LIBERALISM AND LESS DEVELOPED COUNTRIES

Essays in Memory of

PROFESSOR BELLICOTH RAGHUNATH SHENOY

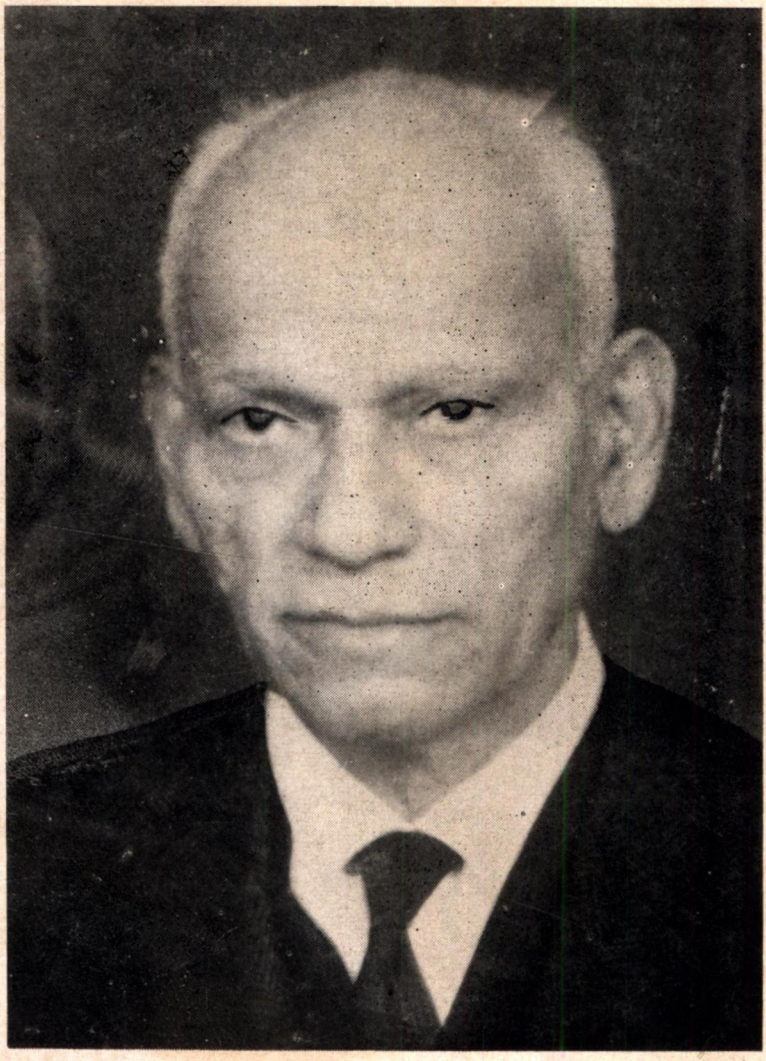
Edited by

Mahesh P. Bhatt

Mukund S. Trivedi

GUJARAT UNIVERSITY

AHMEDABAD-380 009



LATE PROF. B. R. SHENOY

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PUBLISHER'S NOTE

It gives us great pleasure, indeed, in publishing this collection of essays entitled "Liberalism and Less Developed Countries" in memory of late Professor B. R. Shenoy, the first Director of the University School of Social Sciences and a well-known Economist in the country and abroad.

While I wish to clarify that the inferences drawn and views expressed in the Essays are entirely of the respective writers, we take this opportunity to thank the eminent economists who have contributed to this collection of Essays. We are also thankful to Prof. M. P. Bhatt, Professor of Economics and the Director, University School of Social Sciences, for editing this collection.

We hope this collection of the essays will prove of genuine help to the scholars and students of Economics as well as those who have interest in the subject of Liberalism in the context of Third World countries.

Ahmedabad – 380 009
Date : 6-11-82.

B. M. Patel
Registrar

PREFACE

Essays included in the present volume are by way of token tribute to the memory of respected Professor Bellicoth Raghunath Shenoy from his friends and admirers in the profession. The idea of publishing a collection of essays in his honour originated much earlier. After his unexpected sad demise it was thought proper by his friends and students at Ahmedabad to publish a collection of essays in his memory. The time lag between inviting distinguished contributors to send their contribution and the publication after receipts of their essays is considerable and the editors would like to express regret for this delay which was partly unavoidable. Many factors including such suitable publishing arrangements as well as the involvement of one of the editors in several assignments in the country and abroad are responsible for it.

It may not be improper to list here several efforts by us to commemorate the memory of distinguished Prof. Shenoy. Friends and admirers of Prof. Shenoy have formed "Professor B. R. Shenoy's Memorial Committee" and collected funds for this purpose. A Gold Medal was instituted from this fund at the Gujarat University to be awarded annually to the student getting highest marks in M. A. Economics. The Committee has been exploring the possibilities of initiating Prof. B. R. Shenoy's memorial lecture to be delivered at Ahmedabad by some distinguished economist of India or abroad. We take this opportunity to invite all friends and admirers of Prof. Shenoy to send suggestions regarding suitable forms and ways and means through which the memory of Prof. Shenoy can be commemorated on permanent basis.

Finally we take this opportunity to thank all contributors for the readiness and the enthusiasm with which they sent their distinguished contributions. Their spontaneity also reveals their sense of affection towards Late Prof. Shenoy. We of course owe to them word of apology for delay in the publication of their respective essays. We express our thanks to Gujarat University for accommodating the publication of present volume in their publication programme. We received help and cooperation from our colleague Shri V. P. Bharadwaj for which we are thankful to him.

Ahmedabad

Mahesh P. Bhatt
Mukund Trivedi

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BELLICOTH RAGHUNATH JANARDAN SHENOY

(3rd June 1905 - 8th February 1978)

— A Biographical Sketch

By

Mahesh P. Bhatt

Mukund S. Trivedi

Nearly for two and a half decades, Professor B. R. Shenoy dominated the discussion on Indian Economic Policy and Planning. Through the vast number of articles he contributed to professional and popular journals, he attained a world-wide recognition as a powerful dissenter to what Professor Bauer has called "the spurious consensus of development economics".

He was born on 3rd June 1905 at Bellicoth, a small village near the beautiful city of Mangalore situated on the South-coast of India. In his school, he was considered to be rather shy but bright and strong-willed boy possessing an unusual degree of self-control and discipline. In 1920, he passed his high school examination, with excellent grades. In those days, a career in the Indian Civil Service was regarded as something which all the bright young students would eventually strive for. Obviously his parents also wanted him to go in for this career. However, the young Shenoy could not keep himself away from the freedom movement which was then in its full-swing. He left his studies, plunged in the movement actively and courted imprisonment in 1923. He was placed in the Nagpur Central Jail, where, by a happy coincidence, Pandit Madan Mohan Malaviya-one of the principal architects of Modern Indian Renaissance and Nationalism-was also lodged. As Panditji was in weak health, young Shenoy

gladly took upon himself the task of helping and assisting Panditji in his daily chores. Impressed by his sharp intellect, patriotism, and religious upbringing, Panditji took him under his wings, and persuaded him to join the Benaras Hindu University as a student. His close association with Panditji at a very young age of his life left a permanent and lasting impression on Professor Shenoy's personality. Some of the distinct qualities of his character–his life–long interest in philosophy and religion, his leonine spirit, his unfaltering courage in defending the intellectual positions, his vedantic mind–had led him to espouse–for which his contemporaries subsequently came to respect him–can be traced back to his early association with Pandit Malaviyaji. He completed his studies at the Benaras Hindu University in 1929, passing his M. A. Examination with first rank in the first division. His teacher Professor Gurumukh Nihal Singh, who had been taking keen interest in his career suggested him to join the London School of Economics (LSE) for further studies, and gladly made necessary arrangements for his stay at U.K. He left India in the same year and registered himself as an M.Sc. student at LSE. The academic atmosphere of LSE in those days was charged with intense intellectual activity and excitement. Prof. Hayek had just arrived at the LSE and was presenting the Austrian Theory of Capital and business cycles to the English speaking world for the first time. Simultaneously, an acute controversy and debate had started around Keynes's "Treatise on Money". This was both a challenge and a promise for Prof. Shenoy. As a student at B.H.U. he had already developed a strong fascination for pure theory and had acquired a good deal of intellectual capacity for abstract analysis, and theorising. Consequently, instead of working on some applied problem–which was the usual practice for most of the Indian scholars and students of that period–he chose to concentrate on the study of monetary and capital theory. He deeply immersed himself in the study of these subjects and published his first paper, "An Equation for the Price–Level of New Investment Goods", in **Quarterly Journal of Economics** (1931). The paper arose out of his dissatisfaction with Keynes's treatment of the price–level of new investment goods in the "Fundamental Equations" of Treatise. In Professor Shenoy's view Keynes's discussion merely showed under what

conditions the Banking system may prevent a fall in the price-level of investment goods, but it did not tackle the more fundamental issue of how the price-level of new investment goods itself gets determined. Adhering to the terminological and definitional frame of the Treatise, he supplemented its system of Fundamental Equations by an additional equation, and attempted to show how the system can yield a determinate solution for the price-level of new investment goods. Subsequently, he published another paper "Interdependence of Price Levels," again in Quarterly Journal of Economics (1933), wherein he presented further important results appertaining to this issue.

These two papers were received as important contributions to the field and established him as a promising young monetary economist within the profession. To the best of our knowledge, he was the first Indian economist, whose theoretical papers were published in a world-class Journal.

During the same period, Prof. Shenoy also acquired considerable interest in the wider problems of social philosophy and methodology. In this connection, his ideas came to be strongly influenced by Hayekian liberalism and throughout the rest of his life, as an economist as well as a social philsopher and critic, he remained a fiercely uncompromising liberal.

After receiving his M. Sc. degree in 1932 from the University of London, Prof. Shenoy came back to India and for sometime worked as a Lecturer in Wadia College (Pune) and Gujarat College (Ahmedabad). In 1936, he again left India and joined the Univeristy of Ceylon as a Lecturer in Economics. His stay in Ceylon turned out to be important for him from the professional as well as from the personal point of view. For it was in Ceylon that his marriage took place with Ansuya Kamath, who proved to be an inexhaustible source of inspiration, support and counsel for him throughout his life. On the professional plane also, it was in Ceylon that he got his first direct experience of working in Government and Public bodies. He was appointed as a Member, Board of Comissioners of Currency, in 1940 and also occupied the position of economic adviser to the Department of Commerce and Industry of the Ceylonese Government. His active association with the Board of Currency and Department of

Commerce, enabled him to acquire a considerable knowledge of financial and industrial practices and institutions. The practical experiences he thus acquired sharpened his understanding of economic phenomena and led him to view theoretical analysis in a more meaningful perspective. This is reflected in his first technical monograph – "Ceylon Currency and Banking" – published in 1941. Various subsequent reviews of the book regarded it as an exemplary piece of applied work for its fine blending of institutional details and theoretical analysis.

In 1942, Prof. Shenoy came back to India to become the Principal of L. D. Arts College (Ahmedabad) which at that time was considered to be one of the prestigious colleges of the country. The College was founded by the Ahmedabad Education Society with nationalist spirit and zeal and had an enviable record of having some eminent scholars of the country on its staff list. He stayed with the L. D. Arts College for three years and before he left it to join the Reserve Bank of India in 1945, he published in a small book form, a critique of the celebrated "Bombay Plan".

From 1945 to 1953 – a period of almost a decade – he remained with the Reserve Bank of India; and held various important positions in the Bank. He was the Director of Rural Economics and Director of Monetary Research from 1945 to 1946. For one year (1949–50), he acted as a nominated member of the Board of Directors of the Bombay Bullion Exchange. In 1948, he become the Far Eastern Representative of the International Monetary Fund and subsequently for two years (1951–53), he acted as an alternate Executive Director of the International Monetary Fund and the World Bank.

In terms of intellectual and professional accomplishments, the ten years that he spent with the Reserve Bank of India can be regarded as a very fruitful period of his life. Going by the usual hierarchical rules of the R.B.I. he was not very far away from the Governorship of the Bank. On the other hand, besides a number of technical articles and notes in the R.B.I. Bulletins, he had published in 1948 one of his widely acclaimed books, "The Sterling Assets of the Reserve Bank of India", which he

had completed before he joined the Reserve Bank of India.* Moreover, he pursued his interests in capital theory and contributed two important papers related with the analysis of saving and capital in a monetary economy. In these papers, he gave a lucid and authoritative exposition of Austrian theory of capital and discussed some important related issues.**

In 1954, he left the Reserve Bank of India and joined the Gujarat University, to become the first Director of its newly established School of Social Sciences. Although he was holding a position of substantial status at the R.B.I. he accepted the University invitation because of the attraction for greater academic freedom which the university position promised, and also because of his love for teaching.

The time of his joining the Gujarat University marked the beginning of his life as a lone advocate of liberal economic order and a critic of Indian Planning. By training and by conviction he was an economist of the liberal tradition and quite naturally he found himself in a major disagreement with "mainstream" view of development planning. He was seriously apprehensive of the development strategy adopted in the Second Plan. He considered that the strategy in its heavy reliance on deficit financing for meeting the resource requirements of the contemplated ambitious investment programmes was permanently committing the country to a regime of inflation and controls. In his view, a genuine and long-term committment to the policy of maintaining monetary and price-stability was essential part of a truly growth-oriented strategy. Furthermore, Indian planning in its emphasis on the development of highly capital-intensive goods industries, was imposing on the economy a programme of large-scale transfer of resources from agriculture and other sectors to low-return public sector industries. In fact it was a low-employment strategy,

*Professor Bhabatosh Datta, in his history of Indian economic thought considers this monograph as the "most outstanding work" on the subject of Indian sterling balances. As he says "The first important work on Indian Sterling balances was that of B. R. Shenoy, who presented the problem in its true perspective", B. Datta "Evolution of Economic Thinking in India", see also B. Datta "Indian Economic Thought", Tata Mc-graw Hill Publishing Limited (New-Delhi).

(1) The Classical Theory of Savings" **Indian Journal of Economics (1947) and (2) "Static Equilibrium Theories of Savings", **Indian Economic Review** (1953)

which, in his view, a poor country like India could ill-afford. At a more general level he could not share the methodological predilections of most of the development economists of that time formulating and analysing the development issues in terms of mechanistic growth models, devoid of price-theoretic contents. He considered the process of development as too complex a phenomenon and believed that it can be attained only as a by-product of the economic activities of individuals in the environment of free markets and decentralised choice. In his view, attempts at supplanting the market determined "priorities" by the "planned" priorities through administrative fiats, howsoever well-intentioned they might be, rested on an extremely weak understanding and appreciation of the strength and direction of market responses to such attempts and the ultimate allocational and distributional effects these responses entailed. Generally these attempts produced results quite opposite from what they were intended for. Obviously, his disagreement with the prevalent view appertained to issues which were basic in nature and his opposition to it was total and outspoken. Before 1955 his interests were more or less equally divided between theoretical and applied economics. However in the charged intellectual climate from 1955 onwards, they came to be solely concentrated on Indian Economic Policy and planning. His contributions to the field of Indian Economic policy are distinguished by their underlying unity of approach; and reflect an uncommon understanding of the market principle and appreciation of the role of price-mechanism in allocation of resources. They bear an irrefutable testimony to their author's genius for creative application of this principle and a correct sense of judgment, relevance and perspective. Above all, they bring out a social scientist who had an utmost regard for his commitment to his discipline and made no compromises in reaching the conclusions, his reasoning led him to upholding them courageously. For Prof. B. R. Shenoy was anything but a "Committee" man. He was an economist who preferred to be right in a minority of one. Every important contribution he made to the subject, sparked off long-drawn controversies and memorable debate amongst the Indian economists. It would not be an exaggeration to assert that his contributions went a long way in demonstrating the substantive impor-

tance of the theory of markets, in the analysis of development issues, and thereby changing the character and quality of the professional discussions on Indian Economic problems.

At the time of the preparation for the Second Plan, the Government of India formed a panel of economists and Prof. Shenoy was invited to be its member. As a member of the Panel, he wrote his famous note of dissent against the massive programme of deficit financing, which was proposed by the majority of the panel members in their memorandum on the Second Plan. He presented an extended and fuller treatment of the issues he had dealt with in his "Note of Dissent" in his "Sir William Meyers Lectures" 1955–56, which he delivered at the University of Madras. The lectures were subsequently published by Madras University in a book–form as "Problems of Indian Economic Development." In the Indian context, the book has been recognised as a first major contribution to the analysis of monetary aspects of development planning, in the tradition of neo–Classical monetary theory. It contains a definitive discussion on the relationship between deficit financing, inflation and economic development. At a technical level, it provides an excellent analysis of the factors influencing money–supply in the Indian economy with a sharp focus on the relationship between money supply and government budgetary operations and contrary to the established consensus, it ardently advocated for a substantial prunning down in the size of the Second Plan and maintaining the rate of planned expenditure to a level consistent with the available quantum of real voluntary savings. Prof. Shenoy pursued this theme further in his two papers – "The Indian Economic Scene" and "Prof. Gadgil on Rephasing the Second Plan" – which were published respectively in the April and July issues of **Indian Economic Journal (1958).**

Just after the commencement of the Second Plan, inflationary pressures started gathering momentum, the balance of payments situation became increasingly fragile and Government resorted to stringent import and exchange controls. In 1957, Prof. Shenoy was elected as the President of the fortieth annual conference of Indian Economic Association and in his presidential address, he put forth a vigorous plea for floating the Indian Rupee along the Canadian lines as a solution to then prevailing balance of payments situation. His presidential address evoked a good deal of discu-

ssions on the efficacy of devaluation in correcting the prevailing Balance of Paymeots crisis amongst several prominent Indian economists, and important papers pertaining to this issue subsequently appeared in the print. However Prof. Shenoy's analysis of the Balance of Payments crisis and his advocacy of devaluation had a distinct flavour of originality. While most of the contributors to the debate based their analysis on the conventional elasticity approach, he considered the approach as largely irrelevant in the Indian context. By adumbrating impressive evidence, he showed that the Balance of Payments crisis was caused by domestic inflation and was reflected in the observed wide margins between the international and domestic prices of traded goods at the prevailing official exchange-rate. He also pointed out that the devaluation was to take place in the context of imports and exchanage controls and in analysing the effects of devaluation this particular fact needed to be properly recognised. In his view, for all practical purposes, international prices of traded goods were parametric for the Indian traders. Consequently devaluation did not imply change in the terms of trade for India. Devaluation in the Indian conditions essentially amounted to elimination of implicit tax on exportables and subsidy to the importers. He contended that it would involve an increase in the rupee prices received by the exporters and a shift-back of exportable from domestic consumption to sale in international markets. He recognised the importance of the domestic supply elasticities of exportables in this context. However, he considered the impact of devaluation on domestic prices of imports as nil-the impact being fully borne by the abnormal profits earned by the importers through differences in the landed rupee costs of imports and domestic market prices of imports.

For several subsequent years, his plea for monetary and price stability and for relying on exchange rate adjustments rather than on trade and exchange controls remained unheeded by the government. As a result during these years he undertook a further inquiry into this direction and devoted himself to the analysis of the functioning of overvalued exchange-rate system in India. He wrote large number of papers on almost all major manifestations of this system : over and under-invoicing of imports and exports, trafficing in import licences, clandenstine exports of capital from

India, financing of the smuggling trade and the misallocation of foreign aid.* Obviously it is not feasible here to go in a detailed presentation of his contributions related with these subjects. However, it may be noted that in those days he was perhaps the only Indian economist who was putting a good deal of technical research efforts in investigation of these issues. His investigation of the various aspects of the working of exchange and trade controls in India vividly brought out the pronounced anti-egalitarian and perverse allocational effects. Moreover, they highlighted the large-scale wastage of foreign aid received by India in the form of overcapitalisation of public sector projects, and financing of the smuggling trade. His views on foreign aid made him quite unpopular with the ruling circles in the country. However, he remained undeterred in widely publicising his views on this issue in forthright and categorical manner. Realising the Government's ideological opposition to accept a rational exchange-rate policy, in number of papers he pressed for a policy of auctioning of import licences and thereby reducing the anti-egalitarian income shifts and allocational distortions which were largely generated by Government's adherence to the policy of trade and exchange controls.

Besides his contributions to monetary aspects of Indian planning and exchange rate system, Prof. Shenoy also made contributions on two other important topics-the effects of P.L. 480 food imports on the Indian Economy and the increasing transfer of resources from agriculture to the protected urban industries. During 1960, he was attracted to the study of the effects of P.L. 480 food imports on the Indian Economy. After a careful study of this issue, he concluded that the budgetary operations related with P.L. 480 counterpart funds had a net

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* Although he had published quite a voluminous literature on these issues, the following papers may serve as a representative sample of his study on this subject :

1. "Overvaluation of the Indian Rupee" (The Banker 1969)
2. "Currency Overvaluation in Some Underdeveloped Countries" (Il Politico, Uni. of Pavia, Italy, 1968).
3. "Freedom and Order in UDC and the Problem of Foreign Aid" (Ibid 1965).
4. "Errors and Omissions in Balance of payments statements and No II Money" (The Accountant 1971).
5. "Errors & Omissions in India's Balance of Payments" (IL Politico, 1972).

expansionary effect on money supply and consequently they were responsible for aggravating inflationary pressures in the Indian economy. On the other hand, he reasoned that in an overall inflationary situation, the food imports were likely to lead the economy to a state of substantial and long-run dependency on food imports, by artificially depressing the food prices and inducing resource shift from food production to the production of other commodities. His analysis of the monetary impact of P.L. 480 counterpart fund entailed a long-drawn debate and controversy, in which, besides a number of non-govt. economists, economists from the finance ministry as well as from the R.B.I. participated. For several years, Prof. Shenoy pursued this theme in large number of papers, and it was because of his persistent writings on the subject that the Govt. of India was ultimately obliged to appoint a commission to look into the monetary impact of P.L. 480 funds in 1966.*

We have already remarked on his opposition to the planning strategy adopted by the Government of India since 1956. In his view the strategy involved a programme of large-scale transfer of resources from agriculture to public sector industries and other sectors which had easy access to organised capital markets and Government and semi-government financial institutions. By carefully distilling the relevant data, he highlighted the deplorable state of lagging food production and stagnant level of per capita availability of food, prevalent in that period. He further demonstrated the emergence and development of a complicated and discriminatory system of differential interest rates and their inimical effects on resource allocation in general and on agricultural development in particular. His comprehensive analysis of the effects of the policy of repressed interest rates in organised capital markets in an overall inflationary situation with its usual accompaniment of the policy of selective credit controls has provided the basis for the subsequent researches in this field.

Unlike other economists Prof. Shenoy's emphasis on agriculture rested on quite subtle and distinct type of reasoning. A number of economists in those days had advocated greater priority for agriculture. What they meant, was a relatively greater proportion

* All his major writings on this subject can be found in his subsequently published book "P.L. 480 and India's Food Problem" (1974).

of Govternment outlays to be spent on agriculture. This was definitely not Prof. Shenoy's view. According to his reasoning,there should be a sufficient curtailment in the total volume of investible resources appropriated by the Government and the resources should be left to flow in the productive sectors, agriculture being one of these important sectors in accordance with the market forces. His idea of appropriate pattern of resource allocation therefore was based upon the twin principles of comparative costs and marginal productivity and was miles away from the usual simplistic "priority" discussions.

In a pervasive climate of intellectual opposition and apathy to market principle and market determined solutions, his writings evoked considerable opposition and strong criticisms from his fellow colleagues and over a period of time he came to experience a wide communication gap with them. He became an "outsider" within the profession–"A Cinderrella amongst the Indian Economists" as one Commentator of Hindu remarked. With stoicism and fortitude he accepted his professional alienation and in the tradition of his great predecessors like Lord Keynes, he tried to reach and influence the outside enlightened public opinion by writing profusely in prominent Indian and foreign newspapers and journals like Swarajya, Hindu, Times of India, Statesman, The Economist, Fortune, Wall–Street Journal, Far Eastern Economic Review, etc. As a publicist, he remains unequalled amongst the Indian economists for his tremendous expositional and dialectical prowessess and for his unreserved and untiring willingness to expound and to espouse "unpopular ideas" of the time.

The quality of an economist is generally measured not by the conclusions he pronounced on particular matters of his inquiry – though that is important – but by the quality of his logic and the technical competence he demonstrates in his analysis, the empirical validity of the model he has accepted for operational analysis, and above all, by the extent to which his contri butions come to reflect and pre–date the analytical interests and contributions of the subsequent generations of the scholars in his field. On the basis of this criteria Prof. Shenoy would be recognised as one of the most outstanding and important economists by the future historians of Indian economic thought.

A perfunctory perusal of the literature related with development economics which is now recently coming out in recognised professional journals would convince anyone with an open mind that the problems which Prof. Shenoy identified as important from the view point of economic policy have largely come to command significant amount of research interests from the new generation of development economists. More importantly, many of his findings like the effects of P. L. 480 on the Indian Economy, distributional and allocational effects of exchange control, resource transfer from agriculture etc. have been more or less collaborated.* However it is indeed sad to note that during his life-time, the professional colleagues largely ignored his contributions or relegated their importance to background. Almost all the academic writings and surveys dealing with Indian Economic Policy published during sixties and seventies seem to be conspicuous in their universal silence on his contributions and views.**

He stayed with the Gujarat University from 1954 to 1968 – a period of almost fifteen years. During his Directorship he established a strong tradition of economic liberalism at the Economics Department of the School, and exposed generations of young students to liberal economic ideas and doctrines. For number of years, he taught courses in Monetary and International economics. His lectures used to be uniformly lucid, extremely well-organised and terribly stimulating. For in those days of an almost axiomatic acceptance of anti-market ideology and the left radicalism students were encountering a person probably for the first time

* For a sample of corroborative examples in this regard see Mellor "New strategy of Growth" M. Lipton.
J. Bhagavati & A. Kreugger **American Economic Review** 1978.
J. Bhagavati and P. Desai "Industrialisation" O. E. C. D. Publication.

** An illustrative example of this tendency is J. Bhagavati & S. Chakravarti's survey paper on Indian economic policy. The paper, commissioned by the American Economic Association and bearing the usual mark of authenticity of that august body, is meticulous in mentioning even the least important papers on P.L. 480, auctioning of import licences etc. but largely keeps away from refering to Prof. Shenoy's contributions, which as everybody knows were first contributions on these issues and which have been instrumental in initiating widely participated controversies and debates around these very issues. Similar tendency is also observed in case of Prof. Bhavatosh Datta's otherwise excellent work on History of Indian Economic thought. Prof. P.T. Bauer has also recognised this unfortunate omission in case of Gunnar Myrdal's widely famous volume "Asian Drama", See his "Dissent on Development".

in their lives who was relentlessly challenging the basis of every "sacred cow" of the interventionist ideology and programmes, and presenting with an impeccable logic the desirability of maintaining monetary stability, the socially useful function of forward markets and the virtues of flexible exchange–rate system, compelling them in turn to reconsider their views on many important issues of theory and practice and to study and appreciate the logic of free market economy and the theory of markets. He intensely disliked the widely observed propensity of Indian students and scholars to perorate the arguments of famous economists uncritically and used to chide his students for such practices – emphasising instead the importance of understanding the underlying logic of these arguments and evaluating them critically.

His weekly seminars where he used to discuss the problems of his ongoing researches were a sort of star–attractions for the students and used to be frequently attended by the other faculty members and scholars outside the department. It is difficult for us to convey the atmosphere of intense intellectual confrontation, argumentation which used to prevail in those seminars, suffice it to state here, that all his students genuinely felt that they learnt most of their economics in those seminars and with deep nostalgic feelings many of them still remember them and cherish their memories.

During his stay at the University, Prof. Shenoy attained the zenith of professional recognition. In 1957, he was elected as the president of the Indian Economic Association. In 1962, he was honoured to deliver the prestigious Walchand Hirachand Memorial lectures, and in 1966, he delivered Sir Ramaswami Muddalliar lectures at the University of Kerala. His writings won him international recognition as well. He was invited to be a member of the Mont Pallerin Society. Subsequently he was the recipient of the prestigious Relim Foundation grant and went to U.S.A. as a Relim Foundation Visiting Scholar and delivered series of lectures on Indian planning at several American universities, and in 1966, he went to the London School of Economics as a visiting professor of Economics.

In 1968, his life took an unexpected turn. He resigned from his position and left the Gujarat University due to a difference of opinion over the appointment of a Reader in the Labour

Welfare Department of the School. He felt that in the appointment, the University administration had not paid due weightage to the opinion of the faculty. He was deeply committed to the ideals of academic freedom, and he found it impossible to reconcile with the decision of the administration. Many leading intellectuals and educationists–irrespective of their political ideologies – were unanimous in censuring the university and in supporting his stand, which was in many ways a tribute to his intellectual integrity and an indication of the esteem, in which he was held by the enlightened public in the country. He was deeply sad in leaving the Economics Department and the School which with hard work and planning he had tried to develop according to his ideals. He had spent major part of his life at Ahmedabad which he had come to love almost as his native place. He had made plans for establishing a research centre at the Department along the lines of Institute of Economic Affairs in England and to attract and support young research scholars and build up a live research tradition at the university. There is no doubt that his resignation was an irreparable loss to University and the Economics Department. After his resignation from the University, Prof. Shenoy shifted to New Delhi and established the Independent Research Centre. With an undying sense of dedication and zeal — surprising in view of his approaching old age – he continued to work at the Centre, bringing out number of research papers and writing regularly in various newspapers and journals. He already developed some heart ailments but refused to take rest and continued to work until his sad demise on 8th February, 1978.

He was a deeply religious man and used to spend most of his spare time in studying the scriptures of different religions. He was especially impressed by the theosophical writings of Madame Blavtsky. He considered the religious experience to be of paramount importance to the individual and there was a wholesome unity between his religious beliefs and practice. He had a wholesome unstited 'सर्व धर्म समभाव' (Respect for all) outlook and respected all religions alike. All those who knew him would testify that he was truly above divisive religious prejudices.

With deep humility and unbounded devotion, he tried to fulfill the calling of his Dharma– his duty.

He was a pious man.

LIBERALISM AND LESS DEVELOPED COUNTRIES

1

IDEAS vs. FACTS

Milton Friedman*

More than a decade and a half ago my wife and I spent a year travelling around the world, mostly in Eastern Europe, the Middle East, and the Far East. We were greatly impressed by the striking contrast between the facts, as they appeared to us, and the ideas about the facts, as they were perceived by the intellectuals in the countries we visited.

Wherever we found any large element of individual freedom, some beauty in the ordinary life of the ordinary man, some measure of real progress in the material comforts at his disposal, and a live hope of further progress in the future—there we also found that the private market was the main device being used to organize economic activity. On the other hand, wherever the private market was largely suppressed and the state undertook to control in detail the economic activities of its citizens, wherever, that is, detailed central economic planning reigned—there the ordinary man was in political fetters, had a low standard of living, and more important, was bereft of much hope for the future or of any conception of controlling his own destiny. The state might prosper and accomplish mighty material works. Privileged classes might enjoy a full

* This paper is dated September 11, 1975.

measure of material comforts. But the ordinary man was an instrument to be used for the state's purposes, and received no more than necessary to keep him docile and reasonably productive.

By contrast the intellectuals everywhere took it for granted that capitalism and the market were devices for exploiting the masses, while central economic planning was the wave of the future that would set their countries on the road to rapid economic growth and to an ultimate major improvement in the well being of the masses.

A few examples show how clear are the facts. East and West Germany provide almost a controlled scientific experiment. Here are people of the same blood, the same civilization, the same level of technical skill and knowledge, torn asunder by the accidents of warfare. On the one side of the frontier, communism, tyranny and misery, on the other, capitalism, freedom and affluence.

Even two communist countries, Russia and Yugoslavia, provide evidence. Russia is far more closely controlled from the center; private property and a moderately free market have almost no scope. In agriculture, only 3 per cent of the cultivated area is in private plots whose produce the owners are free to market privately—though this 3 per cent produces one-third of the total agricultural output of the Soviet Union. In industry there is no legal scope at all for private activity, though apparently there is substantial black market activity. In Yugoslavia, on the other hand, the great bulk of agricultural land is privately owned, there are many private handicrafts, and a deliberate attempt has been made to decentralize industry. Yugoslavia is far from free and its ordinary people are far from affluent by Western or Japanese standards. Yet when we came to Yugoslavia and Russia, it struck us as a paradise in both respects compared to Russia.

In the Middle East, Israel and Egypt offer the same contrast as West and East Germany; in the Far East, Malaysia, Singapore, Thailand, Formosa and Hong Kong—all relying primarily on free markets—are thriving and their people full of hope for the future,

a far call from India and Communist China—relying primarily on central planning.

We were most forcibly struck by the contrast between facts and ideas in what was then Malaya. Here is a country which is a glowing testimonial to the potentialities of competitive capitalism. Singapore, which was still part of Malaya when we were there, was built on free trade. It has a vigorous industry and the standard of living of the ordinary Chinese or Malaya citizen is many times higher than in neighboring Indonesia or nearby India. Malaysia itself was mostly an unsettled jungle three-quarters of a century ago. Today it is an attractive country with widespread cultivated areas. The standard of life of its citizens, though somewhat lower than that of Singapore, is much higher than that of its other neighbors. Rubber and tin are its main export crops. Yet rubber is not even native to Malaysia. The rubber tree was imported by private enterprises from South America. The tin mines were entirely developed by private concerns. The economic policy that has been responsible for Malaysia's progress and growth has been almost wholly laissez-faire.

Malaysia has now become independent. It was in the process of deciding what economic policy to follow when we were there. Its own past offered one example. Its populous neighbors, Indonesia, then still under Sukarno, and India, offered another. Both had embraced widespread and detailed central planning, with results that were as depressing as they were clear. In Indonesia, the standard of living and the condition of the ordinary man had clearly deteriorated in the nearly two decades since independence; In India the situation was only a little better, stagnation rather than actual retrogression. Yet which example did Malaysia propose to follow ? If the intellectuals had their way, as it appeared that they would, the example of India and Indonesia ? How clear it is that the world is ruled by ideas not facts, and that ideas can for long periods live a life of their own little affected by the facts.

Since our visit, India has continued central planning and has continued to slide down-hill both economically and politically. Indonesia has had a drastic change of government, has reduced

its reliance on central planning, and there is now some hope of progress toward both freedom and affluence.

The importance of ideas and the intellectual climate was still further impressed on us when, toward the end of our year, we came to Japan for an extended and memorable visit—the first of several that we have had the good fortune to make. We were greatly impressed by modern-day Japan. The high level of production, its wide distribution, and its rapid growth are striking testimony to Japanese vigor and industry, and to Japan's private enterprise economic structure. The aesthetic content of everyday life and common household goods, the dignity of the Japanese people, and their courteous hospitality to the visitor make a visit to Japan a joy forever. But even more, we were impressed by the earlier economic history of Japan, in particular, in the first three decades after the Meiji restoration, and the implications it had for the importance of the intellectual climate.

There is a remarkable parallel between Japan at the time of the Meiji restoration and India at the achievement of independence eight decades later in 1948. In both cases, a major political change and upheaval broke "the cake of custom" and permitted a drastic alteration in economic arrangements and in the rigid class relations among men. In both cases, the political change placed in power a group of able and patriotic men who were determined to convert prior economic stagnation into rapid economic progress—though for somewhat different objectives. In both cases, these events occurred in countries with ancient cultures and a high artistic and literary civilization. In both cases, the countries were technologically far behind the leading economic powers of the time. Both had an opportunity to make major economic gains by adopting and adapting techniques developed at great cost in the West, without the need to create them anew.

There were also, of course, differences—mostly favoring India. India's physical resources are distinctly superior to Japan's, except only for the sea round Japan, with its easy transportition and potential supply of food. Japan had been almost completely out of touch with the rest of the world; India had had extensive and widespread contact. The British, moreover, left India an

excellent railroad system, many factories, much physical equipment, and—even more important—functioning political institutions, numerous skilled administrators, and many men trained in modern industrial techniques. In the years since, the rest of the world has made available to India—largely as gifts—an enormous volume of resources, roughly equal to a quarter of India's total volume of capital formation. To my very limited knowledge, Japan had no comparable advantages. The closest counterpart I know of is the fortuitous failure of the European silk crops in the early years of the Meiji restoration, which enabled Japan to earn more foreign exchange by silk exports than she otherwise could have earned. Japan herself financed the training of Japanese abroad and the importation of foreigners with technical skills. During the whole of the first half century after the Meiji restoration, Japan had not only no net grants from abroad but not even any net capital import; she provided the whole of her own capital from domestic sources.

The initial circumstances were highly similar and the opportunities much the same. Yet the outcome was vastly different. In Japan, there was a thorough dismantling of the feudal structure, a vast extension of social and economic opportunity to the masses of the people, rapid economic growth and widespread improvement in the lot of the ordinary man—though, unfortunately, nothing approaching real democracy in the political sphere. In India, there was much lip-service to the elimination of caste barriers yet shockingly little actual progress; differences in income and wealth between the few and the many have widened not narrowed; economic output per capita has been nearly stationary; and there has probably been an actual deterioration in the standard of life of the poorest third of the population. With all this came a widening network of deadening and restrictive controls and little sign of any possible change for the better. And, more recently, has come an interval, fortunately now over, which ended even a pretense of democracy, and introduced open dictatorial rule.

Why this difference in results? I believe that the contrast between the two countries reflects primarily the different techniques of economic organization adopted, though no doubt other

factors played some part. Japan followed essentially a free market policy—taking the Britain of its time as its model. True, the state intervened in many and diverse ways. It subsidized the technical training of many Japanese, established pilot plants in many industries, gave subsidies here and there. Yet at no time did it ever try to control the total amount or direction of investment or the structure of output. It sold off most of its pilot plants to private firms within a few years. The state maintained a large interest only in ship-building and iron and steel industries that it deemed necessary to build military power. It retained even these industries only because they were not attractive to private enterprise and required heavy government subsidies. These subsidies were a drain on Japanese resources. They impeded rather than stimulated Japanese economic progress. Finally, by international treaty, Japan was prohibited during the first three decades after the Meiji restoration from imposing tariffs higher than 5 per cent. This restriction was an unmitigated boon to Japan, though it was resented at the time.

India has followed a very different policy. Its leaders, schooled in the doctrines of Fabian socialism and central planning, have regarded capitalism as synonymous with imperialism, to be avoided at all costs. They took Russia as their model and embarked on a series of five-year plans setting forth detailed programs of investment allocated between government and private firms, and among industries. Certain areas of production are reserved to government. Tariffs, quotas, and subsidies to exports are widely used to shape foreign trade. When exchange difficulties arose, detailed and extensive exchange control was imposed. The Indian government controls wages and prices, prohibits private enterprises from building factories or making other investments without government permits, and levies taxes that are highly graduated on paper though largely evaded in practice.

Reliance on the market in Japan released hidden and unsuspected resources of energy and ingenuity, prevented vested interests from impeding change, and forced development to conform to the harsh test of efficiency. Reliance on governmental controls in India frustrates initiative, or diverts it into wasteful

channels, protects vested interests from the forces of change, and substitutes bureaucratic approval for market efficiency as the criterion of survival.

The difference in policies is a remarkable tribute to the force of ideas and the importance of the intellectual climate of opinion. The men who took charge of Japan in 1867 were dedicated to strengthening the power and glory of their country. They attached no special value to individual freedom or political liberty; on the contrary, they believed in aristocracy and political control by an elite. Then men who took charge of India in 1948 had very different ideas. They were ardently devoted to political freedom, personal liberty, and democracy. Their aim was not national power and glory but improvement in the economic condition of the masses. Yet the Japanese leaders adopted a liberal economic policy that produced a major widening of opportunities for the masses and a great gain in their personal liberty while the Indian leaders adopted a collectivist economic policy that hamstrung their people with restrictions, undermined the large measure of individual freedom and political liberty built up by the British, and led to the recent dictatorship.

The difference in policies followed reflects faithfully the intellectual climate of the two eras. In the mid-nineteenth century, liberalism was the dominant view. It was simply taken for granted that a modern economy should be conducted by free trade and private enterprise. It probably never occurred to the Japanese leaders to follow any other course. In the mid-twentieth century, collectivism was the dominant view. It was simply taken for granted that a modern economy should be conducted by centralized planning and five-year plans. It probably never occurred to the Indian leaders to follow any other course.

Ideas can for a time lead a life of their own, independent of reality. But sooner or later, they meet the test of evidence. The fate of mankind hinges on this test coming soon. If the collectivist ideas so sharply in conflict with the facts continue in the ascendancy, they will doom mankind to a renewed era of tyranny and misery. The brief periods of freedom and affluence will be overwhelmed.

2

THE OUTLOOK FOR WORLD INFLATION

Henry Hazlitt

This essay in honor of the late Professor Shenoy is being written in September 1978. My choice of topic may seem a strange one. It may be reasonably safe, the reader may concede, to discuss the outlook for inflation in, say, a monthly magazine, but in a book may it not be very quickly outdated—perhaps even by the time the book appears in print ?

I hasten to assure the reader that though some of my forecasts may take a short-term view, and though most of my specific illustrations are based on what has happened or is likely to happen in the United States, I have attempted throughout to look at the problem from a worldwide perspective, and to look especially at the kind of political forces which, always and everywhere, tend to bring about an inflation or continue one.

It is amazing how many Americans still talk as if their inflation had developed comparatively recently, in the last few years, and as if it were a problem largely confined to their own country. The truth is that the American inflation is already very old, and that inflation is now worldwide.

For the first time in the history of the world, practically every country is on a paper money basis. And practically every

country is inflating. It is instructive to recall how this has come about.

For a full explanation, we must go back at least 64 years to the outbreak of World War I in 1914. The first thing that happened, almost on the day the war broke out, was that the belligerents suspended the convertibility of their currencies into gold.

It is important to remember why they did this. They did not do it because they suddenly discovered that gold was out of date, that is why a "barbarous relic", that a paper standard was altogether more modern, efficient, and scientific. They did it, on the contrary, because gold had suddenly become in their eyes too valuable. It was a precious war resource. The belligerent governments knew they would need it to buy arms and good from neutrals abroad, and that gold was the only currency other countries would readily accept. They found this out very quickly. England, for example, declared war on Germany on August 4. A run developed on the Bank of England. The gold reserve, which had been 38.6 million in July, was pulled down within a few days to 26 million. Convertibility was suspended on August 5. In addition, export controls were imposed on gold.

When the First World War ended, some of the belligerents went back to the gold standard. England again is the outstanding example of the problems of doing this and of the mistakes that were made. Resumption of gold payments was undertaken — at the pre-war rate for the pound — in 1925. But two greatly changed circumstances were overlooked. First, there had been an enormous expansion meanwhile in the issuance of British currency and credit — that is, in the amount of paper promises that people might want to convert into gold. And second, as a result of that, prices had risen substantially. If in 1925 the currency had been made convertible only at a correspondingly higher "price" for gold, the resumption of gold payments might have worked. But the resumption at the old rate made gold too much of a bargain, and forced a contraction of British credit and a fall in prices.

In September, 1931, England went off the gold standard once again. The U. S. likewise abandoned the gold standard,

at its old rate of $20.67 an ounce, in 1933. Unfortunately, it was not the war and post-war inflations in both countries that were blamed for this result, or the ill-advised retention of the old gold-conversion rates, but the gold standard itself.

When the Second World War broke out, in September 1939, many of the world's currencies were again thrown into chaos, and for substantially the same reasons as in World War I. But this time, before the war had even ended in May, 1945, the representatives of some 43 nations were invited by the United States to a conference at Bretton Woods, New Hampshire, to try to set up a new international currency system.

What they set up, under the leadership of Lord Keynes of England and Harry Dexter White of the United States, was a compromise designed to please the advocates of paper money, "flexibility", and "national independence" of currencies, but at the same time to reassure conservatives that these currencies would retain a "link" to gold. The supposed great merit of the new system was that the monetary role of gold — the "tyranny" of gold — would be drastically reduced.

Only one currency, the U.S. dollar, would have to be convertible into gold — and even then no longer at the demand of anybody who held dollars, but only at the request of foreign central banks. All the other currencies were to be kept convertible merely into the dollar. With the dollar anchored to gold, and all the other currencies tied to the dollar, stability was to be assured, and the need for gold reserves to be minimized.

The system seemed to relieve every other country but the United States from strict monetary discipline. If any country got into trouble, it was assured almost automatic loans and credit to bail it out. The agreement also provided that any nation could at any time devalue its currency by upto 10 per cent, and explicitly stipulated that "the Fund shall raise no objection." The real but unstated and unacknowledged purpose of the Bretton Woods Agreements, as the present writer pointed out at the time (in **The American Scholar**, Winter 1944-45) was "to make resort to inflation easy, smooth, and above all respectable."

As early as 1949 the system started to break down. The British pound was devalued 30 per cent on September 18 of that year — from $ 4.03 to $ 2.80. Twenty-five other currencies were devalued by similar percentages within the following week. The Swiss franc incidentally, was one of these. In succeeding years there were literally hundreds of devaluations of currencies in the Fund.

What had been overlooked from the beginning was the enormous increase in the burden and responsibility that the Bretton Woods arrangements put upon the United States. For the other countries could hold dollar reserves on the assumption that this was just as good as holding gold. But their currency stability was, in fact, made dependent on the soundness of the dollar.

Yet successive U.S. governments remained completely oblivious of the gravity of the responsibility we had assumed. Our officials kept undermining the dollar – by foreign aid, huge domestic spending, chronic and mounting budget deficits, and by pushing down domestic interest rates and increasing the money supply. By 1968 we had practically ceased keeping the dollar convertible into gold, even for central banks. And on August 15, 1971, we abandoned the gold standard openly and officially.

Our repudiation of our solemn commitment was followed by mounting inflation, devaluations, and monetary demoralization everywhere. There seemed no longer any point in maintaining fixed exchange rates. There was not even any agreement on what they could be fixed to.

Now let's go back a little and look at the long and dismal record of international inflation. I am going to begin, arbitrarily, not with 1914, but thirty two years ago, with 1946. That is in one respect a good year to start with, for the International Monetary Fund had been set up on paper, as we have seen, in 1944, but it was not till 1946 that it opened for business. We can trace the international record very well, because the Citibank of New York has kept tabs on it in its monthly letter over these thirty-two years.

I do not want to go into too much detail. But for the ten-year period from 1946 to 1956, the average depreciation of the currency ranged from 1½ per cent a year in Switzerland to more than 25 per cent a year in Chile. The American dollar depreciated 3.4 per cent a year.

From 1956 to 1966 the annual rate of depreciation in 45 countries ranged from zero in Guatemala to 31 per cent in Brazil. For the whole ten-year period the Brazilian cruzeiro lost 98 per cent of its value. The American dollar depreciated an average of 1.8 per cent a year. The median depreciation among all 45 currencies was 3.4 per cent a year.

We come now to the five-year period from 1965 to 1970. The median rate of depreciation of 50 currencies during this period was 4.3 per cent a year. In the five-year period from 1970 to 1975, however, the median annual rate of depreciation for the 50 currencies was 9.4 per cent.

The Chilean and Argentine pesos, incidentally, each lost more than 99 per cent of its value during the decade. The Chilean peso suffered an average depreciation during the five years 1970 to 1975 of 67.5 per cent a year.

The U.S. dollar depreciated an average of 4.1 per cent a year in the 1965 to 1970 period and an average of 6.3 per cent a year in 1970 to 1975 period. The current rate of depreciation is 11.4 per cent a year. From 1940 to the present, the dollar has lost 78 per cent of its purchasing power. Put another way, compared with 1940 the dollar is worth only 22 cents.

So that's the past record. Now let's see how and why this inflation has been going on, nationally and internationally. I have already brought this story up from the outbreak of World War I in 1914 to the American abandonment of gold convertibility of the dollar in August 15, 1971. This, as I have pointed out, not only set an example in itself demoralizing, but it left no fixed standard for other currencies to hook themselves on to.

(I should like to point out here that the Special Drawing Rights—SDRs—issued by the International Monetary Fund, had never been directly convertible into gold, and they were quickly revalued as a daily-fluctuating average or "market basket" of sixteen paper currencies, each itself hourly changing.)

But the American desertion of gold convertibility in 1971 was, of course, merely an additional cause of a worldwide inflation that had been going on ever since the outbreak of World War II. That inflation started when the governments directly involved had to increase their budget expenditures at almost any cost in order to prosecute the war. But when the war was over, they did not prudently return to their previous level of expenditures. They had also enormously increased their tax revenues, even if not proportionately to their war expenditures, and instead of cutting taxes back to previous peacetime levels, they increased or added all sorts of "welfare" measures—mainly vote-buying hand-outs to pressure groups—to make use of the new revenues. What no one sufficiently realized was that once these welfare measures were established, it would come to be regarded as political suicide by the politicians in power to attempt to cut them off or even diminish them.

There has been still a third reason for the increasingly wide-spread inflation in recent years. The Bretton Woods Agreements, as we have seen, gave explicit sanction to devaluation—provided it did not exceed 10 per cent in any single step. There is still a fixed belief on the part of most inflationists that devaluation or depreciation of the national currency on the foreign-exchange market stimulates exports, discourages imports, and helps restore the balance of trade. This is a fallacy and an illusion. Exports are stimulated only because there is a temporary drop in their net cost to foreigners. This drop occurs because the dollar, say, has fallen abroad faster than our domestic prices have risen. But domestic prices soon catch up, and the so-called stimulus is short-lived.

This is what tends to happen when traders assume that what has taken place is once-for-all devaluation. But the effect of a long-continued depreciation may be the exact opposite : it may help to bring about an "unfavorable" balance of trade. This appears to be the result at present in the United States. The reason for this is that depreciation of a currency over a long period—because of internal inflation—can lead to the expectation that the depreciation will continue. When the dollar has fallen in the foreign exchange market, for example, and

internal prices have not yet risen enough to offset that external depreciation, American goods become more of a bargain than before. But foreigners suspect that the dollar may fall still lower next month or the month after, and that they will get still greater bargains in American goods by postponing their purchases. Americans, conversely, fearing that the dollar may be worth still less in the future in terms of foreign currencies, may rush to buy foreign goods to avoid paying still higher dollar prices for imports in the future.

In any case, the whole process of external depreciation of its currency makes a country poorer on net balance, not richer. To the extent that its imports are in fact discouraged, it is because its nationals can no longer afford them. Their price jumps on the very day that their currency declines, and to the exact extent that it declines. A country with a depreciating currency is worse off in terms of its ability to buy the commodities it needs. It is selling abroad too cheap and buying from abroad too dear. All deliberate devaluation does is to accelerate domestic inflation. The few who gain on net balance gain at the expense of all the rest.

There has been still a fourth major reason for worldwide inflation. This is the fixed idea that inflation is necessary to prevent or reduce unemployment. To the extent that there is any truth in this, it is true only for one reason : As long as the special legal immunities and privileges now granted to labour unions in most countries enable those unions to exact wage-rates higher than the existing market can sustain, more inflation—higher prices—will seem necessary to make the higher wage-rates payable. Otherwise—as I have shown elsewhere—the belief in the necessity for inflation as a remedy for unemployment has no real basis.

Lord Keynes gets perhaps too much credit—or blame—as the inventor of this myth. When his **General Theory of Employment, Interest, and Money** appeared in 1936, the American government, for one, had already been following policies of uninterrupted deficit spending for six fiscal years. Keynes's theories simply supplied a more elaborate rationale to justify what politicians

had already been doing. But his authority and prestige prolonged and intensified the disease.

What, now, is the outlook for the future ? I can see now nothing to end the inflation, either nationally or internationally. It is almost impossible to see anything but a continuance of inflation everywhere, and for the most part at an accelerative rate.

It cannot be emphasized too often that there is nothing mysterious about inflation, in spite of the efforts of politicians and some befuddled economists to make it seem so. Inflation, always and everywhere, is brought about by government policy—sometimes by acts of omission, but mainly by deliberate acts of commission. It is brought about by excessive government spending, by chronic deficits, and by the printing of excessive amounts of paper money to pay for the deficits. Inflation is the issuance of too much money and credit. There is no real economic problem about inflation. There is only a political problem. But that political problem is tremendous, and all but insoluble.

