 6.5 million in 1949 to $ 140 in 1970. Researches conducted by the U.S. Department of Agriculture on Changes in Agriculture in 26 developing countries during 1948-63 revealed that Israel was the first among nineteen of them in the value of agricultural output per worker. (4) Prices might have risen but since incomes also rose and in some cases more than prices, the net result was rise in the standard of living which was a positive gain.

Some very important aims were achieved, pointed out Halevi and Klinov-Malul, new immigrants were provided with necessities, the share of investment in resources was high, unemployment declined and real product increased, rapidly.[31] "The main feature of the Israeli economicy", wrote Akzin and Dror, "is its rapid development helped by a large import of capital. The rapid development is reflected by nearly all criteria, including among others, employed manpower and domestic product per capita. This can also be seen by the growth in real product". Some have even argued that in the context of scarcity of raw materials and fuels and sense of insecurity Israel released into 20 years a development that might have taken half a century.

But there are *gloomy trends* in the economy, too. Apart from persistently rising prices which have made it highly

[31] *Op. cit.*, p. 259.

unstable and also shaken faith in the domestic currency, the growing import surplus constitutes one of the weakest features. It has struck at the root of Israel's economic independence. If the adjustments through manipulation of exchange rates are ruled out, it is doubtful if productivity, particularly of industries, has actually risen over the years. According to Halevi and Klinov-Malul, "on the debit side there are two issues: first, the difficulties that will confront the economy when it has to adjust to a smaller import surplus and greater saving, and second, the loss in output mainly in investment and foreign trade, the result of unrealistic and widely diverging prices for credit and foreign exchange".[32]

MEXICO

An Exceptional Case of Steady Growth with Low Inflation

Natural Drawback

There are one or two factors in Mexico's geography which appear like constraints on her economic development. (1) In population, her position is second in the Latin American continent. It is slightly more than half the population of Brazil but more than double that of Argentina. But her area is one-fourth of Brazil's and three-fourths of Argentina's. In other words, Mexico has to support a larger population relative to area than either of these two countries. (2) Half of Mexico is situated at more than 3,000 ft. above sea level; two-thirds consist of steep slopes. Only one-third of the total area comprises plain land; even so, it is predominated by intermont basin. As a result, nearly half the population of Mexico is concen-

[32] *Op. cit.*, p. 282

trated in the Central Region where the average density is about 16 persons per sq. km. As Frank Tannenbaum observed, "Mexico is a beautiful place in which to live, but a tough place in which to make a living".[33]

Legal and Institutional Infrastructure

On the other hand, there were some events and developments in Mexico's history which had been conducive to economic progress. (1) She had a revolution in 1910 which was earlier than the Russian Revolution of 1917. This paved the ground for many changes of a far-reaching character —agrarian reform, recognition of workers' rights, creation and extension of the public sector, centralisation and expansion of the administrative machinery, the rise of economic nationalism and so on. Thus Mexico had her 'institutional take-off' long ago. 'Structural' rigidities which are regarded as impediments to progress had been breaking since 1910 almost by leaps and bounds. As one author put it, "Modern Mexico dates from 1910, but for fifty years the nation has been in a state of revolution . . . . its evolution is not yet complete . . . . the unfolding process, the Institutional Revolution".[34]

(2) The new Constitution promulgated in 1917 established the rights of the nation over the ownership of the soil. A new system *ejido* was introduced under which the land was vested in a village. The village in turn granted the ownership of a plot to each villager. But it could neither be sold nor mortgaged. In case he ceased to cultivate it, it would go back to the village. At the time of the Revolution, there prevailed the *hacienda* or large landholdings; about 96 per cent of the population was landless. Article 27 of the Constitution resulted in breaking them up into small individual holdings. Distribution of land became the continuous obligation of every President. The

[33] *Mexico: The Struggle for Peace and Bread*, Alfred A. Knopf, New York, 1950

[34] Howard F. Cline, *Mexico: Revolution to Evolution, 1940-1960*, Oxford University Press, 1963, p. 24

first President (Carranze) distributed about 2 lakh hectares during 1915-20; followed by 1.5 million hectares during 1920-24 under Obregon and over 3 million hectares during 1924-28 under Calles. The climax came during 1934-40 under Lazaro Cardenas when some 3 million hectares were reclassified as *ejidos*. In 1960, there were over 1.5 million small holders and their holdings represented about 56 per cent of the total holdings in the country and 43 per cent of all arable land.

(3) Article 123 of the Constitution recognised the rights of the workers even before there had grown up a strong working-class movement. It took some time for such a movement to take shape. By 1924, there was one big trade union with a million affiliated members. A Workers' Confederation was formed in 1936 of which the leader Toledano was a Marxist. It was Cardenas again who established labour in a strategic bargaining position and rekindled the sparks of hope of *los de abajo*—the underdogs.

(4) Although a central bank had been set up as early as 1896 in Uruguay, the first central bank in Latin America, which exercised control over the monetary system, was the Bank of Mexico founded in 1925. It was also the one free from external influences unlike other central banks established in the late twenties, of which the charters bore the imprint of the Federal Reserve System of U.S.A. It may be noted that central banks came into being much later in other developing countries—in India in 1934, Thailand in 1942, the Philippines in 1949, Ceylon in 1950 and Israel in 1954.

Apart from the issue of notes, the Bank of Mexico came to promote and help new financial institutions and exercise control over the banking and monetary system. A general law was passed in May, 1941, to regulate the latter's commercial operation as well as capital investments. By 1944 there were some 136 credit and auxiliary institutions under the control of the Bank. It included the Nacional Financiera, S.A. (The National Financial Society) established by decree in 1933 to provide investment capital,

to advise the Government in financial matters and to supervise long-term credit markets. During 1941-46 the Society extended credit worth over 400 million pesos to different private entrepreneurs for industrial development.

(5) An industrial dispute between the owners of oil companies and their workers led to the expropriation of the industry in March, 1938. A law was promulgated in early forties, according to which 51 per cent of the shareholding in certain key industries was to be in the hands of Mexican citizens. However, it was not strictly enforced.

(6) In December, 1939, the Government granted a five-year exemption limit from several taxes to new industries. The Law of Manufacturing Industries enacted in April, 1941, extended the range of benefits to private industry. By August, 1944, over 285 enterprises had come up in a number of fields. Another law was passed in December, 1945, under which new and necessary industries could under certain conditions earn exemption from or reduction of, import duties and other taxes.

(7) While in the two decades between 1920 and 1940 necessary infrastructure was created, industrial expansion received special impetus with the outbreak of World War II. During the War period imports declined and output of domestic industries increased at the rate of 9 to 10 per cent per year on an average. In 1947, industrial investment was almost five times that of 1937 and represented 30 per cent of the total investment in the country.

(8) Mexico took recourse to some sort of macro-economic planning since the mid-thirties. She had her First Six-Year Plan drawn up for 1934-40 and the Second for the period 1941-46. Under these Plans the State assumed decisive authority in directing the national economy. As many as 16 different Government agencies were responsible for preparation of the Plans. Mexico also built up before the last War a strong cadre of economists, engineers and agricultural experts who could apply sophisticated techniques of economic development.

(9) In 1944, the Mexican Government and the Rockefeller Foundation initiated a joint reserch project, the

main object of which was to make Mexico self-sufficient in wheat. It resulted in the development of *high-yielding varieties* sometimes in 1948, which not only revolutionised her agriculture but contributed to the Green Revolution in many an underdeveloped country. *Mexican wheat strains have been successfully used in India, Pakistan, Turkey and a few other countries.*

(10) Above all, Mexico had achieved political stability long before other countries in Latin America and maintained it at a stretch. She alone possesses a continuous record of peaceful regime without dictatorial compulsion or military coup.

It may, therefore, be noted that between 1910 and 1945 most of the legal and institutional instruments necessary for economic progress were set up—a strong and stable administration, an efficient central bank, redistribution of land, planning machinery and the nucleus of a public sector.

Growth with Low Inflation

Mexico represents one of the very few exceptional cases in the recent history of developing countries which achieved appreciable economic progress without much inflation or *growth without tears.* Her more or less steady growth in the post-war period will be evident from the following tables.

Table 69

INDEX OF GROWTH OF GROSS DOMESTIC PRODUCT

(Base 1950=100)

1951	..	107.7	1960	..	181.0
1952	..	111.9	1961	..	187.4
1953	..	112.1	1962	..	196.6
1954	..	123.9	1963	..	209.1
1955	..	134.7	1964	..	230.4
1957	..	154.5	1965	..	242.6
1956	..	143.6	1966	..	260.8
1958	..	163.0	1967	..	277.8
1959	..	167.7	1968	..	297.4

ources: (1) OECD, *National Accounts of Less Developed Countries,* 1950-66, Paris, July, 1968

(2) *Gross National Product, Growth Rates & Trend Data*, RC-W-138, AIR, Washington, April, 1969
(3) Angus Maddison, *op. cit.*, 1970, pp. 300-01

TABLE 70

INDEX OF AGRICULTURAL PRODUCTION

(Base 1963=100)

(Base 1934-38 =100)		(Base 1952-53 to 1956-57=100)			Food	All primary commodities
1950-51	160	1956-57	113	1967	121	117
1952-53	166	1958-59	138	1969	128	120
1954-55	194	1960-61	137	1971	136	127

Source: United Nations, *Statistical Year Books*

TABLE 71

INDEX OF INDUSTRIAL PRODUCTION
(Base 1963=100)

	1948	1953	1958	1965	1970
General	38	49	71	124	186
Mining	60	77	87	102	126
Manufacturing	36	42	70	126	189

Source: United Nations, *Statistical Year Book*, 1972

TABLE 72

A FEW IMPORTANT ECONOMIC INDICATORS

Growth of:	Period	Per cent per year
Gross Agricultural Output (Physical Volume)	1949-50 to 1964-66	5.6
Physical Output per Farm Worker ..	„ „	3.3
Food Output per Capita of Population	„ „	2.3
Industrial Output	1950-65	6.7
Employment in Agriculture ..	„ „	2.2
Employment in Industry ..	„ „	4.9
Employment in Services ..	„ „	4.0

Source: Angus Maddison, *op. cit.*, pp. 121, 123, 130, 162, 163

TABLE 73

GROWTH OF IMPORTANT SECTORS, 1960-69[35]

Average Annual Rate Per cent

Agriculture	..	3.4	Construction	..	8.7
Forestry	..	2.2	Electricity	..	14.1
Mining	..	2.3	Transport &		
Manufacturing	..	8.9	Communication	..	6.5
Petroleum	..	9.4	Commerce	..	9.0

Gross Domestic Product .. 7.1 per cent

Source: Banco de Mexico, *Informe anual*, 1969

Of great significance is the fact that by 1965 Mexico had virtually achieved self-sufficiency in foodgrains, imports being less than 2 per cent. She also became an important exporter of agricultural products, particularly corn and wheat. In the industrial field, the production of petroleum nearly doubled between 1950 and 1970 and manganese increased nearly seven times. There has also taken place great diversification of industrial products 'from steel pipe via refrigerators to washing machines'.

All this has been achieved with only a moderate rate of inflation. This will be clear from the following table:—

TABLE 74

CONSUMER PRICE INDEX

Year		Index (1958=100)	Year		Index (1963=100)
1954	..	70	1962	..	99
1955	..	81	1964	..	102
1956	..	85	1965	..	106
1957	..	90	1966	..	110
1959	..	102	1967	..	114
1960	..	108	1968	..	116
1961	..	109	1969	..	120
			1971	..	130

Source: International Monetary Fund, *International Financial Statistics*.

[35] Banco Nacional De Comercio Exterior, *MEXICO: The New Government's Economic Policy*, Mexico City, 1971, pp. 194-5

The inflation in Mexico compares very favourably with that of most other developing countries, as shown below:

TABLE 75

INFLATION IN SOME DEVELOPING COUNTRIES

	Annual rate of increase (average) of consumer prices	
	1950-65 (1)	1966-73 (2)
Argentina ..	25.0	5.2
Brazil ..	31.0	18.0
Chile ..	33.0	49.6
India ..	2.3	5.9
Israel ..	11.3	—
Mexico ..	*6.2*	*4.5*
South Korea ..	19.8*	8.9

* beginning in 1953

Sources: (1) Angus Maddison, *op. cit.*, p. 93

(2) International Monetary Fund, *International Financial Statistics*, June, 1974

FACTORS BEHIND DEVELOPMENT

There were a number of important factors which contributed to this miraculous achievement in Mexico such as a policy of financial caution, a developed system of banking and credit institutions. One scholar summed up the situation thus:

> "There has been close co-ordination of public, private and foreign investment, reasonable equilibrium and external balance; as a result, there have been thirty years of very substantial economic growth".[36]

[36] R. J. Shafer, *Mexico: Mutual Adjustment Planning*, Syracuse University Press, 1966

(1) Mexico had kept her money supply within limits as far as practicable. This is shown below:

TABLE 76

MONEY SUPPLY
(billion pesos)

Year	Amount	Year	Amount	Year	Amount
1954	9.0	1960	17.4	1966	33.9
1955	10.8	1961	18.5	1967	37.0
1956	12.0	1962	20.9	1968	42.3
1957	12.8	1963	24.3	1969	48.6
1958	13.7	1964	28.6	1970	—
1959	15.9	1965	30.2	1971	57.9

Source: United Nations, *Statistical Year Books*

True, money supply increased but the rate of increase was moderate enough. Some inflation was necessary, too, to generate savings. As Alfredo Navarrete put it, "The policy of forced savings through inflation should not be condemned as 'inappropriate' or 'inefficient' during the first stage of development of a backward economy. At the outset of its economic development Mexico could not easily have resorted to a modern system of voluntary savings or an efficient tax system. For the same reason, inflation cannot now be considered as the best method of promoting Mexico's economic development. National savings are being generated in satisfactory amounts and can be collected by existing mechanism that should be improved (taxes, securities market and the profits of State enterprises)".[37]

(2) Gross investment increased almost steadily over the years as follows:[38]

[37] See "The Financing of Economic Development" in E. Perez Lopez, et al., *Mexico's Recent Economic Growth*, University of Texas Press, 1967, p. 129

[38] Angus Maddison, *op. cit.*, p. 307

TABLE 77

Year	Gross fixed investment as % of GDP	Year	Gross fixed investment as % of GDP
1950 ..	11.7	1959 ..	14.2
1951 ..	13.0	1960 ..	14.9
1952 ..	13.8	1961 ..	14.5
1953 ..	13.8	1962 ..	13.8
1954 ..	14.0	1963 ..	14.4
1955 ..	14.3	1964 ..	16.1
1956 ..	16.7	1965 ..	15.7
1957 ..	16.5	1966 ..	16.5
1958 ..	14.7		

In recent years, it is estimated that the proportion has gone up to nearly 20 per cent.

A striking feature of Mexico's financial development is the big push in investment given by the Bank of Mexico and Nacional Financiera, both of which were under Government control. Both of them directly participated in over-all financing of industrial expansion. By 1958, the Nacional Financiera had channelised into different enterprises about 9,000 million pesos. They came from its own funds, foreign loans and other institutions. In 1961, the Nacional Financiera itself had financial interests of some sort or other in over 500 business enterprises. The private sector also came forward to supplement the resources of the Government in a big way.

The relative contributions of the two sectors to total investment is shown below:—

TABLE 78

	Private Investment		Public Investment	
	Amount (billion pesos)	% of total	Amount (billion pesos)	% of total
1960	8.9	32.0	18.9	68.0
1965	13.6	29.8	32.1	70.2
1966	14.3	27.7	38.2	72.8
1967	19.0	31.7	41.0	68.3
1968	21.2	31.6	45.8	68.4
1969	23.8	31.6	51.5	68.4

Source: Banco National De Commercio Exterior, S.A., *op. cit.*, p. 200

(3) The public sector also played an important role in industrial development. It acquired large enterprises, particularly railways, petroleum and electric power and invested substantial resources in social overheads like irrigation, road construction. By 1962, undertakings in the public sector included the only railroad car manufacturing plant; the second largest automobile and truck assembly plant; two of the largest textile mills; only newsprint mill; a large sugar mill; the largest electrical products manufacturing concern; a meat packing plant; a ship-building concern; and a warehouse business.[39]

(4) Another important factor is the encouragement given to foreign investment. In the 1960's the Nacional Financiera itself took the initiative in seeking foreign partners for Mexican enterprise. In 1961, it had even constructed a model which envisaged that if borrowings abroad were permitted to increase between 1960 and 1970 just moderately, that is, from $172 million to $245 million, Mexico's growth rate could be accelerated from 5.5 to 8 per cent.

Foreign private capital had been flowing to an increasing extent. Thus between 1960 and 1968 the book value of direct U.S. investments in Mexico which represented about four-fifths of the total foreign investment went up from 795 billion to 1,7720 billion dollars with an annual growth rate of 10.1 per cent.[40] It is estimated that about 10 per cent of the national debt which stood at 42,732 million pesos on December 31, 1967, was external. Mining is Mexico's principal industry, but practically 97 per cent of 31,000 mining properties is foreign-owned. Of the annual output of minerals, less than 10 per cent is Mexican.[41]

(5) Foreign investment was greatly helped by stability of exchange rates. Mexico devalued her currency in April, 1954 from 8.65 to 12.50 to the U.S. dollar and kept is stable

[39] See Frank Brandenburg, "A Contribution to the Theory of Entrepreneurship and Economic Development, The Case of Mexico," *Inter-American Economic Affairs*, Vol. 16, No. 3, Winter, 1962

[40] See *Commercio Exterior*, xx(10), October, 1970, p. 818

[41] See *The Statesman's Year Book, 1973-74*

for well over a decade. This fact was given recognition in 1965 by the International Monetary Fund through listing of Mexican 'peso' as a hard currency.

Some Snags in Growth

There are, however, a few snags in the economic growth of Mexico. (1) The economy has become greatly dependent on foreign resources. As the Finance and Public Credit Minister himself pointed out, 'we must recognise that the external and domestic indebtedness which has been brought about by the lack of attraction of the public savings could produce grave consequences; by following the road to indebtedness we will have arrived at *insolvency* and may be to the deterioration of social harmony.'[42] The burden of amortisation has been heavy and increasing. It increased at the rate of 17 per cent per year between 1960 and 1965 and 8 per cent between 1965 and 1969. In 1969, its amount was 6,440 million pesos which was more than the surplus of the Federal Government, estimated at 5,845 million pesos.

(2) There were great regional imbalances. The Federal District, the State of Mexico and the States of the northern border are comparatively more advanced. The people there comprising about 30 per cent of the total population enjoy a standard of living 60 to 70 per cent higher than the national average. On the other hand, the southern, central and north-central regions account for about 70 per cent of the population whose standard of living is nearly 60 per cent below the said average. Many recent studies have focussed attention on this aspect. According to one of them, "regional differentials in output and productivity are still enormous, particularly in agriculture and manufacturing. The process of development in Mexico must be analysed not as a simple set of relationships between two major production sectors (agriculture and in-

[42] See his Statement on the New Administration's Economic Policy, December 18, 1970

dustry) but as a complex series of internal structural changes within 'each, which in turn affect the other'."[43]

(3) There were great differences in the economic conditions of different farmers which had been accentuated. It was estimated[44] that in 1960 about 50.7 per cent of the farm lands accounted for 13.1 per cent of the agricultural surface and only 4.2 per cent of the total value of agricultural output, whereas some 0.5 per cent of the farmlands comprised 28.5 per cent of the surface and contributed 32.3 per cent of the total product. Between 1950 and 1960 the income of the former group of farmlands belonging to 1.25 million families suffered a decline of 7.9 per cent while that of the latter group belonging to 12,000 families increased by 98.6 per cent.

More than half of the farmlands do not have any irrigation facilities. More than two-thirds of the irrigated surface are occupied by 79,000 farm lands, comprising about 3.2 per cent of the total which make up a privileged group in Mexican agriculture. As the Inter-American Development Bank observed, 'at the end of 1960's agriculture remained divided into two groups—*a commercial sector* comprising less than 15 per cent of the farmers of Mexico but producing over 75 per cent of the crop sales of the country; and *a large body of small farmers,* a significant proportion of whom was not even integrated in the domestic market economy'.[45]

(4) Similarly, as revealed in a recent study by Carlos Tello,[46] industrial development reflects 'a situation in which the possession of the means of production and the production are more and more concentrated in a reduced number of establishments. About 1.5 per cent of the industrial establishments in Mexico in 1965 possessed more than 27.2 per cent of the capital invested in industry and contributed to 75 per cent of the value of production. Likewise less

[43] Clark W. Reynolds, *The Mexican Economy: Twentieth Century Structure and Growth,* Yale University Press, New Haven, 1970, p. 6

[44] Banco Nacional De Comercio Exterior, S.A., *op. cit.,* pp. 40-41

[45] 8th Annual Report, 1968

[46] Article in *El Trimestre Economico,* April-June, 1971

than 0.3 per cent of the establishments held more than 45 per cent of the invested capital and also contributed more than 46 per cent of the production value. The situation in 1960 is not very different from that observed in 1965. In 1950, the situation is similar although the degree of concentration is less.'

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CHAPTER VII

Inflation in India

We are living in an inflationary economy since 1942-43; the degree and extent of inflation has varied from time to time; it has been suppressed on occasions partly by good monsoon seasons and partly by PL 480 supplies of foodgrains; it has been more manifest on other occasons; in recent years it has assumed menacing proportions.

C. N. Vakil

AFTER INDEPENDENCE

There are two things of great significance to the birth of Free India—the World War of 1939-45 and partition of the country. She became independent a little more than two years after the cessation of hostilities in May, 1945. This event should have in the normal course exerted a deflationary effect on the Indian economy through such circumstances as stoppage of war orders, decline in demand, shrinkage in employment, overvaluation of the rupee. But none of these materialised. Instead, long pent-up wants of the people came into play. The foreign demand for Indian raw materials also remained buoyant. On the other hand, a few other post-war developments had positive inflationary impact such as decontrol of prices, cheap money policy followed by the Government, increase in budget deficits and fall in production. The Government of India following the recommendation of the Foodgrains Policy Committee suspended rationing and announced a policy of decontrol in December, 1947. Foodgrains were gradually decontrolled. Cotton yarn and cloth were decontrolled in January, 1948. Further, the controlled prices of steel, cement and coal were revised in an upward direction. During the period of decontrol that is, from November, 1947 to July, 1948, the general index of prices rose

from 302 to 390 (base year ended August 1939=100); cereals prices rose by 49 percent; oil cakes, by 99 per cent; textiles, by 43 per cent; and cotton yarn, by 99 per cent.

During the two years 1945-46 and 1946-47 the Government floated loans on favourable terms by either reducing the rate of interest or extending their maturity. The Central Government incurred continuous deficits in its capital account estimated at Rs. 133, 167, 80 and 62 crores respectively for the periods August 1947 to March 31, 1948, 1948-49, 1949-51 and 1950-51 respectively. The production of essential commodities declined as follows:—

TABLE 79

PRODUCTION OF ESSENTIAL COMMODITIES

	1945	1948
Foodgrains (100 tons)	46,093	44,393
Finished Steel (100 tons)	954	854
Cotton piecegoods (million yds)	4,711	4,319
Jute manufactures (000 tons)	1,086	1,081
Cement (000 tons)	2,209	1,553

Source: Reserve Bank of India, *Report on Currency and Finance, 1949-50*

Partition of the country in 1947 made India deficient in important raw materials like jute and cotton and other agricultural products, particularly foodstuffs. The percentage shares of population and resources stood as follows[1]:—

TABLE 80

	(Per Cent)	
	India	Pakistan
Population	82	18
Production of principal foodgrains	75	25
Production of cotton	60	40
Production of raw jute	19	81

Devaluation of the rupee on September 20, 1949 from 30.225 to 21 cents in terms of U.S. currency also contributed to the rise in prices. Although it was 'a defensive

[1] See Government of India, Directorate of Economics and Statistics, *Indian Agriculture in Brief, 1958*

measure' consequent to the devaluation of the £ by the U.K., since India's trade with the sterling area countries was important, the indirect effect was an upward pressure on domestic prices. For she had to pay more for imports of food and other materials, particularly machinery, from hard currency areas and also for raw jute from Pakistan which did not devalue her currency. Thus the all commodities index number of wholesale prices rose from 389.0 in August, 1949 to 405.2 in July, 1950; and the raw materials index from 460.5 to 505.9.

The Korean war which started in June, 1950 was another event, probably the last lap in the upward movement of prices. It led to increased activity in many countries, beginning with U.S.A. and including India. The effect of foreign demand on the latter's industrial raw materials was so great that the index number of prices in this group shot up by nearly 40 points between June, 1950 and April, 1951. The general index, which stood at 410.9 in November, 1950 also reached the peak level of 457.5 in April, 1951. Still another contributory factor was the removal of price control on raw jute and jute manufactures by the Government of India in March, 1951 as a sequel to a trade agreement with Pakistan.

Since Independence and up to the commencement of planned economy prices showed the following trends:—

TABLE 81

ANNUAL AVERAGE INDEX NUMBER OF WHOLESALE PRICES

(Base year ended August, 1939=100)

	1947-48	1948-49	1949-50	1950-51	(Per cent) Rise in 1950-51 over 1947-48
Food articles	306.1	382.9	391.3	416.4	26.4
Industrial raw materials	377.5	444.8	471,7	523.1	27.8
Manufactures	286.4	346.1	347.2	354.2	19.1
All commodities	308.2	376.2	385.4	409.7	24.8

It has been said that inflation which was suppressed between 1943 and 1947 came into the open soon after Independence.[2] According to D. Bright Singh[3] the post-war price rise was not only greater but the range of fluctuations was also wider. Between August, 1945 and April, 1951 the general index of wholesale prices gained 213.4 points against 144.1 points in the entire war period. The highest range of fluctuation in any twelve-month period during the war was 81.8 points from July, 1942 to June, 1943, but between August, 1947 and July, 1948 the rise was as high as 88.2 points.

FIRST FIVE-YEAR PLAN

During the period of the First Five-Year Plan the price-level moved as follows:—

TABLE 82

INDEX NUMBER OF WHOLESALE PRICES
(Base year ended August, 1939=100)

	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	Change in 1955-56 over 1950-51
							(per cent)
Food articles	416.4	398.6	357.8	384.4	339.8	313.2	—24.8
Industrial raw materials	323.1	391.9	436.9	467.7	436.2	419.7	+19.6
Manufactures	354.2	401.5	371.2	367.4	377.4	372.9	+ 5.0
All commodities	409.7	434.6	380.6	397.5	377.5	360.3	—12.0

Source: Reserve Bank of India, *Reports on Currency and Finance*

[2] See N. V. Sovani, *Post-war Inflation in India—a Survey*, Gokhale Institute of Politics and Economics Publication No. 21, 1949, Foreword by D. R. Gadgil, p. x

[3] *Inflationary Price Trends in India since 1939*, Asia Publishing House, Bombay, 1961, p. 46

It may be seen from the above that on the whole prices exhibited *a declining trend* during the First Plan period with minor exceptions, viz., (a) prices of manufactured products rose slightly in 1954-55 and over the period as a whole and (b) those of food articles and industrial raw materials went up to a small extent in 1953-54, compared to 1952-53—to be exact, by 6.9 and 6.6 per cent respectively.

