PRODUCTIVITY

Vol. 15 1974-75
14PC

18

Pg. 1 to 511
Rey

quarterly journal of national productivity council

V. K. Goel
Editor

PRODUCTIVITY, the principal organ of the National Productivity Council of India, is a professional, research-based Journal providing techno-managerial expertise for a productive expansion of the Indian economy. It disseminates knowledge of the latest productivity techniques for pushing forward the growth of Indian Industry, and features from time to time the best available papers dealing with different techniques and facets of productivity, and on all aspects of the national economy.

Instructions to the Authors: The size of the typed manuscript may not generally exceed five thousand words. The manuscript should be sent in duplicate. Accepted works are paid a nominal honorarium and 25 copies of reprints.

Annual Subscription Rates

Inland	Rs. 20.00;	Foreign	— Airmail	US $10.00
			— Surface Mail	5.00

Single copy

Inland	Rs. 5.00	Foreign	— Airmail	US $ 2.50
			— Surface Mail	1.25

All communications should be addressed to:

The Editor
'PRODUCTIVITY',
National Productivity Council,
38, Golf Links,
NEW DELHI-110003.

Contents

April-June 1974
Volume XV
Number 1

Conspectus

IN THE FOCUS

Prices and Incomes Policy

The traditional economic doctrine states that in market economies where 'free play of market mechanism' is supposedly ensured, the path of optimum economic growth is the one that cuts its way between two distinct phenomena—inflation and unemployment. The discovery of 'new inflation' or 'stagflation' has, however, exposed the weakness of such a doctrine, if not completely invalidated it. It is now being realised that economic growth alone is not enough, at least in the developing nations. What is even more important is the 'planned growth of incomes' not only for achieving the objective of distributive justice but also for sustaining the present economic growth itself. This calls for a new strategy which has come to be known as Prices and Incomes Policy to ensure that the growth of money incomes of variou sections of society is in conformity with wider nationa priorities. This new concept has, however, been in fledgling stage in India and there is a need to foster and develop it at all levels. By organising this symposium, PRODUCTIVITY has made a modest contributior towards this goal.

Editor

A Note on Prices and Incomes Policy in India

Surveys the behaviour of factor shares in India. It tends to show that the Indian economy is moving like a Ricardian system wherein the immediate beneficiaries of growth are the rentier class or fixed assets holders. A look into the characteristic trends and features of Indian economy would reveal that the wage share as well as real wage levels have remained somewhat constant; share of reinvestible profits in the output seems to have declined while the incremental output has benefited the recipients of non-work incomes. If this is true, then rise in wage cost can never be recognised as a basic factor behind the present inflationary spiral. What else could be the basic cause then ? What are the areas where immediate remedial action is needed? On the basis of a survey of selected literature on the subject, the paper answers some such questions ....V. K. Goel, N. K. Nair, P.V. Rao (Page 1).

Spares Inventory Control by Materials Management

Materials Management aims at bringing down the material costs by improving the methods of acquisition, movement, inventory and handling of materials. For this, it combines all the functions connected with materials and synchronises the activities of purchasing, handling and inventorying of production materials. A unified approach in co-ordination with maintenance engineers will not only avoid the excess accumulation of spares inventory, but will also increase the utility value and interchangeability of spares for effective spares inventory control . . . . . . K. Chandramouli (Page 157)

Work in Progress : Investment and its Control

Apart from Raw Materials and Finished Goods, Work in Progress (WIP) is also an important factor of total inventories. A blocked up capital on shops, on and before various processing centres, poses problems of production control—specially of not meeting the schedules of completion on time. With the result, this delay in meeting the schedules has a telling effect on inventory control. An evaluation of WIP investment, laying down of norms and procedures for its control is an important production management function. The case studies presented in this paper will be of practical help to managers . . . . . . G. D. Sardana (Page 164)

Capacity Utilisation in Public Enterprises

The underutilisation of capacity in public sector units is not only a threat to economic progress but also to the political philosophy of state ownership. The installation of initially a heavy in-built capacity, recession in the demand for capital goods, operational difficulties and administrative inefficiencies are some of the points that are responsible for the under utilisation of capacity in public sector undertakings. The solution lies in a series of bold measures some of which are outlined in this paper . . . . . R. K. Mishra (Page 175)

Application of Cobb-Douglas' Production Function

A generalized production function has been the convenient tool for analysts to study the relationships between inputs and outputs. This job has been further simplified by the Cobb-Douglas' variance of the model. This paper examines whether the small-scale industry in India, where idle capacity is a chronic problem, follows the production path of a Cobb-Douglas' function. The finding is that the industry better follows the input-output model rather than a Cobb-Douglas' function . . . . . . N. C. De (Page 185)

Collaborative Leadership

If participative management is an accepted principle of industrial democracy, the collaborative leadership is only its logical extension. Conflict crossed by co-operation is the underlying philosophy of collaborative leadership. This type of leadership could, however, be developed only when both management and trade unions stop thinking in terms of their respective 'prerogatives'. Further it should not be regarded as fashion . . . . . P. S. Ahluwalia (Page 190)

Problems of Small-Scale Ancillary Industries

The small-scale ancillary units are complementary to the modern large-scale industries which require a wide range of components and sub-assemblies. Bottlenecks like irregularity of orders, want of essential raw materials, lack of technical guidance, obsolescence in the means of production and quality control and unstable market for finished products hold back the development of ancillaries. It is shown in this paper how large undertakings and government can help removing these bottlenecks . . . . . . K. P. Parmameshwaran (Page 194)

Audit of Management Tools and their Applications

Management tools, evolved from different disciplines is to encounter different problems faced in business. As the economics of their application differs from tool to tool, the management should be selective and take account of the cost incurred vis-a-vis their usefulness. It is pleaded that these management tools and techniques should be scrutinised or audited periodically in order to ensure that an obsolete technique is replaced with a new one. It would thereby improve the quality of decision making . . . . . P. Chattopadhyay (Page 200)

Industrial Engineering Concept Needs be Dynamic

The text-book approach to work measurement seems to fail when it comes to the rating of performance of workers in process industries or in any work situation where a group of workers are doing the same job. There is thus an imperative need to put some more tools in the kit of an industrial engineer. What could be the exact shape of these tools cannot be said at this stage, but what can be pointed out is that these tools should be developed on the basis of a 'Total Approach'—analogous to the approach developed in the field of quality control and corporate planning . . . . . . S. K. Lahiri (Page 207)

On the Explosive Bulging of Cylindrical Shaped Parts

Explosive forming is best described as a process in which metal parts are formed by the high pressures resulting from the detonation of chemical explosives. The major advantage of explosive forming is that some parts which are difficult to form mechanically, can be formed explosively. An outcome of practical experience and research, the paper describes, step by step, how explosive forming techniques can be used in a given situation . . . . . . S. K. Ghosh, V. C. Venkatesh. (Page 210)

Management of Scrap and Rejects

It might appear an exaggeration, but it is true that the management of scrap and rejects is like a window through which one can peep into the weak spots in the organisation of men, machines and materials. This paper provides some valuable guidelines as to how to investigate the causes of rejections and scraps, how to control them, how to use them and how to manage this relatively neglected aspect of management . . . . . S. R. B. Manian (Page 216)

Leadership in Business : A Critique Based on Productivity

Until recently, only experts and academicians bothered about productivity in U.S.A. It was not a major problem for the industry. The twin reasons for this state of complacency were the already high level of efficiency of an American worker and the undisputed supremacy of American goods in the foreign market. For the last few years, the position is not that comfortable at least in thel atter field, which in turn impelled the industry to focus its attention on the former. This posed a new challenge to the American Manager —a challenge to assume the role of a leader in productivity drive. How this challenge is being met in America would have many important lessons for Indian Managers . . . . . . S. K. Jain (Page 226).

Authors

1.	Ahluwalia P. S.	Deputy General Manager, Hindustan Machine Tools, Hyderabad.
2.	Chandramouli K.	Indian Aluminium Company Limited, Belgaum, Mysore.
3.	Chattopadhyay P.	Director (Research), Institute of Costs & Works, Accountants of India, Calcutta.
4.	De N. C.	Assistant Director of Industries, West Bengal.
5.	Ghosh S. K.	Production Engineering Section, Indian Institute of Technology, Madras.
6.	Goyal S. K.	Senior Lecturer, Department of Mathematics, Glamorgan Polytechnic, U.K.
7.	Jain S. K.	Senior Industrial Engineer, L & S Bearing Company, Oklahoma City, U.S.A.
8.	Lahiri S. K.	Chief Superintendent (Training), Heavy Engineering Corporation Limited, Ranchi.
9.	Lal A. B.	Department of Commerce, Meerut College, Meerut.
10.	Manian S. R. B.	1020 Swargate Corner, Shukrawarpeth, Poona.
11.	Mishra R. K.	Lecturer, Department of Economic Administration & Financial Management, School of Commerce, University of Rajasthan, Jaipur.
12.	Sardana G. D.	Production Superintendent, Hindustan Brown Boveri Limited, Baroda.
13.	Venkatesh V. C.	Production Engineering Section, Indian Institute of Technology, Madras.

Determinants of Workers' Money Earnings and Incomes Policy

Incomes policy for industrial workers in a developing economy, characterised by large scale unemployment and mass poverty, could have two planks : (a) an improvement in the standard of living of the workers and, (b) a steady increase in employment, assuring a minimum level of income to the unemployed. The paper attempts to explain changes in the money earnings of industrial workers in terms of selected economic, institutional and technological factors. The conclusion is that an improvement in the standard of living of industrial workers without affecting volume of unemployment adversely, is possible only if the growth in productivity is accelerated significantly and prices of consumer goods and industrial products are stabilised ....G. K. Suri (Page 97).

The New Economic Policy of the United States

In a bid to revamp the Administration's attack on inflation, the New Economic Policy (NEP) was first announced in U. S. A. on 15th Aug., 1971. The phase one of NEP includes measures like absolute freeze on wages and prices, holding down spendings and floating U.S. dollar with respect to gold and other currencies. Phase two would be a continuation and modification of the policies of phase one, but with a structure to make rules, enforce them and judge the demands made upon them. But is the NEP some new kind of policy to stop inflation? That, of course, is the claim of Nixon Administration. The contention of the author is that the entire package is nothing more than a completely orthodox economic stabilisation programme........John T. Fishel (Page 113).

Authors

1.	Dadi M.M.	Reader in Economics, M.S. University of Baroda, India.
2.	Fishel John T.	Assistant Professor, Political Science, University of Wisconcin, U.S.A.
3.	Goel V.K.	Deputy Director (Research), National Productivity Council, New Delhi, India.
4.	Jagannadham V.	Professor, Social Policy and Administration, Indian Institute of Public Administration, New Delhi, India.
5.	Khusro A.M.	Director, Institute of Economic Growth, New Delhi, India.
6.	Labour Bureau	Ministry of Labour, Employment, Government of India, Simla, India.
7.	Nair N.K.	Assistant Director (Research), National Productivity Council, New Delhi, India.
8.	Rao P.V.	Assistant Director (Research), National Productivity Council, New Delhi, India.
9.	Sastry C.M.	Sri Ram Centre for Industrial Relations and Human Resources, New Delhi, India.
10.	Singh J.P.	Institute of Economic and Social Change, Bangalore, India.
11.	Suri G.K.	Assistant Director, Sri Ram Centre for Industrial Relations and Human Resources, New Delhi, India.
12.	Thavaraj M.J.K.	Professor, Economic Policy and Administration, Indian Institute of Public Administration, New Delhi, India.

A Note on Prices and Incomes Policy in India

V.K. Goel N.K. Nair P.V. Rao*

There is a growing realisation among the nations of the world, both developed and developing, that 'planned growth of incomes' is an essential ingredient of the strategy for combating inflation and achieving steady growth of production holding the canons of social justice intact. The increasing volume of literature on prices and incomes is at best reflecting this growing awareness[1]. Attention has thus come to be focussed mainly on the problems, processes, procedures and other relevant issues of wage-cost-price determination in the larger perspective of a long term overall economic and social policy. In India, explicit recognition of what is called 'prices and incomes' has been extended, for the first time in the Approach to Fifth Plan[2]. "Rises in wages unrelated to improvement in productivity push up wage cost per unit of output. Such rises have to be avoided in the interest of price stability"[3] maintains the Approach Document. Attempted in the following

*The views expressed are personal and do not represent that of the Council.

1. Since all cost elements like wages, profits, rent and interest are also incomes, attempts at dealing with them in some systematic way have been known as "incomes policies". Emphasis on incomes policy have assumed its present significance in the context of a spiral in the general level of prices in the world economies, and accordingly, as an anti-inflationary measure, it is referred to as "prices and incomes policy". See in this context :
   - (i) H.A. Turnur & H. Zoetweij "Prices, Wages and Incomes Policies in Industrialised Market Economies", International Labour Office, Geneva, 1966.
   - (ii) International Labour Office "The Role of Appropriate Incomes, Wages & Labour Policies in Industrialisation" United Nations Economic & Social Council (E/CN.II/I & NR/IND. CONF. 2/L. 40) (mimeographed), 1970.
   - (iii) G.V. Haythorne "Prices & Incomes Policy : The Canadian Experience, 1969-1972", *International Labour Review* Vol. 108 No. 6, 1973 pp. 485-504.
   - (iv) Aubrey Jones, "The New Inflation : The politics of Prices & Incomes" Ande Dutch, London, 1973.
2. Apart from the repetitive statements in all the previous plans, some efforts were also done earlier to formulate a framework for Incomes & Prices Policy. See, for instance, Reserve Bank of India "Report on a Framework for Incomes & Prices Policy", Bombay, 1967.
3. India, Planning Commission, Approach to Fifth Plan 1974-79, p. 52.

pages is an assessment of the characteristic trends and features of the Indian economy in the context of a prices-incomes-wages-productivity policy, besides high-lighting the important causes and consequences of inflation. And finally, a few of the important policy issues are also briefly indicated.

The Characteristic Trends and Features

Declining Share of Wages : The past two decades between 1949 and 1970 witnessed a declining share of wages and salaries in the total net domestic product in Indian industry. The share of labour (including salaried class) as percentage of value added by manufactures has declined from about 65.0 in 1949 to about 55.7 in 1960 and to 53.3 in 1969, according to the data provided by the Census of Manufacturing Industries (CMI) reports and Annual Survey of Industries (ASI) reports. The share of wages alone has decreased from about 53.3 percent in 1949 to about 39.6 percent in 1960 and then to 34.7 percent in 1969.[4]

Stagnant Real Wages : The level of real wages has remained constant f not declined marginally. While the annual average money earning of workers in manufacturing industries have increased from about Rs. 1549 in 1961 to about Rs. 2642 in 1971,[5] representing an average annual rate of growth of about 7.15 percent, the rise in the index number of consumer prices of essential commodities was much higher, nullifying, to a great extent, the gains in money

4. See S.L. Setty "Trends in Wages and Salaries and Profits of Private Corporate Sector", *Economic and Political Weekly*, Vol. 8 No. 41, Oct. 1973, pp. 1864-1890. On the basis of data on company finances, published by Reserve Bank of India, the study observes.

 "Cost of wages - - - - - (as a proportion) to total value of production was almost static between 1960-61 and 1964-65 when total cost of production also remained generally static, but subsequently the cost of wages, salaries etc. declined not only upto 1968-69, when the total cost of production rose, but even thereafter upto 1970-71, when the latter experienced a declining trend - - - - - If the Public limited companies experienced a reduction in total cost as a proportion to value of production after 1968-69, it was primarily due to the decline in relative cost of wages, salaries etc." (p. 1868) Clause in brackets supplied.

 Also see N.J. Jhaveri "Wages in Industry and Incomes Policy", *Commerce* August 4, 1973, pp. 217-221. He also finds that - - - - - "as percentage of value of production (at current prices) wage cost declined from 15.1 in 1965-66 to 14.2 in 1970-71", (p. 217).

 See also M.M. Dadi "Wage Share in Organised Manufacturing Industries", *Productivity*, this issue, pp. 88—96.

5. *Indian Labour Statistics* for various years.

wages. Between the years 1960 and 1971 the index number of consumer prices of food items has increased by an average annual rate of 9.36 percent and the general index by about 8.18 percent. The index number of wholesale prices of food items has increased by an average annual rate of 10.7 percent and the general index by 8.61 percent.

Capital Intensification : There has been a relative shift from labour to capital in the input pattern of Indian industries. This is evidenced by the phenomenal rise in the capital labour ratio in the manufacturing sector. The estimated trend rate of growth in the capital-labour ratio, at constant prices, comes to about 9.6 percent per annum between the years 1946 and 1964.[6] On the other hand, the increase in capital-labour ratio has not been followed by corresponding increase in output-labour ratio thereby resulting in a sharp decline in the output-capital ratio. The estimated trend rate of growth of labour productivity measured by value of net output per unit of labour, at constant prices, comes to be of the order of 3.3 percent per annum for the period between 1946 and 1964. Correspondingly, it is estimated, that capital productivity measured by value of net output per unit of capital, at constant prices, has been declining at the trend rate of 6.2 percent per annum. Capital substitution, therefore, seems to be the dominant feature of industrial growth during these two decades.[7] The increasing capital intensity coupled with declining capital productivity could be a logical consequence of the investment policies followed in the past two decades of planning, for, much of the investment expenditure in the organised manufacturing sector was channelised towards basic and heavy industries, many of them with considerably long gestation periods.

6. See Asit Banerji "Productivity Growth & Factor Substitution in Indian Manufacturing", *Indian Economic Review* Vol. 6 (new series) No. 1, 1971 pp. 8-9.

7. There seems to be some ambiguity regarding factor substitution in Indian manufacturing. The two recent studies on the subject used the same set of data, from the company finances study of Reserve Bank of India, but reached apparently opposite conclusions. "A probable explanation for this (declining share of wage costs) is to be found in the introduction of more sophisticated machinery and thus a relative shift from 'labour input' to 'capital input'." See S.L. Setty "Trends in Wages & Salaries ... " op. cit, p. 1868. Clause in brackets supplied.

   Jhaveri, on the other hand, maintains "......it appears reasonable to rule out a decline in the share of wage cost in the value of production on account of replacement of labour by capital in the process of production." See his "Wages in Industry... ..", op. cit, p. 217.

   These apparently opposite conclusions could possibly emerge from the differences in concepts on which each of the studies is based. Thus while Setty bases his observations on total cost of production, inclusive of cost of material inputs other than capital and labour, Jhaveri's is on total value added, which excludes cost of material inputs. Theoretically, this

Declining Profitability Rates : Paradoxically, the capital intensification in Indian manufacturing has been followed by declining profitability rates. Data analysis based on the study of finances of the large scale public limited companies in India indicates that gross profits as percentage to total capital employed has declined from 10.2 to 8.5 during the period between 1960-61 and 1968-69 with year-to-year fluctuations. In all subsequent years, this has shown a marginal increase and was 10.4 percent in 1970-71 against 9.6 percent in 1969-70. There are evidences indicating that in the following years of the seventies the ratio has registered further decreases. Profits after tax as percentage of net worth have also shown a declining trend, almost corresponding to gross profits as percentage of capital employed. For instance, from about 10.9 in 1960-61, profits after tax as percentage of net worth has declined to 7.0 in 1968-69 and then has increased slightly during the following two years.[8]

Constant Share of Re-investible Surplus : The share of re-investible surplus (profits before tax plus interest payments plus remuneration for managing agents) in the net output has remained somewhat constant if not declined. According to the company finances data, this share has remained more or less stable around 38-40 percent. In this, however, the share of interest payments alone has increased from about 5.51 percent in 1960-61 to about 7.32 percent in 1964-65 (based on data relating to 1333 public limited companies), from 8.94 percent in 1965-66 to about 11.30 percent in 1970-71 (based on data relating to 1501 public limited companies). The share of profits before tax has shown a declining trend almost corresponding to increases in interest payments ; from about 31.50 percent in 1960-61 (1333 companies) to about 29.89 percent in 1964-65 and from about 29.27 percent in 1965-66 (1501 companies) to about 26.75 percent in 1970-71. The share of profits after tax has shown a declining trend of a higher order : from about 19.31 percent in 1960-61 (1333 companies) it has decreased to about 14.74 percent in 1964-65 and from 14.63 percent in

difference could disappear at the macro level and in a static model. On the other hand, analysis on the basis of CMI & ASI data which covers almost the entire manufacturing sector shows that "while there is year-to-year fluctuation in the share of wages, there is a constant downward trend which is particularly noticeable during the period 1953-64...... The share of wages in gross value added has declined even more than the share in net value added which indicates *increasing capitalisation* of the sector. The decline in share of wages has not always implied an *equivalent* shift in profits. To that extent, it is the salary earners in the sector who have improved their position relatively to wage earners". See K.R. Ranadive "Growth, Pattern of Investment and Income Distribution : Earning Structure in Organised Manufacturing Industries in India, 1951-1964." Paper presented at the Seminar on *Employment and Income Distribution*, New Delhi, March 29-30, 1970 (mimeographed) pp. 16-17.

8. Reserve Bank of India sources quoted in N.J. Jhaveri "Wages in Industry......" op. cit, p. 219.

1965-66 (1501 companies) it has gone down to about 11.19 percent in 1968-69 and then has increased to about 14.89 percent in 1970-71.[9]

Sort of a Ricardian System : These characteristic trends in the income shares suggest that Indian economy is moving like a Ricardian system, a system in which the main beneficiaries seem to be the rentier class.[10] This process has been further accentuated by the type of inflation that has been prevailing in the economy. In fact, price increases have robbed the wage earners and the salaried groups most of the real benefits of the increases in money earnings. Nor the re-investible profit margins seem to have increased because of the increasing prices of raw materials and intermediate goods. While the index number of wholesale prices (1961-62=100) of manufacturers reached 174.3 in 1972, that of fuel, lubricants etc., recorded 178.2 and industrial raw materials showed 192.2.[11] On the other hand, margins in trade and business, profits from agricultural surpluses and contract incomes are some of the major categories which seem to have been swelled during this period. Categorical accounts of such increases cannot be presented because of the lack of adequate data. It should be noted, however, that the very changes in the production process, inherent in growth, increase the possibilities of income accruals to asset and property holders, mainly through the appreciation in the value of their holdings, particularly in the short run. It is all the more important that such accruals could not be envisaged to be distributed evenly among their recipients, leading to the generation of forces conducive to concentration of economic power. A large part of these incomes is unproductive because of the high propensity for conspicuous consumption among their holders.[12]

Inflation—The Diagnosis

The above trends provide a framework within which the scope of income policy in India could be defined. In particular, they bring to our attention the fact that wage restraints alone would not constitute the content of an incomes policy. Firstly, lack of inducements for entrepreneurs due to a rising wage cost could never be recognised as a significant factor in Indian economic

9. Ibid p. 218.

10. See T.S. Papola "Incomes Policy for India", *Economic and Political Weekly*, Vol. 8, No. 52, 1973 p. 2299.

11. CSO Monthly Abstract of Statistics, Jan. 1974, pp. 66-67.

12. Also see M.P. Chitale "Would Tax Proposals Check Inflation"?, *Commerce*, March 9, 1974 p. 9.

growth. Secondly, the money wage levels in the organised sector of the economy are not high enough to yield a per capita income among workers' families much out of proportion with the overall per capita income. Instead, the causes of the inflationary trend could be traced to —

(i) inefficient deficit financing of a high order ;

(ii) critical shortages particularly of agricultural products ;

(iii) indiscriminate and heavy indirect taxes leading, quite often, to direct increases in prices ;

(iv) a money market insensitive to credit restrictions ; and

(v) unproductive expenditure of a high order in public administration.

Unrealistic Investments : While the controversy regarding the causes of the inflationary trends remains unresolved, "One widely held view is that inflationary pressures of this kind have developed from time to time primarily because the planned investment programmes have been unrealistically large."[13] These unrealistically large investment programmes are, quite often, justified by the philosophy of planning i. e. by the objective of securing higher rate of economic growth, relegating considerations of "distributive justice" to a secondary position is not ignored altogether. Also ". . . . considering the philosophy of planning operationally conducive to growth in the mixed set up of the economy, some doses of mild inflation are rationalised as compatible with growth which has the natural consequences of laying stress on the role of deficit financing in growth."[14] This kind of a thinking has led to deficit financing of a high order, sometimes to the extent of Rs. 800 crores per year. Such heavy doses of deficit financing have been consequent upon —

(a) inadequate accruals from public borrowings of the government ;

(b) inadequate transfers from the profits of the public enterprises ; and

(c) inadequate proceeds from taxation.