For the great bulk of the spending today, in nearly all inflating countries, is on handouts to special pressure groups. And once these handouts have been started and have become established, under whatever name—food stamps, relief, Medicaid, unemployment insurance, job creation, revenue sharing, veterans' aid, Medicare, Social Security, subsidies of any kind—they come to be regarded as a right by their recipients. It is considered to be an act of political suicide for any officeholder to suggest abolishing them, or reducing them, or even preventing or slowing down any further increase.

In fact, once budget deficits come to be tolerated and accepted, their inevitable tendency seems to be to grow acceleratively.

Let me give you just one illustration. The United States first started to run chronic deficits in the fiscal year 1931. In the five fiscal years 1931 to 1935 inclusive, average Federal expenditures were $5.2 billion a year. In the same period the average deficit was $2.4 billion a year. Let's skip now to the five fiscal years 1975 to 1979 inclusive. (Of course fiscal year 1979 has just begun, but its expenditures and deficit are already

officially planned.) As spent and planned, the average deficit for those five years comes to $56 billion a year. This is 23 times the average deficit in the 1931–35 period. In fact, the deficit alone is eleven times the total average expenditures in the 1931–35 period. When we come to the average annual expenditures made or planned for the 1975 to 1979 period, they are $411 billion a year — about 80 times the expenditure in the 1931–35 period.

Let's remind ourselves that we can explain only a very minor part of this by the reduced purchasing power of the dollar in the later period, for each dollar still buys about a fifth as much as it did in 1931 to 1935. Even if we divide 80 by 5, we find that expenditures are 16 times as great in a single year, even in real purchasing power, as they were in the early thirties.

But worse still, many of our present officeholders in the administration and in Congress do not regard even this new level of expenditures as nearly enough. They tell us that something more "stimulative"—i.e. something more inflationary—is needed. Wholly apart from such proposals, we already have in prospect record-breaking deficits of $61.8 billion for the fiscal year 1978, and $60.6 billion for fiscal year 1979. (The President's Budget Message for the fiscal year 1979). Even these official estimates greatly understate reality. Washington has developed a new statistical trick—called off-budget outlays. When these are counted, the estimated total expenditures for fiscal year 1979 are not a mere $500 billion, but $513 billion, and the total estimated deficit rises to $73 billion. In addition, every once in a while the President may casually ask Congress to appropriate a couple of billions more for something.

Now we come to the problem, what can the individual do about it? I am not going to try to answer that in detail. (There are now in existence, of course, scores of professional services which offer such detailed advice.) But I do want to remind the reader of some general principles. Authors have been writing books in the last few years implying that any individual cannot merely protect himself in full against the ravages of a severe and prolonged inflation, but even that such an inflation offers

him a special opportunity, not offered by a stable currency, for him to become rich. This is just not so. It is true that any individual, considered in isolation—if he is very smart, very alert, and very lucky—may not only be able fully to protect himself in a severe inflation, but make a fortune out of it. But such individuals must necessarily be in a small minority. And the more severe the inflation, the smaller that minority. Heinrich Mann, the famous writer, who lived through the great German inflation of 1919 to 1923, later declared that none of his friends, nor even anyone of his direct acquaintance, came out of that inflation whole. Most of them suffered devastating losses.

Let us recall why this is necessarily so. Inflation is a form of tax. It is a tax levied to pay for a deficit. If the government prints money to finance a deficit of $70 billion say, then the rest of us must be paying this $70 billion. Collectively, we have to forego the equivalent of this $70 billion in goods, services, or savings.

A few of us, if we invest shrewdly, and are also lucky, may escape our proportional share of the payment; but if we do, we must do it at the expense of somebody else. Those of us who invest in the right thing at the right time, at the right price, may achieve a paper profit and escape a real loss, but we do so by putting up the price for the next buyer, and reducing his opportunities. Every man's profit from inflation must increase the proportionate loss of somebody else.

There is a further factor, which also insures that the real gainers from a serious inflation can be only a small minority. When a country gets into a hyper-inflation, it becomes more and more difficult, if not impossible, for the individual producer to estimate or guess what his future costs and selling prices are going to be, and what will be the relationship between the two. It becomes increasingly difficult, in short, for industry to plan ahead. Therefore firms everywhere will find themselves producing the wrong quantities of the wrong things. There will be great waste; there will be increasing misdirection and disorganization of output. This is another way of saying that in spite of what

may be an appearance of feverish activity, the country as a whole will be getting poorer than it would under non—inflationary conditions.

What this means is that as inflation gets worse there will be increasing uncertainty on the part of both investors and corporate managers regarding what a particular company is going to earn in the months ahead, and this uncertainty will be reflected in stock prices. This is a large part of the explanation for the poor performance of the American stock market for almost the last three years. Another part is, of course, the more and more evident anti-business mentality in the present Administration and Congress.

The truth is that the cards are stacked today, as never before, and in almost every country, against all of us who are trying to hedge against the ravages of inflation. In addition to all the other risks and pit-falls of hedging against inflation—the compulsory gambling, the inevitable gap between bid and asked prices, the constant commissions, the taxpayers of every inflating country are through into higher-bracket rates of the progressive income tax, and in some countries are forced to pay formidable "capital-gains" taxes on non-existent gains.

So even those few who have been hither to successful in their hedges against inflation cannot afford to be smug about it. It is in the long-run interest of every one of us, in every inflating nation, to work to bring the inflation to a halt as soon as possible.

3

MODERN CHALLENGES TO A LIBERAL INTERNATIONAL ECONOMIC ORDER : AN HISTORICAL PERSPECTIVE

Gottfried Haberler *

I. Introduction

By liberal economic order we mean the order of the market or capitalist economy, of the modern mixed variety, relying predominantly on private enterprise and competition (in the broad sense that producers compete for consumers' dollars) although there may exist monopolies, oligopolies, or government enterprises in some areas. The liberal order does not imply a policy of strict non-interference on the part of government.

More specifically, the liberal **international** economic order (the subject of this conference), is the largely American-inspired post World War II system of freer trade, of low, non-discriminatory tariffs (mostfavored nation clause and absence of quantitative restrictions) and of currencies freely convertible into each other in the exchange market either at fixed or variable exchange rates (absence of exchange control)—the system symbolized and institutionalized by the GATT (General Agreement on Tariffs and Trade) and the IMF (International Monetary Fund).

This liberal order is being challenged from different sides. It is being frontally attacked by socialist and communist parties

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and other advocates of comprehensive central planning inside Western countries and being challenged from the outside by the communist (centrally planned) economies. This attack is, however, not the subject of the present conference. The main theme is not the East–West but the North–South problem (or better, the temperate zone–tropic problem). However, some of the problems posed for the market economies by the existence of centrally planned economies will be discussed in Session V.

This conference is concerned with the challenges to the existing liberal international order in the West, both in the industrially developed countries (DCs) and the developing or less developed countries (LDCs).

In the DCs, after a period of very successful liberalization of trade and payments under the auspices of the GATT and IMF, the liberal international order is facing increasingly serious challenges. In recent years, largely as a consequence of high unemployment during the recession of 1973–75 and the subsequent sluggish recovery, protectionist pressures have become very strong in practically all industrial countries. Higher import duties and quantitative import restrictions (quotas) are being demanded with increasing urgency and granted in many cases. New non-tariff methods of import restrictions such as the so-called "voluntary" restraints that importing countries put on foreign exports (also called "orderly market agreements," OMAs), are being applied with increasing frequency. Continuing a French tradition of favouring substitution of cartels for import duties, the French government recently made proposals for "organized free trade". These and other protectionist tendencies in the DCs will be taken up in subsequent sessions of conference.

A more serious and far-reaching challenge to the liberal order comes from the LDCs' increasingly urgent demands for a New International Economic Order (NIEO). These demands have led to a continuing North-South dialogue and at times confrontation, played out in a succession of international conferences.

This challenge to the liberal order is based on the assertion that the existing liberal international economic order has not

performed well, or at any rate is no longer performing well, especially with respect to the LDCs. The first task is therefore to try to form a judgment on the performance of the market or capitalist system and its alleged shortcomings.

II. The Performance of the Liberal Order and Its Alleged Shortcomings in Historical Perspective

1. The 19th Century up to World War I.

There is fairly general agreement that in the nineteenth century the liberal has performed extremely well, especially as far as the now-developed countries are concerned, all of which were less developed early in the nineteenth century. The most glowing description of the productive achievements of capitalism in the nineteenth century has been given by Karl Marx himself in the **Communist Manifesto.**[1]

1 First German edition 1847, authorized English translation with a preface and comments by Friedrich Engels, London 1888. Here a few samples of Marx's description of the productive achievements of capitalism, of "the bourgeoisie" as Marx called it in the Manifesto :

It (the bourgeoisie) has been the first to show what man's activity can bring about. It has accomplished wonders far surpassing the Egyptian pyramids, Roman aqueducts, and Gothic cathedrals; it has conducted expeditions that put in the shade all former migrations of nations and crusades ..... All old-established national industries have been or are daily being destroyed. They are dislodged by new industries, whose introduction becomes a life and death question for all civilized nations, by industries that no longer work up indigenous raw materials, but raw material drawn from the remotest zones; industries whose products are consumed, not only at home, but in every quarter of the globe ..... The bourgeoisie, by the rapid improvement of all instruments of production, by the immensely facilitated means of communication, draws all nations, even the most barbarian, into civilisation. The cheap prices of its commodities are the heavy artillery with which it batters down all Chinese walls, with which it forces the barbarians; intensely obstinate hatred of foreigners to capitulate. It compels all nations, on pain of extinction, to adopt the bourgeois mode of production, it compels them to introduce what it calls civilisation into their midst, i.e. to become bourgeois themselves. In a word, it creates a world after its own image...The bourgeoisie, during its rule of scarce one hundred years, has created more massive and more colossal productive forces than have all the preceding generations together. Subjection of nature's forces to man, machinery, application of chemistry to industry and agriculture, steam navigation, railways, electric telegraphs, clearing of whole continents for cultivation, canalisation of rivers, whole populations conjured out of the ground–what earlier century had even a presentiment that such **productive** forces slumbered in the lap of social labor?

The work of modern economists and economic historians analysing and measuring the operation and results of the liberal economic order in the nineteenth century, have fully confirmed Marx's judgment. Let me mention only two names. On the theoretical side, Joseph A. Schumpeter has given a classic analysis of the process of capitalist economic development, stressing the innovational role of the private entrepreneur.[1]

Modern economists have become used to defining and measuring the performance of an economy or an economic system in terms of economic growth, that is growth of aggregate output, or, better, output per capita of goods and services (GNP) [2]

Simon Kuznets in several impressive volumes has summarized and synthesized the enormous amount of work that he and others (many under his guidance or inspiration) have done to quantify the growth of total product and per capita product (as well as many structural characteristics) of all the major economies from the early nineteenth century up to the present period.[3]

Kuznets' figures clearly show the high and sustained rates of growth in the now developed countries after "the beginning of modern growth", in other words after the liberal, capitalist order had taken hold. According to Kuznets the date of entry into modern economic growth was roughly the end of the

1 See Joseph A. Schumpeter **The Theory of Economic Development : An Inquiry into Profits Capital, Credit, Interest and Business Cycle** (translated by Redvers Opie), Harvard University Press, Cambridge, Massachusetts, 1934 (first German edition 1912); **Business Cycles : A Theoretical,** Historical, and Statistical Analysis of the Capitalist Process, 2 vols., Mc. Graw-Hil, New York, 1939.

2 In this paper I accept GNP per capita as a measure of economic performance and do not discuss the question of long term "cost of growth", of pollution in the broad sense of deterioration of the environment, the alleged eventual limits to growth, let alone the doomsday prophecies of the Club of Rome and other doomsayers. I have expressed my views on these problems elsewhere. See G. Haberler, "Disenchantment with Growth" in **Economic Growth and Stability : An Analysis of Economic Change and Policies,** Los Angeles, 1974, pp. 30–37 and 199–204.

3 See especially : Simon Kuznets **Modern Economic Growth : Rate, Structure and Spread,** Yale University Press, New Haven, Connecticut, 1966 and **Economic Growth of Nations : Total Output and Production Structure,** Harvard University Press, Cambridge, Massachusetts, 1971.

eighteenth century in Great Britain, the 1830s in France and the United States, the 1850s in Germany, the 1860s in the Scandinavian countries and so on.

But to return to Marx: He was of course not an ardent supporter of capitalism although he gave the devil its dues. An integral part of his vision was the theory of "increasing misery" of the working classes, of the proletariat ("Verelendungstheorie").[1] But the polarization of society through the increasing misery of the working classes that Marx had forecast did not materialize. Since it really makes no sense any more to say that the American, European, Japanese, or even the Brazilian or Mexican workers are getting poorer all the time, either in absolute terms or relatively to other classes, the theory of increasing misery has been given up by modern marxists as far as the developed countries are concerned. But it has survived and flourished in the international sphere. Thus the past master of American Marxism, Paul Sweezy, concedes that in the developed countries workers have a "tolerable if degraded life" but the advanced countries "increasingly impose the burdens on the people of the colonies and the raw material producing countries.[2]

In the Marxian scheme this exploitation of the raw material producing countries, what we now call the LDCs, by the developed industrial countries is the consequence of colonialism. But the theory of exploitation has survived the demise of colonialism. It now comes in the form of the Singer-Prebisch theory which asserts that there is a secular tendency of the terms of trade

1 This theory was essential for Marx's thesis of the inevitable overthrow of the capitalist system. Actually, contrary to Marx's theory, the communist revolution came first in a backward country, Russia, and not in a mature capitalist country.

2 Paul Sweezy "Marxism: A Talk of Students" **Monthly Review,** October 1935. Actually, the theory that capitalism can survive only so long as there exist "non-capitalist spaces" to exploit goes back to Rosa Luxemburg's theory of imperialism. See Rosa Luxemburg **The Accumulation of Capital** translated from the German with an Introduction by Joan Robinson, Yale University Press, New Haven, Connecticut, 1951 (first German edition 1913).

to move against the LDCs.[1] In an extreme form this theory has been put forward by Gunnar Myrdal.

He asserts that "trade operates (as a rule) with a fundamental bias in favour of the rich and progressive regions (and countries) and in disfavor of the less developed countries." His thesis is not only that the poor derive less benefit from trade than the rich but that the poor as a rule become poorer if and because the rich get richer.[2]

The secular tendency of the terms of trade to deteriorate for the LDCs has remained an article of faith for the supporters of NIEO. I shall return to this subject below. At this point I only wanted to indicate the historical roots of the theory.

2. From World War I to World War II.

This period bears the scars of two world wars and of the Great Depression of the 1930s. However, the reparation of physical war damage, the rebuilding of destroyed capital equipment and buildings, the replenishment of inventories, and the reopening of disrupted channels of communication, transport, and trade between the warring countries were achieved amazingly fast, much faster than most people, including many economists had expected. This was true not only after the first World War but also after the second which was much more destructive than the first. But the speed of reconstruction would not have surprised the classical economists. Alfred Marshall wrote: "Ideas whether those of art and science or those embodied in practical appliances are the most 'real' of the gifts that each generation received from its predecessors. The world's material wealth

1 This theory can be called a theory of exploitation because it attributes the adverse change in the terms of trade largely to protectionist policies of DCs (tariff escalation), to monopolistic price setting by large firms, national and multinational, as well as by labor monopolies (unions) in the DCs. The combined effect of these anti-competitive policies is that the LDCs are hampered in their drive for industrialization and that the benefits of technological advance are largely kept by the DCs for themselves instead of being passed on to the LDCs.

2 Gunnar Myrdal **Devlopment and Underdevelopment.** National Bank of Egypt, Fiftieth Anniversery Commemoration Lecture, Cairo, 1956.

would quickly be replaced if it were destroyed but the ideas by which it was made were retained."[1]

The Great Depression of the 1930s was a major disaster. It was a case of disintegration of the world economy. Under the combined influence of high unemployment, steep decline in output and a protectionist explosion (high tariffs, quotas and exchange control) world trade shrank by about two-thirds in nominal terms (dollars) and one-third in real terms. As always in depressions and recessions, prices of primary products fell much more sharply than prices of manufactured goods, turning the terms of trade violently against the LDCs.

In the 1930s, the economic nature and causes of the Great Depression were widely misunderstood. For Marxists the catastrophic slump was confirmation of the master's theory that under capitalism depressions were bound to become more and more severe until the capitalist system would come crashing down in a final big bang. But many non-marxist economists, too, put forward explanations that did not hold out much hope for the survival of the liberal market economy, for example the widely held Keynesian theory of secular stagnation due to a lack of investment opportunities and chronic oversaving.[2]

From the present vantage point the explanation of the exceptional virulence of the Great Depression is much simpler. Whatever the forces, monetary or non-monetary, that caused the downturn of the cycle in the summer of 1929 (well before the crash on the New York stock exchange), the depression would never had become so severe if there had not been a sharp contraction—destruction—of money. One need not be an extreme monetarist to recognize that a reduction in the money supply of about 30%, as happened in the United States, was bound to depress the economy, or if it was already sliding, to push it

1 Alfred Marshall **Principles of Economics** 5th edition, Macmillan, London, 1907, p.780. See also a similar statement by John Stuart Mill, **Principles of Political Economy,** Book I, Chapter 5, Section 7.

2 For further discussion of these and other explanations of the extraordinary severity of the Great Depression which were popular in the 1930s see my essay **The World Economy, Money and the Great Depression 1919–1939.** (American Enterprise Institute, Washington D.C., 1976).

down into the abyss. (Today many economists are scared stiff when the money supply fails to rise for a couple of months.) The monetary contraction, in turn, was due to institutional weaknesses (collapse of the American banking system) and horrendous mistakes of monetary and fiscal policy, mistakes of commission (outright deflationary moves) as well as omission (failure sufficiently to counteract the deflation by monetary expansion).

Furthermore, one need not be an enthusiastic advocate of floating exchange rates to realize that under fixed exchanges (gold standard) a severe depression in the world's leading economy was bound to spread to all other countries that pegged their currencies to the dollar and to gold, with special intensity to the raw material exporting countries, the LDCs. However, the United States was not the only sinner. Similar mistakes, deflationary policies or failure to counteract deflation, were made in other leading countries, notably in France and Germany. And the international currency system of fixed exchanges, the gold standard under which exchange rates were rigidly fixed and could be changed only spasmodically **in extremis**, was calculated to maximize the pains of adjustment.[1]

The upshot is that these institutional defects and horrendous policy mistakes on the national and international level had nothing to do with basic weaknesses or internal contradictions of the liberal market system, nothing with a tendency toward secular stagnation, lack of investment opportunities, chronic oversaving or a propensity of the market economy to develop gigantic real maladjustments.

Proof of all this is that in country after country, as soon as monetary deflation was stopped, by orthodox liberal methods (monetary–fiscal expansion combined with devaluation or floating of the currency) or by unorthodox illiberal methods (monetary fiscal expansion combined with exchange control as in Nazi

1 For details see **ibid.** The statement that under the exceedingly unfavorable circumstances of the 1930s—a severe depression in the leading economic country—the gold standard operated to spread the depression around the globe, does not imply and is not meant to imply, that the gold standard did not work satisfactorily under more favorable circumstances.

Germany), the depression lifted, output and employment quickly expanded, and the alleged real structural contradictions and weaknesses, lack of investment opportunities and maladjustments disappeared as fast as they seemed to have appeared a few years earlier.

Further proof is that after World War II, when the deflationary mistakes of the 1930s were avoided, there was no post-war depression despite much greater destruction than after World War I. There were mild recessions, inflation and later stagflation, but no depression comparable to the so-called first and second post-war depressions after World War II. The following figures show that even the last, most severe recession of 1973–1975 was a far cry from the severe inter-war depressions :

Per cent Decline in U.S. Depressions and Recessions

	Jan. 1920–July 1921	Aug. 1929–March 1933	Nov. 1973–March 1975
Industrial Production	-32.4	-53.4	-14.0
GNP in constant dollars	n. a.	-32.6	- 6.6

The 1973–75 recession, stagflation, and the sluggish recovery since 1975 will be more fully discussed below.

3. The Post World War II Period.

There is virtually general agreement that the first 25 or 30 years after World War II were a period of unprecedented growth and prosperity. Compared with the interwar period the whole post war period, including the last recession and the somewhat sluggish recovery, must be judged a great success, although the unusual coexistence of inflation and unemployment—stagflation—which developed in the early 1970s should cause anxiety for the future.[1] World trade grew by leaps and bounds, although it declined slightly during the last recession.

As far as the DCs are concerned these statements will hardly be questioned. Even in West Germany, the industrial

1 Stagflation on the recent scale is a new phenomenon. There have been short periods of stagflation earlier, but not of the same order of magnitude and duration as in the 1970s. See below.

country hardest hit by the great depression, war destruction and immediate post-war dislocations (dismemberment, 10 million refugees from the East), real GNP per capita passed the highest pre-war level in the middle 1950s, and has since then soared to the fifth or sixth highest level in the world, surpassed only by the United States, Switzerland, Sweden, Kuwait, and United Arab Emirates.

There is a striking contrast between Germany where liberal policies, the policy of the so-called "social market economy" ("Soziale Marktwirtschaft") have been pursued and Britain with its socialist policies. According to World Bank statistics in 1975 German GNP per capita was almost twice the British (6.610 U.S. dollars against 3.840 U.S. dollars)[1] while before the war British per capita GNP was much greater than the German.

To what extent did the LDCs participate in the extraordinary prosperity and growth of the world economy since the war ? The first thing to stress is the enormous differences that exist with respect to wealth, income, and other characteristics of development between the countries constituting the third world. The LDCs are a much more heterogeneous group than the DCs. Apart from the super-rich oil countries there are the "middle income" countries such as Argentina, Brazil, Mexico, Taiwan and at the other end of the spectrum the very poor countries of the "fourth world". The third world is a hierarchy of countries ranging from the very poor and backward to fairly rich and progressive countries which are on the verge of entering the club of the developed industrial countries.

In fact, the world as a whole, developed and less developed, is a hierarchy of countries ranging from the richest with the

1 See **World Bank Atlas : Population, Per Capita Product and Growth Rates.** Published by the World Bank, Washington D.C., 1976, p. 27. World Bank figures exaggerate the contrast because they are based on unadjusted or slightly adjusted exchange rates. But there can be no doubt that the contrast would remain substantial, even if detailed adjustments of local currency estimates for purchasing power parity were made. On the problems and results of such adjustments; see the elaborate study by Irving B. Kravis, Zoltan Kennessey, Alan Heston and Robert Summers **A System of International Comparisons of Gross Products and Purchasing Power** published for the World Bank (Baltimore : Johns Hopkins University Press, 1975).

highest per capita GNP (United Arab Emirates and Kuwait followed by Switzerland, Sweden, United States) to very poor countries. There is no clearcut gap any where in this array separating two distinct, more or less homogeneous groups. Thus the classification of countries in DCs and LDCs is essentially, an arbitary one.[1]

It also follows that the concept of a unique, allegedly widening gap between the DCs as a group and the LDCs as a group is wholly arbitrary and devoid of any useful meaning. There are of course any number of gaps between individual countries, DCs as well as LDCs. Some of these gaps are widening, others shrinking, still others reversing themselves (as for example the gap between Britain and Germany that was mentioned above). But there is no single, unique gap between DCs and LDCs in general.

The **World Bank Atlas** lists many LDCs with very growth rates of GNP per capita for two periods, 1960–1974 and 1965–1974, in many cases higher in the second period than in the first. Among the high growth countries are South Korea, Taiwan and Malaysia, Brazil and Columbia, Greece and Portugal (before the revolution), Rhodesia and Malawi not to mention Hongkong and Singapore. It is hardly by chance that these are the countries that have pursued relatively liberal, that is, market oriented poicies, both domestically and in the foreign trade area.

Simon Kuznets in his magisterial lecture "Two Centuries of Economic Growth : Reflections on U.S. Experience" summed up the results of the enormous amount of research done in recent years as follows[2] :

1 GNP figures, aggregate as well as per capita along with growth rates of population and per capita real GNP for literally all countries in the world (including for example, Albania, Mongolia and the Maldive Islands) can be found in the **World Bank Atlas.**

2 Richard T. Ely Lecture, **The American Economic Review** tyhe Vol. 67, February 1677, p. 14. Kuznets' findings about growth in the LDCs are reported at some length in **Economic Growth of Nations : Total Output and Production Structure,** 1971. Chapter I and in "Aspects of Post–World War II Growth in Le s Developed Countries" in **Evolution, Welfare, and Time in Economics** Essays in Honour of Nicholas Georgescu–Roegen. Edited by A. M. Tang, E.M. Westfield and James B. Worley, Lexington Books, Lexington, Massachusetts, 1976, Chapter *3.*

> Even in this recent twenty-five year period of greater strain and danger, the growth in peacetime product per capita in the United States was still at a high rate; and in the rest of the world, developed **and less developed** (but excepting the few countries and periods marked by internal conflicts and political breakdown), material returns have grown, per capita, at a rate higher than ever observed in the past. (Emphasis added)

In his paper "Aspects of Post-World War II Growth" Kuznets had this to say: "For the LDCs as a group, the United Nations has estimated annual growth rates of total and per capita GDP (gross domestic product at constant factor prices) from 1950 to 1972. The growth rates of per capita product .... for the twenty-two years was 2.61 per cent per year ..... Such growth rates are quite high in the long-term historical perspective of both the LDCs and the current DCs." These high growth rates are largely a recent phenomenon, the result of the post-World War II period of comparative liberalism and liberalization. "While the historical data for LDCs rarely provide a firm basis for judging their long-term growth"; it can be established indirectly that in earlier periods the growth rates must have been lower. For applying the recent growth rates to earlier periods "would have meant impossibly low levels of per capita product and consumption at the beginning of the preceding quarter of century." Kuznets further points out that for the current DCs for which we have long-term growth rates "the observed rates (for well over half a century of their modern growth) are generally well below those cited for the LDCs."[1]

Kuznets is, of course, fully aware of the dangers and pitfalls of using broad aggregate measures of growth for the LDCs as a group, given the great diversity among the countries in the third world. He discusses and carefully evaluates possible biases in the procedures. But after everything has been

[1] "Aspects of Post-World War II Growth," pp. 40-41. To mention another figure : from 1960-1972 the average growth rate of per capita GNP of some sixty-seven LDCs, each with over one million population and ommitting major oil exporters, was 2.6 per year (p. 42).

said and done, he stands by the basic soundness of his findings and expresses puzzlement why, despite the "impressively high" growth rates "in the per capita product of LDCs over almost a quarter of a century", the general sentiment in the LDCs is one of dissatisfaction and gloom that "seems to ignore the growth achievements." He conjectures, and gives ample reasons for this conjecture, that "a rise in expectations has produced a negative reaction to economic attainments which otherwise might have elicited litanies of praise for economic miracles."[1]

Let me briefly mention three facts that have aroused excessively optimistic expectations. The apparent early economic successes of Soviet Russia—rapid industrialization and growth and immunity from the depression that engulfed the West in the 1930s—made a deep impression in the LDCs as well as in the DCs. It engendered the belief that governments have it in their power by comprehensive central planning to lift backward countries, in one great leap, to a higher level of development. It took a long time for the persistent conspicuous lag of the centrally planned countries behind the market economies to shake confidence in the superiority of central planning. This issue cannot be further discussed here. I confine myself to asking a simple question : How is one to explain the glaring gap in the per capita GNP and standard of living between such pairs of countries as East and West Germany, Austria and Czechoslovakia, Yugoslavia and Greece—pairs of countries that enjoyed about the same standard of living in the pre-communist period ?[2]

Later, two events have fostered unrealistic, overoptimistic expectations : the success of the Marshall plan to speed up European recovery after the war and the effectiveness of the oil cartel. Unfortunately the task of developing backward countires is much more difficult than those two successes suggest. It is one thing by foreign aid to help a developed country that

1 **Ibid., p. 41 and passim.**

2 Other pairs of countries with roughly similar resources endowments and similar stage of economic development where the comparative performance of different economic regimes can be profitably studied are : North Korea and South Korea, Sri Lanka and Taiwan, Burma and Malaysia.

has been thrown back by a destructive war to replenish its capital stock and so to get back on its customary living standard; it is an entirely different and much more time-consuming and difficult task to help less developed countries to introduce far-reaching reforms, develop a suitable infrastructure, and to adopt habits of work and policies conducive to modern economic growth. As regards the success of OPEC, there are few, if any important raw materials that offer the same chances for effective cartelization as does crude oil; and if there were such opportunities, mutual monopolistic exploitation would not be an effective method to speed up the growth of LDCs as a group.

The conclusion that the LDCs as a group had an impressive growth performance in the post-World War II period does, of course, not change the fact that many of them are very poor, and that almost all of them have entered the stage of modern economic growth with a much lower level of per capita GNP than the current DCs did a century or so ago (with the exception of Japan which also started from a very low level), and that therefore the gap between LDCs and DCs, however this essentially ambiguous and arbitrary concept is defined, has not appreciably declined and will not disappear in the foreseeable future, even if the growth of the LDCs as a group continues to exceed that of the DCs. But the very respectable growth performance does show that, contrary to what is often said, the liberal international economic order does not prevent the LDCs from showing impressive progress and that, again contrary to widely held views, prosperity and growth in the DCs does spread to the LDCs.

Furthermore, satisfactory overall growth does not change the fact that the internal income distribution in most or many LDCs is widely regarded as unsatisfactory. It is well known that the inequality of income (however defined), particularly the contrast between rich and poor, is much greater in most LDCs than in DCs. This clearly is the consequence of **internal** social and economic structure, resource endowment, institutions and policies; it has nothing to do with the **international** economic order. However, if it is true that a liberal international economic order

improves the overall situation and growth performance of the LDCs, it makes it easier for them to pursue policies and adopt measures of structural reform that may be deemed to alleviate poverty and to reduce the inequality of income distribution.[1]

III. The Terms of Trade and the Growth of LDC Trade

As mentioned earlier, the critics of the liberal international economic order accept the Prebisch-Singer theory of the secular tendency of the terms of trade to deteriorate for the LDCs. They rightly regard this deterioration as essential for their case because without it the thesis of the failure of prosperity and growth in the DCs to spread to the LDCs could hardly be upheld. In other words, a failure of DC growth to benefit the LDCs would have to reveal itself in a change in the terms of trade against the LDCs.

It is hardly necessary to discuss why there is a strong presumption that DC growth will spread to the LDCs. For Classical as well as Keynesian economics, in rare harmony, teach that the demand of the DCs for the exports of the LDCs will strengthen when DC GNP grows; in other words, that the marginal propensity to import is positive (barring the most unlikely case that DC imports largely consist of inferior goods, the Giffen case). It is, of course, possible and it often happens that DC progress takes a form of reducing demand for **particular** imports from LDCs : Synthetics take the place of natural materials, rayon replaces silk, nylon substitutes for jute and synthetic rubber reduces the demand for natural rubber. Such cases have been often cited to help explain the alleged secular change in the terms of trade against the LDCs.[2] Individual industries may suffer from technological discoveries and changes

1 On the problem of income distribution and growth see **Redistribution with Growth, Policies** to improve income distribution in developing countries in the context of economic growth, by Hollis Chenery, Montek S. Ahluwalia, C.L.G.Bell, John H. Duloy, Richard Jolly, published for the World Bank, Oxford University Press 1974.

2 Exactly the same type of arguments were used in the 1940s and 1950s by well known economists, especially in Britain, to establish the case of the permanent dollar shortage.

but not a single case comes to mind where a whole country has come to grief for that reason. It would have to show, at any rate, in a change in the terms of trade.

What are then the facts about the alleged tendency of the terms of trade to change against the LDCs or of primary products as compared to manufacturers ?[1] Fortunately a definitive answer can be given; for this is one of the most thoroughly analysed and researched areas in international economics. The answer is : There has been no long-term trend for or against the LDCs. There have been and there still are cyclical fluctuations, in the past at times violent and destructive. Prices of primary products typically exhibit more pronounced swings in the business cycle than prices of manufactured products and the terms of trade of individuals countries, of DCs as well as LDCs, are occasionally subject to change for special reasons unrelated to the business cycle. But no long trend in the terms of trade for broad groups of countries, DCs or LDCs, or of primary against manufactured products has been established.

The most thorough statistical analysis of price trends in international trade can be found in Robert E. Lipsey's important book **Price and Quantity Trends in the Foreign Trade of the United States.**[2] This study, carried out with extreme care about

1 The interesting fact may be recalled that there exists—or existed—a school of thought that teaches the exact opposite of the Prebisch-Singer thesis. Especially British economists have been greatly worried that the terms of trade must turn against the industrial countries because of the operation of the law of diminishing returns in agriculture and mining. This theory goes back to Ricardo and earlier writers. Marshall and Keynes worried greatly about the British terms of trade. In our time Austin Robinson took up the theme. The gloomiest of all was W.S.Jevons (Reference to the literature can be found in my paper "An Assessment of the Current Relevance of the Theory of Comparative Advantage to Agricultural Production and Trade," in **International Journal of Agrarian Affairs,** Vol. IV, Number 3, May 1964, p. 139.) Needless to add that Ricardo's pessimism, Marshall's and Keynes's worries, not to mention Jevons's forebodings of disaster have proved to be entirely groundless.

2 A Study by the National Bureau of Economic Research, New York, published by Princeton University Press, Princeton, New Jersey, 1963. The coverage of Lipsey's volume is more comprehensive than the title suggests. The book contains price, quantity, and terms of trade indexes also for the U. K. and

the reliability of the basic data and statistical methods that one expects of a National Bureau publication, reaches the following conclusions concerning the problem at hand :

> Two widely held beliefs regarding net barter terms of trade found no confirmation in the data for the United States. One is that there has been substantial long-term improvement in the terms of trade of developed countries, including the United States; the other, that there has been a significant long-term deterioration in the terms of trade of primary as compared to manufactured products. Although there have been very large swings in U.S. terms of trade since 1879, no long-run trend has emerged. The average level of U.S. terms of trade since World War II has been almost the same as before World War I.[1]

Lipsey goes on to say that the U.S. terms of trade have improved steadily since 1951 until 1960, the last year in Lipsey's series. However, this improvement which reflects a deterioration of the terms for the LDCs was not the beginning of a trend, but the reaction to the exceptionally high commodity prices causes by the Korean war and massive U.S. stockpiling during and immediately after the Korean war.[2]

According to IMF statistics[3] the U.S. terms of trade and those for the industrial countries as a group have exhibited mild

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Continental Industrial Europe. References to earlier, less comprehensive statistical analyses, which reached the same conclusions as Lipsey, can be found in the paper quoted in the preceding footnote. It should be noted that Lipsey's conclusions are based not only on U.S. terms of trade figures but also on those of other industrial countries.

1 **Ibid.**, p. 76.

2 The problem was once again considered by an "Expert Group on Indexation" sponsored by UNCTAD which met in spring 1975. The group under the chairmanship of Hendrik Houthakker reported that "there was general agreement that the statistics presented to the Group did not provide any clear evidence of a long-term deterioration in the net barter terms of trade of developing countries, although they did suggest that these terms of trade were subject to substantial short-term fluctuations." (**Summary of Main Conclusion,** mimeographed .

3 See IMF **International Financial Statistics** which presents indexes for export and import prices for most countries and groups of countries such as industrial countries, less developed areas with and without the oil-exporting countries.

parallel fluctuations since 1960. In the 1970s the terms of trade of the industrial countries deteriorated from 100 in 1970 to 88 in 1976. This evidently reflects the oil price rise because the terms of trade for the LDCs as a group (excluding the major oil exporters) have deteriorated by almost exactly the same amount. Both the DCs and LDCs suffered at the hands of OPEC.

It is extremely important to note that in the post-World War II period, when the cyclical fluctuations were very much milder than in the interwar period, the fluctuations in terms of trade too were much milder. We have no terms of trade figures for the LDCs as a group in the interwar period. But the U.S. figures (and those for other countries) indicate the order of magnitude of the enormous changes that occurred during the great depression with 1913 equal to 100 the index of the U.S. terms of trade (export prices/import prices) stood at 99.8 in 1927 and improved by over 40% in the depression (1934=141.4), reflecting a corresponding sharp deterioration in the terms of trade of the LDCs.[1] In the post-World War II period, in contrast, the range of variations was between 102 in 1948 and 82 in 1951, or leaving out the two unusual terminal years (immediate post-World War and Korean war) the range was between 101 in 1968–69 and 89 in 1974. The extreme swings of the terms of trade during the Great Depression of the 1930s have not been repeated but they have unduly colored later discussions.

World trade has grown by leaps and bounds during the post-World War II period as almost never before. The recession of 1973–75 caused a slight decline (from 1974 to 1975) as was to be expected, but rapid growth resumed in 1976. Much has been made of the alleged fact that the trade of the LDCs has grown less fast than that of the DCs. It is true that from 1943 to 1963 according to IMF statistics the share of exports of "less developed areas" in world exports fell from 30% to 22%[2]. Since then however, according to GATT statistics exports of the DCs and the non-oil exporting LDCs have grown at approximately

1 Lipsey, **op.cit.**, p. 443.

2 IMF **International Financial Statistics** 1972 Supplement, pp. xxxii–xxxiii.

the same pace.[1] The lag in the rate of growth of LDC trade behind that of DC trade from 1948–1963 is easily explained by the fact that the remarkable European recovery from the war slump got into its stride around 1948, and the even more impressive revival of the Japanese economy started at about the same time. These developments gave a strong boost to the growth of intra-DC trade. The European economic resurgence was spearheaded by the rapid expansion of the German economy after the currency reform of 1948 and Ludwig Erhard's simultaneous dash for liberalism—the abolition overnight of all wartime and postwar controls. The beneficial effects on the world economy including the LDCs of the assorted European (not only Germany, but also French, Italian, etc.)[2] and Japanese economic miracles can hardly be exaggerated. They stimulated the world economy both directly by providing rapidly expanding markets especially for neighboring countries, and indirectly by demonstrating dramatically that "the classical medicine" (Keynes), the medicine of liberal policies, still works. The German example encouraged other countries to pursue liberal policies. Later the creation of the European common market gave another strong boost to intra-DC trade. All this greatly increased demand for raw materials and other imports, manufactures and services such as tourism, and thus redounded to the great benefit of the LDCs, although it raised the share of DC trade and reduced the share of LDC trade in world trade.

Since the LDCs pursue on the whole much more protectionist policies than the DCs, a certain lag of their trade growth behind that of the DCs would not be surprising. But it is hardly necessary to argue at length that any such lag would not imply that the stake of the LDCs in liberal trade policies is not great. It is true that exports of the LDCs are hampered by

1 See GATT **International Trade 1975/76,** Geneva, 1976, Table F. "Network of Total International Trade 1963, 1968–1970." IMF **International Financial Statistics** does not publish the percentage figures anymore.

2 From 1959–60 to 1970–71 average annual growth of real GNP was 4.9 in Germany, 5.8 in France, and 5.5 in Italy. See **OECD Economic Outlook** No. 14, December 1973, p. 23.

restrictions (cascaded tariffs, non-tariff barriers, etc.)[1] in the DCs (as they are by highly protectionist policies of the LDCs themselves). Obviously it is not liberal policies that hurt the LDCs, but deviations from liberalism.

Despite protectionist tendencies in the DCs and LDCs, the export of manufactured goods from developing countries has grown steadily and rapidly during the last twenty years. In 1955 exports of manufactures were 10% of total non-oil merchandise exports of developing countries. In 1976 and 1977 it was 41% while the share of agricultural exports fell from 76% to 43% and that of ores and minerals rose from 13%[2]. About 80% of LDCs' manufactured goods go to Western industrial (OECD) countries and Middle East oil exporting countries. Of the remaining 20% by far the largest part is accounted for by intra-LDC trade and a tiny fraction by exports to communist countries.

IV. The Last Five Years : 1972–1977

1. The Changing Mood : From Optimism to Gloom :

The comparatively optimistic appraisal of the world economy, including the LDCs, will perhaps not be strongly challenged as far as the first quarter century after the second World War is concerned, although it runs counter to the voices of gloom that have been emanating from ECLA, UNCTAD, and the chorus of supporting voices in the DCs. How about the last four or five years ? Has not the world recession of 1973–75, the somewhat sluggish recovery, chronic unemployment, stagflation and the breakdown of the Bretton Woods system given the lie to the rosy optimism of the 1950s and 1960s ?

The general mood in the industrial countries has certainly changed since 1973 or so. Optimism has given way to pessimism and doubt, and the prophets of doom for the third world find themselves confirmed in their gloomy convictions.

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1 On the high rates of protection in the LDCs see Bela Balassa and Associates, **The Structure of Effective Protection in Developing Countries,** 1971, especially Table 3.1.

2 See **Prospects for Developing Countries, 1978–85** Document of the World Bank, November 1977 (mimeographed), p.44.

The recession is indeed a reality. In the United States it lasted from November 1973 to March 1975, making it the longest of the six postwar recessions. On most measures it was also the deepest recession since the war. In Europe and Japan the contrast between the last and the earlier postwar recessions was even greater than in the United States. Unemployment went much higher than in the earlier recessions and the cyclical recovery has been slower than after earlier recessions and seems to lag behind U. S. recovery in most European countries. Two major industrial countries, Britain and Italy still suffer from very high rates of inflation (over 15%) which makes their cyclical recovery especially precarious.

But it must be stressed agian that both in Europe and the United States the recent decline was definitely a recession and not a depression, if by depression we mean a slump comparable to what happened in the 1930s or even in 1920–21, the so–called first and second post–World War I depressions. Thus in the United States industrial production declined by 14 per cent from November 1973 to March 1975. The corresponding figures for three interwar depressions – June 1920–July 1921, August 1929–March 1933, and May 1937–June 1938—were 32, 53, 32 per cent, respectively. Other measures of the depth of the cyclical decline, such as GNP (in constant dollars) and unemployment tell the same story. The same is true of other leading industrial countries.

It is true that, compared with earlier cyclical recoveries, during the current recovery unemployment has remained high. In the United States in June 1977 after more than two years of cyclical upswing unemployment, although down from the 8.9 per cent recession peak, was still 7.1 per cent. In other industrial countries, too, unemployment is much higher than in earlier upswings.

However, the structure of unemployment has greatly changed since the 1930s. Socially and economically unemployment is a much less serious problem than it used to be. It is very significant that in the United States, while unemployment has remained on a high level, employment has been increasing steadily and substantially. This pattern reflects a rising labour force participation rate, especially among women. Women and young

people represent a much greater share in the labour force than formerly and these groups are much less firmly attached to their jobs than adult male workers. This in turn, means that the high unemployment reflects less durable and more intermittent unemployment than in the past. Moreover, it is well known that in all industrial countries unemployment benefits have become so generous in size, duration, and availability that the statistically recorded number of jobless persons contains an unknown but increasingly large number of people who do not care to work, who are "voluntarily" unemployed in the Keyensian sense.[1]

The upshot of this discussion is that the unemployment situation, although far from satisfactory, is not as serious, either in absolute terms or in comparison with earlier postwar business cycles, as the figure of 7.1 per cent suggests. What is true of the United States is also true of other industrial countries, including Germany and Japan.

The most troublesome feature of the current expansion is the persistent high rate of inflation. The 1973–75 recession was the first highly inflationary recession. Unlike in the "classical" recessions and depressions of the pre-war era, the price level did not decline (or at least remain stable) but even accelerated to a two digit level in 1974, several months after the recession had started. Later, the inflation rate came down sharply, but the cyclical recovery in 1975 started with an inflation rate of about 10 per cent. It was—and still is—a case of pronounced stagflation, that is, coexistence of high unemployment and high inflation. On that scale, stagflation has never happened before.[2]

As far as the DCs are concerned the fact that the ongoing expansion started with a high rate of inflation which probably will go higher makes the outlook much less favorable than it otherwise would be. In other words, the inflation will probably shorten the duration of the upswing and will reduce its peak level of employment and capacity utilization. If attempts are

1 The distinction between voluntary and involuntary unemployment has been criticized as useless. To my mind the distinction is essential and conceptually not difficult although the statistical separation of voluntary and involuntary unemployment inevitably is rough and inexact.

2 In some earlier post-war recessions prices continued to creep up slowly or failed to decline, whcih was then regarded as an alarming development.

made to prolong the expansion by stimulative fiscal-monetary policies inflation will accelerate and the next recessions will be all the more intractable.

What is the implication of all that for the LDCs ? We can, I believe, start from the assumption that what matters basically for the LDCs is the **real** performance of the DC economies. The lower the unemployment and the higher the capacity utilization and the growth rate of real GNP in the DCs, the better the outlook for the LDCs for two reasons : First DC demand for LDC exports is stronger and second protectionist pressures in the DCs are weaker.

Whether a **given** real performance of the DC economies—real growth, unemployment and capacity utilization—is accompanied by stable or rising prices is as such of minor importance for LDCs. It could be even argued that an inflationary real expansion in the DCs is better for the LDCs than an equal non-inflationary real expansion, for following reason : Since most LDCs have high rates of inflation, with a given real rate of expansion in the DCs, the higher the DC inflation, the easier it is for the LDCs to stabilize their currencies in terms of DC currencies and the easier to avoid exchange control. Since many LDCs try to peg their currencies to a DC currency (most of them to the dollar) or to a basket of such currencies, this is not an unimportant matter.

However, if it is true that inflation in the DCs tends to reduce the duration and amplitude of the real cyclical upswing in the DCs, the problem appears in a different light. That is to say, the real longterm interest of the LDCs would be best served if the DCs were able to solve their stagflation problem without endangering longterm real growth.

2. The Dilemma of Stagflation :

Let us have a closer look at stagflation, because the coexistence of high inflation and persistently high unemployment is often regarded as a striking malfunctioning of the liberal market economy and an embarassing failure of liberal economics (both of the Keynesian and Monetarist variety). I shall try to show that in a truly liberal order, in other words in a highly competitive market economy stagflation on the recent scale and duration would not be possible. It is not the liberal order, but

increasingly serious deviations from the free market economy, price and especially wage rigidities that cause the stagflation dilemma.

It is true that no industrial country has been completely successful in eliminating inflation and unemployment at the same time.[1] Stagflation, indeed, poses a nasty dilemma for macroeconomic policy. On the one hand, unlike in an old fashioned ("classical") recession or depression characterized by falling prices, in an inflationary recession (or in a highly inflationary cyclical expansion as the present one) a Keynesian policy of monetary or fiscal expansion is bound to accelerate inflation. It is now fairly generally recognized that in such an environment, despite high unemployment and slack monetary expansion, although it may produce more employment and higher output in the very short run, would soon be followed by a higher rate of inflation which in turn would sooner or later lead to a new recession.[2] On the other hand, an anti-inflationary policy

1 Switzerland is no exception. True, inflation has been reduced from a peak of about 10% in 1974 to about 1.5% in 1977 and unemployment is less than 1% of the labor force. But Switzerland is a special case because the low unemployment rate has been made possible by a substantial decrease in the number of foreign workers. If the departed foreign workers are counted as unemployed, the unemployment percentage is very substantial.

2 There are some die-hard Keynesians and politicians with a time horizon extending merely to the next election who still argue, despite the experience of prolonged stagflation, that monetary expansion is safe and not inflationary so long as there is substantial unemployment and slack. There are, however, convincing reasons for assuming that Keynes himself would not have taken that position. T. W. Hutchison in his pamphlet **Keynes versus the "Keynesians" ... ? An Essay in the Thinking of J. Keynes and the Accuracy of its Interpretation by his Followers,** (The Institute of Economic Affairs, London, 1977) shows that in 1937 Keynes had already become greatly concerned about inflation although at that time the rate of inflation was much lower and unemployment much higher than in recent years.

Disenchantment with inflationary policies has been expressed with surprising bluntness by the Labor Prime Minister of Britain. In a speech to the Labor Party Conference on September 28, 1976 Mr. James Callaghan said: "We used to think that you could just spend your way out of a recession and increase employment by cutting taxes and boosting Government spending. I tell you, in all candour, that that option no longer exists, and that insofar as it ever did exist, it only worked by injecting bigger doses of inflation into the economy followed by higher levels of unemployment as the next step. This is the history of the past twenty years."

of tight money and fiscal restraint is apt to lead to higher unemployment and slack. What is the explanation of this dilemma and how can it be resolved? Two explanations and two corresponding policy prescriptions have been proposed. Fortunately, the two explanations can be reconciled and the policy prescriptions complement each other.

The explanation of the monetarists is simple and their policy prescription straightforward. Stagflation, they say, is the predictable outcome of a long drawnout inflation. Inflation expectations have become very sensitive to expansionary measures. Therefore, Keynesian policies have lost their potency, except in the very short run. The policy prescription is straightforward: Stagflation like any other inflation can be subdued only by reducing monetary growth. It is acknowledged that this cannot be done without initially creating more unemployment. But monetarists are confident that if the rate of monetary expansion is reduced gradually, inflationary expectations will subside, labor unions will moderate their wage demands and the economy will gradually settle down in a sustainable growth path with stable prices and substantially full employment.

The other view (which is shared by the present writer) accepts the monetarist proposition that no inflation, including stagflation, is possible without permissive monetary expansion and that stagflation cannot be cured without monetary restraint; but it insists that inflationary expectations alone cannot explain stagflation on the present scale and duration, the stubborn coexistence of rapidly rising prices and wages on the one hand and severe unemployment on the other. Concretely, in a truly liberal, that is to say, in a more competitive economy than we have now, stagflation on the recent scale could not occur. If there were more competition in commodity and labor markets the spectacle of prices and wages rising in the face of high unemployment and low capacity utilization would be impossible.[1]

It follows that while monetary restraint is an absolutely necessary condition, it is not a sufficient condition for an

1 Competition can of course not prevent prices and wages from rising if the supply of money is being inflated. What is impossible under effective competition is the combination of rising prices and wages on the one hand, and persistent large excess supply of labor (unemployment) and excess supply of commodities (low capacity utilization) on the other hand.

economically efficient and politically feasible solution of the stagflation dilemma. If a policy of monetary restraint is not supplemented by structural reform, that is, by measures designed to make the economy more competitive and flexible, so much transitional unemployment will be created that politically the policy of monetary restraint cannot be carried through. Or assuming, unrealistically, that the process of disinflation was carried through and a non-inflationary equilibrium is reached, the residual unemployment ("natural" unemployment as the monetarists call it) would be higher and the level as well as the growth rate of per capita GNP (standard of living) lower than in a competitive environment. Consequently, if it is not possible to remove at least the worst impediments to competition that have been put in place since the great depression, it would be very difficult, perhaps politically impossible, to prevent a relapse into attempts to increase employment and speed up growth by inflationary policies which would inevitably lead to a new recession.

Here is not the place for a thorough discussion of structural reform measures.[1] Among the measures designed to bring the economy closer to the competitive ideal are deregulation of industry, restraint of union power, elimination of minimum wages which have greatly contributed to youth unemployment, freer international trade (free trade is the most effective and economically as well as administratively, though not politically easiest anti-monopoly policy), vigorous anti-trust policy and many others. A bundle of such measures would reduce what monetarists call the "natural rate of unemployment" and improve what monetarists call the "natural rate of unemployment" and improve what Keynesians[2] call "the trade-off between inflation and unemployment."

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1 Elsewhere I have discussed the stagflation problem, indicated possible cures in greater detail and given references to the literature. See Gottfried Haberler, "The Problem of Stagflation" in **Contemporary Economic Problems 1976** (Washington D.C. : American Enterprise Institute, 1976) and "Stagflation : An Analysis of its Causes and Cures" in **Economic Program, Private Values, and Public Policy,** Essays in Honor of William Fellner (ed. Bela Balassa and Richard Nelson) (Amsterdam : North Holland Company, 1977).

2 Accepting this phrase is not meant to be an endorsement of the Phillips curve. By now it should be clear that there exists no long-run trade-off between

Even in a much more competitive economy than the one we have now there would presumably occur mild fluctuations in economic activity. The business cycle would still be there, but the cyclical ups and downs in output and employment would be milder and would not play around a steep upward trend of the price level as is now the case. The long-run economic growth rate would be higher because recessions would be shorter and milder and out of a larger GNP a larger amount would be saved and invested.

In summary we can say that stagflation of the recent magnitude and duration is a very serious problem. But it does not signify a failure of the liberal economic order or the market economy; on the contrary, in a truly liberal, that is to say in a more competitive economy than the one we have now, the dilemma of stagflation would not exist or would exist only in a mild and inocuous form.