A closer scrutiny of the indices shows that prices were much high during the early part of 1951-52 but later began to show distinct signs of decline. The declines were not continuous. Rather, the price movements were marked by various phases. Prices started declining after June, 1951. The decline was more precipitous from January, 1952 to March, 1952. The years 1952-53 and 1953-54 indicated a fair measure of price stability. During 1954-55 prices declined continuously and markedly. This downward trend continued right up to June, 1955. Since then there was an upward trend in prices which could not be reversed any time by the end of the Plan period.[4]

It is significant however that on the whole consumer prices underwent decline as follows:—

TABLE 83

ALL INDIA CONSUMER PRICE INDEX FOR INDUSTRIAL WORKERS

(1949=100)

1950-51	101	1953-54	106
1951-52	105	1954-55	99
1952-53	104	1955-56	96

Sources: *Reserve Bank of India Bulletins*

[4] See A. Vasudevan, *Deficit Financing Controls and Movement of Prices in India since 1951*, Allied Publishers Private Ltd., Bombay, 1967, pp. 93-94

This compares very favourably with the following trends in consumer prices in some of the advanced countries:—

TABLE 84

CONSUMER PRICES INDICES

(Bose 1949=100)

	1950	1951	1952	1953	1954	1955	1956
U.K.	103	112	123	127	129	135	141
U.S.A.	101	109	111	112	113	112	114
Canada	103	114	117	116	116	116	118
Australia	110	133	155	162	164	169	179

Source: *Indian Labour Journal* (also see D. Bright Singh, *op. cit.*, p. 242)

It was because of the foregoing trends that one economist remarked: "The year 1951 is important in the history of prices in India at recent times in so far as it witnessed for the first time since 1940 a major reversal of the general uptrend in prices".[5]

As a matter of fact, it would be better to describe the period from June, 1951 onwards as one of the *return of stability* than one of recession. For the price decline appeared to be big in magnitude only in comparison to the boom conditions created by the Korean war. As C. D. Deshmukh rightly pointed out, "while it would be premature to talk of anything in the nature of a recession, it is clear that prices have now reached a more stable level. For the first time in four years the ordinary citizen finds the price level a little less irksome."[6]

It may be recalled that the price index during the second-quarter of 1951 had reached so high a level as 456.9 on an average compared to an average of 425.4 in its first quarter and 393.4 in the second quarter of 1950.

The *factors* responsible for this rise, most of which were connected with the Korean war included (1) con-

[5] D. Bright Singh, *op. cit.*, p. 61

[6] *Economic Developments in India*, 1946-56, Asia Publishing House, Bombay, 1957, pp. 91-92

tinued demand for Indian goods abroad, (2) high level of the prices of raw jute, (3) official upward revisions of the controlled prices of some commodities like raw rubber, cotton piece goods and (4) the restriction on imports (which was relaxed only in March, 1951).[7]

As the rise in prices in the first half of 1951 was due mainly to *external* factors, their decline was also caused to a great extent by developments abroad in the second half of 1952 and the first quarter of 1952. The contributory factors may be summarised thus[8]:—

(1) favourable weather conditions in the world and increased supply of several agricultural products, particularly cotton;

(2) excessive stock piling of some commodities (during the Korean peace move in the middle of 1951);

(3) the Korean peace move in the middle of 1951;

(4) a decline in demand for many of these commodities;

(5) revision of U.S. rearmament programme in early 1951 from immediate purchases to spread of delivery over one or two years;

(6) orderly sharing of scarce materials through the agency of the International Materials Conference.

The decline was of course helped by a few *domestic* factors, viz. (1) a deflationary policy adopted by the authorities and (2) increase in the output of commodities in general.

(1) (a) The Bank Rate was raised from 3 per cent, the level maintained since 1935, to 3½ per cent in November, 1951. (b) Restrictions were imposed by the Reserve Bank of India on the provision of funds by the scheduled banks during the busy season. (c) The first budget of the First Plan (for 1951-52) aimed at a surplus. The Finance Minister C. D. Desnmukh while moving it laid emphasis on the mopping up of resources through taxation and borrowing. (d) Cash balances of the Central Government had shrunk

[7] A. Vasudevan, *op. cit.*, p. 94
[8] D. Bright Singh, *op. cit.*, p. 61

from Rs. 270 crores in 1947 to Rs. 78 crores in March, 1951. To recoup them, a satisfactory cash position was necessary. (e) The need to resort to deficit financing was not felt in 1951-52 as both export duties and income-tax yielded large revenue, thanks to boom conditions created by the Korean war.

Over the First Plan period money supply with the public and deficit financing by the Government were kept within limits except towards its end. This will be clear from below—

TABLE 85

MONEY SUPPLY WITH THE PUBLIC

(Rs. crores)

Last Fridays of the year	Total currency with the public	Total deposit with the public	Total money supply	Variation in money supply
1950-51	1,339	640	1,979	+119
1951-52	1,217	587	1,804	−175
1952-53	1,199	565	1,764	− 40
1953-54	1,229	565	1,794	+ 30
1954-55	1,312	609	1,921	+127
1955-56	1,505	679	2,184	+263

Source: Reserve Bank of India, *Report on Currency and Finance*, 1955-56, pp. 136-39

TABLE 86

FINANCING OF THE FIRST FIVE-YEAR PLAN
CENTRE AND STATES

(Rs. crores)

Outlay	1951-52	1952-53	1953-54	1954-55	1955-56	1951-56
Revenue Account	73.6	79.7	96.9	114.9	176.8	541.9
Capital Account	185.8	87.9	246.1	361.0	489.7	1,470.5
Total	259.4	267.6	343.0	475.9	666.5	2,012.4
Budgetary Resources	204.8	141.3	246.1	368.6	316.5	1,277.3
Gap	54.6	126.3	96.9	107.3	350.0	735.1
External Assistance	64.9	45.6	18.5	16.0	58.2	203.2
DEFICIT	−10.3*	80.7	78.4	91.3	291.8	531.9

* surplus

MET BY						
Increase in floating debt	—32.5*	4.6	15.2	193.8	247.4	368.0
Sale of securities held in reserve	8.7	18.8	20.2	32.4	20.1	35.4
Withdrawal from cash balances	13.5	57.3	43.0	9.6	24.3	128.5

Sources: Planning Commission, *Review of the First Five-Year Plan*, May, 1957, pp. 39-40

It may be pointed out further that the budget for 1951-52 imposed considerable additional taxation which was expected to yield Rs. 32 crores. Further taxation levied in 1954-55 was worth Rs. 11 crores. Excise duties were substantially raised. In the last year of the Plan also there was a large increase in taxation, which was to contribute Rs. 17 crores. Thus the revenue from additional taxation during the Plan period was of the order of Rs. 175 crores. More than Rs. 204 crores was also raised through market loans, which exceeded the target of Rs. 115 crores.

There was almost a steady increase in national product due to rise in both agricultural and industrial output as evident below:—

TABLE 87

NET NATIONAL PRODUCT

	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
Net Domestic Product at factor cost (at 1948-49 prices) (Rs. 100 crores)	88.7	91.2	94.7	100.3	102.8	104.2
Index Number of Agricultural Production (base year ended June, 1950 =100)	95.6	97.5	102.0	113.4	117.0	116.9
Index Number of Industrial Production* (base 1951 =100)	100.0	103.6	105.6	112.9	122.4	132.6

* Figures relate to calendar years

Sources: (1) Reserve Bank of India, *Reports on Currency and Finance*
(2) Government of India, *Economic Survey*

The production and availability of foodgrains stood as follows:—

TABLE 88
AVAILABILITY OF FOODGRAINS

	1951	1952	1953	1954	1955
Net production (million tonnes)	48.03	48.57	53.96	63.16	61.70
Imports (million tonnes)	4.80	3.93	2.04	0.83	0.60
Per capita availability (ozs per day)	13.90	13.60	14.50	16.10	15.60

Source: Planning Commission, Statistics & Surveys Division, *Statistics relating to the Indian Economy 1950-51 to 1965-66*, December, 1966

Among the factors that contributed to the increase in agricultural production were the impact of the Integrated Production Programme, merged with the Grow More Food Campaign in August, 1950 and the favourable monsoon conditions that prevailed during the period on the whole.

The rise in industrial production was brought about by factors like the entry of Government in the industrial field, the encouragement given to private industry by way of provision of raw materials, financial assistance through new institutions of special type and so on. The amount of capital issues, for which permission was granted, went up from Rs. 74.8 crores in 1950 to Rs. 125 crores in 1955; the number of registered joint-stock companies from 27,558 to 29,799; and their paid-up capital from Rs. 724 crores to Rs. 983 crores.

On the whole it seems, observed Ram Mohan Sexena, that due to bumper crops, huge accumulation of sterling balances, large foreign exchange earnings from the Korean war boom, absence of highly capital-intensive projects with long gestation period, the price policy had few formidable tasks in the First Plan.[9] According to D. Bright

[9] See Commerce Pamphlet-34, *Price Policy and the Plans*, Vora & Co., Publishers, Bombay, 1970, p. 10

Singh, "by and large, increase in production had a moderating influence on the general price-level during the First Plan period. Rise in business activity, larger spendings by Government for development purposes, deficit financing on a modest scale, higher levels of employment, larger annual investment, all these should have produced a multiplier effect, resulting in higher incomes and higher price-level. In actual fact, up to 1954 the higher level of consumer spending appears to have been matched by the larger availability of output for consumption. In 1954-55 substantial increases in food production depressed food prices and brought down the general price level".[10]

What is still more significant is that over the First Plan period as a whole although money supply increased from Rs. 1979 crores to Rs. 2184 crores, that is, by about 11 per cent, prices were nearly 13 per cent lower at the end of the period than at its beginning. There was thus ample justification for the following conclusions drawn by a number of expert observers:

> "The experience of India's First Five-Year Plan illustrates that in the context of economic growth there exists a scope for inflationary financing which may be compatible with the condition of stability".[11] 'For the modest and limited objectives of the First Plan deficit financing performed its role without creating problems of its own'.[12] 'That investment can be raised up to a point without pushing up prices has been demonstrated to some extent in India in course of the First Five Year Plan. The First Plan was started in a period of inflation and completed in a situation when price-support measures had become necessary for major agricultural products'.[13]

[10] *Op. cit.*, p. 212

[11] A. Vasudevan, *op. cit.*, p. 119

[12] R. G. Kulkarni, *Deficit Financing and Economic Development with Special Reference to Indian Economic Development*, Asia Publishing House, Bombay, 1966, p. 235

[13] Santikumar Ghosh, *Inflation in an Underdeveloped Economy*, The World Press, Calcutta, 1964, p. 195

INFLATION AT FAG END

There was, however, no ground for complacency of any kind. For inflationary pressures had begun to be felt totards the close of the First Plan itself. This is shown below:—

TABLE 89

INDEX NUMBER OF WHOLESALE PRICES
(Base: Year ended August, 1939=100)
1955-56

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
Food articles	281.8	309.7	317.5	313.0	315.7	326.5	323.7	333.4	335.3	351.6
Industrial raw materials	390.4	408.1	404.4	396.1	403.7	418.9	438.3	454.2	464.2	475.6
Manufactures	370.0	370.9	370.2	308.8	371.2	373.3	373.3	375.2	375.3	374.8
All commodities	342.5	355.6	357.2	353.2	357.2	365.0	368.4	376.0	378.4	378.3

Thus from June, 1955 to March, 1956 only the prices of manufactured products remained more or less stable; but those of food articles increased by about 25 per cent, industrial raw materials by about 22 per cent and the general price-level by about 13 per cent. What is further notable is that there was a persistent increase of these prices month by month. Therefore the First Plan was *not that much innocent,* as it was thought to be. At least it became a bit delinquent towards its fag end. *The seed of inflation in the Second Plan had actually been sown in the First Plan itself. The Second only applied irrigation water and fertiliser to it.*

The aforesaid rise was caused importantly by increase in deficit financing and money supply coupled with shortage in the availability of goods. (1) The amount of deficit financing in 1955-56 rose to Rs. 263 crores, the highest in any one year of the First Plan. Money supply with the public increased by about Rs. 264 crores in 1955-56, com-

pared to 1954-55 which was more than double the rise in 1954-55, compared to 1953-54. Scheduled bank credit which stood at Rs. 547 crores in 1954-55 reached the level of Rs. 713 crores in 1955-56.

The reason behind such heavy amount of deficit financing can be traced in the following statement of the Planning Commission:—

"The best defence against inflation is, in a sense, to keep clear of it, but a policy of playing safe is not always conducive to development. A measure of risk has to be undertaken"[14]

(2) The production of foodgrains during 1954-55 declined by about 3 million tons from the peak level reached in the preceding year. This was caused mainly by a fall in rice production from 27.8 million tons in 1953-54 to 24.2 million tons in 1954-55. The production of cotton (lint) dropped from 4.20 million bales to 3.99 million bales and oilseeds from 5.8 million tons to 5.6 million tons.

Another disquieting development of the period was the withholding of supplies of foodgrains from the market by producers and traders. According to the Reserve Bank of India, "in recent months it is stated that there is a substantial hoarding of stocks by producers themselves, thus aggravating the rise in foodgrains prices. Undoubtedly this phenomeon has been in evidence in the Indian economy during the last year or two".[15] The data collected by the Bank from twenty large scheduled banks which provided nearly 60 per cent of the total bank loans showed that the stocks of rice and paddy pledged with these banks increased by over 65 per cent against only a 7 per cent rise in output between 1954-55 and 1955-56.[16]

SECOND FIVE-YEAR PLAN

During the Second Five-Year Plan *prices of almost all commodities went up* practically from year to year, lead-

[14] *Second Five-Year Plan*, May, 1956, p. 86

[15] *Report on Currency and Finance, 1956-57*, p. 23

[16] See *Report of the Foodgrains Policy Committee, 1957*, p. 40

ing to a considerable rise in the end. This is indicated below:—

TABLE 90

INDEX NUMBER OF WHOLESALE PRICES

(Base 1952-53=100)

	Weights	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	Percentage rise in 1960-61 over 1955-56
Food articles	504	86.6	102.3	106.4	115.2	119.0	120.0	27.8
Industrial raw materials	155	99.0	116.0	116.5	115.5	123.7	145.4	31.9
Finished products	249	99.6	105.6	108.2	108.1	111.3	122.8	18.8
All commodities	1,000	92.5	105.3	108.4	112.9	117.1	124.9	25.9

The indices, being wholesale, do not give the real picture. Market reports showed that between May, 1955 and June, 1960 retail prices of jowar shot up by about 150 per cent, gram by 111 per cent, rice by 54 per cent and wheat by 52 per cent.

The principal *factors* responsible for the aforesaid rise were increase in deficit financing and money supply and comparatively slow rise and sometimes, decline in production.

These may be seen from the following tables:—

TABLE 91

FINANCING OF THE PLAN

(Rs. Crores)

	1956-57 (Actual)	1957-58 (Actual)	1958-59 (Actual)	1959-60 (Estimated)	1960-61 (Estimated)	Total 1956-61
Plan Outlay	634	882	998	1,006	1,080	= 4,600
Domestic resources	339	291	645	609	541	= 2,425
External assistance	42	95	217	270	276	= 1,000
Deficit financing	253	496	136	127	163	= 1,175

Source: Reserve Bank of India, *Report on Currency and Finance*, 1959-60, p. 63.

TABLE 92

MONEY SUPPLY WITH THE PUBLIC
(Rs. Crores)

Last Friday	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	Increase in 1960-61 over 1955-57 (per cent)
Total currency with the public	1,506	1,556	1,607	1,725	1,863	2,027	34.6
Total deposit money with the public	679	756	782	774	840	876	29.0
Total money supply	2,184	2,313	2,389	2,499	2,703	2,902	42.0

Source: Reserve Bank of India, *Report on Currency and Finance*, 1960-61

TABLE 93

NATIONAL PRODUCT
(Base 1950-51=100)
Indices

	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	Increase in 1960-61 over 1955-56 (per cent)
National product at 1948-49 prices	118.4	124.3	123.1	131.6	134.0	143.8	21.4
Per capita output at 1948-49 prices	108.2	114.4	108.0	113.2	112.8	118.5	9.5
Agricultural production	122.2	130.0	121.2	139.6	136.3	148.7	21.7
Industrial production*	125.0	136.0	141.8	146.5	159.0	177.0	41.6

* Figures relate to calendar years with 1951 as base

TABLE 94

AVAILABILITY OF FOODGRAINS

	1955	1956	1957	1958	1959	1960
Net production (million tonnes)	51.60	50.34	52.64	49.36	57.30	56.77
Imports (million tonnes)	0.60	1.40	3.63	3.22	3.86	5.13
Per capita availability (ozs. per day)	15.6	15.2	15.7	14.4	16.4	15.8

Source: Planning Commission, *op. cit.*, p. 31

Thus it may be seen from the above that during the Second Plan money supply with the public increased by about 42 per cent. It was more than four times the increase in the First Plan. This led to an expansion in effective demand. Against this, national output rose by something like 21 per cent only. Increase of output per capita was much less, 9.5 per cent only. There was little improvement of per capita availability of foodgrains. Obviously this meant an inflationary pressure on prices, which rose by about 30 per cent over the Plan period.

The Government adopted a number of *measures* to keep down prices during the Second Plan. As a matter of fact it was at this period that some sort of price policy came to be evolved and tried. (1) Thus food zones were set up for better distribution of foodgrains, both imported and domestically procured, in different parts of the country. Three wheat zones were created about the middle of 1957, which were subsequently reconstituted into five. Rice zones were similarly created in 1957, 1958 and 1959. (2) In 1956 about 20,000 fair price shops were opened for the distribution of imported foodgrains. (3) The Essential Commodities Act of 1955 was amended in 1957 to enable the Government to requisition stocks from dealers at market prices. (4) State trading in foodgrains was introduced in a number of States. Quite a few State Governments resorted to purchase of rice and paddy on their own accounts. (5)

On the side of credit restriction all the usual techniques like increase of Bank Rate, open-market operations and selective control were resorted to. The Bank Rate was raised from 3 to 3¼ per cent in March, 1956 and again to 3½ per cent in November, 1956 and 4 per cent in May, 1957. In March, 1960 variable reserve ratios were introduced by the Reserve Bank of India to control the deposit liabilities of banks. A ban was imposed in July, 1958 on forward contracts as well as non-transferable specific delivery contracts for the sale or purchase of coarse grains and pulses. It was extended to rice and paddy in March, 1959. Selective credit controls were introduced in June, 1957, asking all scheduled banks to bring down their advances against foodgrains and raise margins against sugar advances. But all these turned out to be of little avail, thus indicating that the remedy for high prices was to be sought elsewhere.

On the other hand, apart from increase in money supply and slow progress in production, there were *many inflationary factors* of which the combined impact was severe.

(1) The Government itself increased the controlled prices of many commodities. Thus in July, 1956 the prices of all grades of coal raised in West Bengal and Bihar were increased by Rs. 3 per ton. In June, 1957 the price of pig iron was raised from Rs. 163 per ton to Rs. 225 per ton to average out the prices of the domestic and imported material. For steel a new uniform price was fixed at Rs. 525 per ton involving a rise of about Rs. 25 per ton for the port cities of Calcutta, Bombay and Madras. In July, 1956 the price of cement was increased by amounts varying from Rs. 90 to Rs. 120 per ton. In May, 1957 following the rise in excise duties on steel ingots and cement the price of the former was increased by Rs. 70 per ton and that of the latter by Rs. 15 per ton.

(2) Wages increased significantly during the Plan period. Between 1956 and 1959 the wages of skilled labour, it was estimated, rose by 49 per cent in Bombay and those of unskilled labour by 68 per cent. Average monthly earn-

ings of cotton textile workers went up by 24 per cent. The picture in other centres was not much digerent. The all-India index of money earnings per worker shot up from 403.5 in 1955 (base 1939=100) to 494.5 in 1961.

(3) Prices acquired a kind of 'stickiness' at the upward level. In other words having gone up once, they had no inclination to come down even if the factors that had contributed to the rise had died away. It was also true that a large part of the price rise and inflation was partly the consequence of a crowd mentality, i.e. when once the idea gets going that prices are rising, panic sets in and makes the price situation worse than it need be.[17]

The villain of the piece was, however, deficit financing. As R. G. Kulkarni pointed out, in short the policy of deficit financing during the Second Plan period failed because the initial safe upper limit of such financing was not properly worked out; the volume of deficit financing was not related to any specific criterion but was undertaken in a sporadic fashion; it was beyond doubt that the programme of deficit financing created instability.[18] "Taking an overall view of developments, we arrive at the inevitable conclusion that judged by any standard or criterion the extent of deficit financing has clearly been excessive and has certainly strained the economy. . . . . It is true that several other factors also contributed to the price rise, but it was the amount of deficit financing that was basically responsible for it".[19] In the words of A. Vasudevan, "the rising demand for food and consumer goods as a consequence of the high tempo of monetary investment partly influenced by deficit financing in the public sector and by bank credit in the private sector, could not be checked. It was this which was the villain of the piece in the drama of this period".[20]

[17] See M. H. Gopal, "Recent Price Trends and Monetary Factor Reassessment", *Commerce*, December, 1959

[18] *Op. cit.*, pp. 333-34

[19] *Ibid.*, pp. 329-30

[20] *Op. cit.*, p. 162

THIRD FIVE-YEAR PLAN

The price-level stood as follows during the period of the Third Plan.

TABLE 95
INDEX NUMBER OF WHOLESALE PRICES
(Base: 1952-53=100)

	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	Percentage rise in 1965-66 over 1960-61
Food articles	120.0	118.4	123.5	141.0	153.6	168.8	40
Industrial raw materials	145.4	134.7	135.3	146.1	163.3	189.7	30
Manufactures (finished products)	123.9	126.3	129.5	133.0	141.2	145.4	18
All commodities	124.9	125.1	127.9	135.3	152.7	165.1	32

Source: Reserve Bank of India, *Reports on Currency and Finance*

It may be seen from the above that the rise of prices in the case of manufactured products was only 18 per cent but that of food articles was 40 per cent, i.e. more than double that of the former.

Money supply with the public and deficit financing showed the following trends:—

TABLE 96
MONEY SUPPLY
(Rs. Crores)

	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	Percentage change in 1965-66 over 1960-61
Amount of currency with the public	2,098	2,201	2,379	2,606	2,769	3,034	+45
Deposit money with the public	771	845	930	1,147	1,311	1,495	+93
Money supply	2,869	3,046	3,309	3,752	4,080	4,529	+58
Deficit financing	—49	184	183	211	188	385	

Source: Reserve Bank of India, *Report on Currency and Finance*, 1966-67

The position of national income, agricultural and industrial production was as below:—

TABLE 97

NET NATIONAL PRODUCT

(Rs. Crores)

	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	Per cent change in 1965-66 over 1960-61
Net national product at factor cost (at 1961-62 prices) Rs. crores	132.9	137.6	140.5	148.5	159.2	150.2	+13
Percentage increase over preceding year		3.5	2.0	5.7	7.2	—5.6	
Index number of agricultural product (1949-50=100)	142.2	144.8	137.5	142.6	158.0	131.7	— 7
Index number of industrial product (base 1956=100)	130.1	141.0	152.6	165.6	177.0	186.9	+44

* Relate to calendar years

Source: Reserve Bank of India, *Report on Currency and Finance*, 1967-68

The production, import and availability of foodgrains stood as follows:—

TABLE 98

AVAILABILITY OF FOODGRAINS

	1961	1962	1963	1964	1965	1966
Net production (million tonnes)	72.04	72.10	70.29	70.61	78.20	73.30
Net imports (million tonnes)	3.50	3.64	4.56	6.27	7.46	10.36
Net availability per capita (ozs per day)	16.53	16.26	15.65	15.94	16.94	14.40

Source: Government of India, *Economic Survey*, 1973-74, pp. 65-66

It may be noted from the foregoing tables that the money supply rose by about 58 per cent and the quantum of deficit financing increased steadily. On the other hand, while industrial production maintained almost steady increase, there was decline, though moderate, in the output of agriculture. The availability of foodgrains per capita virtually declined over the years with only minor exception. So it was natural that while the prices of manufactured products registered a small rise, those of agricultural commodities, particularly foodgrains, went up considerably.

A new development of the period was the wide divergence between marketable surplus of foodgrains and the quantities actually marketed. There was almost a progressive decline in market arrivals of foodgrains, caused by such factors as the propensity to hoard in the hope of future rise in prices, the desire to bypass State trading and so on. Thus according to the Union Ministry of Food, arrivals of rice in 94 selected markets in the country declined by about 5 per cent in 1962-63 over 1961-62 and by about 20 per cent in 1963-64 over 1962-63. Even in 1964-65 when there was a record output, market arrivals were about 10 per cent less than in 1963-64.

The position of market arrivals worsened over the years as follows:—

TABLE 99

PERCENTAGE OF MARKET ARRIVALS TO MARKETABLE SURPLUS

	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Rice	11.5	11.8	12.2	8.4	6.9	7.2
Wheat	11.1	9.8	11.9	12.4	7.5	8.7
Jawar	8.9	7.6	7.3	6.5	4.2	4.9

Source: *Reserve Bank of India Bulletin*, June, 1967, p. 768

Besides the above, there were a number of *inflationary factors* such as increase in non-developmental expenditure of the Union and State Governments, decontrol and bias in favour of heavy industry.

(1) The non-developmental expenditure of the Union and State Governments, of which defence and general administration comprised the most important items, increased as follows:—

TABLE 100

NON-DEVELOPMENT EXPENDITURE AT 1950-51 PRICE LEVEL

(Rs. Crores)

	1952-53	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Central	260.2	320.4	497.2	493.4	781.5	1,065.5	1,059.6	1,065.8
State	323.7	312.7	395.8	416.6	494.0	518.2	549.7	544.5
Total	483.9	633.1	893.0	910.0	1,275.5	1,583.7	1,609.3	1,610.3

It may be noted that during the Third Plan the country had to meet foreign aggression twice—by China in 1963 and Pakistan in 1965. This is the principal reason why defence expenditure was raised from Rs. 290 crores in 1961-62 to Rs. 762 crores in 1965-66, thus causing a large spurt in non-developmental public expenditure.

(2) Towards the end of 1963 price and distribution control was removed from a large number of commodities, including rayon yarn, staple fibre, caustic soda, soda ash, tyres and tubes. Between March, 1964 and January, 1966 control was removed from steel, pig iron and cement. A direct consequence was rise in prices of most of these commodities. It is estimated that the price of rayon yarn went up by about 30 per cent, caustic soda by about 35 per cent, tyres and tubes by about 25 per cent.

(3) The emphasis on heavy industry, laid in the Second Five-Year Plan and continued in the Third, led to a comparative shortage of consumer goods in general against an increasing demand for such goods, due to increase in population and rise in standard of living. The trend is shown below:—

TABLE 101

INVESTMENT AT 1960-61 PRICES

(Rs. Crores)

	1950-51	1960-61	1964-65	1965-66
Consumer goods	260.7	423.7	483.3	487.6
Intermediate goods	89.5	346.1	547.3	620.2
Machinery	30.9	151.3	282.6	315.9
Others	3.1	6.9	9.6	
	384.2	928.0	1,322.8	1,434.4

While a policy of this nature strengthened the base for future industrialisation, in the short period it resulted in aggravating the shortage of consumer goods needed by the common men.