Market borrowings are inadequate because, among other things, ". . . the rate of interest on government debt is incredibly low."[15] Not only that the rate of

13. K.N. Raj "Planning and Prices in India", *The Economic Times*, 15th March, Bombay 1974, p. 5.

14. G.P. Mishra "Spotlight on Shortcomings", *The Economic Times*, 16th April, New Delhi 1974, p. 5.

15. A.M. Khusro "India's Economic Policy : A Critique and an Approach" *Productivity* this issue, p. 25.

interest is not competitive, but even the face value of the borrowing is also not linked with the index of prices, as a protection to save the real value of borrowing from shrinking.[16] Public undertakings could not transfer surpluses in a large way, for a variety of reasons, well-known as they are, including faulty planning, inefficient management, non-expert pricing etc. Inadequate proceeds from taxation could mainly be traced to a shrinking tax base, even when output and incomes are rising. The tax base shrinks because of the growth of black earnings generated and fed by a variety of ill-conceived controls, on production, distribution, pricing, etc. Given the objective of growth and the consequent requirements for investment funds, deficit financing has become a *Sine-qua-none* for resource mobilisation. But most of the planned increases in the rate of investment have been based invariably, on the assumption that the output in the economy would grow at a very rapid rate which has not happened in India. Against a targeted rate of growth of 5 to 6.5 percent in the past four plans, "The first decade of planning 1951-60 achieved a trend rate of growth of only 3.8 percent and the second decade 1961-1970 only 3.7 percent."[17] "Thus. . . the investment expenditures over savings have raised more increase in demand for output than its supply. . . . This explanation contains the Keynsian type of demand pull theory of price inflation. . . . that planned investment expenditure during the planning has been more income-cum-demand generating than output-supply generating in effects."[18]

Shortages : Regarding shortages nothing is more convincing than the statement, "a feature of today's inflation is that higher prices apart, a large number of crucial producer and consumer goods are simply not available. In this situation consumers try to stockpile and producers attempt to hoard larger inventories and both add to higher prices."[19] This is applicable more to agricultural products though outputs from other sectors are not exceptions. As against a targeted output of about 129 million tonnes of foodgrains at the end of Fourth Plan, it has been now reckoned that the output may be about 114 million tonnes.[20] Also "agriculture. . . had a setback during the third year.

16. For an exposition of the case for linking bonds with the index number of prices. See K. Prasad "Indexed Bonds—Non-Inflationary Scheme to Mop up Resources", *The Economic Times*, 16th October 1973, p. 5.

17. India, Planning Commission Draft Fifth Five Year Plan, 1974-79, Vol. 1, p. 7.

18. G.P. Mishra "Spotlight on Shortcomings", op. cit., p. 5.

19. A.M. Khusro "India's Economic Policy......" op. cit., p. 21.

20. India, Planning Commission, Draft Fifth Five Year Plan 1974-79, Vol. 2, p. 1.

There was a further setback in 1972-73."[21] However, the growth rate was only about 3.1 percent per annum as against a targeted growth of 5.6 percent per annum during the Fourth Plan period. On the whole, agricultural output during the decade 1961-71 has grown at the rate of 2.1 percent per annum as against 3.3 percent in the previous decade. The output of foodgrains during this decade also followed a similar trend, increasing at a rate of 2.5 percent per annum as against 3.3 percent during the previous decade. The position has been much worse during the last two years, domestic output of foodgrains having actually fallen by about 10-12 percent.[22] Logically, if money stock with the public is rising at the rate of 15 percent a year,[23] when output is rising at 3 percent per annum, prices will generally rise, say between 10 and 14 percent. "That is roughly what has been happening in India in the last two years and is now happening much too obviously and disturbingly."[24]

Misconceived Priorities : These shortages in fact could be a corollary of the investment policies followed in the Plans. True that the performance of the economy, particularly its agricultural sector, is heavily monsoon based and a failure in monsoons may contribute substantially to its hardships, but, such exogenous forces apart, the type and the magnitude of investments that have already gone into the economy have, by and large, been income augmenting and not output generating, a least in the short run. Partly this is warranted by the underlined considerations of economic growth. Thus agricultural sector, particularly food items, towards which much of the increased consumption expenditure would be directed in the initial stages of development, has not been given adequate attention in the Five Year Plans. This has now been recognised as a gross mistake, a mistake originating in the misconceived priorities and lopsided ordering of India's primary needs. This has led to the "...strange spectacle of the world's largest industrial nation (United States) feeding the largest agricultural nation (India)."[25] What Colin Clark called 'economic showmanship and conspicuous investment' have

21. India, Planning Commission, Draft Fifth Five Year Plan, 1974-79, Vol. 1. p. 7.

22. V.K.R.V. Rao et. al "Inflation & Economic Crisis", Vikas Publishing House Private Limited, 1973, p.33.

23. Between March 1971 and Nov. 1973, the stock of money with the public has increased by about 39.4 percent. See Reserve Bank of India Bulletin, Nov., 1973.

24. A.M. Khusro "India's Economic Policy...", op. cit., p, 22

25. Sudha R. Shenoy "Central Planning in India & Critical Review", Wiley Eastern Pvt. Ltd., 1971 p. 55, Clauses in brackets supplied.

taken precedence over the human task of raising standards of living.[26]

This overemphasis on growth has also led to the diversion of investment resources more towards basic and heavy industries than towards essential consumer goods.[27] This policy has not only resulted in a high level of capital intensity, but also damped the productivity indices because most of the investment projects undertaken involved long gestation periods. Also the uncertainties and vicissitudes of the foreign aid and export front caused serious dislocations in many of the important industries which were heavily dependent on foreign aid. A serious consequence of this has been the emergence of substantial excess capacity in a number of industries. Thus there is, on the one hand, a built-in-bias towards basic and heavy industries which would result in the generation of an inflationary gap in the short run, but, on the other, even the created potential has not been fully tapped ensuring the smooth flow of goods and services.

Human Capital : At least part of the excess demand generated in the economy has its origin in what is called human capital formation, i.e. expenditure on social services like education, health and welfare. In India almost the whole of such expenditures are at the instance of the government whether Central or State. "Though, in the long run, investment in human capital may increase the earning capacity of the individuals . . . they are not accompanied by any expansion of goods or services in the short run."[28]

Indirect Taxes : Apart from the heavy order of deficit financing attempted in the past, fiscal policies contributed directly to the rise in the general level of prices. A notable feature is the increased reliance on the indirect taxes for resource mobilisation, particularly on excise duties, sales tax, taxes on passenger fares and freights etc., which are shiftable to the final consumer either fully or in part. For instance, while the total tax revenue of both Central and State governments increased from Rs. 627 crores in 1950-51 to about Rs. 1350 crores in 1960-61 and then to about Rs. 4504 crores in 1969-70,

26. Colin Clark, quoted in ibid, p. 8.

27. "The *relative* neglect of agriculture and hence the 'wage goods' constraint with its attendent somewhat exaggerated concern with the building up of the investment sector to break eventually the 'capital-goods constraints' were to be shown by the subsequent turn of events to have been unfortunate and harmful to the process of economic development in the country."

J. Bhagwati and P. Desai "Planning for Industrialisation : Industrialisation and Trade Policies since 1951." Oxford University Press, 1970, p. 117.

28. M.J.K. Thavaraj, "Fiscal Policies & Inflation : A Critical Evaluation", *Productivity* this issue p. 54.

direct taxes account for only about Rs. 231 crores in 1950-51, about Rs. 402 crores in 1960-61 and about Rs. 954 crores in 1969-70.[29]

Even among the goods taxed, it has been pointed out, items of mass consumption account for the bulk. This has added to the regressive impact of commodity taxes. Thus while the total revenue from indirect taxes increased from about Rs. 396 crores in 1950-51 to about Rs. 948 crores in 1960-61 and then to about Rs. 3649 crores in 1969-70, sales tax alone has increased from about Rs. 58 crores in 1950-51 to about Rs. 164 crores in 1960-61 and to about Rs. 661 crores in 1969-70. Excise duties levied by both State and Central governments also showed remarkable increases from about Rs. 117 crores in 1950-51 to about Rs. 461 crores in 1960-61 and then to about Rs. 1706 crores in 1969-70. Also " . . . . it is the commodities of common consumption of the masses . . . . and middle classes which bear the brunt of commodity taxation . . . . The bulk of revenues from central excise is drawn from cotton textiles, sugar, kerosene, tobacco, coffee and other necessities the demand for which is almost inelastic in view of the non-availability of untaxed substitutes."[30] In most of the cases where the levies are imposed on basic raw materials and intermediate goods, the effect of taxation is cumulative. It follows that the heavy accent placed on indirect taxes curbing the necessities of life accounted for a substantial increase in the general price level in India over the plans. This increased reliance on indirect taxes, particularly on sales tax and excise duties, is an unhealthy practice on the part of an under-developed economy especially when confronted with an oligopolistic product market. Such levies will not always lead to substantial curtailment in the household consumption, but would rather result in pushing the level of prices to higher levels.[31] This tendency would get accentuated when the price rise could be compensated by direct wage increases for the wages and salaried groups through the mechanism of dearness allowance and related components.

Expenditure on Public Administration : In India a large part of the resources mobilised through deficit financing finds its leakage in filling the gap between public expenditures and budgetary resources. A major portion of this expenditure is accounted for by unproductive activities like public adminis-

29. Statistical Abstract 1970, pp. 499-500.

30. M.J.K. Thavaraj "Fiscal Policies and Inflation.. .. ", op cit., pp. 57-58.

31. For instance "Indirect taxes have never helped before in checking consumption and supplies and production of unessential commodities." M.P. Chitale "Would Tax Proposals Check Inflation?" op. cit., p. 13.

tration. The magnitude of such expenditures could be seen from the fact that while the net domestic product at factor cost (at current prices) has doubled between the years 1960-61 and 1969-70 from Rs. 13,366 crores in 1960-61 to Rs. 28,936 crores in 1969-70—total revenue expenditure of both Central and State governments on non-developmental items alone has increased more than three fold from about Rs. 953 crores in 1960-61 to about Rs. 3171 crores in 1967-70.[32] The increase is mainly on account of items like defence (from about Rs. 248 crores in 1960-61 to about Rs. 979 crores in 1969-70), police (from about Rs. 99 crores in 1960-61 to about Rs. 311 crores in 1969-70), general administration (from about Rs. 79 crores in 1960-61 to about Rs. 160 crores in 1969-70), interest payments (from about Rs. 218 crores in 1960-61 to about Rs. 679 crores in 1969-70) etc. " It follows that though undue expansion of current expenditure may carry an inflationary potential, it is the unproductive administrative expenditure and the sizeable seepages that take place across the board, especially in defence, public works. . . which contribute a great deal to inflation. . . ."[33]

Public Distribution : Adding further to these vulnerabilities of the economy, has been the faulty system of distribution. Despite the repeated verbal commitments made in the past plans to streamline the public distribution in conformity with the stated objective of eradication of poverty[34] among the lower strata of about 30 per cent and also "ensure equitable distribution of the proceeds of growth" practically not much has been achieved. Critics of Indian planning have recently become articulated with observations like "excess of investment expenditure has caused price inflation because of the right to accumulate property and its ownership and the operation of a money oriented mode of exchange and distribution."[35]

32. Statistical Abstract 1970 p. 482 and pp. 503-504.

33. M.J.K. Thavaraj "Fiscal Policies and Inflation......", op. cit., p. 55.

34. The concept of eradication of poverty in Indian Plans is debated much too often. Curiously, no clear consensus have also emerged from these debates. See, for instance—
    (i) B.S. Minhas "Rural Poverty, Land Distribution and Development", *Indian Economic Review*, Vol. 5 (New Series) No. 1, 1970, pp. 97-128.
    (ii) P.K. Bardhan "On the Minimum Level of Living and Rural Poverty", *Indian Economic Review*, the above issue, pp. 129-138.
    (iii) P.K. Bardhan "On the Incidence of Poverty in Rural India of the Sixties", *Economic & Political Weekly*, Vol. 8, Nos. 4-6, Annual No. 73, pp. 245-254.
    Also see : "Notes on the Controversy around Rural Poverty and the Minimum Levels of Living" by both Minhas and Bardhan, in *Indian Economic Review* Vol. 6 (new series) No. 1, pp. 69-102.

35. G.P. Mishra "Spotlight on Shortcomings", op. cit., p. 5.

Though there was a public distribution system operating in India in the past, its operation is inadequate both in terms of coverage of commodities and its quantities. This system has been concerned primarily with foodgrains, though some other commodities such as sugar and kerosene have also been covered from time to time. The effective coverage of public distribution system is reflected very well in the quantity of foodgrains distributed annually through it. Until 1964, it was seldom more than 5 million tonnes which is less than one twelfth of the total output of foodgrains. Though this has increased to about 13 to 14 million tonnes during the latter half of the sixties, it again came down to 8 million tonnes in 1969 and 1970.[36]

The speculative character of Indian trading sector is well-known. In a situation characterised by extreme shortages, such speculation would gather additional momentum. This speculation leads to the mode of exchange and distribution more favourable to traders and stockists. The position becomes more beneficial if the process of growth is deficit induced. "Thus a small number of large farmers produce and control marketable surpluses of food-grains having the objective of profit maximisation. The system of wholesale trade, being private in nature, market those surpluses and hoard them for speculative purposes."[37] The behaviour of prices under such circumstances naturally would be characterised by chaotic rises. The available indications show that this is applicable in India not only with regard to agricultural sector but a wide range of essential consumables like sugar, kerosene, edible oil etc.

Growth, Price Stability and Incomes Policy : Some Constraints

Reconciliation of the long-term and short-term objectives of national planning in the context of incomes policy poses itself as a critical constraint. For instance, while curtailment of deficit financing and expenditure on public administration could be enthusiastically advocated, it may result in the reduction of net developmental outlays essential for accelerated rates of growth of production or may shrink expenditure which may directly or indirectly promote employment generation. In fact, in market economies, it has been advocated, the path of optimum economic growth is one that cuts its way between two distinct phenomena: inflation on the one side and unemployment on the other. But, now, this traditional doctrine has been questioned and a 'new indation' has been discovered, an inflation characterised

36. K.N. Raj "Planning and Prices in India", *The Economic Times*, March 16, 1974 p. 5.

37. G.P. Mishra "Spotlight on Shortcomings", op. cit., p. 7.

by the disconcerting persistence of significant and even substantial unemployment. In this world of 'stagflation'[38] both inflation and unemployment can co-exist to a certain extent and hence the apparent weakness of aggregate demand could not be invoked as an explanation. It has been reconciled sometimes that "Inflation is essentially a phenomenon related to the behaviour and therefore to the expectations of the various economic agents."[39]

Some element of non-compatibility is involved even between accelerated economic growth and raising the income levels of the poor, have nots and the less paid sections of the society. The genesis of conflict in this case has its origin mainly in the negligible saving capacity of the poor. By the very fact that the marginal propensity to consume of the poor would be around unity, any immediate increase in their real income, if attained through the popular redistribution instruments, would step up their consumption expenditure initially, leaving the saving margin of the economy thinner.[40] Deficit induced investments again assumes its importance if the economy has to attain accelerated rate of growth. Further, the redistributed income, if spent on consumption expenditure, would help in raising the prices of such items which are usually essential consumables, defeating the stated objectives of the incomes policy, viz., holding the price line. One may have to suspect whether Indian economy has already been subjected to the strains of lower rate of economic growth coupled with a galloping inflation, because of the vicious circle of the nature described above.

The problems of an incomes policy in the Indian context would not find an end here. In an economy characterised by a predominantly peasant farming

38. For a brief discussion, see Jean Mouly, "Prices, Wages and Unemployment : Inflation in Contemporary Economic Theory", *International Labour Review*, Vol. 108, No. 6, Oct., 1973, pp. 329-343.

39. Ibid p. 342.

40. "The same overall percentage rate of savings ..... can be realised by the prices of most essential commodities being kept very low...... and the less essential being priced very high (in order to divert the resources to higher-priority uses) " is the idea given in a recent study. See K.N. Raj, "Planning and Prices in India", op cit, p. 5.

But this contention stems from the belief that the marginal propensity to consume of the poor, whose absolute consumption levels of essential items remain low because income remains very low, may be less than or equal to that of the rich. But any absolute increase in the real income (at least if the increase in prices is kept low relative to increase in income) would lead to proportionate or more increase in consumption expenditure. In effect, there could be a reduction in the overall percent of saving.

sector, non-wage incomes constituting a major share in the net output, the efficacy of such policies are directly rendered difficult. The position becomes further difficult when it is realised that the bulk of wage payments in this sector is in kind and not in money. Thus, to some extent, the basic problem is to bring a major sector of the economy directly into the purview of the incomes policy.

A New Wage Policy

It is inevitable that a whole pharmacopoeia of measures relating to monetary and credit, budgetary and fiscal, investment and its financing etc. will have to be mobilised for a meaningful prices and incomes policy for India. Indeed they are complex issues and to some extent beyond the scope of the present paper. However, since labour is one of the major recipients of income in India, and therefore any difference, positive or negative, between its contribution to output and the share it receives would affect the performance of the economy in many ways, some observations regarding the role of an appropriate wage policy are called for. Admitting that 'wage restraints' alone would not constitute the scope and substance of the 'new incomes policy', yet labour has to play a positive role in it. Hitherto, welfare considerations have a dominating role in the wage policy in India. This is clear from the observtion "The labour and wage policies in India. . . . emanate from these basica aims (of increase in production and employment and attainment of economic equality and social justice) and are essentially directed towards the well defined goals of a welfare state and the socialistic pattern of society."[41] But this welfare approach to wage policy has resulted in a situation where money wages in a large part of the wage employment sector move monotonously with changes in the cost of living index, irrespective of the productivity movements, through the mechanism of dearness allowance.[42] Neither such a system offers any incentive for contributing higher to the national output nor it guarantees autonomous growth in output. The contention is that the present practice orbits around its own vicious circle of higher

41. Labour Bureau, "Wage Policy in Five Year Plans : A Review", *Productivity*, this issue p. 68. Clause in brackets supplied.

42. The findings of a recent study are exceptions to this. "The productivity index......has relatively higher importance in explaining changes in money earnings." See G.K. Suri & C.M. Sastry : "Determinants of Workers Money Earnings and Incomes Policy" *Productivity*, this issue, p 108 It is important to note that the concept of productivity, in this case, has been defined as 'net value added by manufacturing per man hour worked at current prices'. The risks to which this kind of a concept is subjected to are :

prices, higher wages, higher costs and then again higher prices. Interestingly wages and prices move disproportionately upwards, leaving wages to trail, always, behind. However, the need for a total departure from this conventional basis of wage setting viz., price-wage-link up, to an incentive based productivity-wage-link up finds its due echo in the Approach to Fifth Plan.[43]

Inherent in the question of linking wages with productivity is the problem of its measurement, for, underlying the estimation of output-input relation stands the concept of a production function i. e., the notion that the physical volume of output depends on the quantities of productive services or inputs employed in the production process. But "Conceding that in a complex production system it may not be possible to measure the net contribution of labour towards higher productivity the concept of total productivity could be used as the basis."[44] While the conceptual details of the so called 'total productivity' are yet to be explored, and operational issues are yet to be resolved, the proponents of the approach have conceded that even with this revised approach ". . . . neither country wide or industry wide index of productivity nor the level of national income could be the criteria as they do not take into account the situation of an individual unit . . . only . . . alternative . . . is of arriving at an arrangement for linking wages with productivity at the unit level."[45] Thus at the unit level it is considered to be possible to develop statistical methods capable of measuring labour productivity independently of other factors of production particularly capital, fairly accurate.

(a) Net value added per unit of labour would not reflect the contribution of labour alone as is envisaged by the authors.

(b) In an oligopolistic market, product prices could be adjusted to changing cost of production necessitated by higher wages.

Since both the concepts viz., productivity and wages are measured at current prices, the model explains only about the behaviour of prices, and not necessarily about wage productivity relationship. For somewhat similar findings see G. K. Suri and H. V. V. Chellappa, "Wage-cost-productivity Nexus and Incomes Policy." *Indian Journal Industrial Relations*, Vol. 9, No. 1, July 1973, pp. 69-82.

For a brief discussion on the relevance of net value added in the context of wage productivity comparisons see : National Productivity Council, "Productivity Trends in Iron & Steel Industry in India," New Delhi 1974, pp. 2-4 and p. 34.

43. India, Planning Commission Approach to Fifth Plan, pp. 50-54.

44. See G. R. Dalvi, "Production & Productivity Aspects of Wage Policy", Paper presented at the Industrial Relations Conference in New Delhi 24-25 Jan., 1974, (mimeographed) p. 4.

45. Ibid pp. 4-5.

Summary and Conclusions

If the proposed incomes policy is intended to be more than a fashion, it has to be realistic in its approach to the questions of realizable growth rates and equitable distribution of the proceeds of economic growth. It is, thus, obvious that the twin problems of poverty and inequalities require a coherent overall economic strategy. An incomes policy has necessarily to fit into this overall strategy. The tendency to look up on incomes policy in terms of merely a wage policy may finally lead to the very defeat of its objectives.[46]

In particular, prices and incomes policy cannot be envisaged only as a negative instrument of restraint alone, it necessarily has to be a positive instrument of growth. What is involved is a certain measure of regulation of the rate of growth of consumption of those who are fully employed, whether they be workers, profit earners, fixed asset holders etc., in the interest of those who are under-employed, and unemployed. Interpreted in this way the envisaged policy, if accepted and implemented by all the concerned agencies including government and trade unions, could be an important element of the strategy of overall economic and social development.

46. It is evident that those who are finally responsible for the implementation of the proposed policy are well aware of this fact. See., for instance, the inaugural speech delivered by Y. B. Chavan, Union Minister for Finance, at the Seminar on "Income Policy and Industrial Relations" in New Delhi 23-25 April, 1973, (mimeographed).

India's Economic Policy : A Critique and An Approcah*

A. M. Khusro

This paper has two objectives, namely (1) to analyse some critical segments of the Indian economy, and (2) in the light of this analysis, to recommend some basic policy changes in order to correct fauity policy postures and improve the economy's performance.

The paper focusses on short-period changes and aims at policies calculated to give early rather than late results. It accepts fully the ideological premises and politico-economic objectives of India's policy - the maintenance and the strengthening of democratic institutions, rapid economic growth, massive distributive justice, an early elimination of absolute poverty, and early freedom from foreign aid. While our basic *objectives* are unexceptionable, the paper shows how ill-calculated to achieve these objectives our policy *instruments* are. It suggests changes in these instruments.

The paper notes that we in this country have rightly discarded the totally free-market economy or the laissez-fairy land in which the sum total of all individualistic activity is somehow presumed to add to the greatest good of the greatest number - which it never does owing to the co-existence of high and low income consumers and monopolistic and competitive producers. We have also rejected the fully regimented economy in which all means of production, distribution and exchange are owned by the State only administered prices function. We thus have a mixed economy. But what is not generally understood is that there are *two types of mixed economy*—one which *has been* functioning in India and functioning rather badly, and the other that *could* function or ought to be made to function. For want of a better phrase we could call it a *progressive economy* in which a continued progress is maintained on several fronts—on growth, on distributive justice,

*This Paper is addressed to the policy-maker. A technical examination of it may reveal some theoretical flaws. But the expert reader would have to bear with it as it is being presented in the hope that the advantages of a policy shift from no theory to good theory are far greater than those of a shift from good theory to very good theory. The plea therefore is that the best should not be made the enemy of the good—*Author*.

on elimination of monopoly and oligopoly, on desirable structural changes and on self-reliance. This paper suggests some methods of moving quickly from the badly functioning Indian (mixed) economy to the efficiently functioning progressive (mixed) economy.

A mixed economy is mixed in two important respects: (a) it has *a mixture of public and private means of production* - capital stock and employment; (b) it has *a mixture of markets for goods and services* - free markets and controlled markets. The difference between the Indian economy and the progressive economy is precisely this that :

(a) *The Indian economy has no pre-existing or known logic or criteria as to why certain lines of production should be in the private or the joint or the public sector.* (Of course, the Industrial Policy Resolution gives a list of industries which ought to be in this or that sector, but it does not say, why). This absence of objective norms or criteria makes its decision-makers and administrators timid and evasive and its entrepreneurs irritable and frustrated. By contrast, the progressive economy has well-known rules for this classification.

(b) *Nor has the Indian economy a known logic or criteria as to why a certain commodity should be sold in the controlled market and why another in the free market.* Why should automobiles be sold at controlled prices and automobile parts at free prices? Why should housing be free and cement be controlled? Why should engineering goods be free and steel be controlled ? The progressive economy, by contrast, has a clear logic to guide it on these issues.

Thus the progressive economy is a *discriminating economy*—an economy which discriminates between competitive and monopolistic (oligopolistic) businesses and then permits the former in the private sector and the latter in the joint sector or the public sector. But then *it has to estimate the degree of monopoly/oligopoly* which the present Indian policy does not do. Neither the Ministries dealing with industrial production nor the Commission and other bodies dealing with monopoly and restrictive practices have any idea about the degree of monopoly or about the most economical scales of production. The progressive economy also discriminates between commodity and commodity or market and market and permits free markets in some commodities in which production responds substantially and quickly to changes in price and incomes, and imposes price and quantitative controls in other commodities. But then it *has to estimate in a technical way the responsiveness* *of supplies to prices and incomes*, which the current Indian policy seldom does.

In other words, the policy-makers and administrators of the present-day Indian economy are confused about the market mechanism. They seem to indulge in 'controlmanship' - which is defined as the art of talking and legislating a great deal about controlling the weaknesses and inequities of the market without actually knowing how the market functions ! The controlman then proceeds to intervene with a great many indiscriminate and non-export controls in all sorts of markets because he cannot discriminate one market from another. He thinks that the controls are working. But since non-expert controls do not work, what actually works is the market mechanism ! In the result, instead of controlling the market, the controlman turns out to have been controlled by the market and by the black-marketeers.

The progressive economy is not confused on these matters. It knows that the price mechanism is one of the greatest inventions of mankind and that the laws of supply and demand generally work in all sorts of economies e.g. in the Soviet type as well as the American type. But it also knows that *what makes non-sense of the price mechanism is basically* (i) *the maldistribution of income or purchasing power* and (ii) the existence of *monopoly/oligopoly*. So the *progressive economy launches a concerted attack on income distribution on the one hand and the elimination of monopoly/oligopoly on the other.* But it does so not by words or mere political decisions but by expert analysis followed by political decisions and these followed by expert action.