3. The Outlook for the Future :

What are the implications of all this for the LDCs ? From the LDCs' point of view it is to be hoped that the DCs will pull themselves together and get out of the stagflation quagmire. Great stability, lower unemployment and more rapid growth in the DCs would expand markets for LDC exports and reduce protectionist pressures.

Perhaps it is unrealistic to assume that the DCs will in fact pursue a policy of structural reform, of restoring a greater degree of competition, with sufficient vigor and comprehensiveness to eliminate stagflation completely. Half-hearted measures in the right direction here and there will not do much good. If this is the prospect we have to reconcile ourselves with higher levels of "natural" unemployment and lower rates of growth than in the past. This is often regarded as the most likely prospect,

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inflation and unemployment. What it does mean is that macroeconomic policies to reduce unemployment would be far more effective and the transition to a non-inflationary growth path would be much less painful (transitional unemployment would be lower) in a competitive environment than it is under present conditions of rigid wages and prices. On that Keynesians and monetarists should be able to agree.

for example when it is said that at the present time in the United States full employment should be defined as 5 or 6% unemployment and not 4% as used to be the casebefore the recent recession.[1]

What are the implications of that outcome for the LDCs? Of course, the LDCs would be much better off if the DCs were able to eliminate stagflation altogether. But even as the situation is at present, with a growth rate of 4½% in the OECD area forecast for 1977 and 1978, the situation of the LDCs is not hopeless or even outright bad. World trade, including that of the LDCs, has resumed its rapid growth after the decline in the recession of 1974 and 1975. It is not generally realized that, contrary to earlier expectations, the LDCs as a group have weathered the recent recession better than the DCs. According to World Bank figures, the annual real rate of growth of GNP per capita of a representative group of LDCs (excluding oil-exporting countries) was 5.6% in 1973, 3.7% in 1974, 2.9% in 1975 and 3.7% in 1976 compared with 3.7% during 1966-1972. The figures for the industrial countries for the same years are 5%, -0.6%, 4.2%, 3.5%.[2]

At any rate, if the internal economic policies of the DCs fall short of the optimum and if therefore their growth rate is lower than it could be, it would be irrational for the LDCs to make things worse by retreating further from the liberal international economic order which has served the whole world including the LDCs so well.

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1 A mere dismal scenario, which unfortunately cannot be dismissed as entirely out of the question, would be an attempt to deal with the problem of stagflation by tinkering with symptoms—by means of direct price and wage controls, consumer rationing and similar measures. The dismal prospects of this outcome, not only for economic growth (standard of living) but also for the liberal order and for democracy itself will not be further discussed in the present essay.

2 See World Bank, Annual Report 1977, p. 104. The figures for 1976 are preliminary. These high growth rates were facilitated by large borrowing abroad whose tapering off from the present, probably unsustainable level will present difficult adjustment problems.

4

DETERMINANTS OF PRICE CHANGES IN INDIA : 1861-1967—A SPECTRAL ANALYSIS

Subramanian Swamy *

1. The Problem

Although the academic community in India is seized by the problem of inflation, there has been hardly any study of the price generation mechanism. This neglect has been especially acute in the area of long-term price behavior. The little discussion there has been, has centred on short term issues such as the oil crisis and the failure of the monsoon. Even here, no systematic effort has been made to resolve the controversy on exactly which factors primarily influence the behaviour of prices. Besides, the Government of India has held divergent views. The Planning Commission has been of the view that prices can be controlled if there is no deficit financing.[1] The Finance Ministry is not inhibited by any such theory of deficit financing, but considers wage hikes and lack of production both the "responsibility" of the labor unions, as the main factors. Some academic economists have propounded a well researched but unconvincing thesis that prices can be controlled only and

* An earlier draft of this paper was presented in a seminar at the Indian Statistical Institute, New Delhi. The author is grateful to Shri T. N. Srinivasan and Shri Dharma Kumar for comments.

1. Planning Commission., **Draft Fifth Five Year Plan,** Part I, p. 53, New Delhi. The Planning Commission had suggested that for price stability there should be no deficit financing in the first two years of the Fifth Plan (1974–75 and 1975–76), and less then 2% of the total mobilized resources for investment in the remaining three years. The Finance Ministry however in its annual

exclusively through monetary policy.[2] There are others as well who have offered other arguments.[3] Minhas has suggested that the performance of the agricultural sector is the single most important factor in determining general price trends.

Since the economy is a non-closed, interdependent, inter-sectoral system none of the above stated factors can be dismissed as absurd. The crucial question from the policy angle is instead : which factor is the "leading factor". In econometric terms, it is important to know which variable(s) account(s) for most of the variance in the general price fluctuations. Obviously, it is not a simple question of demand and supply. Over a long span, the price-behavior is determined by a generating mechanism that reflects trend and cyclic factors besides the random shocks. More importantly, the cyclic factors, especially their inter-sectoral relationship and lead lag-structure are of primary significance. Consequently to analyze price behavior, it is imperative that we examine the cyclic factors that are of influence. **This, surprisingly, no scholar has done to date for Indian data** and the present study therefore is an attempt to fill part to that void.

Further, this study will also provide us with an opportunity to study if the "typical spectral shape" of economic series, first discovered by Granger, obtains with Indian data. If indeed it is so, then the price generation mechanism can be described by the simple Markov chain model $P_t = \alpha P_{t-1} + E_t$, where P_t is price and E_t is the shock term.

I also propose to examine the behavior of the general, agricultural, and non-agricultural price levels, using the technique of cross-spectral analysis.[4]

Budgets had disregarded this kind view. With this of Governmental coordination, confusion on basic economic issues was inevitable.

2. **Memorandum on a Policy to Contain Inflation.** Submitted to the Prime Minister by Dr. C. N. Vakil **et al,** 1974.

3. For example : Pai Panandikar, D. H. : **Anatomy of Inflation,** Center for Monetary Research, New Delhi, 1974. Minhas, B. S. "Only a Marginal Impact" in the **Symposium on Inflation and Its Solution,** August 31, 1974. There is also a school of "left wing" economists who think capitalism is the root cause of inflation. However their works are poorly documented, and consequently they shall remain outside the purview of this study.

4. It is worthy of comment that India, with its long tradition of statistics, has not merited attention from Indian economists in area of long term time series analysis. The present study is surprisingly **the first ever** to apply spectral analysis to Indian economic data. For application of spectural analysis to

2. The Method

Let $P^A(t)$, $P^M(t)$ and $P(t)$ be index number series of agricultural, non-agricultural and general prices respectively. Define x(t), y(t), and z(t) respectively as the trend eliminated zero mean transformation[5] of the p's.

We define the auto and cross-covariance functions for lag l as follows :

$$\Upsilon_{xx}(l) = E[x(t)\ x\ (t+l)], \text{ and similarly for } \Upsilon_{yy} \text{ and } \Upsilon_{zz} \quad (1)$$

$$\Upsilon_{xy}(l) = E[x(t)\ y(t+l)], \text{ and similarly } \Upsilon_{xz} \text{ and } \Upsilon_{yz} \quad (2)$$

Given a sample of T observations, these functions are estimated as :

$$C_{xx}(l) = \frac{1}{T-l}\sum_{t=1}^{T-l} x(t) \cdot x(t+l); \text{ etc.} \quad (3)$$

$$C_{xy}(l) = \frac{1}{T-l}\sum_{t=1}^{T-l} x(t) \cdot y(t+l); \text{ etc.} \quad (4)$$

In the expression in (3) and (4) we have chosen the divisor as $T-l$. Although standard statistical theory would support us in this, we nevertheless sometimes, run into problem on this score while estimating the spectrum. If we use the divisor T, then C_{xx}, C_{xy} etc., become a positive definite function of, and this together with a Parzen Window guarantee that the estimated spectrum is nowhere negative. In this study, we shall retain the use of the divisor $T-l$ on the grounds that the Window used is Bartlett's, and under the circumstances there is no reason to deviate from standard statistical practice.

other economies, see Labys, Walter and C.W.J. Granger : **Speculation, Hedging and Commodity Price Forecasts,** Heath Lexington, Mass., 1970 and references cited therein.

5. This is necessary to ensure stationarity of the time series.

The spectral density function of a covariance–stationary time series is defined as the Fourier transform of the auto–covariance function :

$$f_{xx}(\omega) = \frac{1}{2\pi} \sum_{l=-\infty}^{+\infty} \gamma_{xx}(l)\ e^{-il\omega},\ \omega \varepsilon [-\pi, \pi] \qquad (5)$$

and similarly $f_{yy}(\omega)$, and $f_{zz}(\omega)$

The cross spectrum between time series x(t) and y(t) is given as :

$$f_{xy}(\omega) = \frac{1}{2\pi} \sum_{l=-\infty}^{+\infty} \gamma_{xy}(l)\ e^{-il\omega},\ \omega \varepsilon [-\pi, \pi] \qquad (6)$$

and similarly $f_{xz}(\omega)$ and $f_{yz}(\omega)$[6]

We may note from (5) that the inverse Fourier transform would give :

$$\gamma_{xx}(l) = \int_{-\pi}^{\pi} f_{xx}(\omega)\ e^{il\omega}\, d\omega \qquad (7)$$

From (7) we derive the fundamental interpretation of the spectral density :

$$\gamma_{xx}(o) \overset{\Delta}{=} \text{Var}\ [x] = \int_{-\pi}^{\pi} f_{xx}(\omega)\, d\omega, \text{ etc.} \qquad (8)$$

Consequently, $f_{xx}(\omega)d\omega$ etc. are a decomposition in the closed interval of $[-\pi, \pi]$ of the variance of the time series {x}, etc. The decomposition is into portions associated with the components of the series of different frequencies. This decomposition interpretation provides us with a powerful tool to investigate which frequencies are important in terms of "contribution" $f_{xx}d\omega$ to the variance in the time series, $\gamma_{xx}(o)$. Hitherto the classical business cycle theory approach had been to investigate

6. Because $\lambda_{xx}(-l) = \lambda_{xx}(l)$, and $\lambda_{xy}(l)$ does not have the same property, the spectrum $f_{xx}(\omega)$ etc., are real, while $f_{xy}(\omega)$ etc,, are complex.

cycles by cumbersome methods in the time domain after guessing the likely frequency of the cycle. The spectral method is direct – we can measure the contribution of all frequencies concomitantly.[7]

Similarly with the cross-spectrum, we may write the inverse Fourier transform as :

$$\gamma_{xy}(l) = \int_{-\pi}^{\pi} f_{xy}(\omega)\, e^{il\omega}\, d\omega \qquad (9)$$

and therefore

$$\gamma_{xy}(o) = \int_{-\pi}^{\pi} f_{xy}(\omega)\, d\omega \qquad (10)$$

which shows that the cross spectrum is the decomposition of the covariance over the various frequencies.[8]

Description of a Time Series in the Frequency Domain

It can be shown that any covariance stationary stochastic process x(t) can be represented in the form

$x(t) = \int_{o}^{\infty} [\cos \omega t\, dU(\omega) + \sin \omega t\, dV(\omega)]$, where U and V are stochastic processes, and ω is frequency of occurrence.

dU (ω) and dV (ω) have the following properties :

1. $E[dU(\omega)] = E[dV(\omega)] = o$
2. dU and dV are orthogonal for any pair of frequencies, that is :

   $E[dU(\omega)\, dU(\omega')] = E[dV(\omega)\, dV(\omega')] = o$ for all $\omega \neq \omega'$
3. dU and dV are mutually orthogonal for all frequencies :

   $E[dU(\omega)\, dV(\omega') = o$, all ω and ω'
4. dU and dV have the same variance at all frequencies;

   $E[dU(\omega)^2] = E[dV(\omega)^2] = dF(\omega)$

   dF (ω) is the power spectrum of x(t).

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7. Yaglom, A.M. **An Introduction to the Theory of Stationary Random Functions** (Prentice-Hall, 1965)

8. On the basis of this knowledge, we shall later define a correlation measure ...termed "coherence..." for different frequencies.

$F(\omega) = \frac{dF(\omega)}{C(o)}$ is the spectral density of x(t).

It can be shown that the properties of the random variables dU (ω) and dV (ω) imply that :

$$C(l) = \int_o^\infty \cos \omega l \, dF(\omega).$$ For $l = o$, we have :

$$C(o) = \int_o^\infty (\cos o) \, dF(\omega) = \int_o^\infty dF(\omega).$$

This last equality implies that the spectrum decribes a time series in the frequency domain by decomposing its variance C(o) in terms of the contributions of a set of components indexed on the entire frequency domain.

Fundamental Theorem of Time Series Analysis

Recalling that :

$$C(\theta) = \int_o^\infty \cos \omega \theta \, dF(\omega),$$ we obtain

$$C(\theta) = \int_o^\infty \frac{e^{i\omega\theta} + e^{-i\omega\theta}}{2} \, dF(\omega)$$

$$\text{or } C(\theta) = \int_{-\infty}^{\infty} e^{i\omega\theta} \frac{dF(\omega)}{2}$$

where by definition $dF(-\omega) = dF(\omega)$

The autocovariance function is thus the Fourier transform of the power spectrum.

Dividing $C(\theta)$ through by C(o) we obtain :

$$\frac{C(\theta)}{C(o)} = R(\theta) = \frac{1}{2} \int_{-\infty}^{\infty} e^{i\omega\theta} \frac{dF(\omega)}{C(o)}$$

$\frac{dF(o)}{C(o)}$ is the spectral density function which is thus the Fourier transform of the autocorrelation coefficient.

The Fundamental Theorem of Time Series Analysis states that there is a one-to-one correspondence between the power spectrum and the autocovariance function (and, similarly, between the spectral density and the auto-correlation function) of stochastic process, since each pair of functions forms a Fourier transform pair.

Comparison of Autocovariance Function and Power Spectrum

Thus, the Fundamental Theorem of Time Series Analysis states that knowledge of either one of the autocovariance and power spectral functions entails knowledge of the other. There are two main reasons that make it preferable to study the spectral density in the frequency domain rather than in the time domain using the autocovariance :

1. The spectral function describes a covariance stationary process in terms of additive contributions to the variance of the process of a set of uncorrelated frequency components. In contrast, the value of l_0 of the autocovariance function is a weighted sum of its values at l_1, l_2,.....where l_1, l_2,.....$< l_0$ and l_0 is a linear combination of l_1, l_2,.....

The power spectral function thus gives us information as to the relative importance of the contributions of the different cyclical movements which have generated the observed time series, while the autocovariance function does not.

2. Whereas consistent estimates of the power spectral function can be made, the sampling distribution of the autocovariance function is unstable.

A practical problem of estimating the spectral density arises because it is physically impossible to calculate the infinity of $\gamma_{xx}(l)$, $\gamma_{xy}(l)$ etc. $l \in [-\infty, +\infty]$ Consequently we have to truncate the estimation of the auto-and cross-covariances at some point $l = m$. What this point 'm' is, is of crucial significance in the estimation of the spectral density function.

Besides the practical reasoning, there is a more fundamental reasoning in favor of truncating the covariances even if they were all

known. In the presence of statistical fluctuations, the spectrum becomes spiked, and random fluctuations swamp the actual peaks and troughs in the true spectrum. Consequently, it becomes necessary to smoothen the spectrum. The smoothing may be done in several ways. One way is to 'filter' the series before calculating the spectrum. This we term as "pre-whitening". After the pre-whitening the estimated true spectrum can be derived by "re-coloring".[9] Another way is to employ a weighting function which gives certain lags high weight while others low weight, to accentuate the contrast between peaks and troughs.

For instance, instead of estimating (5), we may estimate

$$f_{xx}^{\lambda}(\omega) = \frac{1}{2\pi} \sum_{l=-m}^{+m} \lambda_l \gamma_{xx}(l)\, e^{-i l \omega}, \text{ where } \lambda - l = \lambda_l \qquad (11)$$

Using (7), we obtain

$$f_{xx}^{\lambda}(\omega) = \int_{-\pi}^{\pi} H(\omega-\theta)\, f(\theta)\, d\theta, \text{ where} \qquad (12)$$

$$H(\omega-\theta) = \frac{1}{2}\left\{ \mu(\omega+\theta) + \mu(\omega-\theta) \right\}, \text{ and} \qquad (13)$$

$$\mu(\omega-\theta) = \frac{1}{\pi} \sum_{l=-m}^{+m} \lambda_l\, e^{-i(\omega-\theta) l} \qquad (14)$$

Definition : If $\Psi(\omega)$ and $\phi(\omega)$ are periodic functions of period such that $\Psi(\omega) = \int_{0}^{\xi} G(\omega-\theta)\, d\theta$, then $G(\omega-\theta)$ is the window through which Ψ views ϕ. The window G(u) so defined possesses the following properties :

(1) $G(-u) = G(u)$,

9. For a lucid exposition, see **Nerlove, Marc** : "Spectral Analysis of Seasonal Adjustment Procedures" **Econometrica,** vol. 32, No. 3, 1964, pp. 241-84. Filtering may be done by moving averages. There are many such filters, e.g., Kuznets filter.

(2) $\int_0^{\xi} G(u)\,du = 1$, because if $\phi(\theta) = c$, then $\Psi(\theta)$ should equal c.

(3) $|G(u)| \leqq G(o)$, so that ω is given the maximum reflection.

The function λ_l is called the **lag window.** G(u) is called the **spectral window.**

In our study, we have chosen λ_l as the Bartlett's lag window :

$$\lambda_l = \begin{cases} 1 - \dfrac{|l|}{m}, & \text{if } l \leqq m \\ o & \text{otherwise} \end{cases}$$

Therefore, using equations (12)–(14), we have

$$H(\omega-\theta) = \frac{1}{\pi m}\left\{\frac{\text{Sin}^2\,[(\omega+\theta)\,m]}{\text{Sin}^2\,\frac{(\omega+\theta)}{2}} + \frac{\text{Sin}^2\left[\frac{(\omega-\theta)m}{2}\right]}{\text{Sin}^2\,\frac{(\omega-\theta)}{2}}\right\} \quad (15)$$

Since $f^{\lambda}(\omega)$ and $f(\omega)$ are both periodic functions of period 2π, we may say that $H(\omega-\theta)$ defined in (15) is a spectral window.[10] This particular Bartlett window has a regular shape of reaching a maximum for $\theta=\omega$, falling off rapidly on either side of ω till the value zero is reached at $\theta = \pm\frac{\pi}{m}$. At points beyond this, it will oscillate but these oscillations are of much smaller amplitude[11] than the height of the main peak at $\theta=\omega$.

As a consequence, $f^{\lambda}_{xx}(\omega)$ given in (12) will "focus" a peak at ω more prominently than revealed in $f_{xx}(\omega)$. The focussing power of $H(\omega-\theta)$ depends very much on 'm', in particular the

10. For other examples see **Jenkins G. M.** : "General Considerations in the Analysis of Spectra : **Technometrics** vol. 3, 1961, pp. 133–66. Jenkins calls $H(\omega-\theta)$ a "kernal".

11. Later we shall term these oscillations "leakages" in the window. The ideal window is one that has no leakages....but it does not exist. For another approach see **Wonnacott, Thomas :** "Spectral Analysis Combining of Bartlett Window with an Associated Inner Window" **Technometrics,** vol. 3, 1961.

width $\pm\frac{\pi}{m}$, that is, equal to $\frac{2\pi}{m}$. Besides, f^{λ}_{xx} is an average of f_{xx} viewed through $H(\omega-\theta)$. Consequently, we shall call $\frac{2\pi}{m}$ as the **bandwidth** of $H(\omega-\theta)$. It is clear that as the number of lags estimate 'm' **increases**, the bandwidth **decreases.** Smaller the bandwidth, **greater** is the focussing power. Moreover, in the case of the Bartlett lag window, it has been shown elsewhere that :

$$\text{Var}\left[f^{\lambda}_{xx}(\omega) \right] = \sigma^4 \left[f(\omega) \right]^2 mT^{-1} \qquad (16)$$

Consequently, if the bandwidth decreases, then the variance of the focussed estimate f^{λ} **increases.** In this particular case, we can formulate the **Principle of Uncertainty in Spectral Estimation** as : Bandwidth x Variance = Constant. We cannot decrease, therefore, the bandwidth without increasing variance.[12] In other words, we have to trade-off focus-power or "resolvability" with "accuracy".

Recalling equation(11), we have chosen to estimate[13] the spectral densities f_{xx}, f_{xy} etc. using a Bartlett lag window with a spectral window bandwidth of $\frac{2\pi}{10}$ i. e., $m = 10$. Since the spectrum is an even function, we may rewrite equations(11) as:

12. We can construct estimates with large variance and wider bandwidth. See **Grenander,Ulf** "Bandwidth and Variance in the Estimation of the Spectrum" **Journal of the Royal Statistical Society,** Series B, No. 1. 1958, pp. 152-7. For a good discussion on bandwidth and its crucial role in designing a spectral estimate see **Priestly, M. B.** "Basic Considerations in the Estimation of the Spectra" **Technometrics,** vol. 4, 1962, pp. 551-64.

13. A recorded time series is the result of sampling an economic phenomenon at equally spaced points of time, each successive two points being Dt apart. We can, therefore, estimate the spectrum only for the frequencies 0 to π/Dt. π/Dt, the highest frequency about which we can obtain direct information is called the **Nyquist frequency.**
But whereas no direct information can be obtained about frequencies higher than the Nyquist one, these frequencies will tend to be confounded with the frequencies for which the spectrum is measured. Such a confounding of frequencies is known as **aliasing.** If aliasing of frequencies is serious, then the observed spectrum differs from the true one.

$$f^{\lambda}_{xx}(\omega_k) = \frac{1}{2\pi}\left\{ C_{xx}(o) + 2\sum_{l=1}^{m} C_{xx}(l) \cos\left(\frac{\pi k}{n} l\right) \lambda_l \right\} \quad (17)$$

where $\omega_k = \frac{\pi k}{N}$, $k = 0, 1, 2, \ldots\ldots, N$.

Similarly f^{λ}_{yy} and f^{λ}_{zz}. The cross spectrum can be rewritten as follows :

$$f^{\lambda}_{xy}(\omega_k) = \frac{1}{2\pi} C_{xy}(o) + \frac{1}{2\pi}\sum_{l=1}^{m} C_{xy}(l)\left[\cos \frac{\pi k l}{N} - i \operatorname{Sin} \frac{\pi k l}{N} \right] \lambda_l \quad (18)$$

$$+ \frac{1}{2\pi}\sum_{l=1}^{m} C_{yx}(l)\left[\operatorname{Cos} \frac{\pi k l}{N} + i \operatorname{Sin} \frac{\pi k l}{N} \right] \lambda_l ; \; k = 0, 1, \ldots, N$$

$$= R_{xy}(\omega_k) = i I_{xy}(\omega_k)$$

$$= A(\omega_k) e^{-i\phi(\omega_k)} \quad (19)$$

where

$$A(\omega_k) = | f^{\lambda}_{xy}(\omega_k) | = \sqrt{R^2_{xy} + I^2_{xy}} \text{ defined as "amplitude"} \quad (20)$$

$$\phi_{xy}(\omega_k) = \tan^{-1}\left[\frac{I_{xy}}{R_{xy}} \right], \text{ defined as "phase"} \quad (21)$$

The ideas of spectral analysis of a single time series are

$$C_{xy}(\omega_k) = \frac{| f_{xy} |^2}{f_{xx} f_{yy}}, \text{ defined as "coherence".} \quad (22)$$

A recorded time series is the result of sampling an economic phenomenon at equally spaced points in time, each successive two points being Dt apart. We can, therefore, estimate the spectrum only for the frequencies 0 to π/Dt. π/Dt, the highest frequency about which we can obtain direct information is called the **Nyquist frequency.**

But whereas no direct information can be obtained about frequencies they will tend to be confounded with the frequencies for which the spectrum is measured. Such a confounding of frequencies is known as **aliasing**. If aliasing of frequencies is serious, then the observed spectrum differs from the true one.

The ideas of spectral analysis of a single time series are thus extended to the cross-spectral analysis of two covariance-stationary time series. This extension is based on a theorem demonstrating that not only is each frequency component of one time series independent of all the other frequency components of the series, but it is also independent of all such components of another stationary series except for the letter's component that corresponds to the same given frequency.[14]

The following measures of the association of the frequency components of two processes are central in cross-spectral analysis :

(1) **Coherence C(ω)**. It can be shown that $o \leq C(\omega) \leq 1$. $C(\omega)$ is analogous to the square of the correlation coefficient between two time series. The greater $C(\omega)$ is the closer is the association between the two series at frequency ω.

(2) **Phase difference, $\phi(\omega)$**. The phase difference between the frequency components of the two series measures the extent to which at each particular frequency the cyclical movement of one series leads, coincides with, or lags the corresponding cyclic movement of the second series.

Using these basic theoretical tools, we shall now apply ourselves to the study of Indian prices.

3. The Data

On investigation one finds no serious dearth of price statistics in India. The Director General of Commercial Intelligence, Calcutta, and later the Economic Adviser to the Commerce Ministry have annually published price data since 1861 when the former office was established. There are altogether seven series of wholesale

14. See Granger, C. W. J. and Hatanaka M., **Spectral Analysis of Economic Time Series** (Princeton, 1964), Ch. 6.

prices.[15] Of these, four viz. **the Indian Price Series, the Sensitive Series, the General Purpose Series** and **the Revised Series,** have been selected. For the 106 years 1861–1967 data which we have used in this study, 80 years are covered by the first series. The series was based on wholesale prices of 28 commodities with base year 1873. The Sensitive Series is available from 1937 to 1947, and is calculated on 23 commodities. The General Purpose Series extends from 1947 to 1953 and is based on 78 commodities. Finally the Revised Series is constructed on price of 112 commodities covering the years 1953–67.

These four series have been spliced together and converted in index numbers with base year 1952–53=100. Table No. 1 contains the final series obtained. Obviously, the series does suffer from the usual problems of quality, continuity, dependability, limited geographical coverage and index-splicing. Nevertheless, the obtained data do seem to be sensitive to, and faithfully represent the economic fluctuations for which we have exogeneous data. Figures (1) – (3) are a time scale profile of the price index series by agricultural and non-agricultural sectors.

4. The Empirical Findings

Employing the data in Table 1, an exponential curve was fitted to determine the trend component in the figures. The following fits were obtained :

1. Agricultural Prices : $\hat{P}^A(t) = 14.53\ e^{0.18t}$
2. Non-Agricultural Prices : $\hat{P}^M(t) = 21.05e^{0.015t}$
3. General Prices : $\hat{P}(t) = 18.10\ e^{0.017t}$

Using these fitted curves, the (residual) stationary time series $x(t) = \hat{P}^A(t) - \hat{P}^A(t)$; $y(t) = P^M(t) - \hat{P}^M(t)$; and $z(t) = P(t) - \hat{P}(t)$ were obtained. The trend curves show that

15. See Thingalaya, N. K. : **Agriculture and Its Terms of Trade,** Unpublished Doctoral Dissertation, University of Bombay, 1963. It must be said to Thingalaya's credit that he has done very painstaking work, but unfortunately his impressive study has gone unnoticed. The data of the present paper "A Century of Prices in India" **Economic and Political Weekly,** Jan. 25, 1969. Note that Thingalaya's trend-fitting is erroneous, and the fit is poor.

agricultural prices have grown faster than all other prices. Over the period of 107 years, agricultural prices have grown at an average of 1.8% per year, non-agricultural prices at 1.5% per year, while the general price level has risen at 1.7% per year. The average trends however hide two distinct sub-trends of almost zero price change between 1861 and 1936, and a very sharp acceleration thereafter. The price spiral after 1967 is even more rapid and is hence excluded from the sample.

The spectral density representations of x(t), y(t), and z(t) is given in figures (4) - (6). The frequency $wk = \frac{\pi k}{50}$, $k = 0, 1, \ldots, 50$. On the basis of the spectral density functions so plotted, we may derive the following conclusions :

First the spectral density of agricultural, non-agricultural, and general prices have a "typical spectral shape" noticed in most economic series. [16] This means that events which affect the economy in the long run are more important in determining price movements than those which affect it only for a short time.

Second, more than 95% of the total variance (viz., the power spectrum) in the original time series of prices is in the frequency band of $\left[0, \frac{3\pi}{10}\right]$ cycles per year. This means that cycles of shorter duration than 6-2/3 years is of slight consequence in Indian price movements. Consequently, the so called three year monsoon cycle has no significant manifestation in the long term cyclic price movements---even of agricultural prices !

Third, in the frequency band $\left[\frac{\pi}{5}, \frac{2\pi}{5}\right]$, the spectrums of prices show a perturbation which may suggest that if an alternative window with less leakage is employed, then the dominant cycles could be revealed in the price series. The graphic representation of the Bartlett window does not reveal any significant leakage. However, to determine more positively if the perturbed spectrum in the band $\left[\frac{\pi}{5}, \frac{2\pi}{5}\right]$ contains a

16. **Granger C. W. J-** : "The Typical Spectral Shape on an Economic Variabls" **Econometrics,** vol. 34, 1966.

TABLE 1

Reconstructed Price Series (wholesale index)

(Base : 1952-53=100)

Year	Agricultural	Non-Agricultural	Genrrl
1861	15.9	28.9	19 9
1862	15.5	30.6	19.8
1863	17.1	30.9	21.5
1864	22.9	30.7	27.0
1865	22.1	31.5	26.5
1866	28.7	29.6	32.6
1867	22.8	29.2	26.7
1868	19.0	28.8	22.9
1869	22.8	29.9	26.9
1870	21.7	31.0	26.0
1871	18.3	29.9	22.5
1872	18.9	31.7	23.3
1873	19.3	31.9	23.7
1874	22.9	29.7	26.9
1875	21.0	28.2	24.8
1876	19.3	26.3	22.9
1877	25.4	30.2	29.5
1878	28.2	28.8	32.1
1879	28.4	28.5	32.5
1890	23.1	31.3	27-3
1881	19.1	31.3	23.5
1882	18.3	30.6	22.6
1883	18.3	29.1	22.3
1884	21.1	28.5	25.0
1885	20.7	27.1	24.4
1886	20.3	28.1	24.2

Year	Agricultural	Non-Agricultural	General
1887	19.5	29.1	23.5
1888	20.8	29.5	24.8
1889	24.1	31.1	28.3
1899	24.5	31.4	28.7
1891	22.9	28.7	26.8
1892	26.5	30.1	30.5
1893	27.3	31.6	31.5
1894	26.3	32.1	30.7
1895	24.0	31.8	28.3
1896	25.4	31.7	29.7
1897	33.9	30.0	37.7
1898	26.2	37.9	29.8
1899	22.7	28.0	26.5
1900	28.3	30.6	32.4
1901	27.7	31.3	31.8
1902	27.9	29.7	31.7
1903	24.8	28.8	28.6
1904	24.6	31.0	28.8
1905	26.1	35.6	30.8
1906	34.8	37.4	39.7
1907	39.3	39.2	44.4
1908	40.4	36.9	45.1
1909	36.2	35.7	40.9
1910	28.6	37.1	33.6
1911	32.3	38.7	37.5
1912	34.0	40.9	39.5
1913	38.3	43.3	43.8
1914	40.6	42.6	46.2
1915	38.8	41.5	44.2
1916	40.1	48.5	46.7
1917	38.3	52.4	45.5

Year	Agricultural	Non-Agricultural	General
1918	40.5	67.0	49.9
1919	62.2	76.2	72.5
1920	61.5	84.8	73.2
1921	56.6	65.3	65.3
1922	55.4	71.0	65.1
1923	46.6	70.8	56.4
1924	47.4	69.5	57.0
1925	54.3	69.7	53.8
1926	54.7	61.5	62.9
1927	50.7	54.2	57.8
1928	51.5	58.1	59.3
1929	48.6	57.9	56.4
1930	39.8	49.0	46.4
1931	27.5	38.4	32.7
1932	24.8	36.9	30.0
1933	24.2	35.9	29.2
1934	25.1	34.9	30.2
1935	27.4	36.0	32.3
1936	29.0	35.5	33.7
1937	28.1	38.6	33.4
1938	27.4	35.6	32.9
1939	29.0	35.6	32.2
1940	28.1	35.5	31.4
1941	32.0	42.1	36.3
1942	37.5	57.7	45.8
1943	81.2	89.6	85.5
1944	65.6	74.2	69.8
1945	64.4	70.4	67.5
1946	68.2	71.0	70.1
1947	80.0	80.4	81.0
1948	99.5	98.1	99.9

Year	Agricultural	Non-Agricultural	General
1949	105.8	96.8	102.3
1950	113.0	100.8	107.9
1951	125.1	114.8	121.8
1952	104.3	103.3	104.9
1953	107.2	102.0	105.7
1954	97.4	100.7	99.6
1955	87.1	97.2	91.5
1956	101.0	105.7	102.7
1957	108.6	110.8	108.7
1958	110.9	111.3	111.0
1959	115.6	113.4	115.5
1960	121.9	124.1	122.9
1961	124.1	130.5	125.8
1962	123.1	131.3	127.2
1963	126.8	136.8	132.5
1964	150.1	146.8	148.3
1965	165.0	158.1	161.3
1966	189.6	177.7	183.2
1967	220.2	204.2	211.6

TABLE 2

Characteristic Measures of the Tukey Window

Lag- Window	$\frac{1}{2}\left[1 + \cos\left(\frac{\pi l}{M}\right)\right]$ for $l < M$ o for $l \geqslant M$
Spectral Window	$\frac{1}{2\pi}\left\{\frac{\sin\left(M+\frac{1}{2}\right)W}{\sin\frac{W}{2}} + \frac{1}{2}\left[\frac{\sin\left(m+\frac{1}{2}\right)\left(W+\frac{\pi}{M}\right)}{\sin\frac{1}{2}\left(W-\frac{\pi}{M}\right)} + \frac{\sin\left(M+\frac{1}{2}\right)\left(W-\frac{\pi}{M}\right)}{\sin\frac{1}{2}\left(W-\frac{\pi}{M}\right)}\right]\right\}$
Bandwidth	$\frac{2\pi}{M}$
Variance	$0{\cdot}75\left(\frac{M}{T}\right) f^2(W)$
Equivalent Degrees of freedom	$2{\cdot}7\left(\frac{T}{M}\right)$

strongly dominant peak, the spectrum was recalculated with a Tukey window——the characteristics of which window are given in Table 2. The reestimated spectrums also showed that Indian price series possessed the typical spectral shape. Thus although most of the power is contained in the low frequency long cycle band, there is no single strongly dominant cycle. It is clear though that weekly dominant cycles of 5–10 years do exist in all the price series.

Fourth, except in the band $\left[\frac{\pi}{5}, \frac{3\pi}{10}\right]$, the spectrum of general prices is statistically indistinguishable from the spectrum of non–agricultural prices. Generally speaking, two time series that differ only in the phase angle have identical spectrum. We cannot however be definitive about this unless we have had a chance to examine the cross spectrum characteristics.

The cross spectrum between agricultural and general prices, and non–agricultural and general prices were calculated. Since the cross spectrum is a complex quantity, its characteristics in terms of coherence and phase was determined. The following conclusions emerge from an examination of these characteristics :

First, the coherence between agricultural and general prices is constant for all frequencies; and statistically not different from unity. The phase diagram oscillates around zero except at very low and very high frequencies——in which bands the agricultural prices leads the general prices. **This implies that agricultural prices is the principal determinant of general price level in India, a point which Minhas has emphasized, one which the Indian Government planners have periodically denied.**

Second, the coherence between non–agricultural prices and general prices is high for most freqencies. In the frequency bands $[0,\pi/2]$, or all cycles of duration longer than 4 years, the general prices lead the non–agricultural prices. This suggests that while agricultural prices determine the general price changes, the general price level in turn, is the principal determinant of non–agricultural prices.

Third, the phase diagrams also suggest that the lead lag structure of general non–agricultural prices resembles the accelerator model, while that of agricultural and general prices is the multiplier type. Such a model does lead to a typical spectral shape.[17]

17. See Granger, *op. cit.*

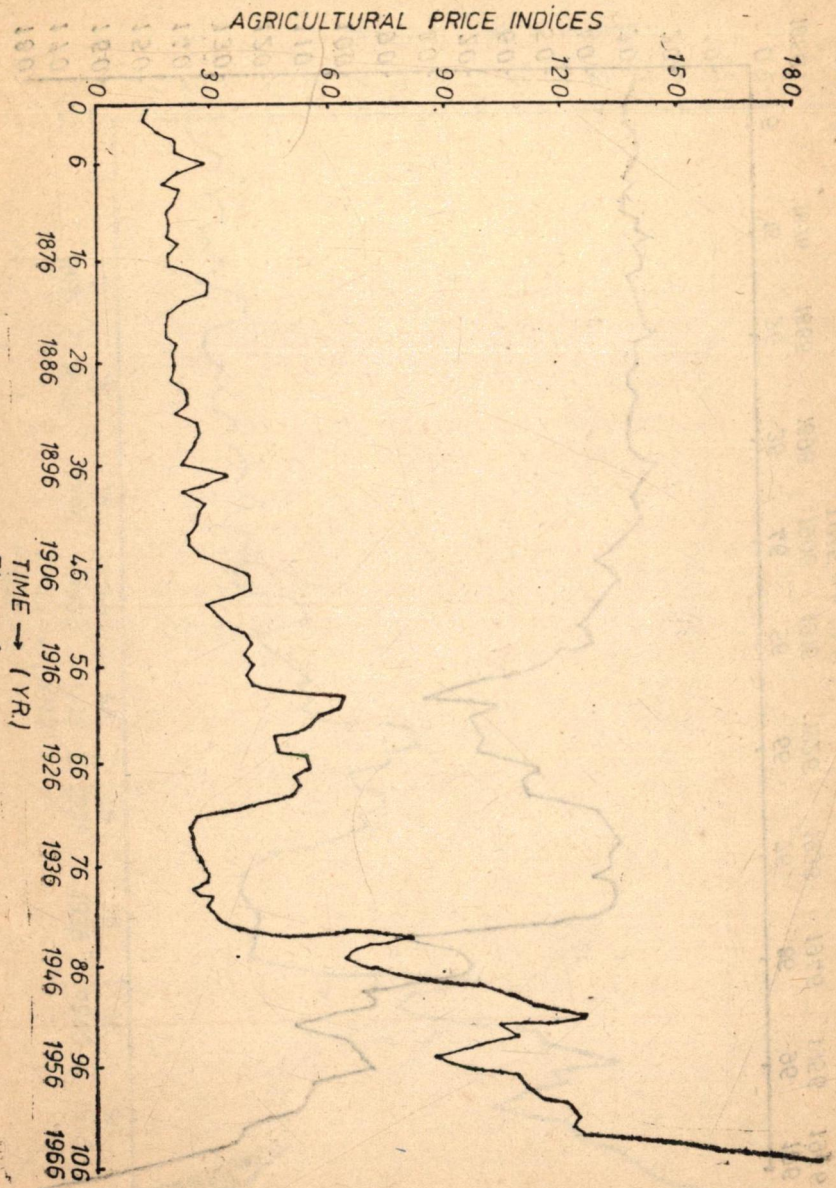
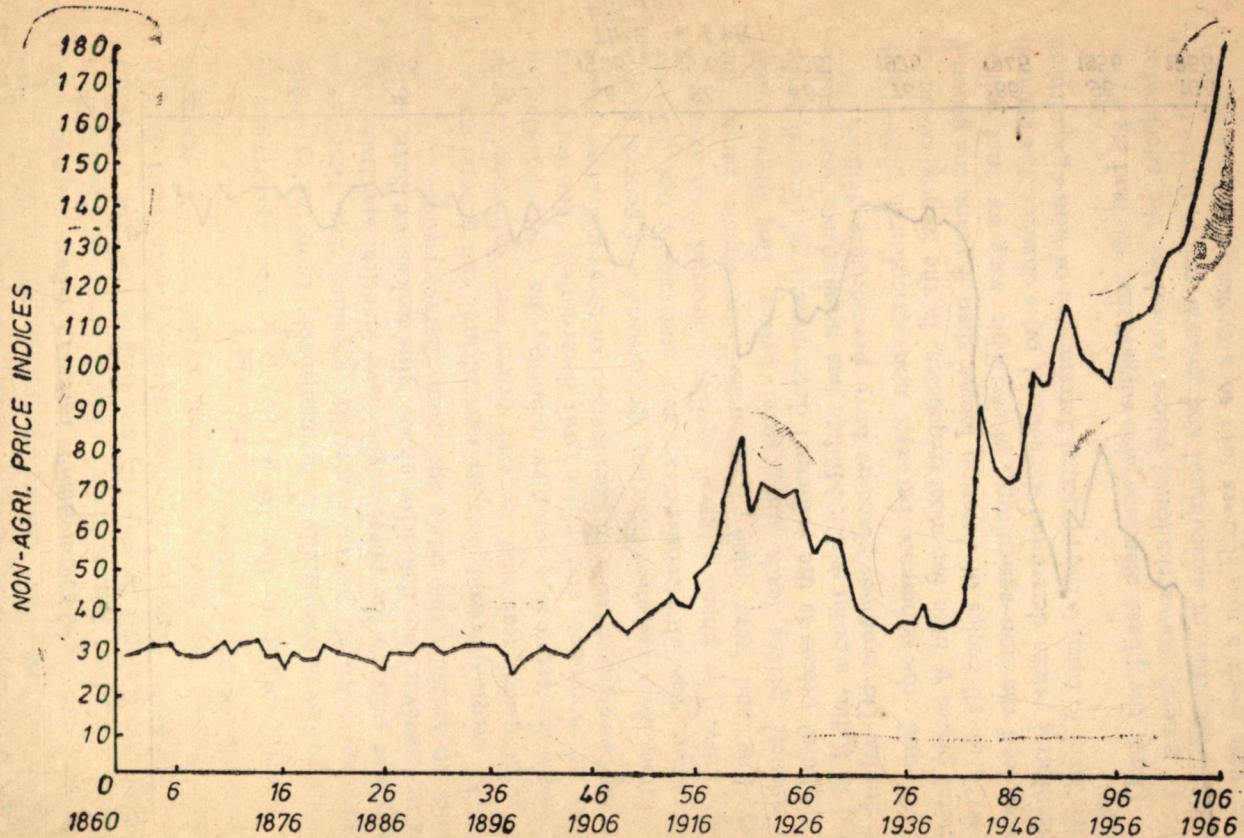
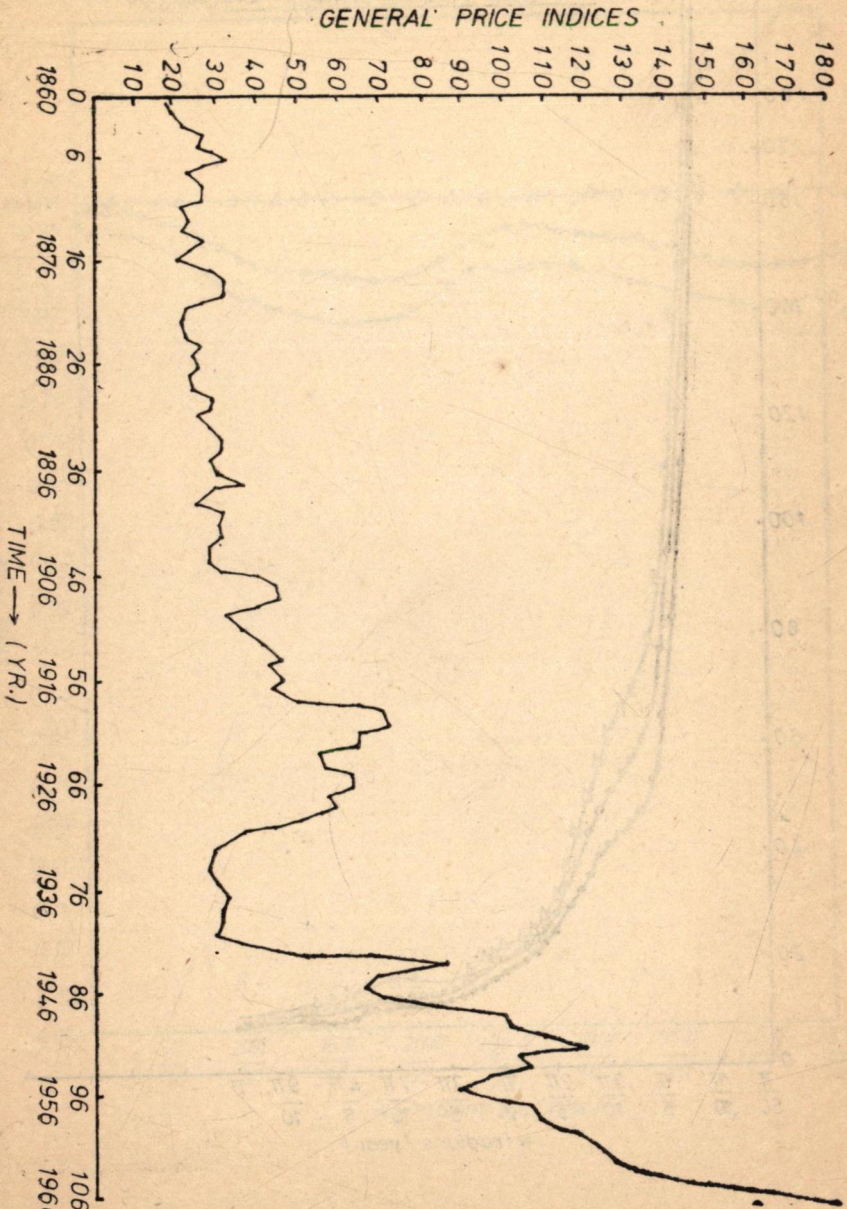

AGRICULTURAL PRICE INDICES
0
30
60
90
120
150
180
0
6
16
26
36
46
56
66
76
86
96
106
1876
1886
1896
1906
1916
1926
1936
1946
1956
1966
TIME → (YR.)

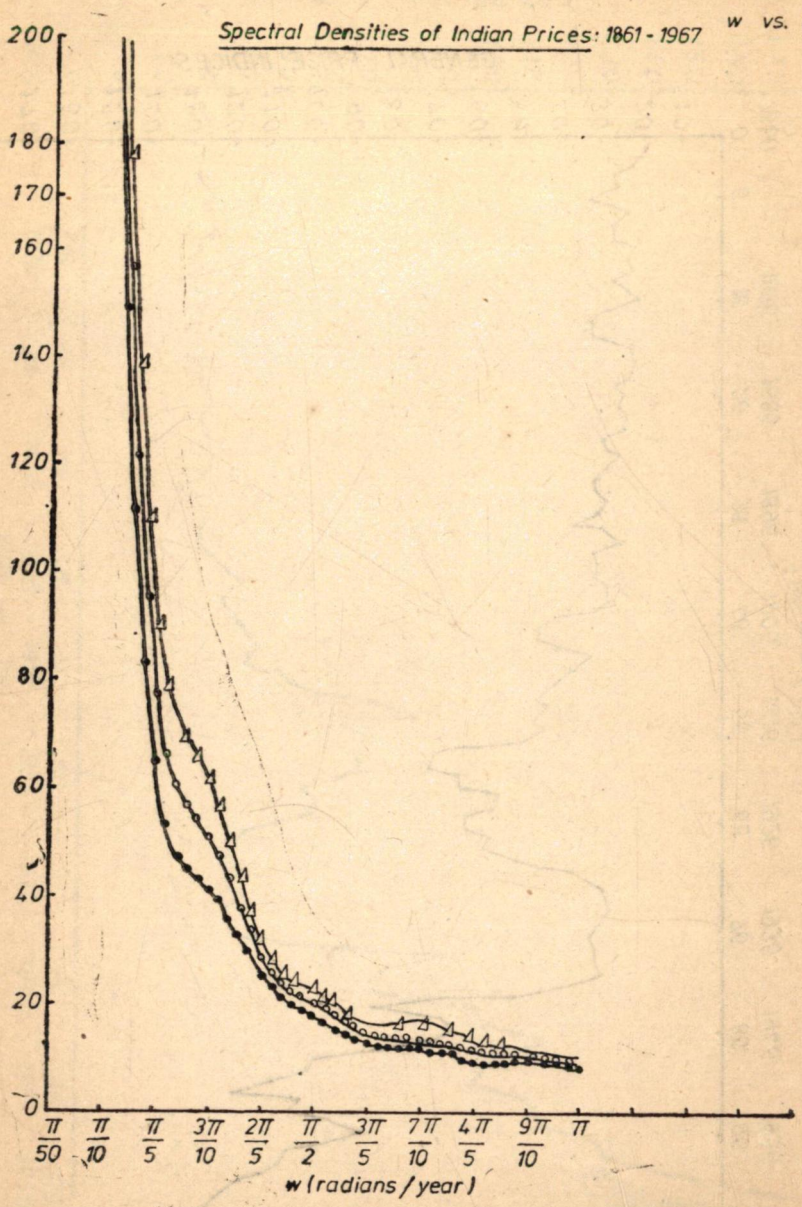
Figure 1

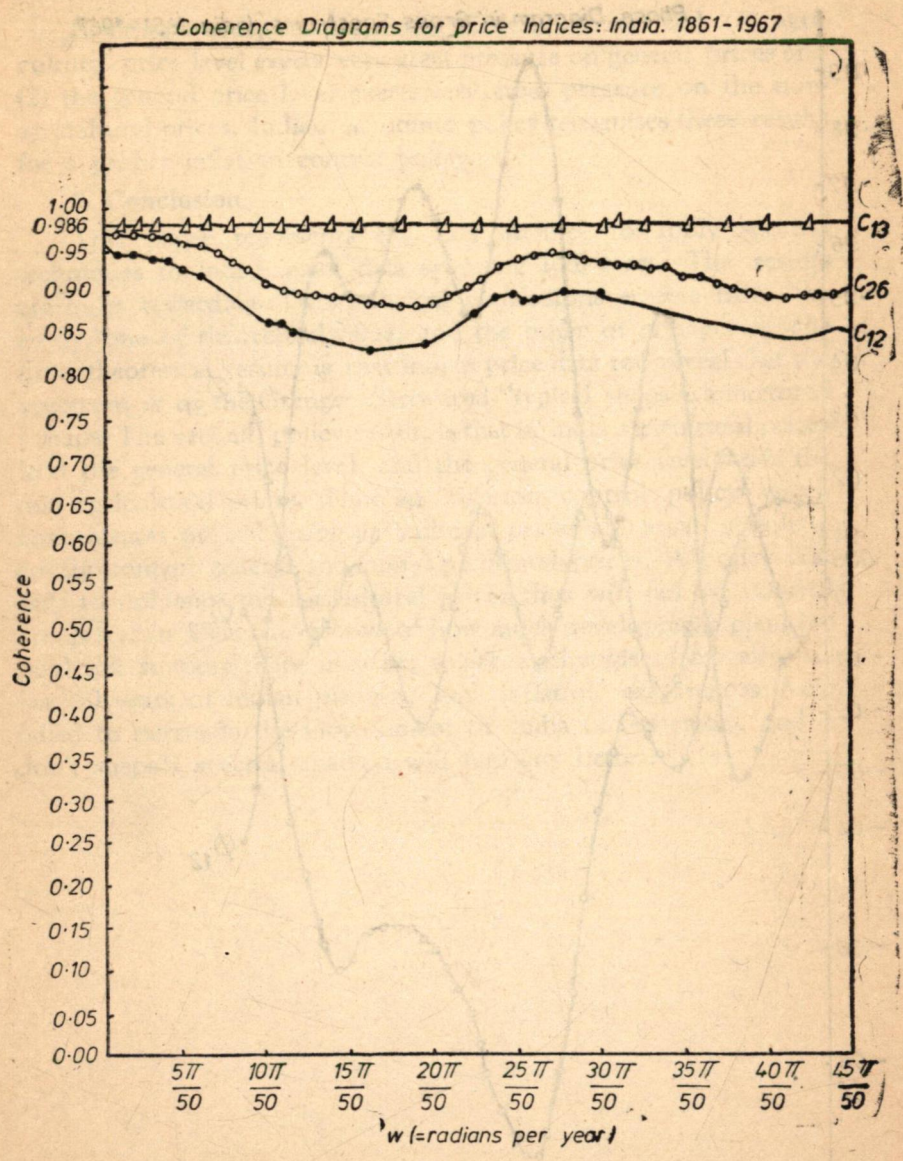

NON-AGRI. PRICE INDICES
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
6
16
26
36
46
56
66
76
86
96
106
1860
1876
1886
1896
1906
1916
1926
1936
1946
1956
1966
TIME → (YR.)