The increase in production of industrial goods of different categories was as follows:—

TABLE 102

PERCENTAGE INCREASE IN PRODUCTION

	Basic goods	Capital goods	Inter-mediate goods	Consumer goods	Total
Second Plan	67.2	50.1	21.3	14.7	30.8
Third Plan	55.0	98.1	36.0	28.7	38.7

Sources: (1) Reserve Bank of India, *Reports on Currency and Finance*
(2) Government of India, *Economic Surveys*

It follows from the above that if the Third Plan can be divided into two phases—the first covering its first two years, and the second, last three years, the first phase may be regarded as one of comparative price stability and the second, one of great inflation. During the first two years the price-level on the whole rose by about 1.2 per cent. But the rate of price increase in the second phase far exceeded that of the preceding ten years of planning. Strange-

ly enough, it was less in the case of food articles than in that of industrial raw materials, although during the Third Plan as a whole the rise in prices of the former group was the highest.

In this connection, one may refer to the fears of the Planning Commission itself that "the Plan envisaged possibilities of significant and even disturbing price rises due to uncertainty of monsoons, excessive demand and the long lags between investment and output. The facts eminently show that these had come true. This was also admitted by India's Finance Minister while he was explaining the Government decision to devalue the rupee in June, 1966. "There is little doubt that the value of the rupee to-day is not what it was ten years ago. You will know that internal prices have been rising for some years. To-day the general level of prices is 80 per cent more than what it was ten years ago".

THREE ANNUAL PLANS

The position of prices and principal relevant factors during the period 1966-67 to 1968-69 stood as follows:—

TABLE 103

INDEX NUMBER OF WHOLESALE PRICES

	Weights	1965-66	1966-67	1967-68	1968-69	Increase in 1968-69 over 1965-66 (per cent)
Food articles	41.3	145	171	208	197	35.8
Industrial raw materials	12.1	133	158	156	157	18.0
Manufactures	29.4	118	128	131	134	13.5
All commodities	100.0	131.6	149.9	167.3	165.4	25.6

Source: Government of India, *Economic Survey, 1973-74*, p. 87

TABLE 104

MONEY SUPPLY WITH THE PUBLIC AND DEFICIT FINANCING
(Rs. Crores)

	1965-66	1966-67	1967-68	1968-69	Increase-in 1968-69 over 1965-66 (per cent)
Currency with the public	3,034	3,196	3,376	3.682	21.3
Deposit money with the public	1,495	1,753	1,974	2,097	40.3
Money supply	4,529	4,949	5,350	5,779	30.0
Deficit financing	358	227	228	277	

Sources: (1) Reserve Bank of India, *Report on Currency and Finance*, 1970-71
(2) Planning Commission, *The Fourth Five-Year Plan, Mid-Term Appraisal*, February, 1972

TABLE 105

NET NATIONAL PRODUCT

	1965-66	1966-67	1967-68	1968-69	Increase-in 1968-69 over 1965-66 (per cent)
Net national product at 1960-61 prices (base 1960-61=100)	113.5	114.7	125.0	129.2	13.8
Per capita product at 1960-61 prices (base 1960-61 =100)	101.6	100.6	107.3	108.2	7.0
Agricultural production (base triennium ending 1961-62=100)	102.2	102.8	109.1	118.0	15.4
Industrial production (base 1960=100)*	153.6	152.4	151.4	161.1	4.8

*Figures relate to calendar years

Sources: (1) Government of India, *Economic Survey*, 1973-74
(2) Reserve Bank of India, *Reports on Currency and Finance*

TABLE 106

AVAILABILITY OF FOODGRAINS

	1965	1966	1967*	1968*
Net production (M/T)	78.20	63.30	64.95	83.17
Net imports (M/T)	7.46	10.36	8.67	5.69
Per capita availability (ozs per day)	16.94	14.40	14.16	16.23

* provisional

Source: Government of India, *Economic Survey*, 1973-74

It may be seen from the above that compared to the last year of the Third Plan, the money supply at the end of the three Annual Plans increased by about 30 per cent. Against this, net national product rose by only about 14 per cent, per capita product by 7 per cent, agricultural production by about 15 per cent and industrial production by about 5 per cent. There was appreciable decline in the per capita availability of foodgrains both in 1966 and 1967, though the position improved in 1968 as a result of significant rise in production. The increase in prices was much higher in the case of food articles than manufactures.

There were *other forces* which also exerted upward pressures on the price-level such as decontrol of some commodities and raising of minimum support prices. Thus control over price and distribution of hard coke produced by beehive and country ovens was removed in April, 1966. By July, 1967 price and distribution controls on all categories of coal (except distribution control on coking coal) were given up. Price and distribution control on cement was lifted in January, 1966. It was however re-imposed in January, 1968. By May, 1967 control on certain categories of steel was lifted. Prices of paper and paper board were also decontrolled.

Apart from withdrawing controls, price increases were allowed in the case of many commodities such as cotton

textiles, coal, sugar, vanaspati, automobiles and so on. The Government also increased the minimum support prices for some agricultural commodities in order to ensure remunerative prices to the farmers. This is indicated below.

TABLE 107

MINIMUM SUPPORT PRICE PER QUINTAL

	1965-66 (Rs.)	1966-67 (Rs.)	1967-68 (Rs.)	1968-69 (Rs.)
Paddy	36.53	36.53	42.67	44.00
Wheat	49.50	53.50	56.00	56.00

Sources: (1) Reports of the Agricultural Prices Commission.
(2) *Reserve Bank of India Bulletins*

So it was natural that prices of two articles of staple food went up considerably as follows:—

TABLE 108

INDEX NUMBER OF WHOLESALE PRICES
(1961-62=100)

	1965-66	1966-67	1967-68	1968-69
Rice	137	169	200	196
Wheat	149	178	214	204

Another important step taken by the Government was devaluation of the rupee by 36.5 per cent on June 5, 1966—from 1 sh 6d to 11.43d in terms of sterling and 21 to 13.33 US cents. The official par value of the rupee, it may be recalled, had remained unchanged since 1949 but in the meantime prices had gone up by something like 50 to 60 per cent. As a result India's exports had been meeting resistance in foreign markets where prices had risen little. The Government had already adopted a number of measures to arrest the growing deficit in balance of trade such as incentives on exports and restriction of imports

through direct controls and heavy export duties. But these ad hoc measures had failed.

The primary object of devaluation was also to encourage exports and restrain imports. For a product when exported would earn more rupees via the foreign currency. On the other hand, an importer would have to pay more in rupees for the same product. All the same if devaluation succeeded, the effect in the short run would be inflationary, because while exports would lead to a diminution in domestic supply, import restrictions would prevent accretions to it. The price-level would thus be doubly affected—first, through shortage in the supply of goods; and secondly, through addition of funds through a favourable balance of trade. There would also be a third kind of pressure in that those industries which depended on imported raw materials would suffer an increase in their cost of production.

It was in apprehension of the above that the Government of India tried to assure the people that devaluation would not affect the internal value of the rupee. It also took a number of steps to hold the price line such as (a) adjustment of import duties on petroleum products, subsidy on imported foodgrains and fertilisers, larger imports of some articles like copra, cocoanut oil, and sunflower; (b) delegation of power to State Governments to regulate the acquisition, storage and consumption of any essential commodity; (c) fixation of procurement prices for foodgrains, oil seeds and edible oils; (d) opening of fair price shops and consumer stores throughout the country. But inspite of all these, *prices rose after devaluation.*

Thus imports of raw cotton went up in value from Rs. 46.2 crores in 1965-66 to Rs. 56.5 crores in 1966-67 and Rs. 83.5 crores in 1967-68; of chemicals, from Rs. 35.9 crores in 1965-66 to Rs. 54.1 crores in 1966-67 and Rs. 78.0 crores in 1967-68. Imports of non-electrical machinery went up in value from Rs. 332.4 crores in 1965-66 to Rs. 408 crores in 1966-67; and electrical machinery and appliances from Rs. 87.8 crores in 1965-66 to Rs. 105.9 crores in 1966-67. The index of unit value of imported food rose

from 140 in 1966-67 to 157 an 1967-68 and manufactured goods from 163 to 172.

There were one or two other factors which helped the inflationary pressures. Thus the Government by adding to the buffer stocks of rice, which rose progressively from 2.1 million tonnes in 1965-66 to 4.1 million tonnes in 1968-69, held back so much quantity from the market. In this sense it appeared to be the biggest hoarder of an essential commodity.

Further the Government itself raised the procurement prices of wheat and paddy as follows:—

TABLE 109

PROCUREMENT PRICE PER QUINTAL
(Rs.)

	1966-67	1967-68	1968-69
Wheat	57.0	61.5	70.0
Paddy	41.49	44.46	50.89

Sources: (1) Reports of the Agricultural Prices Commission
(2) *Reserve Bank of India Bulletins*

The issue prices of coarse rice from Central stocks were raised on July 18, 1967 and again on January 1, 1968 by Rs. 11.81 to Rs. 80 and by Rs. 16 to Rs. 96 per quintal respectively, partly due to the upward revision of procurement-cum-purchase prices of rice and partly due to the decision to reduce subsidy on imported rice.

FOURTH FIVE-YEAR PLAN

During the period of the Fourth Five-Year Plan prices moved up as follows:—

TABLE 110

INDEX NUMBER OF WHOLESALE PRICES
(Base 1961-62=100)

	Weights	1969-70	1970-71	1971-72	1972-73	1973-74
Food articles	413	199.8	199.8	216.5	250.1	321.7
Industrial raw materials	121	185.8	191.0	178.5	236.4	322.6
Manufactures	237	142.8	154.5	165.1	172.4	215.6
All commodities	1,000	175.7	180.6	192.3	218.5	284.4

Source: *Reserve Bank of India Bulletin*, July, 1974, p. 1356

TABLE 111

CHANGE IN WHOLESALE PRICES (PER CENT)*

	1971-72 over 1969-70	1973-74 over 1971-72	1973-74 over 1969-70
Food articles	8.4	48.6	61.0
Industrial raw materials	—4.0	80.7	73.6
Manufactures	15.6	34.2	50.0
All commodities	9.4	47.9	62.0

(* Calculated from the preceding table)

It is clear from the above that rise of prices during the Fourth Plan as a whole surpassed all previous records. Again, the rise in the second half of the five-year period was much higher than that in the first half.

The position of money supply and output of commodities and services was as follows:—

TABLE 112

MONEY SUPPLY WITH THE PUBLIC
(Rs. crores)

	1969-70	1970-71	1971-72	1972-73	1973-74 (provisional)
Currency	4,010.3	4,383.3	4,822.3	5,443.5	6.335.9
Deposit money	2,376.2	2,656.7	3,316.1	3,969.6	4,502.8
Total supply	6,386.5	7,140.0	8,138.4	9,413.1	10,836.7

Sources: (1) *Reserve Bank of India Bulletin*, April, 1973
(2) *Reserve Bank of India Bulletin*, August, 1974

TABLE 113

INCREASE IN MONEY SUPPLY*
(Rs. crores)

	1971-72 over 1969-70	1973-74 over 1971-72	1973-74 over 1969-70
Currency	812.0	1,511.6	2,323.6
Deposit money	939.9	1,186.7	2,126.6
Total supply	1,751.9	2,698.3	4,450.2

(* Calculated from the preceding table)

TABLE 114

NATIONAL PRODUCT, AGRICULTURAL AND INDUSTRIAL PRODUCTION

Index of—	1969-70	1970-71	1971-72	1972-73	1973-74
(1) Real National Product (base 1948-49=100)	202.3	210.8	214.4	215.2	231.1
(2) Agricultural Production (base triennium ending 1961-62=100)	122.5	131.4	130.4	118.5	133.4
(3) Industrial Production* (base 1960=100)	172.5	180.8	186.1	199.2	199.8

* relates to calendar years

Sources: (1) for rows (1) & (2) Directorate of Economic and Statistics (also *Agricultural Situation in India*)
(3) for row (3) *Reserve Bank of India Bulletin*, November, 1974

TABLE 115

INCREASE IN NATIONAL PRODUCT AND AGRICULTURAL AND INDUSTRIAL PRODUCTION*
(Per cent)

	1971-72 over 1969-70	1973-74 over 1971-72	1973-74 over 1969-70
Real National Product	6.0	7.8	14.2
Agricultural Production	6.4	2.3	8.9
Industrial Production	7.9	7.4	15.8

(* Calculated from the preceding table)

Thus it may be noted that increase in money supply was very large during the Fourth Plan period, of which the major part was during its first half. Against this, however, the increase in national product and output of goods and services was more or less even between the two halves except that the rate of growth of agricultural production was much less in the second half than in the first.

On the whole the different factors and trends may be indicated as follows[21]:—

[21] *Commerce*, August 17, 1974, p. 5

TABLE 116

PERCENTAGE CHANGE OVER THE PRECEDING YEAR

	1969-70	1970-71	1971-72	1972-73	1973-74	Average annual rate of increase
Wholesale prices	6.4	2.8	6.5	13.6	29.9	11.5
Money supply	10.5	11.8	14.0	15.7	14.3	13.2
Real national income	5.3	4.2	1.7	0.4	7.4	3.7
Real per capita income	2.9	1.9	—0.6	—1.8	5.2	1.4
Agricultural production	6.7	7.3	—0.8	—9.1	13.5	3.0
Foodgrains production	5.8	8.9	—3.0	—9.5	13.8	2.8
Industrial production	6.8	3.7	4.6	5.0	1.6	4.1

Source: Research Bureau of *Commerce*, Bombay

It may be seen from the above that in the first three years the rise in prices practically was less than half that of money supply. In the last year the former was more than double the latter. There was appreciable decline in agricultural and foodgrains production in the fourth year. But strangely enough, the rise of prices in the last year was double that in the fourth, although agricultural, foodgrains and industrial production went up considerably during that year. Obviously there were a few *other factors* which contributed to this rise than mere increase in money supply.

RECENT INFLATION

As a matter of fact since the last year of the Fourth Plan there has taken place inflation at a rate which is unprecedented in character. This is true not merely of India but of the world as a whole, as pointed out already.

TABLE 117

INDEX NUMBER OF WHOLESALE PRICES
(Base 1961-62=100)

	April, 1973	October, 1973	April, 1974	October, 1974	Increase in October, 1974 over April, 1973 (per cent)
Food articles	255.9	299.5	325.5	381.4	48
Industrial raw materials	246.8	306.3	324.2	330.6	34
Manufactures	174.9	189.9	223.4	260.8	48
All commodities	222.9	255.4	289.9	324.5	45

Source: *Reserve Bank of India Bulletins*

TABLE 118

INDEX NUMBER OF CONSUMER PRICES
(INDUSTRIAL WORKERS)[22]
(Base 1960=100)

	FOOD				CLOTHING			
	1972	1973	Aug., 1973	Aug., 1974	1972	1973	Aug., 1973	Aug., 1974
Bombay	212	250	253	328	193	214	219	280
Calcutta	210	233	238	329	194	249	256	336
Delhi	231	276	289	376	203	225	234	358
All-India	216	262	279	364	195	224	228	323

Source: Government of India, Ministry of Labour

Indeed, the situation was so serious that some 140 leading economists of the country who seldom agree on any issue made it an exception and in a joint memorandum[23] submitted to the Prime Minister in February, 1974 described it as *'full of dangerous implication for economy as*

[22] Government of India, Central Statistical Organisation, *Monthly Abstract of Statistics*, December, 1974

[23] See C. N. Vakil and others, *A Policy to Contain Inflation with SEMIBOMBLA*, Commerce Pamphlets, 80-82, *Commerce*, Publications Division, Bombay, October, 1974

well as stability of the country'. They offered some 17 suggestions to abolish the sources of inflation. It had also been argued in some quarters that *the economy was suffering from high fever*, it was futile to restore strength to the patient without first bringing down the temperature. According to one well-known scholar,[24] "one judgment is that major reductions in the rate of inflation in poor or indemnity-laden societies can occur if *political convulsions* take place. Shall we take a head from pre-liberation China, pre-Hitlerite Germany, the Latin American experiences and the recent Indonesia case?" An economist-cum-administrator (who had been Secretary of the Planning Cimmission) pointed out that India at the current juncture *betrayed almost all the symptoms Marx had diagnosed for France in 1851-52*. It made some 'desirous of revolution'.[25] A member of the Planning Commission observed, "Inflation is clearly the single most important problem before the country at this moment. Unless the rate of increase in prices is substantially moderated, we cannot move even directionally towards the attainment of our basic objectives of removal of poverty and self-reliance.' [26]

Indeed, one of the objectives of the Annual Plan for 1974-75 was 'to help control inflation'. D. P. Dhar, the then Planning Minister called for *political actions* to back up the fight against inflation. Prime Minister Indira Gandhi in a secret meeting held in May, 1974 is said to have directed the Planning Commission and the Union Finance Ministry to find out *'unconventional and drastic ways'* of containing the inflation.

There were quite a few *important factors* which contributed to this viz., mounting public expenditure, particularly non-developmental expenditure, decline in agricultural

[24] P. R. Brahmananda, "The Nature and Genesis of the Indian Stratflation and its Control" in S. L. N. Simha (ed.) *Inflation in India*, Vora & Co., Publishers Pvt. Ltd., Bombay, 1974, p. 86

[25] Ashok Mitra, "Price Explosion in India The Real Danger to Democracy", Supplement to *Capital*, 31st January, 1974, p. 72

[26] Sukhamoy Chakravarty, "'Our Fight against Inflation", *Yojana*, September 15, 1974, p. 4

production, increase in procurement prices of foodgrains and control prices of some consumer products, and rise in the import prices of many important materials.

A distinctly new phase of public expenditure started with the war of liberation in Bangladesh. Some 10 million refugees took shelter in the neighbouring States of West Bengal and Assam, whose relief cost something like Rs. 200 crores in one year. Besides, a positive assistance of about Rs. 400 crores was extended to the liberated country by way of grants and loans during the two years 1972-74. What was still more dámaging from the point of view of inflation was that the buffer stock of about 9 to 10 million tons of foodgrains built over the years was almost exhausted to feed the aforesaid refugees.

TABLE 119
BUDGETARY DEFICITS AND NET RBI CREDIT TO GOVERNMENT
(Rs. crores)

	Budgetary Deficits			Net RBI Credit		
	Centre	States	Total	Centre	States	Total
1970-71	285	141	426	223	106	329
1971-72	519	289	808	583	287	870
1972-73	869	7	876	1,211	386	825
1973-74 (Revised estimate)	650	211	861	630	134	764
1974-75 (Budget estimate)	126	—20	106			..

Source: Reserve Bank of India, *Report on Currency and Finance*, 1973-74

TABLE 120
COMBINED REVENUE AND CAPITAL DISBURSEMENTS OF CENTRAL AND STATE GOVERNMENTS
(Rs. crores)

	Developmental	Non-Developmental	Total
1971-72	5,314	5,197	10,511
1972-73	7,190	5,129	12,319
1973-74 (Revised estimate)	8,007	5,565	13,572
1974-75 (Budget estimate)	8,510	5,891	14,401

Source: Reserve Bank of India, *Report on Currency and Finance*, 1973-74

Thus it may be observed that budgetary deficits, net R.B.I. credit as well as disbursements of the Governments went up considerably in the recent past. The mischief had started from the year 1971-72. It may also be added that a part of the increase in non-developmental expenditure in 1973-74 was due to higher wages and dearness allowances paid to Central Government employees consequent on the implementation of the Third Pay Commission's recommendations which involved something like Rs. 236 crores.

There was a drop in the production of many agricultural commodities in 1972-73. True, there was recovery in 1973-74 but it was only moderate. In some cases the output was only near the level of 1970-71 and in others, 1969-70. This will be evident from the following table.

TABLE 121

PRODUCTION OF IMPORTANT CROPS

	1969-70	1970-71	1971-72	1972-73	1973-74
Foodgrains (million tonnes)	99.5	108.4	105.2	97.0	103.6
Oilseeds (lakh tonnes)	77.3	92.6	87.5	67.1	94.0
Sugarcane (million tonnes)	135.0	126.4	114.0	127.6	140.0
Cotton (lakh tonnes)	52.6	45.0	65.6	54.2	58.2
Jute and Mesta (lakh tonnes)	67.8	61.9	68.3	60.3	67.0

Sources: (1) Planning Commission, *Annual Plan*, 1974-75
(2) *Reserve Bank of India Bulletin*, October, 1974

Although production improved, the per capita availability declined since 1971-72 due to decrease in imports. Domestic procurement for public distribution was also less. These are shown below:

TABLE 122

AVAILABILITY OF FOODGRAINS

Year	Gross output (million tonnes)	Imports (million tonnes)	Total availability (million tonnes)	Per capita availability (grams)	Procurement (million tonnes)
1969-70	99.5	3.1	90.1	458.6	6.5
1970-71	108.4	3.4	94.1	469.0	6.5
1971-72	105.2	1.2	95.1	463.7	8.1
1972-73*	97.0	2.0	87.1	453.3	7.2

* provisional

TABLE 123

PROCUREMENT PRICE
(Rs. per quintal)

Year	Wheat	Rice
1971-72	76.0	74.30— 99.00
1972-73	76.0	83.00— 95.25
1973-74	80.0	104.00—119.00

Control prices of some consumer products and a vital agricultural input were raised as follows—

TABLE 124

INCREASE OF CONTROL PRICES

	Commodity	Extent of Increase	Effective date
1.	Coal and coke	Rs. 10 per tonne	April 1,1974
2.	Vanaspati	Rs. 1,800 to Rs. 2,200 per tonne in different zones	June 15, 1974
3.	Fertilisers	About Rs. 800 per tonne	June 1, 1974

Import prices of many essential materials also went up. This will be evident from below[27]—

[27] "The Nature and Genesis of the Indian Statflation and its Control", in S. L. N. Simha (ed.), *op. cit.*, p. 83

TABLE 125

INDEX NUMBER OF THE UNIT VALUE OF IMPORTS

(Base 1958=100)

	General	Food	Mineral, fuel & lubricants	Chemicals	Machinery & transport equipment
1970	149	147	109	75	257
1971	147	155	132	75	224
1972	155	178	137	63	300
1973	204	252	220	88	359
1974 (March)	267	333	783	89	363

Source: Government of India, Ministry of Commerce, Department of Commercial Intelligence and Statistics

A new factor of great significance was the international price hike in petroleum. The oil producing countries of the Middle East through concerted action raised the export price of oil suddenly to about $5 a barrel in December, 1973 and even $11 a barrel in January, 1974. India's import bill on this account shot up from Rs. 200 crores in 1972-73 to Rs. 571 crores in 1973-74. She had to raise the ceiling selling prices of fuel oil by about 125 per cent between November, 1973 and September, 1974. As some one put it, oil started 'boiling'.

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Inflation and Growth in India

The fact is that developing countries can neither live without growth nor live with inflation. L. K. Jha

There are a few issues of great significance to inflation in India. *What is its relation to economic growth*? Has it helped or hindered it? *How far inflation is due to deficit financing*? *What is the part of black money in inflation*?

INFLATION AND ECONOMIC GROWTH

It is the view of many experts in India that inflation has hindered economic development more than it has helped it. Thus B. R. Shenoy advocated zero inflation budgets to stimulate production.[1] "It is over-investment", wrote he, "that would cause inflation, not economic growth".[2] To C. N. Vakil, 'the adoption of the policy of deficit financing for development by the Government of India was ill-conceived'. In fact the theory of no restraint on public expenditure and all freedom to spend at will has worked havoc'.[3] "With high inflation in India", observed P. R. Brahmananda, "we have witnessed an industrial recession and generally depression or stagnation in industrial profit levels. It is futile to raise the question as to whether the inflation in India is serving the interests of growth. It is not".[4] Niloy Majumdar and Tapan Pillai in a study of

[1] See "Deficit Financing and Economic Development", papers relating to the formulation of Second Five-Year Plan; also his address at Gujarat University in October, 1973

[2] See *The Indian Economic Journal*, 1957-58, p. 332

[3] Inaugural address at the seminar organised at Madras in December, 1973 by the Institute for Financial Management and Research

[4] "The Nature and Genesis of the Indian Statflation and Its Control", in S. L. N. Simha (ed.), *Inflation in India*, Vora & Co., Publishers, Bombay, 1974, p. 70

changes in prices and national income relating to the years 1951-52 to 1967-68 came to the conclusion that price fluctuations, either inflationary or deflationary, had not influenced the rate of growth of our economy in any significant way.[5]

Both the Government of India and the Planning Commission originally had the idea that inflation was necessary for development. In the very early stage of planning, the Reserve Bank of India referred[6] to 'the expansionist implications of deficit financing envisaged' in the First Five-Year Plan. "A measure of strain is implicit in any development plan", wrote the Commission in 1956, "for by definition *a plan is an attempt to raise the rate of invesment above what would otherwise have been*".[7] "Certain upward pressures on prices are implied in development and they have to be accepted".[8] "Some inflation", pointed out the Economic Survey for 1960-61, "is the *very condition* of economic advance".

In recent years, however, the position has changed. Thus the Union Finance Minister while moving his budget in February, 1965 affirmed that deficit financing in all forms must be necessarily reduced and indeed eliminated. In March, 1967 he expressed his determination 'to pursue sound financial policies' and in May of the same year, 'to limit the outlay of the Central Government strictly within the resources which can be mobilised in a non-inflationary manner'. "In view of the excess liquidity in the economy and the abnormal rise in prices", observed the Draft Fifth Five-Year Plan, 1974-79, "there seems to be hardly any scope for deficit financing in the first two years of the Fifth Plan, if reasonable price stability is to be achieved. Over the rest of the plan period, deficit financing will have to be kept down to the level at which the consequential increase in money supply does not exert any autonomous

[5] See Indian Economic Association, *Annual Conference November*, 1968, Part III, p. 28

[6] *Report on Currency and Finance*, 1952-53, p. 39

[7] *The Second Five-Year Plan*, p. 81

[8] *Third Five-Year Plan*, p. 126

inflationary pressure in the economy".[9] The Annual Plan for 1974-75, while limiting deficit financing to the figure of Rs. 125 crores also assured that 'strict vigilance would be kept to ensure that deficit financing did not in any way affect the efforts for restoring stability'.[10] A member of the Planning Commission recently stressed the basic fact that "an anti-inflationary policy must be viewed as an integral policy of our strategy for growth and social justice. Unless the rate of increase in prices is substantially moderated, we cannot move *even directionally* towards the attainment of our basic objectives of removal of poverty and self-reliance".[11] The Finance Minister, while presenting a supplementary budget on July 31, 1974, which was itself a proof of the gravity of the situation, expressed his determination "to contain the rise of the budgetary deficit". The aforesaid intentions and promises are welcome trends.