(c) The progressive economy is thus a sophisticated economy demanding expertise from its political, economic and social decision-makers and its administrators and managers. It has complex policy goals and a complex set of instruments to achieve these. Such an economy shows *high respect for ideological and socio-political objectives as well as high regard for technical-economic considerations.* The present-day Indian economy does have its goals and its sociopolitical decisions, but does not have enough expertise to fashion a consistent set of instruments to achieve those goals, or to critically evaluate its own, decisions or to foresee the second-and-third-stage implications of these decisions. That is why errors are numerous, many decisions have to be reversed and objectives remain grossly underfulfilled. Despite some augmentation of professional skills in the public and the private sector, the current Indian economy remains a good place for the non-expert. For instance, it is a pity that *economic policy in this country is not informed by economic* *theory* but only by a non-expert general wisdom - which does not go half as far as a combination of expertise and wisdom would.

Achievements and Non-Achievements

The Indian economy and polity has substantial achievements to its credit during the last two decades. *Democratic institutions* have survived and even got strengthened. *Economic growth* at 3 to 4 per cent per annum has been maintained over two decades. As for *distributive justice,* it can be asserted that the absolute level of consumption of the good things of life by the masses has increased (except perhaps in the eastern segment of the country and some other pockets). Between 1954 and 1968 while the absolute mass of the poor in the rural sector of the economy may have remained approximately the same (between 150 million and 175 million people below the poverty line), more than a 100 million people got added to the ranks of the non-poor ! That is a substantial achievement.

But, at the same time, the failures in achieving the three objectives of economic growth, distributive justice and political development are also colossal. Consolidation of democracy still leaves a great deal to be desired. Economic growth has never been what it was planned to be and has been limping at a slow pace of about 3½ per cent per year, not to mention the fluctuations in the rate of growth. As for distributive justice, while absolute levels of the masses have generally risen, their relative position has weakened and economic inequality has widened. On top of it all has come the inflationary spiral. Inflation, like poverty, has always been with us, but has now assumed a very disturbing pace. With more than a 20 per cent rise in the last 12 months and a higher price rise in food articles of mass consumption, India now appears to be moving into the Latin American zone of inflation. Actually, prices have risen more than what the official price index shows. The index is based substantially on quotations of controlled prices and not those of free market prices and hence under-states the true price rise.

This phenomenal inflation of prices has been having many well-known effects but also some very serious concealed effects. Real incomes have been rising far less than money incomes and consumers have been finding holes in their pockets. Wage earners have been clamouring for higher wages. Budget deficits have been tending to become alarmingly large. Both deficit financing and wage payments in general unaccompanied by a proportionate rise in production or productivity, have been causing further inflation. On the external front, inflation has been sucking away the exportable goods into the home market and augmenting the balance of payments deficit. This requires a greater resort to foreign aid and means lesser self-reliance.

A feature of today's inflation is that higher prices apart, a large number of crucial producer and consumer goods are simply not available. In this situation consumers try to stockpile and producers attempt to hold larger inventories and both add to the price rise. When the value of the rupee falls visibly, people begin to get rid of money and shift into goods. The situation then begins to border on galloping inflation and that is a terrible thing to happen to any economy. Luckily this is not yet the Indian situation.

But it is the Indian situation that a very large number of goods are in short supply. Every manufacturer finds one or more inputs in serious shortage. To take just one out of a thousand examples, a large firm making bread and biscuits nearly closed down owing to power shortage. As it commissioned its own generators and got over the difficulty, it ran into a scarcity of hydrogenated oil and was again about to close down. However, it negotiated oil supplies at a high price and managed to stay open. But presently it did not have wheat flour and again stood in danger of closing down. The latest news is that it has closed down. Such critical inputs as steel, cement, power and water are not available to many manufacturers. On the household front, off and on, such items as bread, butter, edible oils, cooking gas, sugar and wheat have gone into shortage. The political and social repurcussions of all this and more are obviously very disquieting.

While these and many more are the open effects of inflation, the other effects, often hidden from the naked eye, are at least as damaging to growth and redistribution. When the value of the rupee falls by 20 per cent (or even 10 per cent) in one year, why should anyone attempt to save at all if he gains only 7 per cent interest on it (if at all) but loses 20 (or 10) per cent on the value of capital ? Obviously a rate of price rise higher than the rate of interest has been doing a good deal of damage to savings. If savings in some limited spheres are still rising that is owing to other reasons.

It is well-known that social services like education, health, sanitation and nutrition benefits never reach the target groups as they are supposed to reach. Nevertheless, if there is somewhere a lucky beneficiary whose real income through enhanced social services has gone up by, say, 5 per cent in one year, why should he consider this as any benefit at all if his real income has actually gone down by 20 per cent due to price inflation ? Social services are meaningful only when the value of money is relatively stable. Inflation has thus been making non-sense of our social services and our programmes of socialist redistribution. No wonder the recepients of these great services do not feel enthused but only talk of what they have lost.

A price inflation of 20 per cent in a year is also the reason why a price offer of Rs.76 per quintal of wheat looks like a real offer of Rs. 69 six months later and of Rs. 61 a year later. It seems an essential condition for successful grain procurement at any given price that the general price level should be somewhat stable.

Controlling Inflation Through Controlling Demand

If inflation and its many undesirable effects are to be brought under control, this cannot be done merely by putting a legal price-control, on the inflating commodities. That is like putting a lid on the chimney to hide the smoke when the kitchen has caught fire. The basic causes of inflation, some on the demand side and others on the supply side, would have to be understood and tackled.

Our Five-Year Plans are basically plans for expanding investment — i.e. goods which produce more goods. Investment has two well-known effects: (a) it increases demand or incomes in the hands of people through a multiplier effect; and (b) it increases productive capacity and production or supplies. But it so happens, typically, that owing to long gestation periods, inefficiencies etc. supplies emerge slowly and demand runs ahead faster. In the event, price tends to rise as in the Indian case, with all their undesirable consequences. Anti-inflationary policy has then to work on two fronts: reduce the demand and augment the supply.

Neglecting the exotic controversies among schools of economic thought, to say that total demand in the economy is too high compared to total supplies, is the same thing as saying that money stock in the economy is rising too fast compared to the country's output (if the speed with which money circulates is not changing much) Irrespective of the controversies among schools of economic thought as to whether money stock is a rough or a fairly reliable index of demand, it is not a matter of much controversy that if money stock is rising at the rate of 15 per cent per year when output is rising at 3 per cent per year, prices will generally rise, say, between 10 and 14 per cent. This is roughly what has been happening in India in the last two years and is now happening much too obviously and disturbingly.

TABLE—1

Financial year	*Money Supply*		*National Output*		*Wholesale price Index*	
	Rs. crores	*Annual % rise over last year*	*Rs. crores (at 1960-61 prices)*	*% rise over last year*	*Index (1961-62) =100*	*% rise over last year*
1970-71	7,140	11.8	18,760		180.6	2.8
1971-72	8,138	14.0	19,135*		192.3	6.4
1972-73	9,285	13.5	19,521*		218.4	13.6
1st quarter of 1973-74	9,733	19.3**	—		240.8	41.0**

**Quarterly Increase converted into an annual rate.

*On the basis of a presumed 2% increase over last year.

Why do we allow the money stock (total demand) to rise so madly and so much out of line with output? There are two explanations but neither can be justified:

(i) The Reserve Bank of India has no known rules about the quantum of money stock, such as :

(a) Let the trend increase in money stock be equal to the trend increase in output; or

(b) Let the trend increase in money stock by a certain percentage (say 1 %) higher than the trend increase in output, since the Indian economy is subject to a monetization process and needs somewhat more money each year; or

(c) Let the trend increase in money stock be a certain percentage lower than the trend increase in output, since (i) the monetization process is drawing to a close, (ii) the economizing in the use of money owing to better trust and confidence and greater integration in production is slowly increasing the velocity of money and reducing the demand for money in relation to output; or

(d) Let the stock of money rise somewhat less than output in the upward phase of the cycle and fall somewhat less than output in the downward phase.

The absence of such rules prevents the Reserve Bank from acting promptly when it should and unduly protects it from criticism by the public and the experts. Hence :

Policy Recommendation No. 1 : The Reserve Bank of India must promptly fix the upper and lower bounds of money stock in relation to output and other factors and must announce the rules governing the change of stock. It must recognize that India now needs a sophisticated monetary policy and a degree of expertise in monetary management consistent with the working of one of the great Central Banks of the world.

(ii) Even though the Reserve Bank does not have well-defined rules, it is clear that the recent undue expansion of money stock is not due to much laxity on its parts. Credit to the private sector has been kept tight. Neither this nor foreign transactions have exerted any major influence on money stock expansion. State Government deficits and the resultant overdrafts used to be inflationary in character but the Ministry of Finance has to be complemented on eliminating these. It is true that the States have received the amounts back from the Centre on grounds of drought relief and emergency agricultural programmes. State deficits have reappeared in the name of Central deficit. The great inflationary factor now is the Central deficit.

Even as the Reserve Bank has no theory about the relation between total output and total money stock, *the Central Ministry of Finance has no theory about the relation between total money stock and budget deficits.* These relations are very important. In the present Indian situation a 16 per cent rise in money stock could only occur if the budget dificit was around Rs. 800 crores, not if it was Rs. 400 crores. A 10 per cent rise in money stock would probably go with a deficit of Rs. 400 crores, not Rs. 200 crores; and a 5 % rise would go with a deficit between Rs. 100 crores to Rs. 200 crores, other things being equal.

So if prices in the last two years have risen at an average rate of 14 per cent per year It is largely because money stock, in the face of a mere 2 per cent rise in output has risen by 13 to 16 per cent per year. And if money stock has risen by that much, it is because budget deficits have been of the order of Rs. 800 crores per year. Hence:

Policy Recommendation No. 2 : The Ministry of Finance must recognize the relation between budget deficits, the quantity of high-powered (Government) money and the quantity of total money and must not generally permit a deficit which eventually ends up, via high-powered money, in a larger increase in total money stock than is warranted by the rule of the RBI (Policy Recommendation No. 1).

But why is the deficit so large? Owing to excessive Government expenditures, it is alleged. That is not a very fruitful line of analysis and this is where most analysts get themselves deflected into secondary questions and never reach the primary issues. Some chopping and chiselling of expenditures is, of course, always possible. The Finance Minister has already announced the cuts. But, by and large, at current price level those expenditures have got to be incurred. Given the gunuine need for expenditures, *deficit financing is so large because not enough is forthcoming from (a) public borrowing, (b) profits of public enterprises, and (c) taxation.* Now borrowing is relatively small because, among other things, *the rate of interest on government debt is incredibly low.* Savers will not save much at that rate of interest when other rates of interest are much higher and when price inflation is so high. *Profits of public enterprises are low for various reasons, not the least important amongst them being the non-expert pricing policies.* In this paper we shall not go into the question of low receipts from borrowing and low profits of public enterprises, but concentrate on a much-neglected but critically important area of tax receipts, which is, today, the crux of the rosources problem. Nevertheless, we shall make :

Policy Recommendation No. 3: The interest rate structure, in today's circumstances, must be shifted upwards and within that structure, the rates of interest on Government borrowings and on borrowings from public financial institutions should be suitably raised relatively to other rates.

Policy Recommendation No. 4: The Pricing Policies of public enterprises must be informed by good theory and must get oriented, together with costing policies and management policies, towards higher surpluses.

To turn to the basic issues: to a superficial eye, tax receipts in India seem to be rising fast, but actually that is an optical illusion due to price inflation. Tax receipts in real terms (at constant prices) are not rising much. Relative to the expanding needs of the Five Year Plans, too, they are not rising. *The tax base is shrinking even as the tax rates are rising. An increasing proportion of people, eminently qualified to pay taxes, are becoming non-tax payers.* Most of them are probably among the top 10% of income-earners; and because these are getting away so lightly that the others are having to pay so much more. Real tax receipts have become very inelastic. Hence a much la-ger budget deficit than is necessary.

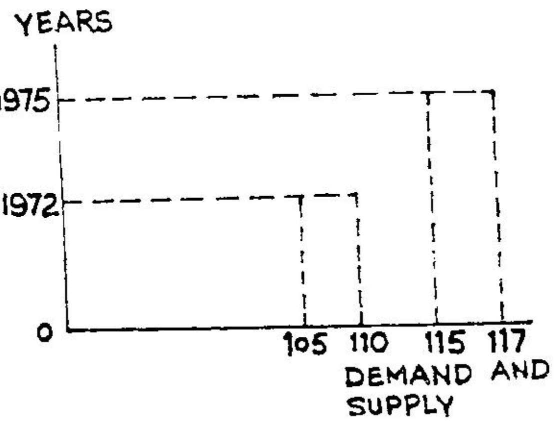
Why then is the tax base shrinking? Why this problem of resources, leading to so much deficit finance? *This is the critical question to which proper answers have not been given and this is where the biggest concentration of analysis and action is required. We attempt such an analysis and deduce from it some policy recommendations.*

Shortages, Controls and Black Markets

When, in the process of investment, as a result of total demand running ahead of total supplies, the price level begins to rise, manifesting several undesirable inflationary consequences, the Government can contain these in three alternative ways—(i) a tight monetary policy, (ii) an anti-inflationary fiscal policy, and (iii) price and quantity controls.

Now monetary and fiscal policies can be administered only by the Ministry of Finance and the Reserve Bank of India and not by individual Ministries. *On the other hand, every Ministry can administer its own price and quantity controls. Hence it comes very readily to ministerial representatives to impose price and quantity controls* and this instrument is promptly administered and multiplied, almost in total ignorance of what controls the other ministries are administering and certainly in ignorance of what the total effect of these controls is.

DIAGRAM 1

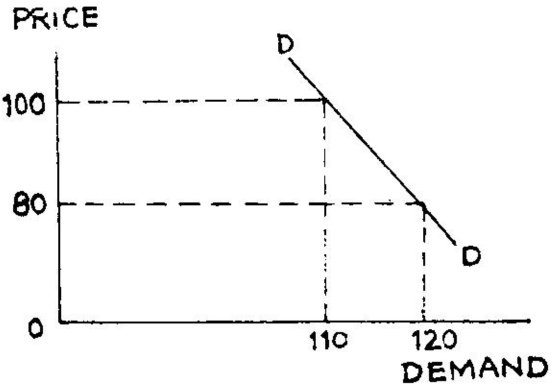


But the administration of prices is fundamentally different from the administration of districts. A different discipline and a different thought pattern is required. A non-expert policy-maker or administrator (non-expert only in economic analysis) *generally sees demand and supply as points on a graph paper.* (as in Diagram 1). He observes that in 1972 the demand for foodgrains was 110 million tonnes; in the same year the supply of foodgrains was 105 million tonnes. In 1975 demand would be

117 million tonnes and supplies 115 million tonnes. *The expert policy-maker or administrator sees demand and supply as a curve or schedule which responds to prices and incomes.*

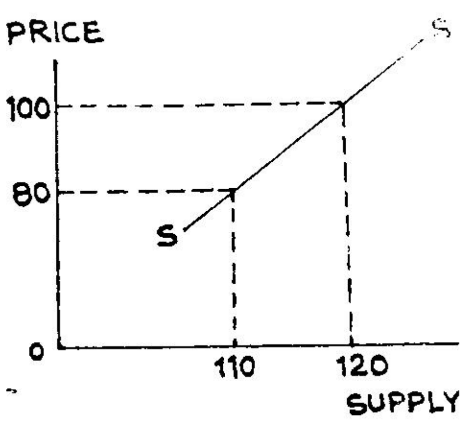
If (as seen in Diagram 2), prices were lower, demand would be higher, along a curve or line, and if prices higher, demand would be lower. *There is a negative relationship between price and demand.* At the same time, if income were higher, the whole demand curve would shift forward, so that at a higher income demand would be higher and at a lower income, lower. *There is a positive relation between income and demand.*

DIAGRAM 2



These propositions follow the basic *law of demand* to which no one has found, for all practical purposes, any significant exception. In like manner, the expert analysis would reveal the point that if (as seen in Diagram 3) prices were higher, supplies would be greater along a curve, and if prices were lower, supplies would be lower. *There is a positive relation between price and supply.* Also, if the income or resources of the producers were greater, supplies would be greater and if resources smaller, supplies smaller. The whole supply curve would shift forward or backward. *Thus, there is a positive relation between resources and supply.* So says the *law of supply* to which, again, no very significant exceptions have been found in practically any society. Of course, the *degree of response of supply and demand to prices and incomes is* different for different commodities in different societies and the knowledge of these responses (elasticities) is essential for policy-making in this realm.

DIAGRAM 3



Now, as the non-expert does not have either the apparatus of thought or the knowledge of commodity responses or elasticities, the effects of control—especially the second-and-third-stage effects—escape his attention. The following *effects of prices and quantity controls* must be noted. They will presently be substantiated:

(1) *Price controls lead to excess demand, i.e. shortage—and the shortage prompts producers and consumers alike to deal in the black-market.*

(2) *Not all commodity controls have the same potential for black-market dealings—some have less and some have more, depending upon the natural elasticities, of the commodity in question.*

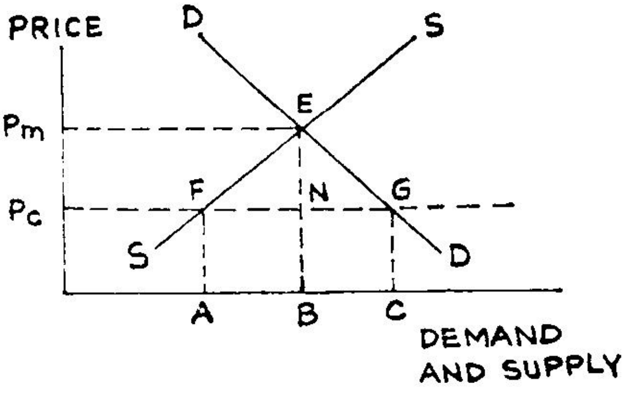
(3) *Controls are self-expanding. They proliferate and extend, through their own inner logic, from commodity to commodity.*

(4) *Controls are self-perpetuation; once they come, they tend to stick.*

These are the micro-effects of controls within the commodity markets. *There are other crucial macro-effects on the economy* which will be dealt with later.

(1) For convenience of exposition the reader is referred to Diagram 4. A key commodity has its demand curve, its supply curve and its market price, OP_m. At this price, demand and supply (AB) were equal. As the market price was too high for many users, a price control was imposed on the commodity and its price was reduced by a legal or administrative decree to OP_c, that is below the prevailing market price. At this lower price, lower by EN, as the law of demand predicts, the demand for this commodity would increase by NG. Simultaneously, at a lower controlled price, as the law of supply ordains, the supply of this commodity would shrink

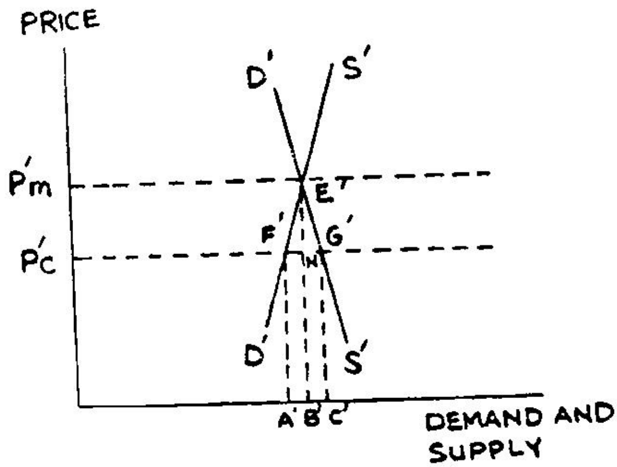
DIAGRAM 4



by NF, and resources would shift to other more remunerative commodities. *Thus, the first impact of the control is to create an excess demand or shortage of the controlled commodity.* The price controller who has a point concept of demand and supply and who does not draw the demand and the supply curves, at any rate mentally, cannot see the emerging shortage. If he does not have an idea of the elasticities—i.e. by how much will demand increase and by how much will supplies shrink if price is reduced by 10 per cent?—he will never gauge the *degree* of shortage.

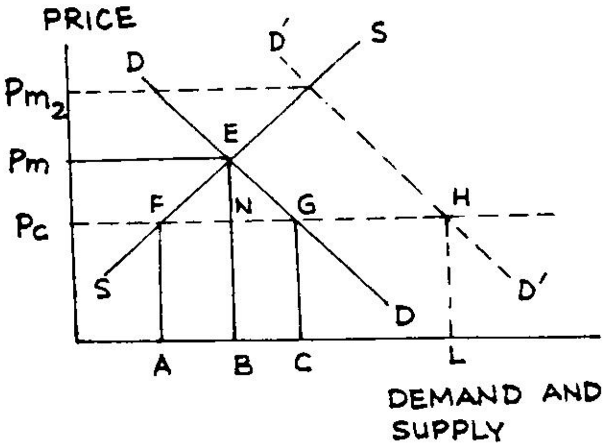
(2) *But the shortage resulting from the imposition of a controlled price is not the same in all commodities.* In some commodities, as in Diagram 4, reduction in price (EN) would bring about a large increase in demand (NG) and a large decrease in supply (NF), leading to a serious shortage and, in consequence, a strong tendency to do business in the black-market. This commodity is a bad thing for price control. In another commodity, as in Diagram 5, an equal reduction in the controlled price (E'N') would cause only a small increase in demand (N'G') and a small decrease in supply (N'F') so that the resulting shortage would be manageable and the consequent black market dealings negligible. Such a commodity is a good thing for price control.

DIAGRAM 5



We now have the result that *commodities with a small price elasticity of demand are amenable to successful control; those with a high price elasticity are not. Also, commodities with a small price elasticity of supply are amenable to successful control; those with a high price elasticity are not.*

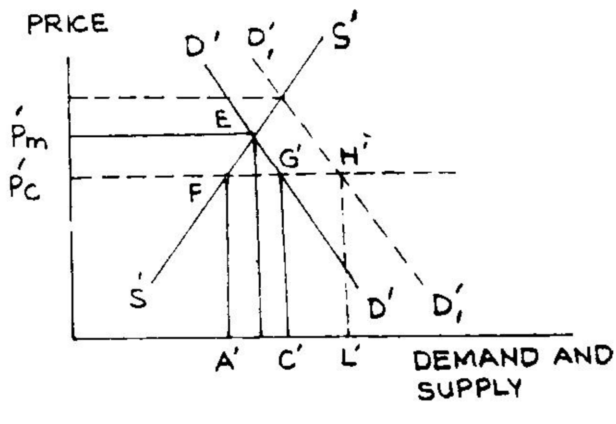
Demand and supply respond not only to prices but also to the incomes of consumers and the resources of producers. If, as seen in Diagram 6, the price of a commodity is reduced (by EN) by imposing a price control, DIAGRAM 6



consumers' real income would go up, as the same money income can now buy more. Since demand depends on real income, the demand for all commodities would go up, including the demand for the commodity whose price has been controlled—depending, of course, on how important in the budgets this commodity is. Its demand curve would have shifted forward from DD position to D^1D^1 position and demand enhanced by GH=CL. Thus the commodity shortage will be further aggravated for income reasons and the black market will further flourish.

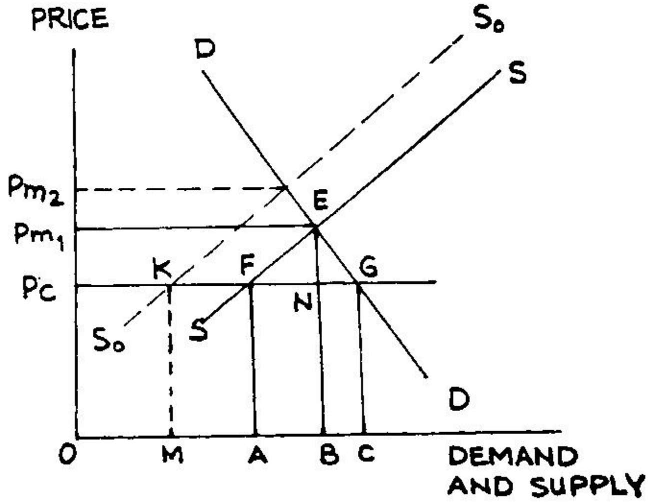
How much shortage develops and to what degree the black market is strengthened for this reason, depends upon how much the demand curve shifts forward after price control—that is how large is the *income elasticity of demand.* In Diagram 6 this shift (income elasticity of demand) is large. But in Diagram 7 there is a different commodity in which the shift (income elasticity of demand) is small; and hence not much shortage (only C'L') and not much black market. The commodity in Diagram 7 represents a good case for control and that in Diagram 6 a bad case.

DIAGRAM 7



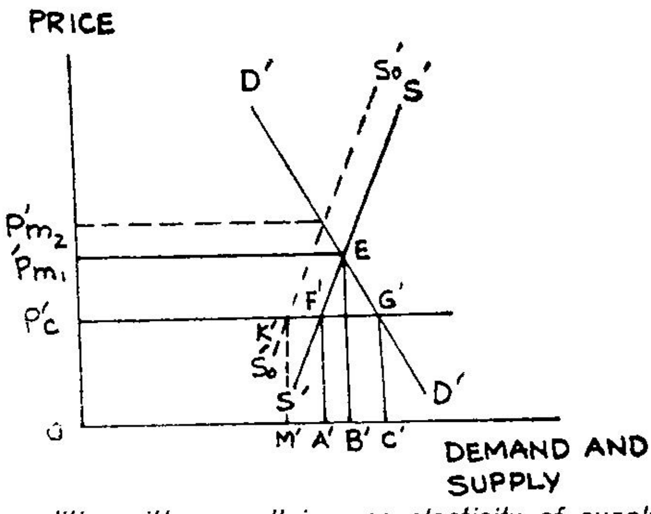
And, finally, if the price of a commodity is reduced through price control (by EN), producers' income or resources would diminish as they receive their incomes through prices. Since supply depends on resources, supply would be reduced and the supply curve would shift backward, as in Diagram 8, from SS to S_oS_o. There will be a considerable reduction in supply due to producers' income fall (FK A=M) and the black market would be buoyant.