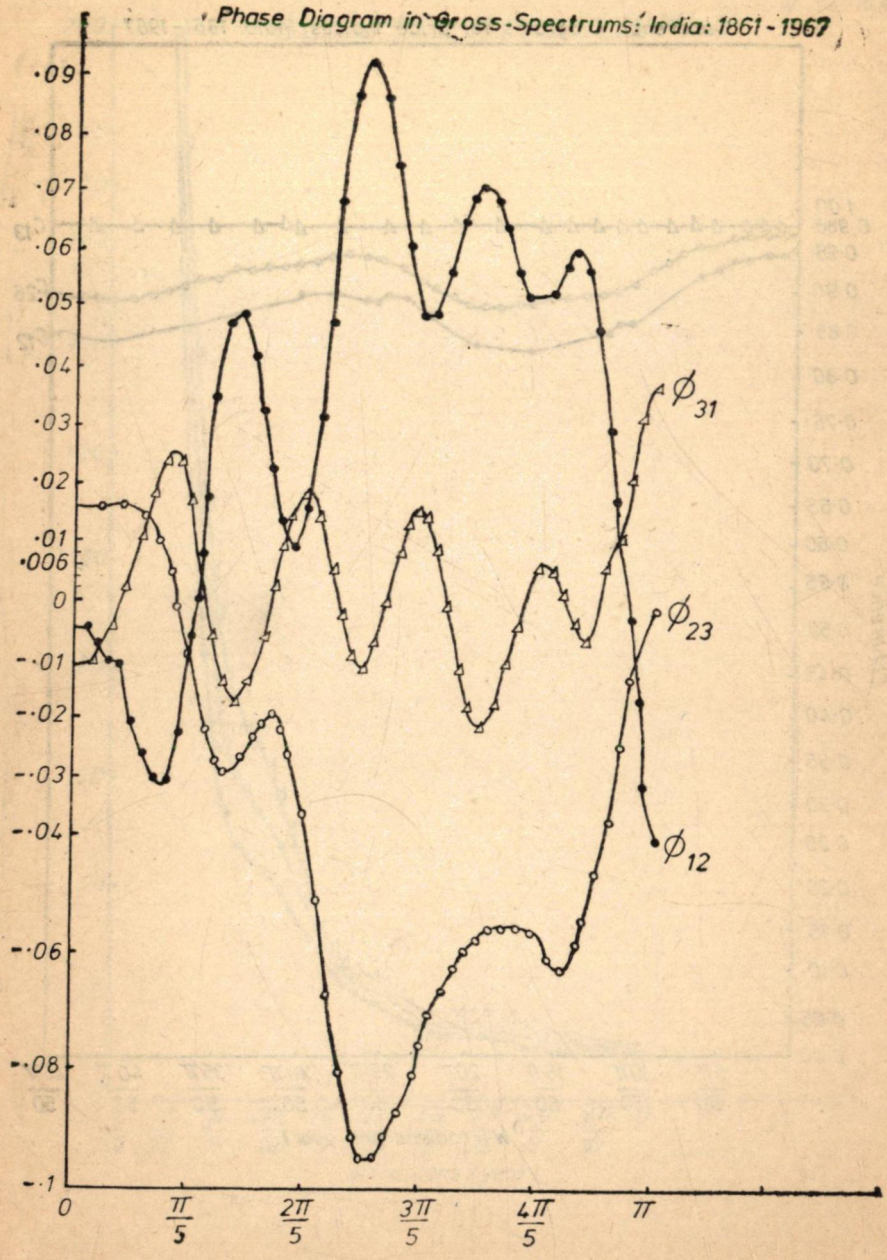
Figure·2


GENERAL PRICE INDICES
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
1860
0
6
1876
16
1886
26
1896
36
1906
46
1916
56
1926
66
1936
76
1946
86
1956
96
1966
106
TIME → (YR.)

Figure·3


Spectral Densities of Indian Prices: 1861 - 1967
w vs. fkk
200
180
170
160
140
120
100
80
60
40
20
0
π/50
π/10
π/5
3π/10
2π/5
π/2
3π/5
7π/10
4π/5
9π/10
π
w (radians / year)


Coherence Diagrams for price Indices: India. 1861-1967
1·00
0·986
0·95
0·90
0·85
0·80
0·75
0·70
0·65
0·60
0·55
0·50
0·45
0·40
0·35
0·30
0·25
0·20
0·15
0·10
0·05
0·00
Coherence
C13
C26
C12
5π/50
10π/50
15π/50
20π/50
25π/50
30π/50
35π/50
40π/50
45π/50
w (=radians per year)


Phase Diagram in Cross-Spectrums: India: 1861 - 1967
·09
·08
·07
·06
·05
·04
·03
·02
·01
·006
0
-·01
-·02
-·03
-·04
-·06
-·08
-·1
ϕ_{31}
ϕ_{23}
ϕ_{12}
0
$\frac{\pi}{5}$
$\frac{2\pi}{5}$
$\frac{3\pi}{5}$
$\frac{4\pi}{5}$
π
w (radians/yr)

In other words, cross spectral analysis reveals that (1) agricultural price level exerts very great pressure on general prices and (2) the general price level exerts very great pressure on the non-agricultural prices. Indian economic policy recognizes these results for a proper inflation control policy.

5. Conclusion

This paper represents the first attempt to apply spectral techniques to Indian price data spanning 106 years. The results are quite rewarding. Two principal conclusions emerge from the study, one of theoretical value, and the other of policy use. The first, theoretical result, is that Indian price data too reveal that the spectrum is of the Granger discovered "typical shape", a mirrored J shape. The second, policy result, is that in India agricultural prices lead the general price level, and the general price level leads the non-agricultural prices. Thus an inflation control policy which concentrates on stabilizing agricultural prices alone can simultaneously control general and non-agricultural prices. A policy that fails to influence the agricultural prices thus will fail to control any prices in India irrespective of how much development planning textbook support there may be, to argue otherwise. Ironically, the last 30 years of Indian planning and inflation experiences have failed to persuade the Government of India of its errors, and I don't suspect spectral analysis will fare any better.

5

AN UNNOTICED STOCK-FLOW ERROR IN THE WEALTH OF NATIONS

–David D. Friedman

> "In the progress of the manufacture, not only the number of profits increase, but every subsequent profit is greater than the foregoing; because the capital from which it is derived must always be greater. The capital which employs the weavers, for example, must be greater than that which employs the spinners; because it not only replaces that capital with its profits, but pays, besides, the wages of the weavers; and the profit must always bear some proportion to the capital."[1]

In this passage from **The Wealth of Nations** Adam Smith makes two related errors. One of them has been noted by several commentators; the other seems to have gone without comment, possibly because the combination of the two errors makes it somewhat difficult to understand the argument Smith was trying to make, and so to see what is wrong with it. I will therefore begin by explaining what I believe that argument is, and why it is wrong.

The Argument

A farmer grows flax. His capital consists of advances–payments for seed, wages, fodder, etc.–that must be made before the crop is sold, and that must be recovered, with profits, from the payment he receives when he sells it. The flax is purchased by an entrepreneur who will employ spinners to convert it into

1. Smith (1976, Volume I, p. 68).

linen thread. His advances include the payments he makes for the flax, plus payments for other materials, wages, etc. Since he buys the flax from the farmer for the same amount for which the farmer sells the flax to him, that part of his advance must be as large as the entire advances (plus profits) of the farmer. The total advances of the entrepreneur must then be larger than the total advances of the farmer, and, by the same argument, the total advances of the entrepreneur who buys the thread to weave into cloth must be larger still. Therefore, Smith argues, the total capital required at each stage is larger than at the stage before and, given a fixed rate of profit, "every subsequent profit is greater than the foregoing."

Smith here makes the common error of forgetting time, and so confusing a stock with a flow. The total capital required at each stage depends not only on the amouut of the advances, but on the length of time for which they must be made. If flax is harvested once a year and the advances are made, on average, uniformly during the year, then the average amount of capital required by the farmer is half the total amount of the advances. If the spinner buys flax from the farmer, spins it into thread, and sells it a month after he buys it, then the average amount of capital he requires is one twelfth the amount for which he buys the flax, plus an appropriate fraction of his other advances. If the weaver is working on tapestries which require ten years to complete and sell, but for which all the thread must be purchased before he begins, then the amount of capital he requires to provide the advances that "replace" the advances of the spinner will be ten times the amount of those advances.

To avoid confusion, one must note that time enters argument in two ways. Each year the farmer receives a certain total which must pay back his advances; this might come as a single payment at harvest time, or as a series of payments during the year as he sells off his accumulated harvest. The total of these payments must be larger than the total of his advances in order to provide him with a profit. The total of these payments is a part of the total of the advances made by the spinner over the course of the year. The weaver must buy, each year, as much thread as the spinner sells each year, hence his annual payments,

which are a part of his annual advances, must be larger than the total of the spinner's annual advances. So far Smith is entirely correct. But if spinning and selling thread takes only a month, then the same capital can be used twelve times during the year, buying flax at the beginning of each month and being replaced when the thread is sold at the end of the month. The weaver of tapestries, on the other hand, if he is to buy, each year, as much as the spinner sells, and if the thread once bought, cannot be sold as tapestry for ten years, will find that his capital can be used only once in every ten years, and he requires proportionately more of it.

Smith compounds the error by neglecting the existence of fixed capital. If some of the farmer's capital is in buildings then that part of the capital need not be replaced by the purchases of the spinner, although they must pay the profit on it. hence the spinner's advances need not be larger than, or even as large as, the capital of the farmer. This is really the same error. Fixed capital can be regarded as another form of advance. Money must be paid out today to the workers who construct a building; it will be repaid over a long period of time in the form of future income from the building. Just as with tapestry weaving the amount of capital required is large because of the long time before advances are repaid.

Adam Smith dealt correctly with the same sort of problem elsewhere in the **Wealth of Nations.** In discussing money, for example, he points out "As the same guinea which pays the weekly pension of one man to-day, may pay that of another tomorrow.....the amount of the metal pieces which annually circulate in any country, must always be of much less value than the whole money pensions annually paid with them."[2] Similarly, in discussions of foreign trade,[3] he recognizes that the same amount of trade requires more capital the longer the time between the export of goods and the receipt of the goods for which they are exchanged.

2. Smith (1976, Volume I, p. 291).
3. Smith (1976, Volume I, pp. 369–370).

The Literature

I have been able to find only three specific references to this passage in the literature, two by Cannan and one by Hollander.[4] In **A History of Theories of Production and Distribution,** Cannan, referring to the passage from Smith quoted above, writes :

> "He (Smith) evidently imagines that 'the capital which employs the weavers must be greater than that which employs the spinners' because thread is worth more than the material out of which it is spun. But this fact could not possibly be supposed to prove that the true capital invested in weaving, the machinery and stock-in-trade of the master weavers, is greater than the true capital invested in spinning, the machinery and stock-in-trade of the master-spinners, while it might very well be supposed to prove that the amount annually spent in employing one weaver (that is, paying his wages and supplying him with thread) is greater than the amount annually spent in employing one spinner (that is. in paying his wages and supplying him with material)."[5]

So far as the neglect of machinery, that is to say fixed capital, is concerned, Cannan is of course correct, but he does not seem to realize that Smith's argument for circulating capital would be correct if the period of production for the spinner and the weaver were the same. His final comment is wrong, unless he assumes that one weaver will exactly consume the thread produced by one spinner as perhaps he intends to.

Cannan comments on the same passage again in a footnote to his edition of **The Wealth of Nations**[6] :

> "The fact that the later manufacturer has to replace what is here called the capital, i.e. the periodical expenditure of the earlier manufacturer, does not necessarily require him to have a greater capital to deal with the same produce. It need not be greater if he requires less machinery and buildings and a smaller stock of materials."

4. The books listed as "references" but not specifically referred to as sources were examined and found to contain no reference to the passage.
5. Cannan (1924, p. 69).
6. Smith (1950, Volume I, p. 53 ff).

Here again he correctly criticizes Smith's neglect of fixed capital. "If he requires...a smaller stock of materials" may mean "if the turnover of his stock is more rapid," but if so Cannan does not make the argument explicit.

The only recent discussion of the problem I have found is in Hollander's **The Economics of Adam Smith** :

"An argument that the weaver needs 'more capital' than the spinner implies the almost complete neglect of the capital structures involved in the production of different goods, or, more specifically in the present instance, in the different 'stages' in the production of a particular good. For the weaver is said to require more capital than the spinner simply on the grounds that he has in his outlays to 'replace the capital' of the spinner–in the present instance the 'periodical expenditure of the earlier manufacturer' and also pays the wages of his immediate employees. A consideration of the capital structures in weaving and spinning, however, would inquire into the fixed capital structures required, and there is no evidence that weaving technology calls for a heavier fixed capital complex than does spinning. Moreover, there is no good purpose served in comparing capital outlays for the 'same' level of output, since the most efficient output may be quite different in the two cases."[7]

Here too, the final comment is puzzling; Smith does not say that the profit of a single master–weaver (i.e. one firm) is larger than that of a single master–spinner, which seems to be what Hollander is denying. He speaks of the "part of the price which resolves itself into wages and profit" and "the capital which employs the weavers which surely means the part of the price of, say, a single piece of cloth (as Hollander correctly puts it in a footnote, "Smith traces the passage of a particular weight of flax through the process of manufacture."[8]) and the capital which employs the weavers (and spinners) required to produce it.

The rest of Hollander's discussion, like Cannan's, correctly points to the neglect of fixed capital, but, more clearly than Cannan's ignores the error in Smith's argument as it applies to circulating capital.

7. Hollander (1973, pp. 196–197).
8. Hollander (1973, p. 197 ff).

The neglect of fixed capital is, in context, the less interesting and less important of the two errors; indeed it is scarcely an error at all. The passage occurs, early in Book I, and fixed capital is not introduced until Book II, more than two hundred pages later; it seems only reasonable to allow Smith, like any modern author, to begin with a simple model and only later introduce additional complexities. When he does discuss fixed capital, Smith explicitly states that "The far greater part of the capital of all such master artificers, however, is circulated, either in the wages of their workmen, or in the price of their materials, and repaid with a profit by the price of the work."[9] So the factor he ignores has not only not yet been introduced–it is relatively small in any case.

The confusion between a stock and a flow, on the other hand, makes the analysis wrong within its own context. Both Cannan and Hollander comment elsewhere on errors of the same[10] sort; it seems a pity that neither one identified, in his analysis of this passage, the same error.

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9. Smith (1976, Volume I, p. 280).

10. "The distinction between **stock** and **flow was not clearly** drawn and consistently maintained in the **Wealth** of **Nations**", Hollander (1973, p. 192). "He (Smith) thus makes the capital of a country a part of its annual produce instead of a part of its stock; it becomes a thing which must be said to be worth so much **per annum** instead of so much at a point in time." Cannan. (1924, p. 67).

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6

A CRITIQUE OF PRICE-RIGIDITY HYPOTHESIS IN OLIGOPOLISTIC CONDITIONS *

Gautam Mathur

This paper deals with the Price-Rigidity Hypothesis in Oligopolistic Conditions owing its origin to the Sweezian Oligopoly demand curves showing a kink at the current price. It does not deal with other causes of price-rigidity in oligopoly situations, nor with price-rigidity in other forms of competitions. The Hypothesis has become, in the last thirty years, a part of economic doctrine through being taught in University courses as if it were a theoretically valid and well established proposition.[1] However, there are serious misgivings of a theoretical nature which one may have if the procedure for arriving at its conclusions are analysed rigorously. Hence this attempt is made to reconstruct the theory underlying the hypothesis, to evaluate its validity.

The discussions based on the Sweezian kinky oligopoly demand curve have been of various types. Some of them dealt with the empirical validity of the price-rigidity hypothesis, others have dealt

*. Originally this is the script of lectures at the Punjab University at a stage when the present author was on the threshold of discovering the shortcomings of micro-economics without attending first to macro-economic analysis.

1. Eg. Stigler : "The Kinky Oligopoly Demand Curve and Rigid Price", **The Journal of Political Economy**, LV (1947) reprinted in **AEA Readings in Price Theory** pp. 410-39 (further page references will be in respect of the reprinted article) and Efromyson : "The Kinked Oligopoly Curve Reconsidered" in **Quarterly Journal of Economics** (1955) pp. 119-36.

with the validity of the assumptions.[1] Still another line has been the extension of the uses of the kinky oligopoly demand curve.[2] But very little space has been devoted to an examination of the logical structure of the price–rigidity hypothesis, given the original assumptions. The main discussion on theoretical validity has been confined to a short note by C.W. Efromyson which brought to light serious theoretical flaws in the hypothesis as far back as 1943.[3] However, not enough attention has been paid to this note in later literature on the kinky curves with the result that the belief in a price–rigidity hypothesis based upon kinky oligopoly demand curves has not been completely discarded from economic thinking.

It is the object of this article to examine afresh and in detail the theoretical and basic frame work of the price–rigidity hypothesis and the equilibrium conditions in connection with the Sweezian kinky oligopoly demand curve. No discussion will take place of the empirical data in favour of or against the hypothesis, nor of the validity of the assumptions.

PART A

The equilibrium conditions and price rigidity hypothesis in connection with the Sweezian kinky oligopoly demand curve may be stated as follows :
In a situation where :

(a) there is oligopoly in an industry;
(b) firms maximise their current profits;
(c) a particular entrepreneur conjectures the reactions of his rivals but does not think that others conjecture his own reactions; and
(d) there is a uniform price ruling in the market at the start of the analysis;

then there exists a kink in the demand curve of a firm which leads to a discontinuity in the corresponding marginal revenue curve.

1 Eg. Fellner "Competition Among the Few" p. 181 and the controversy on marginalism in general and oligopolistic objectives in particular, of Lanzillotti : "Multiple Products and Oligopoly Strategy" **Quarterly Journal of Economics.** (1954), p. 461–74 fn. 9 p. 465.

2 Eg. Bronfenbrenner : "Applications of the Discontinuous Oligopoly Demand Curve." **The Journal of Political** Economy (1940) p. 420–7.

3 "A Note on Kinked Demand Curves" **American Economic Review,** March 1943 Vol. 33 pp. 98–108 most of whose conclusions are correct but do not seem to be derived from an entirely faultless method of proof.

Equilibrium Conditions

1. In such a situation if the marginal cost (MC) curve of the oligopolist passes through the discontinuity, then profit maximisation equilibrium output is directly below the kink and price is determined at the kink.

Price Rigidity

2. If costs increase by a small amount, demand being unaltered, then the MC curve continues to pass through the discontinuity in the MR curve, thus making no change in the price.

3. If the demand increases, cost being unaltered, then the kink shifts to the right but remains at the same level, thus giving price rigidity.

4. Combining (2) and (3) if both demand and costs increase but if the MC curve still passes through the discontinuity in the MR curve, then there will still be price rigidity.

The reasons for enunciating the price rigidity hypothesis in this form are explained in Appendix A of this article, entitled "The Sources of the Price Rigidity Hypothesis."

The ensuing discussions deal with the theoretical validity of the price rigidity hypothesis as stated above, as well as conditions of oligopolistic equilibrium in connection with the kinky curve. The following propositions are established :

I. On Equilibrium Conditions :

(a) The statement that the equilibrium will be at the kink in a period of excess capacity such as slump is correct, provided the macro-economic situation remains unaltered. But even here the explanations that are usually given are not entirely satisfactory and could be replaced by a simple but rigorous geometrical demonstration.

(b) In a period of general limited capacity such as a boom, a wartime, or a state of underdevelopment,

(i) the indication of profit maximising equilibrium at the kink ceases to be valid, but

(ii) alternative conditions could be provided.

II. On Price Rigidity Hypothesis :

(a) Macro-economic conditions being unaltered
  (i) there is price stability when there is excess capacity; but
  (ii) there will be no price stability when there is limited capacity.

(b) When macro-economic conditions change e.g. either during
  (i) a slump or
  (ii) a boom or
  (iii) a transition from slump to a boom or vice versa the price rigidity hypothesis is not warranted.

PART B.

General Excess Capacity

Let us start by taking an oligopolist operating under conditions of a trade depression. There will thus be a lot of excess capacity in his firm as well as in his rivals' firms. There is a certain price at which he is, at any moment, operating, which may be called the current price. The current price happens to be his price at a particular moment of time. This price is the nucleus of all that is to follow. There is a demand curve facing him; but this is probably unknown to him. In its place he makes his own estimate of what the demand curve facing him looks like, and his actions are governed by the shape of his imagined demand curve. The imagined demand curve shows the output demanded from him by the consumers if he were to change his price from the level of the current price. In estimating the shape of his imagined demand curve he reasons as follows :

"In a situation of general excess capacity, like the present, my rivals are in a mood to increase their sales, but not to decrease them. As a price cut increases their sales it will be followed by the rest while a price rise would not be followed.

"As a price cut will be followed, the price of the industry will decrease, and the sales of all will rise, although thereby leaving the relative share of each firm in the market undisturbed. Thus an ordinary demand curve faces me when I cut my price.

"As a price of mine will not be followed, the price of the industry will remain the same; only my own price will rise. A price rise would have ordinarily decreased my sales somewhat even if others had followed suit. But here the decrease of my sales will be much larger as others will encroach into my share of the market because others (not having followed my price rise) will have a price lower than mine. Hence, for a price rise, I have facing me a demand curve which is flatter than for a price cut."

On drawing the two wings of the imagined demand curve the oligopolist will discover a kink at the current price. In a slump the upper wing would be flatter than the lower wing. The lower wing represents the normal Marshallian Demand curve, or the normal Average Revenue curve of a firm under conditions of imperfect competition (less than absolute monopoly) as given by Joan Robinson.[1]

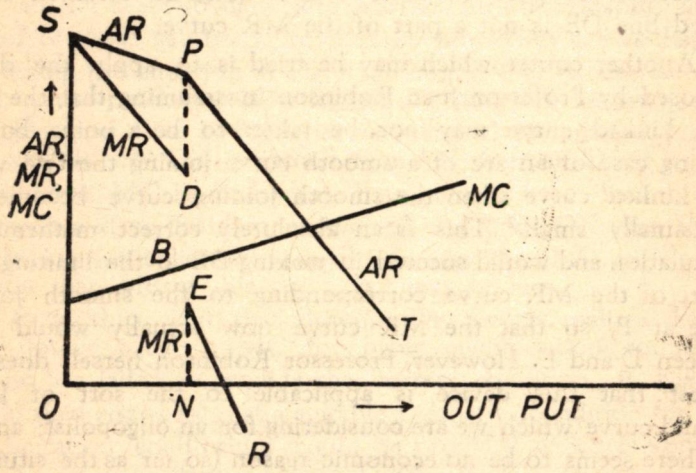


Fig-1

Let us now proceed with the analysis. If the two wings of the Demand Curve are drawn as discovered (Fig. 1). They are in the nature of an Average Revenue Curves (AR), and must have a Marginal Revenue Curve (MR) corresponding to each of its wings

1 **"The Economics of Imperfect Competition"** (1948) London ch. 3 sec. 3 pp. 50–51.

SP & PT. The shape of this curve comes out to be the familiar discontinuous MR curve. There is a gap DE directly underneath the kink at P. If the Marginal Cost curve (MC) passes through this gap DE, then it is not proper to say that Marginal Revenue and Marginal Cost are equated at that output or that these two curves intersect within the gap. Two approaches have been tried by economists to deal with this situation. In one approach some device is adopted to make the MC curve intersect the MR curve somehow within the gap. In the second approach no attempt is made to equate MC to MR within the gap and alternative conditions of profit maximisation are provided.

First Approach

Some writers[1] have tried to put a vertical dotted line to fill the gap between the points D and E. If the MC curve passes through the gap DE, then the point B where it intersects the dotted line DE, is taken by these writers to be the point of intersection of MR and MC. This is quite unwarranted as the dotted line DE is not a part of the MR curve.

Another course which may be tried is to apply the device proposed by Professor Joan Robinson in assuming that the joint of a kinked curve may not be taken to be a point, but the limiting case of an arc of a smooth curve joining the two wings of a kinked curve when the smooth joining curve becomes infinitesimally small.[2] This is an absolutely correct mathematical formulation and would succeed in making DE in the limiting case a part of the MR curve corresponding to the smooth joining curve at P, so that the MR curve now actually would exist between D and E. However, Professor Robinson herself does not suggest that this device is applicable to the sort of kinky demand curve which we are considering for an oligopolist; and to me there seems to be no economic reason (so far as the situation facing an oligopolist is concerned) for believing that the kink at P is not a point but a number of points close to one another forming the limiting case of a smooth curve.

The attempts in the first approach are the result of a belief in the virtues of MR and MC curves intersecting as a necessary condition determining profit-maximising equilibrium. This is not,

1 Tarshis : **"The Elements of Economics"** (1947) p.169, Fig. 34.

2 **op.cit.** p. 38, Fig. 13

however, an ideal condition for profits maximisation, nor should it be looked for out of necessity in all cases, as not always will it be found to be applicable to the type of curves being studied. As a matter of fact a belief in the infallibility of the condition equating MR and MC is capable of giving a great misdirection to analytical research regarding equilibrium conditions for profit-maximisation, as far as kinked curves are concerned.

Second Approach

On the other hand Professor Paul M. Sweezy recognises the defect in the procedure of trying to make MC intersect MR in the gap and says that "(i) it is not possible to apply the condition that Marginal Cost must equal the Marginal Revenue; (ii) all we can say is that marginal cost must certainly not be greater than marginal revenue. (iii) It may, however, be less."[1] To my mind, there are three parts of the above quoted statement and the numbers in bracket have been inserted by me. Although part (i) of the statement is quite valid, parts (ii) and (iii) do not seem to have any warrant in Mathematics, and no proof of these has been provided by him. They can be disproved by taking the situation in Fig. 1 at output ON where according to him the profit-maximisation equilibrium will be established.

Marginal Cost is BN whereas Marginal Revenue is both DN as well as EN. DN is greater than BN whereas EN is less than BN. Thus MC is both less than and greater than Marginal Revenue and as profit is maximised at output ON then there is no reason for believing with Dr. Sweezy that MC can never be greater than MR at this point, but may be less.

It is thus seen that although Dr. Sweezy realises that MR may not be equal to MC for profit-maximization equilibrium, yet he has failed to provide the correct condition. It has been established elsewhere that a suitable alternative condition for profit-maximization equilibrium could be provided which is applicable to the condition "MR=MC", the latter being not only irrelevant but meaningless in the case of kinky demand curves.[2] The alternative condition which should be used here has been enunciated as follows :

1. "Demand under Condition of Oligopoly", **The Journal of Political Economy** Vol. XLVII (1939) pp 568—73, at p. 570, reprinted in **A. E. A. Readings in Price Theory** pp 404— 9 at p 406.

2. "A Note on Conditions of Profit Maximisation Equilibrium" by the present author, **Journal of Osmania University** (Humanities and Social Sciences) March 1966, pp. 63-76.

Profits are maximised at an output wherein an interval strictly to its immediate left (MR–MC) is non–negative (positive or zero) and in an interval strictly to its immediate right (MR–MC) is non–positive (negative or zero).

Application to Kinky Oligopoly Curves

Now applying this to the case of the oligopoly situation in Fig. 1, it will be seen that immediately to the left of output ON the value of MR−MC is positive, as MR is greater than MC. Immediately to the right of output ON, MR is less than MC, so MR−MC is negative. There is, therefore, a maximum point for profits at output ON.

It is on this framework that it would be justifiable to derive the conclusion that in slump conditions the oligopolist will produce an output shown immediately below the kink and the profit maximising price will consequently be at the kink where current price is. This establishes proposition I (a). The current price is not determined by the curves of this firm but is somehow given by the extraneous factors or by accident; and the only conclusion which has been established upto this time is logically no better than noting that status quo is best while the price remains at that level.

Let us now examine the effect of a small change in costs. It is assumed that no change takes place in demand, so that the kink is not displaced nor is the gap changed in size or shifted. It is further assumed that the change in costs is so small that the MC curve continues to pass through the gap. In such a case, it will be seen that the equilibrium will still remain at the output directly underneath the kink and the price will remain at the same level. This explains price rigidity in an excess capacity situation and establishes proposition II (a) (i).

PART C.

General Limited Capacity

In the next step the state of general excess capacity may be replaced by restricted capacity as is found in a boom or wartime or an underdeveloped country. Here an oligopolist expects that his rivals will now follow a price rise but not a price fall. The wings of the demand curve thus move upwards making it steeper above the kink and flatter below the kink. The Marginal Cost has risen from the slump to the boom but it is assumed that it still passes

through the vertical gap thus giving a pseudo–equilibrium at that place. This is capable of misleading an economist to the conclusion that the price is again determined at the kink and hence in oligopolistic market price rigidity should be expected in slumps as well as in booms.

However, during a boom, even if for a while the macro-economic situation is unaltered, price stability will be absent, unlike the slump situation. This is so because the kinky AR curve being winged upward the MR curve takes a sudden jump upwards directly below the kink, resulting in a vertical discontinuity. The MC curve, in such a case, if it passes through the gap, cuts the MR curve at two points A and C one to the left and the other to the right of the gap respectively.

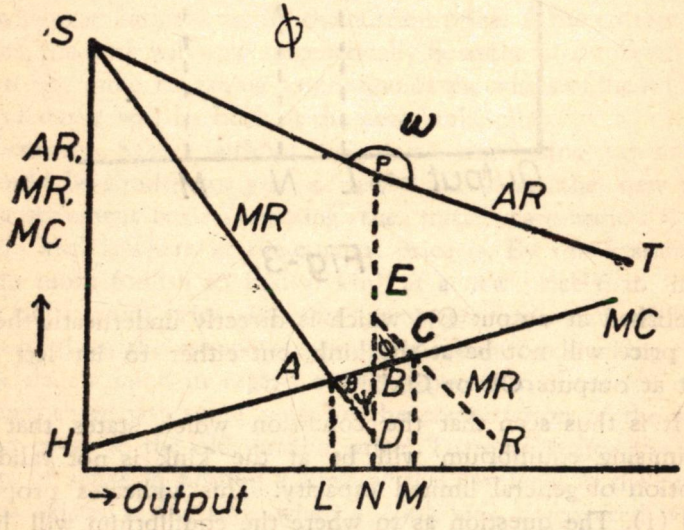


Fig-2

According to the alternative condition of profit maximisation stated earlier, it is seen that to the left of output OL, MR–MC is positive and immediately to its right it is negative. Hence there is a profit maximum position at output OL. Similarly at Output OM, immediately to the left MR–MC is positive, while immediately to the right it is negative again giving a profit maximising equilibrium at output OM. But at output ON which is directly underneath the kink, the situation is quite different.

For immediately to the left of output ON, MR–MC is negative and immediately to its right it is positive which indicates a profit minimum situation there. Therefore, the equilibrium will not be

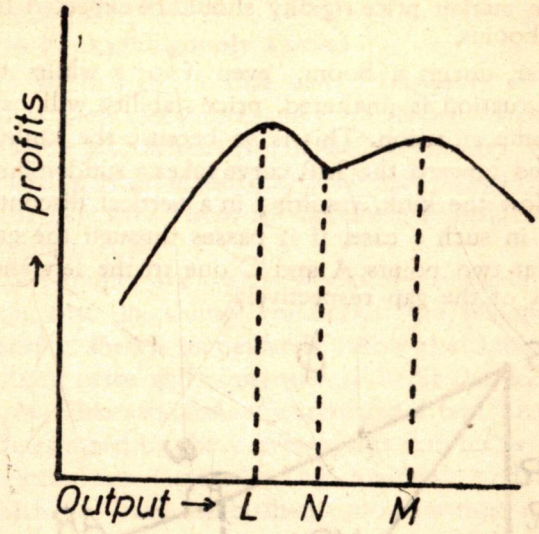


Fig-3

established at output ON which is directly underneath the kink, and price will not be at the kink, but either to its left or its right at outputs OL or OM.

It is thus seen that the condition which states that profit maximising equilibrium will be at the kink is not valid for a situation of general limited capacity. This indicates proposition I (b) (i). The question as to where the equilibrium will lie and under what conditions is dealt with in Appendix B.

Further in a boom not only is the price rigidity hypothesis not true but is exactly the opposite of what is true. For, in a boom there will always be an incentive to shift away from the current price, because the kink is at the current price and at the kink there is a profit minimum equilibrium. What pattern of price behaviour it may lead to is a subject for further investigation beyond the scope of the present article but at this stage it is enough to indicate that the possibility of price stability is ruled out. This establishes Proposition II (a) (ii).

PART D

Change in Capacity

It finally remains to be seen whether there is any ground for believing that there will be price rigidity through a period of change in general capacity say either during a slump or a boom or a transition from one to the other.

It is important to bear in mind the initial assumption that the current price happens to be the price of the oligopolist at the moment. The level of the initial current price is an external datum: it was given when the analysis started. It is in no sense determined by the inter-action of the curves we have constructed later on. From this the only conclusion possible regarding the location of the kink is that the level of the kink will coincide with whatever happens to be the current price. If the current price changes, the kink will now automatically be at the new current price and on the same reasoning as previously the wings of the imagined demand curve will be built at the new kink.

George J. Stigler without assigning a convincing reason says : "it would be foolish to put a new kink"[1] at the new price. In this statement he is forgetting the initial assumption namely that the kink is wherever the current price is. By this assumption it is no more foolish to find a kink at a new price than it was at the old current price. But we have seen that in an oligopoly situation, given the requisite assumption about the working of the entrepreneur's mind in regard to his expectation about his rivals' reactions, there was some sense in the construction of the kinky demand curve at the old current price. There is, hence, the same amount of sense in finding a kink at the new level of the current price as existed at the time when a kink was discovered at the initial current price. It may further be noted that neither the economist nor the entrepreneur "puts" a kink deliberately at his current price as Professor Stigler thinks he does. A kink is not "put"; it is discovered to be there under the assumptions made of rivals' reactions.

The general price level is determined by macro-economic variables. From macro-economic analysis there is no reason to think that the price level in an oligopolistic industry will remain constant throughout the course of a trade cycle. If macro-economic

1 **Op.Cit.** p. 417 in **A.E.A. Readings in Price Theory**

variables are changing the current price is likely to go on changing and neither the existence of the kink nor the analysis based upon it can give any ground for price rigidity. Professor Paul M. Sweezy implicitly assumes that the prices are constant when he deals with shifts in the kinky demand curve by saying "it seems clear that any such shift will make itself felt in the quantity sold at the current price."[1] It is obvious that he is visualising an increase of output at the constant level of the price ruling today. Now a rightward shift in the demand curve may raise the price as well as the output and there is no special reason to assume that the kink will remain at the same level throughout the course of a trade cycle. If, however, the macro-economic variables are behaving in a way as to give a constant level of price for a while, then of course during a period of excess capacity there will be noticed a price stability. This temporary price stability is not due to the kinky demand curves, but to the behaviour of the macro–economic variables.

In a situation of restricted capacity there is absent even the stability derived from macro–economic situation being constant for a while. This is so because the existence of a kink induces a change of price and output of a firm to a more favourable position. This straightaway leads to the possibility of spontaneous inflation in the economy following from micro-economic cause of oligopolism in an industry. This may further generate macro-economic cost inflation, if that industry happens to supply raw materials or intermediate goods to other important industries.[2]

Apart from an assumption of price rigidity the analysis of the kinky demand curve of an oligopolist gives no ground for believing that there will be price rigidity through the course of a trade cycle. As effective demand rises the kinky curve may shift

1 **Op. Cit.** p 407 in **A.E.A. Readings in Price Theory** cf. **"A Survey of Contemporary Economics"** (1949) Ed. H. Ellis. Chap. I "Value and Distribution" contributed by Bernard F. Hailey with Professors E.H. Chamberlin and J.M. Clark as associated critics, where Fig. 2 on page 8 gives a clear impression that output and price are both rigid through the course of a trade cycle, in an oligopolistic situation. Also cf. Efrosyson, **op. cit.** p. 104 diagram 2 where the kink is shifted horizontally by following a line of reasoning which conceals behind it an assumption of price rigidity.

2 This is considered by the author in another article entitled **"Oligopolistic Price Leadership and Spontaneous Inflation".**

rightwards and upwards during the upswing of a trade cycle from a slump through recovery, expansion and the boom phase. In this case not only would output rise from slump to a boom but price would also rise, due to macro-economic causes. The kink is at a higher level as output increases from slump to a boom due to macro-economic considerations. Moreover, as the slump changes into recovery, the wings open out and after a time become straight; after that the curve becomes winged upwards as we enter the boom period where the rivals are producing more than the optimum output leading to a situation of restricted capacity in their firms. The whole movement may be shown as follows (Fig. 4) and it may be seen that the whole series of kinky curves does not give indication of price rigidity over the course of the upswing of a trade cycle. This establishes Propositions II (b) (i), (ii) and (iii).

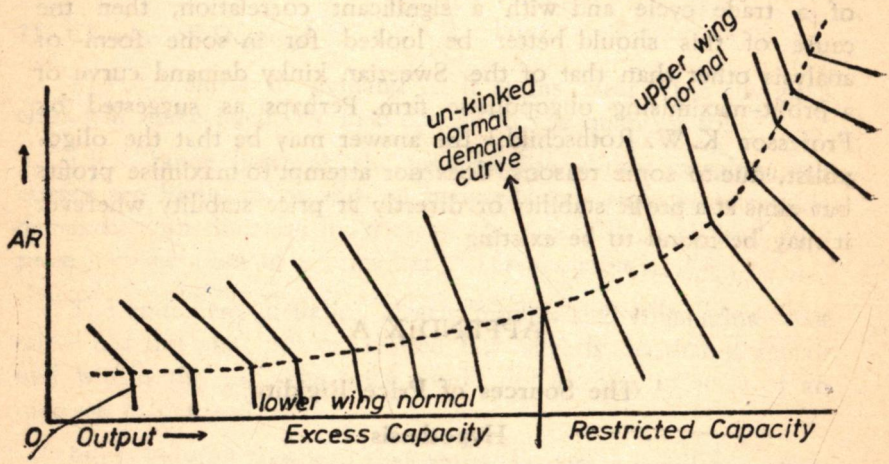


Fig-4

PART E

Conclusion

It is thus seen that there is validity in the belief in the existence of the kink in the Demand Curve under the assumptions stated in the beginning. But this is theoretically incapable of providing an explanation of price rigidity because the hypothesis implies the existence of price rigidity over long spans of time whereas the kinked demand curve does not warrant the deduction

of price rigidity when macro-economic conditions are changing. Moreover even over short periods when the macro-economic situation may be taken to be given, the kink cannot lead to a price rigidity hypothesis in situations of limited capacity. Only the excess capacity situation in the short period where macro conditions are unchanged gives any indication of the kink leading to price rigidity. On the support of this tenuous theoretical thread it would be absurd to verify empirically the validity or otherwise of a price rigidity hypothesis based upon kinky oligopoly demand curves, with reference to data which covers the whole course of a Trade Cycle.

Having seen the very great limitations under which the price rigidity hypothesis may be found to be true, it may be concluded that if in a certain industry price rigidity and oligopolistic structure are shown to coexist for a number of years covering the span of a trade cycle and with a significant correlation, then the cause of this should better be looked for in some form of analysis other than that of the Sweezian kinky demand curve of a profit–maximising oligopolistic firm. Perhaps as suggested by Professor K. W. Rothschild,[1] the answer may be that the oligopolist, due to some reasons, does not attempt to maximise profits but aims at a profit stability or directly at price stability wherever it may be found to be existing

APPENDIX A

The Sources of Price Rigidity Hypothesis

The source of the price rigidity hypothesis in the form enunciated in Part A of this article cannot be pin–pointed as it is neither stated categorically by Professor Paul M. Sweezy nor by Professor George J. Stigler, nor ever established by formal proof. But there is enough evidence that some of the statements actually made and omitted where they should have been made, and some diagrams exhibited imply the existence of a price–rigidity theory in connection with kinky oligopoly demand curve

1. "Price Theory and Oligopoly", **The Economic Journal** Vol. LVI (1947) pp. 299–320 reprinted in **"Readings in Price theory"**, pp. 440–464 at pp. 450–55.

of the form used in this article. At any rate, whatever was actually meant by the authors being not known to the readers, a perusal of the statements would lead a student of economics to interpret them as implying the said theory of price rigidity. This can be judged from the following references :

I. Change of Costs :

(i) "..... any disturbance which affects only the position of the marginal cost curve may leave the short-run equilibrium of price and output entirely unaffected. Thus, for example, a successful strike for higher wages may be without influence on either price or output"[1]

(ii) ".....The most profitable selling price will remain at P for shifts between the limits indicated by MC_1 and MC_2 ....."[2]

II. Change of Demand :

(i) "... shifts in demand ... It seems clear that any such shift will make itself felt in a change in the quantity sold.[3]

(ii) "Since, however, **the presumption is that marginal cost curves are likely to be shifting upwards** in a time of increasing demand ... an increase in demand is more likely to lead to a price increase than to a price cut".[4] (Italics mine).

The statement in italics clearly implies that if marginal cost curve did not shift up, or shifted but slightly so that it remained within the gap, the price would not change, in spite of an increase in demand.

(iii) "Sweezy assumes that shifts in demand will not affect the price at which the kink occurs..."[5]

(iv) "... the price which remains stable as demand shifts... This stability is defined (1) by the tendency of the kink to move horizontally along the abscissa. ... as demand shifts..."[6]

1 Sweezy Op. Cit. **A.E.A. Readings** p. 406.
2 Bronfenbrenner **Op. Cit.** p. 423.
3 Sweezy **op. cit.** p. 407.
4 **Ibid** p. 407, 8.
5 Stigler **op. cit.** A. E. A. Readings p. 412.
6 Clarence W. Efromyson **op.cit.** p. 100. Also see Fig. 2

(v) "... clearly any shift in demand between the curves labelled D_1 and D_2 would have no effect upon price, price would remain stable at P."[1]

III. Changes in Demand and Costs Together :

(i) "The theory of the kinky demand curve explains why prices that have been stable should continue to be stable despite certain changes in demand or costs."[2]

(ii) "... the theory was advanced ... that the kink goes for to explain observed price rigidity in oligopolistic industries."[3]

The 'observed' rigidities refer to a period where costs and demand were both changing i. e. "... June, 1929, through May, 1937... the period used in most empirical studies of price rigidity".[4]

(iii) "... tests are made by comparing observed price rigidities in a group of industries with the relative rigidities forecast by the theory ... We chose the period June, 1929, through May, 1937 ... which embraces a complete business cycle ..."[5]

An empirical verification of a hypothesis can only attempt to verify the hypothesis for the conditions for which it is alleged to applv. Thus if the period for empirical verification is chosen as a complete trade cycle, then a reader cannot escape interpreting this to mean that Professor Stigler was implying that price rigidity theory also is alleged to be true for a complete trade cycle i.e. for a slump as well as a boom.

(iv) The diagram in "Survey of Contemporary Economics"[6] gives the kink for the slump as well as the boom at the same place. This was not perhaps deliberate, but it certainly suggests to a reader that prices are the same through slumps and booms, especially in the context of other statements regarding price rigidity e.g..." Hence the price XD' is likely to be very stable."[7]

1 Bronfenbrenner **op.cit.** p.421.
2 Stigler **op. cit. p.** 417
3 **Ibid.** p. 410.
4 **Ibid.** p. 426
5 **Ibid.** p. 426
6 Bernard F. Heley **op. cit.** p. 8
7 **Ibid.** p. 19

(v) In the same article written in 1949 Professor Bernard F. Haley contents himself by merely saying that Professor Efromyson in 1943 has explored the possibility further for a reflex curve.[1] He does not explicitly go on to mention, that where a reflex curve is concerned there will be instability of the price at the kink in a boom, and that this is no more possibility, but a certainty. The very failure to mention instability explicitly where it ought to have been stressed, leaves a suggestion of possibility of general price stability or at least the impression that Professor Efromyson's correct criticism of price stability had left the cautious authors and critics of the A.E.A. article not convinced enough to speak out boldly against the general theoretical possibility of price rigidity following from kinky oligopoly curves.

(vi) Professor Stigler in 1947 again makes it obvious that he must be aware that a reflex curve leads to instability, as he states that

> "...then maximum profits would never be secured at the price at which the kink arises."[2]

But the curve is constructed in a strange way, the "upper branch (for the price leader)" and the "lower branch (for the secret cutter)" and it is not explicitly stated that Sweezy's reflex curve of Fig. 2 [3] theoretically leads to instability. The failure to mention this and to hide the most important point against price rigidity theory in a vague foot-note clearly suggests to the reader that price rigidity hypothesis is implied by Professor Stigler to be existing in theory for a slump as well as a boom period. It may further be noted that Professor Stigler's article was published in 1947 and throughout its length of eighteen pages he has refrained from referring to Professor Efromyson's important paper published four years earlier. This further leaves the reader with the same impression (mentioned in the last paragraph) as one gets after reading Professor Haley's contribution.

The above statements indicate that the readers of these important publications can easily be led to believe in the implied existence of a price rigidity hypothesis of the form stated in

1. **Ibid** fn. 17 p. 8
2. Stigler **op. cit.** p. 412 fn. 4
3. Sweezy **op cit** p. 407

Part A of this article in connection with kinky oligopoly curves. The hypothesis may, on analysis, turn out to be a broken windmill rather than a giant, but is still substantial enough to be worthy of attack by a student of micro theory, interested in ridding his academic demesne of cobwebs.

APPENDIX B

The Condition for Equilibrium for a Kinky Curve in a Boom

To establish proposition I (b) (ii) a criterion for determining where exactly the profit maximising equilibrium will be determined in a situation of restricted capacity remains to be provided as it has been seen that it will not be directly underneath the kink but at either of the two maximising outputs OL and OM. The curve of profits will be having a double hump (a bimodal distribution) with maxima at outputs OL and OM and minimum at output ON which is directly underneath the kink (Figs. 2 and 3). The equilibrium of profit maximising will be established either at OL or at ON according as the value of profit at OL or OM is greater, and it is to be investigated under what conditions the higher value of profit will be at OL i. e. to the left of the kink, and under what conditions at OM, i. e. to its right.

In Fig. 2 the level PN of the kink (current price) is given by macro-economic conditions which are assumed stationary for a while, and the present output ON by the market conditions. MC is assumed to be a straight line passing through the gap in MR (ED) and cuts the vertical straight line ED at B. Assume that technical conditions are constant so that the angle ABD which the MC curve makes with the Y-axis is given as being equal to a constant and hence the slope of MC curve is constant. However, the height of the MC curve is not fixed. The upper wing of the demand curve (SP) makes a given angle with the X-axis defined by market conditions, so that the corresponding wing of the MR curve (SD) makes a given angle SDE = ψ with the vertical line DE. The position of the lower wing of the Marginal Revenue Curve (ER) corresponding to the lower wing of the AR curve (PT) is determined by the internal angle

SPT = ϕ which SP and PT (upper and lower wings of the AR curve) make with each other. Let ER make an angle DER = ϕ with the vertical line DE. When the angle ϕ increases; the upper wing of the AR curve (SP) remaining constant, the lower wing of the AR curve (PT) rotates downwards, and also rotates the lower wing of the MR curve ER downwards thus decreasing ϕ. Thus ϕ is a decreasing function of ω. An increase of ω also moves the point E downwards and C leftwards, hence area of the Δ BEC decreases.

As assumed above θ and Ψ are constants defined by technical and market conditions, point D is also fixed, as the height of the kink (PN) is fixed at the level of the current price, for one stationary position of the latter.

Profits for any output q are given by the value of the integral $\int_0^q$ (MR–MC) dq i.e. area between the curves MR and MC, the Y-axis and the ordinate at output q. In Fig. 2, at output OL, profits are represented by the area SAH and at output OM the profits are represented by the area SAH–ADB + BEC. Therefore, to determine whether profits are greater or smaller at output OL than at OM, we have to determine whether Δ ADB is greater or smaller in area than Δ BEC. If Δ ADB > Δ BEC, then profit maximising equilibrium is at OL otherwise at OM.

As a first step let ω be gixen so that ϕ is known and is a constant. The height of the kink (PN) being given, as well as ω, the position of E is fixed, so DE is given. The line MC actually cuts the line DE somewhere between D and E at a point B, whose position varies with the level of the line NC as it moves parallel to itself. ↑ Let the distance DB be denoted by ρ which is a variable. Further Let ρ' denote a distance DB' such that if a line A'C' (parallel to the MC curve ABC) cuts the line DE at B', and cuts the two wings of the MR curve namely SD and ER at A' and C' respectively, than the area of the Δ A'DB' = Δ B'BC'. Thus DB' = ρ' may be termed the critical value, such that if ρ ρ' then ΔADB = ΔBEC. For profit maximising equilibrium at OL, Δ ADB > Δ BEC, hence $\rho > \rho'$; and for profit maximising equilibrium at OM, Δ ADB < Δ BEC, hence $\rho < \rho'$. Thus if the point B at which MC actually cuts DE, lies above B', then equilibrium will be at OL; if below B' then at OM.

Critical value Analysis

As the condition of equilibrium has been shown to depend upon the fact whether MC cuts DE above or below the critical point B′ it is necessary to investigate more closely into the position of B′ and how it is determined.

The following indications can be shown to be true :

1. $\rho' > \frac{1}{2}$ DE i.e. B′ lies always in the upper half of the gap DE.

2. ρ' is a decreasing function of ω and an increasing function of ϕ i.e. if ω decreases B′ moves upwards.

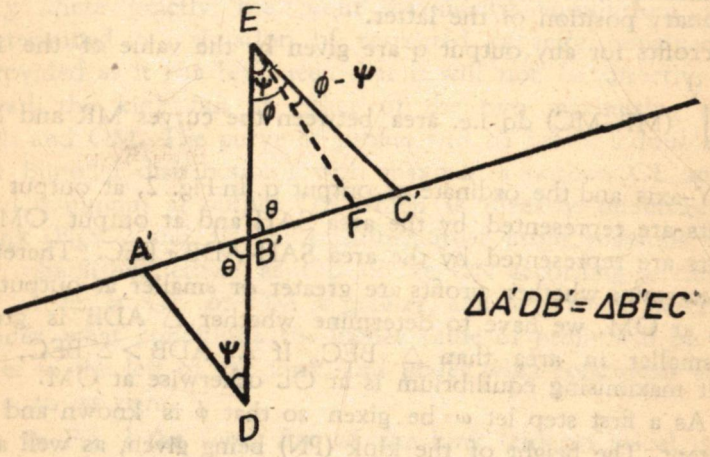


Fig-5

Indication 1 :

Extracting from Figure 2, the relevant portion and magnifying as in Fig. 5, we can then draw EF parallel to A′D to meet B′C′ at the point F. $\angle$ B′EF = $\angle$ A′DB′ = ψ, and $\angle$ FEC′ s equal to $\phi - \psi$. $\phi > \psi$ as the upper wing of the AR curve is steeper than the lower wing.

Now

$$\left(\frac{EB'}{B'D}\right)^2 = \frac{\triangle EB'F}{\triangle A'DB'} = k \text{ (say)} \therefore \triangle A'DB' = \frac{1}{k}\triangle EB'F$$

$$\frac{\triangle EB'C'}{\triangle A'DB'} = \frac{\triangle EB'F + \triangle EFC'}{\triangle A'DB'} = k + \frac{\triangle EFC'}{\triangle A'DB'} = k + \frac{\triangle EFC'}{\frac{1}{k}\triangle EB'F}$$

$$= k\left(\frac{\triangle EFC'}{\triangle EB'F} + 1\right) = k\left[1 + \frac{\frac{1}{2}EC' \cdot EF \cdot \sin(\phi - \psi)}{\frac{1}{2}EB' \cdot EF \cdot \sin\psi}\right]$$

Now in $\triangle EB'C'$,

$$\frac{EC'}{EB'} = \frac{\sin\theta}{\sin\{\pi - (\phi+\theta)\}} = \frac{\sin\theta}{\sin(\phi+\theta)}$$

$$\therefore \frac{\triangle EB'C'}{\triangle A'DB'} = k\left[1 + \frac{\sin\theta}{\sin(\phi+\theta)} \cdot \frac{\sin(\phi-\psi)}{\sin\psi}\right]$$

At the critical position B', $\frac{\triangle EB'C'}{\triangle A'DB'} = 1$ by definition

$\therefore \left(\frac{EB'}{B'D}\right)^2$ i.e. k will be such that $\frac{1}{k} - 1$

$$= \frac{\sin\theta \cdot \sin(\phi-\psi)}{\sin\psi \cdot \sin(\phi+\theta)} \qquad \ldots\ldots\ldots (1)$$

Here θ and ψ are constants and both $< \pi/2$

Therefore sin θ, Sin $\psi > 0$ and are constant.