It is said that many learn by experience. *What is the lesson one gets from the Indian economy?*

Some of the important trends are indicated below:

TABLE 126

	Rate of Inflation (1)	Aggregate Domestic Investment (2)	Growth of Agricultural Output (3)	Growth of Industrial Output (4)	Growth of Real Income (5)
1951-52	3.9	7.1	2.0	—	2.8
1952-53	—0.9	3.8	5.4	4.4	4.0
1953-54	1.9	5.1	3.2	1.6	6.0
1954-55	—6.6	7.9	1.1	9.1	2.4
1955-56	—3.0	9.7	—0.6	14.7	3.4
1956-57	11.4	12.0	6.0	7.8	5.5
1957-58	4.6	10.5	—6.5	5.5	—1.4
1958-59	5.3	9.8	15.4	2.1	6.9
1959-60	4.2	9.7	—2.4	7.0	1.8

[9] Vol. I, p. 53

[10] *Annual Plan 1974-75*, p. 35

[11] Sukhamoy Chakravarty, "Our Fight against Inflation", *Yojana*, 15 September, 1974

	(1)	(2)	(3)	(4)	(5)
1960-61	0.8	12.2	8.9	10.7	6.7
1961-62	2.4	11.0	0.3	10.6	3.5
1962-63	3.1	13.2	—1.6	9.0	2.0
1963-64	4.5	14.9	2.5	8.4	5.7
1964-65	14.5	13.2	10.7	9.0	7.2
1965-66	7.6	13.2	—16.7	6.4	—5.6
1966-67	13.0	12.0	1.0	0.3	1.5
1967-68	11.5	11.1	21.6	—0.2	9.3
1968-69	—0.5	9.7	—1.6	—	2.4
1969-70	1.4	9.5	6.7	7.1	5.3
1970-71	5.1	11.7	7.3	4.6	4.2
1971-72	3.1	12.7	—0.8	3.1	1.7
1972-73	7.7	12.8	—9.1	7.0	0.4
1973-74	20.7		13.5	0.3	7.4

N.B. I. Col. (1) is measured by annual change in the All-India Working Class Consumer Price Index—Sources: (1) Reserve Bank of India, *Reports on Currency and Finance,* 1967-68, 1972-73; (2) *RBI Bulletin,* March, 1974

II. Col. (2) shows percentage of net national product at current prices—Sources: (1) *RBI Bulletin,* March, 1965; (2) RBI, *Reports on Currency and Finance*

III. Col. (3) shows percentage of change over the preceding year—Source: *Agricultural Situation in India,* January, 1974

IV. Cols. (4) & (5) shows percentage change over the preceding year—Sources: (1) RBI, *Reports on Currency and Finance;* (2) *RBI Bulletin,* May, 1974

It may be seen from the foregoing table that out of 23 years covered, high inflation and large domestic investment were contemporaneous in only three of them, while low inflation was accompanied by large investment in as many as nine or ten of them. In some three years there was decline in the rate of inflation but increase of investment ranging between 7.9 and 9.7 per cent.

Again, out of the nine years in which real national income increased by over 5 per cent, the rate of inflation exceeded the same percentage only in five and was barely 1 per cent or less in three. On the other hand, there were

some three years in which the rate of inflation ranged between 0.8 and 1.9 per cent while the rate of growth of real national income exceeded 5 per cent. In one year, viz. 1966-67, the rate of inflation went up by 13 per cent but real national income rose by only 1.5 per cent. In another, viz. 1973-74 the former was so high as 20.7 per cent but the latter only 7.4 per cent.

Empirical evidence, therefore, supports the conclusion that *there was little or no connection between inflation and economic growth in India.* It is of interest to note in this connection that at the annual conference of the Indian Economic Association held at Hyderabad in December, 1968, it was generally agreed that "inflation has created difficulties in achieving a high rate of development".[12]

The principal *reason* why inflation has not helped growth is that the rates of both savings and investment have fallen short of the requirements of a developing economy. On the whole, they have gone down rather than up. This is the finding of both official and non-official sources. Some of the estimates are indicated below.

TABLE 127

NET CAPITAL FORMATION

(Rs. crores)

	At current prices	At 1960-61 prices		At current prices	At 1960-61 prices
1950-51	480	602	1956-57	1,662	1,888
1951-52	791	928	1957-58	1,267	1,387
1952-53	443	525	1958-59	1,680	1,786
1953-54	761	901	1959-60	1,663	1,741
1954-55	779	928	1960-61	1,959	1,959
1955-56	986	1,159			

Source: *Reserve Bank of India Bulletin*, January, 1963, p. 18

[12] See I.E.A., Conference Number, 1968

TABLE 128

NET NATIONAL SAVINGS

(Rs. Crores)

	At current prices	At 1948-49 prices
1950-51	732	675
1955-56	1,144	1,022
1960-61	1,408	1,267
1964-65	1,328	996

Source: National Council of Applied Economic Research, *Savings in India during the Plan Periods*, Delhi, June, 1966

It is estimated that the average annual increases of aggregate investment during the three Plans at current prices were 21.7, 14.9 and 9.7 and at 1948-49 prices, 24.5, 10.7 and 4.2 respectively. This shows that not only the rate of investment declined from Plan to Plan but inflation led to a fall in the real content of investment. As the Reserve Bank of India pointed out, "while rising prices affect savings adversely, in an underdeveloped country like India the inflationary process itself originates in a savings deficit. In underdeveloped countries the level of real income being low, voluntary savings by the community through a reduction in consumption are not sufficient to finance investment required for the growth of *per capita* real income. The gap between the required investment and available savings is filled by the Government through creation of additional money. However, such creation of money, though it initially diverts resources into investment, would after a point lead to a situation where there are not enough resources available to meet the enlarged money demand except at higher prices".[13]

The positions of saving and investment in recent years stood as follows:—

[13] *RBI Bulletin*, June, 1967, p. 774

TABLE 129

RATES OF SAVING AND INVESTMENT AS PER CENT OF NATIONAL (DOMESTIC) PRODUCT AT MARKET PRICES[14]

Year	Domestic saving	Foreign saving	Investment
1960-61	8.9	3.1	12.0
1961-62	8.6	2.2	10.8
1962-63	9.6	2.4	12.0
1963-64	10.7	2.0	12.7
1964-65	9.8	2.2	12.0
1965-66	11.1	2.3	13.4
1966-67	9.0	3.2	12.2
1967-68	7.9	2.7	10.6
1968-69	8.4	1.1	9.5
1969-70	8.4	0.8	9.2
1970-71	8.3	1.3	9.6

TABLE 130

ESTIMATES OF DOMESTIC SAVING AND INVESTMENT[15]
(Per Cent of Net National Product at Current prices)

	Net domestic saving	Net inflow of foreign resources	Aggregate net investment
1968-69	8.4	1.3	9.7
1969-70	8.5	0.8	9.3
1970-71	10.1	1.2	11.3
1971-72	11.4	1.5	12.9
1972-73	11.0	0.8	11.8
1973-74	10.0	0.8	10.8

It may be noted from Table 129 that during the decade 1960-61 to 1969-70 while the rate of domestic saving remained more or less stationary, that of investment gradually declined. In only two years, 1963-64 and 1965-66, there was an improvement in the rates of both saving and investment. Incidentally these were years of good harvest.

[14] *The Fourth Plan Mid-Term Appraisal*, Vol. I, pp. 36-37

[15] Reserve Bank of India, *Report on Currency and Finance*, 1973-74, p. 11

Similarly Table 130 shows that of the quinquennium 1969-70 to 1973-74 the first two years registered some progress but thereafter the rates of both saving and investment went down. In this case, too, the first two years were those of satisfactory crop production. On the whole, the fact remains that over the past three decades the rate of saving or investment in India scarcely exceeded the level of 10 to 12 per cent of national income which compares unfavourably with the rates of even some of the developing countries like Argentina, Brazil, Mexico, Thailand and Venezuela. This will be evident from below[16]—

TABLE 131

NON-RESIDENTIAL GROSS FIXED INVESTMENT AS PERCENTAGE OF GROSS DOMESTIC PRODUCT AT CURRENT MARKET PRICES

1950-66 average of annual ratios

Argentina	..	14.7	Israel	..	17.3
Brazil	..	12.5	Mexico	..	13.2
Chile	..	11.7	Peru	..	15.3
Colombia	..	12.9	Philippines	..	10.7
Egypt	..	11.5	Taiwan	..	12.2
Ghana	..	13.1	Thailand	..	13.9
India	..	11.2	Venezuela	..	19.5

PROS AND CONS OF DEFICIT FINANCING

In a general sense deficit financing refers to the process of meeting big deficits in revenue against expenditure by the government through some arbitrary method of comparative ease such as printing of notes or borrowing from the central bank or other financial institutions. Its practical application passed through three principal stages. (1) It originated from the need to provide for huge expenditures of World War I in some of the belligerent countries. (2) In

[16] See Angus Maddison, *Economic Progress and Policy in Developing Countries*, George Allen and Unwin Ltd., London, 1970, p. 37

the intermediate stage it was used to recover from the effects of the Great Depression of 1929-32 in a few of the advanced countries. (3) In the present era it forms an important means of financing development in most of the underdeveloped countries.

The *rationale* of deficit financing for development arises from the circumstance that an underdeveloped country is not in a position to raise enough funds through the traditional devices of taxation or borrowing. The people's ability to pay being limited, the level of taxation is low. Similarly few citizens have got surplus funds to lend to the government in a big way. Naturally recourse is had to deficit financing for the utilisation of resources existing in the country, but not yet tapped. It appears to be the only means of undertaking investment, increasing production, generating employment and so on. Deficit financing provides a kind of *big push* for development.

It has also been argued that after incomes rise as a result of deficit financing, the government is in a position to mop them up through taxes which it could not impose before. Further, an underdeveloped country is characterised by under-monetisation and inadequate banking facilities. So there is considerable hoarding of money. This has to be compensated by additional credit and currency creation.[17]

According to V. M. Dandekar,[18] deficit financing is ultimately self-terminating. By creating fresh capital and increasing employment opportunities, the economy is stimulated, more goods are produced, more services rendered and thus price stability is re-established. As the International Monetary Fund observed, "So long as the expansion of money supply is no more than enough to finance the larger volume of consumption and investment at stable prices, it is essential to the functioning of the economy. To the extent that expansion of the money supply takes place through deficit financing and government

[17] A. V. Devasia, "Inflation and Economic Development" in S. L. N. Simha, *op. cit.*, p. 214

[18] See *The Illustrated Weekly of India*, October 21, 1973

borrowing from commercial banks, it makes available funds indispensable to the success of planned economic development".[19] V. K. R. V. Rao on the basis of constant marginal propensity to consume even constructed a *model* to show that tax revenue would rise as a proportion of national income as deficit financing operated.[20] Jagdish Bhagwati also followed suit.[21]

It is the view of V. K. R. V. Rao that deficit financing is not necessarily always inflationary. Whether it is inflationary or not depends on the following factors:

(*a*) the scale of investment outlay;
(*b*) the extent to which the additional incomes created by the outlay are mopped up and returned to the exchequer by way of tax revenue;
(*c*) the effect of the expansion of currency upon the behaviour of the balance of additional income not mopped up in regard to its outlay on consumption;
(*d*) its impact on the balance of trade;
(*e*) the purposes for which there has been a deliberate gap between revenue and expenditure.

Thus "creation of credit equivalent to the reduction of reserves attributable to a balance of payments deficit on either current or capital amount is not inflationary and indeed is necessary to restore the money supply and thereby prevent deflation in a country in which the money supply is properly related to economic policy and the balance of payments deficit is an appropriate deficit that can be financed. In the case of a current account deficit, the credit

[19] See *Economic Development with Stability*, Report submitted to the Government of India by a Mission of the International Monetary Fund (E. M. Bernstein, Richard Goode, Morris Friedberg and I. S. Patel) in 1954, p. 47

[20] "Deficit Financing for Capital Formation and Price Behaviour in our Underdeveloped Economy", *Indian Economic Review*, February, 1953 (reprinted in *Essays in Economic Development*, Asia Publishing House, Bombay, 1964)

[21] "Deficit Financing and Economic Development in India", *Indian Economic Review*, August, 1956

expansion is necessary to match the additional supply of goods and services available from abroad and enables home investment to exceed domestic savings. In the case of a deficit on capital account, the credit expansion obviates the need to use domestic savings to match the capital outflow and permits the whole of domestic savings to be used for home investment".[22]

Still deficit financing has got many *limitations.* (1) Underdeveloped countries generally have got large unemployed labour but not sufficient natural resources for expansion of productive capacity. (2) Even if there are available surplus labour as well as raw and other materials, there is a time lag between their employment and the ultimate production of goods, particularly those of a capital nature. Since underdeveloped countries suffer not merely from shortage of machinery and equipment but also of roads, bridges and other public facilities, the expenditure out of deficit financing mainly goes to its removal with a view to provide the base or infrastructure for future development. But construction of these facilities is a time-consuming process. (3) Additional funds placed in the hands of those engaged in the production of capital goods or 'social' capital lead to increase in the demand for consumption goods. In underdeveloped countries the people's propensity to consume is generally high. But as there is no immediate increase in the supply of consumption goods, there takes place an imbalance between demand and supply causing rise in prices. As G. M. Meier and R. E. Baldwin pointed out, "Capital accumulation through deficit financing is likely to generate inflation because in underdeveloped economies the propensity to consume is high, there are many market imperfections, there is little excess capacity in plant and equipment and the elasticities of food supplies are low".[23] (4) If the rise in prices is not matched by a

[22] See Report of the IMF Mission to the Government of India, 1954, p. 46

[23] *Economic Development, Theory History Policy,* John Wiley & Sons, Inc. New York, 1957, p. 385

rise in wages, it causes lowering of the standard of living of the workers and thus impairs their health and efficiency. (5) On the other hand, if the rise in prices leads to a rise in wages, the cost of production goes up and there takes place further rise in prices. Then starts the wage-cost-price spiral, of which the effects are cumulative. Thus inflation is followed by 'creeping inflation' which in turn gives rise to 'hyper-inflation'.[24] (6) There is another important reason why deficit financing leads to 'hyper-inflation'. Being comparatively easy, it is tempting and goes on unchecked. It has been said[25] that 'a little inflation brings about an illusion of great prosperity, much as a narcotic administration eases the post-operation pain. But a little inflation is no more than a little pregnancy; inflation like pregnancy must grow'. 'It is like a rat gnawing at a piece of cheese. The rat takes a little here and another little there. Eventually it eats the cheese away'.

E. M. Bernstein and I. G. Patel analysed the possible results of the initial increase in investment with the help of deficit financing thus[26]: "'One result may be an initial rise in prices, relatively stable wages, an increase in profits and savings and a larger scale of investment with stability in prices at a higher level. A second result may be an initial rise in prices, a later rise in wages, a decline in investment to the pre-expansion level and stability of prices at a higher level. A third may be an initial rise in prices, a subsequent decline in investment to the pre-expansion level and a fall in prices to the previous level. A fourth result may be

[24] It has, however, been argued by some that in a developing country with the increase in the proportion of national income diverted to investment, forces are set up that induce an upward adjustment of prices in those sectors which are expanding. This does not have much effect on the prices prevailing in other sectors of production. This is referred to as 'the functional' rise in prices as distinguished from 'inflationary' rise. (See International Monetary Fund, *op. cit.*, p. 6)

[25] David L. Markstein, *How Can You Beat Inflation*? McGraw-Hill Book Coy, New York, 1970

[26] "Inflation in relation to economic development" in International Monetary Fund, *Staff Papers*, November, 1952

an initial rise in prices, a subsequent rise in wages, a new expansion of credit to sustain investment and a spiral of rising prices and wages. Thus while only the first of the above developments is helpful to growth, the second is positively dangerous because of the wage-price spiral. The second and third may, far from promoting growth, even lead to stagnation".

Apart from resisting the temptation of an easy device, to lay down the *safety limits of deficit financing* is an exercise which depends on a number of important variables such as (1) the use of money in the economy and the proportion of credit in that money, (2) the tax structure of the country, (3) the nature of government expenditure, (4) the supply elasticities in agriculture and other consumption goods sector, (5) nature of disposability of private incomes, (6) the *fluctuation* in export earnings, (7) the state of entrepreneurial expectations; and so on.[27] A policy maker or planner would require considerable data of reliable character before he could determine the safe limit. In other words the safe limit would have some built-in element of unreliability. That is why the Taxation Enquiry Commission of India in 1953-54 emphasised that there was no formula by which the amount of deficit financing that might properly be undertaken could be determined. It was ultimately *a matter of judgment.*[28] Most schemes of deficit financing assume the existence of effective control policies directed at keeping stable wages, prices and incomes. Unfortunately the administrative machinery and other conditions of most underdeveloped countries are not up to the mark for the purpose of enforcing such controls effectively.

DEFICIT FINANCING IN INDIA

In India there is an important difference in the approach to the concept of deficit financing. Thus deficit in govern-

[27] See ECAFE, *Economic Bulletin for Asia and the Far East,* November, 1954

[28] Report of the Commission, Vol. I, p. 153

ment revenue in relation to expenditure may be met in one or more of the following ways:—

(1) borrowing from the non-bank investors;
(2) borrowing from the commercial banks;
(3) borrowing from the central bank.

In Western countries the first two are regarded as deficit financing. In India it is the third method which finds acceptance in official circles for the purpose of deficit financing. Obviously the first two are not inflationary because there is just a transfer of purchasing power from the private sector to the government. But when the government borrows from the central bank, it hands over its securities to it, on the basis of which it can create further money. This is explained below.

TABLE 132

MODE OF INCREASE IN MONEY SUPPLY

Increase in money with the public	Rs. 95
Borrowing from central bank	Rs. 5
Total ..	Rs. 100
Increase in government securities with central bank ..	Rs. 5
Proportion of bank money to reserve (including government securities)	6:1
Increase in bank money on this account	Rs. 30
Total increase in money supply*	Rs. 125

(*Increase in money with the public plus increase in bank money due to the government's borrowing from the central bank)

The Reserve Bank of India laid down the following conditions as measure of *increase in money supply*— (*a*) holdings of rupee coins and notes by the Reserve Bank; (*b*) one-rupee notes and coins in circulation with the public; (*c*) Reserve Bank's loans and advances; (*d*) Reserve Bank's holdings of government securities including

treasury bills; (*e*) Banks' holdings of government securities including treasury bills; and (*f*) Government's deposits with the Reserve Bank and holdings with the treasuries.[29]

On the other hand, the Planning Commission denoted by deficit financing—"the direct addition to gross national expenditures through budget deficits whether the deficits are of revenue or of capital account". "The essence of such a policy lies, therefore, in Government spending in excess of the revenue it receives in the shape of taxes, earnings of State enterprises, loans from the public, deposits and funds and other miscellaneous sources. The Government may cover the deficit either by running down its accumulated balances or by borrowing from the banking system (mainly from the central bank and thus 'creating money')".[30]

The Planning Commission's definition is based on two principles. (1) A deficit must be judged both in terms of revenue and capital accounts and from standpoints of both the Centre and the States. (2) The criterion whether a particular transaction is or is not deficit financing should be whether or not it tends to increase money supply. Obviously the first principle is realistic. But the second does not lend itself to any practical verification. For it is difficult to precisely increase the impact of a budgetary operation on monetary circulation. As R. G. Kulkarni pointed out, "withdrawals from cash balances and increases in floating debt are regarded as part of deficit financing, as they normally tend to increase money supply. But in respect of floating debt it is necessary to see whether all short-term borrowing essentially leads to an increase in money supply or whether a distinction should be made between short-term borrowing from the central bank, from the commercial bank and from the public at large... There is also a difference between the purchase of Government securities by banks and the public directly".[31]

[29] *Reserve Bank of India Bulletin*, July, 1961, pp. 1057-61

[30] *The First Five-Year Plan*, pp. 59-60

[31] *Deficit Financing and Economic Development with special reference to Indian Economic Development*, Asia Publishing House, Bombay, 1966, pp. 252-53

From the standpoint of monetary policy, the Reserve Bank of India's approach is more realistic. It brings out the direct effects of deficit financing on changes in the quantity of money. The Planning Commission's viewpoint is narrow in this context. If the principle involved in it is to be carried to its logical conclusion, the deficits arising at the lower levels of the Governmental machinery have also to be taken into account. This would make the task very complicated and well-nigh impossible.

In India empirical data show that the relation between deficit financing on the one hand and economic growth and inflation on the other had been different in different periods.

Relevant data in the first two Plan periods are furnished below:—

TABLE 133

DEFICIT FINANCING IN FIRST PLAN

	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
(1) *Deficit financing (Rs. crores)*	0	2	45	36	93	157
Per cent variation over preceding year	—	—	—	—20	158	70
(2) *Money supply with the public (Rs. crores)*	1,856	1,873	1,752	1,765	1,850	2,049
Per cent variation over preceding year		—0.9	—6.5	0.7	4.8	10.8
(3) *Real national income (Index—base 1948-49=100)*	102.3	105.2	109.4	116.0	118.8	122.8
Per cent variation over preceding year	0.3	2.8	4.0	6.0	2.4	3.4
(4) *Index number of wholesale prices (base 1950-51 =100)*	100	105.5	89.4	93.6	87.2	82.7
Per cent variation over preceding year	—	5.5	—15.2	4.7	—7.0	—5.2

Sources: (1) Reserve Bank of India, *Reports on Currency and Finance*

(2) Government of India, *Economic Surveys*

TABLE 134

DEFICIT FINANCING IN SECOND PLAN

	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61
(1) *Deficit financing (Rs. crores)*	157	253	497	140	112	—49
Per cent variation over preceding year	70	61	95	—72	—20	—144
(2) *Money supply with the public (Rs. crores)*	2,049	2,223	2,334	2,395	2,551	2,725
Per cent variation over preceding year	10.8	8.5	5.0	2.6	6.5	6.8
(3) *Real National income (Index 1948-49=100)*	122.8	129.6	127.8	137.9	140.4	149.8
Per cent variation over preceding year	3.4	5.5	—1.4	7.9	1.8	6.7
(4) *Index number of wholesale prices (base 1950-51 =100)*	82.7	94.2	97.0	101.0	104.7	111.7
Per cent variation over preceding year	—5.2	14.0	3.0	4.0	3.6	7.0

Sources: (1) Planning Commission, *Basic Statistics relating to the Indian Economy, 1950-51 to 1965-66*
(2) Reserve Bank of India, *Reports on Currency and Finance*
(3) Government of India, *Economic Surveys*

It may be noted from the above that during the First Five-Year Plan there was practically little deficit financing and little change in money supply at least for the first four years. The national product at constant prices increased, though at a moderate rate. The price-level declined. The picture in the last year of the Plan was however different. Both deficit financing and money supply increased considerably over the preceding year. The national product rose by only a small margin. But the price-level instead of going up declined on the whole. This proved to be an exceptional

year. One reason for it might be that though there was a fall in agricultural production, imports of both foodgrains and raw materials were substantial. At the same time it is worth noting that the combined impact of lower production and increased money supply came to be felt from early part of the following year.

It may be added that the internal budget deficits were greatly matched by import surpluses, financed out of the releases of sterling balances in London. Such balances dropped from Rs. 884 crores in 1950-51 to Rs. 746 crores in 1955-56. This was one of the reasons for the low increase of money supply till 1954-55.[32]

The Second Plan period was characterised by almost steady increase in money supply and only a nominal rise in national output.

In three of the five years deficit financing declined but money supply showed a rising trend leading to an appreciable rise in prices. It may be that prices rose not only in those years in which the national product decreased but also in those in which it registered improvement.

The over-all trends in the two Plan periods are shown below—

TABLE 135

IMPORTANT ECONOMIC INDICATORS IN FIRST TWO PLANS (Change per cent)

	First Plan	Second Plan
Plan outlay in public sector* (Rs. crores)	1,960	4,672
Deficit financing* (Rs. crores)	333	954
Monetary resources	+14	+44
Net national expenditure at market prices	+6	+44
Net national output at constant prices	+18	+20
All commodity prices	—17	+35
Agricultural output	+22	+21
Prices of agricultural products	—26	+41
Foodgrains output	+27	+19
Foodgrains prices	—15	+15
Industrial output	+33	+37
Prices of manufactures	—3	+24

* refers to aggregate (not percentage change)

[32] See A. Vasudevan, *Deficit Financing Controls and Movement of Prices in India since 1947*, Allied Publishers, Bombay, 1967, pp. 113-14

Sources: (1) Reserve Bank of India, *Report on Currency and Finance, 1967-68*
(2) *RBI Bulletin*, June, 1967
(3) Planning Commission, *Basic Statistics relating to the Indian Economy, 1950-51 to 1965-66*, December, 1966

The foregoing table points to the facts that during the First Plan as a whole though deficit financing constituted 17 per cent of Plan outlay in the public sector and monetary resources rose by 14 per cent, the growth in national expenditure was of the order of 6 per cent only. Against these, agricultural output went up by about 22 per cent and industrial output, by 33 per cent. So overriding whatever little inflationary pressure could be exerted by increase in money supply, the rise in output forced prices down by very significant proportions.

But the balance of power was different in the Second Plan period, during which monetary resources increased by 44 per cent and national expenditure also to the same extent. The Plan outlay in the public sector was 138 per cent higher than that during the First Plan. But of this, about 20 per cent was met through deficit financing. Comparatively, the quantum of deficit financing was nearly three times as much as in the First Plan. All these were significant enough to raise prices to the extent of 41 per cent in the case of agricultural commodities and 24 per cent in that of manufactures. This happened in spite of the fact that agricultural output rose almost to the same extent as in the First Plan and industrial output even more than in the First. Probably if these outputs had not risen, the increase in prices would have been more severe.

Some experts opined that the rise in prices during the Second Plan was primarily due to deficit financing. "The root cause of such a situation", pointed out C. N. Vakil, "is the tendency of large public expenditure by Government greatly in excess of its genuine resources, that is, taxes and loans from the public".[33] In the words of R. G. Kulkarani, "the

[33] *Deficit Financing and Inflation*, Forum of Free Enterprise, Bombay, 1967, p. 5

basic fact (behind the price-rise) was the large volume of deficit financing undertaken to meet the development expenditure. If investment would have been financed without deficits in the budgets in these years, such a catastrophe would not have arisen".[34]

Milton Friedman found in the price trends empirical support to the Quantity Theory of Money. "In the First Five-Year Plan period", wrote he, "currency in public circulation rose by 13%; currency plus demand deposits rose by 11%; currency plus demand deposits plus time deposits rose by 15%. The stock of money as defined in any of these ways rose decidedly less than the 18% increase in output. In consequence, prices fell. In the Second Five-Year Plan period, the stock of money rose more than output. Currency alone rose by 25%; currency plus demand deposits by 33%; currency plus demand deposits plus time deposits by 53%. The stock of money rose more than output; hence prices rose".[35]

The year-to-year trends during the Third Plan and the following quinquennium are analysed below—

[34] *Op. cit.*, pp. 291-2, 388

[35] *Inflation: Causes and Consequences*, The Council for Economic Education, Asia Publishing House, Bombay, 1963, p. 11

TABLE 136

DEFICIT FINANCING IN THIRD PLAN & 1966-71

Year	Deficit financing (Rs. crores)	Percentage variation over preceding year	Money supply with the public (yearly average) (Rs. crores)	Percentage variation over preceding year	Real national income (index 1948-49 =100)	Percentage variation over preceding year	Index No. of wholesale prices. All commodities (1961-62 =100)	Pencentage variation over preceding year
1961-62	181	—	2,844	4.4	155.0	3.5	100.0	—
1962-63	180	—	3,098	8.9	158.1	2.0	103.8	3.8
1963-64	212	18	3,476	12.2	167.1	5.7	110.2	6.2
1964-65	162	—24	3,866	11.2	179.1	7.2	122.3	11.0
1965-66	398	146	4,236	9.6	169.1	—5.6	131.6	7.6
1966-67	189	—53	4,641	9.6	171.7	1.5	149.9	13.9
1967-68	224	19	5,008	7.9	187.6	9.3	167.3	11.6
1968-69	269	20	5,428	8.4	192.1	2.4	165.4	—1.1
1969-70	58	—80	6,009	10.7	202.3	5.3	171.6	3.7
1970-71	365	530	6,736	12.1	211.6	4.6	181.1	5.5

Sources: (1) Reserve Bank of India, *Reports on Currency and Finance*
(2) Government of India, *Economic Surveys*

Thus it may be seen that deficit financing was the same in 1962-63 as in 1961-62 and national product went up to some extent, yet there was increase in prices to the extent of about 4 per cent. Both in 1964-65 and 1966-67 there was decline in deficit financing compared to the respective preceding years but rise in prices of about 11 and 14 per cent respectively. On the other hand, against an increase of about 146 per cent in deficit financing in 1965-66 over 1964-65, prices rose only by about 8 per cent, although national product also declined by about 6 per cent. Similarly against a very large increase in deficit financing in 1970-71 over 1969-70 prices rose by only about 5 per cent.