DIAGRAM 8



But how much is the shortage and how buoyant the black market would depend on the degree of shift in the supply curve, i. e. on the magnitude of the *income elasticity of supply*. In Diagram 8 the shift is large but in Diagram 9, with another commodity, it is small (F'K' = A'M') and hence in this commodity there is not much of a black market. The commodity in Diagram 9 is a good case for control and that in Diagram 8 a bad case.

DIACRAM 9



We, thus, have the result that *commodities with a small income elasticity of demand are amenable to successful control; those with a high income elasticity are not. Furthermore, commodities with a small income elasticity of supply are amenable to successful control; those with a high income elasticity are not.*

These elasticities are quite easily estimable by people who know how to estimate these. If appropriate cells are set up in the economic Ministries and other organisations, the elasticities can be estimated in most cases within three months; but the estimation should be on a continuing basis, since elasticities do change. If on some items data do not exist, the decision to obtain the elasticities will call forth the required data—and—data will come. For most commodities, experts already have an idea of these elasticities. The policy-maker does not need to *estimate* the elasticities himself. He only needs to *use* them and he can do that if he trains himself in the general logic of these things. The reader will have noticed that the plea here is not for decontrol; it is for a much more judicious control after studying the responsiveness or the elasticity of each commodity's demand and supply with respect to price and income. In the light of this analysis the following recommendations are in order :

Policy Recommendation No. 5 : Price and quantity control policies (and other policies like tax and subsidy policies) should not be 'ad hoc' in nature but should be based forthwith on an understanding of the nature of the commodity in question—in particular the elasticities of demand and supply with respect to income and prices. By and large :

Have a presumption in favour of price and quantity control.

If the price-elasticity of demand (Ep_d) is small,

if the price-elasticity of supply (Ep_s) is small,

if the income elasticity of demand (E^i_d) is small, and

if the income elasticity of supply (E^i_s) is small.

In general, if the sum of the four elasticities (neglecting the signs) is small, price and quantity control is advisible.

In the opposite cases of elasticities, have a presumption against this type of control. In general, if the sum of the four elasticities (neglecting the signs) is large, price and quantity control is not advisible.

Policy Recommendation No. 6 : Immediately set up technical cells in the economic Ministries to estimate econometrically, and in other ways, the relevant commodity-wise elasticities of demand and supply with respect to income and price. The Central Statistical Organisation, the State Bureaus of Economics and Statistics, and research units in Universities and institutions could be asked to help. Meaningful demand and supply models should be both time-bound and continuous.

The plea is not for no controls—that would be absurd—but :

(a) for an *informed and judicious price-quantity control* which makes sure that the price administrator can control the market rather than the market control the price administrator; and

(b) for other controls, in particular, *monetary controls and fiscal controls* which could be substituted, wherever feasible, for price-quantity controls. This prescription is aimed basically at eliminating the blackmarket, which, as will be shown later, is the greatest enemy of growth, of socialist redistribution and of self-reliance.

In the price and quantity controls administered so far in this country, as no reference has been made to the basic question of elasticities, some extremely *ad hoc* and indiscriminate decisions have been taken which has resulted in extra-ordinarily buoyant black markets. Not only have *indiscriminate controls led to shortages* but have revealed some of their worst properties. Not merely the commodity markets have been affected but the economy as a whole has been involved through the macro-effects of these controls. Some of these effects are not self-evident and must be noticed through analysis.

As price controls have been imposed, one by one, and supplies have shrunk, one by one, authorities have been forced to impose a quantitative control as well—rationing, allocation, quotas, in order to distribute the remaining supplies better. If rationing works well, a smaller quantity of the rationed commodity is sold at a smaller (controlled) price compared to the pre-control situation. In that case some expenditure is 'saved' by the community and the amount saved promptly overflows to be spent in other commodity markets. The prices of other commodities then increase owing to a strengthening of demand. These other commodities are then promptly brought under price control. *Controls then have a self-expanding, proliferating nature.*

While controls strengthen commodity demands and raise prices, there is nothing in the control system which enhances production and so bring down prices. While demands tend to move forward, supplies tend to move backwards. If they are seen to move forward at all, that is because of other reasons—subsidies, secular increase in demand, technical change, etc. *Price-quantity controls are thus, self-perpetuating : once they come, they seldom go.*

Under the control system, which keeps on widening its network, *black earnings increase in three different ways :*

(a) suppliers have a stake in selling at the *free market price* which is illegal and cannot, therefore, declare the price for fear of the law;

(b) suppliers have a high motivation to sell *quantities in the free market* beyond the permissible (rationed) limits and cannot declare these extra quantities for fear of the law; and

(c) these undeclarable dealings (illegal quantities multiplied by illegal prices) not only expand in each commodity market but, as commodity controls multiply, the black markets multiply in number.

On all counts black earnings increase with tremendous gusto. The rate of increase of black earnings, from all accounts, appears to be much faster than the rate of increase of national income. These *black earnings, ever-multiplying, cannot be declared to the tax authorities,* as they have been illicitly earned. *The tax base, thus, shrinks* or perhaps, increases at a much slower rate than it would normally do. Tax authorities whose needs for tax resources are multiplying rapidly, become nervous at the relative shrinkage of the tax base. *In their anxiety to make good the loss of base, they enhance tax rates* on direct taxes, on indirect taxes, here and there and everywhere. Faced with sharp increases in the marginal rates of tax, *the community responds with a serious tax evasion.* The effect of very high marginal tax rates is that *the activity called tax evasion begins to yield a very high rate of return.* No wonder, *a very large fraction of the community begins to indulge in this activity.* Be that as it may, the tax base undergoes *a second round of shrinkage, this time because of high tax rates. The authorities* truly become nervous and not finding their way to enhanced resources, *decide to declare plan holidays* and the like under different respectable names like 'annual plans'. *Planned development becomes the main casualty.*

While the wrong mix of policy instruments does so much damage via black earnings and tax evasion, to economic growth through the public sector investment, equally serious damage is done to private investment and to the capital market. *Black earnings cannot possibly be invested in the capital market* for fear of being challenged and brought to book Neither shares nor government bonds can be purchased through black money, except in small volumes. *The main outlet of black earnings then is in non-institutional assets like lands, buildings, gold and commodity stocks.* But those who sell these assets against black earnings often do so for purposes of tax evasion. Having got the black money, they are themselves contrained not to go into the capital market and are forced to invest in other non-institutional assets like land, gold, etc. *A parallel economy is then truly set up.* Now, *it is the property of many of these non-institutional assets* on which black money is spent, *that their supply is fixed.* Very often they are *non-reproduceable assets.* Thus it comes about that *the high demand for them only pushes up their price but not their supplies. Economic growth does not occur. Black earnings are truly the enemy of economic growth* both in the public and the private sector. As the black earnings are generally in the high income brackets, and still escape the tax they turn out to be an enemy of distributive justice as well. *Black money and socialism do not go together.*

The solution to the problem of shrinkage of tax base does not lie in employing more inspectors, tax gatherers and officers. Nor does it lie primarily in conducting raids on tills and godowns, nor indeed in demonetisation of currency—all of which measures have, no doubt, some limited logic in their favour but none attacks. The *system*, the *machine* that creates black earnings. *The basic solution lies in giving a body-blow to the system which generates black money* and forces the earners not to declare their earnings. It is clear that *a more discriminate price and quantity control based on technical elasticities will free many commodities with vast black money potential from the realm of controls. These commodities will then be sold openly at the market price which will then be a legal price. He who sells at that price will feel free to do so and will, therefore, declare his earnings. As declarations expand, the tax base will expand; and as this happens, undesirably high marginal tax rates can be reduced suitably. As the rates are reduced, declarations of earnings will be further enhanced* and the elasticity of taxation will improve. It is certain that *more tax receipts can be had today in the exchequer not by higher rates of taxation but by lower rates—not by getting more money from the same people but by bringing in more people from the fold of non-tax payers to the category of tax payers.*

In order to eliminate black earnings, *a total decontrol of a commodity is not the only method; partial de-control can be considered,* as in the case of sugar, and can, in suitable cases, be a phenomenal success. In addition, there is the method used in some of our recent budgets to *bridge the gap between the control price and the market price.* This can be done : (a) *by enhancing the retention price allowed to the producer,* who will then go on to produce more, provided inputs are available, and (b) *by enhancing the indirect taxation* which accrues to the government and then can be ploughed back into investment activity in the public sector. In either case, while growth occurs *the black marketeer,* who typically buys at the controlled price and sells at the free price, thereby making his black earnings, *is squeezed out.* The black profit is transferred into white hands and meanwhile, supplies tend to increase.

As tax rates enlarge through these two major moves—judicious controls and judicious tax rates—*authorities can substitute tax resources for deficit financing. Deficit financing can then be reduced and we see here the beginning of a major process—a reduction in governmental borrowings from the Reserve Bank, a reduction in the rate of increase of money and a consequent stabilization in the general price level.* Moreover, and indeed very importantly, *as suppliers are left free in many commodities to supply at the given market price, they will certainly tend to supply more according to the good law of supply.* It is only through this process that *shortage after shortage would be eliminated and the economy move to a desirable abundance.*

Growth with Social Justice :

A Critical Evaluation of Policies and Programmes in the Five-Year Plans

V. Jagannadham

Growth with social justice is a subject of universal and perennial interest both at the societal and national levels. Even at the individual level, the concept of progress from being to becoming in terms of "nirvana" or liberation has this element of growth expressed in religious or ethical terms. In the view of Ernest Barker, the preamble to the Indian Constitution marks a progress in human history in so far as it puts Justice as a coping stone on the edifice of liberty, equality and fraternity enshrined in the philosophy of the French Revolution and of the socio-political movements thereafter. Developments in science and technology during the last couple of centuries have enabled mankind to achieve such tremendous speed and variety in the exploitation and manufacture of material resources, thereby enabling the masses to have goods and services formerly possessed by a few. In addition, community services like education, health, housing, welfare, social security are now capable of being spread with speed for all in need, provided racial prejudices and national barriers are removed. This is what Mcnamara meant when he said that Growth is not enough; it must be coupled with Justice. Growth with Justice is an undisputed objective of progressive ideologies but the achievement of this objective by translating it into policies and the management of programmes accordingly is the biggest task that needs careful consideration.

Development-Frame

Soon after adopting the Constitution in January, 1950, the Planning Commission was established in March of the same year, for designing scheme of developing the nation's resources so as to eliminate poverty and unemployment. Since 1931 the Congress Party was pursuing the twin objectives of achieving progress and justice. The A.I.C.C. Resolution of 1931 says : The organisation of economic life must conform to the principle of justice to the end that it may secure a decent standard of living. So far we had implemented four Five-Year Plans and the Fifth Plan is on the anvil. In all these Plans, there has been a clear identification of the need for balanced development. This was understood to mean a simultaneous achievement of speedy growth and fair distribution of the fruits of development among different regions and classes of people in India. The emphasis in particular was upon rapid development and bringing backward areas and weaker sections of population to the level of the advanced areas and classes.

The policies and programmes embodied in all the Plans reflect the pre-occupation to achieve these objectives by adapting the programmes to the changing conditions. The basic features of our country's development framework are federal democratic decentralized policy and mixed economy. Within this framework, Growth with Justice has to be achieved. Some question the wisdom of federalism; some doubt the capacity of democracy and others are skeptical of mixed economy in achieving growth with justice, but these three systems namely, federalism, democracy and mixed economy form the basic framework of development planning.

Features of Development Plans

Within the framework referred above, emphasis in all the Plans was placed upon achieving a higher rate of production of capital and consumption goods and these provide the infrastructure for acceleration of employment and for the provision of social services like education, health, housing for all the people. During the first three Five-Year Plans, there was proportionately larger allocations for basic industries like steel and cement, for multipurpose irrigation projects like Bhakranangal, Nagarjunsagar and Hirakud, and for the development of highways, transport, etc. These were long gestation projects and the gap between production of wage goods and capital goods had created conditions of inflation. The inflationary situation was heightened by the wars with China and Pakistan as well as by floods and droughts during the sixties. Also, the Census of 1961 and 1971 disclosed a phenomenal growth in population. Besides these, for strategic as well as ideological reasons, a large proportion of investment had gone into public sector undertakings whose performance had not fulfilled the expectations. Though the large investment on public sector was in pursuance of a policy of placing it on commanding heights and for correcting the imbalances likely to be caused by the private sector undertakings, the management did not match to meet the expectations.

Achievement of Growth with Justice in India was identified as a problem of reducing (1) the growth of population, (2) the land people ratio, (3) the migration of population to urban, particularly, metropolitan areas, and (4) the inequalities between the propertied and the non-propertied and also the employed and the unemployed people partly by ceilings on lands and partly by increasing employment opportunities. To achieve these ends, many policies and programmes have been adopted, the focus of all of which was to increase production and to distribute income fairly among all classes. The interdependence of agricultural and industrial production was recognised for promoting growth. The place of small and village industries was recognised and the need for developing small towns so as to arrest the growth of megalopolis was felt. Towards this end the policy of identification of backward areas and the dispersal of industries to those areas even at higher rates of investment was followed. The weaker and backward sections of population were listed and special programmes for promotion, relief and rehabilitation of their interests were followed.

Among the techniques adopted for implementing the policies and programmes to achieve growth with justice special mention should be made of (1) Community Development and Extension Services, (2) Joint and Co-operative sectors to supplement private and public sectors and (3) industrial licensing and restriction of trade practices and monopolies. These three techniques, it was hoped, would accelerate agricultural and industrial production as well as facilitate fair distribution of incomes.

Disarray and Disillusionment

Unfortunately, the conflicts with neighbours and the droughts in the sixties had made a disarray of the policies and programmes under the Fourth Five-Year Plan and for some years, there were only annual plans earlier to it. However, the disarray resulted in a degree of disillusionment about the assumptions and policies under the earlier plans. As a result, new policies of identification of backwardness, both of areas and classes, was attempted and new programmes for small farmers, marginal farmers, for drought-prone areas etc. were developed.

Notwithstanding the exercises in identification of reasons for slackness in production and persistence of backwardness among districts and communities, and also in spite of adaptations and modifications in programmes and techniques, certain basic conflicts and contradictions in the policies, programmes and their management have been undermining the faith in democratic planning as an instrument of achieving growth with justice. Some of these contradictions are described below :

Plan and Non-Plan Policy

From the beginning, a distinction was being maintained between Plan and non-Plan activities and allocations. Defence and Police, to mention only a few, are under the non-Plan sector. They have not received as much attention from the Planning Commission as they deserve. Development has an implicit force of generating conflicts in interests between the haves and have-nots. The resolution of these conflicts is a function of Government. Police which is regarded as a non-developmental activity, have not been able to handle the law and order problems arising out of conflicting interests in development. Defence, fortunately, is receiving greater attention after our experience in wars with neighbours.

Labour Policies

The labour policies of the Government are more welfare than productivity-oriented. Consequently, the "right to strike" is often used to extract welfare benefits. The trade unions have not become enlightened enough to relate their ideologies to development. Intra and Inter-union rivalries among trade unions have been introducing indiscipline into the labour movement.

Political parties are also responsible to encourage fragmentation and factionalism among trade unions. Workers among organised industries constitute a large and powerful block of voters. Each political party has a labour wing in it.

As a legacy of the past, there was poor articulation of the problems of agricultural labourers. This was sought to be remedied by the ruling party by land reform legislation and land redistribution among landless labourers. Rural Works Programmes have been formulated and undertaken to alleviate the miseries of the rural unemployed and the underemployed labourers. But the management of these schemes suffers from many drawbacks.

Education Policy

The education policy of the Government has been highly unfavourable both to development and employment. The legacy of the educational system was such that it puts a premium upon a kind of knowledge appropriate for office jobs rather than for production skills in industry, agriculture or trade. Also, the proportion of investment on higher education was much larger than on primary education even though several field studies brought to light the low returns from higher education and the high benefits of Primary Education to development. Incidentally, Article 45 of the Constitution lays down as a directive principle that "The State shall endeavour to provide, within a period of ten years from the commencement of the Constitution, for free and compulsory education for all children until they complete the age of fourteen years". We are now here near the realisation of this goal, notwithstanding the lapse of a little more than two decades from the adoption of the Constitution. To the basic education scheme which was an experiment in vocationalisation of our entire education system, lip homage was paid even during Dr. Zakir Husain's lifetime, who was the author of the scheme. Our attempts to relate education to required skills in agriculture and industry, health and medicine, etc. through manpower planning have been a thorough failure. We find disparities in the services of doctors, between urban and rural areas and mounting numbers of unemployed persons among the educated. The unemployment among the educated persons is a source of unrest and frustration.

Absence of Wages and Salaries Policy

The wages and salaries policy of the Government has been a great source of inflation, disincentives and disenchantment with the ideology of socialism. Indeed, there is hardly any wages and salaries policy but to react to price-rise. The poverty studies of National Council of Applied Economic Research, of Dandekar and Rath, of Minhas and others point out how the development plans have been benefitting the enterprising classes who are resourceful and articulate. This is partly due to the failure of expectations about industrialisation in providing accelerated employment opportunities and partly because of the incapacity to sustain the so-called "green revolution". The failure to implement land reforms and the incapacity to distribute the surplus land to the landless as well as to help those landless who got the lands to retain the land through supply of credit and other facilities is equally responsible for the persistence of rural poverty. Consequently, the migration to urban areas has not declined. The dispersal of industries to backward areas has not helped the local people but attracted outsiders. The availability of infrastructural and environmental advantages around metropolitan areas makes private industrialists somehow manage to start industries around metropolitan cities. The unit costs of services to the immigrant population to the metropolitan cities are going up and the number of slums is increasing. Failure in all these areas has caused a chase between wages and prices. In regulating this race, *laissez-faire* rather than planning prevails. This phenomenon could be singled out as the critical factor in the failure to relate growth with Justice.

Anti-Growth Policies

Bonus and Licencing : Besides rising unemployment and increasing immigration to urban areas, the statute providing compulsory payment of bonus, recently increased to a little over eight percent, without reference to profits, has a negative effect on growth. The discouragement of production, beyond the licensed authorised capacity has positively hindered production. The intentions behind these licensing policies may be to encourage a chain of small industries but, unfortunately, the latter has not succeeded and the former is anti-growth.

Central Pay and Dearness Revisions : It is not necessary (and space does not permit it even if necessary) to go into the phenomena of inflation and the attempts through pay and dearness allowance revisions to relate the salaries of Central and State Government employees to the spiralling prices. The multiplier and demoralising effects of the revision in pay scales instead of attempting to increase production and stabilize prices have caused havoc to the whole concept of growth and justice. In one word, growth is negatived and justice is frustrated by the runaway inflation. Central Pay Commissions were the cause of inequities in pay among Central, State and Local Governments. The Central Pay Commissions initiate upward revisions and the others were compelled to follow suit without the will or the capacity to raise additional resources. The absence of a national income and wages/salary Commission so far is regrettable.

Perspective of Growth with Justice

There was no doubt considerable investment and much growth was effected. An NCAER Survey of 1967-68 showed that the average income for each percentile group is higher in 1967-68 than in 1962. The study also brought out that while in 1962, 63 percent of the households had an income below Rs. 1,200, in 1967-68, the proportion declined to 36 per cent.

The important point is not so much the national aggregate or the statistical averages as the perceptions and feelings of the mass of the people. The pay packet may be bulging but the standard of living has been declining. The 1971 Census showed a substantial increase in the population in spite of the family planning programme. The 2.5 per cent growth rate cancelled out an almost equal per cent growth rate in economic development.

While growth rate is thus impeded, justice is felt and perceived to be on the decline because of unemployment, corruption, caste and regional disparities, sharp wage-salary income differentials, conspicuous consumption, costliness of elections and other participative processes in Government and administration and so on. No attempt seems to have succeeded in alleviating injustice in these matters. Even if there was slight growth economically, social injustice was felt to have grown more.

In 1973 the money income of many is probably high but satisfaction is very much less because of rising expectations. All citizens have liberty that they never knew; there is greater equality than ever before; fraternity at the national level exists in spite of linguistic and communal outbursts sporadically in different localities. But the overall feeling is that the quality of life has deteriorated notwithstanding the four Plan policies and programmes.

The Fifth Plan and the Lacunae

The Fifth Five-Year Plan is in process of finalisation after its draft was accepted by the National Development Council in December, 1973. This Plan is described as a People's Plan specifically oriented to provide the minimum needs of the common man. For the first time, one finds a concrete objectivisation of the consumption requirements of the bottom thirty per cent of the population. The Approach to the Fifth Five-Year Plan identifies the supply and demand sides or the goods and incomes required for satisfaction of minimum needs. The Fifth Plan draft also ties up many of the programmes under specific rubrics and spells out the implications of the implementation of policies and programmes.

However, there seems to be some lacunae. The implicit assumption underlying the Fifth Plan draft methodology was that ours is a socialist society. True enough, but the interplay of democracy upon socialism and the constraints put upon our planning by the system of mixed economy and the ineptness of our inherited administration as well as the non-involvement of the bulk of the people in the plan formulation and implementation seem to have been overlooked. A noted economist writes : "In other words, in a country like India, unlike in socialist countries, there has to be a shift from the material balances approach—which is after all aggregative—to one of planned distribution of benefits of growth to the poor, in terms of employment, income and social services."[1] If justice is to be realised consistently with growth, we have to think differently both from socialist countries and from capitalist countries. The same economist suggests "As things are, there are several administrative and structural deficiencies in the economy which can undermine in the process of implementation even the most carefully worked out plans. The structural resistance would be even greater in the case of an objective like removal of poverty. In these circumstances the plan for removal of poverty has a somewhat better chance of overcoming such resistance, if the plan for employment and income-generation for the poor is spelt out at least as clearly as that for sectoral allocation of resources."[2]

For Growth with Social Justice, in the light of the experience of the previous plans, the above suggestion to work out detailed projects for employment emerges as the concrete suggestion. But experience about the "employment orientation" of the Plans is unfortunately discouraging. Writes Prof. D. R. Gadgil : "Therefore the strategy of the Fourth Plan, with its emphasis on rural development and small-scale industry was based on integration of opportunities of employment creation with economic development. The Plan did not contain any massive proposals for a frontal attack on the problem of employment per se."[3] The tragic deficiency in our planning is the gap between the objectives and the programmes or the lack of harmony between the policies and investments. Our Plans seldom make frontal attack on any single problem. They are all hold-all plans followed by all mal-administration.

Dr. B. S. Minhas has come out with a plan of consolidation-cum-public

1. C. H. Hanumantha Rao : "Strategy for Removal of Poverty—Lopsidedness of Fifth Plan." *Economic and Political Weekly*, Special Number 1973. Vol. VIII No. 31-33 p. 1465.
2. Ibid. P. 1466.
3. Prof D. R. Gadgil : "Towards Social Justice : Employment in Rural Areas," p. III. Govt. of India, Ministry of Information & Broadcasting, April 1971, New Delhi.

works programme neatly worked out with a scheme of organisation, personnel and an estimate of employment opportunities not only for rural population but with a carry-over of these opportunities into urban areas.[4] He optimistically said : "In the present radical fervour of India, when different political parties are vying with each other in asking for limitation of rights in private property and for redistributive measures, implementation of a programme of compulsory consolidation of land holdings and complementary works should seem relatively the easier task to undertake and accompolish."[5]

There is a nostalgia about these suggestions because for over a century we have been reading about remedies to rural poverty in the form of compulsory consolidation of fragmented holdings and public works to relieve poverty. One could not comment about these matters better than in the words of Gunnar Myrdal : "But I have wanted to stress that in India there is no dearth of intellectual capacity of the highest order. All the arguments for my thesis, and the practical policy proposals in line with it, have been authoritatively stated and developed by supremely competent persons in leading positions in their fields. It is only the implementation of their reform proposals that has largely been missing."[6]

New Dimensions of Development Plans

So far growth and justice have been approached separately or, as the former preceding the latter. Of late, growth with justice has been receiving attention. The process of this thinking was initiated in India but it is being studied in detail in developed countries. For example, Paul Samuelson says :

> "No discussion of the theory of economic growth should be complete without mention of the fact that growth in the gross national product is only one aspect of modern economic goals. If higher G.N.P. means more pollution and deterioration of the environment, and if the fruits are distributed inequitably among the few or squandered in militaristic ventures, then it can become an evil and not a good."[7]

But Prof. Samuelson has one thing more to say about the uses of sciences

4. Dr. B. S. Minhas : "Towards Social Justice : Rural Poverty, Employment and Growth." Govt. of India Ministry of Information and Broadcasting, May 1970, New Delhi.
5. Ibid. p. 15.
6. Gunnar Myrdal : "Conflict of Goals" : *The Economic Times Annual*, 1972, p. 45.
7. Paul A. Samuelson : "Process of Growth." *The Economic Times Annual*, 1972, p. 63.

and technologies for the benefit of humanity. He writes :

> "And yet, those who are seriously concerned for the quality of life and for the environment will realize, upon reflection, that only through more skilful use of the benefits of science can a nation afford to clean up its rivers and streams, purify its atmosphere and distribute to all a decent minimum standard of life and economic opportunity. Growth is no end by itself, but without growth modern problems are unlikely to get solved."[8]

Prof. Samuelson diagnosed that the mixed economy of Welfare States suffers from the serious blemish of "stop-go" driving. By this he meant that when the rate of unemployment is high, economy is stimulated by budget deficits and expansion of the money supply; however, when inflation spirals up, the Government tightens the credit and pumps out money supply. In the Indian context, the phenomenon of crash schemes of rural employment, famine or drought relief schemes etc. correspond to these "stop-go" adhoc approaches. The saddest conclusion of the most famous economist, Prof. Samuelson, is that "we simply do not have the knowledge to get rid of the conflict between full employment and price stability".[9] Growth of the economy in India under the Five-Year Plans has been continuously and consistently suffering from rising prices, growing unemployment and increasing population. We too do not seem to have learnt as to how to plan or achieve the goal of growth with justice.