$\pi/2 > \phi > \psi > 0 \quad \therefore 0 < \phi - \psi < \pi/2 \quad \therefore \sin(\phi - \psi) > 0.$

Also $o < (\phi + \theta) < \pi$, so $\sin(\phi + \theta) > o$.

$$\frac{\sin\theta}{\sin\psi} \cdot \frac{\sin(\phi-\psi)}{\sin(\phi+\theta)} > o \qquad \ldots\ldots\ldots (2)$$

$\therefore$ From (1), $\frac{1}{k} - 1 > o$ or $\frac{1}{k} > 1$ or $k < 1$ or $\frac{(EB')^2}{(B'D)^2} < 1$

or $(EB')^2 < (B'D)^2 \quad \therefore EB' < B'D$ or $EB' + B'D < B'D + B'D$

or $ED < 2\,B'D$ or $B'D > \frac{1}{2}ED$ or $\rho' > \frac{1}{2}ED$.

Therefore, the critical position B' will always be in the upper half of the gap ED. This establishes the truth of Indication 1.

Indication 2:

We now relax the assumption that ω is constant and shall now analyse changes in ρ' as ω changes, by the rotation upward of the lower wing of the kinky AR curve (PT in Fig. 2). It will be easily seen that a decrease of ω results in two effects being produced on the corresponding wing of the MR curve (ER). Firstly the angle ϕ increases; secondly, the point E i.e., the upper end of the vertical gap shifts upwards. We shall analyse the effect of these on the critical position B' in two stages, firstly change in B' for increase of ϕ, E remaining fixed, and secondly changes in B' when E moves upwards ϕ remaining constant.

First Stage : ϕ increases, E constant. Let the initial position of B′ be denoted as B_1' (Fig. 6). Let $\left(\frac{EB'_1}{B'_1D}\right)^2 = k_1$

As B′ is a critical position we have

$$\frac{1}{k} - 1 = \frac{\sin\theta}{\sin\psi} \cdot \frac{\sin(\phi-\psi)}{\sin(\phi+\theta)}$$

from equation (1). In this equation $\sin\theta$, $\sin\psi$ are positive constants. Let us consider the expression $\frac{\sin(\phi-\psi)}{\sin(\phi+\theta)} = f(\theta)$, and examine its changes as ϕ increases.

Now $f'(\phi) = \frac{df(\phi)}{d\phi} = \frac{d}{d\phi}\left[\frac{\sin(\phi-\psi)}{\sin(\phi+\theta)}\right]$

$$= \frac{d}{d\phi}\left[\frac{\sin\phi\cos\psi - \cos\phi\sin\psi}{\sin\phi\cos\theta + \cos\phi\sin\theta}\right]$$

$$= \frac{\left[\left\{(\sin\phi\cos\theta+\cos\phi\sin\theta).\frac{d}{d\theta}(\sin\phi\cos\psi - \cos\phi\sin\psi)\right\} - \left\{(\sin\phi\cos\psi - \cos\phi\sin\psi).\frac{d}{d\phi}(\sin\phi\cos\theta + \cos\phi\sin\theta)\right\}\right]}{\{(\sin\phi\cos\theta + \cos\phi\sin\theta)\}^2}$$

$$= \frac{\{\sin(\phi+\theta).\cos(\phi-\psi)\} - \{\sin(\phi-\psi).\cos(\phi+\theta)\}}{\sin^2(\phi+\theta)}$$

Put $(\phi+\theta) = A$, $(\phi-\psi) = B$ then $A - B = \theta + \psi$ where $0 < (\theta+\psi) < \pi$

The above expression then becomes

$$= \frac{\sin A\cos B - \cos A\sin B}{\sin^2 A} = \frac{\sin(A-B)}{\sin^2 A} = \frac{\sin(\theta+\psi)}{\sin^2(\phi+\theta)}$$

But $\sin(\theta+\psi) > o$ and $\sin^2(\phi+\theta) > o$; thus $f'(\phi) > o$.

$\therefore f(\theta) = \frac{\sin(\phi-\psi)}{\sin(\phi+\theta)}$ increases with ϕ, and

consequently as ϕ increases $\frac{\sin\theta}{\sin\psi} \cdot \frac{\sin(\phi-\psi)}{\sin(\phi+\theta)}$ increases and is $> o$..... from (2)

i. e. $\frac{1}{k} - 1$ increases and is $> o$..... from (1)

$\therefore \frac{1}{k}$ increases or k decreases as ϕ increases.

Let the value of k decrease from k_1 to k_2 the latter being $= \frac{(E\,B'_2)^2}{(B'_2\,D)^2}$

Then, E remaining fixed, the critical point B′ starting from B'_1 moves up to B'_2. Hence DB′ increases from DB'_1 to DB'_2. Thus ρ' increases with ϕ.

Second Stage : Let E_1 be The original position of E. Then in this stage ϕ is kept constant, and the point E is made to move up from E_1 to E_3, D remaining fixed. At the critical position B′, since k depends only on the angles θ, ψ and ϕ and all of them are constant in this case, the value of k does not change for movement of E from E_1 up to E_3.

Let us start from the initial critical position B'_1 (Fig. 7). Now if the new position of B′ is B'_3 then

$$\frac{E_3B'_3}{DB'_3}=\frac{E_1B'_1}{DB'_1} \text{ as each is } = k^{\frac{1}{2}}$$

$$\text{or } 1+\frac{E_1B'_1}{DB'_1}=1+\frac{E_3B'_3}{DB'_3} \text{ or } \frac{DB'_1+E_1B'_1}{DB'_1}=\frac{DB'_3+E_3B'_3}{DB'_3}$$

$$\text{or } \frac{DE_1}{DB'_1}=\frac{DE_3}{DB'_3} \text{ or } \frac{DE_3}{DE_1}=\frac{DB'_3}{DB'_1}$$

Now $DE_3 > DE_1$, hence $DB'_3 > DB'_1$.

Therefore, B_{i3} is higher than B'_1.

Thus in the second stage the point B′ moves up from B'_1 to B'_3.

It has now been seen that acting separately and individually an increase of ϕ sends up the position of B′ from B'_1 to B'_2 and

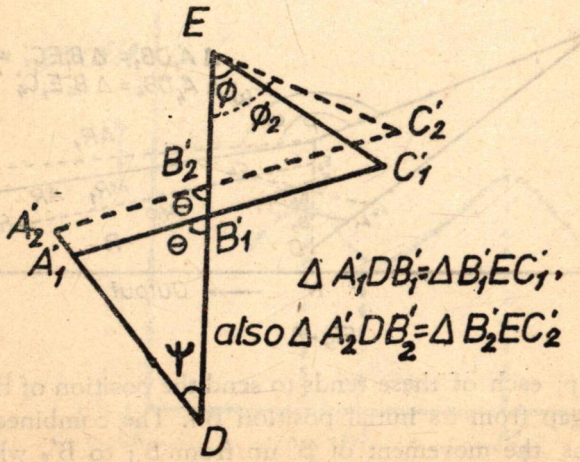


Fig-6

an increase of the length of the gap from DE_1 to DE_3 sends up the position of B′ from B'_1 to B'_3.

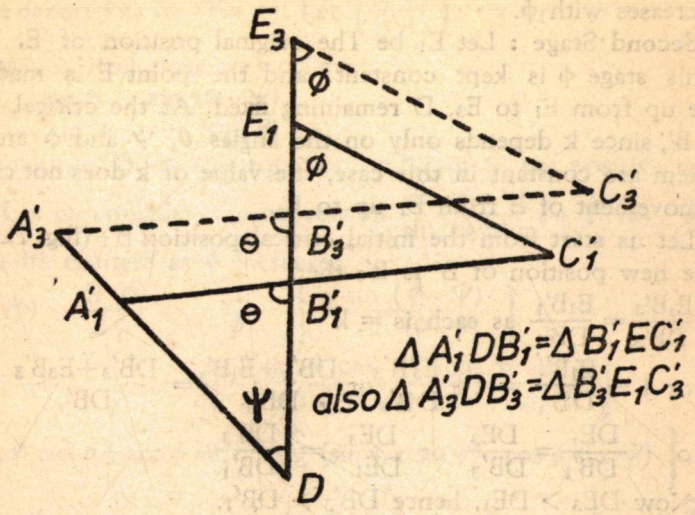


Fig-7

Combining the effects of the two stages it can be seen that as the lower wing of the kinky AR curve PT (Fig. 2) rotates upwards (Fig. 8), angle ω decreases, angle increases as well as E

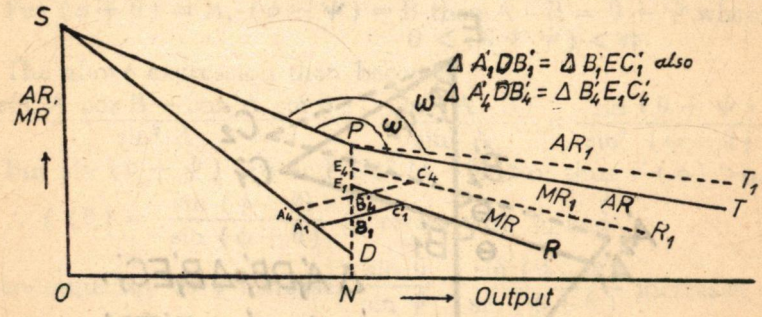


Fig-8

moves up; each of these tends to send the position of B′ up in the vertical gap from its initial position B'_1. The combined effect will appear as the movement of B′ up from B'_1 to B'_4 which would be higher than either B'_2 or B'_3.

Hence as ω decreases ρ′ increases. This establishes the truth of Indication 2.

CONCLUSION

We have found out the critical position and how this position shifts with changes in the angle ω. If the intersection B_1 of an actual marginal cost curve (MC_1) with the gap line DE is below the critical position B′ (Figs. 9 and 10), then profit maximising

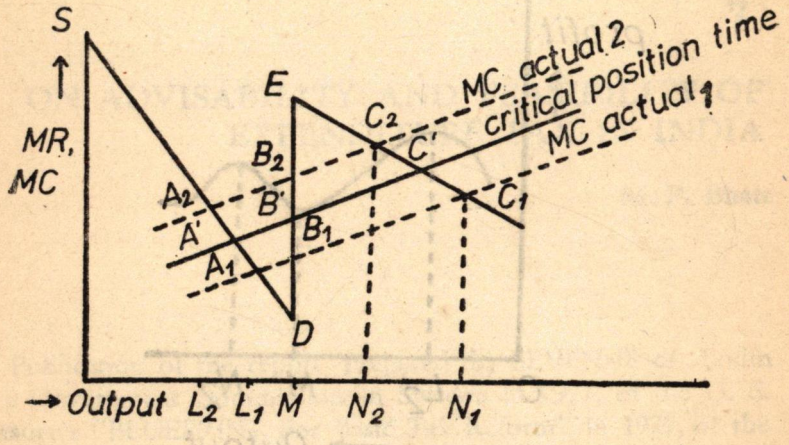


Fig-9

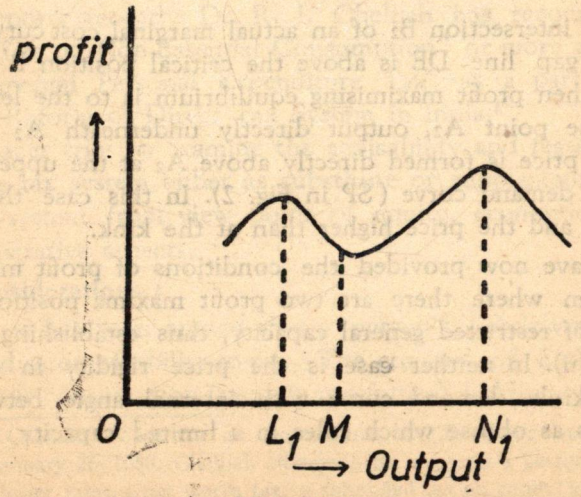


Fig-10

equilibrium is to the right of the kink at point C_1, output directly underneath C_1 at value ON_1, and the price is determined directly above C_1 at the lower wing of the kinky demand curve (PT in Fig. 2). Here the output is larger and the price smaller than at the kink.

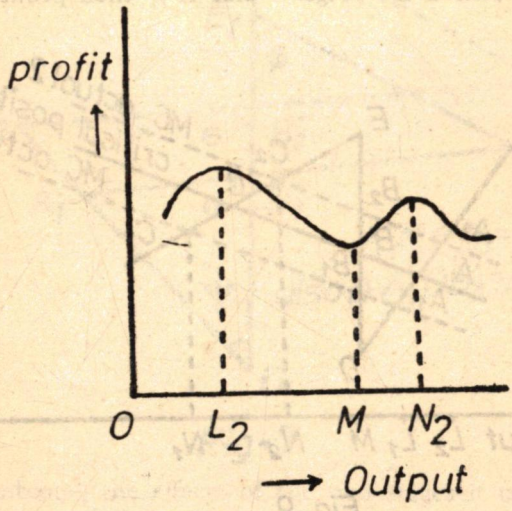


Fig-11

If the intersection B_2 of an actual marginal cost curve (MC_2) with the gap line DE is above the critical position B′ (Figs. 9 and 11), then profit maximising equilibrium is to the left of the kink at the point A_2, output directly underneath A_2 at value OL_2, and price is formed directly above A_2 at the upper wing of the kinky demand curve (SP in Fig. 2). In this case the output is smaller and the price higher than at the kink.

We have now provided the conditions of profit maximising equilibrium where there are two profit maxima positions, as in a period of restricted general capacity, thus establishing proposition I(b) (ii). In neither case is the price rigidity in oligopoly having a kinky demand curve with internal angle between the two wings as obtuse which rules in a limited capacity situation.

7

ON ADVISABILITY AND FEASIBILITY OF EXPENDITURE TAX IN INDIA

M. P. Bhatt

Publication of the report prepared by SEVEN-01 of Lodin for a Government Commission in Sweden in 1977, of the U. S. Treasury's "BLUEPRINT For Basic Tax Reform" in 1977, of the Meade-Committee Report in the United Kingdom 1978, reflect the new interest in the idea of an expenditure or consumption tax (Et) as a practical and desirable alternative to income tax (Yt). Inspired by these reports recently Dr. R. J. Chelliah has recommended "a Direct Tax on Non-Essential Consumption" or more precisely "a Supplemental Personal Expenditure Tax" as a part of the scheme of Reform of Direct Tax System in India.[1]

This paper tries to examine the advisability and feasibility of expenditure tax system either as substitute or supplement of the existing Yt-system, from view point of equity, economic effects and administrative aspects.

Equity Considerations :

Lately, it has been argued that a person's "endowment" is the best indicator of ability-to-pay. The concept of Endowment would include consumption (present and future), holding of wealth,

1 Dr. R. J. Chelliah : Case for an expenditure tax, **Economic and Political Weekly** January 26, 1980. Chelliah alongwith Et. suggests a personal income tax with lower rates, a net worth tax, a simplified tax on capital gain, a gift tax and a more moderate corporate profit tax coupled with a tax on indirect expenditure of corporation.

and the enjoyment of leisure. However, such a comprehensive concept is non-operational as for all practical purpose taxation will have to be restricted to marketable activities and exclude value of leisure as it cannot be measured. Given this constraint the meaningful question is whether income or consumption is a better indicator of ability–to–pay. Musgrave has suggested "potential consumption" as a criterion of ability–to–pay.[1] Saving or acquisition of assets increases a person's power to consume; Et which exempts saving or investment therefore fails to take into account the total potential consumption.

Moreover, available evidence indicates that the ratio of consumption to current income declines as income rises – the burden of Et would be regressively distributed unless the rates of Et are more steeply graduated than the Yt.

One of the most repeated equity arguments in favour of the expenditure tax is what is known as the "common pool" argument. The argument is that an income tax taxes a man according to what he puts into the "common pool", while an expenditure tax taxes the man according to what he takes out of the common pool. But what is or where is this common pool ? Assets always belong to some person or a group of persons. A pool of goods and services from which anyone can take whatever he pleases simply does not exist. One must not forget that one of the functions of money is as a store of value. In an exchange transaction, the buyer gives up general purchasing power for a specific commodity and the seller gives up a specific commodity for general purchasing power. How does the common pool enter into this transaction ? Assuming that there exists something like a common pool, it is important to note that private inxestment no less than consumpion, is a withdrawl from the pool. It is worng to say that income tax taxes the man when he is contributing to the common pool. Income tax taxes a person because he claims and receives a reward for his services. Consider a business executive who is getting salary of Rs. 10,000 per month. When he obtains his salary, he does not contribute his services, he sells it, i.e.

1 Musgrave and Musgrave : **Public Finance in Theory and Practice.** Third Edition, 1980, P, 243.

exchanges a particular commodity, his services, in exchange for general purchasing power. Assuming that one day he decides that he will not accept any salary for the work he does, he also stops paying income tax. When he stops accepting salary, his contribution to the common pool does not change in any manner whatsoevar. This is sufficient to establish that income tax taxes a man because he receives a reward for his services and not because he simply contributes his services.

The argument under consideration may be re-worded as follows : An income tax taxes a person as he acquires a right to the share in the common pool and an expenditure tax taxes a person as he exercises this right to the share in the common pool. It is obvious that this amounts to nothing more than stating that an expenditure tax taxes expenditure and an income tax taxes income. The difference in timing of the tax payment is the whole problem as the principal difference between an expenditure tax and an income tax is that an income tax taxes savings as they accrue but an expenditure tax taxes savings as they are spent.

For the majority of the people the choice between income tax and an expenditure tax would make very little difference. For most of us, our life–time consumption is likely to be equal to our life–time income. The taxation of consumption rather than income would, therefore, but serve to shift the tax burden from the middle age, when savings are usually at its peak, to youth and old age, when funds are usually being borrowed or assets drawn down. In such a situation, the progressive rate of expenditure tax, if measured against the income of such an individual, would be regressive.

Capital Gains :

One of the most crucial equity argument against existing income tax system is that it excludes capital gains and other casual receipts from its base. As against this under Et capital gains if spent would automatically get taxed. However, it can be proved that as far as treatment of capital gains is concerned there does not seem to be any significant difference between Yt which exempts the capital gains and an Et in which expenditure out of capital gains is subject to the tax. Let us assume that a taxpayer has Rs. 100 taxable income. The rate of both taxes is

50 per cent (gross). Assuming zero consumption (or fixed consumption) under an income tax, the taxpayer will have to pay Rs. 50 immediately to the government. Therefore, his monetary savings will be equal to real saving (Rs. 50). Under an expenditure tax monetary saving will be equal to Rs. 100 (assuming zero consumption) but real savings will be equal to Rs. 50. The taxpayer can buy Rs. 100 worth of shares under an expenditure tax and Rs. 50 worth of shares under an income tax. Now suppose share prices double, then, capital gains will accrue. Under an income tax the taxpayer will have Rs. 100 as capital gains (which is exempted). Under an expenditure tax, the taxpayer will have Rs. 200 worth monetary assets, including capital gains, but real value of these assets (in terms of consumption goods) will be equal to Rs. 100. In other words, if two individuals one under an income tax system and another under an expenditure tax system, have the same pre-tax incomes, the same amount of consumption, and if they invest their remaining savings and realize the same degree of capital gains, then, at the end, they will have the same real value of assets. This means that there is no real difference between an expenditure tax and an income tax, as far as the capital gains are concerned.

Fluctuating Incomes :

Income tax creates inequities between stable and fluctuating incomes – as under progressive rate, a person with a fluctuating income will have to pay a larger amount in tax. As compared to this, a person receiving fluctuating income can without any difficulty have a steady rate of expenditure, which is obviously advantageous to the taxpayer unde the Et. However, under the Et there is a corresponding disadvantage. Under an Yt a taxpayer can spend his wealth in any amount at any time without any tax consequences. This privilege is not available under Et. Under Et. as soon as he starts spending his wealth his total taxable expenditure will increase thus causing 'fluctuating' expenditure. Thus a person will be better off under Et if the fluctuations in his expenditure are less than the fluctuations in his income while persons with constant income who have saved with the intention of dissaving in the future will be better off under the Yt as compared to Et.

It will be appreciated that the problem of fluctuating income or expenditure is not inherent in the choice of the tax base.

The problem arises only because of the progressive tax rates. A suitable system of averaging the tax base over a period of time would reduce the otherwise higher tax liabilities of the persons with fluctuating tax bases.

Gambling Gains :

The existing Yt does not tax gambling gains while under Et expenditure of gambling gains, like any other expenditure, will be subject to the tax. Mr. Kaldor maintains that "outlays on betting and gambling is really a form of consumption.....there is no reason in equity for excluding this from chargeable expenditure.

Let us, however, consider the implications of Kaldor's statement. Assume that there are twenty persons who put down Rs. 10 each, and agree that one person should get all the Rs. 200, the lucky person being decided by a game of chance. Now, Kaldor's contention leads us to the following curious results: (i) When each of the twenty persons puts down Rs. 10, he consumes it; and then the lucky person can consume the whole of Rs. 200 all over again–a physical impossibllity. (ii) If a group of persons start gambling and finish in such a manner that on balance none of them has won or lost anything, then we have the startling result that there has been no consumption. That is when you loose something first, you consume it; if you subsequently win the amount you have lost, what you have consumed somehow reappears again–a physical impossibility. Alternatively, if you loose Rs. 150, this amount should enter into chargeable expenditure, if ten minutes later you win back the Rs. 50, this amount should be treated as any other receipt, because what you have consumed cannot reappear again. So, a person who on balance has neither won nor lost anything should, on this view, pay a tax on his aggregate (not net) losses. It seems highly doubtful that this view of the tax base would be generally acceptable.

Effects on Savings :

Out of the various claims of the favourable economic effects of expenditure tax, the most widely accepted is that about its favourable effects on savings. Careful theoretical analysis as well as factual studies on the net impact of taxation on private savings are inconclusive. Most of the arguments claiming favourable effects on savings are based on partial micro–analysis, which seems to

have erred in exaggerating the inducement to save under the expenditure tax. To the best of my knowledge, no effort has been made to examine whether or not savings will be higher under an expenditure tax than under income tax, within the framework of general equilibrium analysis. What is required is to make up a model and analyse the various functions to find out the direction and change in the various variables when an expenditure tax is substituted in place of an income tax. Savings in any economy would depend on several economic and non-economic factors, such as level of income, rate of interest, tax rate, inflation and motives to save, etc. In the absence of any direct evidence of marginal propensity to save of different income classes, any conclusion about the impact of an expenditure tax on personal savings would be highly conjectural. Further, in discussion on the effects of taxes on savings, sufficient attention is not given to the changes in the real value of income, savings and wealth which takes place on account of introduction of expenditure tax or changes in the rate of expenditure tax. The introduction of expenditure tax or increase in its rate will reduce the real value of income, savings and wealth. Normally, people will not accept any reduction in the consumption level which they are accustomed to. If this is so, the possibility is that the substitution of expenditure tax in place of income tax would reduce saving. This is likely to happen because with given income more funds would be needed to maintain consumption in real terms, which are likely to be diverted from that portion of income used for saving.[1]

Under the expenditure tax the real value of wealth is dependent upon the tax rate. Under the income tax the real value of wealth is independent of the tax rate. We assume the price level to be constant. Since there is uncertainty regarding the future expenditure tax rate, it follows that under the expenditure tax rate there is uncertainty regarding the real value of wealth. Since the uncertainty of the future income tax rate does not affect the real value of wealth, we may say that there is more uncertainty under the expenditure tax than under the income tax in this respect. Let us elaborate this point and study its implications.

1 Howrey and Hymans based on time series analysis found no significant evidence of a positve effect on saving of change over to Et from Yt,

The uncertainty of the future expenditure tax rate implies the uncertainty of the real value of wealth. Wealth by definition is the summation of savings from the beginning to the present, i.e. positive savings are additions to wealth. Uncertainty of the real value of wealth implies the uncertainty of the real value of savings. Now since savings form a part of income, it follows that under the expenditure tax, there is a greater uncertainty of the real value of a part of the income than under the income tax. It follows therefore that there is greater uncertainty of the real value of a part of the reward a man obtains for his services under the expenditure tax than under the income tax, the part referred to is that part of the reward which he saves.

Now it could be argued that a similar uncertainty exists also under the income tax. Under the existing income tax, certain items are charged on the previous year basis; i.e. the taxpayer this year pays these taxes on the relevant portion of last year's income at this year's rates. So, there is a similar type of uncetainty under the income tax, also. However, two points must be distinguished between these two cases. Firstly, since the uncertainty under the income tax arises because certain items are charged on a previous year basis, the uncertainty involved is that the tax rate one year hence may be different. Under the expenditure tax wealth (accumulated savings) carries the uncertainty with it till it is spent, i.e. the uncertainty involved is the uncertainty of the tax rate as and when the accumulated savings are spent. The savings obviously need not be spent one year after they were made, they could be spent three or five or any number of years hence. Therefore, the uncertainty involved is greater under the expenditure tax than under the income tax.

Secondly, under the expenditure tax this type of uncertainty is inherent and fundamental, while under the income tax it is neither inherent nor fundamental. The uncertainty referred to cannot be removed from the expenditure tax, except by taxing the savings in the year in which they occur and not taxing them subsequently, i.e. except by turning the expenditure tax into an income tax.

What we have shown is that there is more uncertainty under the expenditure tax than under the income tax. This does not imply that there is no uncertainty under the income tax. Of

course, the whole world may be blown to bits in a nuclear war, the real value of wealth under any conceivable tax will then be zero; a total loss. The price level may go galloping up or down, technological changes may affect various prices and asset values, there is uncertainty regarding profits, balance of payments, etc. The point here is that all these uncertainties are common to both the taxes. Also, in some of the cases one can more or less insure oneself against these uncertainties. For example, one can buy common stock of incorporated companies and insure oneself to some extent against the price level changes. One can also insure against untimely death by buying a life annuity, etc. However, the important point is that all these uncertainties are common to both the taxes, while the uncertainty of the real value of wealth due to the uncertainty of the future tax rate is peculiar to the expenditure tax.

Effects on Investments :

It is claimed by the advocates of Et that an economic advantage of the Et is that, unlike Yt it does not discriminate against risky investment essentially because the Et does not reduce the part of the reward for risk-taking that is saved. Domar and Musgrave[1] have demonstrated that a proportional income tax with full loss offset equally reduces investors' risk and the reward for assuming risk.

Et as compared with Yt is supposed to encourage saving mainly because for given interest rate, it increases the value of interest income net of tax as compared to the income-tax. We can encourage savings under Yt by raising interest rate but this would discourage investment. What Et attempts to do is to increase interest income net of tax as compared to the Yt, for a given interest rate. That is, on the basis of partial micro analysis, the Et encourages savings without discouraging investment. I believe that some such mechanism i.e. increasing interest income net of tax under Yt without discouraging investment can be used within the framework of income tax. One

1. See R. A. Musgrave The Theory of Public Finance. The original reference is Evsey D. Domar and R. A. Musgrave "Proportional Income Taxation and Risk-Taking" **Quarterly Journal of Economics** Vol. 58 (May 1944) Reprinted in **Readings in the Economics of Taxation**. See also E. Larry Brown : "Mr. Kaldor on Taxation and Risk Bearing" **Review of Economic Studies**, October, 1957,

way to do this would be to increase the interest rate, and devise a suitable depreciation policy (i. e. accelerated depreciation) to offset the disincentive effects of the higher interest rate upon investment. It is known fact that the depreciation policy significantly affects the decision to invest[1] and shorter the period over which they are spread greater the present value of the tax savings.

Meade Committee has given prominence to the fact that Et is equivalent to a tax on income with the return on savings excluded from the base. In other words Et attempts to subsidize interest income as compared to earned income. And this is precisely the main reason for favourable effects on saving-investment claimed under Et. If with given interest rate similar subsidy is made available – under Yt this would increase the interest income net of tax, and since the interest rate remains unchanged; there will be no adverse incentive effects on investment. Such subsidy under Yt may be objected as 'unfair'. However, since the Et attempts to increase savings by increasing the interest income relative to earned income: other measures under the Yt which also attempt to increase savings by increasing the interest income relative to earned income cannot be called 'unfair' unless the Et is also called unfair.

Work Incentives :

It is known fact that the gross rate of the expenditure tax will be higher than the income tax rate to fulfill the condition of equal yield; therefore a given amount of income will buy less present consumption under the Et that under Yt. That is, leisure relative to present consumption will be more expensive under the Yt than under the Et. This situation causes the familiar dilemma of two opposing effects on work incentives. In the first place, the return in terms of present consumption for sacrificing a unit of leisure is lower under the Et than under the Yt, this would indicate that less work will be done under the Et. Secondly, because of the very fact that the value of present consumption is reduced under Et, the tax payer may well increase their work input : i.e. reduce leisure – to maintain their existing standard of present consumption. The net effect on work incentives will be

1 See R A. Musgrave : **The Theory of Public Finance.**

the sum of the above two effects, the outcome of which is uncertain. It is known fact that the analysis of effects of Yt on incentives to work leads to more or less same conclusion. Hence there is nothing to choose between Et or Yt on this account.

Built-in-instability :

Et is likely to affect the time pattern of consumption of the taxpayers. Under constant Government expenditure substitution of equal yield ET in place of Yt the tax rate is an endogenous variable. Therefore, when the general level of consumption is high, the tax rate will be low and vice-versa. So, the consumption value of a given income will be high when the general level of consumption is high, and vice-versa. It follows therefore that it would pay a person to consume more when the general level of consumption is high, and to save more when the general level of savings is high. Furthermore, higher the level of consumption, the lower the tax rate ; and lower the tax rate, the higher the level of consumption demand, and so on. Alternatively, lower the level of consumption demand, higher the tax rate; and higher the tax rate, lower the demand for consumption, and so on. That is, here we have built-in-instability.

Transitional Effects :

The transitional effects are the once for all effects, of changing over from the Yt to the Et. When the Et is introduced, it will have the effect of a once for all wealth tax. If the Et were introduced at the gross rate (tax - inclusive) of 50 per cent; it is clear that the real value of wealth would fall 50 per cent. Another problem will be the effect on a person who has saved during his earning period under Yt regime with the purpose of spending it after retirement. Such individual will have to pay Et on the use of their savings. This obviously would be unfair.

International Aspects :

The Meade Committee and Mr. Lodin have considered international aspect of shifting from income base to expenditure base. The advantage of Yt in this respect is that it is widely accepted and treaties are signed by several countries to avoid double taxation. Adoption of Et would create the problem about the treatment of foreign-source income of its residents. Providing relief for Yt paid to other countries would be inconsistent with the philosophy of Et.

Administrative Consideration :

Recent discussion appear to suggest that new insight into feasibility of Et have been gained. Advocates of Et claim that the tax based on consumption will be easier to administer than the present income tax. However, this claim is based on the failure to conceive various difficult administrative problems arising in operation of Et and is likely to burden us with unanticipated problems. Let us begin with the problem of measurement of chargeable expenditure under Et. Direct measurement of chargeable expenditure, i. e., counting up all the rupees spent on consumption is clearly administratively impossible. The only other alternative is an indirect measurement of taxable consumption. Consumption may be calculated by subtracting the increase in wealth between the beginning and the end of the period in question from the total receipts during the period. Total assets at the beginning of the period, plus the total receipts during the period indicate the total amount that can be spent during the period; subtracting from this sum the total assets at the end of the period gives us as a balance the amount actually consumed.

The expenditure tax would remove various arbitrary distinctions present in the income tax, but at the same time would introduce a few arbitrary features of its own. The principal arbitrary distinction to be made under the expenditure tax is between chargeable expenditure and investment. Suppose Professor of Chemistry has small laboratory in his house, where he works on a research project of his own. Assume the laboratory is financed through his own funds. Presumably the expenditure and the laboratory would be considered as investment and taxable consumption. If this be so, then do we consider the expenditure on a child's chemistry set as a taxable cnosumption ? If so then are we not discriminating because of age and/or former education, and/or intent. In circumstances such as these, how do we draw a line between taxable consumption and non-taxable industry, which is not arbitrary and which does not create "anomalies" and "inequities" ? Should education be considered as investment or taxable consumption ?

Under Et purchase of invertment will be a deductable
For any workable system of the expenditure tax, it would be absolutely necessary to specify explicitly what items are t

regarded as investment and what items are to be regarded as consumption; and the circumstances in which a particular item may be regarded as consumption or investment. It is at this point that various arbitrary distinctions have to be introduced; these arbitrary distinctions create "anomalies" and "inequities". The arithmetic involved in ascertaining taxable consumption is elementary, but the task of explicitly specifying the content of the words 'taxable consumption' is far from simple.

In general expenditure tax can be avoided by understating receipts, it can also be avoided by overstating value of purchase. If receipt is not reported then the value of receipts can be consumed without incurring tax liability. Of course, the income tax can also be avoided in this manner. However, under Yt all the receipts are not subject to the tax and hence all receipts do not have to be reported. Under Et it is essential for the purposes of accurately calculating taxable expenditure that all the receipts be reported.

The taxation of gift raises some very serious and fundamental administrative problems under Et. The Et can be avoided if the receipt of a gift is not declared by the recipient. The problem is how do we make sure that all the gifts will be declared by the recipient? This problem can be overcome without too much difficulty by system of cross checking. Under this system each tax payer will be required to furnish the code numbers of all the persons involved in transactions for each of the items claimed as a deduction from the expenditure tax. However, this system can work well under strictly proportionate tax rate. Under the progressive tax rate, the cross checking system will create several other problems. Under a progressive Et a tax payer with a high marginal tax rate can hire persons, who are either exempt from tax or have a relatively low marginal tax rate to do some of the spending for him; the required funds being transferred as gift. Another possibility of avoidance of Et would be that, a person in a high marginal tax rate may give a gift to a person who is exempted, who in turn would buy an object, i. e., car and keep the title to the object and sell it at nominal and "second hand" price to the same high marginal tax rate tax payer.

Tax Avoidance via Investment Transactions :

In computing taxable expenditure proceeds from the sale of investment are to be added to the available resources that can be spent. One way of avoiding expenditure tax is to sell an asset and to refrain from reporting the sale, or to underestimate the proceeds from the sale of the asset. The funds so obtained can be spent, and Et avoided. In the modern society, a large part of investment transactions takes the form of buying and selling of shares. It is known fact that buying and selling prices of shares are different at any given point of time and they may vary over time. It is also possible that, for one seller, there will be many buyers and, for one buyer, there will be many sellers. Furthermore, sellers may have no knowledge of the identity of the buyer and buyer may have no knowledge of the identity of the seller. Hence neither the buyer, nor the seller can provide the code number of the other party. Hence the cross-checking system will not work. Taking into consideration the fact that several millions of transactions of this nature occur on the stock exchange every year, the cross-checking system would involve colossal amount of work and may fail. Even if an efficient system were found, it is likely that such a system would be rather expensive and cumbersome to operate.

Foreign Transaction :

When we introduce other countries into the discussion, the administrative problems become a bit more complicated. The system of cross-checking which is so necessary under the Et would break down completely in so far as transaction with foreign nationals are concernd – as presumably, the Treasury would have no jurisdiction over the foreign nationals. And in so far as the system of cross-checking becomes uneffective, it would become easier to avoid the expenditure tax i.e. the purchase of investment could be over-stated, and the proceeds from the sale of investment could be under-stated. Other possibility is that a person can consume as little as possible, amass his savings, and then emigrate and thus avoid the expenditure tax.[1] Further, presumably the overseas visitors would be exempted from Et, or even if they are subject to the tax, their expenditure would be

1. A. R. Prest-Tax on Expenses **Leyods Bank Journal, October 1956.**

probably within the exemption limit, i.e. the marginal tax rate of the overseas visitors would be zero. A citizen of the country can transfer the funds to the overseas visitor in various ways and hire the overseas visitor to do some of his spending for him. It appears that it would be rather difficult to stop tax avoidance via transaction in view of the foreign nationals are involved.

Cost of Collection :

The amount of information required to operate Et is considerably larger than that required to operate Yt; hence the cost of collection will be higher under the Et than under the Yt. We are not in a position to estimate the cost of operating a system of cross-checking but in view of its complexity and the fact that a person's tax return may have to be cross-checked against several persons' tax returns in various parts of the country, it would be seen that the system is not likely to be inexpensive to operate. The most crucial issue in any scheme of reform of taxation is its enforcement. Regardless of the measure of ability employed, – (income or consumption) equity cannot be attained unless enforcement is effective. This of course does not mean that ease of administration alone should be the consideration in any proposal for tax reform – after all, there are even easier taxes to implement than Yt or Et. However, taking into considerations the relative merits and demerits of Yt and Et from view point of equity, efficiency and administrative convenience, there does seems to be very strong case for abandoning the Yt system. This of course does not mean that there is no scope for rationalization of Yt system as it exists to-day in India.

9

INDIA'S FISCAL POLICY– A SUGGESTED OVERHAUL *

M. H. Gopal

The fiscal or budgetary policy and its manifestations in any country play a crucial role in its socio-economic build-up. Not only the material prosperity, but the social happiness of the people, is made or marred by a wise or a wayward policy. India is an illustration of this policy.

This essay analyses India's experience in recent years in four different steps, and outlines broad directions of an overhaul: (i) Policy objectives in retrospect; (ii) the extent of their achievement in practice; (iii) the reasons for the limited success; and (iv) the direction of an overhaul. I shall concentrate on the broad objectives; as presented in the Central budget and its accessories, with particular reference to the last decade and a half.

Part I – Policy Objectives

A. The Period 1951–61 :

During the last nearly three decades (1950–51 to 1977–78) and particularly since 1961, two major features of India's fiscal approach stand out :

* This paper is the outline of a major work under completion. Since it is an outline, supporting citations and references are largely omitted. For an earlier analysis of 1940–1953 see M. H. Gopal : **Financial Policy of the Indian Union** (Delhi University, 1955).

1. The consistent reiteration of the same over-all objectives with little distinction between the long-term and short-term ones, and the very short-term, almost annual, upsets, and
2. The gap between the claim and its operation.

Although the emphasis may have shifted from one to the other depending on who the Finance Minister was, or the socio-economic situation or the political atmosphere, for example, how proximate an election or how vociferous the oppositon was, there have been broadly six fiscal objectives announced in the budgets and in the related debates:

1. The unending quest for more and more resources;
2. The necessity to sustain economic growth;
3. The urgency of stabilising the price level;
4. The pressure of social justice;
5. The requirement of reducing unemployment; and
6. The goal of self-reliance.

In addition to these major fiscal objectives, which are discussed below, there have been relatively minor ones such as balance of payments difficulties, export promotion and external assistance. It is interesting, but not encouraging, to note that in the early fifties, the fiscal obsession was the plan and raising resources for it, while as years went by and in the sixties, other major objectives were heralded and in the seventies a multiude of aims was announced in each budget.

Thus, the 1953-54 budget was "framed against the background of the Five Year (First) Plan"[1], and the fulfilment of a programme of planned development. To this was added that of solving unemployment which "calls for long-term measures"and can only be gradual in applying remedies. There was little in the fiscal policy about stabilization because inflationary pressures were taken as under control and if anything, a fall in prices was feared and was to be guarded against. The hiatus between the central policy and its acceptance by the States, i.e., lack of co-

1. Budget Speech, 1953-54, Para 51. Part I cites mostly the Budget papers, especially the Finance Minister's speech, which enunciates policy. Part II depends on the **Economic Surveys, RBIB** and Planning Commission documents except where other citations are made.

ordination, was expressed thus. "Some of them (the States) have not shown the necessary determination, matching their keenness in raising the resources expected from them after full consultation."[1]

The next budget repeated that the main purpose of all these budgets has been to secure the orderly implementation of the plan.[2] It claimed that the economy had been strengthened; inflationary pressures eliminated; production expanded; food position notably improved, etc. But what was really the position ? The price index was 374 in 1952 and 392 in 1953, but this was explained as temporary: "unemployment was aggravated". There was a fall in exports, but this was explained as due to fall in prices. In some industries, production was being normal, but this was due to 'several factors'.

The lack of Centre–State co–ordination was again noted in the budget[3]. "The experience of the last three years has been that, while development schemes are more or less going forward according to plan, the States have not shown the same readiness to augment their resources...". As plans were to be pushed through and resources to be raised, the overall deficit was Rs. 238 crores after additional taxation of Rs. 175 crores, and the economic climate was suitable for 'moderate deficit financing'[4] and the gap was to be met by Treasury Bill expansion.

The 1955–56 budget was the last budget of the First Plan, and like the preceding budget, "it has been framed with the main purpose of securing the orderly implementation of the plan"[5]. "The success of the Second Plan depended on organisation and finance". "The availability of finance is a crucial consideration". To secure the resources, fresh taxes were levied, but still the overall deficit was Rs. 340 crores and this was to be met by Treasury Bills. There were sizable deficits in 1954–55 and 1955–56 and yet, the view was that budgetary deficits of this order carry no threat of serious inflationary pressures".[6]

1 **Ibid.** para 52
2 Budget Speech, 1954–55, para 52.
3 **Ibid,** para 43
4 **Ibid,** para 41
5 **Ibid,** para 67
6 **Ibid,** para 49

The unfortunate lull in the economic situation was taken as permanent. Prices were down from an index of 392 in December 1954 to 360 in January 1955, "principally due to food prices fall". Agricultural results were encouraging and they were not due to temporay fators; but 'a significant part must be regarded as a permanent addition'. The tempo of industrial development was taken as encouraging. The employment situation, however, continued to cause anxiety; even its magnitude, admitted the Finance Minister, was unknown. There was substantial increase in money supply to meet needs of 'growing economic activity'. There would be considerable strain on the payments position in the future. The Mathai Taxation Enquiry Report had been accepted and some suggestions were put into effect.[1] Still, this budget stressed growth and resources, was anxious about employment, spoke little about social justice or self-reliance and swore by the plans as the panacea.

The first budget of the Second Plan period began : "In the context of our plan the Central Government's budgets have come to possess a significance far exceeding that suggested by the respective constitutional spheres of the Central Government and the States"[2]. "A plan was a co-ordinated effort by all sections of the community". And yet the co-ordination in raising resources and even in implementing the plan proposals was admitted wanting with reference to the States. The Second Plan, being a bolder step, was larger in size and so would require "the utmost effort by way of mobilizing the resources needed"[3]. "In this context", said the policy maker, "a progressive tax system, that is, a system which augments tax resources proportionately or more than proportionately to the increase in national income, has an important role to play"[4].

What was the economic situation like? Correct appraisal of current economic trends was conceded to be notoriously difficult. Still the climate was considered favourable. Industrial production was up and agricultural output 'satisfactory'. Price decline had been halted and the move was now upward. Food articles rose from 276 points in May to 323 in December 1955 and

1 **Ibid**, para 54 & ff
2 **Budget Speech. 1956-57**, para 2
3 **Ibid**, para 2
4 **Ibid**, para 9

industrial raw materials from 396 to 438 points in the same period. Money supply, which was already rising, increased by 11 per cent; and instead of relating this to the 'recovery of prices', the budget regarded it as not significant in the context of the 'considerable expansion' in production. Unemployment was 'a matter of concern', but the remedy was to 'step up the pace of development'. It may be noted that the development was largely in areas which could not solve materially the employment problem. On the other hand, the large outlay would add to disposable funds and so to inflation. This only emphasises how the plan and the outlays on them were considered a cure-all.

The complacency in 1955–56 about the payments position was shaken a bit. "On the eve of the Second Plan, the situation appears to be more or less one of balance, with slight pressures which, if not kept under observation and check, might in the context of the greatly increased rates of further expenditure contemplated hereafter become inflationary"[1]. Although the position both regarding payments and inflation grew worse, as feared, little more was done in the succeeding years, but anyway, the danger was realised.

Yet another fear lurked but was brushed aside, and this related to expenditure increases. "Any net reduction in the administrative expenditure in the Centre or the States can hardly be expected during the course of implementation of the Second Five Year Plan"[2]. But, the rising tempo of expenditure opens up possibility of extravagance. Therefore, "keep a still closer watch over such expenditure". But what really happened? The civil expenditure of the Centre alone increased from Rs. 216 crores in 1951–52 to Rs. 308 crores in 1956–56 and had more than doubled to Rs. 673 crores in 1960–61. A situation, which had long been operative, was not openly admitted because the tax burden had to be increased. So it was said "Current expenditute should be met by taxation. Capital expenditure also should be phased so that it corresponds to the results of special efforts to increase resources for development"[3]. May be because expenditure began to soar, a reclassification of expenditure between revenue and capital transferring some of the former to the latter head was introduced.

1 **Ibid,** para 32
2 **Iidb,** para 51
3 **Ibid,** para 52.

The tax additions were to the tune of Rs. 34 crores, "Additional taxation is inseparable from a bolder plan of economic development"[1].

In spite of this tax effort, the over-all deficit in 1956-57 was Rs. 356 crores. The hidden danger was recognised but explained away. "There is not, at the moment, any great slack left in the economy which would justify anything more than a reasonable amount of deficit financing. Up to a point, deficit financing is not only permissible but even desirable in a developing economy". The limit may be disputed but the deficit of Rs. 356 crores 'cannot be maintaind for any length of time without inviting inflation'. How wisely the budget stated. "The road to inflation is easy enough, but it opens flood gates which it would later be impossible to close. We are, in fact, taking a risk with the dificit financing proposed for 1956-57, and we shall have to watch its effects closely"[2]. How prophetic, and yet how little this was followed by the later budgets.

In 1956-57, yet another fiscal objective was just referred to i.e., social justice.[3] The problem in the plans was not merely 'one of raising the statistical average of per capita income, but one of raising the lowest income'. It was hoped that in the Third Plan-five years or more ahead-there would be 'a marked and unmistakable improvement in living standards all round'.

The plan, stated the budget of 1957-58, "is the main theme and the dominant concern of all our thinking and policy formulation...The most crucial aspect of economic policy was taxation, and tax policy and proposals were to be shaped in the light of four criteria, namely, sizeable addition to revenues; providing incentives to earnings, and savings, restraining consumption over a wide field; and making tax yield responsive to income increases. The Wealth and Expenditure taxes were introduced to make taxation "more effective and equitable"[4].

It was claimed[5] that the new thrust was in the direction of a socialist society. The rationale of the direct tax policy was "an efficient system of production and an equitable pattern of income and

1 **Ibid**, paras 71-72
2 **Ibid**, paras 71-72.
3 **Ibid**, para 73.
4 Budget Speech, 1957-58, para 42.
5 **Ibid**, para 67.

wealth", to strengthen incentives to work and to save', and to increase revenue from Company taxation and, at the same time, to facilitate greater plough-back of profits. The basis of indirect tax changes, that is, in taxing the common man's necessities, was to distribute the tax burden, to restrain consumption, to check inflation and to stimulate exports. The measures are essential and salutary. The stagnancy of revenue relative to national income must be changed and, therefore, new taxes and greater progression was the crux of the tax proposals. Fiscal policy was not only to rationalise the tax structure, but to sustain' 'a crescendo of developmental effort'.[1] This, the custodian claimed, had "imparted a new turn to our tax structure". These principles and proposals were patently conflicting and the only justification for the measures could be to raise the maximum resources.

The other features may be noted. The introduction of social justice – 'the demand of the low income people must be assessed carefully and must be met to the maximum extent possible', and the claim that the over-all deficit – Rs. 275 crores in 1957–58 – would be met by Treasury Bills in spite of inflationary pressure[2].

What was the economic situation like when this policy was announced ? Prices had risen by 8.5 per cent in a year, but wheat and rice prices were up by 16.4 per cent and 14.1 per cent respectively. Agricultural production had fallen, though by a little less than in the previous year and overall production showed 'a modest improvement'. Money supply increased by the 'small amount' of Rs. 132 crores; later, it expanded and there was consequent strain on the banking system. The strain on foreign exchange resources was a major problem, there being hardly any cushion left.

Still, the plan outlay was to be stepped up and the strain on the resources met by 'sustained effort'.

The fiscal policy of 1959–60 was much the some as its predecessor[3]. Each budget was claimed to mark a stage in 'the country's continuous development and has to be judged by the

1 **Ibid**, para 72.
2 **Ibid**. para 66.
3 Budget Speech, 1959–60, para 77.

contribution it makes to this development', i.e., the implementation of the plan conditioned this budget. Therefore the budget envisaged three main considerations :

(i) maximum mobilisation of resources

(ii) firm control over the growth of non-developmental expenditure; and

(iii) minimum borrowing from the Reserve Bank for growth purposes.

Therefore, additional tax burden was imposed but, though substantial, was 'less than in 1956–58'.[1] The expenditure on defence was slightly reduced but civil expenditure increased on account of larger provision for development. The Centre was fully conscious[2] of the imperative need for tightening the control over such expenditure and to secure the utmost economy without sacrifice of efficiency or output. The over-all deficit was Rs. 222 crores, but the satisfaction was that it was smaller than in 1958–59 (i.e. Rs. 255 crores), though still higher than desirable. The explanation was naive: "The deficit reflects the outlay on the plan which cannot be cut down without accentuating unemployment and leading to stagnation"[3].

The net additional tax burden was a mere Rs. 23.35 crores. Changes were made not in personal income taxation but in company taxation. The two new taxes on Wealth and Expenditure continued. The revenue from the Expenditure tax was 'quite disappointing', but "it is a new tax, not tried anywhere in the world, and in the first year of its imposition in our country, it is only right that we should have proceeded cautiously"[4]. This year's policy, like that of the previous year, was to tax the private sectors more.

Economic conditions, which formed the base on which fiscal policy is based, were not easy. "Our crisis is a crisis of development, a crisis of resources." "I feel," continued the Minister,[5] "we have passed through the most difficult phase and there is no reason for taking a more pessimistic view of the situation."

1 Ibid
2 Ibid
3 Ibid
4 Ibid, Para 66
5 Ibid, Para 78.

It was hoped that the major developments would shortly yield results and that there was no reason to doubt the soundness of the country's economy. The foreign exchange difficulties were being surmounted and the over-all budgetary deficits were moving down significantly. Therefore, "the difficulties were purely transitional."[1]

Were these claims borne out by facts? In 1958–59, agricultural production dropped to the lowest level since 1953–54. Industrial production slowed down and prices showed an upward trend. Foreign exchange reserves declined. There was a decline in monetary expansion in 1958, 1957 and 1956, the additions having been Rs. 75, Rs. 96 and Rs. 136 crores respectively, and the expansion of credit was relatively smaller. But wholesale prices rose from 106 to 112, and prices of food articles from 104 to 133. The balance of payments difficulties continued from 1956, though corrective steps were taken.

Surely this situation was not good, though later it went worse, and except the first of the guiding considerations mentioned above, i.e., raising resources, the other two – economies in outlay and limiting deficit financing were not – followed.

Like other budgets, the budget for 1960–61 had current economic conditions as the base and raising plan resources as the objective. The budget was to be considered against the background that there was no reason to be complacent. The Third plan, just to begin in the next year, would require greater efforts and larger sacrifices, until the economy became self-generating by the end of that plan, i.e., in 1971. Therefore, the slogan was[2] "Strain every nerve to mobilise the maximum resources from both taxation and savings. We face all the time a crisis of resources in developing our economy ... Mobilising the resources required for this is not going to be easy". Some restraint on consumption and 'a high degree of fiscal and monetary discipline is necessary. Therefore, it is in relation to the implications of planning that all our budgets have to be framed". It is worth noting that the economy, in spite of the resource-raising aim, did not become self-generating in 1971, nor has it become even now. This, like all other budgets lived on hopes and promises.

1. Ibid.
2. Budget Speech, 1960–61, para 18.

The economic conditions having a direct bearing on the budget were on the whole encouraging. Agricultural production in 1959–60 was promising despite flood and drought. Industrial output was 7.4 per cent – more than in 1958 and substantially better than in the two previous years. Money supply expanded less in 1958, but picked up in 1959. But wholesale prices rose by 4.5 per cent, and though rice and wheat prices were slightly lower than in 1958, food prices on the whole were escalating and industrial raw material prices increased sharply. Balance of payments were adverse and the gap was filled by foreign loans and credits.