The over-all trends were as under:

TABLE 137

IMPORTANT ECONOMIC INDICATORS IN THIRD PLAN & 1966-71 (Change per cent)

	Third Plan	1966-71
Deficit financing	13.2	9.4
Money supply	57.0	57.0
Monetary resources	55.0	72.0
Net national expenditure at current prices	58.0	63.2
Net national output at constant prices	14.0	24.7
All commodity prices	32.2	37.6
Agricultural output	—7.4	36.8
Prices of agricultural products	36.3	41.8
Foodgrains output	—12	27
Foodgrains prices	57	13
Industrial output	38.7	17.4
Prices of manufactures	20.4	31.1

Sources: (1) Government of India, *Economic Survey, 1971-72*
(2) Reserve Bank of India, *Report on Currency and Finance*, 1970-71
(3) *Reserve Bank of India Bulletin*, August, 1971
(4) Planning Commission, *Fourth Plan Mid-term Appraisal, Vol. I*

There are some who traced a close connection between deficit financing and the movement of prices during the Third Plan and the subsequent five- or six-year period. For instance, according to Suraj B. Gupta of the University of Delhi, "the trend rate of growth of (officially recorded) prics in India (6.75%) over the period (1960-61

to 1972-73) has been in very close proximity to the rate of growth predicted by a correct use of the *quantity theory of money* (7.05%)".[86] According to him, (1) the stock of money has more than tripled—from Rs. 2,869 crores to Rs. 9,348 crores; (2) the real output increased by about 45 per cent—from Rs. 13,294 crores to Rs. 19,349 crores; and (3) prices have more than doubled—the wholesale price index (base 1961-62=100) increased from 99.8 to 218.4. Closer scrutiny reveals that the rate of increase in deficit financing during the Third Plan period was 50 per cent higher than that in the subsequent five-year period, although money supply remained the same. But prices of all commodities as well as agricultural products rose more in the latter period than in the former. This happened in spite of the fact that agricultural output declined slightly during the Third Plan period but increased by about 37 per cent during the subsequent five-year period.

The trends in the last three years of the Fourth Plan are indicated below—

TABLE 138

SOME ECONOMIC INDICATORS DURING 1971-74

	1971-72	1972-73	1973-74*
(1) *Deficit financing* (Rs. crores)	710	848	625
Percentage variation**	97	19	—26
(2) *Money supply with the public* (Rs. crores)	8,138	9,412	10,836
Percentage variation**	14	15	15
(3) *Real national income* (index number) at 1960-61 prices	276	398	376
Percentage variation**	6	9	26
(4) *Index number of wholesale prices* (1961-62=100)	188.4	207.1	254.4
over preceding year	4.0	10.8	22.6

* provisional **Percentage variation

Sources: (1) *Draft Fifth Five Year Plan 1974-79, Vol. I*
(2) Reserve Bank of India, *Report on Currency and Finance, 1973-74*
(3) Government of India, *Economic Survey, 1974-75*

[86] See his paper on "Food Shortage, Demand-Pull and Inflation in India", presented at the Seminar on Inflation organised by the Institute for Financial Management and Research, Madras on December 14 and 15, 1973

The above table shows that in 1971-72 deficit financing rose by about 97 per cent but prices increased by only about 4 per cent whereas in 1972-73 the price rise was about 10 per cent against an increase of only about 19 per cent in deficit financing. The position in 1973-74 was very peculiar because the price-level went up by about 23 per cent although deficit financing declined by about 26 per cent and national product rose to a similar extent.

There are some who find in the above trends an illustration of the *quantity theory, too.* Thus the 140 economists who formulated *A Policy to Contain Inflation with SEMI-BOMBLA* pointed out that "during the end of 1969 and the third week of January, 1974, money supply had increased by 70 per cent, the level of wholesale prices by 60 per cent and food articles by 62 per cent", and urged immobilisation of 30 per cent of money supply through partial remonetisation and illiquid savings certificates and blocked accounts. "In 1972-73 the money value of net domestic product", observed P. R. Brahmananda, "was estimated at Rs. 40,700 crores. Money supply has increased since 1969-70 by about 40 per cent. According to the norm of the *quantity theory* the price level should have gone up by 31 per cent; but according to published data the price level has gone up by about 21 per cent. On this basis in 1972-73 about 9 per cent of that year's net domestic product was in the form of black incomes".[37]

There may be force in the said arguments. But two aspects of money supply require emphasis. (1) There was a decline in the income velocity of money. This is shown below—

[37] "The Nature and Genesis of the Indian Statflation and its Control", in S. L. N. Simha (ed.), *op. cit.*, p. 83

TABLE 139

DECLINE IN INCOME VELOCITY[38]

	Money Supply		Aggregate monetary resources	
	Income velocity	Change (%)	Income velocity	Change (%)
1969-70	5.260	+0.4	3.587	—1.6
1970-71	5.090	—3.1	3.433	—4.3
1971-72	4.782	—6.1	3.149	—8.3
1972-73	4.667	—2.4	3.003	—4.6

(2) True, deficit financing by the Government increased much. But deficit spending by non-Government sectors also went up considerably. This is evident from below—

TABLE 140

BANK CREDIT TO GOVERNMENT & PRIVATE SECTOR

(Rs. crores)

Year	Bank credit to Government	Bank credit to private sector	Time deposits
1969-70	28	713	423
1970-71	511	889	498
1971-72	1,181	848	728
1972-73	1,324	1,117	926
1973-74	956	1,547	1,003

Source: Reserve Bank of India, *Reports on Currency and Finance*

OVER-VIEW

On the whole, therefore, it may be inferred that whatever influence deficit financing might have exerted indirectly and ultimately on the price-level, *there was no direct correlation between the two.* As one scholar[39] put it, 'an era of price inflation in India (1952-1967) has been

[38] See D. K. Rangnekar, "Inflation & Black Money", *The Economic Times Annual* 1974, p. 30

[39] Gangadhar Rakshit, *Role of Deficit Financing in the Context of Indian Planning*, The World Press, Calcutta, 1973, pp. 41-42, 44

associated with an era of large-scale deficit financing. But to say that this inflationary situation is caused by deficit financing alone is an over-simplification... a price rise in a particular context cannot be safely attributed to one single factor as deficit financing or expansion in the supply of money'. In the words of D. N. Rangnekar, "Inflation is a wide-ranging complex phenomenon. Even if the growth of money supply and Government deficit were intended to signify *excess demand*, there is no conclusive evidence of a stable relationship between the two... At the end of the exercise one is not sure that one has not confused cause with the effect".[40]

BLACK MONEY AND INFLATION

There are quite a few who have traced the root cause of inflation in India in black money.

The fountainhead of inflation and corruption in the country, observed K. R. Ganesh, Union Minister of State for Finance, was the kind of business practices and culture that had developed around black money. 'No effort of the Government to arrest inflation would succeed unless an all-out attack on black money was relentlessly made'.[41] 'The holders of black money', argued Naba Gopal Das, 'are naturally careless about prices. They feel a compulsion to spend the extra money on whatever is available. This extravagant spending causes an inflationary spiral in prices telling heavily upon people with limited means. The latter receive a further blow when dishonest business men use their black purse to create artificial scarcity of the necessities of life by indulging in speculative hoarding of essential commodities'.[42] "One cannot escape from the fact of black money", wrote P. R. Brahmananda. "Its significance has increased very much by the present inflation. High denomination currency helps finance the black tran-

[40] *The Economic Times Annual*, 1974, p. 28
[41] See his speech reported in *The Times of India*, August 12, 1974
[42] See Supplement to *Capital*, 31st January, 1974, p. 75

sactions. Black and white transactions intermesh".[43] According to the Wanchoo Committee, "In the worst days of inflation, the artificial element of shortages has always been large; but as black money multiplied, the area of artificial shortages seems to have grown—these illegal operations have induced a considerable amount of leakage of foreign exchange through under-invoicing and over-invoicing of foreign trade deals and also through secret cuts and commissions on joint ventures and collaboration agreements involving India and foreign parties. Small wonder then there is, in this black money economy, a regular list of quotations covering items even where transferability is denied or restricted. These include industrial licences, import licences, allocations of materials, foreign exchange permits, etc".[44]

DEFINITION

For a proper understanding of the issue and sequence involved, it is necessary to know what is black money and what are its chief features. "Black is a colour", pointed out the Wanchoo Committee, "which is generally associated with evil. While it symbolises something which violates moral, social or legal norms, it also suggests a veil of secrecy shrouding it. The term 'black money' consequently has both these implications. It not only stands for money earned by violating legal provisions—even social conscience —but also suggests that such money is kept secret and not accounted for".[45] 'Black money', wrote a monetary expert, 'is that which is earned or received in contravention of the prevailing government acts and regulations or money that has been retained without the payment of taxes due to a government. It is black money when a minister or an official takes payment for giving a licence or a permit. It

[43] *Op. cit.*

[44] Direct Taxes Enquiry Committee, *Final Report*, December, 1971, paras 2.6, 2.7.

[45] Ibid., para 2.1.

is black money when a cement or steel manufacturer/ trader sells the commodity at a price above the controlled rate without the money appearing in the official records. When an exporter of jute goods under-invoices the exports, keeps the money abroad or brings it back by selling the foreign exchange at a substantial premium over the official exchange rate and in contravention of exchange control regulations, he has acquired black money. When a professor goes to another university to conduct an examination and travels II class while claiming I class fare, he is also acquiring money which is not white".[46]

VOLUME

Nicholas Kaldor estimated the amount of unaccounted income in India to be of the order of Rs. 600 crores in 1953-54. The Wanchoo Committee found that the assessable non-salary income for the financial year 1961-62 was Rs. 2,686 crores as against an actually assessed non-salary income of Rs. 1,875 crores. Accordingly the income which evaded tax for 1961-62 was placed at Rs. 811 crores. Similar income on the basis of rough adjustments was estimated at Rs. 1,000 crores in 1965-66 and Rs. 1,400 crores in 1968-69. D. K. Rangnekar disagreeing with the Committee found such income to be of the orders of Rs. 2,833 crores in 1968-69 and Rs. 3,080 crores in 1969-70.

P. R. Brahmananda arrived at three sets of figures of black money in 1972-73 on the basis of three different methods of estimation.[47] (1) In 1972-73 the money value of net domestic product was Rs. 40,700 crores. Compared to 1969-70, it increased by 6.6 per cent, but money supply rose by about 40 per cent. According to the quantity theory the price-level should have gone up by about 31 per cent, but actually it increased by about 21 per cent. So about

[46] S. L. N. Simha (Director, Institute for Financial Management and Research, Madras), "Black Money and Inflation", *The Financial Express*, August 27, 1973.

[47] Op. cit.

9 per cent of net domestic product in 1972-73, that is, Rs. 3,600 crores should measure the gains to various parties due to the pressure of excess demand. (2) The income-velocity of money in 1972-73 was about 5.0 per cent. But the highest value of such velocity reached in India was about 5.8 to 5.9 per cent. So the maximum money value of net product would have ranged between Rs. 47,200 and Rs. 48,000 crores. This would give a black income of Rs. 7,000 crores in 1972-73. (3) The true rate of return on capital under Indian conditions would be at least 25 to 40 per cent higher than what was reflected in interest rates, yields and rates of return according to official data in the organised sector. This would mean a black income of about Rs. 5,000 crores mostly in the form of unrecorded profit.

CHARACTERISTICS

(1) Whatever may be the measure of black money, the fact is undeniable that its amount is considerable. In other words, there exists something like *a parallel economy* in the country running on the strength of black money. Or as someone put it, the Indian economy is 'like a zebra with both white and black stripes on its skin'.

(2) The father of black money is *controls* of various kinds. Its mother is *corruption.* In the parallel economy prices, interest rates, profit rates are all higher than what is allowed under the law.

(3) Black money is both *a flow* and *a stock.* It exists in either form. As the Wanchoo Committee observed, "not only unaccounted money is either hoarded or is in circulation outside the disclosed trading channels, but it is also invested in gold, jewellery and precious shares and even in lands, buildings and business assets over and above the amounts shown in the books of account". "Those earthen pots full of black money", pointed out a leading daily, "are largely mythical. It is extremely costly and dangerous to hold money in that way, and most offenders will have

converted such money into assets that are better protected against inflation and the tax man".[48]

(4) The parallel economy does not remain parallel all the time. Black money and white money get mingled after a few transactions and one can scarcely distinguish between the two. Finally, it is difficult to say whether black-money operations take place in the background of a white-money dominated system or vice versa.

(5) Black money bears no relation to any measure of social contribution to the production of national wealth. It is money ill-gotten through the back door. It accrues as "windfall gains, situational and conjectural rents, partly to the producers, partly to various intermediaries, and partly also to those who have the political and economic power or privilege over the distribution of permits, licences, scarce commodities and other rights. This has set up a whole hierarchy of very *powerful vested interests*, engaged in the perpetuation of an economy of scarcities, of segmented decision-making without any integrated principles governing the whole economic process".[49]

Effect of Black Money

On the face of it, black money implies so much purchasing power. Therefore, it may be argued that its expenditure leads to inflation just by generating further demand. A group of scholars led by V. K. R. V. Rao have pointed out[50] two important ways in which black money helps inflation or there develops black marketing. (*i*) The parallel economy based on black money functions like a self-breeding reactor

[48] *The Statesman*, leading article, August 22, 1972

[49] See C. N. Vakil and others. *A Policy to Contain Inflation with SEMIBOMBLA* Commerce Pamhlets 80-82, October, 1974, p. 9.

[50] See V. K. R. V. Rao, A. M. Khusro, C. H. Hanumantha Rao, K. Krishnamurty and Ajit K. Dasgupta, *Inflation and India's Economic Growth*, Institute of Economic Growth, Vikas Publishing House, Delhi, 1973, pp. 25-27

and tends to make nonsense out of controlled prices and leads to a higher rate of inflation in terms of price at which actual transactions in goods and services are effected in the economy. (*ii*) The emergence of black markets and their increasing proliferation and expansion, promotes inflation indirectly by the effect it has on reducing the base and therefore the volume of Government receipts needed to cope with increasing public expenditure.

Closer scrutiny however reveals *a number of interesting sequences*. Two sets of people are involved in every transaction leading to black economy—one who pays it and another who receives it. There is thus a mere transfer of purchasing power. When the question of its utilisation comes, it may be either spent straightway or hoarded and kept in readiness for convenient purchases of rare articles, landed property or for speculative dealings. (*a*) Generally the expenditure of black money takes place secretly and also cautiously. By and large the tendency is to keep it for a suitable future occasion. If it is not spent immediately, black money is disinflationary. (*b*) To the extent it is spent on luxury articles, landed property etc., its effect on the general price-level is negligible. (*c*) Black money may be the result of transfer from low-income groups to high-income ones, say purchase of rice by common people at higher than controlled rates. The rice-dealer who gets it may just hoard it or utilise it in purchasing a car. In that case its impact may not be inflationary. (*d*) On the other hand, a cement dealer after getting black money or sale of cement in the black market, may choose to invest it on productive pursuit, say, increasing the manufacture of cement or some other product useful to the community. This may have a disinflationary effect in the long run. (*e*) If the black money is the result of transfer from the high-income to low-income groups, as from a bank manager to a railway booking clerk, its effect may be inflationary; for the latter is likely to spend it on consumption goods. (*f*) When black money originates through tax evasion, it may be said to hold back public expenditure and hence inflation.

Thus there can be no hard and fast observation about the effect of black money on inflation. It is inflationary in some cases but disinflationary in others.

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CHAPTER IX

Control of Inflation in India

We have no floor for our real growth each year: we have no ceiling for financial expenditure. Thus inflation is written into our operations.

E. P. W. DA COSTA

I MONETARY POLICY IN INDIA

"Monetary policy", as the Radcliffe Committee in the United Kingdom pointed out in its Report (1959), "is necessarily moulded by the world in which it takes shape". In a developed country the primary object of such policy is contra-cyclical, with emphasis on anti-inflationary aspects during the upswing. Its central bank is mainly a controller and stabiliser of the economy through the monetary sector. But in a developing country the object is growth with stability. Its central bank has to play the twin role of a *regulator* and *promoter*. In the latter capacity it has not merely to resist the forces which impede development but also provide the positive stimulants which are necessary for it". As Dr. S. K. Basu emphasised, it has to mix a little more of development activities along with regulatory operations.[1] According to the Governor of the Reserve Bank of India, the problem is not merely one of control in the negative sense, of preventing the misuse of credit for speculation and hoarding but of guidance in the positive sense to see that the priority sectors are not starved.[2] There is the dilemma, as Dr. Bhabatosh Dutta put it, of 'going to the brink and remain there. Failure to reach the brink would mean failure to utilise the potentials; failure,

[1] *Central Banking in the Emerging Countries*, Asia Publishing House, Bombay, 1968, p. 118

[2] See *Reserve Bank of India Bulletin*, September, 1967, p. 1203

to prevent the system would mean growth-inhibiting inflation'.[3]

It was also made clear by the Planning Commission in the early stage of planning that central banking in a planned economy could hardly be confined to the regulation of the flow of bank credit. It would have to take a direct and active role, firstly, in creating or helping to create the machinery needed for financing developmental activities all over the country and secondly, ensuring that the available finance flows in the direction intended.[4] Accordingly the Reserve Bank of India as the central bank of the country had been on the whole following a policy of 'controlled expansion of money and credit'.[5] Its aim had been secular expansion of credit in the long run but control of the rate of expansion in the short. But it is virtually tantamount to 'walking on a tight rope'. For on the one hand it requires that the sagging economic growth should be activised; on the other, the growing inflationary pressures will have to be kept under control. It is easier to preach than practise such a policy.[6]

The Reserve Bank used all the weapons available for the purpose—Bank Rate, variable ratios, open-market operations and selective credit control.

(1) Bank Rate

The Bank Rate in India had remained practically unchanged since the inception of the Reserve Bank in 1935. But with the introduction of planned economy the Bank got down to its job and raised the Bank Rate from 3 to 3½ per cent in November, 1951. It was a kind of corollary to the raising of the Bank Rate in England from 2 to 2½ per cent in September, 1951. Obviously its object was to arrest the rising tendency of prices as an impact of the

[3] "Inflation and the Fifth Plan: Need for Bold Decisions", Supplement to *Capital*, 31st January, 1974, p. 62

[4] *The First Five-Year Plan*, p. 38

[5] See *Reserve Bank of India Bulletin*, April, 1966, p. 342

[6] See *Bank of Baroda Weekly Review*, November 6, 1970

Korean war. Moreover, during the busy season of 1950 there had been large expansion of currency. There was also an unprecedented increase of bank loans, by about Rs. 180 crores.[7] However, the actual timing of the rise coincided with the downward phase of the boom. Speculators and hoarders had already started releasing stocks. The net result was a rapid decline in prices, something like a recession. The all commodities index number of wholesale prices which stood at 457.5 (base year ended August, 1939=100) in April, 1951 declined to 437.6 in August, 1951; came down further to 415.8 in January, 1952; and 367.1 in May, 1952.

The Bank Rate was raised from 3½ to 4 per cent in May, 1957. This was almost simultaneous with the presentation of the central budget in Parliament which proposed rise in excise duty and a few other taxes. Their effect was going to be inflationary. It may be noted that comparative price stability, rather price decline in the First Plan had led to a policy of deficit financing in the Second. The Reserve Bank of India Act was itself amended in 1957 giving power to the Bank to print notes without limit provided a minimum reserve of Rs. 200 crores was maintained in gold and foreign securities.

Further, a mission of the World Bank, which visited India at the time of launching of the Second Plan, had predicted that serious inflationary pressures would develop due to created money. If loans were to be obtained from the Bank, it had to be convinced that fiscal-cum-monetary policy was disinflationary. Raising of the Bank Rate was however not the only device adopted. Progressively rising penal rates of interest were introduced on loans paid by the Bank under a *three-tier slab system* from October 1, 1960.

But the rise in Bank Rate together with the supplementary measures of variable reserve ratios and open-market operations could not bring about any appreciable

[7] See Reserve Bank of India, *Report of the Central Board of Directors*, August, 1952

impact on the price situation. Thus the index number of wholesale prices for all commodities which stood at 109.0 (base 1952-53=100) in May, 1957 rose to 112.0 in August, 1957. The 1958-59 average index was 112.9 against 108.4 of 1957-58. Of course, total deposit money with the public declined from Rs. 742.9 crores in 1957-58 to Rs. 738.3 crores in 1958-59.

The Bank Rate was raised from 4 to 4½ per cent in January, 1963. This was done to curb serious inflationary pressures, caused among others by (a) heavy defence expenditure, (b) increase in indirect taxation, (c) imports of raw materials and other goods at high prices and (d) speculative activities. Further, there was the context of a 'de facto' stringency in the money market, the inter-bank call money rate ruling around 5 per cent even during a part of the 1962 slack season.

The Bank Rate was further raised to 5 per cent in September, 1964 and 6 per cent in February, 1965. Thus it was increased twice within an interval of five months. Obviously it reflected the emphasis on *dear money policy* in order to check the inflationary situation. At the same time with a view to assisting the commercial banks in meeting genuine requirements for credit, the prevailing quota system was replaced by one of *differential interest rates* in September, 1964. According to it, instead of paying higher rates on borrowing above quotas, banks could borrow any amounts from the Reserve Bank at Bank Rate if it maintained a net liquidity ratio* of 28 per cent. For every decrease of one per cent in the ratio the rate charged on the entire amount of borrowings went up by ½ per cent. The increase in the Bank Rate in February, 1965 was accompanied by a change of the differential rate system raising the requirement of net liquidity ratio from 28 to

* The term 'net liquidity ratio' means the total of bank's cash balances with the Reserve Bank and other notified banks and balances in current accounts with other banks and investments in Government securities less its total borrowings from the Bank and the State Bank expressed as a proportion of its aggregate demand and time liabilities as reported weekly.

30 per cent for maximum accommodation from the Reserve Bank.

But the rises in Bank Rate on three occasions, the last two being at short intervals, could not bring down prices during the Third Plan period. Thus the all-commodities price-index went up from 126.0 in January, 1963 (base 1952-53=100) to 129.8 in April, 1963, 135.5 in July, 1963, 139.9 in April, 1964. Varying from 151.5 in April, 1965 to 156.2 in May, 1965, it went up to 169.7 in December, 1965.

The Bank Rate was *reduced* for the first time from 6 to 5 per cent in March, 1968. Simultaneously rates of interest paid by banks to depositors and the rate of interest on post office savings bank deposits were reduced by ½ per cent. The principal object of these measures was *revival of the economy* from the recession which it suffered in 1966 and 1967. These steps together with an earlier package of measures introduced in July, 1967 and directed to provide credit at concessional rates to priority sectors including exports, engineering and small industry, had some good effect. Thus bank credit to the commercial sector went up from Rs. 124 crores in 1968-69 to Rs. 338 crores in 1969-70. There was a significant impact on the foreign trade sector. The net foreign exchange assets of the Reserve Bank increased by Rs. 270 crores in 1969-70, compared with a rise of Rs. 68 crores in 1968-69.

But the cheap money policy could not be continued for long. Inflationary trends had reappeared and a number of credit control measures had already been taken such as raising of the net liquidity ratio from 30 per cent to 31 per cent in February, 1970; to 32 per cent in April, 1970; and 33 per cent towards the end of 1970. In June, 1970 the Reserve Bank asked all commercial banks to raise their interest rates on loans by ½ per cent. Ultimately the Bank Rate was raised to 6 per cent from January 9, 1971. Almost simultaneously the net liquidity ratio was stepped up to 34 per cent from January 29, 1971. It was also decided to make available re-finance facilities at the Bank Rate only in respect of advances for priority proposes.

There was some positive effect of these measures. For instance, net bank credit to the commercial sector declined from Rs. 347 crores in 1970-71 to Rs. 76 crores in 1971-72. But this was offset by a virtual doubling of net bank credit to Government from Rs. 515 crores to Rs. 972 crores.

The Bank Rate was again increased from 6 to 7 per cent at the end of May, 1973. It was part of a package of measures which included raising of commercial banks' reserves from 3 to 5 per cent and net liquidity ratio from 37 to 39 per cent. There were also many other follow-up steps such as virtual withdrawal of refinance facilities in July, 1973; a further increase in reserve requirements to 7 per cent and net liquidity ratio to 40 per cent in September, 1973; ceiling on credit expansion in other sectors than food procurement during the period September, 1973 to April, 1974. But the over-all results were far from satisfactory. For instance, deposit money with the public went up from about Rs. 4133 crores in June, 1973 to Rs. 4214 crores in August, 1973 and Rs. 4502 crores in March, 1974. The all commodities index of wholesale prices rose from 233.4 (base 1961-62=100) in May, 1973 to 250.0 in September, 1973 and 284.4 in March, 1974.

From July 23, 1974 the Bank Rate was pushed up from 7 to 9 per cent, that is, by 2 per cent which set up *a record rate* of rise at one stroke. This was also part of a package of credit restriction measures which included raising of minimum lending rate chargeable by banks on advances from 11 to 12.5 per cent for the exempted categories, from 13 to 15 per cent or 12 to 14 per cent for selective control categories, maximum rate of interest on export credit from 9 to 10.5 per cent and the rate of interest on public sector food procurement from 9 to 11 or 12 per cent. One consequence of these measures was decline in money supply with the public to the extent of Rs. 106 crores during the slack season, April 26 to October 25, 1974. This was unlike the preceding slack seasons of 1972 and 1973 when money supply increased by Rs. 80 crores and Rs. 322 crores respectively. Component-wise, it was, however, currency with the public which declined by Rs. 419 crores whereas de-

posit money actually rose by Rs. 313 crores. The aggregate monetary resources also showed a considerably smaller increase of Rs. 491 crores which was less than half of the increase of Rs. 1003 recorded in the 1973 slack season.