Need for Research and New Approaches

Another development economist, Jan Tinbergen, commenting upon the recent debate on limits of growth, suggested inter alia "a redirection of the whole body of scientific research away from useless research toward more relevant research; more relevant, that is, for the solution of the problems formulated."[10]

The one most important single change suggested by Jan Tinbergen is the need for a change in the human attitudes towards birth control. A more interesting suggestion which is relevant for Indians is his plea for upgrading

8. Ibid.
9. Ibid, p. 62.
10. Jan Tinbergen : "Limits to Growth" : *The Economic Times Annual*, 1972, p. 46.

again cultural values of simplicity as against acquisitiveness of material goods. He says : "Generally the rich of the earth should prepare themselves for a simpler life in the future. The leading philosophy of the present which always asks for more material goods and does not attach much value at simplicity of life or modesty in claims has to be replaced by alternative philosophies and surely much could be learned from Mahatma Gandhi's words and example. The real values of life do contain a sufficient quantity of food and shelter; but it is not necessary to have the luxuries aimed at." One of his immediate recommendations, in the context of the earth's limited resources, is to curtail the tremendous waste on armament and outer space research. To fellow-economists he recommended new policies of distribution of very scarce commodities and a strategy of making income inequalities less as a top priority one during the second development decade.[11]

Scope of Social Justice

What do these diagnostic studies by eminent economists and planners amount to in the context of our present subject, namely, Growth with Social Justice? So far no attempt has been made to give an idea of social justice. While growth is defined in terms of increase in quantity, social justice (as distinguished from Justice according to Law or distributive justice, etc.) is understood to include many more elements than covered in this paper. For example, William K. Frankena writes "Social Justice is the equal (though not always similar) treatment of all persons, at least in the long run. This equal treatment must be qualified in the light of certain principles : the recognition of contribution and desert, the keeping of agreements, non-injury, non-interference, non-impoverishment, protection, and perhaps the provision and improvement of opportunity."[12] In India growth with social justice is understood to mean "material advancement as well as moral progress."[13] Problems both of production and distribution are simultaneously facing the country in India unresolved under the series of Five-Year Plans so far.

Growth with Social Justice in India remains an unresolved problem for generations to come, because of difficulties of establishing a coordination among federal democracy, Welfare State, mixed economy and traditional

11. Ibid. pp. 46-47.
12. William K. Frankena: ' The Concept of Social Justice" in the book entitled "Social Justice" Edited by Richard B. Boandt. Prentice Hall, 1962. printed in India, M. Sundaram, New Delhi, p. 23.
13. Vide Whither Social Justice : "Our Resolves versus the Reality." *Avard*, Vol. VI No. 1-2, January-April, 1964.

society. The reconciliation of liberty with equality in a society of authoritarian family and caste-occupations as well as achieving fraternity in a nation of diversities in languages, religions and regions, is not merely the function of Plans and Policies. The State ways, the market ways and the folk ways should be brought on the same common wave length for achieving social justice, national integrity, economic equality and secular fraternalism. These could not be achieved under the present process of centralized planning or bureaucratic management. There is need for a change in development planning towards decentralized as well as concentric planning. This must be coupled with the full sense among common people of belonging in the formulation of planning among all sectors of people in the development endeavour. Also we should develop the art of social management and community development for encouraging the feeling of achievement, and fulfilment. This is equally necessary among all the people at all levels and among all classes. Somehow we have drifted towards estrangement of the people from planning and government except for periodic elections. Also, the objectives of planning are negatived in the process of implementation and quite the reverse results are reaped after each Plan. We have to recapture the spirit of adventure in planning for growth with social justice, which has gradually evaporated during the last few decades. In the words of the present Prime Minister, "There is need to recapture the spirit of involvement of the people in a greater national effort to make the Plan a success".

Suggested Solution

The theme of the Seminar is on Prices, Income, Wages and Productivity Relationships. On all these matters barring Productivity something or other was said in the paper. In fact, productivity is the critical element in the concept of Growth with Justice because it is the link between production and distribution. Development is ensured by accelerated productivity. However, productivity is dependent upon not only increased production but fair distribution because, larger number of citizens would be motivated to produce more and better. Here we should also note that increased production as well as productivity could be achieved only when there are larger investments on health for energy, education for skills and motivation for will to do better. These could be expressed in the following formulae :

$$\text{Productivity} = \frac{\text{Health} + \text{Education} + \text{Motivation}}{\text{Resources}}$$

whereas

$$\text{Development} = \frac{\text{Productivity}}{\text{Growth} + \text{Justice}}$$

These ideas are not new but relating them together suggests a new mix. The above suggested idea of involvement of the people in the process of plan formulation and implementation in appropriate ways at different levels is, it may be hoped, likely to create a sense of belongingness. The sense of belongingness is not enough. It must be supplemented by necessary energy and skills through appropriate measures of health, nutrition, functional literacy, vocational education, social security measures, etc. These social service schemes would energise and enskill the citizens. These services have in them a distributive element besides contributing to increased production provided the motivation for it is generated by involvement and belongingness. This remedy demands a new climate of discipline, a fresh outlook among leaders, a different emphasis by intellectuals and a modified multi-level planning and administration in government. These are perhaps not too much to ask for achieving growth with justice.

Fiscal Policies and Inflation : A Critical Evaluation of Indian Experience

M.J.K. Thavaraj

Since 'fisc' is a component of the governmental apparatus fiscal policy reflects the character and scope of the State. To a large extent, the volume and pattern of incomings and outgoings of the government would depend upon who wields State power. Under the early stages of capitalist economic development, Governments played the role of an umpire for the ruling elite and that of a policeman protecting the basic framework of the system and its dominant interest groups from antagonistic forces threatening the system from within and without. The philosophy of Laissez Faire kept the governments small. Consequently, the best of all public finances was that which was least in amount. Slowly, however, regulatory and welfare functions have been added to the sphere of government so as to temper the excesses arising from the operations of the capitalist system at the national and international levels.

Stability of the economic system became one of the major concerns of government of the developed capitalist countries since the Great Depression. The developing countries, on the other hand, were anxious to make up for the backlog in their economic development through enlarged state intervention. Extension of adult franchise has also attracted governmental attention to problems of inequalities in income and wealth. The successes scored by the socialist system in the sphere of planned development and equitable distribution have forced the rest of the world to have an expanded public sector with stability and accelerated development as well as deconcentration of the ownership of property as some of their declared objectives.

Fiscal policies reflect the stage of development and the corresponding role of the government in the capitalist world. In the infant stages of capitalism, governments gathered only a minimum quantum of revenues to meet their law and order functions. The burden of such mobilisation largely fell on those sections who could not defend themselves adequately through the prevailing framework of institutions and laws. Sturdier growth of adolescent capitalism necessitated a greater involvement of the government in the creation and maintenance of economic infrastructures which were sometimes financed through public borrowing. Instabilities of mature capitalism have led to a substantial enlargement of the scope of public investment and social services. Accordingly, the concept of "compensatory financing" characterised by unbalanced budgets, massive public debt and deficit financing have become the salient features of financing policies of governments in the developed countries.

In the developing countries, where governments have assumed a pioneering role in industrial development, the scope of public investment embraces several massive and innovative lines of basic, intermediate and directly productive activities apart from the creation of social overhead capital and other infrastructural facilities dictated by the pace and pattern of economic development. Doses of social services have also been added depending on the needs of the ruling classes and the pressures exerted by the under-privileged masses of people through the electoral and other channels available to them. Fiscal policies in the developing capitalist countries reflect, in varying degrees, these multiple—often contradictory—objectives such as stability, development, self-reliance, reduction of inter-personal inequalities in income and wealth, balanced regional development and so on. Thus, fiscal policies, in general, are geared to the needs of the politico-economic system and the interests it seeks to serve.

In a market economy, fiscal operations are meant to influence economic decisions in desired directions by stimulating or curbing market forces. It is also recognised as one of the instruments of social and economic planning in mixed economics where market mechanism constitutes the most important channel of resource allocation. However, in totally planned economics where physical controls is the major instrument of resource allocation, fiscal policies are confined merely to balancing operations. Thus, fiscal policies derive their goals and objectives from the broader system of political economy in operation. The degree of conformity would depend upon how closely fiscal policies are integrated with the broader objectives of the plans. In practice, fiscal policies in the market-oriented mixed economies have a short-term focus rather than a long-term perspective. Nevertheless, secular trends in fiscal performance can be judged only with reference to plan objectives.

Theoretical Framework

Stability denotes an overall trend emerging out of certain dynamic instabilities characterising the various components of the economic system. General price level indicates whether the system is stable or unstable. An upward trend in the general price level over a secular period is regarded as instability marked by inflation. Traditional monetary theories built on the assumption of full employment assumed a direct relationship between the quantity of money and the level of prices. Various equations were built around the Quantity Theory of Money. John Maynard Keynes introduced drastic modifications of the Quantity Theory in the light of widespread unemployment during the Great Depression. As explained in the General Theory of Keynes, expansion of money supply will not result in arising prices until full employment is reached, unless "bottlenecks" appear in the supply of factors before full employment level. Based on this formulation, Keynes and his followers adopted deficit financed public spending and created money as potent remedies for compensating for the deficiencies in the aggregate demand of the economic system. They were also advocating a mild inflation or a fascile boom as the best way of ensuring near full employment.

Some economists, brought up in Keynesian traditions, sought to apply Keynesian prescriptions, which were tested and found effective in overcoming deflationary conditions to deal with problems of capital formation in under-developed economies having an inflationary gap. Surplus labour abounding in the under-developed economies was looked upon as a vast hidden investment potential. The successes of the Soviet Union in this direction prompted them to think of their application in the market-oriented developing economies based on private property. W.A. Lewis, Ragner Nurkse and J.S. Dusenbery argued that conversion of surplus labour into capital is possible by redistributing consumption (from those who are already employed to those whose surplus labour is to be converted into capital) through deficit financing. A note of caution was also sounded that deficit financing unaccompanied by commensurate increase in wage goods would result in inflation in all but comprehensively planned and controlled economies. Some, like Arthur Lewis, were suggesting that a faster rate of capital accumulation and development would depend upon the extent to which income could be redistributed from the consuming to the saving classes in the developing countries. Consumption was to be curbed by taxing consumption as well as by eroding real earnings of the consuming classes. At the same time, fiscal policies were meant to augment public savings besides stimulating savings in the private sector.

Indian Inspiration

Fiscal and monetary policies in India echo the theoretical formulations outlined above. Even before Independence Keynesian influence was reflected in the 'easy money policy' of the Reserve Bank of India. The IMF mission (consisting of E.M. Bernstein and I.G. Patel) which visited India in the early years of the First Plan suggested a mild inflation punctuated by unexpected occasional fall in the general price level as the appropriate monetary policy for the developing countries like India. H.V.R. Iyengar and B.K. Madan have also endorsed this policy in their writings in the early sixties.

Fiscal policies hammered out by Walter Helier and other U.N. Experts inspired by Keynesian traditions are also reflected in Indian thinking and practice. Keynesian influence could be traced in the theoretical underpinnings of the Taxation Enquiry Commission of 1953-55. They are also reflected in the Indian Plans and Budgets. Obviously, redistribution of income from the consuming to the saving classes is a patently capitalist solution to the problems of capital accumulation and financing of development. On the other hand, the Directive Principles of State Policy adumberated in the Indian Constitution as well as the declared objectives of the various plans have emphasised the need for reduction of inequalities in income and wealth and prevention of concentration in the ownership of private property as the cornerstone of economic policy. Evidently, fiscal policies designed to redistribute income from the consuming to the saving classes run counter to the professed social objectives of economic policies in India. Such contradiction is highlighted by the Socialistic Pattern of Society proclaimed in the Second Plan and the fiscal policies announced by Shri T.T. Krishnamachary in his budget speech of 1957. He delineated the tax policy for the Second Plan in terms of mobilisation of additional resources, provisions of incentives to saving, restraint on consumption and so on. It could be argued that if additional resources are mobilised from those who have the ability to pay and incentives are offered to small savers and restraints are imposed on luxury consumption and tax administration is insulated from the corrupting influences of tax evaders and delinquents, tax policy may be regarded as conforming to socialistic pattern of society. Besides, it is conceivable that, in the midst of far-reaching changes in the ownership of property and property relations, fiscal policy would pale into insignificance as an instrument of translating socialist objectives into reality. Unfortunately, in India, the brunt of the tax burden has fallen on the poor and inequalities in income and wealth has grown over the plans. Against this background, fiscal policies which ignore adverse social consequences could only be regarded as an additional instrument of capitalist development in India. However, the purpose of this paper is to focus attention on the impact of fiscal policies on stability rather than highlighting the lopsided pursuit of national purposes and the contradictions between fiscal and social objectives and practices under the plans. It should, however, be borne in mind that while inequalities can be perpetrated even when there is stability, the inflationary impact of fiscal policies are bound to be more inequitous.

Inflationary Potential of Fiscal Policies

Sometimes, in federal formations fiscal policies are discussed only with reference to federal government. But, the full impact of fiscal policies on economic development or social transformation can be seen only when a comprehensive study and analysis embracing all levels of government is undertaken. For instance, most of social and developmental expenditure in India is undertaken at the state and local levels. The pattern of resources mobilisation at these levels would have differential impact on development and stability. Sales Tax which is highly regressive in nature is the major instrument of resource mobilisation at the State level. Conversion of overdrafts incurred at the State level into central loans, liquidation of securities issued by the Central Government through the commercial banks or the Reserve Bank of India, operation of the cash balances at the state level and so on will have their own impact on the stability of the economy. Nevertheless, the main thrust of monetary and fiscal policies emanate from the centre since it has an enormous command over the available fiscal instruments including that of deficit financing.

Fiscal impact could be transmitted either through the size and pattern of public expenditure or by the ways and means of financing. Public expenditure could be classified as consumption and investment. In recent literature, current outlays on education, health and so on are regarded as investment in human capital. The rest of current public expenditure may either be for direct public consumption such as defence or law and order or for supplementing private consumption through social services or for augmenting private saving or consumption through subsidies and other forms of fiscal transfers. Though, in the long-run, investment in human capital may increase the earning capacity of individuals apart from conferring social benefits, they are not accompanied by any expansion in goods or services in the short-run. From an equity point of view, that part of expenditure on social services and transfers supplementing or strengthening the consumption of the poorer stratum of population may be important. However, Keynesian analysis directed at macro level would club such socially beneficial outlays together with other administrative expenses as public consumption bolstering up the purchasing power of the community.

In recent years, some economists have observed a close correspondence between the magnitudes of increase in the salaries and wages of the government employees and the expansion of money supply. They attribute inflation to undue increases in the pay packets of the government sector. This argument implies that public expenditure is wasteful and unproductive and that government employees are privileged and well to do. It is necessary to sift the grain from the chaff in this line of thinking. Apart from the normal growth of government expenditure necessitated by an efficient performance of the expanding developmental programmes and activities, it is reasonable to understand the anxiety of the government employees to catch up with the soaring index of cost of living. It is a pity that even after 25 years of Independence the Government could not guarantee need-based minimum wages to its employees. Besides, operating expenses of public enterprises and departmental undertakings cannot by any means be regarded as unproductive.

It is true that Indian administration has increasingly become top heavy with widening wage differential between the top and the bottom and ever-increasing perquisites and fringe benefits at the top layers of management. Too many intermediate levels between policy-making and grass-roots of administration unduely inflate the cost of delivering the goods and services of government apart from being dysfunctional. Though defence is looked upon as a sacred cow it is widely recognised that it has become too fat. Police expenditure of the Government of India has shot up by nearly 150 times since independence though it is a State subject ! Veteran administrators have estimated that the seepages in government expenditure might range anywhere between a quarter and a half of the total. It is through these channels that the pool of private blackmoney merges with that of the corrupt elements in the Government. Incomes generated through such illegitimate channels aggravate the inflationary impact of public expenditure partly by encouraging speculative hoarding of sensitive commodities and partly through hot pursuit of consumer goods especially those catering to the comforts and luxuries of the U-sector thereby bending the market forces to divert a large volume of scarce resources into socially unimportant areas of production. It follows that, though undue expansion of current public expenditure may carry an inflationary potential, it is the unproductive administrative expenditure and the sizeable seepages that take place across the board especially in defence, public works and other forms of construction which contribute a great deal to inflation since they have moved far ahead of the rate of expansion of commodity production.

It is maintained that hardly 28 percent of revenue and loan-financed public expenditure at the Central and State levels constitute developmental outlays and capital formation. Even here, just as a part of social services are deemed to be contributing to the building up of human capital, a sizeable part of public investment especially in the construction of palatial and air-conditioned office buildings and skyscrapers alongwith their fancy frills which resemble consumer durables in the private sector do not add much to the productive potential of the economy.

As for the rest of public investment, there is a considerable time lag between investment and the emergence of output thereby bearing an inflationary gap. The gestation period is longer in the basic and heavy industries involving large investments. When adequate financial and organizational resources are at hand, projects may be completed on time. When government is constrained by inadequate resources mobilisation and organisational skills, gestation period gets elongated and the emergence of output gets delayed. Delayed production of crucial investment and intermediate goods creates a chain reaction back and forth dampening the growth of interdependent industries thereby creating bottlenecks in the supply of final consumer goods. With the broadening and deepening of the industrial base, the average gestation period of the industrialisation programme becomes cumulatively longer thereby worsening the imbalance between supply and demand. Prolongation of the gestation period on account of the thin spread of limited resources could also happen when political considerations of nursing the constituencies push the Governmental machinery to undertake more work than warranted by rescurces and organisational capabilities. This is a common feature in public works at the state and local levels. Whereas one could identify wastages and delay, it is dangerous to use the cumulative increase in the average gestation period of the packages of public investment over the plans as an argument to tone down basic and heavy industries in favour of quick investment. Those who are shy of comprehensive physical controls would fall an easy victim to a quick investment bias in the event of cumulative elongation of the average gestation period of public investment. This approach would seriously undermine the efforts to build up balanced development of a self-reliant economy over a long-period. What is needed is a drastic cut in unproductive public investment and irrational commitments of limited resources.

Keynesians would have no hesitation in suggesting that Governments should curb the inflationary potential by mopping up the excess demand through appropriate pricing policies and commodity taxes. They generally prefer the manipulation of the market forces through various fiscal operations to comprehensively controlled allocation of real resources and rationed distribution of supplies. Hence, they place a heavy accent on taxes curbing consumption. In simple terms, Keynesian theory, which is concerned with the macro aspects of economic analysis, regards the rate of saving and investment as a major factor in stimulating long-term economic growth. When applied to mixed economies like India, it would imply that fiscal policies which divert savings from private to public sector will not add to the aggregate savings in the economy. According to this reasoning, at best, savings diverted from private hands may be put to better use in the public sector ; at worst, it may be frittered away in unproductive and socially wasteful expenditures. Since public sector in a mixed economy dominated by big property holders neither moves briskly forward in response to carrots and sticks nor releases the creative energies associated with the socialist system, the Keynesians have no difficulty in asserting that taxation of saving would curb the willingness and capacity to save and invest. Consequently, they regard curbing consumption as the best way of mobilising resources with a view to augment public saving besides strengthening and stimulating savings in the private sector.

Of course, they would enthusiastically proclaim that luxury consumption should be drastically curtailed through progressive rates of commodity taxation. What they do not care to recognise is the regressive character of commodity taxes in the light of the growing inequality in income distribution, phenomenal growth of black income, itching for conspicuous consumption and the negligibly mild progression in the rates applied to luxuries especially in the sprawling black market transactions. In practice, therefore, it is the commodities of common consumption of the masses of the poor and middle classes which bear the brunt of commodity taxation. For instance, though the volume and concentration in the ownership of reproducible wealth as well as the inequalities in the ownership of immovable property have increased over the plans, taxes on the stock of wealth and property does not exceed Rs. 55 crores in the current year. Income and corporation taxes have gone up by about 10 times since 1949. Landlords and capitalist farmers pay only a pittance out of their fabulous incomes resulting from Green Revolution. On the other hand, commodity taxes (excise, sales and customs duties) have increased by about 18 times over the same period. When customs is excluded, the increase is about 40 times. Central excise alone has recorded a 60-fold increase over 26 years.

Union excise was levied on about 12 commodities in 1950-51. The number of commodities covered has gone up to about 132 in 1974-75. There has also been a considerable step up in the rates of excise duties over these years. Some of the levies have fallen on an expanded productive base. The index of industrial production has nearly doubled during 1950-51 to 1971-72. The bulk of revenues from central excise is drawn from cotton textiles, sugar, kerosene, tobacco, coffee, tea and other necessities the demand for which is almost inelastic in view of the non-availability of other untaxed substitutes. May be Indian taxation follows the dictum that "necessities are the ideal choice for commodity taxation". The pursuit of this dictum in India has thrown overboard the professed social considerations. The fact that luxuries are taxed at slightly higher rates does not offset the regressive bias of the tax system in India. Keynesian economists whose eyes are set on raising the rate of saving[are prone to ignore the deleterious social effects of their tax proposals.

However, from the point of view of stability, we are mainly concerned about the influence of indirect taxes on the general price level. Taxation would lead to price rise if the additional burden can be shifted to the final consumers in the form of higher prices. This has happened in India in a number of ways. Firstly, as mentioned earlier, more and more commodities with inelastic demand have been subjected to indirect taxation. Secondly, the rates have been progressively raised over the plans. Thirdly, in most cases where the levies are imposed on the basic raw materials and intermediate goods, the effect of taxation is cumulative. Since in India, sellers' market has been the rule rather than an exception, the entire burden has been on final consumers. Sometimes, the extent of price rise at the consumers' end has been far more than justified by the rates or the stages through which commodities pass before reaching the final consumers. It follows that the heavy accent placed on indirect taxes curbing the necessities of life has accounted for a substantial increase in the general price level in India over the plans.

Public Debt

Debt financed public expenditure was one of the most popular Keynesian prescriptions for activising idle savings accompanying economic depressions in the mature capitalist economies of the West. In fact, rapid accumulation of public debt accounted for a sizeable and increasing proportion of the national income in these countries since the Great Depression. Net export of capital was but an aspect of this policy of activising idle savings though foreign investments had far-reaching implications as an instrument of neocolonialist domination over the developing countries. On the other hand, "foreign aid" has dulled the will and determination to stop up their efforts toward an intensive mobilisation and efficient and economic utilisation of domestic resources apart from enticing them into a web of dependent relationships threatening the possibility of building a self-reliant economy in the developing countries over a long period.

For the saving classes which are not directly engaged in productive investment, public borrowing offers a productive avenue for employing surplus funds without affecting their rights to property or the income accruing therefrom. Even some of the well-known portfolios of small savings benefit the rich than the "small" savers. To the extent that the burden of debt servicing falls on the masses of the tax payers, public debt is another means by which resources are transferred from the non-savers to the savers in the long-run.

The outstanding public debt of the Government of India is expected to amount to Rs. 17058.23 crores at the end of 1973-74 and Rs. 18412.20 crores at the end of 1974-75 comprising

TABLE—1

	As on March 31 1974	*As on March 31 1975*
	(In crores of rupees)	
Internal Debt	11228.32	12029.82
External Debt	5829.91	6382.38

In addition the Government is liable to repay the outstanding against the various Small Savings Schemes, provident and other funds and deposits on public account amounting to a net figure of Rs. 22968.94 crores for 1973-74 and Rs. 24850.51 crores for 1974-75. Interest payments and saving of debt alone about Rs. 897.48 crores of the revised estimate for 1973-74 and Rs. 975.13 crores in the budget for 1974-75.

It must be borne in mind that, in the developing countries, public borrowing is not meant to activise idle savings. Instead, it attracts savers who are either allergic to risk-taking or have no opportunity for more productive investment. Institutional savers use government securities as one of the secure avenues amongst the spectrum of manifold opportunities. Thus, in the developing countries, public borrowing is either to stimulate savings habit among potential savers or to transfer resources from savers to investors. Deposits in the commercial banks is another important channel of such transfer. But, to the extent public borrowing either directly from the public or through the commercial banks used for unproduction financing of the government, debt financing will have an inflationary bias in the developing countries. Inflationary pressure may also be generated when subscribing public convert their government securities into commercial bank credit which is not warranted by the requirements of productive activities in the economy. In fact, undue expansion of commercial bank credit to the Government sector has been one of the important contributory factors for inflation in India especially over the last 3 years. Thus debt financing of public expenditure in India has led to inflationary pressure while at the same time aggravating inequality.