In spite of the Finance Minister's stress on economies,[1] the civil expenditure in 1959–60 was up by Rs. 14 crores in the R.E. Concern was expressed over this trend and maximum economy with efficiency was insisted upon: but in 1960–61, civil spending was even in B.E. Rs. 9.8 crores more; and, as pointed out below, there has been no holding back of this increasing trend.

A modest Rs. 24 crores of additional taxation was levied and the overall deficit was Rs. 153 crores, which was left uncovered. In basing his tax policy, the Finance Minister announced two sets of considerations[2]–one relating to deficits and the other to tax changes. The long run of revenue surpluses was coming to a close, he said, and in meeting the deficits, consider: (1) the exceptional circumstances leading to the deficit, (2) the amount of additional taxation in recent years, and (3) the need for the continuous mobilization of resources financing the plan. Applying these tests, only one quarter of the deficit in 1960–61 was covered by additional taxation.

Regarding tax proposals in the overall budget, the major consideration was and should be[3]: (1) something more than the "immediate needs" because of the continuous necessity for raising additional resources; (2) broadening and adjusting the bases of taxation must be considered to facilitate expansion of yield in the future and the 1960–61 proposals had this in view and also the needs of the Third Plan; (3) Direct taxation should

1. Budget speech 1960–61, para 28.
2. Ibid, paras 52–53
3. Ibid.

be reoriented constantly and continuously so as to maximise resources; (4) The bulk of tax expansion was to be in indirect taxation. Two more aspects of this year's policy may be noted : the heavier resort to business taxes and to indirect levies. The first would hurt saving and investment and, therefore, growth, while the second would impinge on the poor and thus run counter to social justice.

Thus, in the first decade of planning, the fiscal objectives were broadly two : economic growth and raising resources to facilitate it. There were also subsidiary aims – employment, social justice, price rise control and balance of payments improvement – but these cropped up or receded according to the economic situation and the mood of the Government.

B. Third Plan and After – 1961 – 1977 :

The fiscal policy of 1961–62 was based on a very rosy interpretation of the preceding decade and the rosier hopes of the ensuing Third Plan years.[1] It was claimed that the previous ten years were a period of "striking development in almost all sectors" and that the two plans had succeeded in 'creating a new dynamism in the economy', and large investments had been made in agriculture, power, industries, and so on. Although the First Plan was a modest effort, both in scope and dimension, it was assumed to have fulfilled its aims, particularly in agriculture, satisfactorily. The Second Plan was more ambitious, aiming at large increases in investment and employment, and was conceived as a 'long–term strategy of development'. Although it was largely employment–oriented, the Plan stressed also the agricultural base. However, it may be pointed out that the later Plans bypassed the employment aspect, which in later Central budgets became a policy concern, while the 1977 Janata economic policy statement and the party's first budget have shifted the emphasis to agriculture.

Two fiscal policy features, subscribed to in the 1950–61 decade and prominent in the succeeding 17 years. are clearly noticeable in 1961–62 : [2] one, making the overall fiscal policy synonymous with tax policy, thus overlooking the non–taxation aspects, and the other, making the budget a tool for raising

1 **Ibid**, paras 2–4.

2 **Ibid**, para 8.

resourses for the Plans. Thus the 1961–62 budget stated [1] "Taxation in a developing economy plays a vital part. It is more than a budgetary device to pay for the cost of administration. It is an instrument of economic policy". It added, "It is no longer a question of trying through taxation to cover the deficit on revenue account from year to year. We have to raise resources for the Plan as a whole".

The problem of finding Plan resources was admitted to be 'difficult'.[2] At best the available resources for the public sector were Rs. 7,500 crores, but the programme projected involved an outlay of Rs. 8,000 crores. The budget announced that commitment should not be beyond our resources and that "deficit financing is strictly limited to Rs. 550 crores in five years". "The size of the Third Plan will depend upon our tax effort and our ability to mobilize savings". Inflation was raising its head and the budget aimed at keeping the pressure on prices under check by raising additional resources and mobilizing savings so as to control deficit financing.

But the actual operations in 1961–66 were different. The plan size grew from an over–all Rs. 10,400 crores to over Rs. 12,000; deficit financing (Central and State) increased to Rs. 1133 crores, additional central taxes amounted to Rs. 2071 crores (and the States added Rs. 617 crores[3]) and prices continued to rise. In the 1961–62 budget itself, the tax increases were to the extent of Rs. 61 crores, of which Rs. 58 crores were from indirect taxes.

The lame–duck budget of February 1962–63 admitted[4] the levy of substantial taxation in 1961–62 as contributing significantly to the enlargement of resources for development and for keeping inflationary pressures under check, though how the letter could happen was not clear. It also made a significant statement implying social justice, which as a fiscal objective was repeated in the later years, which never materialised. "The true measure of economic

1 **Ibid**, paras 68–69.

2 **Ibid**, para 8.

3 For the sake of brevity, see **O. P. Vaish and S. Panandikar : Direct Taxes** Tables 4 and 14 (Vikas, 1978).

4 **Budget Speech, 1962–63 (Feb.), para 5.**

progress and development is not the number of major industrial projects that are set up in the country, but the general increase in levels of consumption and production".[1]

The substantive budget of May 1962–63 restated[2] that taxation policy was no longer to have merely the revenue objective, but the wider aim of augmenting savings, promoting exports, bringing abut a better balance between the demand and supply of commodities, and social justice, all these objectives to be reconciled in terms of the immediate and long-term perspectives.

All the same, this budget imposed the additional tax burden of Rs. 72 crores, of which Rs. 47 crores was from indirect taxation, holding that indirect taxes in India are not regressive and that taxes were also to provide a sizeable surplus for the capital budget. Thus the emphasis once again was, in spite of assertions to the contrary, on resources and not on incentives to production, except through the Plan.

The additional direct and indirect taxation of Rs. 72 crores reduced the budgetary gap to Rs. 89 crores. Two tax policy statements were repeated;[3] First, "We no longer go along with our out-moded concept of taxation being limited to what is needed to cover the revenue component of the budget", i.e., in simpler words, raise resources for the Plan. The second, "The richer sections must carry an increasingly larger share of taxation and poorer sections must benefit progressively more through development. This is part of our concept of a socialist state"[4]. It will be clear later that the first part of this statement was carried through with vigour whereas the second relating to social justice was almost a dead letter.

In fact, in 1963–64, it was conceded[5] that for a number of years, the budget had been framed primarily with reference to the Plans. The need for increasing production was imperative but by far the greater part of the responsibility for the increase was admitted to lie with the private sector. The budget, however, maintained that the Chinese threat necessitated a much higher order incidence of tax burden and that the chaos of inflation arising from unbridled deficit financing, was to be avoided.

1 **Ibid**, para 10.
2 Budget Speech, 1962–63 (May), Para 26.
3 **Ibid**, para 58.
4 **Ibid**, para 53.
5 Budget Speech, 1963–64, para 1.

Under these conflicting policy aims, – a feature of fiscal policy that became more prominent later – changes in direct taxes alone added Rs. 111 crores and indirect taxes Rs. 195 crores, in all a total burden of Rs. 306 crores. The Finance Minister himself was shaken[1] at this new burden, for "its magnitude and range were much more than the sum total of proposals during the previous four budgets".

Two other features of this budget may be pointed out, as they became later normal features. The first was the growing size of deficit financing and the complacence with which it was viewed. The overall deficit was Rs. 151 crores, in spite of the additional tax effort of Rs. 306 crores, but the budget explained : "Considering everything (whatever this meant) it would not be reasonable to expect that deficit financing of this order will not have any adverse effect on the eocnomy"[2].

The second feature was the economic menace of State overdrafts – an evidence of State financial indiscipline. Although the Centre cautioned the States, this indiscipline became more marked in later years, and emphasised the fiscal need for greater co-ordination between the Centre and the States–the two taxing and spending authorities.

The next budget, i.e., of 1964–65 is very interesting partly because it shifted the policy objectives and partly because it anticipated some of the later fiscal needs, and at the same time, pointed out some policy lacunae. It re-appraised and reassessed policies and performances.[3]

The budget started with a reaffirmation of the basic social values. It conceded what is true even to–day, in spite of the warnings and recommendations of the Mathai Taxation Commission and a number of later committees. "The tax structure itself", said the Finance Minister,[4] "which has grown in a somewhat haphazard manner, needs a closer look, and in this task one has to remember that direct taxes provide the means through fisc for change in the nature and direction of society through the

1 **Ibid,** para 69.
2 **Ibid** para 63 .
3 Budget Speech, 1964–65, paras 37 and 75.
4 **Ibid,** para 49.

goal of removing inequalities in income distribution". Here, two important points were made. One, the tax structure, even 10 years after the Mathai Report, was haphazard and required a fresh look at it; second, it reiterated openly the objective of income redistribution and its instrument, viz., direct taxation. That is, social justice through taxation was openly accepted.

The budget next announced a new investment policy via the budget : "As important to make the most efficient use of the investments already completed as it is, is to step up further the tempo of investment. Often in the race for making the new start, sufficient attention is not given to the fullest exploitation of the facilities already created"[1].

This is a standing weakness even to-day, and, as I shall plead later, one of the fundamental fiscal and economic objectives should be consolidation before further expansion.

The budget also pointed out a major drawback – still continuing – of the public sector in India.[2] "The public sector should expand without adding unduly to tax burden. No profits are all right in the schools and hospitals but not in steel, fertilisers, machine-tool plants..... To the future growth of the public sector in India, a major contribution has to be made by the return on investments already made in the public sector". In other words, while economic growth has to go on and resources have to be raised through taxation, the latter should not be done to sustain inefficient projects.

But, almost until recently, the public sector behaved like a spoilt child, both in its efficiency and in its dependence on public revenues.

The budget also made another important point and, this, in relation to the private sector. This sector must have the resources to expand[3]. "One of the prime objectives of our economic and fiscal policy, therefore, must be to generate savings both in the hands of individuals and in the hands of corporate bodies." While concentration of economic power has to be countered and profiteering curbed through fiscal devices, private savings and invest-

1 **Ibid,** para 12.
2 **Ibid,** para 14.
3 **Ibid,** para 15.

ment must be encouraged and fiscal policy adapted to it. "In the society which we hope to establish on an enduring basis the private sector, in the sphere assigned to it, will and should have the opportunity to grow (and) to attract individual savings... subject to the overall discipline of the State"[1].

Attention was also drawn to a fact which is rarely acknowledged by the politician in power. The growth of the economy had not been commensurate with expectations[2]. "The existing taxation policy, good as far as it goes in the direction of producing revenue, has also to be geared to the permanent task of promoting growth... Fiscal measures have a major role to play in the process of economic development, care has also to be taken to ensure that we do not, at the same time, add to the forces of inflation which are always around the corner..."

The budget also warned : "It is also necessary that the tax structure should not merely be attuned to the needs of growth and to the revival of the capital market, but it should also provide sufficient cushion for both corporate and individual savings..... Taxation has, therefore, to be used as a sensitive and multi-purpose tool to encourage production, to keep a measure of restraint on rising levels of consumption, to ensure that people get the fruits of their labour, to induce savings and to prevent profiteering so that the inherent ills of a scarcity economy such as ours are not multiplied...These very desirable goals cover a whole horizon and it is not possible at one stroke to serve all the purposes in a single year's budget proposals."[3] These words are one of the most complete statements on India's tax policy as it is and as it should be–resources, plan financing, approach to the public and private sectors, limitations of a budget, etc.

The 1964–65 budget also referred to another important feature characterising the whole period since Independence–the ever expanding budgetary deficits. The overall deficit in 1964–65 was Rs. 176 crores[4] and this had to be "tempered, if not altogether avoided, particularly as it would come on top of successive doses of deficit financing and when prices are spiralling". The price

1 **Ibid,** para 21.
2 **Ibid,** para 36.
3 **Ibid,** para 37.
4 **Ibid.**

situation had to be stabilised, and so, a reduction in the gap was essential. Price rise was also sustained by continuous monetary expansion, which 'needs careful watching' "to ensure that credit creation is kept within reasonable limits and does not encourage speculation of hoarding". Through new taxes and other devices, the deficit was reduced to Rs. 86 crores – one of the lowest in recent years – but, even the cautious Finance Minister repeated the earlier as well as later formula. "Given the present economic situation...this order of deficit, I think, should serve best the requirements of growth as well as reasonable stability in prices"[1].

More will be said later to point out how the warning about both deficit financing and monetary expansion was unheeded and why. It is enough to stress here that there was at best, only a loose co-ordination between monetary, fiscal and planning policies, leading, among other consequences, to growing inflationary pressures. Said the Finance Minister in February 1964, "There are, I think, a few lessons which have emerged from our experience in the recent past, which deserve to be borne in mind in framing budgetary policy and other policies for the period ahead"[2]. Strangely these words and lessons had no impact.

One of the ablest and radical of the Finance Ministers claimed that the 1965–66 budget – which became his last one – was to be treated "as an earnest of our desire to put the tax structure in this country on an enduring and rational basis". It was carrying forward "the legacy of Jawaharlal Nehru according to our lights"[3]. It was also claimed to have 'a unique significance' – as the last budget of the Third Plan period – marking the 'climax of our efforts for the fulfilment of the Third Plan', and as "setting the stage for the more complex, sophisticated and difficult tasks of the Fourth Plan".

The budget's long run and main objective was to find funds for the Plan:" Budgetary policy has to serve the ends of our Plans for development and also to make an impact on the immediate (short-term) problems year to year"[4]. Rising prices, shortage of foreign exchange and, according to the Finance

1 **Ibid,** para 82.
2 **Ibid,** para 4.
3 Budget Speech, 1965–66, paras 1–2
4 **Ibid,** para 2.

Minister, even resources for investment came under the category of urgent problems. The aim was to reconcile rapid economic growth with financial stability, both internal and external. Already explanation was offered for increased expenditure and for the resultant additional taxation. "In a growing economy, progressive increases in outlay and the balancing of the capital budget cannot be done entirely by mobilization of voluntary savings and external assistance. They have to be supplemented by public savings realised through a revenue surplus. The achievement of a sizeable revenue surplus this year is, therefore, a step in the right direction".[1]

Although the budgetary deficit was moderate, the claim that public savings were to be used as capital outlay was nothing special as the earlier years too managed to do the same. Stability was one of the fiscal objectives in 1965–66, but prices rose beyond expectation. "The prevalence of inflationary pressures at different levels in the economy and speculative withholding of supplies have, however, (in spite of agricultural recovery) prevented prices from falling"[2]. Fiscal and monetary measures were claimed to have been adopted and would be continued to bring about a fall in the prices.

But the result was different, indicating at least two things : first, the measures were inadequate, and second, the two types of measures were not adequately co-ordinated – a feature characteristic of Indian fiscal policy before and after 1965–66. Thus, to quote the budget : 'Monetary expansion in the Third Plan period has so far kept ahead of the growth in real production'[3]. This situation, it was asserted, could not be allowed to continue.

This budget took kindly to the private sector in order to help it save and invest. "The primary objective must be to raise the capacity for individual savings and to improve the performance of industry so that it is able to earn and offer an attractive return on the capital invested"[4]. This shift led to tax reliefs to some extent and was an important step, but only a step, in evolving a long-term fiscal plan, for overall tax stability. The role of private savings was thus recognised as desirable. More of this later.

1 **Ibid,** para 7.
2 **Ibid,** para 8.
3 **Ibid,** para 14.
4 **Ibid,** para 10.

The budget referred to the important role State governments have in strengthening fiscal and monetary discipline. The epidemic of large State deficits and of overdrafts continued, and the Finance Minister was "to make sure that their operations are generally in line with our policy of curbing inflationary pressures"[1]. In other words, although they formed parts of one whole, fiscal co-operation between the Centre and the States left much to be desired.

Yet another important facet of the 1965–66 budget related to foreign investment. It was admitted that adequate foreign exchange funds had always been a problem and political prejudice had antagonised foreign investors. It was now openly recognised that foreign private investment had a role to play not only as an essential supplement to foreign aid, but "as a catalyst for the development of technical skills and enterprise"[2]. Facilities for investment and repatriation were offered : "This policy of hospitable and fair treatment will be continued in the future".

Let us look at the taxation side of this important policy-forming budget. Accepting that the Fourth Plan (1966–1971) required large investments and, therefore, "the first and foremost pre-condition for mobilization of resources"[3] is (i) the maintenance of financial and monetary stability and (ii) equally important was a degree of stability in our taxation policies. The Minister stated : "It may be necessary to adjust the rates of indirect taxation from year to year in keeping with supply and demand conditions. But a greater degree of stability in regard to the structure of direct taxation is of vital importance as it has a bearing on long-term decisions in regard to saving and investment. My budget proposals this year have been designed to serve this end at least in part"[4].

The budget of 1966–67 was perhaps one of the best and frankest, though the usual claims and intentions were there. "We are ... determined" stated the Finance Minister, "to change our fiscal climate for the better",[5] implying that all was not

1 **Ibid,** para 14.
2 **Ibid,** para 21.
3 **Ibid**. para 22.
4 **Ibid** para 22.
5 Budget Speech, 1966–67 as in **Economic Times,** March, 1966. So the paragraphs for this budget could not be cited.

well so far. This feeling resulted partly from a different minister succeeding the more radical one and partly from a desire to stop the prevailing confusion. This change in the ministry is one of the reasons for the confusion and instability of India's fiscal policy because though the same party remained in power for three decades, the frequency of change in the finance portfolio led to the absence of any considered long-term policy and measures.

As usual, it was proclaimed that "the budget ... is a major instrument for implementing our plans and policies. It has been framed therefore, in response to current economic trends as well as the long-term requirements of the economy".

What was the economy like vis-a-vis the budget ? To cite ftom the budget itself : "The year 1965-66 has been a very difficult year".[1] The overall economic performance was poor; the capital market sluggish, the balance of payments under pressure; prices of essential commodities continued to rise, and these features "have been with us", admitted the Minister,[2] for a number of years. Hopes of improved agricultural production and higher national income were not realised. In spite of a supplementary budget in August 1965 adding Rs. 100 crores more to the tax burden, the budgetary outlook deteriorated and the deficit in the revised estimates was Rs. 165 crores.

So, "budgetary and, indeed all economic, policies are framed with a view to reversing these adverse trends."[3] In addition to meeting the unfavourable position, the policy of 1966-67 intended to give the Fourth Plan as good a start as possible consistent with the immediate need to restore a greater measure of monetary and price stability. The budget recognised the failure of the earlier policy to control the inflationary trend. While resources for the Fourth Plan was an important objective, 'the Plan itself and our policies in support of the Plan', stated the Minister,[4] "have to be consistent not only with reasonable developmental goals but also with a greater determination on our part to rely increasingly on our strength and resources". It was recognised as essential to restrict the expansionary impact of government ex-

1 Budget Speech, 1966-67, para 3.
2 **Ibid.**
3 **Ibid.**
4 Budget Speech 1966-67 in **Eastern Economist**, 11 March 1966, P.449, Col. 1.

penditure in general.[1] The developments during the current year are a matter of concern and call for a greater degree of realism in budget making as well greater sense of determination in restraining expenditure, whether revenue or capital whether by the Centre or the States".[2]

Perhaps for the first time economy in capital expenditure was stressed and this should be, as suggested by me below, an important facet in the process of reorientation. Thus far, six policy issues have been clear – to sustain the Fourth Plan, to contain inflation, to meet current economic adversity, to strive for self–reliance, to restrict public expenditure and to restore a favourable balance of payments, Of these, the first two related to long–term objectives and the rest were of relatively short–term character. The absence of any special stress on the social justice objective, repeated annually in later years, is worth noting.

Let us have a closer look at these objectives. Self-reliance was almost a new policy aim; and it was due partly to the limited inflow of aid and partly to the psychological reason associated with a proud begger. Thus the budget said, "We still cannot dispense with foreign aid in the near future.....No self–respecting nation can ever look upon external assistance as a substitute for reasonable effort on its own part or as a continuing feature of its economy. The willingness of friends to help will depend on the confidence that we are able to inspire in our ability to grapple with our problems and to put such aid as we get to the best possible use"[3].

The Finance Minister thus summarised the guiding policy:[4] "Main considerations which have guided me in framing the next year's budget: First and foremost, the budget has to be production-oriented creating a better psychological climate for a greater regard to savings and efficiency all–round. Secondly, while investments in progress have to be completed (obviously referring to the Fourth Plan outlay), every effort has to be made to restrain governments expenditure, particularly on general administration and on new schemes of development with a long gestation period. Thirdly,

1 **Ibid,** para 8.
2 **Ibid.**
3 **Ibid,** para 17.
4 **Ibid.**

the Government was to press with such enterprises in the public sector as are beneficient to the country", such as Bokharo. The crusade against expanding expenditure was such that for the first year since 1951, the Plan outlay for 1966–67 was cut. In 1965–65, the total Plan expenditure was Rs. 2,225 crores, but in 1966–67, it was Rs. 2,081 crores, for, it was necessary "to exercise the utmost caution in regard to both Plan and non-plan expenditure"[1].

Another important shift in policy related to the private sector. Holding that raising resources depends on the growth and dynamism of the economy, the Minister observed: "From this point of view, I attach great importance to strengthening and maintaining the confidence of the private sector as also the efficient working and management of public enterprises"[2]. "The malaise of the capital market has contiuned now for more than three years...The revival of the capital market and a greater flow of private savings to industry in the form of equity investment are desirable in the larger social interest"[3]. The Minister pleaded: "Make investments in the private sector as wide as possible. Growth of private industry depends on equity participation from different strate of society".

These statements, whatever the degree of their adoption in the actual tax proposals, were patently different from the policy of earlier years and also from that of the 'Garibi Hatao' period later.

A grave evil in the body politic referred to earlier related to the lack of co-ordination in the budgetary policies of the Centre and the States. To quote the Minister: "I cannot emphasise too strongly that the weakness of the financial position of the States and the tendency on the part of some of them to resort to unauthorised overdrafts from the Reserve Bank are matters which have to be remedied"[4]. The clearing of these overdrafts strained the Centre's budgetary position "Unauthorised overdrafts and deficit budgeting by some States inevitably have repercussions on other States which are better able or more willing to manage their affairs on a more realistic basis. Both the

1 **Ibid,** para 11.
2 **Ibid.**
3 **Ibid.**
4 **Ibid,** para 11.

Centre and the State governments taken as a whole, therefore, have to share the responsibility for ensuring that unsatisfactory budget practices...are avoided in future by adopting common standards of discipline"[1].

These words, indeed, grave as they are, point to the lack of control and co-ordination in the fiscal policies of the Union and the State governments. Since both draw resources from the same national pool and spend so as to affect the same national economy, a major policy facet must be considered as missing in the Centre's fiscal policy set-up over all these years.

Another facet of loose co-ordination in policies related to the Central fiscal policy and the banking community's monetary policy. "Money supply has increased at a rate faster than envisaged", lamented the custodian.[2] However, "The Reserve Bank will continue to deploy the instruments of monetary policy in keeping with the genuine requirements of credit ... We shall have to make sure that the expansion of credit for legitimate purposes takes place on the basis of the growth of deposits and at the expense of credit expansion for less desirable social purposes ... It is essential to ensure that lending by the banking system is directed towards socially desirable objects such as greater economic opportunity to a wider spectrum of producers ..."[3]. The combination of monetary stringency with a rapid increase in money supply was an indication that genuine savings have not increased adequately and that part of the savings has been diverted to other forms of investment. We cannot relieve monetary stringency by continuing to increase money supply at the same rapid rate. This had aggravated inflation and prices rose in 1966 significantly by 7.6 per cent. Although this rise was little compared to experience in later years, it indicated the persistence of the lack of co-operation between the fiscal and monetary policies.

Despite the sound fiscal principles and strict application of cuts, there was a budgetary gap, and to bridge the gap, a large number of tax changes, all round were made—reliefs in direct taxation, abolition of the expenditure tax and changes in personal and corporate taxation as well as additional levies to raise res-

1 **Ibid.**
2 **Ibid,** para 20.
3 **Ibid.**

ources "on a considerable scale".[1] Still, the gap could not be plugged completely and, the budget conceded that 'the underlying budgetary position ... is itself not very unsatisfactory." Almost apologetically the Minister said : "(It is) imperative ..... to cover the deficit. This, I have sought to do by methods which cause minimum disturbance and hardship and ensure maximum simplicity"[2]. He continued : "The last budget (i.e., 1965–66) emphasised the importance of stability and simplicity in the tax structure in the interests of providing a proper climate of expectations for orderly growth."

The Supplementary Budget of August 1965 took a further step and rationalised import duties. "I have kept these basic objectives clearly in view in proposing measures for raising additional resources. Even in doing so, I have sought to carry the process of simplification a step further by proposing a number of changes and reliefs".[3]

There appears to have been no end to the attempts at simplification and rationalisation. A number of Committees before and after 1966 have recommended measures, but still in 1978, the attempt is on.[4] A clear distinction between two facets of simplification and rationalisation should be made but was not kept in view – one, relating rationalising fiscal policy and tax structure, and the other to the legal and administrative aspects, i.e. the kind of attempt the committees have made.

The Interim Budget of February 1967–68 referred to a number of difficult and conflicting considerations. By May, a full picture of the economic trend was available.[5] The substantive budget found the situation more disconcerting. A serious drought had increased food shortage by 17 per cent. Prices were steadily rising in the last three years and were 46 per cent up, and had to be controlled. Industrial activity, particularly in capital goods industries, was low and had to be propped up. Each of these and others had their ramifications such as depressing savings and diverting investments.

1 **Ibid,** para 33.
2 Budget Speech, 1966–67, para 33.
3 **Ibid.**
4 **e. g. Chowksi Committee Report, 1978.**
5 Budget Speech (May), 1967–68, para 1.

The over–all fiscal objective in 1967–68[1] was to generate "a long period of satisfactory growth with reasonable price stability and increasing self–reliance". The primary concern was two–fold– to evolve a new agricultural strategy – how much this anticipated the 1977 Janata policy – and to end the psychology of inflation, i.e., the Plan production and stabilisation aspects of policy. The psychology was traced, among others, to continued large budgetary deficits during the preceding years, to the inability to limit outlays to the resources and to the large State overdrafts. It was admitted that deficit financing was not a sufficient condition for price stability. While some monetary expansion was needed for growth, in the prevailing circumstances the government was expected to avoid expansion even within the permissible limit. The best way to meet the situation was accepted as (1) economising on Government expenditure, and "a thorough examination of the avenues to do it", (2) more efficient collection of existing taxes by improving tax administration and tax laws; and (3) maximum utilisation of private savings by "granting fiscal concessions ... designed ... for long–term effects".[2]

These, in fact, were repetitions of the 1966–67 approach, but what really happened was startling. Revenue increased by Rs. 100 crores but expenditure by Rs. 143 crores, and the Centre's deficit by Rs. 68 crores. Rationalisation of tax administration and laws had been taken up even earlier than 1966 but a lot more remained to be done. Reliefs had been given to private investors and yet more had to be done. In 1966–67, the Finance Minister was allergic to foreign aid and pleaded for 'self–reliance', but actually, foreign aid of Rs. 900 crores was in the flow.[3]

So the Finance Minister took steps to meet the situation. The initial deficit was covered by additional indirect taxation. The direct tax burden was not increased and the changes related largely to selective and minor concessions in both the personal and Corporation tax fields, and in rationalising and simplifying tax laws as suggested in the Bhoothalingam Report.[4] Excise

1 **Ibid**, paras 86–88.
2 **Ibid**, paras 52 & ff.
3 **Ibid**, para 14.
4 Budget Speech, 1967–68, Paras 59 & ff.

duties, the milch cow of all Indian finance chiefs, were increased so as to yield Rs. 115.5 crores, which along with countervailing import duties imposed an additional burden of Rs. 123 crores.

Thus was achieved 'a balanced budget', so dear to the then Finance Minister. It was stressed that this was done also by keeping the Plan outlays in check, for "a larger outlay would hinder restoration of price stability".[1] The other facets of the 1967–68 budget were to help "the poor and the downtrodden" by raising larger resources year after year, to put 'our tax structure on a sound, stable and progressive basis' through "selective but sizable increases in excise duties...in the interests of exports and for avoiding deep cuts in plan outlays"[2], to stimulate productive activity and savings, offer more tax concessions, and 'to pursue a more positive policy of public and private investment activity'.

In other words, economies even in Plan expenditure, encouragement to private initiative and savings and restoring a climate of price stability were stressed. Except the last which was on the agenda in previous budgets, the other two were departures in policy.

The 1968–69 policy conceded[3] that in the previous year the country was in "one of the most difficult periods," marked by droughts, food shortage, rising prices, subdued demand, inadequate exports, insufficient savings, a sluggish capital market, etc., but it was claimed that a major disaster had been avoided. So 1968–69 was to be a year of revival with a degree of optimism, if "given the right policies".

The Finance Minister proclaimed[4] : "The objective of policy in the coming year must be to consolidate the gains so that a major developmental programme can be undertaken in the Fourth Five Year Plan". A new agricultural strategy, a (fond) hope of price stabilisation, steps to stimulate industrial production, a determination to have "significant increase in planned outlays" and, therefore, the need for a major operation for mobilisation of additional resources mark the continued emphasis on resources and more resources.

1 **Ibid**, para 87
2 **Ibid**, para 88
3 Budget Speech, 1968–69, para 1.
4 **Ibid**, para 2.

The most 'anxious tax problem' was the oft-repeated step, the revision and simplification of the tax structure, which was promised to be taken up in the next budget. The main objective of indirect tax changes was to 'maintain price stability for items of essential consumption". Although the overall deficit was large it was stated that –"we cannot afford to indulge in large budgetary deficits year after year".[1] The budget reconciled itself to the present one so as 'to assist the revival of the economy at large', and also because Plan outlays cannot be cut further, while 'it would be shortsighted to retard the process of recovery by putting an undue curb on government spending'. The alternative to the deficit was 'massive mobilization of resources', i. e., taxation, which would hurt the economy and retard the process of recovery by putting an undue curb on government spending. The alternative to the deficit was 'massive mobilization of resources', i. e., taxation, which would hurt the economy and retard the process of growth. And the budget peroration was : "Turn the present challenge into hope and opportunity for the future", and "the budget...reconciles as best as possible a variety of concerns".[2]

Thus all the conflicting objectives–the primary of finding resources for the Plan, the clinging to hopes inspite of discouraging conditions, and the unwillingness to cut expenditure – were apparent in the 1968-69 policy.

The next budget was the first Fourth Plan one. Economic conditions appeared encouraging – a good enough harvest, signs of revival of trade and industrial production, an apparent lowering of the general price level, and increase in exports. It was assumed[3] that "a new dynamism in agriculture and industry was ushered in, prices had stabilised, and there was such progress towards self-reliance" that the Fourth Plan period could be faced with confidence. Here was introduced a new fiscal objective – self-reliance. But there was a fear that the country was still a long way to 'satisfactory levels of consumption', i. e., in the direction of effecting social justice or reducing the poverty level.

Two questionable tendencies more or less common in the budgets in the 30 years are (1) inability to assess the real

1 **Ibid,** para 72.

2 **Ibid,** para 73.

3 Budget Speech, 1969–70, para 1.

economic situation, and (2) the hope that in the next year all would be well. Whether the former was due to the reluctance to face up to facts and the latter to the political needs for a carrot is difficult to say.

Development, the main theme in the budget[1] was to serve certain larger social values – basic human needs and a growing measure of equality. This socio–economic objective was implicit for decades but it was now openly reiterated as the growth and fiscal policy aims.

The emphasis in the Fourth Plan and so in the 1970–71 budget, was on agriculture and capital goods, on stimulating the mobilisation of higher productivity and, therefore, on more revenues. "Despite substantial efforts to mobilize resources and considerable restraint on expenditure, the financial position...has weakened over the past five years".[2] And yet, the budget assumed that conditions were propitious for progress over a wide front during the next Plan period. What was needed, the policy stated,[3] was "balance between consumption and investment, resources and outlays, economic growth on the one hand and external viability on the other, and, indeed, between larger social values and purely economic considerations" – the usual vague generalisation.

The policy perorarion continued in 1969–70[4] : Tax changes had to consider, "not only the needs of the year, but the requirements of long–term economic growth as well" – i.e., this was a warning that these changes for greater revenue were almost permanent –, and the changes for greater revenue were almost permanent –, and the changes were to be such as were 'feasible' and adequate "to sustain progressively longer developmental outlays". The struggle against mass poverty was to continue but "the all–pervasive objective of growth with social and political stability (i.e., unemployment) and increasing self–reliance cannot be achieved by budgetary policy only".

1 **Ibid**, para 5.
2 **Ibid.**
3 **Ibid.**
4 **Ibid**, para 23.

In 1970–71, the Prime Minister herself took over temporarily the finance portfolio and clarified the main ingredients of Government's approach.[1] **First**, social, economic and political stability; **second**, reconciling 'the imperatives of growth with the well–being of the needy and the poor'; emphasising employment and agricultural production, immediately productive and long run growth; **third**, a positive approach to growth with stability and social justice; **fourth**, reducing concentration of economic power, and finally industrial development in selected backward areas to attain regional balance. She also announced that the budget framework was to be "consistent with the political, economic and social realities of the country – (whatever these were) and finally 'no effort was to be spared in **raising resources'**. This policy statement, coming from the horse's mouth, brought together all the major objectives which underlay the policy for nearly two decades but had not been pin–pointed.

In 1971–72 the Government, with a fresh mandate, was the same but the Finance Minister was a new broom. He announced[2] in the new Parliament a 'reoriented' fiscal policy because of the people's mandate for socialism, economic growth and social justice. Perhaps because the Third Plan – twice the size of the Second – had achieved relatively less than the earlier two, 'a fresh appraisal of the Plan as a whole' and a reassessment of Plan priorities and objectives were to be made. Parenthetically, the reappraised Fourth Plan was really still–born and became Annual Plans. However, the policy statement was optimistic and said that the need was to further our objective of a truly socialist society. A new social and economic order cannot be achieved 'merely through budgetary policy alone' nor in a single budget.

This budget's fiscal objectives were not merely to raise resources but also other 'larger objectives'[3] – to reduce inequalities through direct measures, and to reduce balance of payments difficulties, through indirect taxation. Measures contemplated were also to 'speed up implementation of projects, foster employment opportunities and reduce disparities'. Social justice was to assure a job for everyone, "at least one person in each family".

1 Budget Speech, 1970–71, para 2.

2 Budget Speech, 1971–72, paras 5, 92 and 93.

3 **Ibid.**

As 'unabated price rise affects growth and income distribution' – and prices were actually rising in spite of foodgrains output expanding "at a most satisfactory rate", efficiency of production had to increase and a faster rate of growth was to be blended with price stability.

This was the reiteration of the old policy objective–resources, growth, stability, employment and social justice, – combined with new assurances of the effectiveness of new measures such as take–over of general insurance, 'an annual credit plan, increases in developmental and social welfare outlays, etc. The amazing features of the 1971–72 policy were **firstly**, reiterating the policy but at the same time bypassing the economic difficulties; e.g., industrial sector was slowing down; overall budget deficit was increasing; price level was disquieting; balance of payments was unsatisfactory and so on; **second**, counting on the brighter aspects and hoping for good times, e.g., 'economy shows a promising feature', 'agricultural progress maintained', 'anticipated growth for 1970–71 realised', etc.

The steps taken were to raise the indirect tax burden by Rs. 177 crores and direct taxes by Rs. 57 crores and at the same time to increases Plan outlay. The underlying philosophy of the former step was to raise resources, to distribute the overall burden among all sections and to see that the fresh burdens did not disturb the general price level, to make an effective dent in income inequalities, and bring about 'a significant change in income and wealth distribution', by deploying direct taxation, and to raise needed resources by resorting to indirect taxation.

The hopes of the 1971–72 budget were belied by socioeconomic conditions in the post budget months. The year was[1] one of 'extraordinary stresses and strains' such as natural calamities, influx of Bangla refugees, the Indo–Pakistan war, etc. The price level was 'reasonably stable', the central deficit lower than anticipated (naturally because of two supplementary tax burdens in the year) savings and investment inadequate, and the rate of growth slowing down. Still, the policy makers held up such hopes[2] as "Resilience and strength displayed by the economy gives confidence", "foreign reserves intact", and so on. But, two supplementary tax increases were made in 1971–72.

1 Budget Speech, 1972–73, paras 3 & ff.

2 **Ibid**, para 4

The budget policy of 1972–73 was interesting. The new elections which gave the Congress party a thumping majority, was claimed[1] to give 'a clear expression ... in favour of a bold and radical programme to promote growth and social justice'. The budget was 'an instrument for furthering our social and economic objectives'. 'The mandate for creating a socialist society is (to be) carried out with speed and vigour''. The interdependence of the objectives clearly recognised. **Growth, social justice, self-reliance,** investment and mobilisation of **resources** were all mutually reinforcing processes and appropriate changes in budgetary and other policies and a co-ordinated and concerted approach to our economic problems were required. Fiscal policy was to serve the larger objectives of self-reliance and equity. Two other objectives were implied and not stressed – **employment and price stability.**

Accordingly, policy measures taken included[2] a larger Plan outlay, an increase by 23 per cent in 1972–73, the increase being particularly in the public sector, considered to be 'a prerequisite of industrial production,' and more on 'social justice'. Further doses of indirect taxation of Rs. 183 crores and direct taxation of Rs. 24 crores were administered. This was in addition to the substantial measures for additional resources mobilization of Rs. 500 crores in three budgets in 1971–72. With all this added burden, the overall central deficit in 1972–73 was around Rs. 375 crores on revenue account only.

1973–74 marked the third budget of Y. B. Chavan, and there were the usual fireworks. This budget was to be[3] "another major effort ... towards the goal of an expanding self-reliant economy based on social justice ... Our firm commitment to socialism, rapid economic growth and a self-reliant economy requires 'a multi dimensional effort' and not any luxury in maintaining the **status quo**''.

So, the Central budget was to be[4] the major instrument for realising our basic social and economic objectives', i.e. accelerated economic growth, greater social justice and self-reliance.

1 **Ibid,** paras 2, 32.
2 **Ibid,** para 29.
3 **Ibid,** para 101.
4 Budget Speech, 1973–74, para 11.

Reducing disparities in income and consumption, securing greater social justice and providing minimum basic amenities were the principal tasks in framing the budget proposals for 1973–74. There were also[1] three 'immediate tasks' – containing inflation, increasing the rate of savings and investment and greater viability on the external front – larger exports and restrained imports. Thus, ths long-term policy objectives were growth, social justice and self-reliance – vague but relatively new – while the short-term ones were stabilisation, capital formation and balance of payments. Although compared to growth and social justice, the latter were of shorter term, their persistence, particularly of price instability over two decades, made a solution in the short-term doubtful.

Let us look at the events in 1972–73 on which these policy decisions were based. The previous year as not easy: monsoons had failed, scarcity was on; refugee relief was increasing; prices were going up, e.g., in 1971–72 by 3.7 per cent and in 1972–73 by 9.1 per cent over the preceding years. The growth in national income was small; State overdrafts had increased; the Central budgetary deficit had grown.

Yet, the 1973–74 policy was[2] out "to fulfil the commitments of the Fourth Plan and to provide a firm base for the Fifth"; and an important — perhaps politically easy — step was to increase the outlay for 1973–74 to Rs.4,554 crores. It was justified on the ground that with the current strong inflationary pressure, it was difficult to reconcile growth with stability. Therefore, "My general approach", observed the Finance Minister[3] (is) that the stability to be aimed at must be the stability of a growing economy – whatever the latter may mean. Thus, growth was met by more outlay, inflationary pressure by the larger concept of stability, and resource needs by more taxation, while welfare measures were identified with looking after unemployment because[4] "provision of unemployment in the plan was not commensurate with the magnitude of the problem".

1 **Ibid**, para 2.
2 **Ibid**, para 23.
3 **Ibid**, para 24.
4 **Ibid**, para 30.

In the next year, 1974–75, the Finance Minister referred[1] to his talks in the previous year as "control of inflation, promotion of higher levels of savings and investment, greater viability of external payments and generation of new employment opportunities as the most pressing immediate tasks". The main problem, according to him, was resources and that meant new burdens. Two underlying considerations were stated: (1) not to have a large deficit and (2) raising resources for the Fifth Plan : and the instruments to be adopted were increases in both direct and indirect taxes. There was "no alternative to increase the latter", but mass consumed goods were left untouched. Direct tax changes adopted, to some extent, the Wanchoo and Raj proposals. The resulting additional burden from indirect taxes alone was Rs. 238 crores, the total tax burden rising by Rs. 253 crores. The budgetary gap was reduced by this step to Rs. 85 crores.

In 1974–75, the "principal concern", proclaimed the budget,[2] "was to strike a proper balance between the requirement of accelerated growth, stability, greatet social justice and self-reliance." The objectives were admitted to be conflicting, making reconciliation not easy, but the hope was that they were self-reinforcing in the long run. It was recognised that economic conditions in 1971–74 were not normal and even challenging, and because of 'national and international factors beyond control', progress in achieving the objective has fallen short of expectations.

This had upset budget calculations. Thus, terms of trade were adverse, inflationary pressures acute, upsurge in industrial production was not sustained, the growth rate in the Fourth Plan much lower than targeted. The most pressing and immediate objectives of 1973–74 had failed. Even the modest deficit of Rs. 87 crores foreseen in that year and regarded as innocuous bloated into one of Rs. 650 crores,[3] because of pay increases, shortfall in agricultural production, extensive relief operations, increased assistance to the States, food subsidies and shortfall in receipts in spite of efforts to tax new resources and of cuts in expenditure.

1 Budget Speech 1974–75, **The Eastern Economist**, March 1974, page 440.

2 **Ibid**, page 439.

3 **Ibid**, page 440.

Yet, the fiscal objectives and ambitions remained unchanged. No doubt, the two budget criteria were minimising deficit financing with its impact on price rise, and keeping production moving; but the Plan was made all important. 'Monetary and fiscal policies were to be directed twoards Plan objectives'[1] and the instrument of performance budgeting was introduced hoping it would be an effective instrument to measure the efficiency of allocation of resources and the returns therefrom. Consolation was sought in the dictum that "problems (of which they were plenty in 1971–74) can be solved in the long run in the framework of a rapidly expanding economy with socialist objectives";[2] and the 1974–75 budget was "one more step in that direction". Once again it is evident that pious hopes and tall claims were made, and the actual situation in the economy and the limitations of the policy and its tools were overlooked.

The policy in 1975–76 – the first of a new Finance Minister – was full of promises, philosophy and hopes, but was, in essence a reiteration of what his predecessors had said and hoped for but not realised.

The economic situation was admitted to be difficult.[3] Inflation was virulent and persistent with its impact on real incomes and the flow of investible resoutces. The capital market was depressed. Cost had steeply escalated. The 1974–75 budgeted deficit of Rs. 126 crores had blown up in spite of a remarkable buoyancy of revenue, e.g. Rs. 364 crores in customs duties and Rs. 90 crores in income and corporation taxes. The 1971 agricultural sluggishness continued. But, the consolation was held out that a run away inflationary situation had been combated through curtailing non-development expenditure, reducing money supply, etc.

The only solution to the problems was said to be a rapidly growing economy and additions to productive capacity. "My major concern is to stimulate production by stepping up the pace of investment".[4] The significant feature of this budget, claimed the Finance Minster in 1975–76,[5] was "a clear-cut identification of these twin priorities–food and energy–the basic investment strategy of the Draft Fifth Plan".

1 **Ibid,** page 152.
2 **Ibid.**
3 Budget Speech 1975–76, para 1. 2
4 **Ibid,** para 3.3
5 Ibid, para 2.10

As important as the rate of increase were the human geographical aspects of production and proper distribution, i.e., the individual and regional poverty aspects of social justice. To quote the budget speech:[1] "The problem of production, of diffusion of income and employment, of reduction of inequalities and of ensuring maximum consumption standards for all have to be looked at in its entirety",[2] as the previous ones had done in their own ways, the importance and interrelatedness of the problem were viewed in their long and short-term aspects, Thus, the budget was "an important tool for reaching our socio-economic goals". The long-term goals were security, development, growth with social justice and delivering the masses from grinding poverty, while the short-term ones, i.e., of immediate concern, were checking inflation, stimulating the economy, promoting domestic savings and increasing investments is the public and private sectors.

Apart from measures to carry out the short-term aims, the objectives of 'sustaining the tempo of development' demanded more outlay. Hence, the total Plan size for 1975-76 was fixed at Rs. 5,960 crores, i. e., a 23 per cent increase over the previous year's allotment. This would result in a budgetary gap of Rs. 464 crores and, therefore, was introduced 'a package of measures', to yield an additional Rs. 239 crores, a series of direct and indirect tax changes. The residual gap of Rs. 225 crores was to remain as "it is not likely lo accentuate inflationary pressures".[3]

It is unbelievable that in spite of the rising prices and the patent effect of budgetary gaps, the budget should increase the outlay, overlook the gap and claim that the deficit was innocuous.

Next was the last budget of the old regime. The 1976-77 budget assumed[4] that the economic performance of 1975-76 was 'a source of satisfaction'-an all round improvement in production, a decline in the price level, a successful struggle against inflation and acceleration in the rate of economic growth, plus the hope that in real terms national income would increase by 5.5 per cent. All this was traced to the New Economic Policy of July 1975 (i.e., 20 points programme), enforcement of economic discipline, incentives to agriculture, input in power, etc.

1 **Ibid**, para 2,12
2 **Ibid**, para 1.5 & ff.
3 **Ibid**, para 3.2
4 **Ibid**, paras 1.5 and 3.2
5 **Ibid**, para 1.4

Therefore, the budget claimed that the time was ripe for "further measures to accelerate development'. The 1976–77 policy's "main thrust (was) towards accelerated growth".[1] The 1975–76 policy emphasis was on 'stabilisation and growth' and the 1976–77 was on greater growth although stability was still important in a world with price inflation in some areas and recession in others. But India was poised for "a major advance" and this was to be a "step-by-step advance adding dynamism to the economy".[2]

While 1975–76 stepped up the Plan outlay by 25 per cent, a further increase was made in 1976–77 so that the total outlay was to be Rs. 7, 852 crores, i;e., 31.6 per cent more than in the previous year; and much of this was to be in 'key sectors to sustain growth'. Investment was to be through savings: "Our economic policies should promote the growth of savings and investment and so the tax system is being adapted to facilitate this". [3]

Continued stability of prices was to be through economic discipline. Non-development expenditure was to be curbed and a 'rational system of credit use' introduced. The 1975–76 priorities in investment and development were to continue, i.e., agricultural and power development, with a maximum utilisation of local resources. 'The overall aim of our approach (is) the twin objectives of productive employment of available work force and utilisation of our natural resources".[4]

A 'national investment strategy' was claimed[5] to have been adumbrated, and its essence was to put private investment in line with national priorities and to have measures to improve profitability and have a more flexible pricing policy to push up investment levels in some industries. The approach to social justice was not merely to increase production but to pay special attention to vulnerable section and hence the 20-point programme. Finally, the fiscal policy was to minimise the incentive and opportunity for tax evasion, etc.

1 **Ibid**, para 1.4
2 **Ibid**, para 1.3
3 **Ibid**, para 2.2
4 **Ibid**, para 2.3
5 **Ibid**, para 2.10

This was one of the few budgets which did not stress mobilising resources, but admiringly referred to tax reductions in 1974–75. Its main tax thrust was "to provide the necessary stimulus to growth and modernisation" through reliefs, concessions, etc. It signalled the lowest increase in excise tax burden – a mere Rs. 15 crores; and the overall revenue expansion was only Rs. 80 crores. This relatively moderate revenue increase reduced the budgetary gap to Rs. 368 crores – an appreciably wide gap – and left it uncovered. For, the basic policy assumption was "The nation is at the crest of such a tide. The economy is poised for a surge forward...(to) usher in a qualitative change in economic environment.[1]

It is against this background of policy and its effectiveness in 1961–77 that the Janata fiscal policy of 1977–78 should be analysed. Was it different ? If so, in what respects ? What better chances has it to succeed more ? What changes are required if India's fiscal policy objectives should be really effective ?

Apart from the subsidiary speeches, including those in the budget debates, there are two announcements of policy one in the Janata budget of June 1977 and the other in the party's economic policy statement of November 1977. Of these the former is more important for fiscal policy.

Before expounding his policy, the Finance Minister referred,[2] as usual, to the background influences. In the 1960's agriculture showed some dynamism, but this had a limited impact. Instead of improving, the agricultural growth rate in the Seventies was not higher than in the 1960's. Therefore, new growth impulses are required to lift up the minimum level of growth at least to 4 percent. Hitherto, greater emphasis was on industrialisation. In 1956–64, the annual growth rate in industry was 8 per cent, but since 1965, it averaged 4 percent, although fortuitously the rate in 1976–77 reached 10 percent. Unemployment rose sharply. The saving feature was that in 1975–77 exports increased sharply and so did the inward remittances. In other words, said the custodian,[3] the decade 1965–75, the years preceding the new government, was hardly a decade of progress.

1 **Ibid**, para 3,2
2 Budget speech, 1977–78, paras 4 & ff.
3 **Ibid**, para 5.

Regional disparities in development since 1961 had increased,[1] one-third of the districts in the country had negative rates of growth. The proportion of people below the poverty line had gone up, unemployment had multiplied, prices were rising—in 1976–77 alone the inflation was up by 12 percent—and the overall growth rate in the 1970's was 3.5 percent, far too short of the Plan target, in 1976–77 growth was just 2 percent.

These observations were, no doubt, partly the politician's tendency to denigrate his predecessor, whose regime he did not love, but they are facts. And it is against this setting that the 1977–78 fiscal policy was.

The budget claimed[2] that the 1977 elections expressed clearly the "people's desire for a re-orientation and re-shaping of our economic policies, and to move forward ... to banish poverty, ignorance and disease". The budget, being a major instrument for shaping the country's social and economic policies, reflects faithfully Janata's philosophy and programmes.

Parenthetically, these claims are what every party in power and every Finance Minister has been claiming in India since 1951.

The 1977 budget was said to "mark the beginning of this policy in operation". The most fundamental problem was economic growth. "My task is to tackle problems of inadequate growth, crushing poverty, unemployment, growing regional imbalances and rising prices – all interrelated problems".[3] "My aim", concluded the Minister,[4] "is to stimulate the economy and achieve a higher rate of growth and employment, and to ensure that the fruits of development are spread widely". The emphasis on investment in the plans and the budget would be agriculture, small industries and rural infrastructure, i.e., the small man.

The policy referred to two other factors[5] —one that rising prices were largely due to 'excessive money supply', i.e., the budget admitted the lack of complete co-ordination between the

1 **Ibid**, para 6.
2 **Ibid**, para 2.
3 **Ibid**, para 4.
4 **Ibid**, para 120
5 **Ibid**, para 8

monetary and fiscal policies. The other, that it was not possible to consult the States in reorienting development programmes.[1] i.e., a similar admission of lack of policy co-ordination between the Centre and the States.

This policy statement was essentially a continuation of the earlier policy objectives. Even the reference to the 'primacy of agriculture' and the 'small man' was simply a reiteration, perhaps a little more pointedly. The problems were old, the policy objectives were the same, and the language too was not much different, Naturally, the tax proposals tilted a little this way and that, except that the tilt was in favour of the 'small man; (such as the income tax exemption being now Rs. 10,000) and a little in favour of the private sector. Even the principles were rehashing of the old. Thus direct tax changes were related (1) to covering the budgetary gap, and (2) to increasing corporate savings and channelling them into productive investment. In indirect taxation, the objective of the changes was (1) not to infringe on the necessities of life, (2) simplification and rationalisation. These, in a way, were old wine in new bottles, only the custodian and the government were different – a new salesman with the same old goods. And as of old, the 1977 budget continued the practice of budgetary deficits, the volume in 1977 being Rs. 95 crores.

The party's over-all economic policy of November 1977[2] was, so far as fiscal policy went, not much different in vagueness and in context. Some of the 'policy ideas' were relatively commonplace, and the purely fiscal side of the statement confined itself to taxation. This draws attention to a common misconception that taxation is all that matters in fiscal matters.

To reinforce my observation that there is little that is new or different, I quote below the relevant portions of the Janata policy statement :[3]

"The taxation policy of the Government must keep in mind five considerations :

(i) Increased public investment must necessitate increased public income. The people of the country, therefore, have to accept the burden of higher taxation needed for investment in the future;

1 **Ibid**, para 3

2 Reprinted in the **Hindu**, 16th Nov. 1977.

3 **Ibid**, concluding paragraph.