LIMITATIONS OF BANK RATE

There are some special circumstances in India which tended to make the Bank Rate ineffective. (1) Commercial banks are not in the regular habit of rediscounting their bills with the Reserve Bank. Rediscounting is no more than an emergency affair. (2) They are generally fond of excess liquidity. Most of them possess excess cash reserves and do not feel it necessary to take recourse to the Bank when the Rate is raised. (3) There is a large unorganised market, consisting of indigenous bankers and private money lenders, over whom neither the Reserve Bank nor commercial banks have any control. But a good volume of transactions takes place in this market, particularly in rural areas. It is believed that a little less than a third of the economy is in the non-monetised sector. So even if the Bank Rate were followed as a guide by the scheduled commercial banks, that would not have mattered much. (4) The impact of the Bank Rate on saving decisions is also doubtful since nearly three-fourths of personal saving are in insurance, housing and small business. Even if changes in this Rate are followed up by changes in interest rates in general, these would affect savings very little. (5) Further, it is said that the Bank Rate has been more a follower than a leader of the money market. "There are grounds to suspect that whatever little increases in the Bank Rate had thus far been effected in India, had been effected not so much for preventing excessive investment as for bringing the Bank Rate in alignment with the other rates of interest in the money market".[8] Thus before the Bank Rate was raised in May, 1957, the highest call money

[8] P. D. Hajela, *Problems of Monetary Policy in Underdeveloped Countries*, Lalvani Publishing House, Bombay, 1969, p. 125

rate charged in Bombay by larger banks on inter-bank lending had ranged between 3½ and 3¾ per cent in the busy season of 1956-57. Again when the Bank Rate was raised to 4½ per cent in January, 1963, the call money rate had already risen to 5 per cent in December, 1962 and that in Calcutta, to 4.99 per cent. (6) It has also been pointed out that the rates of increase on different occasions were so small that their effectiveness was lost in the midst of the other factors making for inflation. Thus between 1954 and 1964 the price-level went up by more than 6 per cent per annum on an average. In such a situation one could justifiably raise the question, 'why should I save Rs. 100 and invest in Government bonds to get Rs. 4½ if before the year ended its value declined to Rs. 94'.

According to Alak Ghosh, "even a dearer money policy which was pursued between September, 1964 and February, 1968, could not deal with the problem of an excessive price rise. Between 1965 and 1967 there was a price rise of 12 to 14 per cent per annum and under such circumstances even a 6 per cent Bank Rate was not enough for curbing either hoarding or speculative tendencies associated with sky-rocketing of prices".[9]

The changes in Bank Rate vis-a-vis other rates of interest and its over-all ineffectiveness in the context of rise in prices are shown in the following table—

[9] *Control Techniques in Indian Monetary Management* (P. U. Banaili Readership Lectures, 1969), The World Press, Calcutta, 1971, p. 31

TABLE 141[10]

Year	Bank Rate (1)	State Bank *Hundi* Rate (2)	Bombay Call Money Rate (3)	Average Rate of Interest paid by large companies on borrowings (4)	Index No. of average consumer prices (base—1950-51) (5)
1950-51	3.00	3.75	0.74	3.39	100.0
1951-52	3.00-3.50	4.25	1.73	3.56	103.0
1952-53	3.50	4.50	2.23	4.51	103.0
1953-54	3.50	4.50	2.65	4.32	105.0
1954-55	3.50	4.50	2.59	4.04	98.0
1955-56	3.50	4.75	2.75	4.23	95.0
1956-57	3.50	5.12	3.22	3.98	106.0
1957-58	3.94	5.37	3.07	4.68	111.0
1958-59	4.00	5.37	2.81	5.04	117.0
1959-60	4.00	5.25	2.86	5.34	121.0
1960-61	4.00	6.00	4.24	5.10	122.0
1961-62	4.00	6.50	4.24	5.50	125.0
1962-63	4.13	6.75	4.16	5.50	128.0
1963-64	4.50	7.25	3.87	6.00	134.0
1964-65	4.50-6.00	8.25	4.01	6.60	154.0
1965-66	6.00	9.25-9.75	6.26	7.00	166.0
1966-67	6.00	9.75	5.16	7.20	187.0
1967-68	6.00-5.00	9.75-9.50	4.95	7.30	209.0
1968-69	5.00	9.50	3.75	7.90	208.0
1969-70	5.00	9.50	4.30	7.80	211.0
1970-71	5.00-6.00	9.50	6.38	8.40	222.0
1971-72	6.00	8.75-10.70	5.16	—	229.0
1972-73	6.00	10.50	4.15	—	247.0

(2) VARIABLE RESERVE RATIOS

It was noticed in late fifties that while bank credit expanded in the busy season, there was no corresponding contraction in the slack one. Obviously, a part of the ex-

[10] See P. R. Brahmananda, "Interest Theory and Policy in the Indian Economy", *Commerce* Annual Number, 1974, p. 43

panded credit was being retained for speculative dealings. Thus the contraction in the slack season (May-October) of 1960 was only Rs. 86 crores compared with Rs. 112 crores in 1959 and Rs. 158 crores in 1958. So in order to ease the pressure of monetary demand the Reserve Bank of India clamped on the commercial banks a package of credit control measures on March 11, 1960. One of them was that all scheduled banks were required to maintain with the Bank an additional reserve of 25 per cent against any increase in their demand and time deposit liabilities after March 11, 1960. This was in addition to the pre-existing statutory reserve requirements of 5 per cent of demand and 2 per cent of time liabilities. The above measure was further tightened by a directive issued on May 6, 1960, which required the banks to maintain with the Reserve Bank an additional reserve of 50 per cent of any increase in their deposits after May 6.

But the above measures did not produce much effect. The level of credit continued to be high throughout the slack season. Thus the scheduled banks' borrowings from the Reserve Bank, outstanding in September, 1960, were as high as Rs. 33 crores against only Rs. 3 crores a year ago. Therefore, in order to put a check on this a system of *penal rates* was introduced on September 21, 1960, under which the scheduled banks' access to the Reserve Bank would be regulated by a three-tier rate depending on the extent of borrowing. With effect from October 1, 1960, each scheduled bank was assigned a quota equal to 50 per cent of the statutory reserves required to be maintained by it (that is, 2 per cent against demand and 5 per cent against time deposits). Rates of interest payable on borrowing from the Bank were to go up as follows:—

TABLE 142

Borrowing	Interest rate
1. Up to the quota	4 per cent (i.e., Bank Rate)
2. Above the quota but up to the amount of statutory reserves	5 per cent
3. Above the statutory reserves ..	6 per cent

The three-tier system continued till July, 1962, when a four-tier system was introduced under which a bank could borrow upto 100 per cent of its statutory reserve, known as its basic quota at the following rates:

TABLE 143

Borrowing	Interest rate
1. Up to the quota (i.e., 25 per cent of its statutory reserves)	4 per cent
2. Above the quota up to 50 per cent of the amount of statutory reserves ..	5 per cent
3. Above 50 per cent of the amount of statutory reserves but up to this amount	6½ per cent

In October, 1963, the system was further changed. The total borrowing quota allowed to banks was raised from 100 to 150 per cent of their statutory reserves. Half of this quota, i.e., 75 per cent of these reserves, could be borrowed at Bank Rate and the remaining half at 6 per cent. In September, 1964, the quota system was abolished but the system of penal rates was retained.

The technique of variable reserve ratios suffers from some positive *disadvantages* in an underdeveloped economy. (1) It assumes that commercial banks expand deposits against a fixed reserve ratio so that if it is raised, the deposits would be commensurately affected. But this is not so. They actually operate on the basis of a range of ratios which is sufficiently flexible and, therefore, not easily controllable. (2) An underdeveloped economy is predominated by agricultural operations. But these are seasonal in character. Foreign trade is also similarly subject to fluctuations. In order to be effective, therefore, the ratio requirements have to be varied too frequently. This strikes against their reliability. (3) It is unfair and discriminatory against the smaller banks, the number of which is not small in a developing economy. (4) It is clumsy, too. For the reserve requirements are usually altered in big chunks. It is like cutting everything in the garden—trees, bushes and flower-

ing plants—blindly with a heavy axe.[11] Moreover, even if the technique might be helpful in mopping up funds in the slack season, it has got definite limitations in the busy season. It was because of these limitations that the device of variable reserve ratios was short-lived. The rules were relaxed in November, 1960, and completely revoked in January, 1961.

(3) Open-Market Operations

During World War II the Reserve Bank of India undertook open-market operations in the field of management of public debt. Its main object was to keep up people's confidence in Government securities. The Bank kept on buying when securities were unloaded on the market. As a result, its holdings of them nearly doubled between June, 1948, and June, 1951. In November, 1951, it used them to strengthen the effect of the Bank Rate in keeping prices within check. It announced that in future seasonal finance would be provided to commercial banks, not by making purchases of Government securities outright but by granting temporary accommodation against the collateral of Government securities. The idea was to force them to seek such accommodation through the discount window so that the Bank Rate could become effective. Since then, the Bank had tried to engage in buying and selling securities on a large scale when a serious imbalance had been noticed between demand and supply. Generally, open-market operations, as H. V. R. Iengar put it,[12] "had been used to assist commercial banks to tide over seasonal monetary stringency (usually in the period November to April) and to invest their surplus reserves in the slack season (usually May to October), but they have rarely been made use of deliberately for the purpose of restraining credit".

During the First Plan period, the Bank's open-market

[11] Alak Ghosh, *op. cit.*, p. 57

[12] *Monetary Policy and Economic Growth*, Vora & Co., Publishers, Bombay, 1962, pp. 199-200

operations were used to a large extent as a means of creating necessary market conditions for the floatation of new loans. The net sales of Government securities by the Bank during the period 1951-56 amounted to Rs. 55.47 crores.[13]

During the Second Plan period, the operations aimed at increasing or decreasing the volume of credit. The sale of securities amounted to Rs. 65.22 crores in 1957-58, Rs. 55.95 crores in 1958-59 and Rs. 60.33 crores in 1959-60. The net purchase amounted to Rs. 6.5 crores in 1960-61 and Rs. 82 lakhs in 1961-62. During the period 1951-52 to 1962-63 total purchases of securities amounted to Rs. 587 crores and sales, about Rs. 669 crores. Net sales, therefore, were of the order of Rs. 82 crores. These generally helped the dear money policy followed during this period.

It is generally believed that the open-market operations were still carried out not so much to curb inflationary pressures as to maintain stability in the prices of Government securities.[14] C. D. Deshmukh himself emphasised the aim of such a policy in these words:[15]

> "Open-market operations cannot be really classified as a pure instrument of monetary control, divorced from fiscal consideration. Their purpose, nature and functions in developing countries are totally different. (1) Since borrowing from the public constitutes an important item in the pattern of financing (public investment under partial planning), the Government is preoccupied with the creation of a suitable climate for smooth absorption of Government bonds by the public. (2) The developing countries have a narrow market for Government securities so that any change that emanates from open-market operations is apt to result in disproportionately wide fluctations in their prices without affecting significantly the cost base of commercial banks".

[13] *Reserve Bank of India Bulletin*, June, 1960

[14] See P. D. Hajela, *op. cit.*, pp. 151-52; H. V. Iengar, *Monetary Policy and Economic Growth*, p. 200; Alak Ghosh, *op. cit.*, pp. 39-40

[15] See Per Jacobsson Foundation Lectures delivered by him on October 1, 1956, at Washington

Obviously, the monetary aspect of open-market operations involves the fulfilment of certain conditions. At least three of them are important: (1) There should be a broad and active capital market. The central bank must be in a position to buy or sell securities in appropriate amounts and not just a few securities as a formality. (2) The central bank should not also allow easy access to the rediscount window, for in that case the effect of open-market operations would be neutralised by borrowing from or lending to, the central bank through this window. (3) The central bank should be free from the obligation to maintain stability of government security prices.

But these conditions were not fulfilled in India. Accordingly, the monetary effect was very much limited. But what was still more damaging was that it was being offset. In fact, floatation of loans and the consequent sale of securities made for increased inflationary pressures in the economy whereas normally their effect should be deflationary.[16]

(4) Selective Credit Controls

Selective credit controls were applied by the Reserve Bank for the first time in May, 1956. It appeared to the Bank that there had occurred a very large increase in the volume of advances against paddy and rice such as from Rs. 11.6 crores in March, 1955 to Rs. 24.6 crores in March, 1956 and further to Rs. 38.7 crores in May, 1956—about 234 per cent in 14 months. There was reason to believe that a considerable part of it was being used not for the purpose of genuine trade in paddy or rice but for that of speculative dealings in other commodities of short supply. So between May and September, 1956 the Bank issued directives to all scheduled and two State associated non-scheduled banks to restrict their advances against paddy and rice. Importantly, they were three in number—(i) the prevailing margins maintained by the banks in respect of loans and advances (against paddy and rice) should be

[16] See P. D. Hajela, *op. cit.*, p. 153

increased by at least 10 per cent; (ii) the banks should not grant fresh advances or credit limits of more than Rs. 50,000 to each party; and (iii) they should bring down their aggregate advances to a level not exceeding 25 per cent above that in the corresponding period of the previous year. In September, 1956 the scope of these was extended to cover bank advances against wheat, other coarse grains, gram and pulses and cotton textiles including yarn.

Credit controls were extended to sugar in June, 1957; ground nuts in February, 1959; oilseeds in December, 1959; raw jute and jute goods in December, 1960.

In June, 1957 an imporant stage was reached in the evolution of selective control, viz., regulation of the aggregate level of bank advances in place of regulation by margins.[17] Thus a directive issued on June 7, 1957 contained the provisions that advances against paddy and rice should not exceed two-thirds and against other foodgrains, three-fourths, of the respective levels in the corresponding week of 1956. In respect of jute goods a ceiling limit was imposed in respect of advances in each two-month period commencing from January, 1961—at 130 per cent of the average aggregate level of advances in the corresponding period of 1960.

A policy of *selective liberalisation of credit* was introduced for the busy season from November, 1965 to April, 1966. Control was liberalised in respect of advances for defence supplies, packing credits for exporters and for food procurement and other allied Government activities. The said policy was continued in 1966-67, too. But there was an increase in bank credit this year to the extent of Rs. 404 crores compared with that of Rs. 254 crores in 1965-66. So within the framework of a policy of general credit control, selectivity for the 1967 busy reason gave preference to priority sectors such as agriculture, exports and small-scale industries. Thus advances against exportable varieties of cotton or kapas were completely exempt-

[17] See S. K. Basu, *A Survey of Contemporary Banking Trends*, The Book Exchange, Calcutta, 1961, p. 232

ed from control on May 4, 1967. In September, 1967 advances against stocks of non-edible vegetable oils (except castor and linseed oils) were exempted from the purview of minimum margin requirements and credit limits stipulated earlier. Advances to vanaspati manufacturers were also exempted from margin requirements. As the busy season advanced, further relaxation of control was introduced in respect of advances against paddy and rice granted to millers and procuring agents, against vegetable oils and oilseeds and so on.

But there was a considerable expansion of credit during 1969. So there was a *reversal of policy* and *selective control was tightened.* From May 4, 1969 the minimum margin on advances against cotton and kapas was raised to 50 per cent. From May 22, 1969, the margin on advances against oilseeds and vegetable oils was also raised similarly. In January, 1970 the margins were further increased to 60 per cent. The minimum margin on advances against all foodgrains was also raised to 50 per cent. In January, 1971 the minimum margin on advances against oilseeds, vegetable oils and vanaspati was raised from 60 to 75 per cent. Subsequent developments in selective credit control included its extension to advances against cotton textiles in November, 1973, fixation of a minimum margin of 25 per cent on advances against wheat to flour mills in November, 1973, stepping up of the minimum margin on advances to sugar mills from 10 to 15 per cent in some cases and 15 to 25 per cent in others.

Thus the methods generally resorted to by the Reserve Bank for the selective control of credit were: (i) varying the margin requirements against certain collaterals; (ii) exempting certain collaterals with a view to encouraging selected sectors; and (iii) fixing ceiling limits on advances against selected commodities. A fourth type of control was introduced in June, 1965 viz. *pre-import deposit requirement.* According to it, importers were required to deposit in advance 25 per cent of the value of goods shipped to India after July 1, 1965 with banks. Before returning the

amount to the importers concerned the banks were required to invest the money thus received in Government of India Treasury bills. At their peak in September, 1965 such investments exceeded Rs. 20 crores. This method was discontinued in August, 1965 following a supplementary budget making changes in import duties.

Selective credit controls have *special uses* in a developing country. (1) In such a country the economy is subject to structural changes. New sensitive spots appear from time to time while the locations of old ones change frequently. The central bank can keep in check these spots and consequent pressure points by applying control against them. A general credit control would be inappropriate for the purpose. (2) Selective controls can also play an important part in the field of short-term credit management.

But there are *limitations* of selective credit control, too. (1) In an underdeveloped economy commercial banks have got dodging habits, that is, habits which try to evade the controls. Thus banks may on the surface lend against other collaterals but the borrowers may actually use them for the very purposes which are supposed to be controlled. These correspond to the so-called 'benami' transactions in land transfer. (2) The banks do not want to lose their customers. So they are unwilling to change their existing terms and conditions with them. (3) The success of selective credit control is intimately linked with the situation of general credit. A tightening of the selective credit will achieve little if simultaneously a policy of general credit expansion is followed. (4) Selective controls are usually more effective in their negative aspects, viz., prevention of the flow of credit to undesirable sectors than in their positive aspects of channelising credit to the desirable ones in an adequate manner. In other words, on ultimate analysis they have got only limited scope as a tool for promotional policy. As P. D. Hajela commented, "even when the banks have, by and large, tried to fall in line with selective credit control directives, the selective credit controls have not helped much in the stabilisation of commo-

dity prices".[18] That is why selective credit controls have generally been applied in combination with other weapons of credit regulation, particularly Bank Rate.

Failure of Monetary Policy in India

On the whole, as one scholar pointed out,

> "our monetary policy in retrospect for 1950's and 1960's has been one of cautious improvisation. It is obvious that the monetary policy during the last two decades has failed to reduce or regulate the price spurts. Even in 1970's the basic monetary problem is going to be the same. Credit planning at macro and micro levels will assume greater importance than hitherto. The management of the monetary affairs will be more challenging in 1970's".[19]

It had been virtually admitted even by experts of the Reserve Bank of India[20] as an observed fact that

> "the data on bank credit and prices show little, if any, positive correlation; obviously, the factors affecting the price situation are complex. They primarily emanate from the side of supply, are structural in character and uncertain in the timing and intensity of their occurrence. The discontinuity in the rate of income growth is primarily a manifestation of the vicissitudes of agricultural production and at second remove, the fickleness of weather conditions. The object of a policy of credit restriction on the other hand is to dampen the pressures originating on the side of demand to the extent that it is excessive in relation to supply availabilities. Credit restriction by itself cannot be expected to restore balance in prices when the under-

[18] *op. cit.*, pp. 188-89

[19] See B. D. Ghonasgi, "Some Important Aspects of Monetary Policy in relation to Development" in Ashok V. Bhuleshkar (ed). *Towards Socialist Transformation of Indian Economy*, Popular Prakashan, Bombay, 1972, pp. 373-77

[20] See V. G. Pondharkar and M. Narasimham, "Recent Evolution of Monetary Policy in India", *Reserve Bank of India Bulletin*, April, 1966, p. 346

lying trends make for increase either due to forces on the supply side or due to the impact of other factors such as fiscal deficits operating on demand".

The failure of monetary policy in India in general is proved by the fact that the rate of growth in monetary resources fell short of that in real output during the First Plan period resulting in deflation. Thereafter the former outpaced the latter in all the Plan periods leading to severe pressure on prices. All this is evident from the following table:—

TABLE 144

INCREASE IN MONETARY RESOURCES, REAL NATIONAL INCOME AND PRICES

(Per cent)

	First Plan	Second Plan	Third Plan	Three Annual Plans	Fourth Plan
Growth in monetary resources*	11.8	51.4	56.0	35.2	103.2
Growth in national income at constant prices	18.5	20.5	12.5	12 9	15.0**
Increase in prices	18.5	31.0	28.5	23.7	79.8

* Currency and deposit money with the public plus net time deposits with commercial banks and net time liabilities of State co-operative banks

** roughly estimated by interpolation for 1973-74

Source: Reserve Bank of India, *Reports on Currency and Finance*

II FISCAL POLICY IN INDIA

Fiscal policy vis-a-vis inflation in India may be analysed from three aspects—taxation, public expenditure and public debt.

(1) TAXATION

Taxation in India has been rising. Thus in 1950-51 total tax revenue of the Central Government was of the order

of Rs. 357 crores. In 1973-74 it reached the level of Rs. 4,000 crores. Similarly total tax revenue of the States and Union Territories went up from Rs. 269 crores to about Rs. 2000 crores during this period.

Taxation provided about Rs. 570 crores or about 27 per cent of the outlay in the public sector during the First Plan, Rs. 1052 crores or about 23 per cent during the Second Plan, Rs. 2892 crores or 34 per cent during the Third Plan and Rs. 4044 crores or about 25 per cent during the Fourth Plan.

It is generally alleged by businessmen that high personal taxation and lack of adequate fiscal incentives have impeded investment in the private sector and thus contributed to price rise through a damping effect on production. It has been estimated by the Federation of Chambers of Commerce and Indusry in India that the tax on personal incomes of over Rs. 70,000 a year work out to about 80 per cent in India whereas it is only 39 per cent in U.S.A. and 69 per cent in U.K. The maximum rate itself is only 70 per cent in U.S.A., 65 per cent in Sweden and 53 per cent in West Germany against 97.5 per cent in India.[21] According to the Research Bureau of *The Economic Times*,[22] whereas tax revenue of the Central Government increased from 6.7 per cent of net domestic product in 1960-61 to 9.7 per cent in 1972-73, aggregate investment declined from 12.4 per cent of NDP to 11.4 per cent. The latter was even so low as 9.7 per cent of NDP in 1967-68 and 9.3 per cent in 1969-70.

There may be *some truth* in the above argument but the decline in production in the private sector has been offset to some extent by extension of the public sector made possible by increasing revenues from taxation itself. Thus the share of the public sector in net national product went up from 10.6 per cent in 1960-61 to 15.5 per cent in 1971-72.

Secondly, an important cause of inflation in India is the rise of prices of foodgrains and other agricultural products.

[21] See N. Mahalingam, "Planning, Prices and Inflation", *Swarajya*, October 13, 1973

[22] See Annual Number, 1974, p. 109

But their producers barely came within the net of high income taxes.

While taxation has been increasing in India and its percentage to national income doubled between 1950-51 and 1969-70, its level in 1969-70 was only about 14 per cent of national income. It was much low compared to about 38 per cent in U.K., 28 per cent in U.S.A. and West Germany. It is even lower than the level of many developing countries. In Brazil taxation is of the order of 22 per cent of national income; in Malaysia it is about 20 per cent. According to Benjamin Higgins,[23] tax revenue per capita in 1968-69 stood at $17 in India, compared to $23 in Philippines, $34 in Sri Lanka, $152 in Japan, $616 in France, $638 in U.K., $807 in Sweden and $1174 in U.S.A. A recent study[24] has shown that in terms of tax revenue India ranks 37th among 52 developing countries.

Of course *it is a fact* that indirect taxes have increased much more than direct ones and the impact of the former has been inflationary. The increase in two types of taxation is shown below:

TABLE 145

YIELD OF TAXES

(Rs. crores)

Year	Direct taxes	Indirect taxes	Year	Direct taxes	Indirect taxes
1948-49	239	832	1966-67	362	2,594
1950-51	231	1,043	1969-70	428	4,511
1955-56	255	1,238	1971-72	558	3,353
1961-62	467			1,190	

Source: Reserve Bank of India, *Reports on Currency and Finance*

Thus since 1949 while direct taxation has gone up about five times, indirect taxation has risen twelve times. The increase in the case of Union excise duties has been so high as from Rs. 67.5 crores in 1950-51 to Rs. 2324 crores in 1972-73, that is, more than thirty-four times.

[23] See *The Economic Times* Annual 1974, p. 79

[24] P. Jorger Lotz and Elliott R. Morss, "Tax Effort in Developing Countries", *Finance and Development*, 1969, No. 3

Similarly there has taken large increase in the indirect taxes levied by different State Governments. An idea of thus can be had from the following table:—

TABLE 146
REVENUE OF STATES
(Rs. crores)

Year	State excise	General Sales tax	Taxes on commodities and services (aggregate)
1951-52	49.4	54.4	148.6
1955-56	45.1	80.1	182.0
1961-62	58.6	163.1	409.6
1966-67	108.9	406.9	978.1
1972-73	279.1	976.5*	1,672.1

* Comprises general sales tax, Central sales tax on motor spirit and purchase tax on sugarcane

Source: Reserve Bank of India, *Reports on Currency and Finance*, 1967-68 and 1973-74

It is said that the number of commodities subjected to Union excise duty has gone up from 12 in 1950-51 to 115 in 1972-73; the rates of duty have also risen considerably. These cover not merely finished products but raw materials and semi-manufactures; not merely luxury goods like cars and refrigerators but articles of common consumption like kerosene, cloth and tea. According to unofficial estimates, indirect taxes imposed by the Government of India in 1972 were responsible for the following shares of the ex-factory cost of certain commodities.[25]

TABLE 147
SHARE OF INDIRECT TAXES IN EX-FACTORY COST

	(Per cent)		(Per cent)
Cotton Cloth ..	50 to 75	Cement ..	60 to 70
Sugar ..	75	Steel ..	50 to 68
Paper ..	50 to 60	Rayon ..	50 to 70

[25] See Nabagopal Das, "Indirect Taxes & Prices", *The Statesman*, January 7, 1975

It is estimated that the tax element accounts for 75 to 80 per cent of the price in the case of passenger cars and trucks and about 375 per cent of the basic import price of crude petroleum. It has also been argued that there has been a kind of *chain reaction.* Taxation has raised the cost of road transport, both capital and recurring. Freight charges have gone up as a result and eventually the prices of products carried by road.[26]

The net result is, pointed out one scholar,[27] that "as a commodity in the making moves from one stage of production to another, it is subjected to taxation repeatedly and by different State Governments if it should move from State to State. In the case of steel products, taxation starts with the sale of iron ore and ends with the sale of machines or other final products. The combination of excises on intermediate products with multi-point and multi-State sales taxes on capital, intermediate and consumer goods has led to an *uncontrolled* and an *unknowable* incidence of *indirect taxation in the country.* The price effects of such taxation have been pervasive. Because of the pyramiding effects, the rise in prices must have been more than what was strictly necessary to raise the given amount of revenue".

It is the finding of V. K. R. V. Rao and others that[28]

> (1) Rising prices and inflation of money incomes have increased money receipts from taxation but when the rate is considered in real terms or at constant prices the taxation effort is much less impressive than that claimed by Government.
>
> (2) It is true that there has been a rise in the ratio of net receipts to national income at current prices but this has not been sufficient to counter the inflationary effect caused by the money rise in public expenditure.