Deficit-Induced Inflation

While it is true that commodity taxation has contributed significantly to rising prices, it is the quantum of deficit financing in relation to the sluggishness of production which explains the spiralling of prices in recent years. In a broader sense, the current inflation is only a symptom of a deepening economic crisis in India. For instance, the growth of per capita real income over the sixties has been slower than that of the previous decade. There has been further deterioration in the growth rate under the Fourth Plan. Constrained by inadequate resource mobilisation, the quantum of deficit financing has increased in every successive plan. Though the concept of deficit employed in the Indian Plans and budgets are not quite same time or consistent, the size of budgetary deficit has increased progressively as a source of plan finance as seen from the following table :

TABLE—2

Deficit Financing by Government of India

Period	*Amount (Rs. Crores)*
First Five-Year Plan (1951-56)	532.00
Second Five-Year Plan (1956-61)	948 00
Third Five-Year Plan (1961-66)	1133 00
Plan Holiday (1966-69)	733.00
Fourth Five-Year Plan (1969-74)	3750.00 (tentative)

The role of deficit financing can be fully appreciated when seen together with credit expansion in the entire economic system on the one hand and the sluggish performance of the economy on the other.

For instance, between 1960-61 to 1968-69 the Net National Product increased by about 26.6 percent while the money supply doubled. Similarly, while the NNP increased by hardly 15 percent over the period March 1969 to March 1973, money supply increased by 60 percent. Since then, money supply has increased by another 30 percent while agriculture has suffered a setback and industrial production has been virtually stagnant. Government borrowing for Reserve Bank of India and the commercial banks has accounted for a good part of the expansion in money supply. In fact, bank borrowing during July 1972 - July 1973 has amounted to Rs. 1542 crores. The trend has been continued unabated. At the same time, the performance of the economy has been depressing. As against the 5.5 percent growth rate planned for the Fourth Plan the actual may not be more than 3.5 percent. On the other hand, increase in money supply has reached nearly 20 percent per annum.

Deficit financing has led to soaring price levels touching new heights at every successive wave of deficit financing in the past two decades or so. Based on 1949 prices, there was relative stability in the price level over the First Plan partly because of the successive good harvests towards the end of the Plan. Prices increased by more than 25 percent over the second plan. The increase was about 32 percent over the Third Plan. It has gone up by more than 70 percent since then. It is well known that these indices built on the basis of officially recognised prices understate the reality.

However, it is acknowledged that the current inflation which has reached a critical stage has hurt the masses of the poor people with unprecedented severity. The limited scope of rationing and controlled distribution of essential commodities could not insulate the majority of the vulnerable sections of population from the onslaught of inflation. By robbing the real incomes of the poor, inflation has helped to fatten the landlords who account for the bulk of the marketed surplus in foodgrains, monopolistic and oligopolistic producers in organised industry and speculators amongst traders. In other words, inflation has done the job of curbing consumption of the wage earners, salaried employees and other fixed income groups in a clumsier manner than indirect taxation. But, as Arthur Lewis has pointed out, the choice between taxation and inflation is political. Sometimes, inflationary methods are resorted to when further taxation becomes politically inconvenient. In India, both commodity taxes and inflationary deficit financing have been used like a double barrel gun aimed at curtailing the purchasing power of the masses of the consumers. Nevertheless, depending upon the classes against whom they are directed, taxation calls for a political will and farsightedness whereas inflationary financing symbolises political irresponsibility and economic bankruptcy.

Conclusions

Developing countries engaged in raising the rate of investment far above the voluntary rate of saving would generally be confronted with an inflationary gap unless they adopt a comprehensive system of planned allocation of resources and controlled distribution. The mixed economy evolved in India has assigned to the public sector riskier jobs of building up of the industrial base of the economy involving huge investments leaving the centres of quick profit in private hands. The system operates mainly through the market mechanism subjected to partial regulation and control. There are enormous wastages inherent in the system. Quite a bit of scarce resources—both internal and external—are frittered away to ensure the supply of "incentive goods" to propitiate the goods of private investment. A substantial part of household savings seek unproductive channels of investment. The surplus labour which abounds in the economy could not be utilised for want of a suitable organisation. Manipulative tendencies on the part of monopolists and oligopolists results in non-utilisation of created/intended capacities. One wonders how far high pressure advertisement and sales promotion characteristic of mature economies faced with a deficiency of demand are consistent with a sellers' market having acute shortages. Even the Government is unable to keep unproductive investments under check.

Under this system, the excess demand implied in any major investment effort manifests itself through inflationary pressures which defy the system of partial regulation and control. There are several factors which aggravate inflation. First of all, the inability of the system to convert surplus labour into productive capital constricts the overall investment effort and thereby the growth of output. Secondly, dissipation of scarce resources in wasteful consumption and unproductive investment widens the inflationary gap. Thirdly, there is a secular tendency to elongate the average gestation period of public investments on account of the deepening of the industrial base dictated by the long-term needs of balanced economic development. Fourthly, growth of unproductive consumption and investment in the public sector has kept public savings far below what was envisaged under the plans. Paucity of investible resources have led to their thin spread over committed programmes and projects resulting in a further elongation of the average gestation period of public investment.

The irrationalities and expediencies in political behaviour have also adversely affected the gestation period. Investment decisions in India are not based on appropriate cost-benefit analysis. Locational disadvantages are often disregarded. More serious is the inclination of the politician to mortgage the long-term objective of development to immediate political gain and popularity with the electorate. Consequently, he is always prone to undertake more projects than would be warranted by resource availability and organisational capabilities. Biting more than what could be chewed results in delayed action and indigestion. The number of false or half starts or miscarriages increases with every successive election at the national, state and local levels. When empty slogans and promises fail to impress upon the electorate more and more abortive investments are undertaken to cover up the dismal failures in the past. Apart from misdirection and waste of real resources, such irresponsibility and irrationality on the part of political executives have played havoc with completion schedules leading to long delays in the supply of investment and intermediate goods and services essential for the full utilisation of the productive capacities in the system.

In this context, the Keynesian remedy of slashing down public expenditure would not solve the problem. In fact, cutting down the rate of investment or toning down the heavy investment bias would only impair the long-term objective of balanced development. On the other hand, a prudent development strategy would call for a considerable step up in the rate of investment alongwith a more pronounced bias in favour of capital goods sector. Pruning of social services would also militate against the building up of human capital over a long period. It is true that social services benefit the rich more than the poor. But, to the extent social services benefit the poor, any cut back on them would also cut into the welfare of the needier sections of the population in the short-run. Similarly subsidies in support of the consumption of the vulnerable sections of the population can no doubt be justifiable on social considerations. But, fiscal subsidies and other subsidised inputs and services benefiting these who otherwise reap fabulous profits cannot be justified either on grounds of production or of social justice. Fiscal prudence demands that all such subsidies should be withdrawn. A good deal of resources which would otherwise have appeared as profit in business accounts gets camaflaged as perquisites and expense accounts inflating the operating expenses. The existing fiscal instruments havefailed to penetrate behind these accounting juggleries to prevent such dissipation of resources.

One should, therefore, be discriminating while dealing with economy in public expenditure. A drastic clamp down on the construction of palatial office buildings, five-star hotels, inessential defence installations and so on along-with the plugging of leakages and the clipping of frills and trappings in public construction may bring about substantial economies without in the least undermining the long-term developmental objectives. In fact, more real resources could be released for productive investment by this step. If politicians could resist the temptation of mortgaging the future well-being of the economy for immediate political gains, considerable waste and misdirection of resources could be avoided. They should also be induced to employ tools and techniques of analysis and management with a view to introduce rationality in investment decisions and their implementation. Elimination of dysfunctional levels and tiers of administration and toothing the cutting edge would be helpful in accomplishing better results at the grass-roots of administration.

Had there been abundant resources, a little waste here or there could have been overlooked. But the system has imposed severe constraints on resource mobilisation. The brunt of the burden of taxation has been on the poor and middle classes of the population.

There is a clear case for shifting the focus of resource mobilisation to those who have the ability to pay. The resources potential of the richer stratum of population is really great. The black money which plays havoc in the economy is estimated to be more than Rs. 10,000 crores. Evaded taxes exceed what is being collected. The landlords gloat in unprecedented wealth and prosperity. But the ever-increasing dominance of the monopolists and oligopolists over industry and trade and that of the landlords in the country side as well as their combined power and influence over the state and the apparatus of governance and administration have made it impossible to carry out any drastic programme of restructuring ownership of property and property relationship. It is this institutional obstacle which has strangulated the efficiency of certain sensible economic and fiscal policies.

Concentration in ownership of property and the highly skewed distribution of income has left enormous disposable purchasing power in the hands of the affluent. The economic organisation commits sizeable resources in the production and import of comforts and luxuries meant to meet the insatiable demand for conspicuous consumption. There is no regulation or control which this section cannot flout with impunity. The progressivity in the taxation of luxuries only remains in paper. It is against such fortifications of vested interests that the limited fiscal policies have floundered. Deficit financing on an unprecedented scale is an admission of the glaring failure of fiscal policies in realising the proclaimed developmental and social objectives. The instabilities of the system is also attributable to the constraints of the system on resource mobilisation. Past performance in public saving casts a dark shadow over the prospect of substantial resource mobilisation under the Fifth Plan. In the absence of comprehensive physical controls for the mobilisation and allocation of resources as well as for the distribution of final output, systematic failure to generate enough surplus from those who can afford to shoulder a much larger burden of resource mobilisation would inevitably lead to fresh waves of inflationary financing. The utilisation of P.L. 480 funds for budgetary purposes would only add fuel to the fire.

Wage Policy in the Five-Year Plans: A Review

Labour Bureau

In the modern industrial community, wages form the pivot around which most of the labour problems revolve. Wage issues give rise to frequent unrest, grievances and industrial disputes. Dissatisfaction with wage rates is one of the most common causes of low level of production and has an important bearing on the standard of living and welfare of working force. In a developing economy like that of ours, the utility and the importance of a wage policy in the context of a broader income and wealth policy cannot be underestimated. The issues connected with the wages and salaries etc., are basically important because of their direct impact on other factors affecting national growth. Commenting on this, the National Commission on Labour has remarked :

> "In all countries, wage policy is a complex and sensitive area of public policy. This is because the relative status of workers in the society, their commitment to industry and attitude towards management, their morale and motivation towards productivity, their living standard and, in fact, their way of life are all conditioned by wages. Hence, a policy dealing with this crucial problem cannot be simply economic, as it has to reckon with the realities of multi-dimensional social phenomena, in which besides the worker and the management, the consumer and the society at large, and in consequence the State are all vitally interested . . . ."[1]

The Commission also highlighted 'that issues concerning wage policy are inter-related with the broader economic decisions on the one hand and on the other with the goals set for social policy. Wage rates and differentials have a functional role in sustaining and developing the structure of society and thus merge with other elements of economic and social policy'.[2]

Prior to independence, no proper wage policy had been formulated in the country. This was followed by a series of struggles, enactment of various

1. Report of National Commission on Labour - p. 220.

2. *Ibid* - para 15.24.

labour legislations, recommendation of number of committees and conferences, awards of industrial tribunals, courts and wage boards, etc. coupled with collective bargaining which brought about notable changes in the wage patterns.

The International Labour Organisation also contributed in giving new directions to our wage policy through recommendations/conventions; important amongst them being (i) Minimum Wage Fixation Machinery, 1928[3], (ii) Protection of Wages Recommendations 1949, (iii) Minimum Wage Fixing Machinery (Agriculture) Recommendations, 1951 and (iv) Wage Hours of work on Boardships Manning Recommendations, 1958. The I.L.O. in its publication entitled 'Problems of Wage Policies in Asian Countries (1956)' outlined in brief the following objectives of wage policy in an economically weak group of population :

(a) to abolish malpractices and abuses in wage payments;

(b) to fix minimum wages for workers whose bargaining position is weak because they are either unorganised or inefficiently organised, accompanied by separate measures to promote the growth of trade unions and collective bargaining;

(c) to obtain for workers a just share in the fruits of economic development supplemented by appropriate measures to keep workers' expenditure on consumption goods in step with available supplies so as to minimise inflationary pressures; and

(d) to bring about a more efficient allocation and utilisation of man-power through the operation of wage incentives particularly through wage differentials and where appropriate systems of payment by results.

These objectives have been taken into consideration in formulation of wage policy in India.

The case for fair deal to labour has been emphasised in Indian Constitution. The constitution assured that—

> "The State shall secure work, a *living wage*, a decent standard of life, leisure and social and cultural opportunities for people, and in

3. Convention ratified by India.

particular to promote cottage industries (Article 43)".

The constitution also provides for equal pay for equal work for both men and women as well as recognise the right of citizen to an adequate means of livelihood. The acceptance of socialistic pattern of society as the basic objective of State Policy and the concept of planned development backed by the constitutional guarantees provided further momentum to the cause of labour in matters of wage determination etc. However, the period of planning witnessed the evolution of a positive wage policy.

Five-Year Plans and Wage Policy

A common feature of post-war economic and social policies in most countries have been an attempt to increase the welfare of the people through planned economic development. The main objective of planning in India has been to initiate a process of rapid development which will raise living standards and herald an era of new opportunities for a richer and more varied life for the masses. The task is not merely one of reaching any fixed or static point such as doubling of living standards but of generating of dynamism in the economy which will lift it continually to higher levels of material well-being and of intellectual and cultural attainments. The planners believe that eradication of poverty cannot be achieved merely by redistributing the existing wealth nor can a programme aiming only at raising production remove existing inequalities. The wage policy should, therefore, seek to provide in the framework of democratic planning for a balanced emphasis on increase in production and employment and the attainment of economic equality and social justice. The labour and wage policies in India, like all other social policies, emanate from these basic aims and are essentially directed towards the well defined goals of a Welfare State and the socialistic pattern of society. The plans have emphasised in particular that the fruits of development should accrue more to the relatively less privileged classes of society and that there should be a progressive reduction in the concentration of incomes, wealth and economic power in the hands of a few.

The First Five-Year Plan stressed that in order to check the inflationary pressure caused by the rise in prices, profits and wages during the war and post-war periods, it was necessary to exercise considerable wage restraint, as otherwise the economic stability of the country would be jeopardised. It, however, agreed that wage increases were justified in cases where it was intended to (i) remove anomalies or where existing wages were abnormally low; and (ii) restore pre-war real wages as a first step towards the living wage, through increased productivity resulting from rationalisation and the renewal or modernisation of the plant. It also laid down some guidelines to be followed in the immediate future in regard to wage policy. These were:

(a) All wage adjustments should conform to the broad principles of social policy and disparities of income have to be reduced to the utmost extent. The worker must obtain his due share in the national income.

(b) The claims of labour should be dealt with liberally in proportion to the distance which the wages of different categories of workers have to cover before attaining the living wage standard.

(c) The process of standardisation of wages should be accelerated and extended to as large a field as possible. There should be a progressive narrowing down of disparities in the rates of remuneration of different classes of workers in the same unit, of workers engaged in similar occupations in different industries and in wages in the same industry at different centres. Differentials for various jobs should be maintained at the minimum levels justified by :

(i) degree of the skill required;

(ii) strain and fatigue involved;

(iii) training and experience required;

(iv) responsibility to be undertaken;

(v) mental and physical requirements for doing work;

(vi) disagreeableness of the task; and

(vii) the attendant hazards.

A scientific assessment of the relative work-load in different occupations and industries should be taken up.

(d) Fifty percent of the dearness allowance admissible to the Central Government Servants drawing basic pay upto Rs. 750/- per month should be amalgamated with pay. This recommendation should be extended to workers in private sector also.

(e) to work out the proper basis for bonus payments.

(f) Full and effective implementation of the minimum wage legislation should be secured and depressed areas should be given priority. In view of the paucity of data and administrative difficulties a limited beginning was advocated in the fixation of minimum wages for agricultural workers.

(g) Permanent Wage Boards with a tripartite composition should be set up in each State and the centre to deal comprehensively with all aspects of question of wages.[4]

The Second Five-Year Plan reasserted the wage policy initiated in the First Five-Year Plan period with a shift in emphasis. It suggested that increase in wages should be based on increased productivity brought about not merely by efficient and hard work on the part of labour but also on better *layout of plants*, improvement in working conditions, management practices and training of workers. The concept that earnings beyond the minimum wage should be related to payments by results subject to safeguards like fall-back wages, protection against fatigue and undue speed up was envisaged in the Second Plan period. The plan emphasised the need to evolve such a wage structure for workers, which may aim at rising real wages. The workers' right to a fair wage was although recognised but the plan found it difficult to quantify it. A major difficulty experienced in the fuller implementation of the principle of fair wage is the drag exercised by the marginal units in determining the wage structure. The Plan also advocated for laying down the principles to bring wages into conformity with the expectations of the working class in the future pattern of society as well as to provide for settling industry-wise wage disputes. The Plan recommended that creation of wage boards on tripartite basis will be an appropriate step in this direction, as it will provide a hand to the concerned parties in evolving a wage structure. It also pleaded that with a view to making the existing cost of living indices uniform, an enquiry for the revision of the same may be undertaken along with the Wage Census. As regards bonus and profit-sharing, the Plan was of the view that further study of the principles with regard to its settlement be made before a formula acceptable to all the parties could be evolved. Till such time any dispute aristing out of bonus issue will continue to be settled through the industrial relations machinery. During the Second Plan period there were two other important develoments. These were: (i) recommendations of the 15th Indian Labour Conference regarding need-based minimum wage and (ii) report of the Second Pay Commission in respect of the Central Government

4. First Five-Year Plan - pp 584-85.

Employees. A reference was also made to the principles of wage determination as laid down in Report of the Fair Wages Committee and the norms laid down by the Indian Labour Conference (15th Session). Due to divergent opinion on the subject no recommendation was made with regard to the acceptance of this principle on a national basis. The concept of the need-based wage was also examined by the Second Pay Commission and they found it impracticable in the then prevailing conditions. The Third Pay Commission also found it difficult to recommend the need-based wage in view of the economy.

By and large, the Third Plan reiterated the Government policy on wages followed in the First and Second Plan in matters of minimum wage fixation, reduction in disparities, wage differentials, etc. but a shift in emphasis towards productivity was clearly apparent. For securing better implementation of the Minimum Wage Legislation the plan suggested the strengthening of enforcement machinery. It also recommended that care should be taken in fixing fair wages for different classes of workers and that adequate incentives are provided for the acquisition and development of skills and for improvements in output and quality. As regards bonus, the Plan expressed the hope that the Bonus Commission already appointed will study the problem in detail and lay down guiding principles and norms for its payment. The Third Plan also pointed out that wage determination in major industries was to be left to the process of collective bargaining, conciliation, arbitration and adjudication.

When the Fourth Plan was being drafted the country was in the grip of inflationary pressures. The sole objective of the planners was to evolve such programmes and policies which could take the country out of prevalent adverse economic situation. It was in this context that the planners realised that due to wage-price spiral not only wage policy needed rethinking and adjustments but it was also felt that it cannot be evolved in isolation from the overall incomes and prices strategy for the country.

The draft Fourth Five-Year Plan accordingly recommended for the formulation of an integrated income policy for the guidance of the private and public sectors. It was felt that wages, salaries and incomes of all kinds must be in a reasonable organic relationship with the performance of the economy as a whole in case growth was not to be retarded. An emphasis was also laid on relating wages squarely to productivity, extension of payment by result, incentives, wage structure to have three components namely basic or the minimum wage, an element based on the cost of living and an element relating to increase in productivity and sharing the gains of productivity, priority to be given to workers whose wages are abnormally low, dearness allowance to be linked to cost of living but not necessarily involving full neutralisation at all levels, etc. In short the Draft Fourth Five-Year Plan made the following recommendations:[5]

(i) Integrated incomes policy in line with overall performance of the economy at a given time which marked a new approach by way of conceiving the problem in a wider national perspective as compared with earlier social philosophy of considering wage issues etc. piecemeal on sectoral basis lacking cohesion, uniformity and above all an organic relationship with the economy;

(ii) Generation of higher savings to ensure sustained growth essential for meeting minimum requirements of the community.

(iii) Price stability; and

(iv) Linking wages with productivity, at the same time ensuring no further erosion of workers' real standards of living as an immediate objective of such a policy.

However, the Fourth Plan as finally approved by the Planning Commission relegated the entire subject to the background probably because a high powered National Commission on Labour had already been set up and was seized of the matter.

The Draft Fifth Five-Year Plan stresses on redistributive growth. This makes it necessary to provide an equitable system for sharing the gains of higher performance. To this effect one approach will be to broadbase the reward structure of the industrial employees in terms of wage and non-wage benefits on the one hand and to link the structure more directly to the performance records in industrial enterprises on the other hand. For such a system, the Plan stresses on coordinated efforts at all levels national, state and local. It suggests that the labour in unorganised and depressed sectors of industry be provided protection in their earnings. This equitable system should also take care of the interest of the poorest section of consumers. Large scale unemployment and underemployment being a major cause of inequality, the Plan has laid emphasis on providing vastly expanded employment oppor-

5. Draft Fourth Five-Year Plan - pp. 292-294.

tunities at reasonable income levels in wage-paid employments as well as in self-employment. In this regard the Plan has advocated increased emphasis on the generation of employment opportunities for the poorer section of the population as well as to increase the earnings of the marginally employed persons.

The Plan lays stress on undertaking studies in the field of labour and productivity and points out that the Labour Bureau will undertake various studies relating to Rural Labour, Working and Living Conditions of Scheduled Castes and Scheduled Tribes, Occupational Wage Survey and other subjects in the field of Labour.

Wage Policy as an Integrated Approach to Incomes, Prices and Productivity

An equitable distribution of income and wealth is an essential objective of our social and economic planning. Incomes Policy plays a very important role in maintaining economic stability. If incomes of particular sections in the society continue to rise persistently at rates unrelated to the growth of real national income, there is likelihood of a strong built-in pressure towards inflation resulting in arbitrary shift in income distribution. The underlined philosophy of incomes policy is to ensure rational distribution of national wealth among various partners of production. Thus viewed, the relationship of wage policy with incomes policy is very close and in fact wages policy is an integral part of an overall income and distribution policy. While wage policy determines the share of labour in the national cake, the income and wealth policy provides for allocation of shares for other sections of the society including labour.

It is true that in India the inequalities in income have grown over time. The rich have tended to become richer and the poor have become poorer. This is as a result of uneven distribution of wealth between various segments of society. As such the incomes policy of the country should be so carved out which *inter alia* may take care of rightful claims of all the sections of the community. No wage policy could be described as fair unless positive measures are taken to ensure that the level of non-wage income are also kept at a reasonable level. The tendency to regard incomes policy mainly in terms of wages policy is no longer regarded as correct. Unless integrated incomes policy covering all major categories of incomes, e.g., profit, rents, dividends, etc. is formulated i ts success will be in doubt.

While the workers get wage rise in the form of frequent increases in dearness allowance or wage adjustments as a result of price rise, other sections of the community are not provided any such protection. It is in this background that the slogan of wage freeze is often raised. This demand is, however, resisted by labour on the ground that ceiling on wages cannot be applied alone, while leaving profits and prices rise freely. There is enough weight in the argument. Moreover, any wage policy which provides curbs on wages and incomes of the labour will prove ineffective as it will not provide for any monetary incentives for increased productivity.

Prices always include cost of production and cost of production includes cost of labour. It is also our general experience that if prices rise, there would be a demand for higher pay-packets on the part of labour. Thus in actual practice, wages influence prices and *vice versa*.

A certain extent of price rise in any developing economy is inescapable and should not cause any serious worry. However, the recent price spiral in the country has touched all time high and, therefore, it has become a matter of serious anxiety. The worst sufferers are the wage earners and other financially weaker sections of the society. It is often regarded that prices are rising because of arbitrary increase in wages irrespective of productivity considerations. This may not be true. In actual practice, wages always chase prices which rise continually due to inflation which is more as a result of monopolistic control and general economic and financial policy.

With the intention of protecting real wages of workers against the price spiral, the practice of paying the dearness allowance in conformity with the rise and fall of Consumer Price Index Number has been widely adopted, especially in the Organised Sector of industries. In some cases protection is provided by making necessary adjustments in the basic wages of workers. This system has proved useful in providing some financial cushion to workers in times of scarcity of consumer goods and higher prices. However, this process itself leads to rise in the cost of living further. It thus only strengthens the vicious circle of wages chasing prices. No country, particularly a developing one, would afford such a situation where wages and prices push each other continuously. It is in this context that frequent wage hikes are disfavoured. Efforts may, therefore, be made to secure stability in the general price level for ensuring that increase in wages do not outstrip the growth in the real national product.

In considering the relationship between the wages and productivity, numerous problems crop up. These relate to the manner in which the national drive for higher productivity can be ensured; measurement of labour productivity, sharing the gain of such efforts, impact of linking wages to productivity in individual industry or in the inter-industry and inter-sectoral wage structure etc. Wages and productivity are closely interlinked with each other : while on the one hand it is the level of wages and incomes which provide incentives for higher productivity, on the other the labour productivity determines national growth to sustain that wage level. In actual practice any improvement in wages can only result from the increased productivity. Such an increase in productivity must necessarily be based on technological improvement and through the effective use of existing resources especially manpower.

A demand for formulation of a wage policy which should ensure rise in wages in conformity with the rise in productivity is gaining popularity day by day. This concept is, however, being resisted by labour. The feelings generally reflected by the Trade Unions on this question were also voiced in the Asian Trade Union Seminar held in New Delhi during April 24th to 28th, 1972. The views expressed are reproduced below :

> "Wages are not dependent upon productivity of labour and cannot be linked with it. The slogan of linking wages with productivity under conditions of capitalistic relations is another attempt to keep wages low while increasing work-loads and profits. The presence of a large army of unemployed is used to depress the wage level. In Australia and Japan scientific and technological advance is used to increase the value added by manufacture which while reducing the relative share of workers as wages, multiplies the volume of profits."[6]

The fact, however, remains that practical difficulties apart, the soundness of the basic principle of linking wage to productivity cannot be questioned easily.