(ii) Taxation policy must simultaneously aim at redistributive justice and must take into consideration the capacity to pay;

(iii) Taxes should be easy to collect and it should be easy for the tax payers to know what he has to pay. There is an urgent need for the simplification and rationalisation of the tax administration;

(iv) Taxes must have an in-built growth potential and inherent buoyancy, and

(v) Taxation policy must aim at stimulating national growth and must encourage production and savings".

These 'considerations' are either rehashing old concepts or a repetition of the replaced party's practice, or at best, not specific policy objectives. So they may be overlooked here.

Thus, in the years 1961 to 1977, the minor aims of the previous decade gathered strength and six major objectives stood out-growth, employment stabilisation, social justice, self-reliance and resources, because deterioration in socio-economic conditions and changes in political outlook brought the problems to the fore. There were also a few minor objectives such as balance of payment and foreign aid.

Part II : The Policy Objectives and their Relations

I shall now examine how far these policy objectives have been realised. The purpose of any policy is not simply to formuate it or attempt to operate it; it is, more importantly, to make it effective in practice.

The period since Independence falls into two sections : 1951-52 to 1960-61, the years of the first two Plans with fiscal policy being attuned to them, and the later years, 1961 to 1977 when inflation and other problems raised their heads. The first ten years would form the initial years for thinking over socio-economic and fiscal policies, such as the Industrial Policy Statements of 1948 and 1956, and the Socialistic Pattern of Society aim. This experience will be a set-off to the later years, largely because fiscal objectives were still being formulated. I shall, therefore, concentrate on 1960-61 to 1977-78 for testing the success of the fiscal objectives.[1]

1. The data below are, except where otherwise stated, from the Union Government **Economic Surveys**, **R.B.I.B**., and **C.S.O.** publications. In a succinct form, the statistics are collected in **O.P. Vaish and S. Panandikar: Direct Taxes: Proposals for Reform** (Vikas, 1978).

1. Growth :

The growth objective has been the central purpose of our fiscal policy, and let us, therefore, see how much of it was achieved. The other aims, important as they are emanate from growth. Even the objective of resources was for development of which the Plans were the blue prints.

Changes in five items would form the criteria for testing growth: Volume of N.N.P, per capita National Income; rate of growth and its components, agricultural production and industrial output.

Between 1950–51 and 1960–61[1] the net national product, in 1948–49 prices, increased from Rs. 8,150 crores to Rs. 13,263 crores; i.e. by Rs.4,412 crores or at an annual average of Rs. 440 crores, i.e., 45 points in 10 years. The per capita National Income was up from Rs.250 to Rs.293, i.e., by Rs.43 or 4.3 rupees a year. As an index, this would be a rise of 16 points – 102 to 118 – i.e., 1.6 per cent per year.

After 1960–61 and in the Third, Fourth and Annual Plan years, N. N. P. (base 1960-61) was up (from Rs. 13,263 crores to Rs. 21,952 crores in 1975–76) by an annual average of Rs.579 crores.[2] The per capita growth in the 15 years was from Rs. 305 to Rs.366, or an annual average of Rs.5. As an index, the rise was 65 points or about 4 points or about 4 points a year.

Viewing from another angle, the First and Second Plan growth targets were 5 per cent a year in 1951 to 1961 and those of the next two, 1961 onwards, were 5.5 per cent. But the growth rates achieved were 3.8, 3,5 and 2.5 per cent respectively in the First and Second Plans and the later years. The Gross National Product in 1961–66 was up by 2.9 per cent, in 1966–71 by 3.5 per cent and in 1971–76 by 2.8 per cent, while the Net National Product increase in the same three periods was 2.6, 3.5 and 3.2 per cent respectively. The annual per capita N.N.P. growth was 0.3 per cent in 1961, 1.3 per cent in the next five years and 0.1 per cent in 1971–76.

1. Economic Survey 1977–78, Table 1.2. In this table the base is 1960–61 prices.
2. Ibid.

No doubt, the growth rate is also a function of factors other than fiscal policy, but, as pointed out earlier, fiscal policy is a very important instrument of growth, the most important fiscal objective, especially in the last 17 years. We are, therefore, compelled to concede the ineffectiveness of the policy in the actual growth process.

Let us look at two of the more important components of growth : agricultural and industrial productions.[1] These, especially the former, depend also on factors extraneous to fiscal measures, e.g., floods, droughts and pests. But, by and large, and after the 1977–78 budget, a closer relationship could be expected between the growth-oriented policy and the two components; therefore, following the changes in production is largely suggestive and not conclusive of the growth facet of Indian fiscal policy.

Agricultural production has three components – changes in area, output and yield per hectare. What were the changes brought about in each of these ? With 1950–51 as the base year for 1950–51 to 1966–67, the area index increased by 21 points in 10 years, 1950–60, i.e. an average of 2 points a year; in the next 17 years, i.e., half a point a year. Admittedly, there is a very large element of constraint in area expansion such as socio-economic limitations on crop shifts and on modifications in cultivation methods. Nevertheless, the experience in 1960–77 is not very encouraging.

Agricultural output in 1950–60 increased by 42 points, i.e., 4 points a year, whereas in the next 17 years, the volume was up 37 points, i.e., 2.5 per year. The yield per hectare increased by 7.5 points or 0.75 per annum in 1950–60 and by 26 points or 1.7 per annum in the next fifteen years. These performance in area, output and yield indicate that the objective of growth vis-a-vis agriculture was not achieved even considerably.

Industrial production did better in 1960–75, the years of the III, IV and supposedly Fifth Plan periods. The changes averaged 5 per cent a year for these 15 years varying from 0.7 per cent in 1966–67 to 9.7 per cent in 1962–63.

1. **Ibid**, Tables 1.5 and 1.13. The following data have been based on these tables.

The overall conclusion, therefore, is that the growth objective does not appear to have been substantially realised, although it was the key–stone of fiscal policy and very large outlays from the public fisc were made in the budgets. My contention is not that the growth objective was inappropriate and unnecessary, but that the means to realise it were.

Of the complex reasons for this slow growth four may be stressed – the private sector's fear of the capricious fiscal policy changes and operation, the obsession of the planners that each Plan must be larger than the predecessor, the faulty plan allocation of the resources; and finally, the inept administration of plan projects. In other words, this was the questionable policy of expansion before consolidation, instead of consolidating the gains before expanding further.

2. Stabilization :

Stabilization of the price level, the second of the fiscal objectives, has a two–fold purpose. It influences developmental outlay, since the greater the price rise, the larger the outlay to achieve the same result. The more important impact is on the common man, his wages and incomes and consumption level, and on savings and investment in the private sector. Inflation has been with us since the Second World War, but after Independence and particularly in the last 17 years, its pressure has been mounting. Therefore, budgetary policy since 1950, except for an odd year or two, has had stabilisation as an important aim.

To ascertain the effectiveness of the policy, let us look at the behaviour of prices.[1] From 1951 to 1960, the wholesale price index showed an annual average rise of 2.5 points. In a developing economy and after all the upsets following the war and the 1947 holocaust, this level of increase was not much. But from 1960–61, the price–rise got accelerated. Thus, in 1961–66, the Third Plan years, prices were up by 66 points, i.e. +12.5 a year, and by 1974, the increase was nearly 300 points in 15 years, i.e. +10 a year on an average. Even in 1976–77, it was 12 points up, in spite of the attempted price stabilisation.

Agricultural prices, a component of the wholesale prices, followed the above trend, though manufacturing prices rose a

1. **Economic Survey**, 1977–78. Tables 5.1 and ff.

little less. The behaviour of the working class consumer prices was not different. The inevitable inference from this trend is that the policy of price stabilization, in spite of controls, imports, fair price shops, procurement, etc., has not succeeded in even containing the rise.

Two of the more important reasons for this policy failure were: (1) The disappointingly low growth rate and (2) the continuous and large increases in money supply with the public. For instance, between 1963 and 1969, the annual average addition to money supply was Rs. 333 crores, ranging from +Rs. 180 crores to +Rs. 475 crores in different years. Thus, in 1971, the total volume of money with the public was Rs. 7,193 crores but by 1976–77, the volume had doubled to Rs. 15,156 crores, i.e., an average annual addition of Rs. 1,180 crores, and in some years, e.g. 1965–76, the addition was as much as Rs. 2,215 crores.

It is amazing that there was so little of co-ordination between the monetary authorities, largely in control of money supply, and the fiscal authorities making price stability a policy objective. The two agencies appear to have run in opposite directions.

Anyway, the Centre's policy of containing price rise failed. In a way, the Centre itself contributed to the rise partly by its rising expenditure and partly by continuously running into deficits. "Budgetary deficit, as a component of changes in money supply", warned the Reserve Bank in July 1977,[1] "has important implications for the price level". And Central deficits have been continuous, while in some years their size has been unsettling. For example, in 1975–76, the amount was Rs. 366 crores and in the next year (R. E.) it was Rs. 425 crores. In 1977–78, the budgetary gap apparently was only Rs. 85 crores, but "the Centre will borrow from the Reserve Bank Rs. 800 crores against foreign exchange reserves",[2] supposedly to be balanced by imports.

3. Employment[3] :

The creation and provision of employment has been another fiscal and plan objective. Under Professor Mahalanobis' advice, the Second Plan was mainly employment-oriented. Since 1961, a major budgetary aim has continued to be to create employment

1. R.B.I.B., July 1977, page 18.
2. Ibid.
3. Economic Survey 1977–78. Tables 3.1 and 3.2

opportunities, partly for socio-political reasons, partly to utilise the large volume of idle human resources and partly on humanitarian grounds of social justice. Even the first Janata budget affirmed the policy importance of employment, stating that "greater attention" would be bestowed on this 'most pressing' problem.

How much did the policy succeed in practice ? The total employment provided by the combined public and private sectors in 1961–76 increased from 121 lakhs in 1961 to 201 lakhs in 1976–77, the expansion in 15 years has been 80 lakhs in the two sectors combined, giving an annual average of 5.6 lakh new jobs. The public sector, though less efficient in production and less profit-earning, increased the total employed from 70.5 lakhs in 1961 to 133 lakhs 15 years later, an annual average of +4 lakhs. The private sector had an annual average of 1 lakh additional jobs, accounting for 50.4 lakhs in 1961 and 68.3 lakhs fifteen years later. It is worth noting that the percentage change over the previous year (i.e. annual additions) varied from 6.8 in 1965 to 0.17 in 1968. Thus, the average annual rate of change was +3 8 per cent, with an average of 4.5 per cent in the public sector and 2.7 per cent in the private one. Surely, this trend of affairs is not much indicative of an 'employment creation' policy.

Let us view the achievement against the number of employment seekers, i.e., the backlog plus net additions : [1]

(In millions)

	1951–56	1956–61	1961–66	1966–69	1669–74
Unemployed at the start of the Plan period	3.3	5.0	9.0	11.5	14.3
Net addition in the Plan period	9.0	11.7	17.0	14.0	23.0

These figures are not exhaustive of all unemployed, but are merely indicative, and they also do not include the rural unemp-

1. C. N. Vakil and Mohana Rao (Ed.) **Industrial Development of India**, p. 338. Data based on R.B.I.B., Dec. 1969 and **Report of the Expert Committee** on **Unemployment**, Planning Commission. The figures given in Tables 3.1 and 3.2 of the **Economic Survey** for 1977–78 are slightly different. For an interesting analysis of employment growth in six States in 1961–73, see R.B.I.B. 1975 February (Khan)

loyed and many in the urban sector too. Still, even with these limited numbers and assuming that the employment target in the plans is attained, the number of unemployed is continuously added to.

Looking back on the position since 1956, the conclusion is clear that not much dent has been made in the volume of unemployment, that is, the fiscal objective has not been achieved. The reason is simple : The problem itself is huge both in the numbers involved and in the constraints arising from social structure such as slow mobility from rural to industrial sectors and from traditional occupations to new ones. But the outcome is clear – the failure of the fiscal objective.

4. Social Justice :

The demand for social justice is decades old, prior to the Plans and to Independence; and Gandhiji was one of its apostles. Such justice is long overdue, but, this apart, it forms an important segment of the economic and fiscal policies of the Government. It was dramatised in the Congress slogan **'Garibi Hatao'**.

Social justice has many facets, but I shall consider only two testable ones : (1) changes in the poverty level – numbers and distribution; and (2) impact of education, housing and health outlay. Although the letter are nonmonetary facets of justice, they have their financial and welfare implications, and therefore, redistributive significance.

The depth and spread of poverty in India are proverbial, and, repeatedly, claims have been made of improvement in the position. But except in 1960–70 very little attempt has been made by policy–makers even to understand and measure conditions over the long period. What constitutes poverty level in India and how it has changed in the Plan period are answered differently by different studies.[1] Since my interest is to test broadly a policy objective, I shall consider below only the overall aspects of Indian Poverty.

1. V. M. Dandekar and R. Rath : 'Poverty in India', Parts I and II, **Economic and Political Weekly** Jan. 2 & 9, 1971, P. K. Bardhan : 'On the Incidence of Poverty in Rural India, **Ibid.** Annual No. 1973, pp. 245 & ff., T. N. Sreenivasan in **Poverty and Income Distribution in India**, 1974, pp. 309 & ff.

Taking Rs. 180 per year per capita in 1960–61 price as indicating the poverty level, the percentage of population *below* that level according to Bardhan[1] was :

1960–61	...	38%
1964–65	...	45%
1967–68	...	53%
1968–69	...	54%

The study by Dandekar and Rath takes Rs. 324 in rural areas and Rs. 468 in urban centres per capita as the dividing line, and finds that in 1960–61, 33 per cent and in 1968–69, 40 per cent in rural areas and 49 per cent and 50 per cent of urban dwellers in the two years were below the line.

Two conclusions follow from the above facts : (1) the low income level of the poverty line, and (2) the spread, not the reduction, of poverty in the decade.[2] M. L. Dantawala rightly observes that among policy makers "there is either inadequate knowledge of the magnitude of the problem or unwillingness to face it.[3]

Another facet of poverty relates to regional variations. Thus, for instance, in 1960–61 the percentage below the poverty line in Karnataka was 34 and by 1967–68, it had risen to 48, while the corresponding all India figures were 38 per cent and 52 per cent in the two years respectively. This situation of increasing poverty and of regional variation is true of other regions in the country. This fact must be borne in mind when fiscal policy stresses reducing poverty and reducing regional disparities.

Yet another way of viewing the problem relates to the intensification of inequalities.[4] Income redistribution and reduction of inequalities are a part of the annual budget. For instance, progression in tax rates and new levies like the Gift and Wealth taxes are meant to reduce inequalities. In fact, hardly a couple of years ago, the marginal rates on incomes reached 97.5 per cent in the top most bracket, apparently to cut down the 'tall poppies'.

1. Burdhan, **Op. Cit.** Recently the Union Government in a reply in the Lok Sabha stated that the poverty line in 1976–77 prices was Rs. 61.80 a month for rural areas and Rs. 71.30 for urban areas (**The Hindu**, 22nd Dec. 1978, p. 10)
2. **Economic and Political Weekly**, 2nd Jan. 1971. pp. 39–40
3. **Poverty in India, Then & Now**, 1870 and 1970, p. 21
4. E. g., B. S. Minhas : **Planning and Poor** (1974), p. 53.

What has been the result? "N. S. S. data make it clear that the small gains of development during the decade (1960–70) have been very unequally distributed, and the gulf between the rich and the poor has widened";[1] for, the gain has been monopolised by the upper middle and richer classes, and it would take, add the investigators, fifty years before every one is over the poverty line.

It is thus clear that yet another facet of fiscal policy–to lift up the poor, to mitigate regional income disparities and to reduce individual income differences–has not succeeded.

Let us look at other measures to bring about social justice through outlays on welfare. Rural works and related programme have been found to have had negligible impact on income distribution, i. e., one aspect of poverty reduction, because, to quote the detached analysis of T. N. Srinivasan[2], "employment scheme in the Plans are more like frills added to the structure". Pricing and distribution policies, e.g., of commodities, foreign exchange and luxury goods, benefit mostly the better off urban consumer and not the abject poor in the rural area. "The inequality of this policy is glaring."

Similarly, while large outlays have been made on education, subsidised higher education has benefited mostly the upper income groups. So also the public housing schemes. Srinivasan concludes :[3] "Regardless of intentions, the economic policies (and public revenues are raised to sustain them) adopted have, in the Indian social and political context, by and large, benefitted the upper income classes." While intentions of the budgetary policy and of the Plans, particularly the Fifth one, were laudable in that they recognised growth as the key to poverty, the investment allocations and policy frame of the Fifth Plan and the pattern of public expenditure and the tax structure were not very different from what prevailed in the last 20 years, and therefore, not encouraging regarding poverty.

This analysis leads to the conclusion that the fiscal devices for social justice have not been much effective. The reason is threefold : (1) the problem is stupendous in its size, variety and

1. Dandekar and Rath : Page 25.
2. **Op. cit.**, p. 378.
3. **Ibid**, p. 394.

implications, and the solution is not in tinkering with it, but in accelerating growth : (2) where even a little is attempted by e.g., indirect tax changes, the commodities chosen and the rates imposed could be done more thoughtfully in terms of the impact on poverty, and (3) the actual administration of the related fiscal devices leaves much to be desired.

5. Self-reliance :

This is a relatively late and not often much stressed fiscal objective. Its emergence may be traced to the balance of payments difficulties and defence and other heavy industry demands. Appreciable advance has been made in self-reliance in some directions, but a long way still remains to be traversed. It, moreover, raises the basic issue if a country of India's size and complex problems and with an open economy can both afford to be and can obtain self-reliance except in a few major directions. Therefore, we may pass over this fiscal objective.

6. Resources :

Resource raising and spending is the only fiscal objective that has been achieved, perhaps, more than expected. In 1950–51, the Central Government's receipts on revenue account were Rs. 405 crores and by 1975–76, they had increased to over Rs. 6,875 crores, i.e., fifteen-fold in 25 years.[1] In the five years of the First Plan period, the revenue was Rs. 2,232 crores and in the five years of the Fourth Plan, it was Rs. 20,089 crores.

Such a phenomenal growth was the result of five factors :

(1) Price rise which hurt the masses but benefitted the government, e.g., in commodity ad valorem taxes; (2) stricter administration, e.g., of direct taxes; (3) growth in population leading to growth in consumption and so adding to indirect tax reciepts; (4) growth in national income in current prices on which are based income and other levies, (5) Increase in tax rates and reduction in tax concessions, as in direct taxes.

The success of raising resources and, therefore, implications of the fiscal policy become clearer with a breakdown of the revenue heads. Thus, in 1950–51 and in 1975–76, the receipts from personal income taxation for instance, were respectively Rs.

1. The total revenue receipts in the two years were Rs. 786 crores and Rs. 13,334 crores respectively. e.g. see Vaish & Panandikar Table 2, for more details.

134 crores and Rs. 1060 crores, and of the corporation tax Rs. 40 crores and Rs. 954 crores. That is, in 25 years, the former increased eight-fold and the latter twentyfive-fold.[1] While the former influences personal savings and may react on income distribution, the latter is very significant for 'growth' since the burden is on the private sector and, therefore, on business savings and investment.

I am drawing attention to the latter since one of my suggestions is to reduce the burden on business savings and investment, particularly because India, as a mixed economy and with the slow growth rate so far, had better shift over to greater relief to the private sector.

Another feature of the resources expansion relates to the customs and excise duties. In the 25 years from 1950-51, customs showed an eight-fold expansion, and Central excises a fifty-two fold increase.[2] Government dependence on excises is becoming more with years. The significance of the increase in yield and the greater dependence on the taxes is clear in that, by and large, customs duties affect the upper income groups and business sections, while excises (e.g., tobacco, sugar, textiles) burden common consumption and the common man, although luxuries are also being taxed and heavily too. That the total tax revenue should multiply in 25 years by fifteen-fold is indicative of both the success of the resource raising policy and of the possible unpleasant repercussions on the economy – on growth, private savings, price rise, and even the growing poverty level.

The success of resource raising efforts must be placed against how the receipts were spent, as revenue and expenditure are but two faces of the same coin. The total Central and State expenditure on revenue account was Rs. 731 crores in 1950-51 which in 1975-76 rose to Rs. 11880 crores. Of this, non-developmental expenditure accounted for Rs. 519 crores and Rs. 6611 crores in 1950-51 and 1975-76 respectively, i.e , a continuous annual increase of Rs. 244 crores per year. As growth was a prime fiscal objective and resources were raised specifically for the purpose, the developmental part on revenue account increased from Rs.

1. Vaish and Panandikar, Tables 4 and 5.
2. **Ibid.**

209 crores to Rs. 5020 crores in the quarter of a century, i.e., by Rs. 1,520 crores overall or Rs. 60 crores a year.[1]

These three features of expenditure in a fiscal policy insisting on the growth objective are significant and they will be commented upon by me in the reorienting policy section below : these features being (1) the shooting up of the overall expenditure of the Centre; (2) the inordinate increase in non-developmental expenditure and (3) the relatively non-too-fast growth on the developmental side. It is true that there was a 'Capital' side of the budget, but this consisted mostly of loans, internal and external.

In conclusion, it is worth repeating that the resource-raising fiscal objective was successful, albeit the way the receipts were spent, and albeit the process and instruments by which the resources were raised.

III. Reasons for the Limited Success of Fiscal Policy

The preceding analysis indicates that five out of six objectives have not been much of a success in the last 27 years. What could be the reasons for this failure ? The answer suggests what lacunae should be made good, and which direction any overhaul should take.

The reasons may be placed in three broad groups : (1) Overall policy drawbacks; (2) Deficiencies largely of fiscal policy; and (3) tax structure limitations. These three may be correlated to three decision-making levels : The Cabinet which dictates the outline of the policy, the Finance Minister whose responsibility it is to shape fiscally these objectives, and the permanent civil service – advisers and administrators – who, given the policy, help to formulate the detailed steps. As the overhauling of policy suggested below is closely linked to these causes, I shall briefly explain them below :

I. Overall Policy Drawbacks :

(a) Lack of continuity :

Fiscal policy, no less crucial for a country than foreign and defence policies, insists on its being, in its broad approach, bipartisan, the annual budgetary changes being confined to structural and administrative details such as rates and reliefs. Policy, having

1. Table 2 in Vaish & Panandikar.

varied and long-term repercussions on the economy, demands a continuity of the policy objectives, and also the continuity of the finance custodian for a few years at a stretch, to formulate the policy, to see it operate and to understand its limitations.

In India, however, in the last 27 years, in spite of the same party being in power, there has been outwardly a continuity in broad policy issues, but the changes and uncertainties in the operating details have been many and conflicting. Moreover, in this period, a dozen finance ministers have come and gone, with an average duration of 2¼ years for each. Most of them, in fact, 8 out of 12, have been full-blooded politicians, having neither the training nor the time to get command over the implications and repercussions of the complexity of fiscal policy and of any major change in its application. Even if one were to overlook the three Prime Ministers who each presented one budget, the average tenure of the custodians was three years. In spite of competent permanent staff and an interested minister, three years are too few to understand fully and decide wisely about the all-important policy.

(b) Lack of co-ordination :

The second drawback is the lack of co-ordination between (1) the Union and the States' budgetary policies, and (2) the Central fiscal and the banking sector's monetory and credit policies and steps. Apparently the Reserve Bank is a part, though supposedly autonomous, of the Central Government. So also the Reserve Bank and the lower level banking system are considered to be integrated. But in actual working, as for instance money supply and credit policy in the former case and in operating the Reserve Bank's directives in the latter, there is not full co-ordination. This lacuna partly accounts for the excessive money supply and consequent price inflation, which have been frequently referred to by the Finance Minister himself.

In a sense, the component States are and should be autonomous in many matters, but in economic, especially fiscal, matters both the Union and the States draw from the same resources pool and spend on the same functions. There has not been full understanding and co-ordination between these authorities in their budgetary policies and actions. For instance, if a State 'overdraws' from the Reserve Bank freely or makes an un-

wise outlay, inflationary pressure would, as has happened, increase. Further, there is no synchronisation in the timing and policy dates, nor among the different States themselves. Much less previous consultation is there on the broad policy issues.

In a country, such as the United States, where the States are more autonomous and act more freely, any Federal State conflict matters less than in India because of a different economic structure, different fiscal objectives and vaster Federal resources. In a developing young federation, lack of reasonable co-operation between the two sets of governments would be fatal to the economic 'growth' and social justice. A way out of such a situation is suggested below.

(c) Mix-up of long and short-term policy objectives :

A third drawback is that, apart from the claims while presenting the budget, there is no overall long-term perspective in the Central budget. There is a mix-up of the yearly changes, e.g., in rates and reliefs, and, except in a couple of budgets of T. T. Krishnamachari, the larger impact of the changes in policy are not realised and acted upon. Thus, just as fiscal policy is repeatedly claimed to be Plan oriented and so resource raising. these annual changes are presumed to be parts of the same resource raising process, and rarely having any other impact. For instance, the growth objective is secular – not in the political sense–and so are social justice and employment creation, objectives whereas stabilisation is a short-term problem and policy issue, although its containment has evaded success in the last two decades.

What is the impact of the long and short-term aims on each other ? How do the resulting changes in tax structure, for example, influence the major objective ? Inflation is an aberration and a temporary imbalance in the economy, but social justice is not. While the latter is urgent, it will take decades if it can be resolved at all through fiscal policy alone.

There is no recognition of this kind of situation in the Indian budgets; there is confusion resulting in a slower than need-be achievement of the 'growth' objective. As is pointed out below, policy reorientation demands giving each objective its relative priority.

(d) Overemphasis on Growth :

Yet another drawback is the obsession with growth, and the Government belief till 1977 that the public sector, given the funds can largely by itself achieve the growth target, and thus across the overemphasis on resource raising. In all non-authoritarian societies, growth is a function of the public and private sectors co-operating – only that, in a largely competitive economy like that of U. S. A., private enterprise dominates growth, while in mixed economies, both sectors play their part. In India, under its overall economic policy and its component, fiscal policy, the scope for the private sector has been forced to shrink from Plan to Plan, through the tax and other constraints, after increasing in 1951–57. So the response of this sector in the growth objective in terms of saving, investment and risk has been hesitant, and, thus, growth itself has been slowed down.

I reiterate this widely known feature because of my plea below for giving the private sector a large share in growth and, therefore, in facilitating stabilization and other objectives; that is, a plea for greater relaxation in tax burdens and constraints on this sector. While the private sector, if given sufficient leeway, would find for expansion its own resources out of its earnings and in the open market the public sector must find funds partly internally and mostly through taxation. Therefore, the emphasis on growth through the public sector has led to the search for continuously increasing tax resources, especially through indirect taxation. The repercussions of this overemphasis on taxes have been overlooked. And since fiscal policy is more than mere taxation its overall success has been limited.

(e) Lack of stability in policy :

A fifth drawback is there has been no policy stability. Apparently the objectives have remained the same, but the manner in which they have been operated has differed. For instance, compare the budgets of Mathai, Deshmukh, Krishnamachari; Morarji Desai and Subramanian—all were able Finance Ministers, but what a difference in their approaches and measures ? Although it was not a strictly policy matter, look at the impact of the Kaldor taxes on the investing class and on tax administration. After all, what matters most is not how acceptable the

objectives or their instruments are to different strata of society,—no budget proposal can please everybody,—but how much they can be depended upon over a long enough period to adjust one's investment and production activities.

(f) Confusion between broad policy and details :

Finally, there is the mix-up between overall policy and budget details such as changes in rates, exemptions, reliefs, commodity groupings, etc. It is true that the details flow from policy and are necessarily annual adjustments in applying the policy in the context of the economic situation. But, these are not of the same significance as the broader policy directives, spelt not in general terms as done in Central budgets, but in terms of their specific and multifaced impact. The impact aspects is largely omitted and the details facet is over stressed in the budgets.

Further, though the details are to be adjusted annually to the economic situation in India, there is a too frequent an alteration in the budget structural details, often depending not on what the policy requires but who the minister is. For example changing the income-tax exemption limit, or raising the marginal rate on the top income slab or the different kinds of profits taxes, or even the course of the Kaldor taxes. Budget changes are awaited particularly by the investor with anxiety, which turns into confusion, when changes depend not on policy but on the individual custodian's reactions. Thus, paying greater attention to structural details and introducing changes too frequently have naturally brought instability into the fiscal policy. Hence, my suggestion that the Government formulate a long-term, and, even a perspective broad outline in fiscal policy, into which the shorter, e.g., Plan term, and annual budget changes can be fitted.

II. Deficiencies in Fiscal Policy :

(a) Multiplicity of objectives :

These deficiences are at the second level and relate more specifically to the policy itself.

The most glaring drawback in India is the multiplicity of fiscal objectives. All of them, and perhaps even a few more, are important and even urgent, but since a budget is a practical, operating instrument, it is not the prevalence of the problems that should determine how many and which are to guide the

policy, but essentially which, given the human and administrative resouces, are practicable, of greater priority and of greater benefit. It is this that the Indian policy-makers appear to have overlooked. Too many objectives, though important and interrelated, have resulted in too little of achievement. In spite of political pressures and public demand a selection has to be made and the fewer the objectives concentrated upon the quicker would the others, too, be on the agenda.

(b) Mix-up of long and short-term objectives :

When there are competing objectives, a choice has to be made regarding priorities and some objectives may even have to be postponed. Such choice has to be of two kinds-(i) between the long and short-term ones, e.g., growth and social justice are long-term objectives to be realised in a decade or a generation, while aberrations like price rise are of short run duration; (ii) between the above and annual problem.

Another basic defect has been attempting too many things at the same time, partly because of political necessities and partly because of inexperience and overenthusiasm. Such a mix-up, when resources are few, leads; as has happened in India, to failure to achieve substantially even a single aim. Nobody questions the legitimacy, e.g., of social justice, but one is not so sure of its urgency vis-a-vis growth, because adequate growth would provide the resources for welfare and if the economy is rapidly taking off, economic and social justice would follow with minimum State control and direction. Therefore, long and short-term objectives and priorities must be separated, their priorities determined and dovetailed, but this is lacking in India's fiscal policy.

(c) Dominance of political slogans :

A third deficiency in the second group is the presumption that political slogans can replace hard reality, e. g., **"garibi hatao"** and **"Rama Rajya in ten years."** Every year, the Central budget is replete with promises and, often even the hard facts of the economic situation are slurred over. This has two effects, first, it gives the unwary reader and the politically biassed legislator an incorrect idea of the situation, and secondly, it lulls the policy maker himself into complacence since it would be a year more before the next budget is presented and he would realise, from the economic situation, what happened.

(d) Neglect of the expenditure facet :

The next, perhaps more important, drawback is not adequate recognition of the importance of the expenditure side. The budget document most often merely narrates the outlay trend and why perhaps a little more was spent (R. E.) or little more is needed (R.E). But it really hesitates to enquire (1) the underlying why of it, (2) if there cannot be greater economies effected, or (3) the impact of a rise or fall in outlay on other sectors. In fact, it completely forgets that expenditure is as important in policy framing and budget making as the presentation of the revenue position and taxation proposals.

Moreover, it is strange that practically no serious attempt has been made in the last 30 years to economise, drastically as is necessary, spending which has been marked by continuous jumps. For example, the total Central and State outlays were Rs. 998 crores in 1950–51, Rs. 6,611 crores in 1965–66 and Rs. 18,905 crores in 1975–76, i.e., an annual average increase of Rs. 704 crores; i.e., in 25 years the expenditure has risen nineteen-fold. The total outlay of the Centre alone was up twenty–four fold in nearly three decades.

What is pointed out is that although expenditure determines the load and direction of revenue, it is markedly neglected by the policy maker recalling what a British Indian Finance Member of old times called the 'Rake's progress'.

There is, further, generally a nonchalant approach to budgetary deficits. In 30 years there has been practically no year without an overall deficit, ranging from a few crores to quite a few hundreds. For example, it amounted in 1952–53 to Rs. 41 crores, in 1960–61 to Rs. 177 crores, ten years later to Rs. 270 crores and in 1976–77 to Rs. 320 crores. In this respect, the attitude of the policy maker has been of two kinds, first, to over–stress the deficit on revenue account in order to justify additional tax burden, and second, to under–stress the overall deficit as not of much import. Thus, for example in 1976, the Finance Minister concluded "I leave this gap of Rs. 320 crores uncovered. It is my considered opinion that this order of deficit will not accentuate inflationary pressures in the economy." This

unconcern to an obvious danger is being repeated year after year. And yet, the Reserve Bank warned in 1977 that deficits would accelerate inflation.

(e) Frequent tax changes :

Finally, there is the drawback of too many changes in taxes such as the Kaldor trio, the Super Profits Tax, the Dividends Tax and now under contemplation, the Value Added Tax. The old adage that an old tax is a good tax still holds true. All taxes are ultimately paid by the public, rich or poor, producer or consumer. Even a burdensome tax or an unreasonable tax burden tends to be absorbed by the economy financially and by the tax-prayer psychologically. But, when, under monetary enthusiasm as in the case of the Kaldor levies and in prejudice as with the Dividends tax, a new burden is imposed, the economic equilibrium is disturbed, and there is a tremendous psychological impact on the saver and investor. Novelty is not welcome to the tax payer or advantageous to the tax administrator. The Indian fiscal policy makers have often forgotten this since independence. The budgets of this period leave the impression that the policy maker itches for novel levies and more burden.

III. Tax Structure Limitations

The third group of causes limiting policy success consists of details, normally put forward in the budgets and often enquired into by numerous Committees from Justice Varadachariar Income-tax Enquiry of pre-Independence days to the latest Jha and Chowksi Committee. Occasionally, private organisations such as the Centre for Fiscal Studies in Delhi deal with such problems. As enquiries are plentiful and suggestions for reform galore and also as this set of limitations is not totally a policy matter but an application of policy objectives. I shall deal with them only briefly.

The tax limitations fall into two groups : (1) Structural; and (2) Procedural and administrative. The structural group is made up of new levies, rate changes, and changes in reliefs, exemptions, extensions, etc. The other group relates to rationalisation, simplification and tax law.

(a) Structural aspect :

In its avid search for larger resources and new tax venues, the finance chiefs have introduced, time and again, novel, untried levies and without consideration of their impact on the economy. Such have been the Kaldor taxes, Super Profits and Dividends taxes, Compulsory Deposits, and the now contemplated Value Added Tax. Some of these may have been tried in other countries and some may be even theoretically sound. But fiscal policy, though it learns from other's experiences and looks to them for guidance, is basically limited by the particular set of conditions—economic, social and administrative in which it operates. For instance, the First World War Excess Profits Duty was a success in Britain, mainly because of the superb tax administration and the enviable tax payers' response; but elsewhere, including India, it was a failure. Both in introducing and withdrawing measures, India's budgets have been hasty and biassed.

A second structural aspect relates to tax rate change, which in India are sudden and often whimsical. Hereunder are the tax rates on personal incomes : [1]

Personal Rates of Taxes

Assessment Year	Highest marginal rate	Marginal rates on slabs above Rs. 50,000
1960–61	77.00	63.00
1961–62	80.50	63.00
1962–64	83.37	68.25
1964–65	82.50	60.00
1965–66	74.75	60.00
1966–69	82.22	66.00
1969–71	82.50	66.00
1971–72	93.50	66.00
1972–73	97.75	69.00
1974–76	70.00	60.00
1976–79	60.00	50.00

Similar variations are found in business taxation, e. g. of widely-held companies.

1. S. V. Ghatalia "Taxation of Industry" in C. V. Vakil & U. S. Mohana Rao **Industrial Development of India**, p. 228. Data for 1974–78 are from the Central Budget.

A fundamental tenet of taxation is to let the rates sink into the tax payer and the economy. Since all tax changes – additions or reliefs – upset the existing set up such as savings, risk, investment and consumption patterns, both materially and psychologically, it is wise not to change too drastically or too frequently. This is overlooked by Indian fiscal policy makers, and thus they kill the goose – the private entrepreneur – that lays the golden egg. In this process net capital formation has been almost stationary[1] and for this, both the messing with new taxes and with the rate structure are responsible, and to that extent, the overall policy success has been held up.

Similarly uncertainty in operation and inequity in burden characterise indirect taxation–inclusion or exclusion of commodities, shifts from **ad valorem** to specific duties or **vice versa**, changes in rates and classification and so on. This affects movement, supply and release of commodities and thus aggravates price rise. The indiscriminate **ad hoc** change in indirect tax structure are traceable to the unending search for revenue and the discovery that excise taxation is a milch cow. The resort to it, as indicated by the growth in Central excise and customs revenue, is amazing.

TAX REVENUE OF CENTRAL GOVERNMENT

(Rs. crores)

	Direct taxes	Indirect taxes	Total tax revenue
1950–51	128	229	357
1966–67	515	1419	1934
1970–71	504	1947	2451
1976–77	2414	5667	8081
1977–78	2780	6341	8121

While this may help raising resources, its impact on prices, and even growth may be severe, while the temptation to evade tax increases. The 1977 L. K. Jha Committee on indirect taxes

1. The proportion of NDCF to NDP was 12.7 per cent in 1960–61 and 13.9 per cent in 1976–77, though in 1966–67 it touched 15.4 per cent. See **Economic Survey** 1977–78.
Table 1.3 Alternatively see Ram N. Lal : **Capital Formation and its Financing in India** (1977).

observes that 'the present indirect tax system (and tax law) is not an integrated system but just a juxtaposition of a number of systems ... Since the main emphasis in each of these levies is to bring in revenue and since each of them has been subject to **ad hoc** autonomous changes under the pressure of circumstances, their cumulative effect does not adequately subserve these objectives.'

The other facet of this limitation relates to tax laws and, therefore, to tax administration. The frequent demand for simplification and rationalisation of tax laws is sufficient proof of the complexity of tax law, resulting in over-worked tax administrators and, therefore, of slips and unfairness in operating the laws; and leading to inability of the tax payers to understand their responsibility, and therefore, to avoid and even evade the tax burden.

In a way, tax administration is the most important facet of the tax process, for, the success of tax policy directly, and therefore, of growth indirectly, depends largely on the administrator. The changes in the income, wealth, gifts and capital gains and other similar tax laws are so many, so frequent and so overlapping that the administrator himself gets bewildered.

IV. The Direction of Overhauling

The overhauling process should meet squarely these drawbacks, group by group and deficiency by deficiency.

I. Overall Policy Drawbacks :

(a) As changing horses in midstream is unwise, the first step in the reorientation process is to have continuity in the person formulating policy. The Janata Government, for instance, may be expected to be in power for about four more years, and so do not change the custodian for that period, for, in earlier years, the Minister's term was too short and the changes were too many.

It should even be feasible to give the Finance Minister's position a bipartisan colour, as the current overall economic policy is basically a modified earlier programme, while the fiscal objectives have been almost the same since 1961.

(b) The second step is to bring about greater co-ordination between the States and the Centre regarding major policy appro-

aches. This should be possible since many of the States are run by the same party and also since the Centre can control through aid, loans and greater firmness any recalcitrant unit.

This involves two means : (1) Normally make the budget presentation dates synchronise in all the States and the Union. (2) While the detailed operative budget proposals are confidential till presented the overall fiscal approach need not be secretive and prior and closer consultations among the Governments should be feasible, as in the case of planning.

(c) Another part of co-ordination is with the money and credit policy formulators. Such an understanding with the Reserve Bank exists already, but to a limited extent. Greater co-ordination is essential and may be achieved through two steps (i) by a little more interference with the policy making powers of the Bank, e.g., as has been done very recently by appointing a competent person, well and truly familiar with the 'fiscal side' to head the organization (ii) Yet another device for greater co-ordination is the Centre itself determining the direction of monetary and credit policies, leaving their application and day to day adjustment to the Bank. This may convert the Bank, – which in Central banking theory is supposed to be independent–, a wing of Government, but in the present circumstances in India such a step is both necessary and useful.

(d) A further step is to take the cue from the Planning Commission. The Commission has not only annual plans, but also five year ones, and with the rolling plan concept, even the latter becomes a continuous five year plan; it also has perspective planning, covering a much longer span.

This approach may be adapted to budget policy formulation as below : (1) the normal annual budget to deal with outlays, tax changes etc. as of now; (2) a quinquennial perspective or guideline for policy formulation. This would not involve new levies, rates or relief and therefore, its confidentiality would be limited but its significance in policy making and co-ordinating with State policies would be important. It would in effect outline the direction.

(e) The next part of reorientation relates to specific policy issues. The first of these is to regard the expenditure facet of the budget as important as the revenue raising or tax levying

one. The obsession with growth and, therefore, the politician's bias that the Plans, – the growth instrument–, must be big and continue to get bigger, each successive Plan almost doubling itself in size, must give place to the businessman's approach, i.e., it is the result, not the size of any investment, that matters and that economy in spending is more important than size.

Two of the steps regarding expenditure reorientation are urgent : (1) A thorough enquiry into expenditure growth in the last 27 years and (2) A determined halt to expenditure growth for a period of, say 5 years.

Although **ad hoc** and largely departmental enquiries have been made into the expenditure pattern, there has been no thorough study, partly because it may bring out unpleasant facts and partly because expenditure is mostly taken for granted. The level of expenditure, developmental and non–developmental, decides the volume and need for resources and, so tax and non–tax measures. In a way, it is not taxation that is the centre of fiscal policy but it is public expenditure.

It is, therefore, urgent and imperative that a high–powered Commission enquires into expenditure growth over the years and into the need for the present outlay. Recently it was suggested by a private body that the overall increase per annum should not exceed 4 per cent of the National Income. I consider this unacceptable, for my own cursory study of public expenditure indicates that in normal circumstances, there should be a total halt to increase for the next five years. In fact, even an overall cut of 5 per cent is desirable and feasible, except for two facts: (1) Provide increases, if any, due to price, (2) Do not touch the defence head.

The slogan should be "Economy before Increase". This means a temporary ceiling even on Plan outlay to the 1977–78 level until (1) prices are stabilised and (2) the public sector picks up efficiency and becomes profitable. The Plan outlay dictum should read "Consolidate before exapnsion."

Such a decision involves again Centre–State co-operation in achieving cuts. If achieved this would help the short–term anti–inflationary objective also. Any buoyancy in revenue should not be excuse for expenditure but should be utilised for external debt reduction or avoiding deficits.

II. Deficiencies in Fiscal Objectives :

The second group of reforms relates to fiscal objectives. Currently these are too many and none can be achieved substantially. Therefore arises the necessity to reduce their number to two plus one : (1) Growth, (2) Stabilization and, as a necessary adjunct to the first, (3) Resources. Growth will be the long-term objective extending, in the first instance, to 10 to 15 years, while stabilization, the short-term objective, may extend to 2 to 3 years, which may be the minimum time to hold and reverse the price trend, for its success depends largely on the extent of economic growth.

(a) The growth objective should be marked by maximum returns for the outlay and not by mere outlay expansion and spread, as is the case today.

Growth as an objective involves another shift in current fiscal policy–greater encouragement to the private sector. Enlarging GNP involves both the public and the private sectors. While the former has an overall performance of about 4 per cent on outlay, the latter has returned around 13 per cent. Also, except in agriculture and basic industries, the private sector is the major contributor to GNP and for quite sometime to come, it should not only continue that role but also must be encouraged to play a larger part, if the growth rate is to be impressive. This means that the declining role of this sector–from 60–40 per cent, through 50–50 per cent to 40–60 per cent–must be reversed to enable industrial production to grow. That is, temporarily at least, political socialism must be toned down.

If this position is accepted, greater scope is to be given to the private sector. Three fiscal steps, therefore, become necessary, —**first**, gaining its confidence that, for a few years to come, expropriation, unnecessary economic restraints and further taxation will not be the State policy; **second** reducing the current tax burden on business; and **third**, providing incentives to private saving and investment from internal sources.

This shift in policy may have its impact on resources. But more taxation is not the only way to raise resources. There are others : (1) Tighten up the current tax structure and administration. (2) As has been almost annually experienced, buyoancy of

public especially tax revenue may be expected consequent on greater private sector co-operation, and larger GNP due to a higher rate of growth, and (3) greater economy and efficiency in expenditure. Further, since the expenditure hike is to be halted, the need for more and more resources would not be so persistent.

(b) The short-term objective of stabilization–holding and even reversing price rise–is absolutely essential if the economy is not to get into doldrums. In a way, inflation is a root cause of much of economic trouble in India – rising public expenditure, privation in consumption, rising production costs, etc.

The control of expenditure and acceleration of growth through greater private sector effort–both suggested above–would help stabilization. What more is needed is to make it a joint banking fiscal effort. With the above steps, I guess stabilization and reversal of rising trend may take 3 to 5 years.

The other policy objectives like employment, social justice and self-reliance are incidental, and would to some extent follow from the above three. But their effective and substantial realisation would take a long long time, for they are secular problems and require vast resources to solve them. It serves little purpose to be blind to the difficult nature of these problems. At best, keep up the present attention, machinery and outlay on them but do not accelerate or promise too much.

To put the foregoing in different words, the long-term growth objective is a problem of greater government–private sector co-operation, indicating greater freedom to and less burden on private investment; and the stabilisation objective, one of fiscal–monetary co-ordination, indicating greater government control over banking.

III. Tax Structure Limitations :

The third side of the overhaul relates to tax structure. Tax burden, tax laws and tax administration–are the application of fiscal policy. In India these facets are certainly not ideal. Quite a few studies have been made on them and a few more are in the pipeline. Partly because these studies,–with which I do not agree in toto,–partly because limitations lead to the analysis of details and largely because my concern is with policy, I will defer my obsevations on how to meet these limitations.

9

WHAT IS ECONOMICS?

G. C. Wiegand

Some time in the late 1960's, in a hotel in Bangalore, I was headed for the dining room, when another gentleman approached from the other side. We both bowed to let the other enter first, and then suddenly recognized each other : "What are you doing here?"

I had known Professor Shenoy for many years. We had met at meetings of the Mont Pelerin Society, I had lectured at Gujarat University and had visited Professor Shenoy's home, and we had met again in Delhi. But it was at Bangalore that we had the first opportunity to chat for several hours. We talked about the growing difficulties of the dollar and the economic problems of India, but most of all about a subject which on first sight may seem rather abstract and without practical value, but which is actually of fundamental importance to a better understanding of the economic problems of the world : What is the nature, what are the limitations of economics? Is there something fundamentally wrong with modern economic theory, and with the application of this theory or theories to the problems of the world?

John Kenneth Galbraith, the one-time American Ambassador to India, once warned the British Association for the Advancement of Science that "the oldest problem in economic education is how to exclude the incompetent. A certain glib mastery of

verbiage...is easy for the unlearned and may even be aided by a mildly enfeebled intellect." This warning coming from the author of the **Affluent Society,** and for many years one of the ardent advocates of deficit spending and growing government intervention, should give us pause for thought.

Actually, the problem does not lie so much with the "intellectually enfeebled" charlatans, but with the "experts", who may be very clever and great technicians, and whose activities in government affect the lives of millions of people, but who have never paused to ask the basic philosophic and epistemological questions regarding the scope and nature of economics. And as the English economist Lord Robbins wrote a generation ago: "We all talk about the same things, but we have not yet agreed what it is we are talking about." Is economics a part of moral philosophy, is it a quantitative science, or is it a tool of politics?

What is Economics

Through much of human history–and this applies to all civilizations–economic thought has been a part of social philosophy, governed by what was conceived to be moral principles. The basic ethical "laws" honesty, charity, a sense of responsibility toward the family and society in general–were known and universally accepted by society, and usually assumed to be divinely ordained. It was the task of the social philosophers – the 'economists' – to apply these principles to the daily problems of economic life.

The Old Testament, which provides basic ethical principles for Christians, Jews, and, indirectly, Moslems is full of economic principles presented as moral laws, some dating back to the Law of the Covenant of the 11th or 10th century B. C., including for instance, provisions for the protection of the debtor class and the preservation of the fertility of the land – "the seventh year shall be a sabath or rest unto the land, a sabath for the land," when all land is to lie fallow. There are, of course, also laws against "usury", meaning any kind of interest-taking, and the prophet Ezekiel, several centuries later, compared the sin of usury with "defiling thy neighbour's wife."

The Greek philosopher Plato looked upon economic issues as a part of the moral order of society and was very much

inclined toward "economic planning". His famous pupil Aristotle was somewhat more "practical" and preferred "free enterprise" to "overall planning", but he too approached economic issues from the point of view of moral philosophy.

The same was true during the more than 1000 years of the Christian middle ages, whether we look at St. Augustine, St. Thomas or the Scotists, although there were variations in the attempt to "reconcile" the eternal ethical laws with the changing necessities of daily life – or the expediencies of doing business. Under what circumstances, for instance – or rather with the help of what subterfuges – could interesttaking be made morally acceptable.

Large business houses of the 14th and 15th centuries had their "economic advisors" to tell them how to conduct their business–profitably–yet within the limits of moral laws. The scholastic writers developed elaborate price and value theories, a number of doctrines dealing with usury, Nicole Oresme and others discussed the problem of currency depreciation, but all of the writers approached the problems from an ethical point of view. "There is no place in medieval theory" to quote Tawney, "for economic activity which is not related to a moral end, and to found a science of society upon the assumption that the appetite for economic gain is a constant and measurable force, to be accepted, like other natural forces, as an inevitable and self–evident datum would have appeared to the medieval thinker as hardly less irrational or less immoral than to make the premise of social philosophy the unrestrained operation of such necessary human attributes as pugnacity and the sexual instinct."

The Beginning of a New World

All this changed within the first few decades of the 16th century, as the Christian unity ended, and instead of one universal church with one moral law there suddenly sprung up several hundred churches and sects each proclaiming its own "truth" and judging man and the world accordingly. Calvin, who had a profound influence especially in Scotland and the United States, for instance, argued that even good Christians could accept and pay "usury" because it was a matter of "public convenience"; – which greatly facilitated modern banking. The em-

phasis shifted from "prayer" and "meditation" to "work", and while St. Augustine in the 5th century had warned that "no good Christian can be a merchant", famous 17th century Cambridge divine proclaimed that "the most lucrative way of doing business is the most Christian," because, as he implied vaguely, it made best use of God's gifts.

With no more universal moral law, and with general social, economic and political chaos – during the Thirty Years War of the 17th century about half the population of Germany perished – man lived, in the words of the English philosopher, Hobbes, a life of "constant fear and danger of violent death." Only a strong state could protect him. The new rulers who took the place of the feudal lords were at the same time the head of the state and of the church. They could determine the religion of the people, and they controlled the economy. In many respects – including economic theory – the Absolution of the 16th to 18th centuries resembled modern totalitarianism.

To increase their power, the absolute rulers needed soldiers and ships, and to convince the ragged masses that they ruled "by the Grace of God" they had to surround themselves with luxuries to emphasize the distinction between themselves and the mass of the people. All this required money – gold and silver, and the economists of the Age of Mercantilism concentrated on proving that gold and silver are "our best fruit, the inner mark of our strength." Even John Locke, who later developed doubts about mercantilism, argued in his younger days that "if any of our neighbours have (gold and silver) in much greater abundance than we, we are in many ways obnoxious to them... They can maintain a greater force... (and) can command the markets and thereby break our trade..."

It was thus up to the economists to develop policies to promote the accumulation of the largest possible amount of specie. And so they did : Acquire colonies which produce gold and silver; hence the age of colonial conquests; maintain an export surplus, so that the deficit countries had to pay the difference in specie. And to maximize the export surplus, it was necessary to forster exports and reduce imports, thus lowering the standard of living of the gerat mass of the people; – all this to strengthen the state, which supposedly existed to protect the defenseless

individuals. In our own times, some of the totalitarian countries, especially the USSR, have pursued a similar policy of depressing artificially domestic consumption; – not to accumulate specie, but to develop the nation's military and economic might, and in both instances the aim was the strengthening of the state.