[26] See Nabagopal Das, *op. cit.*

[27] Raja J. Chelliah, *Fiscal Policy in Underdeveloped Countries with special reference to India,* George Allen & Unwin Ltd., London, pp. 266-7

[28] *Inflation and India's Economic Crisis,* Institute of Economic Growth, Delhi, Vikas Publishing House, Delhi, 1973, pp. 16-17

(3) The tax effort has not been big enough to result in surplus budgets; on the contrary there has been a steady increase in deficit budgeting.

(4) Much of the increased taxation is on commodities and on a value basis; and a good share of the commodity taxation is on intermediate and producer goods with a resulting multiplier effect in its incidence.

All this has added to the rise in industrial prices and increased the cost of living. The attempts at increasing Government receipts by additional taxation have thus proved to be of an inflationary rather than an anti-inflationary character.

(2) PUBLIC DEBT

The public debt of the Government has been increasing over the years, as will be evident from the following tables:—

TABLE 148

DEBT POSITION OF THE GOVERNMENT OF INDIA

(Rs. crores)

End of March	Total internal debt	Total external debt	End of March	Total internal debt	Total external debt
1951	2,469.5	32.0	1969	11,000.0	5,637 0
1956	3,082.8	113.6	1971	12,708.0	6,485.0
1961	5,494.1	761.0	1974 (R.E.)	17,439.0	5,830.0
1966	8,165.9	2,590.6	1975 (B.E.)	18,769.0	6,382.0

TABLE 149

DEBT POSITION OF STATES

(Rs. crores)

End of March		Total debt			Total debt
1952	..	445.3	1969	..	7,440.0
1956	..	1,231.9	1971	..	8,749.0
1961	..	2,737.2	1974 (R.E.)	..	11,621.0
1966	..	5,501.6	1975 (B.E.)	..	12,450.0

(R.E.—Revised estimates; B.E.—Budget estimates)

Source: Reserve Bank of India, *Reports on Currency and Finance*, 1967-68 and 1973-74

Thus the public debt of the Government of India more than doubled in each of the first two decades of planning. During the period 1951-75 it increased nearly eight times. The increase was much higher in the case of the States. Their debt increased about six times during the first decade of planning and more than three times during the second decade. During the period 1951-75 it went up about twenty-eight times. But this does not give a true picture of the Government debt for which it is necessary to know its source.

The major portion of the public debt of the Government of India is held by what is called the *captive market*, consisting of quasi-Government institutions like the Life Insurance Corporation of India, the Reserve Bank of India, the State Bank of India, the Industrial Finance Corporation of India and other financial institutions. This portion stood at about 53 per cent on 31st March, 1957 and 74 per cent on 31st March, 1963. At the end of March, 1972 about 86 per cent of the Central Government securities was held by the State Governments, Reserve Bank of India, nationalised commercial banks, Life Insurance Corporation of India and Provident Funds of exempted establishments. Similarly a large part of the States' loans is accounted for by the Central Government. It was of the order of 53 per cent at the end of 1951-52, 74 per cent at the end of 1961-62 and 70 per cent at the end of 1971-72.

The result is that there has hardly been any significant drawal of funds from the open market. So in spite of its large volume the *public debt has not been able to exert any deflationary influence.*

On the other hand, the subscription to Government loans by the Reserve Bank of India has by raising the Bank's investment in first-class securities *ultimately produced* an *expansionary effect on money supply.* An one financial expert observed,

> "When the Reserve Bank invests in Government securities (or extends credit to Government in other forms), after the money is spent by Government, not only does money supply with the public go up immediately by an

equivalent amount but there will also occur subsequently a secondary expansion of credit as a result of the increase in commercial banks' reserves with the Reserve Bank .... to float Government bonds at unduly low rates of interest, sell them predominantly to captive buyers, in particular the banking system and call the Government's borrowing operations a success is a *farce that must be ended* soon, if inflation is to be halted".[29]

According to the National Council of Applied Economic Research,

"Mainly through deficit financing of the Government expenditures, the supply of loanable funds has been maintained at a level needed to support an expanding borrowing programme at relatively low rates of interest. Since in our economy the effect of higher liquidity is not felt on the level of output but mainly on prices, we can infer that the debt policy has been inflationary".[30]

(3) PUBLIC EXPENDITURE

Public expenditure in India has been going up year by year. This will be evident from below:—

TABLE 150

PUBLIC EXPENDITURE IN INDIA

Year	Amount (Rs. crores)	Year	Amount (Rs. crores)
1950-51 ..	529.2	1966-67 ..	5,167.7
1955-56 ..	911.7	1969-70 ..	5,621.0
1960-61 ..	1,826.7	1972-73 ..	8,421.0

Sources: Reserve Bank of India, *Reports on Currency and Finance*, 1967-68 and 1973-74

Thus during the 21-year period 1951-52 to 1972-73 public expenditure of the Union Government went up about sixteen times. But compared to it, revenue increased about 15 times as shown below:

[29] S. L. N. Sinha, "Government Borrowing & Inflation", *Financial Express*, July 31, 1973

[30] Management of Public Debt in India, June, 1965, p. 113

TABLE 151

REVENUE OF THE GOVERNMENT OF INDIA

Year	Amount (Rs. crores)	Year	Amount (Rs. crores)
1950-51 ..	510	1966-67 ..	4,810
1955-56 ..	762	1969-70 ..	5,575
1960-61 ..	2,004	1972-73 ..	7,546

Source: Reserve Bank of India, *Reports on Currency and Finance*, 1967-68 and 1973-74

So the Government has been running with deficit.

It would have been good if the increase in expenditure, which created additional demand for goods and services, resulted in augmenting their supply through new investment. But it is non-developmental expenditure which has on the whole increased much more than developmental. This is shown in the following table:—

TABLE 152

EXPENDITURE OF THE GOVERNMENT OF INDIA
(Rs. crores)

Year	Developmental	Non-developmental
1955-56	254.2	315.9
1960-61	554.9	676.9
1966-67	1,167.7	2,372.7
1969-70	1,318.0	2,272.0
1975-76*	5,868.0	4,900.0

Sources: (1) Reserve Bank of India, *Reports on Currency and Finance*, 1967-68 and 1973-74
(2) Government of India Budget 1975-76
* Budget estimates

Thus between 1955-56 and 1966-67, while developmental expenditure increased about five times, non-developmental expenditure went up more than seven times. Compared to 1969-70, the former rose much more than the latter. It may be noted that two major items of non-developmental expenditure were defence and debt services which increased as follows:

TABLE 153

REVENUE EXPENDITURE OF THE GOVERNMENT OF INDIA

Year	Defence services (Rs. crores)	Debt services (Rs. crores)	Year	Defence services (Rs. crores)	Debt services (Rs. crores)
1950-51	164.13	37.4	1969-70	966.0	555.0
1955-56	172.23	43.1	1972-73	1,439.0	776.0
1960-61	247.55	77.1	1975-76	2,036.0*	1,187.8*
1966-67	797.80	463.7			

* Budget estimates

Sources: (1) Reserve Bank of India, *Reports on Currency and Finance*, 1967-68 and 1973-74
(2) Government of India Budget 1975-76

It may be seen from the above that during the period 1950-51 to 1972-73 while the expenditure on defence services increased about nine times, that on debt services went up more than twenty times. Both these items are producing inflationary effect.

Another recent development is the enormous increase in expenditure on gratuitous relief. This is undertaken by the different State Governments but money is generally provided by the Centre. According to the Sixth Finance Commission, "one cannot but feel perturbed by the sharp increase in expenditure on relief particularly since 1966-67. As against an annual average expenditure of Rs. 13.41 crores during the period of the Third Plan, expenditure under '64-Famine Relief' in State budgets rose to an average of Rs. 81.01 crores during the period of the three Annual Plans. This rising trend gathered momentum during the period of the Fourth Plan. The expenditure which stood at Rs. 151.87 crores in 1969-70 rose to an all-time peak of Rs. 318 crores in 1972-73".[31] Central assistance to State Governments towards relief due to national calamities has been increasing thus:

[31] *Report of the Commission*, p. 63

TABLE 154

CENTRAL ASSISTANCE TO STATES FOR RELIEF

Year	Amount (Rs. crores)	Year	Amount (Rs. crores)
1965-66 ..	8.2	1969-70 ..	124.1
1966-67 ..	82.0	1970-71 ..	86.3
1967-68 ..	75.5	1971-72 ..	102.6
1968-69 ..	105.5	1972-73 ..	216.7

Source: *Report of the Finance Commission*, 1973. Appendix VII, Table No. 10, p. 175

It was 'the distinct impression' of the aforesaid Commission that "there has been a good deal of avoidable waste in the expenditure incurred in the name of drought relief and that with better planning and organisation more enduring benefits could have been secured".[32]

It is no wonder, therefore, that C. N. Vakil called 'public expenditure' 'the villain of the piece in the present highly inflationary situation'.[33] According to him, 'during the period 1960-61 to 1973-74, a total of Rs. 85,500 has been spent by the Central and State Governments, but of this only Rs. 11,750 crores or less than 15 per cent of our outlay has been utilised directly for capital expenditure on development account. If we include loan-financed development expenditure by third parties also, the figure would be Rs. 22,300 crores or about 28 per cent. This shows that due attention has not been paid to expenditure which can result in tangible goods, with due emphasis on the production of consumer goods. The revenue expenditure under development is mainly for services of different types. However, desirable for long-term development, this expenditure is not effective for countering inflation; in fact it may add to it'. According to another scholar, "the rate of increase in Government expenditure is much higher than in national income. While the annual compound rate of

[32] *Ibid.*, p. 63

[33] See his inaugural address before the Seminar on Inflation organised in Madras by the Institute for Financial Management and Research in December, 1973

growth of national income has been 3.6 per cent between 1950-61 and 1970-71, that of Central Government expenditure has been 25.2 per cent during the period 1950-51 to 1973-74. The consumption component of the latter has been increasing at the rate of 12.2 per cent since 1960-61. Obviously this is exerting an upward pressure on prices and adding fuel to the inflationary fire".[34] It is the view of P. R. Brahmananda[35] that "Government expenditures make a draft of the bulk of the surplus of annual commodity output over maintenance. This surplus is itself a low fraction of GNP. Whereas Government absorbs a major portion of the precious commodities surplus, its contribution to augmentation of productive capacity in basic capital or in even other forms of capital is meagre. For Government accumulation expenditure (that is, development expenditure on the capital account directly and through loans) has fallen from about 7 to 8 per cent of GNP during the later phase of the Third Plan to about 4.5 per cent in 1972-73. If we make adjustments for the understatement of the money value of GNP in 1972-73, the current ratio would be just about 4 per cent".

On the whole, therefore, the Government

> "had been caught in a vicious circle of undertaking larger outlays in the context of rising prices, partly through incurring 'deficits', this in turn leading to a further rise in prices with the expenditure causing greater increase in money incomes than in output, and the Government being forced to repeat the process ... All in all while the Government can be given credit for making earnest attempts at mobilization of domestic resources for development, it would be fair to say that it failed to adjust

[34] H. R. Machiraju, paper on "Fiscal Policy and Inflation in India", read at the Seminar on Inflation in December, 1973 (organised in Madras by the Institute for Financial Management and Research)

[35] Paper on "The Nature and Genesis of the Indian Statflation and its Control" read at the Madras Seminar on Inflation in December, 1973

and alter fiscal policies to changing circumstances so as to maintain a reasonable degree of stability".[36]

III PRICE CONTROLS IN INDIA

After experimenting with decontrol for a short time after Independence India went back to a system of price control over essential commodities, including raw materials and some industrial goods. In July, 1948 the Government announced its decision to fix fair ex-mill prices for cloth and yarn, stamp them on the products and allocate cloth on a quota basis among provinces. Floor and ceiling prices were also fixed for raw cotton. In respect of major foodgrains control was reimposed on price, procurement and distribution. Besides, steps were taken to cordon off surplus and deficit areas, license dealers and extend rationing to major cities.

Under an eight-point programme in October, 1949, a comprehensive scheme of price control, based on fixation of ceiling prices was introduced. One of its aims was to reduce by 10 per cent the general level of retail prices of essential commodities. This included lowering down of the controlled prices of cloth, yarn, sugar, steel, steam coal and coke and retention prices of pig iron. The Supply and Prices of Goods Act passed in December, 1950 gave the Government powers to fix maximum prices at which certain essential goods might be sold or possessed. Its scope was gradually extended to cover more items. But with a general improvement in the supply position it was allowed to become ineffective from February, 1965.

Thus prior to planned economy there prevailed ceiling prices, rationing and procurement of foodstuffs. The prices of steel were controlled in two ways—retention prices paid to the producers and the selling prices charged from consumers. The difference between the two went to the Steel Equalisation Fund, meant for improvement of the steel industry. Selling prices were based on retention prices plus

[36] Raja J. Chelliah, *op. cit.*, pp. 190-91

a surcharge levied in order to subsidise imported steel, of which the prices were higher than those of the Indian material.

After 1951 bumper crops for successive years and declining food prices led to relaxation of controls on foodgrains. Wheat and coarse grains were decontrolled in November, 1953 and rice from July, 1954. Since the latter month trade in foodgrains virtually became free except the ban on movement of wheat among three wheat zones. This ban, too, was lifted in 1956. In June, 1957 three wheat zones were again formed but good harvests in 1959-60 and 1960-61 resulted in removal of inter-zonal movement. However, subsequent decline in production led to the introduction of nine wheat zones in March, 1964.[37] Thus *the policy rolled from control to decontrol and back to control up to the Third Plan.*

In respect of cash crops some form of control had been existing from before, of which the main objective was to protect the interests of producers. Thus raw cotton had floor and ceiling prices since 1943-44. Raw jute had an operational minimum price since the early phase of World War II. Minimum prices had been prescribed for sugarcane since 1949-50 for purchase by sugar factories. The basic ceiling prices of raw cotton in the 1951-52 season were raised by Rs. 50 per candy.

The statutory ceiling prices of galvanised sheets, galvanised wires and tin plates were increased from July, 1951 by Rs. 100, Rs. 60 and Rs. 150 per ton respectively. From October, 1952 price control was removed in stages from most varieties of cloth. Control over prices, movement and distribution of sugar was lifted in September, 1952; price-control on vanaspati, in June, 1952; control over price and distribution of all varieties of iron and steel in January, 1953.

In July, 1956 the prices of all grades of coal were increased by Rs. 3 per ton. In June, 1959 uniform prices

[37] See S. S. Madalgi *Population & Food Supply in India*, Lalvani Publishing House, New Delhi, 1970, ch. 5

were introduced for pig iron and steel at all rail-head destinations with a view to encourage decentralisation of industries and to reduce disparities in regional development. Prices of cement were raised from an average of Rs. 90 per ton to Rs. 102.5 per ton from July 1, 1956.

An important development was the *fixation of floor prices* for certain commodities about the middle of 1954 and the decision to purchase them if market prices fell below them. The Government directly purchased from the growers jowar at Rs. 5.50 per md and bajra at Rs. 6 per md. The U.P., Punjab and Rajasthan Governments fixed the minimum price for wheat at Rs. 10 per md. It was however in 1964 that a coherent policy of *price support for foodgrains* was adopted for the whole country. An Agricultural Prices Commission was set up in January, 1965 to advise the Government in evolving a rational policy to raise agricultural production, as also to give relief to the consumers. At about the same time the Food Corporation of India was set up to act as the principal agency for making purchases from producers and building up buffer stocks. It undertook, "in different contexts, procurement in times of shortage and price support in times of plenty".[38]

A scheme of price support to agricultural commodities has got *special benefits* in a developing country which is predominantly agricultural. (*a*) The agriculturists are unorganised and not so well-off. They are mostly in the grip of money-lenders and big middlemen. If they are guaranteed support price, they can extricate themselves from their clutches and sell direct to the Government. (*b*) If there is recession in agricultural prices in a particular year, it is bound to affect production in the coming year. Agriculturists will feel discouraged to actively undertake cultivation. There will be shortage and prices will go up. The history of some cash crops in India like jute and sugarcane illustrates this point clearly.

[38] *Fourth Five Year Plan 1969-74*, para 7.9

As A. B. Ghosh has argued,[39] the case for a minimum support price for foodgrains rests on short-term as well as long-term considerations. 'In the short period the case rests upon the desirability of eliminating the impact of price fluctuations on the income of the farmer, particularly because a good harvest in conjunction with the low elasticity of demand may leave his money income at a level, lower than in the absence of such output fluctuations'. 'From the long period point of view the case rests on the need to ensure a price which the farmer can count upon for covering input costs of the current level of production and a higher minimum of raising that level'.

There is however one *great difficulty* that the fixation of support prices presents a complicated practical problem, because it involves the measurement of the costs of production, costs and margins of marketing, projection of demand and supply, impact of possible change of technique and so on. There is the *further difficulty* of differences in the costs of production of different products. Therefore, there is always an element of arbitrariness in this device, which strikes at the root of economic efficiency through violation of the laws of demand and supply. Moreover, the indirect effect of a support price may be inflationary; for farmers, armed with the guarantee of a minimum price and using it as a cushion, may actually sell the crop at a higher price in the open market.

The minimum price of sugarcane came to be fixed on a uniform basis for the country as a whole since 1950-51 under the Sugar and Gur Control Order, 1950, which was replaced by the Sugar Control Order in 1955. Since then the minimum cane prices have been altered from time to time, keeping in view the cost of production, the return to growers from alternative crops, the general trend of agricultural prices and a fair price of sugar for the consumer.

[39] *Price Trends and Policies in India*, Vikas Publishing House, Delhi, 1974, pp. 115-16

Up to 1961-62 the price of cane was fixed purely on weight basis in most of the States except Gujarat and Maharashtra where it was fixed factory-wise according to the recovery of sugar obtained in the previous season. In 1962-63 the system of linking price with sucrose content was extended to all the States. Sugarcane was specially favoured in October, 1967 when its price was raised by 30 per cent at one stroke.

The minimum support price for sugarcane is different from that for other crops in that it is *not a reserve price* but *a fixed operative price,* on the basis of which the ex-factory price of sugar is calculated. It thus seeks to protect the interests of both the growers of cane and consumers of sugar. The protection to the former is however partial because it applies only to that part of the crops which is sold to factories. It has been pointed out aptly that the level of price which is deemed appropriate for the cane grower may fail to ensure adequate supplies to the factories. Indeed, the attempted juxtaposition of the two functions has been responsible for a great deal of the malady that has over the years characterised the sugar industry.[40] "When we remember that nearly 66 per cent of the cost of sugar consists of the cost of sugarcane, it will not be an exaggeration to say that the price policy has not helped either the grower or the consumer".[41] Further, it has been pointed out by the Sugar Enquiry Commission that the present position or system of paying a premium at a higher level but no discount for decrease below it is inequitous for regions with low recovery.[42]

After devaluation of the rupee in June, 1966, price control was relaxed for a number of industrial products. Thus in July, 1967 control over price and distribution was removed from all categories of coal except control over distribution of coking coal consumed by metallurgical in-

[40] *Report of the Agricultural Prices Commission on Price Policy for 1968-69 season,* p. 2a.

[41] See A. B. Ghosh, *op. cit.,* p. 154

[42] See *Report of the Agricultural Prices Commission,* October, 1965

dustries. Control over price and distribution of cement, discontinued since January, 1966, was reimposed in January 1968. By May, 1967 such control on certain categories of steel was removed, as also price control on paper and paper board. In 1970-71 commodities which remained subject to statutory price control included certain varieties of mill cloth, tractors, motor cars and scooters, cement, synthetic rubber, vanaspati, certain fertilisers, kerosene, sugar, and industrial alcohol. Price increases were granted to many industries such as cotton textiles, coal, sugar, vanaspati, iron and steel, automobiles, bicycles, soaps.

A study made by the Reserve Bank of India showed the following trends in the prices of controlled vis-a-vis non-controlled items—

TABLE 155

PRICES OF REGULATED ITEMS VIS-A-VIS NON-REGULATED ITEMS

	1961-62	1962-63	1963-64	1964-65	1965-66
(1) Price-regulated items					
Index (1952-53=100)	120.8	125.1	132.7	139.0	144.8
Weight	111	111	129	362	362
Per cent increase in index		3.6	6.1	4.7	4.2
(2) *Non-regulated items*					
Index (1952-53=100)	125.6	128.2	135.7	160.5	176.6
Weight	889	889	871	638	638
Per cent increase in index		2.1	5.9	18.3	10.0

It may be seen from the above that during the period 1961-66, the weight of regulated items, representing their number, more than trebled.

True, the rise in price was less in the case of regulated items than non-regulated ones. But this was based on official prices. Prices actually charged in the market, which was obviously more black than white, must have been much higher. As the Reserve Bank itself observed. "It is difficult to indicate how effective price control has been in en-

suring a smaller rise in the prices of regulated items . . . . the indices of (such) items may not reflect the effective price-level. Therefore, the price rise experienced in the last three years, 1963-64, to 1965-66 seems to be in the nature of *repressed inflation*".[43]

It may also be added that according to the Ministry of Food and Agriculture, Government of India itself, during the period 1965-66 to 1970-71 minimum and wholesale prices of sugarcane rose by 37 and 48 per cent respectively and the prices of foodgrains and food articles by 34 and 41 per cent respectively.[44] Similarly the official indices of wholesale prices show that between 1965-66 and 1963-74 the price of kerosene oil went up by about 60 per cent; that of petrol by about 147 per cent; cement, by about 40 per cent; and fertilisers by about 46 per cent.

It has accordingly been urged that in India controls have been clamped on the economy as and when particular requirements arose without any thorough investigation into their rationale. They have clogged the wheels of production, thrown additional burdens on the administration and involved huge cost to the Government.[45] In the words of V. K. R. V. Rao and others,

> "Our policy of price controls is neither based on the essentiality of the goods controlled from the point of view of mass welfare nor on the possibility of siphoning off monopoly or luxury demand profits to the public exchequer nor is it based on the forward and backward linkages of the commodities sought to be controlled. *Ad hocism*, public pressures and wishful thinking rather than laws of economics or regard for mass welfare or control of luxury consumptions seems to be the determining factor in both our choice of commodities for price control and the levels at which their prices are sought to be fixed".[46]

[43] See *RBI Bulletin*, June, 1967

[44] See *Indian Agriculture in Brief*, eleventh edition, 1971

[45] See Federation of Indian Chambers of Commerce and Industry, *Controls—A Study*, 1952, pp. 96-7

[46] *Inflation and India's Economic Crisis*, Institute of Economic Growth, Vikas Publishing House, Delhi, 1973, p. 22

The Planning Commission also expressed a similar opinion thus:

> In the past price increases have occurred because of ad hoc decisions to decontrol and because of weakness in the administration of price and distribution controls. In the light of this experience the entire structure of controls has to be reorganised and a rational decision taken on where controls should be vigorously applied and where the forces of supply and demand should be allowed to operate freely.[47]

According to B. B. Bhatia,

> "Statutory price control is only a short-time device; it can be relied on only to relieve distress in an emergency. It is no answer to a situation of general shortages which India has been facing for the last few years",[48]

Vadilal Dagli has gone a step further and argued that

> "The actual experience of controls has proved that they always hit the poorest most . . . because controls hamper production and when as a result shortages develop, it is only the poor who suffer. Instead of removing the anti-production controls, whenever the price situation becomes alarming, the Government rushes to announce a fresh round of controls and regulations which only augment the power and help of the bureaucracy".[49]

INCOMES POLICY IN INDIA

The Government of India introduced a package of measures in July, 1974, comprising a new incomes policy. (1) In one ordinance, companies were directed not to declare or pay for a period of two years dividends on equity and preference shares in excess of one-third of the profits after tax or 12 per cent on the face value of equity shares and

[47] *Fourth Five Year Plan—A Draft Outline*, p. 19
[48] See *The Statesman*, January 9, 1975
[49] *Inflation—A Way Out*, Commerce Pamphlet—83, November, 1974

dividends payable on preference shares, whichever was lower. Interim dividends also could not be paid without Government's approval. (2) By another ordinance, the entire amount of additional wages and salaries and 50 per cent of additional dearness allowance sanctioned thereafter would have to be deposited compulsorily with the Reserve Bank for periods of one year and two years respectively. On both of these deposits the Bank would pay interest on the basis of 2.5 per cent over and above the maximum bank deposit rate that would prevail. The amounts deposited would be frozen and not available to the Government for expenditure. (3) By another ordinance all persons paying income-tax in excess of incomes of Rs. 15,000 per annum were to deposit compulsorily with the Government a part of their income—4 per cent on excess incomes up to Rs. 25,000; 6 per cent in the next slab up to Rs. 70,000; and 8 per cent on the balance of income. The sums so deposited would carry interest at the maximum of bank deposit rate.

(1) The first measure known as The Companies (Temporary Restriction of Dividends) Ordinance, 1974 applied to the following categories of companies: (i) those in which the public were substantially interested; (ii) those of which at least 75 per cent of the share capital was held by a charitable institution with dividend income exempt from income-tax; (iii) those engaged in the construction of ships, manufacture or processing of goods, mining, generation or distribution of power; and (iv) those, the value of whose capital assets amounted to Rs. 50 lakhs or more. (2) The second measure viz. The Additional Emoluments (Compulsory Deposit) Ordinance, 1974, applied to the employees of the Central and State Governments, local authorities, companies defined in Section 3 of the Companies Act, statutory corporations, or bodies, individuals or Hindu undivided families and establishments to which any law relating to provident funds (other than the Public Provident Fund Act, 1968) applied. (3) The third measure, viz. The Compulsory Deposit Scheme Ordinance, promulgated separately on July 17, 1974 was fairly com-

prehensive in scope and covered all individual income-tax payers, Hindu undivided families, trustees of private discretionary trusts and all those whose aggregate of net agricultural and non-agricultural incomes exceeded Rs. 15,000 per year.

The aforesaid ordinances received mixed receptions in business and other circles. Thus, while a leading journal called them 'a halting step on the right road' and a trade union leader regarded them as 'an unfortunate necessity', one commentator traced in them 'a wrong application of the coercive power of the State' and a stock exchange association apprehended 'a death blow to the capital market'.

The *points* that could be advanced *in support* of the aforesaid measures were briefly as follows:

(1) The companies in India had been distributing a large part of their profits after tax, 60 per cent in some cases, as dividends instead of ploughing them back for expansion. This was an unsound practice. On the other hand, the recourse they were having to banks and other external sources for finance was indirectly frustrating the credit restriction policy of the Reserve Bank. Limitation of dividends was, therefore, necessary to bring the corporate sector under the discipline of the Government's over-all anti-inflationary strategy. (2) The maximum limit allowed for distributable profits, viz., 33½ per cent of net profits or 12 per cent of the face-value of equity shares, would leave unaffected a large number of companies. It would still be possible for them to provide a reasonable return on capital. (3) The ultimate effect of the dividend limitation ordinance would be to strengthen the financial position of the corporate sector. The excess amounts that would be retained would add to the net worth of companies.

(4) The Additional Emoluments (Compulsory Deposit) Ordinance was designed to prevent the generation of additional demand on the existing volume of wage goods, of which it was not possible to increase the supply in the short period. In an inflationary situation more incomes in

the hands of wage-earners push up prices by raising demand. At the source they also cause aggravation of the wage-cost-price spiral. The ordinance was to help keeping in check this spiral, too. Its major impact would be on the Government's own employees who were getting D.A. increases in instalments. According to official sources, the total D.A. increases for Central Government employees for the year 1974-75 were estimated at about Rs. 312 crores. The ordinance was thus 'a step in the right direction'.