Existing Wage Policy

Broadly speaking, the existing wage policy in the sweated industries provides for wage fixation under the Minimum Wages Act, 1948. Such a machinery has been prescribed to protect workers from exploitation where they are in a

6. Industrial Relations Letter dated May 2, 1972 - p. 2.

weak bargaining position. In the field of organised industries, the wage policy is usually guided by the recommendations of various Committees/Commissions and Wage Boards. Adjudication, awards and decisions of industrial courts under the Industrial Disputes Act, 1947 have also provided important guidelines in the determination of Minimum Wages and wage differential etc. for any industry on regional and national basis. Collective bargaining (bipartite/tripartite) has also in its own way contributed in shaping the wage policy.

A Review

As would be evident from the above discussion, the broad objective of wage policy in the country during the various plan periods was to secure social and economic well-being of the working population through higher growth of productivity. The wage policy has been a progressive one after independence due to a number of governmental measures initiated from time to time. Series of struggles, enactments of various labour legislations, recommendations of a number of committees and conferences, awards of industrial tribunals, courts, wage boards etc. coupled with collective bargaining have brought about notable changes in wage patterns. In order to reduce the disparities and to introduce rationality in wage patterns, the norms and principles suggested by the various committees and commissions were followed by the wage fixing machineries/agencies. With a view to provide protection to workers in matters of their earnings in the unorganised sector of industries where workers' bargaining position was weak, more and more scheduled employments had been gradually brought within the ambit of Minimum Wages Act, 1948. By now it can be said that a sizeable section of working class in the unorganised sector are covered by it.

In the field of organised sector of industries, the Government of India had appointed Central Wage Boards as per the recommendations of the Second Five-Year Plan. These Central Wage Boards were asked to rationalise the wage structure in the concerned industries in accordance with the concept of 'Fair Wage' as recommended by the Fair Wages Committee. By now twenty two wage boards (including three Second Wage Boards for Sugar, Cement and Cotton industries) have been appointed. The Wage Boards have not only improved the wage structure but have also been able to rationalise and standardise wage structure with due regards to regional conditions. To take care of future rise in prices, incremental scales have been provided and dearness allowance has been linked to the Consumer Price Index Numbers.

The system also provided a common forum for workers and employers where they could freely express their viewpoints and settle wages and allied problems through mutual negotiations, mediations and voluntary arbitration, which was hitherto absent. The system of dearness allowance payment in accordance with the rise and fall of Consumer Price Index Numbers for the adjustment of basic wage have provided some financial cushion to workers against price rise. Workers have been guaranteed a minimum percentage of bonus with the exception of a few industries through a statutory provision.

Prosperity of any developing nation lies in increased productivity, the Second Five Year Plan recommended that wage should be linked with productivity. The system is already in vogue wherever workers are paid wages on basis of piece-rate system. Besides the schemes on production bouns and incentive bonus in some of the industries are manifestation of the above concept.

In the matters of earnings of workers in manufacturing sector of industries the experience had been that the money wages since independence have shown marked improvement. But this increase has not been reflected in real wages nor have been commensurate with improvements in productivity. The views expressed by the National Commission on Labour are noteworthy. The Commission in this regard observes that :

> "The increases in money wages of industrial workers since independence have not been associated with a rise in real wages nor have real wages increases been commensurate with improvements in productivity. Simultaneously, wage costs as a proportion of total costs of manufacture have registered a decline and the same is true about workers' share in value added by manufacture".

Since various kinds of anomalies have cropped in our economy over a period of time creating disparities in the wage structure between industries and also among comparable occupations trades within an industry, it may be necessary to effect readjustments in our wage policy. If these anomalies are allowed to continue, these would cause a strain and stress in industrial relations. A developing country like India cannot afford the luxury of work stoppages, particularly in the difficult economic times. It would, therefore, be advisable to evolve a national wage policy on some sound principles in order to create a better climate for industrial relations.

In a mixed and developing economy wedded to democratic institutions, the formulation of a wage policy is beset with numerous difficulties. This obviously calls for a thorough study of all the issues connected with the wage policy. The proposed wage policy may *inter alia* bring within its compass the following broad objectives:

(i) to evolve a wage structure for workers which may aim at rising real wages. Wages, salaries and incomes of all kinds should be in a reasonable organic relationship with the growth of the economy as a whole so that national growth may not be retarded;

(ii) wage policy must generate higher savings and stabilise economy by favouring non-wage incentives to workers in the form of better working and living conditions, reduced working hours, greater leisure and other fringe benefits. This approach will contain inflationary tendencies;

(iii) to take care of the earnings of depressed section of workers and those employed in unorganised sector of industries including those who are either unemployed, under-employed or marginally employed;

(iv) to evolve integrated income policy which should take care of legitimate claim of all factors of production. A reasonable balance has to be maintained between wage and non-wage incomes;

(v) to ensure wages in conformity with the expectations of working class and in the process it must seek to maximise employment with rising levels of productivity. For this, it must take into account the price level which can be sustained, the employment level to be aimed at, requirements of social justice, and capital formation need for the development of the country;

(vi) care must also be taken to ensure that the fruits of development accrue more to the heretofore relatively less privileged class of society, such as Adivasis, Harijans and especially in rural areas. Priority in the wage programme should, therefore, first go to them. The wage policy must attack multi-dimensional wage problems at the very grass root, which alone would ensure the proper economic and social advancement of the working population.

It can be said that the success of any wage policy would largely depend on how far we are successful in controlling the inflationary tendencies in our economy which is a pre-condition for any successful wage policy.

For formulation of guidelines and criteria of any workable wage policy for the future, an accurate and clear picture of the prevailing wage position in the country is needed. The data available on wages and earnings, at present, are neither complete nor accurate. Any policy inference based on such data is bound to have serious limitations. As a first step in this direction, it is, therefore, necessary to have a suitable data collection machinery which should also be responsible for its timely presentation. The Government of India have already constituted a wage cell in the Ministry of Labour probably with this objective in view. For implementing the national wage policy, a National Wage Commission with well-defined statutory powers should immediately be created. It should be the function of the National Wage Commission to ensure that wage fixation in all sectors is consistent with the wage policy. The Commission should also have the superintending, implementing and evaluating authorities and its decisions binding on the industry and the Government.

The new trend in favour of bipartite negotiating machinery for wages instead of the usual tripartite set-up has to some extent helped to lessen the causes of friction. Work stoppages were prevented in the Cement, Coal and Sugar industries. More such bipartite bodies may be formed for the industries in the organised sector.

The minimum wages fixed should be sufficient to get the workers minimum nutritional requirements in order to enable him to put in increased physical efforts and thus increase his productivity. Wage rates in industry should be fixed in such a manner as to encourage adoption of labour-intensive techniques, i.e., in other words, the wage policy should be employment-oriented. The time perhaps has also arrived to mould the wage policy in favour of the workers in the unorganised sector, who by all means now deserve a better treatment. Indeed, a progressive Labour Policy has to take into account all these aspects and mould itself to the growing challenge(s) of the times.

Growth of Factor Shares in Indian Agriculture

J. P. Singh*

The main objective of this paper is to examine the changes, which took place, in the relative shares of factors of production in Indian agriculture after the inception of green revolution. In order to meet this, the partial elasticities of factor inputs have been estimated by considering that the production relation is of the Cobb-Douglas form and by using the least squares method of estimation for two periods of time, 1961 and 1971. According to neo-classical theory of distribution, partial elasticities of production derived from the Cobb-Douglas function at the macro-level indicate the relative shares of factors of production. Comparison between relative shares at two points of time will enable us to know about the changes in factor shares.

Specification of Model and Measurement of Variables

The input-output data used for production functions belong to individuals states[1]. The specification of the Cobb-Douglas production is given below :

$$Y = C\, A^{b_1}\, L^{b_2}\, K^{b_3}\, F^{b_4}$$

where

Y = Value of output (Rs.)

A = Land Area (Hectares)

L = Male Agricultural Workers (Nos.)

K = Capital Services (Rs.)

F = Fertilizer (nutrient content, Tonnes).

C stands for constant term and $b_1 \ldots\ldots b_4$ are the partial elasticities of production of different input factors.

* The author is grateful to Prof. L. S. Venkataramanan for his valuable comments on an earlier draft of this paper.

1 The production function results are based on the data of 16 states of Indian union. The names of these states are Andhra Pradesh, Assam, Bihar, Gujarat, Himachal Pradesh, Jammu and Kashmir, Kerala, Madhya Pradesh, Maharashtra, Mysore, Orissa, Punjab (including Haryana), Rajasthan, Tamilnadu, Uttar Pradesh, and West Bengal.

Some of the important variables, such as seed, could not be included in the function owing to non-availability of data. The introduction of high-yielding varieties of seeds would have played an important role in bringing changes in the relative shares of factors of production. It can, however, be expected that a major part of the effect of high yielding seed on production will be caught by the fertilizer variable since there is high correlation between the adoption of high-yielding seeds and the use of fertilizers.

The definition and the measurement of variables are given in the following paragraphs :

Output (Y)

Output has been defined as the sum of the value of 26 forecast crops[2] evaluated at constant prices. Since output of crops fluctuates from one year to another, three years average of the output of individual crops has been taken for each period of time to eliminate the effect of the non-accounted weather variable. Thus, output in 1961 is taken as the average for the years 1959-60, 1960-61 and 1961-62; similarly the output in 1971 is the average of the years 1969-70, 1970-71 and 1971-72. The average output of each individual crop has been multiplied by the corresponding all-India average harvest price of 1949-50 to 1951[3], except for small millets, mesta, sugarcane (gur) and dry ginger which pertain to years 1956-59[4]. The sann hemp (fibre) has been evaluated at the price of mesta.

2. The crops included under this study are rice, wheat, jowar, bajra, barley, maize, ragi, small millets, gram, tur, other pulses, sugarcane (gur), groundnut, castor seed, sesamum, rape and mustard, linseed, cotton, jute, mesta, sann hemp, tobacco, potato, chillies, ginger, and black pepper.

3. The main reason for selecting output prices corresponding to year 1950-51 has been the availability of fairly accurate prices for bullocks and most of the implements and machines for the year from Tara Shukla, Capital Formation in Indian Agriculture, Vora & Co., 1965 p. 81. With a view to make prices correspond to a single year for all the variables to be taken in value terms for the sake of aggregation, the year 1950-51 was chosen. It should, however, be mentioned at the outset that some prices do not strictly correspond to 1950-51. But these items are of minor importance and hence may not have any significant effect on our results.

   For the harvest prices, see, P. V. John, Some Aspects of the Structure of Indian Agricultural Economy, *1947-48 to 1961-62*. Asia Publishing House, 1968, pp. 195-202.

4. See B. S. Minhas and A. Vaidyanathan, "Growth of Crop Output in India, 1951-54 to 1958-61: An Analysis of Component Elements", *Journal of Indian Society of Agricultural Statistics*, Vol. XVII 1965, pp 248-49.

Land (A)

Land has been measured in hectares adjusted for irrigation. Since, there is considerable difference between the productivity of irrigated and unirrigated land, adjustment for irrigation became necessary in order to make the land input homogeneous. This has been done by multiplying the irrigated area under the selected crops by 1.67 on the presumption that one hectare of irrigated land is equivalent to 1.67 hectares of unirrigated land[5]. The converted figures have been added to the difference between the area sown and the area irrigated under the selected crops with a view to represent land area as standard unirrigated land. The area sown and the area irrigated[6] figures used in this study are three-year average corresponding to that of output.

Labour (L)

Labour stands for the number of male agricultural workers (cultivators plus agricultural labourers). Flow of labour services in term of man days or man hours are better measures of labour input for the production function studies. Since, the data on labour services are not available, we were left with no option but to use the number of workers as the labour input.

Capital (K)

Capital has been measured in flow terms and stands for depreciation plus interest on bullocks and implements and machines. Data on these items have been taken from the Live-Stock Census of 1961 and 1966, except for tractors and pump sets (both oil and electric operated) in the Census 1966 which are taken from other sources[7] and pertain to year 1969[8]. In the absence of data on capital items for 1971, it was decided to use the data

5. See, Raj Krishna, "Some Production Functions for the Punjab", *Indian Journal of Agricultural Economics, Vol. XIX*, July-December 1964, p. 88. Raj Krishna's ratio relate to Punjab only. However, this ratio is not widely different for other states in regard to irrigated and unirrigated wheat and paddy. See Government of India, Ministry of Food and Agriculture, Farm Management in India: A study Based On Recent Investigation, 1966, p. 53 and p. 68.
6. Data on irrigated area for the period 1971 pertain to year 1969-70.
7. Data on tractors are taken from S M Patel and K V Patel, "Progress of Farm Mechanisation in India" in Indian Society of Agricultural Economics, Problems of Farm Mechanisation, 1972, p. 42; and those on pumpsets are taken from Roy E. Harrington, "A Note on Tractors and Employment of Farm Workers", Ibid., pp. 108-109.
8. Except for Jammu and Kashmir which relate to year 1966.

of 1966 census by updating some items, as mentioned above, to represent the capital services for the period 1971. This will certainly lead to under-estimating the figures of capital for the function of 1971. It is, however, expected that the under-estimation may not be large because of the fact that bullocks which constitute the major item of capital services, accounting as much as 89% of the total in 1961, have risen very slowly between 1961 and 1966[9] and secondly, the capital items, which have risen very fast (more than 80 percent between 1961 and 1966), have been updated to a certain extent.

So far as the bullocks are concerned, only male working bullocks above 3 years of age have been taken into consideration. Buffaloes have, however, been excluded from the analysis.

Data on the prices of bullocks, ploughs (both wooden and iron), carts, sugarcane crushers (both bullock-drawn and power-drawn), oil engines, electric pumps, and tractors have been taken from Tara Shukla's study and relate to year 1950-51[10]. Prices of persian wheel, chaff cutters, and power tillers have been taken from the Handbook of Agriculture[11].

Prices of harrow cultivators, improved seed drills, and improved threshers have been taken from S. C. Jain's study[12] with modifications so that they could correspond to the year 1950-51. The price of sprayers and dusters has been taken as Rs. 100/-.

The bullocks and those implements and machines whose prices were taken from Shukla's study have been depreciated on the straight line basis on average expected life given in the book[13]. For other implements, the average expected life has been assumed as 10 years and the rate of depreciation has been taken as 10 percent of their value.

On the value of bullocks and implements and machines, it has been considered appropriate to use (charge) an interest rate of 9 percent.

9. Percentage increase in five years have been only 0.7.
10. Tara Shukla, op. cit. p. 81.
11. ICAR Handbook of Agriculture, 1961. Prices of persian wheel and chaff cutters relate to year 1955. (pp. 780-81). In case of power tillers, the lower range of its price is taken for evaluation (p. 589).
12. S C Jain, Price Behaviour and Resource Allocation in Indian Agriculture, Allied Publishers, 1968. pp. 39-41, and p. 50.
13. Tara Shukla, op. cit., p. 14 . The average working age of bullocks has been taken as 7 years Ibid, p. 148.

Fertilizer (F)

Fertilizer has been measured in terms of tonnes of nutrient content of phosphatic fertilizers consumed. Data on the consumption of nitrogenous and phosphatic fertilizers in terms of nutrient contents for individual states for the period 1961 are average of the years 1959-62, while those for 1971 pertain to the year 1970-71. The nutrient of nitrogenous fertilizers consumed has been converted into that of phosphatic by multiplying the former by a factor 1.77 on the presumption that one unit of the nutrient content of nitrogenous fertilizers is 1.77 times more productive than that of phosphatic fertilizers[14]. This has been added to the nutrient of phosphatic fertilizers consumed with a view to represent fertilizers in homogeneous units.

Production Function Results

The cross-section production function results for the periods, 1961 and 1971, are presented in Table 1. It is noteworthy that the percent of variations in inter-state agricultural output explained by the independent variables is as high as 96 for the period 1961 and 94 for the period 1971. This, in fact, shows the good fit of the data to the model. However, the inter-correlations among the independent variables are quite high, higher than 0.95 in some cases (Table 2). This is a matter of serious concern, though the multiple correlation coefficient for each equation is greater than the simple correlation coefficient between any two independent variable[15]. Multicollinearity is not altogether unexpected for the cross-section production functions depending on the 16 observations.

It can be seen from Table 1 that all the elasticity coefficients have correct signs. But none of the coefficients is significant at the conventional level. This may be because of the multicollinearity resulting in high standard errors of the coefficients and also because of the small number of observations on which the production functions are based. In view of the multicollinearity and statistical non-significance of the elasticity coefficients, we are seriously aware of the limitations of our results. In spite of these limitations and

14. The ratio is the average of the response of wheat and rice crops to the nutrients of nitrogen and phosphates. See, Seth and Khanna (1963) quoted by S C Jain, op. cit, p. 107.

15. "Inter-correlation or multicollinearity is not necessarily a problem unless it is high relative to overall degree of multiple correlation among all variables simultaneously." L R Klein, An introduction to Econometrics, Prentice-Hall, 1969, p 101. For more specific interpretation of this rule, see, D E Farrar and R R Glauber, "Multcollinearity in Regression Analysis: The Problem Revised", *Review of Economics and Statistics*, Vol. 49, 1967, p. 98

TABLE—1

Elasticities of Production and Related Production Function Statistics for Indain Agriculture for the Periods, 1961 and 1971*

Period	Constant (in log)	Elasticities of Production: Land (A)	Labour (L)	Capital (K)	Fertilizer (F)	Sum of the elasticities of Production	Standard Error of Estimate	Coefficient of Multiple correlation (R)	Coefficient of Determination (R^2)	Degrees of Freedom
1961	2.2743	0.2040	0.4191	0.2937	0.1473	1.0641	0.1066	0.9804	0.961	11
	(0.56[illegible]0)	(0.2069)	(0.4789)	(0.4281)	(0.0857)					
1971	3.1584	0.2191	0.4166	0.1126	0.1457	0.8940	0.1087	0.9718	0.944	11
	(0.5833)	(0.2819)	(0.2447)	(0.3355)	(0.0881)					

* Numbers in Parentheses are standard errors.

crudeness of the data used, a few tentative inferences about changes in the factor shares may not be totally out of place.

TABLE -2

Coefficient of Correlation Matrix

Period	*Independent variable*	*Land (A)*	*Labour (L)*	*Capital (K)*	*Fertilizer (F)*
1961	A	1.000	0.944	0.969	0.705
	L		1.000	0.978	0.746
	K			1.000	0.658
	F				1.000
1971	A	1.000	0.919	0.968	0.840
	L		1.000	0.949	0.805
	K			1.000	0.789
	F				1.000

The sum of the elasticity coefficients for both the periods is not significantly different from unity, and hence indicate constant returns to scale in Indian Agriculture, both before and after the green revolution. The magnitude of the sum of the elasticities is greater than unity in 1961 and less than unity in 1971. Though the estimated elasticity coefficients indicate the true theoretical shares of factors[16], they may under or over-exhaust the total output. "One may consider a solution in terms of windfall 'profits' or 'loss' which are not considered input payments in usual sense but rather pure residuals"[17]. But unless, sum of the elasticity coefficients is adjusted to unity, the factor shares between 1961 and 1971 may not be strictly comparable. Hence, partial elasticity coefficients are adjusted by taking ratio of individual coefficients to the sum of elasticity coefficients in order to make total shares of factors equal to total output. The adjusted coefficients are presented in Table—3.

It is clear from the table that in 1961, the relative shares of land, labour, capital and fertilizer were about 19 percent, 39 percent, 28 percent and

16. M Bronfenbrenner, Income Distribution Theory, Macmillan, 1971, p. 396.

17. Ibid, p. 396.

14 percent, respectively. The respective shares of these factors in 1971 turn out to be about 24 percent, 47 percent, 13 percent and 16 percent. A comparison of these shares at two points of time reveals that the relative shares of land, labour and fertilizer have risen by about 5 percent, 7 percent

TABLE-3

Relative Factor Shares in Indian Agriculture for Periods, 1961 and 1971

Period	*Land*	*Labour*	*Capital*	*Fertilizer*	*Sum of Factor shares*
1961	0.1917	0.3939	0.2760	0.1384	1.0000
1971	0.2450	0.4660	0.1260	0.1630	1.0000

and 2 percent, whereas the relative share of capital has declined by 15 percent. It is, however, difficult to say how much decline in the relative share of capital has been due to the under-estimate of capital input. But the fact remains that the relative share of capital has declined overtime. Since the technology embedded in the green revolution has been generally of biological-chemical nature (depending upon high-yielding seed and chemical fertilizers) which increases the use of labour and adds to the productivity of land, it is not surprising that the relative shares of land, labour and fertilizer (which is also supposed to catch the effect of high-yielding seed) have risen overtime.

From the above analysis, it may be inferred that the relative shares of land, labour and fertilizer appear to have risen in 1971 over 1961, whereas the relative share of capital seems to have declined.

Wage Share in Organised Manufacturing Industries : 1946-1965

M. M. Dadi*

Recent literature on income distribution widely discusses the constancy of income share accruing to labour class.[1] Economists today, according to Heidensohn[2], seem reluctant to see the constancy of wage-share destroyed, in spite of the evidences available against the hypothesis. The alleged stability of labour's share, he points out, got momentum because of the main interest in refutation of the 'immiserization of the proletariat' hypothesis propounded by Marx.

In the context of the constancy of labour's share an important question that arises is: Does it mean that the course of economic development has no impact on the distribution of income ?

The present paper, attempts (i) to examine the constancy hypothesis of labour's share in organised manufacturing industries in India, for the period 1946-1965 and 1953-65; (ii) to answer the above question considering the changes in industrial structure associated with the growth of the economy over 1953-1965 (thirteen years of plans), the period for which the required data for the factories employing 50 or more workers (subject to certain adjustment[3]) are available. The basic data have been derived from the Census of Indian Manufactures (CMI) and the Annual Survey of Industries (ASI). Out of the total of 29 industries covered by the

*The author is highly indebted to Professor V. N. Kothari of the M. S. University of Baroda for his invaluable help and guidance. He also wishes to acknowledge the comments received from Dr. S. R. Hashim, of the M. S. University of Baroda.

1. See, for example, Michael Kalecki, Essays in the Theory of Economic Fluctuation, (London: Allen & Unwin, 1939); J. M. Keynes, "Relative Movements in Real Wages and Output" *Economic Journal,* March, 1939; R. M. Solow, "A Skeptical Note on the Constancy of Relative Shares", *American Economic Review,* Sept. 1958 ; E. H. Phelps Brown and P. E. Hart, "The Share of Wages in National Income", *Economic Journal,* June, 1952; E. H. Phelps Brown, Pay and Profits (New York: Augustus M. Kelley, 1968).
2. K. Heidensohn: "Labour's Share in National Income: A Constant?" The Manchester School of Economic and Social Studies, Dec. 1969.
3. C.f : M. M. Dadi: Income Shares of Factory Labour in India Doctoral dissertation, M. S. University of Baroda, Oct. 1971. See also, M. M. Dadi and S. R. Hashim: "An Adjusted Capital Series for Indian manufacturing: 1946-1964", Anvesak, Dec. 1971, Vol. 1, No. 2.

CMI, the last industry namely, General Engineering and Electrical Engineering has been omitted due to difficulties of comparability between the two sources.

II

The different terms and concepts used in the study are as follows :

The concept of relative share accruing to labour class in manufacturing can be interpreted in two different ways :

(i) share in value added received by workers who are directly employed in the production process; (ii) share in value added received by workers and salary earners (which includes the supervisory and managerial staff), that is, total employee compensation, including the money benefits. The category of workers, thus excludes persons holding positions of supervision or management or employed in a confidential position. Value added by manufacture represents the part of the value of the products which is created in the factory and is computed by deducting from the gross ex-factory value of output, the gross value of input.

One might choose labour's share either with reference to share received by workers in direct production or share received by total employees including supervisory and managerial staff. One may, in the latter case divide the income originating (total value added) into wages and salaries (employee compensation) as one part and rest of the income (property income) as the other part. However, there is quite a substance in the view that the payments to managerial and directoral staff do not represent pure wages: "A part of profits would no doubt then be included in labour's share of income. Salaries might be classified separately for clerical and non-supervisory employees were the data available".[4] Since the data on wages to workers and compensation to total employees are separately available, in what follows, the relative shares of both, workers and total employees, are examined separately.

III

Table—1 presents workers' share and total employee share in value added over the period 1946-65. The yearly movements of the two series are more or less similar to each other: when we examine the workers' share over the

4. J. T. Dunlop: Wage Determination Under Trade Unions, (New York: Augustus M. Kelley, 1950), p. 153.

period, we find that the share has increased by about 5.5 percent points between 1946 and 1965, whereas in the case of employee share it has increased by about 8.7 percent points during the same period. However, when we examine the period of 1953-65 (the period of planned effort), we find that there has been a fall both in worker share and employee share.[5] The fall being more in the case of workers' share as compared to that of employee share.

To examine the proposition of constancy or otherwise of labour's shares and employee share more objectively, the trend coefficients are calculated. The following regressions have been run for the period 1946-65 and 1953-65:

$$Y = \alpha + Bt + u$$
$$X = a + bt + u$$

Where Y = wage share in value added (wage bill as a percentage of value added)

t = time (year)

X = employee share (employee compensation as a percentage of value added)

u = error term.

The results of the fitted regressions are :

1946-65 (i) Labour's Share : $Y = 43.164 - 0.057t$ (0.139)

(ii) Employee Share : $X = 55.601 + 0.101t$ (0.156)

1953-65 (i) Labour's Share : $Y = 45.773 - 0.456t$ (0.141)

(ii) Employee Share : $X = 57.326 - 0.068t$ (0.143)

5. In the case of the time series data for 1946-65, the problem of comparability arises because of differences in coverage and classification of industries in the two sources, namely, census of Indian Manufactures (1946-58) and Annual Survey of Industries (1959-65). Fortunately the former source gives information by different size-groups for the period 1953 and onwards, and hence at par with the latter source giving data for the factories employing more than 50 workers. Moreover, it is 1953 onwards that the planned effort towards growth has been experienced. Thus, on both these accounts the period of 1953-65 is considered for the detailed analysis.