(5) The rationale of the Compulsory Deposit Scheme was that it would cause a temporary immobilisation of a part of the incomes of the comparatively well-to-do and thus lead to a diversion of resources from consumption to savings.

There were, however, some *weaknesses* and *harmful effects* of the ordinances. (1) The dividend limitation ordinance would affect most of the large firms in the country that were being run with comparative efficiency. By reducing the quantum of dividends that could be paid by them it would strike at the root of an important incentive for expansion or better management.

(2) According to a recent survey, about two-thirds of shareholders belong to the middleclass. They would be hit hard by the dividend curb, as they were dependent on dividend income for meeting many of their daily commitments.

(3) The measure was 'discriminatory' as it exempted 'share-holders of 104 companies from dividend limitation'. It was 'irrational' since a few crores added to the agreegate amount of yearly dividends of Rs. 200 crores would not have 'a serious impact on the inflationary situation'.[50]

(4) As a matter of fact, according to one scholar, 'the anticipated withdrawal of Rs. 500 crores would imply a reduction of less than one per cent in the gross national expenditure. So, prima facie, the over-all impact on the

[50] See M. C. Bhandari, "The Dividends Curb", *The Statesman*, September 22, 1974.

price situation would be just marginal".[51] Two experts went further and pointed out that 'in India for every five rupees' worth of flow of national income, one rupee worth of money as stock was required. So the impounding of Rs. 500 crores would imply an impounding in money supply of about Rs. 100 crores. Hence, the effect on prices would be insignificant".[52] It may be noted in this connection that the Union Finance Minister Y. B. Chavan himself admitted[53] that "the measures by themselves cannot stabilise prices".

(5) The wage restriction ordinance discriminated against low-paid employees who might be granted pay rises or D.A. increase but favoured the high-paid executives who were used to get substantial annual increments as well as many perquisite benefits.

(6) Prices would continue to rise and the low-paid employees, already suffering from the evil effects of high inflation, would continue to face the misery of erosion of their real earnings. As the general secretary of an employees' federation pointed out, 'the concealed wage freeze would immediately affect adversely the ability of the working people to maintain themselves and their families". Since this was a temporary measure, when the time came for payment of interest and refund of deposits, these processes would have an inflationary effect.

That the ordinances failed to appreciably check the inflationary spiral had been proved by the fact that the index number of wholesale prices (all commodities) went up from 317.7 in July, 1974 (1961-62=100) to 330.2 in September, 1974 and stood at 320.5 in November, 1974. Another adverse result had been depression in the capital market. Thus the all-India weekly index of security prices (ordinary shares) dropped from 134.3 in July, 1974 (1970-71=100) to 99.9 at the end of November, 1974.

[51] See Norottam Shah, "The Government's anti-inflation programme: An appraisal", *Commerce*, July 13, 1974, p. 57

[52] See C. N. Vakil and P. R. Brahmananda, "No antidote to price rise", *Commerce*, July 13, 1974, p. 59

[53] His speech on the Supplementary Budget of July 31, 1974

There was also a sharp decline in capital issues, the total amount being a little more than Rs. 10 crores for July-December, 1974 against Rs. 40 crores in the same period of 1973.

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CHAPTER X

Conclusion

Without food enough, India's hopes for improving human welfare, achieving social justice and securing democracy will become almost impossible of attainment.

Ford Foundation Team on Agricultural Production, 1959

CAUSES OF INFLATION IN INDIA

Different authorities have laid stress on different factors to explain the inflationary situation in India. Some of them are diametrically opposite, too. There are many who have discovered 'the villain of the piece' in *expansion of money,* including *deficit financing.* For instance, it is the view of R. G. Kulkarni that the basic fact (behind the price-rise) was the large volume of deficit financing undertaken to meet the development expenditure. If investment would have been financed without deficits in the budgets in these years, such a catastrophe would not have arisen".[1] "In my opinion", pointed out V. M. Dandekar of the Gokhale Institute of Economics and Politics, "increasingly heavy budget deficits in the last few years are the main cause for the present abnormal price rise in the country".[2] According to Vadilal Dagli, "the major explanation has to be found in terms of galloping increase in demand as indicated by the increase in money supply which in turn has been caused by the excessive deficit financing by the Government coupled with equally excessive credit extension to the business sector. If an individual spends more than what he earns, he goes bankrupt. What happens if the Government acts in a similar way? It creates utter chaos

[1] See *Deficit Financing and Economic Development with Special Reference to India,* Asia Publishing House, Bombay, 1966

[2] See *Amrita Bazar Patrika,* July 6, 1973

in the country. It is precisely this that has been happening in this country during the last two decades and particularly during the last few years".[3]

Others have emphasised *food shortage* as 'the prime mover' behind price-rise. For instance, it has been argued by Sukhamoy Chakravorty of the Planning Commission that "the genesis of the present inflationary problem is to be found in the area of food. This is because once food prices go up, all oher prices follow suit with varying time lags".[4] In the words of S. B. Gupta of the Delhi School of Economics, "increase in food prices is caused by real autonomous factors such as adverse weather conditions, droughts, floods, stoppage or reduction of imports. Increase in food prices is the result of food shortage and causes increase in other prices, resulting in inflation of the general level". "The current economic crisis", observed V. S. Vyas of the Agricultural Prices Commission, "is essentially a food crisis. The spiral in general price-level has followed after a short time lag the rise in food prices".[5] One scholar has gone so far as to suggest that "what India witnesses today is not inflation, but an abrupt and steep rise in prices mostly of foodgrains and essential articles of living for reasons altogether different".[6]

There are a few who regard the *structural weakness* of the economy as the principal cause of inflation. Thus according to C. T. Kurien, "the fact of the matter is that the State has been trying to reach this goal (to ensure that everybody has at least the minimum requirements for tolerable living) can be achieved only through non-market operations".[7] "Structural weaknesses in the Indian economy", observed V.K.R.V. Rao, "have brought about the rise in prices. Drastic measures may bring down the prices

[3] See *Inflation—A Way Out*, Commerce Pamphlet—83, Bombay, 1974

[4] *Yojana*, September 15, 1974

[5] *Commerce*, February 23, 1974

[6] See B. Natarajan, "Planning Prices and Inflation", *Swarajya*, November 24, 1973

[7] See *Swarajya*, November 17, 1973

for a short time but they will continue to spiral".[8] "Inflation and our current economic and social distress", opined D. K. Rangnekar, "must be viewed in the larger context .... The basic causes of our malaise indeed go deeper and impinge on the sense of direction, pattern of investment, structure of production, economic management and policy".[9]

Some have also ascribed inflation to *political factors*. For instance, taking his clue from Gunnar Myrdal's concept of the 'soft state', Ashok Mitra has pointed out that "the fundamental cause of price explosion in a democratic country like India is largely political rather than economic —the anxiety of the Government to placate certain interests".[10] Arguing in a similar view H. K. Paranjpe has observed that 'populist socialism was merely leading the country to short-time gains for the classes in entrenched positions while social justice and economic development were being neglected'.[11]

However, quite a few have adduced a *pluralistic* rather than a *monistic* explanation for the rising price-level. In the opinion of Nabagopal Das,

> the factors are:
>
> (*a*) an unprecedented increase in the volume of money supply available both to the Government and the public;
>
> (*b*) existence of a vast quantity of unaccounted money with certain sections;
>
> (*c*) the insidious effects of cost-push resulting from various indirect taxes and the demands of workers for higher wages and amenities without any corresponding increase in productivity; and

[8] Mahalanobis Memorial Lecture delivered at the Indian Statistical Institute on June 29, 1974

[9] "Inflation, Taxation & Black Money", *The Economic Times Annual*, 1974, p. 29

[10] "Price Explosion in India: The Real Danger to Democracy", Supplement to *Capital*, 31st January, 1974, p. 69

[11] Speech at the Founder's Day celebration of the Gokhale Institute of Politics and Economics, Poona on June 19, 1974

(*d*) the slow rise in production both on the agricultural and industrial fronts.[12]

"Indian inflation is not a demand-pull inflation only. It is a mixture of demand-pull, cost-push, bottleneck, mark-up and other kinds of inflation. The real problem before us is our inability to tackle various kinds of inflation at the same time and the difficulty of controlling one kind of inflation without controlling the other".[13]

This last approach is more realistic because it takes a comprehensive view of the situation. Quite a number of forces have contributed to it, directly or indirectly, proximately or remotely.

The important among them may, however, be broadly divided into two groups, following the Marshallian example of the pair of blades in scissors—(1) those associated with demand and (2) those originating from the supply side.

(1) The principal *factors* which affect *demand* are:
   (*a*) growth of population;
   (*b*) increase in employment and income;
   (*c*) expansion of money supply.

(2) The *factors* on the *supply* side are:
   (*a*) shortage of output;
   (*b*) withholding of supply;
   (*c*) increase in cost of production and
   (*d*) rise in import prices.

Inflation is the result of imbalance between these two. The inflationary gap has stood at different levels at different periods. That is why prices have risen at different rates over the years. There is however one exceptional feature which has dominated the scene at different times. It is that prices in India have been 'sticky', that is, having once risen, they have generally shown a tendency to stay at the level reached even after the forces causing the rise have subsided. One explanation for this is the 'inflation psychology' prevailing in the country, the

[12] "Combating Inflation", *The Statesman*, April 8, 1974

[13] J. D. Sethi, "Deadlock over monetary policy", *Amrita Bazar Patrika*, November 8, 1974

widespread expectation that prices would continue to go up. Another is the firm grip which manufacturers and traders have over the situation being helped by a large, growing but sheltered market.

The trends of factors on the demand side are indicated below:—

TABLE 156

COMPOUND ANNUAL RATE OF GROWTH

	1st Plan (1951-56) (1)	2nd Plan (1956-61) (2)	3rd Plan (1961-66) (3)	Three Annual Plans (1966-69) (4)	4th Plan (1969-74) (5)	Between 1950-51 and 1973-74 (6)
(1) Population	1.8	2.1	2.2	2.2	2.2	2.1
(2) Employment*	1.5	3.8	4.9	0.6	—	—
(3) Income*	3.1	2.9	3.8	8.0	—	—
(4) Money supply	2.0	5.9	9.2	8.6	13.1	7.6
(5) Per capita income at current prices	0.9	5.1	6.8	10.1	8.7	9.5

* relate to registered factories

Sources: (*a*) For rows (1) and (4), Commerce Research Bureau (See *Commerce*, August 17, 1974, p. 81)
(*b*) For rows (2) and (3), *Indian Labour Statistics*, 1966 and 1972
(*c*) For row (5), Government of India, *Economic Surveys*, 1967-68, 1971-72 and 1974-75

It is well-known that the population of India has been increasing by about 70 to 80 lakhs per year. Obviously for this number there is need for additional quantities of food, cloth and other essential articles. So even if other things remain equal, prices would rise just on the ground of increased demand from the growing population. This had, therefore, been the HCF or Highest Commission Factor to exert an upward pressure on the price-level, particularly that of consumer goods.

Then, each year a few thousands get employed and many of those, already employed, have their emoluments raised through trade union action or otherwise (apart from usual annual increments). The propensity to consume being high, both the employment of new hands and addition of incomes in the hands of those employed lead to further rise in demand. This rise would take place even if there is no increase in population. The increase in employment as well as income had been helped by expansion of money supply, of which a major contributory factor was deficit financing by the Government.

On the supply side the important factors registered the following trends:

TABLE 157

COMPOUND ANNUAL RATE OF GROWTH

	1st Plan (1951-56)	2nd Plan (1956-61)	3rd Plan (1961-66)	Three Annual Plans (1966-69)	4th Plan (1969-74)	Between 1950-51 and 1973-74
Foodgrains production	4.9	3.6	—2.5	8.8	2.3	3.0
Agricultural production	4.2	4.0	—1.4	6.2	2.5	2.9
Industrial production*	8.2	6.6	9.0	1.5	4.2	6.3
Real national income	3.7	4.1	2.5	4.3	3.4	3.6
Per capita real income	1.9	1.9	0.3	2.1	1.2	1.5
Exports	0.3	1.1	4.6	2.3	12.2	4.2
Imports	3.5	7.7	4.6	—4.9	6.7	4.2

* relates to calendar years

Source: Commerce Research Bureau, (See: *Commerce*, August 17, 1974, p. 81 and *Commerce Annual Number*, 1974, p. 217)

TABLE 158

NET PER CAPITA AVAILABILITY OF SOME CONSUMER GOODS

	1950-51	1955-56	1960-61	1965-66	1968-69	1973-74*
Foodgrains (gms. per day)	393	431	468	404	437	
Edible oils (kg)		2.5	3.2	2.6	2.4	3.0
Vanaspati (kg)		0.7	0.8	0.8	0.9	0.8
Cotton cloth (metres)		14.4	13.8	14.7	14.4	12.1
Sugar (kg)		5.0	4.7	5.7	5.0	6.0

* provisional

Source: Government of India, *Economic Surveys*

Besides, rise in prices led to demands for higher wages in most establishments. As soon as wages increased, the cost of production also went up and there was further rise in prices, generating a wage-cost-price spiral. Rising wages are thus an important contributory factor. The following tables show how wages rose over the years.

TABLE 159

AVERAGE PER CAPITA MONTHLY EARNINGS OF FACTORY WORKERS

(earning less than Rs. 200 p.m. for 1951-60 and Rs. 400 p.m. for 1961-68)

1951	..	Rs. 86.3	1961	..	Rs. 128.3
1956	..	Rs. 96.9	1966	..	Rs. 176.0
1960	..	Rs. 115.5	1968	..	Rs. 206.1

Source: *Statistical Abstract of India*, 1970

TABLE 160

AVERAGE EARNINGS

	(1) Lowest-paid operators in cotton textiles.			(2) Unskilled workmen in jute textiles in West Bengal.		
Year	Bombay Rs.	West Bengal Rs.	Period	Earnings Rs.	Period	Earnings Rs.
1962	135.76	79.25	July, 1963	82.80	Nov., 1973	263.25
1965	167.08	96.98	Aug., 1963	167.00	Feb., 1974	283.00
1968	219.48	136.18	July, 1969	172.00		
1973	288.28	231.87	May, 1972	189.40	Feb., 1975	373.65

Sources: (1) for (1) Labour Bureau, Ministry of Labour, Government of India.

(2) for (2) Labour Department, Government of West Bengal

Sidney Weintraub in a special study[14] of the Indian situation pointed out that money wages had been rising at a pace far in excess of the increase in the average level of labour productivity. According to him, this phenomenon had been almost exclusively responsible for the persistent rise in the general level of prices. Another study[15] for the period 1950-64 showed that in the cotton textile industry wages coupled with other costs played an important role in pushing up product prices.

The movement of prices in consequence of the above factors was as follows:—

TABLE 161

COMPOUND ANNUAL RATE OF CHANGE IN WHOLESALE PRICES

	1st Plan 1951-56	2nd Plan 1956-61	3rd Plan 1961-66	Three Annual Plans 1966-69	4th Plan 1969-74	Between 1950-51 and 1973-74
All commodities	—3.7	6.2	5.7	6.9	9.1	4.6
Food articles	—4.6	7.9	8.1	12.0	14.0	—
Agricultural goods	—5.2	8.1	7.6	—	12.5	—
Industrial raw materials	—4.8	9.4	6.0	6.1	—	—
Manufactures	—0.7	4.8	4.1	4.1	13.0	—

Source: Reserve Bank of India, *Reports on Currency and Finance*

A scrutiny of the foregoing tables shows that the growth of employment and money supply had been slow during the First Plan while production, both agricultural and industrial, and real per capita income rose appreciably. The over-all effect was fall in prices. During the Second Plan

[14] See National Council of Applied Economic Research, *Growth without Inflation*, (Report prepared by Sidney Weintraub), New Delhi, February, 1965

[15] V. P. Bharadwaj, "Cost-push, Wage-push and Product Prices", in L. K. Deshpande and J. C. Sandesara, (ed.) *Wage Policy and Wage Determination in India*, University of Bombay, 1970

also the factors on the supply side maintained a steady growth. There was also an appreciable rise in imports. Simultaneously, factors on the demand side registered considerable improvement. The average rate of increase of population was about 17 per cent higher during the Second Plan than the First; employment about 153 per cent higher; and money supply, about 195 per cent higher. Similarly during the Third Plan some of the demand factors like employment, income and money supply also increased; the rate of increase was however less than that during the Second compared to the First, being 31, 31 and 56 per cent respectively. On the other hand, while an important supply factor like industrial production registered about 36 per cent more rise during the Third than the Second, another vital factor, viz., foodgrains production actually declined. Accordingly the rise in prices during the Third Plan was almost the same in the case of manufactures. The prices of food articles and other agricultural commodities should have risen much more during the Third than during the Second, but they were prevented from doing so by a number of circumstances such as the introduction and strengthening of price controls, expansion of the public distribution system. It may be added that it was during the Third Plan that a definite price policy came to be evolved and pursued.

During the three Annual Plans the demand factors on the whole did not register much change, compared to the Third Plan. Thus the annual rate of growth of population remained the same. While income rose nearly twice as much on an average during the three Annual Plans as during the Second, the rate of increase in employment was negligible. On the supply side, agricultural and correspondingly foodgrains production, registered considerable progress, but industrial production lagged behind. Imports also declined on the whole. Accordingly, the prices of manufactures rose almost at the same rate as during the Third Plan. On the other hand, prices of foodstuffs and raw materials should have declined as a result of increase in production. But this did not happen due to a number of

circumstances such as rise in minimum support and procurement prices of some foodgrains, revision of floor and ceiling prices of some raw materials, the general 'stickiness' of the price-level and the inflation psychosis generated during the Third Plan. During the Fourth Plan period the increase in money supply was the highest. The rise in per capita income was also appreciable. Against these, on the supply side the rates of growth in both agricultural and industrial production were quite low. Accordingly the resultant increase in prices was the highest so far.

REMEDIES

It follows from the foregoing analysis that the attack on inflation has to be carried out on many fronts. Remedial measures can be grouped under two broad heads—short-term and long-term.

SHORT-TERM MEASURES

The important short-term measures are:

(1) control of deficit financing and restraint on money supply;
(2) increase in the supply of essential consumer goods;
(3) strengthening of the public distribution system.

(1) *Restraint on Money Supply*

Deficit financing and money supply have to be kept within limits. It has been rightly emphasised in the Draft Fifth Plan that "deficit financing will have to be kept down to the level at which the consequential increase in money supply does not exert any autonomous inflationary pressure on the economy".[16] It is, of course, difficult to lay down the safety limits in this respect. The 140 economists have suggested a ceiling of 5 per cent on the annual growth rate of money supply in the next quinquennium.[17] In con-

[16] See *Draft Fifth Five-Year Plan*, 1974-79, Vol. I, p. 73

[17] See C. N. Vakil and Others, *A Policy to Contain Inflation with SEMIBOMBLA*, Commerce Pamphlets 80-82, October, 1974

crete terms this would come to about Rs. 540 crores, based on a money supply of Rs. 10,836 crores in 1973-74. It may be noted in this connection that a Committee set up a few years back under the Chairmanship of S. L. N. Simha with some experts of the Bombay School of Economics also came to the conclusion that a budgetary deficit of the order of Rs. 550 crores was necessary for a non-inflationary expansion of money supply.[18] A limit of Rs. 500 crores may be considered reasonable enough.

(2) *Increase in the Supply of Essential Commodities*

In the immediate short-period such increase would mean reinforcement of domestic supply by imports. There is need for preparation of a National Budget for essential articles of consumption, particularly foodgrains. This was suggested by the Foodgrains Policy Committee long ago.

In particular, imports of foodgrains have to be continued on a liberal scale. It is estimated that under PL 480 India imported from USA during 1956-72 about 65 million tonnes of farm products. The advanced countries which enjoy surplus in foodgrains have a responsibility to feed the underdeveloped ones. According to J. K. Galbraith,[19] in 1969-71 the affluent capitalist and socialist countries with 30 per cent of the world population consumed 51 per cent of the total grain supply. The amount fed to animals was something like 370 million tonnes which was more than what China and India together had available as food for human beings. In this respect the proposal emanating from the World Food Conference held in Rome in November, 1974 to set up an emergency reserve of 10 to 12 million tonnes of foodgrains in the short period is a salient move.

(3) *Strengthening of the Public Distribution System*

Increase in supply, whether through more production or more imports, does not necessarily guarantee availability

[18] See S. L. N. Simla (ed), *Inflation in India*, Vora & Co., Publishers, Bombay, 1974, p. 345

[19] "Inflation & the Food Shortage", *The Statesman*, March 3, 1975

at fair prices, particularly in deficit regions. Therefore, the public distribution system has to be streamlined and extended to vulnerable pockets. Past experience has shown that prices of foodgrains in rural areas have come down as soon as more rice or wheat has been made available through modified ration shops. The rationing system has on the whole served well. Short of total regimentation of supplies, it is the only effective check against high prices in the free market. It deserves expansion. A comprehensive scheme should be evolved for the sale through ration and modified ration shops of other articles of common consumption like baby food, kerosene, soap, paper and so on. The distribution of fertilisers, in which the black market is rampant, may also be channelised through the modified ration shops or some such agencies in rural areas.

Long-term Measures

The long-term measures include—

(1) increase in the production of foodgrains and other articles of consumption,
(2) building up of adequate buffer stocks,
(3) widening the base of taxation,
(4) proper allocation of investment,
(5) rationalisation of public expenditure.

(1) *Increase in Production*

The production of foodgrains and other consumer goods has to be stepped up on emergency basis. It has been proved that the use of high-yielding varieties of seed with suitable other inputs can bring about Green Revolution. This seems to be the only short-cut to food self-sufficiency. As a result of the HYV Programme introduced in 1966, Punjab had been able to raise the production of wheat from about 2 million tonnes to about 6 million tonnes in 1974-75. This should set an example to the rest of India.

Irrigation water and fertilisers are vital inputs for increasing agricultural production. While irrigation facilities

have made some progress, the supply of fertilisers has been persistently inadequate. Priority should be given to the setting up of fertiliser factories both in the public and private sectors. This should be the No. 1 factor for bringing about Green Revolution.

The manufacture of some important articles of consumption like kerosene oil, baby food and commonly-needed medicines is controlled by a very small number of large concerns. This monopoly has to be broken. If necessary, there should be public undertakings in this field.

(2) *Building up of Buffer Stocks*

Buffer stocks constitute an emergency reserve intended to maintain the supply line in years of crop failures. It is appropriate to recall what the Planning Commission said in May, 1956: "The most effective insurance against this risk (that deficit financing may possibly generate) is command over reserve stocks of foodgrains—and a few other essential commodities—which can be used to augment supplies in the market as and when necessary".[20]

The Foodgrains Policy Committee in its report of 1966 recommended a buffer stock of not less than 4 million tonnes by 1969-70. The Fourth Plan target was 5 million tonnes. The buffer stocks, it is said,[21] reached the level of about 9 million tonnes in 1970-71 but during the liberation war of Bangladesh they were depleted to feed the refugees from that country. It was a great act of benevolence but its effect on the food situation has been disastrous. There is no escape from a buffer stock of at least 4 to 5 million tonnes. No sacrifice is too big for this.

(3) *Widening the Base of Taxation*

The Government must try to mop up purchasing power through taxation. It must widen its base so as to include

[20] *The Second Five-Year Plan*, p. 86

[21] See speech of Prime Minister Indira Gandhi before a group of Japanese youths in New Delhi (reported in *The Statesman*, November 3, 1974)

agriculture. According to the K. N. Raj Committee, which reported in 1972, land revenue, cesses and surcharges and agricultural income-tax account for hardly 1 per cent of the net domestic product of the agricultural sector. Some other sources[22] have estimated that in 1969-70 taxes in the agricultural sector as a whole amounted to about 7.5 per cent of income from that sector while those in the non-agricultural sector took away about 19 per cent of its income. There is, therefore, good scope for further taxation in the agricultural sector. The recommendations of the Raj Committee for imposition of tax on operational, agricultural holdings together with a tax on agricultural property have to be acted upon.

(4) *Proper Allocation of Investment*

The degeneration from the side of supply started with the Second Plan, in which more emphasis was laid on producer goods than consumer goods. Agriculture, too, received less importance. The pattern of investment should be such that in future the consumption needs are met to an adequate extent. In particular, priority has to be given to those projects, of which the gestation period is short and which are designed to produce more of wage goods than capital or luxury items. This may to some extent lead to delay in building up the infrastructure for future development. But it is necessary for the sake of economic and even political stability. The rising price-level happens to threaten both.

(5) *Rationalisation of Public Expenditure*

It is not the quantity of money that is so much important as the way it is spent. There should be nation-wide economy and austerity, particularly in the use of foodstuffs, petroleum and scarce raw materials. The expenditure of the Government on normal relief due to lack of employment in slack agricultural seasons and on relief in cala-

[22] See *The Economic Times Annual*, 1974, p. 145

mities has gone up tremendously. This is highly unproductive. There should be a long-term plan to integrate relief with development. The so-called 'test relief' schemes, which have become almost a perpetual feature in rural areas, should be so designed and prepared well in advance as to effectively contribute to the building up of infrastructures like roads, 'bundhs', tanks, bridges and so on.

CONSENSUS AND CONCERTED ACTION

In conclusion, the Government cannot be held solely responsible for the inflationary situation. It cannot also be solved by the Government alone; although in a welfare state run democratically people look to it for most of their needs and difficulties. When a disease is deep-rooted, its cure depends not merely on an effective drug but also on co-operative action on the part of the patient. A well-known author once said that 'the art of medicine consists in helping nature to cure the illness'.

In U.S.A. during the mid-sixties of the last century more than half the nation rose in arms to save the integrity of the whole, to prevent 'a house from being divided against itself'; to thwart 'dissolution of the Union'. Some 22 States in the north with a population of 22 million were arrayed against eleven in the south, inhabited by 9 million. According to many, the Great War of 1914-18 was fought to make the world 'safe' for democracy'.

Similarly in India there should not merely be a certain amount of consensus about the preventive, ameliorative and remedial measures to be taken to deal with inflation but co-operative and concerted effort towards their fulfilment by all political parties, classes and sections of the population. Unscrupulous traders are not lacking in the country who are ready to create artificial shortages in order to reap the benefit of high prices. There are some designing political groups also whose job is to criticise the Government for failure to procure foodgrains on the one hand and to carry on surreptitious propaganda among the agriculturists, on the other, not to part with their surplus products.

The war on inflation should be a *total, popular* and *sustained* one. One front may be opened in farms and factories—for increase of productivity on emergency basis; another in markets—against hoarding and profiteering; a third—to keep checks on wastage, luxurious spending and ostentatious living; a fourth—to prevent bottlenecks in the distribution system; and so on. There should be committees, composed of representatives of all sections—on all fronts and at different levels, State, district and block. It is appropriate to conclude by recalling what Tagore wrote in one of his poems[23]:

"Who is there to take up my
duties?" asked the setting Sun.
"I shall do what I can, my Master,"
said the earthen lamp.

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[23] Poem No. 153, *Stray Birds,* Macmillan and Co., London, 1917 p. 41

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