The figures in brackets indicate the standard errors of the regression coefficients. It can be seen that the coefficients bear negative signs for labour's share during 1946-65 and both labour's share and employee share for the period 1953-65. However it is 1953-65 Labour's Share coefficient which is found to be significant.

TABLE—1

Worker Share and Employee Share in Value

Year	*Worker Share (%)*	*Employee Share (%)*
1946	35.11	46.82
1947	41.25	55.01
1948	38.89	51.24
1949	49.43	64.43
1950	44.37	59.82
1951	40.70	53.58
1952	48.00	63.28
1953	49.39	60.63
1954	45.96	57.83
1955	42.05	54.77
1956	41.37	54.80
1957	44.00	53.70
1958	41.02	55.61
1959	40.30	54.52
1960	42.20	57.28
1961	41.33	55.33
1962	43.04	58.56
1963	41.44	57.01
1964	40.38	58.43
1965	40.65	55.54

Source: Calculated on the basis of data provided in Census of Indian Manufacturing and Annual Survey of Industries.

6. It is interesting to note that in the case of U.S. Manufacturing, there has been a downward trend in labour's share over the period 1949-64; D. N. Gujarati, "Wage Share in U.S. Manufacturing, 1949-64", Industrial and Labour Relations Review, October 1969.

Thus, there appears to be a clear cut tendency for the overall wage share to decline over the period of planned effort. So far as the values of the trend coefficients are concerned, one should not be surprised to find them very low in the above results. After all, what we are concerned with is the ratio of wages to value added, and hence it must contain certain 'inertia' in it. Both numerator and denominator of the ratio are dependent of each other; with every change in wage bill, both get affected simultaneously (although not by the same magnitude).

The fall in the labour's share over the period might be a result of rise in profit margins of the firms caused by say, a rise in the selling prices of their products or an introduction of capital-intensive techniques in the production methods. The rise in money wages, as pointed out by Phelps Brown,[7] will not increase the labour's share unless the firms are prevented from raising their selling prices so as to protect their profit margins. Looking to the fact that the profit margins in selling prices are generally not compressible in practice, what appears to have happened in the case of Indian industries, is that the firms must have succeeded in raising their profit margins either through increase in selling prices in relation to wage cost or through increase in labour productivity relative to wage rate through increase in capital/labour ratio accompanied by an improvement in the technique of production.

Since the overall labour's share is the outcome of changes in incustry-mix and changes in labour shares in individual industries, the question naturally arises as to what part of the observed labour's share really owes to changes in industry labour's shares—in other words what has been the relative role played by industry-mix in making the labour's share decline over time.

IV

The important aspect in the context of the observed trend in labour's share as noted above, is the changes in industrial structure associated with the growth of the economy. Dunlop, while analysing the labour's share during the depression, made an interesting observation that "those industries which lost weight most heavily in depressions showed the most marked increase in the rate of participation in the same period...... The decreased importance in depression of industries whose rate of participation increases most rapidly tends to make for a relatively stable share".[8]

7. Phelps Brown : op. cit, p. 21.
8. J. T. Dunlop : Wage Determination Under Trade Union. (New York: Augustus M Kelley, 1950), p. 165.

The findings are quite interesting and suggestive of the overall wage share variations to be explained in terms of changes in industry wage share (participation rate) and changes in the relative importance of the industry over time. Since the overall wage share is a weighted average of individual wage share (weights being the industry share in total value added), the growth of industries will always be accompanied by the distributional shifts in their relative importance and hence influence the overall wage share. "When than one enterprise is combined, the share of the aggregate income going to more labour will depend upon both the share in each firm and the relative amounts of incomes generated by each concern."[9] It was this structural factor which inspired Solow to raise some doubts against the constancy of labour's share. The 'constancy', he argued, may not be a 'miracle' (Keynes), but rather an 'optical illusion'.[10]

In what follows an attempt is made to isolate and quantify the sources of overall wage (labour's) share changes attributable to changes in industry wage share (participation rate) and changes in relative importance of the industry (share of the industry in total value added). Since overall labour's share in value added is $\sum_{i=1}^{n}(P_iW_i)$, where P_i is the labour's share in i^{th} industry (participation rate) and W_i is the weight or share of the i^{th} industry in total value added,

$$\Sigma\,\Delta\,(P_iW_i) = \Sigma(P_i\Delta W_i + W_i\Delta P_i + \Delta W_i\Delta P_i).$$

This implies that the variations in labour's share are split into changes in industry weights and changes in industry participation rates. This equation, therefore, enables us to find out the extent to which the variations in overall wage share are attributable to changes in relative importance of industries and to changes in participation rates in different industries. $P_i\Delta W_i$ indicates that the participation rate is held constant while the weight is allowed to vary; and $W_i\Delta P_i$ indicates that weight is held constant and participation rate is allowed to vary. $(\Delta W_i\Delta P_i)$ is an 'unexplained residual'; it measures the combined influence of both weight and participation rate shifts. This term can be eliminated by using a system of 'cross weights'; ΔP_i must be weighted by W_i in the initial year and then by W_i in the terminal year, these two weighted changes in Pi are then averaged to get the term $(W_i\Delta P_i)$. In the same way the cross weights are applied to get the term $(P_i\Delta W_i)$.

9. Ibid, p. 164.

10. R. M. Solow : Op. cit.

Table—2 gives the breakdown of changes in labour's share due to weight shifts and due to changes in industry wage share. The changes are calculated for each year with reference to 1953. The shifts in industry weights and changes in industry wage share, as it can be seen, have played their roles in the same direction so as to make the wage share fall in each year relative to 1953. In other words, the fall in overall wage share caused by fall in individual industry wage shares, has been further aggravated by the decline in weights of the industries. Had the industrial composition, for example, been the same as in 1953, there would have been only 1.63 percent decline in wage share in 1965 as compared to 1953. Out of the fall of 8.74 percent points in wage share in 1965, 7.11 percent points is purely because of fall in the relative importance of the industries.

TABLE—2

Breakdown of Changes in Wage-Share (Changes are in Percentage Points)

Year	*Observed wage share %*	*Change in the observed share over 1953*	*Change due to shifts in industry weights* (P△W)	*Change due to wage share shifts within industry* (W△P)	*Wage share net of shifts in industry weights*
1	2	3	4	5	6
1953	49.39	—	—	—	49.39
1954	45.96	—3.43	—0.88	—2.55	46.84
1955	42.05	—7.34	—1.22	—6.12	43.27
1956	41.73	—7.66	—1.69	—5.97	43.42
1957	44.00	—5.39	—3.51	—1.88	47.51
1958	41.02	—8.37	—4.08	—4.29	45.10
1959	40.30	—9.09	—3.84	—5.25	44.14
1960	42.20	—7.19	—3.00	—4.19	45.20
1961	41.33	—8.06	—3.38	—4.68	44.71
1962	43.04	—6.35	—3.44	—2.91	46.48
1963	41.44	—7.95	—4.57	—3.38	46.01
1964	40.38	—9.01	—5.44	—3.57	45.82
1965	40.65	—8.74	—7.11	—1.63	47.67

Source : Same as Table 1.

The average fall in overall wage share during the period is 7.38 percent points. This fall is attributed to weight shifting of industries by 3.51 percent points and to industry wage share changes by 3.87 percent points (both figures being averages). In the absence of any weight shifts, thus, the fall in average wage share would be of the order of only 3.87 percent points instead of the observed fall of 7.38 percent points.

The overall wage share series corrected for the shifts in industry weights is presented in Column 6 of Table 2. It can be seen that the fall in wage share series net of weight shifts in industries is very much slowed down, has remained almost constant, compared to the original observed wage share series (shown in Column 2 of the Table). The range of variations in the wage share has now declined to 6.12 percent points in the new series as compared to 9.09 percent points in the original observed series.

The wage-share series corrected for the shifts in industry weights, when regressed over time gives the value of the trend coefficient as —0.0017 (with standard error as 0.1371). Thus, the value of the trend coefficient has been both low and statistically insignificant. It is the changes in relative importance of industries which seem to have influenced the declining overall wage share during the period.

V

We may conclude that the proportion of income accruing to labour class, in fact, reflects the relative importance of labour. Since it represents the proportion of wage cost in total cost, any tendency in the ratio would reveal whether the importance of labour is increasing or decreasing over a period of time. It is in fact, not the wage rate, but the wage bill as a proportion of total cost which is a suitable yardstick to measure the changing cost of an industry.[11] When we examine the trends for 1953-65, we find a clearcut tendency for the overall labour share to decline over the period.

There are two forces which operate upon the overall wage share : (a) inter-industry force or the change in relative importance (weights) of different industries, and (b) intra-industry force which operates in a particular industry through changes in the participation rate of the industry. The former, inter-industry force, is nothing but industry-mix or structural shifts brought about, say, by emphasis on heavy and capital using industries particularly in the

11. c.f. : Paul E. Sultan: "Unionism and wage-income ratios: 1929-51", Review of Economics and Statistics, Feb. 1954, p. 67.

initial stages of economic development. However, since the capital intensive industries are generally low wage share industries and labour-intensive industries are high wage share industry, the increase in relative importance of capital intensive (low wage share) industries associated with fall in relative importance of high wage share industries would bring about a fall in overall wage share and thereby make the distribution unfavourable to labour class, in spite of the fact that the industry wage shares (participation rates) do not change.

When we isolate the effects of shifts in industry-mix on the overall wage share, what we find is the change in industry-mix has been largely responsible for the fall in the overall wage share during the period. The trend coefficient of the observed wage share series which was found to be significant at —0.456 is now substantially reduced to an insignificant figure of —0.002 for the series net of weight shifting.

Determinants of Workers' Money Earnings and Incomes Policy

G.K. Suri C.M. Sastry

Incomes policy for industrial workers in a developing economy characterised by low wages and mass poverty could have two planks namely, (a) an improvement in the standard of living of the workers and (b) a steady increase in employment which could assure the minimum income to the vulnerable sections of industrial workers, namely, the unemployed. If this premise is accepted, then several questions arise :

What has been the role of productivity in explaining changes in money wages ? To what extent do other factors such as rising cost of living, technological progress, volume of employment and degree of unionism, explain changes in money wages. What has been the relationship between money wages and the volume of employment ? Have rising money wages brought about an increase in real wages which is a prerequisite for an improvement in the standard of living of the industrial workers? In this paper we have addressed ourselves to these questions. More specifically, we have made an attempt at explaining changes in the money earnings of the industrial workers in terms of selected economic, institutional and technological factors, which are thought for *a priori* reasons to be influential. We have also examined whether the increase in money earnings has led to an increase in real earnings of the workers. Finally, policy implications of the findings have been indicated.

The Variables

The variables selected for quantitative analysis are :

(1) Money Earnings Index :

This includes all remuneration capable of being expressed in terms of money paid to workers, more or less regularly, for each pay-period according to the terms of the contract of employment. This, however, excludes money value of benefits received by the worker. Factory expenses in the shape of employer's contribution to the provident fund, pension, gratuity or similar other charges have also been excluded for the purpose of our analysis.

(2) Productivity Index :

The term productivity is understood and defined differently. The operational definition depends upon the use to which it is put. For the purpose of our analysis, we have defined productivity as net value added by manufacturing per manhour worked at current prices.

This measure should reflect worker's contribution to productivity and changes in the prices of finished products. Value added is the surplus generated from production after meeting the 'costs' of production. It is generally conceded that workers are entitled to a share of gains in productivity that result from their effort. Also, money wages move in sympathy with changes in the prices of the finished products. It is, therefore, legitimate to assume *a priori* a positive contribution from this index in the explanation of the changes in the money earnings of the workers.

(3) Cost of Living Index :

The system which has generally prevailed in India for the adjustment of wages against fluctuations in the value of money is that of paying dearness allowance over and above the basic wage. The principle behind this payment, therefore, is one of a correction adopted to neutralize the fall in the value of money, so as to keep the worker's real wages constant at a given level. In this context, we expect a positive contribution from cost of living in the explanation of the changes in the money earnings of workers.

(4) Capital-Output Ratio :

This variable can be taken to represent the growth of technology in the industry. This ratio may give some tentative idea about the value of fixed capital requirement per unit of output. If capital-output ratio remains constant, wage increases proportionate to labour productivity would imply a constant rate of return. If, however, capital-output ratio increases, wage increase proportionate to productivity cannot be allowed without depressing the rate of return. If, on the other hand, the ratio of capital-output declines, it may be possible to allow more than proportionate increase in wages consistent with stable or even rising rate of return. We would expect that over the period of analysis, technological progress would result in higher output per unit of capital. This would increase money wages without effecting adversely the rate of return on investment.

Employment Index :

Ordinarily, an inverse relationship between growth of employment and money earnings of the workers is envisaged. In the context of a developing country such as ours, this relationship is somewhat uncertain. Therefore, we do not make any *a priori* assumption.

Unionism :

Unionization, per se, strengthens workers and aids them in striking more favourable wage deals. Higher levels of unionization help workers in securing wage increases. However, the growth in unionism itself might not have any discernible impact on wage increases beyond a point. Union's fight for wage increase might have adverse effects such as retrenchment, closures, lock-outs, etc. Also, an increase in the degree of unionism might be accompanied by rivalry and factionalism, thus neutralising the effect which a higher degree of unionism might have. Therefore, we do not set out *a priori* any relationship between the degree of unionism and money earnings.

The Analysis

In this paper, we have made an attempt at isolating and quantifying the influence of these variables. Thus we have attempted to do by simultaneously interpreting the results of intercorrelation, partial correlation (zero and higher order), and step by step regression analysis on the transformed data. The regression function of the following form has been used :

$$y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5$$

where,

a = constant

y = index of money earnings of the industrial workers

x_1 = cost of living index

x_2 = index of productivity at current prices

x_3 = index of capital-output ratio

x_4 = employment index

x_5 = index of degree of unionism

The details regarding these indices appear in Table 1.

Table 1

Index numbers of money earnings of workers, productivity, capital-output ratio and employment in respect of the aggregate industries during 1959—69 (Base 1959=100)

Year	*Index of money wages (1959=100) (In Rs.)*	*Cost of living index (1959=100)*	*Index of real wages 1959=100 (In Rs.)*	*Index of producti-vity at current prices (1959=100)*	*Index of producti-vity at constant prices (1959=100)*	*Index of capital-output ratio at current prices (1959=100)*	*Index of employ-ment (1959=100)*	*Index of the degree of unionism (1959=100)*
1959	100	100	100	100	100	100	100	100
1960	105	102	103	105	98	94	103	107
1961	115	106	108	115	106	92	109	97
1962	118	109	108	117	103	128	115	95
1963	124	112	111	131	111	133	121	93
1964	126	128	98	137	105	155	130	88
1965	139	140	99	151	107	171	133	89
1966	159	154	103	171	108	178	131	93
1967	176	175	101	179	99	183	130	96
1968	185	181	102	191	106	186	130	98
1969	194	179	108	221	120	174	1[illegible]5	97

Explanations :

1. Wages to workers include all remuneration capable of being expressed in terms of money paid to workers more or less regularly, for each pay-period and in terms of the contract of employment. However, money value of benefits and factory expenses in the shape of employer's contribution to the P. F., pension, gratuity, or similar other charges are however excluded.
2. Index number of productivity are constructed from the net value added by manufacture worked per manhour and related to the base year 1959.
3. Index numbers of productivity at constant prices are constructed from the net value added by manufacture deflated for constant prices by reference to the relative index of the wholesale prices of the manufactured articles and related to the base year 1959.
4. Index numbers of capital-output ratio are constructed from the ratio of fixed capital per unit of output and related to the base year 1959.
5. Index numbers of the degree of unionism are constructed by the respective indices of the membership of the unions and total employment.
6. Employment index is obtained by relating the employment figures of each year to the base year.

Sources :

(1) Annual Survey of Industries 1959-66, (2) ASI (general review) 1967-69, (3) Indian Labour Statistics 1969-1973, & (4) Statistical Abstract of India 1967-69

Regression Analysis :

Multiple regression analysis was performed to examine the relative explaining power of the selected variables. In order to reduce the effect of multicollinearity, we took several steps. First, the trend was eliminated from the data. Second, we performed stepwise regression analysis. This approach involved adding one independent variable at a time and generating a series of intermediate regression equations. The first independent variable considered was the one which had the highest simple correlation with the dependent variable. This initial two variable regression was completed and the partial correlations between the dependent and all the other independent variables were computed. The independent variable among these which had the highest partial correlation, was then included at the second step. A new regression equation involving two independent variables was derived, the partial correlations were computed for the remaining variables with the two held constant, and the selection of the next variable to be included was made on the basis of these values. At each step, the adjusted partial regression coefficients and multiple correlation coefficients were also obtained. The stepwise procedure continued until all the specified independent variables were included. Third, Beta values of the significant regression coefficients with the least standard error were computed.

The Data

Indices of money earnings, cost of living, value added by manufacture, capital-output ratio and the volume of employment were computed for the aggregate industries with 1959 as the base year from the data reported in the Annual Survey of Industries. The number of manhours worked in the year 1967 was not available. Therefore, the figure was inter-polated by using Langrange's formula.

The data pertaining to the membership of the union have been derived from the Indian Labour Statistics. There were gaps in the reported data. The gaps were filled by inter-polation. To obtain the index of the growth of unionism of workers, corresponding figures for the number of workers were not available in the Indian Labour Statistics. Therefore, employment figures were taken from the Annual Survey of Industries.

We might notice here some of the limitations of the data :

(1) The coverage of the Annual Survey of Industries upto 1966 was wider

than that for the years 1967, 1968 and 1969. Upto 1966 major industries were distinguished individually. However, for the years 1967-69, data were available for only major groups of industries. Therefore, the reported data did not permit analysis at the individual industries level. This limited the scope of the paper to the analysis at the aggregate industries level.

(2) The industrial units reporting data differ from year to year. Wages paid in each industry group—aggregate as well as per manhour-may show wide fluctuations especially if the factories included/excluded in any year happen to be comparatively large units in the respective industry groups. This might affect the inter-temporal comparability of the aggregate even for the same industry.

(3) Errors in the orginal data for any year relating to prices, production, labour input, etc. can effect the results for that year. The reporting units may not be giving accurate figures and/or they may be following divergent accounting practices.

For the purpose of this analysis the following precautions were taken :

1. In order to make the required magnitudes comparable for the whole period 1959 to 1969, only data on the aggregate industries have been used for computations. Since uniformity in reporting the data was lacking, we could not attempt an analysis of the individuals industries.

2. As regards irregular and inaccurate reporting, there is very little that data users can do. We can only hope that while figures of particular units or industries for a particular year may be inaccurate, t is likely that the major directions of change over the whole period covered will be correctly indicated by the data.

In view of the limitations in this study, we have tried to explore significant relationships and the directions of change. The conclusions have to be interpreted within the framework of these limitations.

The Findings

Intercorrelation Analysis :

The correlation matrix between variables without eliminating trend revealed that excepting the degree of unionism (x_5), all other independent variables were inter-correlated at 1 percent probability level. However, consumer price index (x_1), index of value added by manufacture (x_2), capital-output ratio index (x_3), and index of employment (x_4) showed statistically significant positive correllation with money earnings (y) which is the dependent variable. On account of multi-collinearity, we transformed the data by eliminating the trend from the series.

On eliminating the trend from the series, the correlation coefficient between money earnings and cost of living and productivity though reduced were found significant at 1 percent probability level. But the correlation between money earnings and technology and employment were negative. Only the correlation between money earnings and employment were found to be statistically significant at one percent probability level.

Partial Correlations Analysis :

When no allowance had been made for the effect of other variables, productivity (x_2) ranked first and employment (x_4) ranked last in their correlation with the dependent variable money earnings (y). When adjustment was made for the other variables say for x_2, x_3, x_4, x_5 respectively, the partial correlation between money earnings (y) and cost of living (x_1) and that between money earnings and productivity was found to be significant in all the cases. When adjustments were made for all the variables, the correlation between money earnings productivity ranked first and the correlation between money earnings and cost of living ranked second. But both were not statistically significant.

In brief, the partial correlation analysis led to the following conclusions :

1. There was significant positive correlation between money earnings and productivity, the latter having been defined as value added at current prices.

2. The correlation between money earnings and cost of living was found significant.

3. There was significant negative correlation between money earnings and employment.

4. Between technology and money earnings there was negative correlation.

Table 2

Zero Order Matrix of Inter Correlations for Aggregate Industries

(After eliminating trend)

	Y	X_1	X_2	X_3	X_4	X^9
Money earnings Y	1.00000	.78195*	.79264*	—.37666	.92597*	.81191*
Consumer price index X_1		1.00000	.60718**	.14705	—.65918**	.64793**
Index of value added by manufacture X_2			1.00000	—.30277	—.66437**	.81240*
Index of capital output ratio X_3				1.00000	.51655	—.41783
Index of emoloyment X_4					1.00000	—.76208
Degree of unionism X_5						1.00000

* Significant at 1% level of probability.

** Significant at 5% level of probability.

*** Significant at 10% level of probability.

5. The correlation between money earnings (y) and cost of living (x_1) keeping the other variables constant at a time, were found to have significant positive correlation. Even after eliminating the trend the correlation between money earnings (y) and cost of living was very high. So also was the case with productivity and money earnings.

6. Higher order partial correlation coefficients between money earnings and cost of living and also between money earnings and productivity showed positive correlation even when the effect of other variables was kept constant. But this correlation was not statistically significant.

7. When the effect of technology was held constant, the partial correlation between money earnings and cost of living and money earnings and productivity became highly significant.

Table 3

Summary table of first order and higher order coefficient of correlation for the selected variables for the aggregate industries

$r_{YX_1.X_2}$	$r_{YX_1.X_3}$	$r_{YX_1.X_4}$	$r_{YX_1.X_5}$	$r_{YX_2.X_1}$	$r_{YX_2.X_1}$	$r_{YX_2.X_4}$	$r_{YX_2.X_5}$	$r_{YX_1.X_2X_3X_4X_5}$	$r_{YX_1.X_2X_3X_4X_5}$	$r_{YX_3.X_1X_4X_4X_5}$	$r_{YX_4.XX_1X_3X_5}$	$r_{YX_5.X_1X_2X_3X_4}$
.7048**	.9900*	.6052**	.5770	.6424	.7681	.6300	.3880	.4796	.5188	.1735	.6931	.0867

Significant at 1% probability level

Significant at 5% probability level

Significant at 10% probability level

Variables : Y = Total money earnings index

X_1 = Consumer prices index

X_2 = Productivity index

X_3 = Capital output ratio index

X_4 = Employment index

X_5 = Index of unionism

tion R^2 in all the equations. All the variables had the hypothesized signs in all equations in which they were significant.

4. By evaluating the significant regression coefficients, with least standard errors, in terms of their 'beta values', one may draw more decisive inferences from the estimating equations. In terms of the beta weights, productivity and cost of living made the largest contribution in the explanation of the variations in money earnings.

Conclusions and Implications :

The foregoing analyses and the reported findings led to the following broad conclusions :

1. The productivity index, as defined in this paper, has relatively higher importance in explaining changes in money earnings.

2. The cost of living index comes next in the order of importance and has a positive influence on money earnings movements.

3. These two variables together explain most of the variations in the money earnings.

4. There is no conclusive evidence to show any largest single contribution by either of the two variables namely cost of living (x_1) and productivity (x_2).

5. There exists an inverse relationship between money earnings index (y) and employment index (x_4).

6. There is no positive contribution of degree of unionism and capital-output ratio on changes in money earnings.

These conclusions have to be viewed in the light of the limitations listed earlier. As mentioned earlier, we took several steps to treat the data for multi-collinearity. The effect has not, however, been completely eliminated. The results could be further improved by using more sophisticated econometric methods, which take into account auto-correlation and hetroscedesticity. We have, however, not attempted such an analysis in this paper. These limitations could effect the degree of precision but not the basic nature of the conclusions.

Table 5

Summary table for the Beta values of the significant regression coefficients with the least standard error*

B_1	B_2	B_3	B_4	B_5
.2291	.2482	—.0690	—.92597	—.0449

B_1=Beta coefficient of the variables X_1

B_2=Beta coefficient of the variables X_2

B_3=Beta coefficient of the variable X_3

B_4=Beta coefficient of the variable X_4

B_5=Beta coefficient of the variable X_5

*For details on computation, see : King, Leslie J. *Statistical Analysis of Geography*, Prantice Hall, Inc., 1973, pp. 140-141.

The emerging conclusions along with the data on movements in money wages, real wages and productivity (at constant prices) reported in Table 1 and depicted in Figure 1 and 2 can provide the basis for some inferences. Table 1 indicates that money wages have gone up steadily since 1959. Also, we have seen that changes in money wages are largely understood and explained in terms of changes in the cost of living index, that is, prices of consumer goods and value added at current prices that is, prices of industrial output. Again, from Figure 1, it appears that money wages have kept pace with the cost of living index but have lagged behind the productivity index. In real terms, we find that from 1959 to 1963, real wages kept pace with productivity but lagged behind it since 1963. (See Figure 2). If real wages are to improve significantly, productivity (at constant prices) will need to go up more significantly than has been the case hitherto, especially since 1963. Also, an increase in money wages can bring about an increase in real wages only if prices of consumer goods are stabilised within reasonable limits to be justified by economic growth.