The Age of Natural Laws

By the late 17th and the 18th century it became gradually apparent that Absolutism and Mercantilism "just did not work" as far as the rising middle class and the great mass of the people were concerned. Instead of "protecting" the poeple, the system empoverished them. It was thus time for political change and a new type of economic thought to promote "the general welfare" rather than to "strengthen the State." At the same time a drastic change in the intellectual climate occurred. Over a period of 300 years, since the days of Copernicus and Galileo, Scholars had slowly developed a system of "natural laws" which apparently governed the entire physical universe, culminating in the great Newtonian Revolution of the early 18th century which postulated a universe functioning according to a few simple laws of gravitation. The impact on the general intellectual climate was tremendous, so that it is not surprising that Francois Quesnay, a brilliant Frenchman, argued that if God had created an orderly physical universe, it was only reasonable to assume that in His infinite wisdom He had also provided for an orderly social system. Yet there was chaos in France: – apparently because the hoards of bureaucrats interfered with the divine order. It was thus the task of the 'economists'–the term is now beginning to be used officially and more widely – to discover the "laws of society", just as Newton had discovered the laws of physics. And once discovered, society would live according to the divinely created and hence perfect "Rule of Nature", a combination of the "loi morale" and the "loi physique." When publishing his **Tableau economique** in 1758, Quesnay and his followers (known as the Physiocrats – Rule of Nature advocates) thought they had discovered the innermost secrets of the socio-economic process, but alas, as we know today with the hindsight of more than 200 years, the Physiocrats were mistaken, and ever since the mid–18th century economists throughout the world have continued to search–in vain–for the innermost secrets of the "Grand Machine".

The New World of the 20th Century

But the world is changing rapidly. Newton's absolute laws of gravitation have been replaced by the modern laws of relativity, the notion of the "loi morale" has long been forgotten, economics has become a strictly amoral discipline, and the "immutable economic laws" have become mere economic tools in the hands of economic planners. While the textbooks still speak of "economic systems", in the world of the economic practitioners there are no "systems," only "problems" which are solved through ad hoc measures. Political expediency has become far more important than economic rationality. As President Roosevelt put it in explaining the devaluation of the dollar in 1932; "If this is not working, we shall try something else." And as the news magazine Time wrote in 1961 with regard to the Kennedy administration : Pragmatism "is the vogue word among economists today... When economists call themselves pragmatists, they mean that they are the opposite of dogmatists, that they are wary of broad theories... and that they believe that it is possible to improve the functioning of the economy by tinkering with it."

Modern economics–certainly applied economics–does not try to apply basic moral laws to the problems of the economy, and modern economists do not have much faith in the notion of a self–equilibrating mechanism of natural laws–Keynes already challenged this notion–but, as during the Age of Mercantilism, modern economists, guided by political necessities or expediencies, "tinker" with certain aspects of the economy with little or no regard for the over–all picture. If this sounds too one–sided a judgement of modern economic planners, it is certainly closer to reality than the notion that the nation's economy is guided by "experts" who know the facts, can predict the consequences of their policies, and are free to pursue the best policies without political interference.

If unemployment rises, the "logical" advice of politicians supported by the "experts" is to create more public jobs, and thus reduce unemployment. But, of course, these jobs have to be financed either through taxes on deficit spending, i.e. more inflation, and either method of financing make–work jobs tends to reduce capital investments, and thus the creation of new jobs. Hence

another suggestion to cope with unemployment. If there is unemployment and at the same time "poverty" – families of four having an income of less than about 25.000 Rs. are efficially classified as "poor"–both problems can be overcome through "transfer payments" : the government "transfers"–via taxes and inflation–purchasing power from the "rich"–the great middle class–to the "poor." But since the middle class refuses to reduce its standard of living, its rate of savings–and thus the available funds for capital investments–decline and there will be fewer new job openings. In 1978 the American public saved only about one fourth as much of its disposable income as did the Japanese, which is one of the reasons for declining ability of American industry to compete in world markets.

If an individual businessman experiments with new ideas–"tinkers"–he risks only his own money and future. But if a centralized government "tinkers" with the nation's economy without a basic blueprint, a general theory as to what can be done and how it can be done, the welfare of millions is at stake.

This is the great danger of modern economics. On the one hand the concentration of tremendous power in the hands of a few government planners – perhaps no more than two dozen in the United States – who "manage" the economy – always under the pressure of political expediency – by trying to cure the ills which seem most obvious at the moment to the general public, but which may not be the most important in the long run. And on the other hand the fact that the present state of economic understanding does not provide a reliable picture of the problems which face us nor the future which lies ahead and which we are trying to shape.

It is like giving small children sticks of dynamite to build their sand castles on the beach.

Walter W. Heller, the chief economic advisor to Presidents Kennedy and Johnson, and one of the architects of the "Great Society", the system of large-scale government intervention which started in the United States in the early 1960's, spoke of the "over-reaching responsibility (of the government) for the nation's economic stability and growth" – the "completion of the Keyne-

sian Revolution." "We now take it for granted that the government must step in to provide the essential stability at high levels of employment and growth that the market mechanism, left alone, cannot deliver." And how did Professor Heller expect to achieve growth and stability, which President Johnson called "the American economic miracle" ? By relying on "the internal advances of recent decades in positive economics, in the economic knowledge – the theory, analysis, facts, and figures – on which policy must be based."

But this hopeful view of the planners that modern economics provides the tools for macroeconomic management is not shared by any means by all economists. "There is at present no universal system of economic theory" wrote Neumann and Morgenstern, the creators of the famous Theory of Games, "and if one should even be developed, it will very probably not be during our lifetime." While Professor Arthur F. Burns told Congress in 1953 that "economics is approaching very slowly, very gradually; the status of an exact science, "he was unable as the Chairman of the Board of the Federal Reserve System during the critical years of the early 1970's to prevent the progressive deterioration of the dollar.

At the 1974 meeting of the American Economic Association, of which Professor Heller was the President at the time, numerous economists expressed their serious doubts about modern economics. "It is ironic", complained the chief economist of the savings banks system, "that with the tools of forecasting improving – with our sophisticated models and all those numbers – the forecasts are worse than before." And Professor Robert A. Gordon warned : "I don't think we have a body of economic theory that is of great help to us in to-day's world."

Since Professor Heller became the chief economic advisor to the White House in 1961, federal spending has increased from $ 104 billion to well over $ 500 billion in 1978/79; the national debt, which stood at $ 363 billion in 1961, is expected to reach about $ 850 billion by the end of the 1979 fiscal year; and to meet its chronic deficit the American government in effect had to borrow about $ 120 billion from foreign governments and central banks, a fact which even some of the American Congress-

man apparently do not know. Total indebtedness, public and private, rose from less than $ 1 billion in the early 1960's to more than $ 3 trillion in the late 1970's. Interest on federal debt alone requires close to $ 50 billion in 1979, compared with total federal spending of $ 97 billion in 1960. And the consumer price index (1967 = 100) rose from 88.7 in 1961 to well over 200 at the end of 1978, while the value of the dollar in international markets declined by more than 60 percent. Between the late 1950's and the late 1970's American exports have grown at only half the rate of that of other industrialized countries, and in fixed dollars they did not grow at all between 1974 and 1978. In 1976 the United States still had $ 12 billion surplus in trade in manufactured goods; by 1978 this had changed into a deficit of $ 12 billion. This is one aspect of twenty years of "planning for growth and stability." But there is another aspect : Chronic inflation produced an unprecedented boom in America. The number of employed workers grew from 66 million in 1961 to well over 100 million in 1978, and the real per capita income rose in 17 years from $ 2,700 to $ 4,400. The number of the "poor", as defined by government statistics, declined by more than 50 per cent.

"Pragmatic economics"–unguided and un–hampered by either the moral principles of normative economics or the natural laws of "scientific" economics–has produced a tremendous inflationary boom, pleasing to the great mass of the people and the politicians (just as the accumulation of gold and silver delighted the governments of the Age of Mercantilism), but the prosperity of the past twenty years was financed to a substantial degree by drawing on the substance of the nation accumulated in the past, and by burdening the future with a huge debt.

The Scope of Economics

What went wrong ?

In addition to the fact that more is needed than "tinkering" to build and maintain the "Grand Machine", modern economists, like many economists of the 19th century have failed to see that the "economy" which they try to understand and manage does not exist in a vacuum, but functions in an ever changing institutional and cultural framework. "The ultimate reality in econo-

mics" wrote the famous Chicago economist Frank Knight, "is the Zeitgeist", – the spirit, the intellectual climate, of the time, a fact which only too many economists tend to overlook.

Prior to the 1930's and 1940's, especially in the Anglo–Saxon countries, the economy was conceived in atomistic terms. "There is no 'America'; there are 120 million Americans," was a popular phrase as late as the 1920's. The economy was thought to consist of millions of individuals. Each was assumed to know best what was good for him, and to be free to make the best use of his abilities. And assuming that there are more intelligent and ambitious people than stupid and lazy ones, society was expected to progress through the individual efforts of millions of people each trying to improve himself. This was the picture which America had of itself, when the country grew within just a few decades from an underdeveloped outpost at the frontier of the western world into the most productive and economically most powerful nation of all times.

There were two important facets to the picture, both with strong moral overtones. The economic philosophy of Adam Smith, the "Father of Economics", was based upon the notion that man is guided by two ideas, the desire for self–advancement, "egoism", which makes for economic progress; and the awareness that the individual cannot prosper at the expense of society "altruism," which protected the social fabric : "Honesty is the best policy."

Obviously, egoism often won out at the expense of altruism. Economic progress was financed through a great deal of poverty of the masses both in the slums of the rising industrial cities and in the colonies which were exploited for the benefit of the homeland. Yet there was a great deal of strength in the notion of an invisible hand balancing egoism and altruism and thus promoting progress, and the United States seemed to provide a striking proof for the efficacy of the idea.

And there was a second aspect to the social philosophy; God had sent man to this world to make it a better world–better in the material sense. "Progress," a word which became popular in the 19th century, meant material and social progress, not progress toward a more spiritual life. Thus was the philosophy of the early 20th century.

But somehow wers and depressions left their impact, and by the 1930's the pendulum began to swing into the opposite direction. Collectivism began to replace individualism, even in the United States. 'America' became a reality in itself, notmerely a word by which to refer collectively to millions of individual Americans.

The change in the intellectual climate was soon reflected in economic theory. As long as the individual was the ultimate economic reality, the economy could best be explained in micro-economic terms. But as the emphasis shifted, and the nation as a whole came to be conceived as a living organism in its own right–with the individuals reduced to subordinate cells – it required macroeconomic theories to explain the changed picture of the economy. The real word – millions of individuals struggling to make a living – may not have changed very much since the 1920's, but our thinking has created a new world which can no longer be explained in terms of yesteryear economics. And the creation of this new world picture, and the efforts to cope with this new world, produce a great deal of unrest and uncertainty, which is, in part at least, the explanation for the intellectual, social and economic turmoil in which the world finds itself at present.

The "Three Layers" of Economic Reality

To understand economics as an evolving complex of ideas, we have to study it at three levels. There are first of all the "economic facts" and the "economic forces." But these function within an institutional framework which impinge upon the "facts" and "forces". In fact, the American school of "Institutionalists", which played an important role during the first two decades of the twentieth century, held that the key to an understanding of the economy are the social and economic institutions. And the institutions in turn are shaped by the general intellectual and cultural climate of the time.

The "economic facts" are described by more or less reliable statistics : the number of people at work; the volume of output, the quantity of money in circulation; exports and imports; etc. The "economic forces" are explained by such economic "laws" as supply–and–demand, the quantity theory of money, the production function, and a host of more sophisticated modern the-

ories. "Facts" and "theories" combined provide a picture of the economy, but even the both models, even so-called "dynamic" models, present "reality" only like a photograph which freezes a fleeting moment. Models tend to be "closed" by the mere fact that they have to exclude a multitude of variables, yet the world, of which the economy is a part, is changing continuously, including the thinking and the attitude of the people. Man is a historical being, not a scientific abstraction, which makes "scientific" predictions regarding man's future attitudes and actions extremely difficult.

As the English economist F. W. Paish wrote : "The older I get, the surer I become, that economics or at least applied economics, is more an art than a science." Yet most modern economists are trained exclusively as quantitative "scientists", not as moral philosophers, historians and anthropologists. This explains to some extent the difficulties which many students from developing nawions experience in relating to the problems of their own countries after receiving advanced degrees in industrialized countries.

Without an understanding of the ever changing institutional, and ultimately the evolving cultural framework, economic "facts" and "forces" remain dead abstractions.

Technological changes – mass production, jet travel, rapid communication, the impact of radio and TV on consumer demand have created an entirely new world and new ways in which the economy functions. The migration of uprooted peasants into the slums of modean metropoles, and in the U.S. the out-migration of the middle class into suburbs have created a host of and unpredictable socio-ecooomic problems, from the destructive racial riots in the USA in the late 1960's to the near bankruptcy of such cities as New York. The fact that in recent years nominal wages have tended to rise faster than productivity has resulted in growing mechanization, thus increasing unemployment among marginal workers. In some American metropolitan areas unemployment among black teen-agers has reached 40 per cent, yet there is an unfilled demand for unskilled workers in many service industries, but among many young people jobs in service industries are "menial" and hence rejected.

The growth of union power has fundamentally changed the "law" of supply-and-demand as far as employment and wages are concerned. If the supply of workers is greater than the demand, i.e. if there is unemployment, wages should tend to decline, according to economic theory. But this is clearly no longer the case in the United States. Despite chronic unemployment hourly wages in American industry rose by about 50 per cent. Between 1970 and 1978, because the labour unions had sufficient political power to force the government to "validate" the rising wage level by inflating the demand through the creation of more money and credit, and by maintaining the chronically unemployed marginal workers on the welfare rolls, so that they did not exercise a depressing influence on the rising wage levels. We know that this has happened in the past but we have no way of predicting what will happen during the next two, let alone next ten years, and there is thus no way of predicting the development of American production costs, – and thus the future of the dollar. We can assume that things will continue as they have in the past, but this a mere guess not a scientific forecast.

Just as the cost of labour is extremely hard to predict, so is the quantity and quality of labour. An economic planner forecasting in the early 1950's the probable demand for and supply of labour in the United States would have been completely wrong if he had not taken into consideration the vast influx of women into the labour force. Between 1947 and 1977 the number of men in the labour force increased by about 35 per cent, the number of women by 125 per cent. If the influx of women had been at the same rate as that of men, there would have been in 1977, 12 million fewer workers, the country probably would have suffered from a shortage of labour rather than unemployment, and the output of goods and services, and hence the general standard of living, would have been considerably lower.

But who could have predicted in the early fifties the vast social and technological developments which drove millions of American women from the home into the market place ? The rapid mechanization of the American home greatly reduced the time needed to keep house; the breakdown of millions of marriages made it necessary for divorced women to support themselves and their children; and then there was the desire for an ever

higher standard of living – a swimming pool, two instead of 'just one' car – which made it necessary for two members of the family to add to the family income. All these technological and social changes had a profound effect upon economic development during the past twenty years. They could not have been predicted and neither can we predict what the next twenty years will bring. Will there be a stabilization of the American family; a reversal of the sharp down–trend in the birth–rate; a change in the attitude and influence of labour unions (which after all represent only about 22 per cent of the labor force); will there be a revival of the traditional Puritan ethics of hard work and frugality, which were largely lost during the past thirty years of the inflationary boom ?

All these are not economic "facts" in the narrow sense, yet they are likely to have a more far–reaching effect on economic developments in America than any purely economic projections.

We can predict with some accuracy the number of young people who will enter the labour force during the next ten years on the basis of existing population statistics. But we don't know how well they will be prepared for the jobs which will be available. After all, even though America spent in 1978 about three times as much on its public schools than in 1965, more then ten percent of those about to graduate from High School were found to be "functionally illiterate" according to a government survey, and thus ill prepared for holding a job in modern society. What will be the situation ten years hence. And what will be the attitude of the young people toward working for a living rather than depending upon welfare ?

It is hard enough to predict cyclical trends for the next two years, but economic planning requires reasonably reliable projections extending over the next twenty years. Modern economics – whether in the narrow model building or the wider sense of socio–economic philosophy – does not have the tools to make long–range predictions. And herein lies the profound danger of centralized planning, of which the great mass of the people – the potential victims of false economic planning and management – are not aware. The collapse of mercantilism helped to produce

the great revolutions of the 17th and 18th centuries. Are we headed in the same direction?

What will be the future of the Indian economy twenty years hence? Tell me what India and the Indian people will be like, and I will venture an – "unscientific" – guess.

10

THE LONELY SEARCH FOR TRUTH

Antony Fisher

It is commonly thought that the role of professor, researcher and thinker is one of the easier pursuits in life. Physical demands are few, competition is minimal and the rewards, both financial and psychic, are sustaining. Yet in contemplating the life of Professor B. R. Shenoy, we realize the situation is quite the opposite. He who is dedicated in the search for Truth must be uncommonly courageous because he will be often maligned; he must be utterly self-sufficient because he will be often lonely; and yet he must be completely humble because he will never be totally satisfied.

Shenoy's dedication to the study of economic cause and effect in human action was made even more difficult by a popular fallacy prevailing during his lifetime : the concept that government can resolve economic problems. Almost all the economic literature, all of the intelligentsia, and most political pundits were oriented towards varying degrees of socialism as the sine qua non of human progress. Shenoy found these vogue-ish ideas to be highly suspect, undocumented, and frequently downright unreasonable.

On government committees he would frequently question the proffered solutions to various economic problems, pointing out the pitfalls and deleterious side effects, or he would try to warn the public against the consequences of certain programmes through his writings and teachings. So often he was the only voice protesting; and so often his predictions were tragically fulfilled. He warned not only of the questionable feasibility of

government programms, but of the accretion of power which fosters a "government by coercion", and which ultimately, as Lord Acton warned, "corrupts absolutely". But freedom of the people in the largest freely elected republic in Asia was sacrosanct to Shenoy, and his heart was breaking to see its vast potential wasted.

Shenoy and I had one particular economic interest in common: agriculture. It was Shenoy's understanding that if food supplies are to be maximized at the lowest possible prices, "the market" must operate within the rule of law. Then and only then will the necessary technology, ability and capital formation develop at the fastest possible rate. Protection of private property, free trade, low taxes, and of course, a concurrent "sound money" are the basic principles which produce maximum resources at any given time.

As I built up the Buxted Chicken Company in England, we were able to multiply jobs and rates of pay many times. We saw rates of pay go through four pounds a week and then ten pounds a week, at which point some of the employees could buy cars. By the time we paid twenty pounds per week we had to build car parks for the factories. Simultaneously we were able to cut the price of our product ex-farm six times in fourteen years with a sales volume which started with nothing in 1953 and rose to over forty million chickens, per annum and several million turkeys and ducks by 1968. Taxes were still relatively low in those days and government regulations had not yet proliferated to stifle endeavour.

Thus I was able to watch and participate in an excellent practical example of the theory in which Shenoy and I believed. It is worth nothing that the chicken meat industry, a completely new industry in the UK – only got going when the British government removed farm feed rationing in January, 1953. They brought in farm feed rationing in 1939 at the beginning of the war and continued eight years after the war was over, showing that bureaucrats are somewhat more durable than generals.

The Indian food situation is but one more example of well meant government interference designed to benefit the people by increasing supplies, but doing it in a way which seriously hinders the attainment of that objective, to the dismay, frustration and anger of all.

It is not surprising that during the developing stages of the coercive power of government, those who endeavour to explain the errors of this course are not popular with their governments. In fact, they become anathema in direct ratio to the degree of power assumed by government leaders. And so it was for Shenoy. But he kept writing, and those of us who had the privilege of seeing him occasionally at meetings such as Mont Pelerin Society conferences, know that he never lost his zeal. Strict adherence to principle under these circumstances is very difficult indeed, and one is thought to be masochistic by continually asserting one's views and continually being rebuffed or avoided... something of a self-imposed outcast. History is full of examples of men who couldn't adhere to truths as they saw it; Galileo tried and then recanted when faced with torture. Shenoy wasn't threatened with physical torture, but what mental anguish and uncertainties he suffered !

His children must be so very proud of him, just as they gave him such solace during his years of trial. I have lost touch with his sons over the years. Through the courage, the tenacity and dedication of Prof Shenoy and his family, we will eventually live in a world which recognizes that maximizing individual choice is the route to maximizing the standard of living, and that human welfare and human freedom are inseparable.

11

THE PRODUCTIVITY OF FREEDOM

C. Lowell Harriss

Freedom is more than an **end**, something which in itself is of incalculable value. Freedom is also a **means** for achieving other ends. Among the objectives which freedom helps man achieve are those of his economic life.

But what, really, does the term "freedom" mean in relation to economics? How does it relate to the productivity of an economy? Both questions are difficult. Neither of them am I able to answer to my own full satisfaction. Few of the many aspects are black or white. Gray areas exist. The problems are complex. The values involved are not always in harmony.

The lack of certainty does more than compel caution in presenting conclusions. The existence of doubt also leads to failure to recognize points which, it seems to me should be more nearly clear than debatable. My university students seem rarely to appreciate the significance of some major elements. And who has not heard, many times and from many sources, statements to the effect that the world's poor, "emerging" countries cannot afford freedom because of their desire to speed economic development? Economic freedom, however, can make an incomparable contribution to good economic performance.

Freedom – The Concept

Freedom implies the absence of restraint. Yet we also think of it as the existence of opportunities – the more numerous the alternatives available, the greater our freedom. As related to economic affairs, freedom often means less, rather than more, res-

triction imposed through the political process, i. e., by government. Who will deny the validity and the pertinence of this interpretation? Denial may come from the person who has been blessed by the opportunity to live where governmental restrictions bother him little – or by the man who has become desensitized (or never had a chance to develop feelings for economic freedom).

Freedom in the fullest sense, however, covers more than the absence of governmental restriction. The freedom that counts economically–and humanely–includes the absence of privately created restrictions whose origin is not in some **quid pro quo.**[1] The massing of economic power in various parts of an economy with generally 'free' markets can restrict the freedom of persons not exercising the power.

Freedom in economic, as well as in personal, life requires government and the restraints it imposes. The preservation of order and the enjoyment of personal rights cannot exist without curbs on action, curbs which limit opportunity but which operate under law. Organized economic life needs "rules of the game," a framework within which activity can be carried on with assurance about rights and obligations. A binding legal obligation – to live up to the terms of an agreement – in one sense limits freedom. In a broader sense, however a body of law which compels men to respect their obligations is a source of freedom and opportunity. The legal system makes possible the contracts and arrangements which are indispensable for specialization and capital accumulation. The essentials of advanced economic life require the governmental imposition, and enforcement of law.

1. By **quid pro quo** restrictions, I mean those which result from inability or unwillingness to meet the terms demanded by others in a generally competitive market : A's failure to get a new auto because he was unable to meet the seller's terms or B's failure to get the better job because he was unwilling to study at night. These must be distinguished from privately erected obstacles to entry by persons who have the qualifications into a line of business or occupation. Private (nongovernmental) restriction on freedom may be illustrated : (a) the existence of producing units so large that potential newcomers face hurdles which are insurmountable; (b) wage agreements that effectively exclude from jobs those persons whose productivity makes them worth less than the wage set.

Government acts in another way to create, while also restraining, economic freedom. Government can use the power of coercion to prevent undesirable "neighbourhood" or "third-party" effects. Restrictions against the pollution of air and rivers or inappropriate uses of land provide example. Personal and business activity need to be controlled to reduce adverse effects on persons who are not parties to the transactions. In short, "social costs" of private activity must not be ignored in society's economic calculations if we are to get best overall results. Curbs on some freedoms are necessary to assure the existence of others.

Yet the government which restrains (participates or intervenes– different terms carry different connotations) to make liberty possible also restricts freedom. In surveying the broad scope of government restraint in modern economic life, one sees many "gray areas". Their frequency and extent, however, ought not to get predominant attention. The central issues deserve attention and most need to be understood. What is the relation of freedom to the essential tasks of an economic system ?

What Goods and Services Shall be Produced ?

An economic system exists to produce goods and services for consumers – today and in the future.[1] But not just anything not great masses of this and nothing of that.

The objective is to produce a vast array of goods and services in the proportions which will best satisfy human wishes. The optimum combination can be produced only if the public can, does, reveal personal desires in all their myriad nuances. What methods of showing desires are available ? One method consists of our buying as individuals and as private groups – voting in the market place with our money. We can also reveal desires in buying collectively through government. The processes of individual and collective buying differ–and so must the quality of the results. Three differences warrant comment.

1. The nature and conditions of work are no less important than many of the rewards we call consumption. Bot positive and negative values lie in work, activity, in the job itself. Here, too, freedom plays a role of paramount significance. The more numerous the opportunities to select among alternatives, the greater the likelihood that one can settle on the best combination of job conditions among those available and also induce the type of change which makes for better jobs.

1. When buying in the market, individuals may not always do what they really prefer, or would prefer if they had more facts, including those which will come with experience.[1] Mistakes are legion. Yet the person who makes an erroneous consumption choice also bear the burden. The effect on incentives will be direct and unrelenting. When we buy collectively through government, however, a considerable minority–perhaps even a majority–will ordinarily have preferred some other arrangement. They would rather have more of this, less of that, a different mix of "public and private goods and services." The direct and indirect expression of preferences through the process, of voting in political elections will leave some of the public getting less satisfaction of its wants than the dollars spent would permit. Compulsion on minorities, therefore, sacrifices human satisfactions which would be met under a regime of freedom–except for such truly collective wants as national defence and internal policing.[2]

2. In getting produced those things which are most likely to satisfy human wants, the freedom of the market possesses two other inherent advantages over the political, that is, the governmental, process. (a) Governmental decisions are discontinuous. They are made at infrequent intervals. Once made, they often commit spending for months or years, and in amounts which are subject to little change. Much private spending, in contrast, shifts constantly. In the market place we can vote with every dollar on a list of candidates which is long indeed. Alternatives shift from day to day. Prices and qualities are kept on the move. New opportunities appear. Consumer reaction to them induces changes in government purchasing. (b) Governmental spending decisions are made through intermediaries, not by the ultimate user, the citizen being served. Elected officials, the civil service, and the military place the orders. The public served remains somewhat removed from the choices.

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1. As consumer goods get more complex, the need for information increases.
2. More typically, the family rather than the individual is the unit involved. There are, for example, things I as an individual want rather more than higher prices of food, putting a man on the moon soon, or subsidizing the development of new agricultural land. Yet some of taxes I pay to the national government go for these purposes.

3. New products and new types of services are most likely to appear in an environment of freedom. Buyer reactions then indicate how much of each shall be produced. For many good reasons, government spending patterns tend to be largely stable. Of course, innovation does occur in government, while private monopoly can restrict innovation in the world of business.[1]

Yet even private monopolies may act progressively. And most of the world of business is free and more competitive than government.

How to Produce

Most goods can be produced, and most desires for services satisfied, in more than one way. Some methods are better than others. The general welfare objective is to use the minimum of inputs per unit of output. The closer the economy comes to this objective, the greater the total output obtainable from the productive resources available.

In the business world, the hope for profit and the fear of the loss act powerfully to compel economizing in production. Freedom provides opportunity and more. One producer's aggressiveness in cost cutting is another's challenge or threat. Governments, however, do not need to meet cost demands in the same sense as do businesses. If the taxpayer can be compelled to pay the bills (including losses in commercial-type activities), what are the inducements to economizing? They exist, but making them powerful and effective requires exceptional imagination, effort, and freedom within government.

Efficiency demands smaller rather than greater use of inputs per unit of output. To take advantage of opportunities, to adjust to the unending (and also uneven) change (a) of the prices of inputs and (b) of technological possibilities, a producer must be free. He must also be under pressure to do what seems best. Production possibilities differ widely from time to time, from place to place. Any single pattern, no matter how well adapted to some situations, will be unsuited to others, and definitely bad for some. Freedom permits the public to benefit from such variety.

1. Obstacles to innovation in business are not limited to monopoly in any strict sense of the term. Lethargy, ignorance, lack of capital, and red tape inside a company are among factors limiting innovation.

Where producers are free to seek better methods and even more certainly where producers are under pressure of competition to reduce costs–the public stands to benefit. Government agencies cannot be expected to improve efficiency to the extent that, and as promptly as, permitted by changes in technology and changes in the prices of inputs. Nor does governmental regulation appear promising as an "encourager" of cost reduction. The governmental agency, whether as an operating entity or one regulating private businesses, faces more than one disadvantage as a promoter of production efficiency. So does the business firm or the labour union which is somewhat insulated from the free competition of others. Not the only examples in America are to be found in the makework policies of labour unions and obsolete local laws affecting new construction.

As producers, many of us may nurse a sneaking sympathy for restraints which impede the growth of productivity if they seem to create demand for our labour or what we have to sell. Nevertheless, the result in any "not–so–long" period will be some failure to improve the relation of output to input. Society suffers. To repeat, protection from the forces of freedom will result in greater use of productive resources per unit of output.

Who Gets What?

For the economy as a whole, there can be no Santa Claus, no "free lunch." Society must pay for what it gets. The payments thus made are the incomes of the recipients. Most of us are on both sides–paying and receiving. On one side, we want the amount to be large; on the other side, we want it to be small. Each of us presumably tries to do the best he can, to make the best settlement possible with what he has, in getting income and then in using it.

The greater our freedom to make the best bargains, the better in general will be the results. No one wants to pay others more than their services are worth, and freedom to reject demands for overpayment reduces the likelihood that we shall be forced to do so. In turn, the broader our range of freedom, the larger our opportunities to get the most that our services are worth to others.

In contrast, restrictions on freedom whether imposed by government, the possessors of private power, or one's own commitments made earlier will make the terms for some of our bargains less satisfactory than is potentially possible.

As a result of such compulsion, we shall pay more than is inherently necessary for what we get and get less than our services are worth.

The distribution of income which results from complete freedom would be less than ideal, judging by the standards to which most of us hold. The person with no productive capacity might be left out in the cold because private philanthropy–a not insignificant feature of free society in America might not fill all humanely distressing gaps. Long ago government came to use funds collected in taxes to meet some needs of persons whose income from production seemed inadequate. Who among us does not endorse such policy?

Transfer Payments Modify Income Distribution

Modern society goes further. Trasfer payments (such as social insurance and aid to farmers) modify income distribution. The results differ from those of the free market. Taxes also redistribute income and wealth. The general results may, or may not, suit us better than those from freedom.

Nevertheless, in three important respects the consequences of freedom have no small economic merit : (1) The kinds of services desired are most likely to be forthcoming if demanders and suppliers are free to make the best deals possible. (2) Efficiency in utilization will be encouraged. The employer will not use labour being paid $4 an hour jobs worth $3 an hour. Men capable of producing enough to justify $4 an hour will rarely spend their time on jobs worth $3 an hour. The desire for income leads free men to "allocate" themselves toward the work where the rewards are highest because worker productivity is highest. (3) Men seeking work will not be denied jobs because someone else sets conditions–sex, colour, age, or creed – which are not pertinent to the task. Nor will a man be denied work because his productivity does not come up to the lowest level of wage rate permitted by law, union–management agreement, or custom.

Economic progress requires that things be done differently. What could be more obvious than that innovation change, the

striking out in new directions, all depend upon freedom ? Bureaucracy–in government, in large businesses or labour unions, perhaps even in universities, religious organizations, and private foundations–provides stability without which progress is impossible. Yet bureaucracy and the slow decision processes of legislatures get in the way of the change which makes up the very essence of economic progress. Perhaps the greatest contribution of freedom to economic productivity lies in the fruits of progress.

Concluding Comment

Reality cannot compete with dreams, at least not "fairly." How easy to romanticize, perhaps about free enterprise, perhaps about possibilities of improving the world by some governmental policy which will restrict the freedom of others : Mr. Dooley made a good point when he said, "A man that'd expect to train lobsters to fly in a year is called a reformer and remains at large."

Government will inevitably influence economic affairs extensively. One element of the essential intervention will deal with private market power. Another will involve efforts to meet the problems of particular "soft spots"–individuals, groups, areas—in exceptional need. Let's hope that the results will be constructive. Yet is it not a bit sobering to look at almost the oldest example of governmental intervention in the United States–regulation of railroads–and that which today gets the most financial outlay – agriculture ? The results are less than brilliant, scarcely models for the "good society". One reason for the lack of success in these cases is that governmental activity has imposed restrictions on freedom rather than enlisting freedom–in combination with those things which government has to offer.

One advantage of prosperity is that it frees us from the need to worry about small economic problems. Many details of government spending are just that, small and unimportant. But many are not. The quality of the decision must influence profoundly the quality of society. In the words of one of history's greatest economists, Alfred Marshall :

> "Government is the most precious of human possessions; and no care can be too great to be spent on enabling it to do its work in the best way; a chief condition to that end is that it should not be set to work for which it is not specially qualified, under the conditions of time and place".

12

"A MAN ALONE"

George C. Roche III

This article is dedicated to the memory of Professor B. R. Shenoy who, like Frederic Bastiat, knew what it was to be a man alone.

For the past two centuries, the Western world has been torn by a continuing debate : Does the well-being of society as a whole stem from the freedom of enlightened individuals to pursue their own interests; or must government intervence in the lives of its citizens to assure the greatest collective good ? Oddly enough, the liberal historically has taken first one side and then the other in that debate. "Liberal" today implies a readiness to use government as a problem-solving device, as a handy and absolutely necessary tool to save the citizens of (a nation) from the dangerous effects of excessive freedom. In the first of the nineteenth century, during the lifetime of Frederic Bastiat, "liberal" had a precisely opposite meaning. For Bastiat and the liberals of his age, the encroachment of the state in the lives of its citizens was not a solution to society's problems, but instead was the problem itself.

Though the meaning of the word "liberal" has changed greatly since Bastiat's day, the underlying argument hos not. We are still trying to decide whether or not government should be the final arbiter of men's lives. This is why Bastiat's words have so much relevance today. He addresses himself to the central argument of our own times. Always quick to defend the consumer

the forgotten little men of most modern economic analyses, Bastiat writes in terms at once understandable and entertaining. He often turns a withering blast of ridicule on those who presume to know what's best for everyone else. And, of course, to be laughed at is the one thing which big government has never been able to stand.

Writing long before government reached the enormous proportions of our own times. Bastiat predicted the history of the past century :

> "The state quickly understands the use it can make of the role the public entrusts to it. It will be the arbiter, the master of all destinies. It will take a great deal; hence, a great deal will remain for itself. It will multiply the number of its agents; it will enlarge the scope of its prerogatives; it will end by acquiring overwhelming proportions."

Bastiat was one of those men fated to stand at the crossroads of sweeping histrorical events and radically conflicting ideologies. He lived his life in the turbulent aftermath of the French Revolution and personally witnessed the upheavals of 1830 and 1848. He was active in the political and ideological debates of his age. The battle he fought as a mid-nineteenth-century public figure were the battles which still mold the events and thinking of the Western world. This perhaps explains the timely and lively quality of Bastiat's thinking which immediately strikes the reader of today.

As an author, columnist, and politician during a stormy period of French history which brought the citizens to the barricades again and again which witnessed the overthrow of several French governments, Bastiat realized that the radical changes induced by the Industrial Revolution were making a totally new society of Europe. There could be no road back to the past, no staying the hand of change. He saw before most of his contemporaries that Western men had their destinies in their own hands as never before. Prosperity or disaster awaited the new industrial world, depending upon a single issue : would men allow the system to work, or would they, in Bastiat's phrase, "fear liberty" too much to give themselves this new beginning ? Bastiat realized that the very complexity of the new order demanded a flexibility that

the dead hand of government planning could not tolerate, a flexibility which only individual freedom in transactions could supply. The slender Frenchman spent his life fighting to give all Frenchmen the freedom which alone could make the specialized world of the Industrial Revolution function properly.

Socialists, communists, visionaries, demagogues, and planners of every description were all his foes. He stood steadfastly and often alone against the trend of his time. Even such allies as he had in the struggle were not always in agreement with him. True, Bastiat and his thought were related to Burke, Mill and the Whig tradition in England. True, Bastiat joined Alexis de Tocqueville in his resistance to the influences of the French Revolution. It is even true that in many ways Bastiat drew heavily on the thought which typified the nineteenth century. Yet somehow Bastiat was a man alone, not only in his lofty independence, but also in the frank and fearless application of his ideas. The search for popularity and approval never shifted him from his chosen course. Perhaps this is why Bastiat speaks so clearly today: His vision was unclouded by the rhetoric of his age.

Frederic Bastiat was far more than an economic journalist. In his work there appears a grasp of the broadest social issues. In a modern world dominated largely by systems builders, Bastiat has a great deal of importance as an antidote to the subtle poison contained in the idea that some social architects can mold the lives of men to the advantage of all.

Perhaps we should not be surprised that the nineteenth century spawned an unusually large number of social architects. The enormous changes of the Industrial Revolution, coupled with the political revolution which had begun in France and which had swept through country after country in the Western world, had strongly impressed the idea of change upon the European mind. Since then change was not only sweeping in nature, but was presumably, change for the better, the idea of social reconstruction, of remodelling society in the aftermath of revolution, came to dominate the minds of many. The idea of evolution, so dear to nineteenth century thinkers, also played its part in promoting the idea of progress. Nineteenth-century thinkers tended to see themselves living between the old and the new, groping toward radical change, toward a new society, toward a new world. Men had

flirted with the idea of "progress" since the time of the Greeks, but it was the men of the ninteenth century who promoted progress into the be-all and end-all of society.

The rise of a new industrial working class channeled much of the century's thinking into the confining intellectual framework of socialism. Building upon the anti-individualistic doctrines of Rousseau and the eighteenth-century philosophers, the social architects came to feel that only collective and class-oriented action on the part of the workers could produce the "progress" which they felt awaited a properly planned society. Before the theorists were through, they had produced the bloody revolutions of 1848. Marx, in the same year, spelled out the doctrine of class struggle in the Communist Manifesto, urging violence as not only necessary but desirable.

Bastiat recognized, far sooner than most men, the extreme dangers involved in the new politics and economics. Bastiat stood on particularly difficult ground since he could not pose as a defender of the old system under the French monarchy. In fact, Bastiat was a sharp critic of the old-style interventions in the lives of men, but he was also perceptive enough to see that the new-style interventions in the lives of men were an aggravation to social problems rather than an answer. Thus, Bastiat was forced to believe in progress. He could not urge a return to an earlier, happier day and had to meet the social architects on their own ground, granting their premise of an unfortunate past and yet pointing out the fallacies involved in their proposed utopias. In this struggle, Bastiat found himself cast in a familiar role : a man alone.

Fortunately, Frederic Bastiat brought to his difficult task both insight and humor. He was unfailingly fair in his observations. Indeed, Bastiat's good humor and complete fairness in public controversy drove his opponents to distraction. It seems that there is nothing more frustrating than good humor and fair play for the embittered ideologue who is willing to distort the truth in the name of his mission to serve mankind.

Bastiat probed the minds of the social architects and called attention to the almost total disagreement to be found among them :

> "If I had to point out the characteristic trait that differentiates socialism from (a proper view of political economy), I should findit here. Socialism includes a countless number of sects. Each one has its own utopia, and we may well say that they are so far from agreement that they wage bitter war upon one another... What then, is the common denominator to which all forms of socialism are reducible, and what is the bond that unites them against natural society, or society as planned by Providence? There is none except this : **They do not want natural society.** What they do want is an artificial society, which has come forth full-grown from the brain of its inventor... They quarrel over who will model the human clay, but they agree that there is human clay to mold. Mankind is not in their eyes a living and harmonious being endowed by God Himself with the power to progress and survive, but an inert mass has been waiting for them to give it feeling and life; human nature is not a subject to be studied, but matter on which to perform experiments".

It was the recognition of that common trait of the social architects which caused Bastiat to mutter, "I still cannot understand why the numerous partisans of the systems opposed to liberty allow the word **liberty** to remain on the flag of the Republic."

Building upon his observation that the concern of the socialist was the development of an artificial social order, Bastiat stressed the point that the denial of the idea of a natural social order carried with it the denial that man's interest are fundamentally in harmony. Therefore, one of the prerequisites for destroying the natural order of society and substituting an artificial order in its place would be the necessity to demonstrate that men's interests are fundamentally antagonistic, one to another. Thus, the very nature of the social-architect idea necessitated a belief that the property owner and the worker, capital and labour, the common people and the bourgeoisie, agriculture and industry, the farmer and the city dweller, the native born and foreigner, the producer and the consumer, were all fundamentally in conflict, a conflict which must be furthered until the existing social order was destroyed in the process, thus removing all distinctions between and among men. For Bastiat, this explained how the social

architects could profess to be filled to the brim with love for humanity, yet constantly preach the doctrine of hatred.

The results for France were disastrous; indeed, the results for any country which listens to such prophets of hatred are always the same. Soon the poor rise against the rich, the proletariat against the capitalist, class against class. And when this happens, the social architects then tell us that conflict is the inevitable result of freedom. Substitute social organization and enforced brotherhood and all such conflict will pass away. Thus, those who have engineered our discontent now offer themselves as the only people who know how to bring it to an end.

Bastiat, of course, knew full well that the excuse of the social architects for assuming great power was that the power was in the hands of the state, for the good of all. As a benevolent and inexhaustible being, the state would provide " ... bread for all mouths, work for all hands, capital for all enterprises, credit for all projects, ointment for all wounds, balm for all suffering, advice for all perplexities, solutions for all problems, truths for all minds, distractions for all varieties of boredom, milk for children and wine for old age," and thus become the agency"... which provides for all our needs, foresees all our desires, satisfies all our curiosity, corrects all our errors, amends all our faults, and exempts us all henceforth from the need for foresight, prudence, judgement, sagacity, experience, order, economy, temperance, and industry." It was Bastiat's great gift to be able to spell out the assumptions of the social architects so clearly and simply, leaving the absurdity to speak for itself.

Yet, there lurked behind that absurdity the terrible truth which lies at the heart of all social planning :

> "If you start with the already absurd assumption that the government is the morally active force and that the nation is passive, are you not putting morals, doctrines, opinions, wealth, everything that makes up the life of the individual at the mercy of the men who one after another come to power ?"

For Bastiat, the essence of social organization rested in a single idea :

> "We see, then, that in almos tall of the important actions of life we must respcte men's free will, defer to their own good judgement, to that inner light that God has given them to use, and beyond this to let the law of responsibility take its course."

He knew that human transactions were not possible in any lasting way without barter, exchange, appraisal, and value, and he knew that none of these acts of choice were possible without freedom, nor was freedom possible without responsibility. Bastiat's solution was simply stated in the phrase, "freedom of transactions" :

> "God has endowed mankind also with all that it needs to accomplish its destiny. There is a providential social physiology, as there is a providential individual physiology. Social organs too are so constituted as to develop harmoniously in the open air of liberty. Away, then, with the quacks and the planners ! Away with their arti ficial methods ! Away with their social workshop, their phalanstery, their statism, their centralization, their tariffs, their universities, their state religion, their interest-free credit or bank monopolies, their regulations, their moralization, and their equalization by taxation ! And after vainly inflicting so many systems on the body politic, let us end where we should have begun. Let us cast out all artificial systems and give freedome a chance — freedom, which is an act of faith in God and in His handiwork."

The sweeping changes of the Industrial Revolution, coupled with the equally sweeping changes of popular democratic politics, inevitably brought with them a new society. Bastiat was far more able than conservatives like Burke and Tocqueville to come to terms with that new society, but, unlike the rationalists (from which liberalism and certain strains of libertarianism sprung), he did not make **Freedom** and **Man** into abstractions. He insisted that men were imperfect and unique, that freedom could be found only by protecting the individual's life, liberty, and property from the predations of other men, organized or unorganized. Thus he adapted a unique conservative-libertarian position, well-suited to a difficult transitional stage in modern history.

In that unique middle way between conservative and the libertarian, Bastiat offers us a great deal. It is true that the twentieth century has brought special concerns, such as the Cold War and the problems of modern technology. For these unique problems, we must find our own unique solutions. What Bastiat has done is light the way to a path which we must now discover for ourselves.

This is the heritage of Frederic Bastiat, "the man alone."

13

PROBLEMS MIRACLES POSE

Leonard E. Read

> A miracle is a work exceeding the power of any created agent, consequently being an effect of divine omnipotence.
>
> — Robert South

A miracle, according to the dictionary, is "thought to be due to supernatural causes," or, as the English clergyman, South, has it, "devine omnipotence." All miracles do indeed, exceed the power of any created agent, that is, any man past or present. And unless a divine source or cause of miracles is recognized, the resultant confusion can lead to chaos — a point that requires some explaining!

My son and I were peering out of an airport window at a 747 jet and I wondered aloud what George Washington would have said had he seen this miracle. Responded my son, "I'll never touch another drop!"

The Father of our country never saw an airplane and perhaps never dreamed of one. Yet he, along with a few other patriots, embraced a fundamental and profound truth which they set forth in the Declaration of Independence. I believe this spiritual truth is responsible for the 747 jet and millions of other miracles.

These spiritual and intellectual exemplars did not have material miracles in mind but only moral and ethical principles that

would permit Americans to be self-responsible — each his own man ! They sought an escape from the kind of authoritarian rule that had, with few exceptions, plagued societies since the dawn of history. The truth they discovered correlates with the supernatural or God or Infinite Consciousness or the Creator — call the Divine Omnipotence what you will. And here it is, **the very essense of Americanism :**

> – that all men are.....endowed by their Creator with certain Unalienable rights, that among these are Life, Liberty and the pursuit of Happiness.

Here we have the greatest wisdom written into a political document. It unseated government as the endower of men's rights and placed the Creator there !

It is one thing to write such a revolutionary concept but quite another matter to implement it — put it into practice. There followed a fews years later the Constitution and the Bill of Rights. These limited government more severely than ever before in history — hardly any organized force standing against the release of creative human energy.[1] Government was so limited that it had nothing on hand to dispense nor the power to take from some and give to others !

When citizens cannot turn to government for security, welfare or prosperity, to whom or what do they turn ? To themselves ! Result ? Self-reliance and the greatest outburst of creative energy ever known — miracles by the millions. It is important to keep in mind that the genesis of these miracles was not the deliberate intent to effect a miracle; they were the fruits of a heavenly principle : the man's rights are the endowment not of government but of the Creator — **the exclusive source of all creativity** !

Comments on a single miracle — the airplane — will make my point. George Washington would have stood in awe of the Weight brothers' first plane, which did no more than leave the ground and flutter in the air for a few minutes. Move ahead a few generations and imagine his astonishment had he witnessed

1. For an excellent detailig of the "no's" and "Not's" see "Constitutional Restraints on Power" by Edmund A. Opitz (The Freeman, April, 1978),

the fantastic performance of one of the planes I rigged in WWI — the Sopwith Camel.

Suppose he could have foreseen the 747 jet, that miracle with about 50,00,000 parts: and no one knowing how to make a single one of them ! Who can imagine his reaction to this glory of the heavens ! Transportation at 500–600 miles per hour as compared with his fastest–on horseback. This miracle of ours can fly around the world in about the time it took him from Mount Vernon to Jefferson's home – a mere hundred miles. Interestingly, Washington and his compatriots **unknowingly,** set the stage for that jet and millions of other miracles !

No one can see the blessings that will flow from human actions if the premise be right. Our Founding Fathers received from a heavenly source and bestowed on their countrymen the best politico–economic premise ever written. Assume that we return to understanding and strict observance of that righteous premise – presently all but forgotten. Should we do so, I can no more imagine the miracles 200 years in the future than Washington could have foreseen the 747 jet. Nor can you or anyone else !

As no one knows how to make a simple pencil or a single part of an airplane, so no one now knows or ever has known how to write the righteous premise. In either case, it is an interception of what Emerson called "immense intelligence" – Creation. Thus, if intellectual and material progress is to grace us, we must accept and abide by the incontrovertible fact that the source of all benefactions is Divine Omnipotence, not elected and appointed officials — government. Even as brilliant a President as George Washington could no more write and act out an eternal truth than he could make an airplane. Would he agree ? Here is his answer : "Let us raise a standard to which the wise and honest can repair. **The event is in the hand of God.**

Our miracles bump into several obstacles or obstructions— which we must understand and overcome. First and foremost are the false opinions which millions of political dictrocrats have of themselves. They see themselves as the very opposite of what are. These naive and vain persons at all levels of government who are unaware of the moral principles that made America

great – the source of all creativity – think of themselves as the source of miracles.

Again, let the airplane serve to illustrate their dangerous error. They dictate who can own and operate airlines. No one is free to try; he is only permitted – if the bureaucrats approve. Schedules are coercively determined and so is the question of what airports are open to entry. The same goes for passenger and freight rates. Airports are owned and controlled by governments — on and on.

Regardless of these obstacles, the performance of airlines is miraculous. And the dictocrats in their blindness take credit ! Actually, their intervention and control only limits — forestalls– millions of additional miracles that would otherwise be wrought were the free and unfettered market allowed to function. Unless these regulators are divested of their present power, miracles will, sooner or later, be no more than phenomena of the past !

What of those outside the political hierarchy–those who experience discoveries, inventions, insights, intuitive flashes ? Persons so graced are to be found in every walk of life, regardless of occupation, race or nationality.

Most of these individuals interpret their own minds, unaware that their insights are but interceptions of Divine Omnipotence. As a consequence, they regard their little think-of-thats as personal property, no less than their homes, autos, pay checks or whatever.

By and large, they defend such error as vigorously as they would defend their home against thieves. The discovery or invention is their property, or so they "think" ! The forms of defense are countless. A mere sampling : Businessmen fight for tariffs, embargoes and the like; others seek licenses or patents or copyrights or exclusive franchises or some other from of protectionism !

What kind of thinking can bring about a corrective procedure ? It must begin with an acknowledgement that every one of these think–of–thats–no exception–is but an interception of the flow of Infinite Consciousness; therefore, any individual who intercepts this or that is no more than a fortunate intermediary !

Patents, for instance : It is a safe guess that more than 99% of all think–of–thats contributing to the miraculous have not

been patented. And copyrights? "All truly wise ideas have been thought already thousands of times." True, we copyright our monthly journal, **The Freeman**. Why? Only to secure a Library of Congress catalogue number. Note, however, that we permit reprints without request. Briefly, knowing that our works are but interceptions, we wish them to freely flow–share and share alike!

Imagine what would happen if each of us were to share ideas he intercepts, regarding ourselves as transmitters–not possessors–of the heavenly flow. There would be at least two immediate blessing:

- It is an observed fact that the more we share the more and higher grade are the ideas we receive.
- The resulting miracles would be far more numerous than we can imagine. There would be intellectual enrichment and prosperity would grace the citizenry!

Why an intellectual enrichment? When people have no awareness of **The Source**, wealth goes to their heads, makes "softies" of them. They give no thought to the problem wealth presents. Instead of solving this and related problems themselves, they refer them to Washington or to some other political body, unaware that political bodies have no competence in this respect–none whatsover!

However, when Divine Omnipotence is recognized as the source of miracles, the individual finds his place in the Cosmic Design. He is aware that his role is to solve problems — not transmit them into the political arena. This attunement with Creation is the greatest of all intellectual enrichments!

These intellectually enriched individuals never regard wealth as an end in itself. They see wealth as only a means to freeing oneself from the mundane chores of life so that all his hours and days and years may be devoted to interceptions, perceptions — **Creativity**!

14

PRICE-EXPECTATIONS, PRICE-UNCERTAINTY AND DEMAND FOR MONEY IN INDIA : SOME EVIDENCE *

Mukund S. Trivedi

I

One of the important points which merits recognition in empirical estimation of the demand for money function is related with the stock-flow nature of the money-demand relation and corresponding need for explicitly taking into account the changes in quality of money-stock in terms of its monetary-liquidity-service flow. Barring the study by Perlman, most of the empirical literature on demand for money has until recently paid insufficient attention to this point[1]. Recently, Klein has presented a

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1. M. Perlman "International Differences in Liquid asstes Portfolis" in "*Varicities of Monetary Experience*" (Ed.) D. Meiselman, University of Chicago Press (1970).

systematic treatment of this important issue[2]. As Klein has shown, unstable rates of inflation, by reducing the predictability of the exchange-value of money and thereby imposing extra pecuniary and non-pecuniary information costs on the holders of money-balances tend to impair the liquidity quality of money-stock. Thus, in addition to anticipated rate of inflation, variability of the inflation rate should be considered as a variable potentially capable of influencing the demand for money.[3]

Apparently the variability of inflation rate would be expected to influence the demand for money in opposite direction, since it implies a reduction in the quality of real cash-balances. However this proposition is not unambiguously true. A decrease in the quality of cash balances implies two opposite effects. On the one hand it directly reduces the demand for money. On the other hand, it also implies that a greater money-stock would be required to produce a given monetary service-flow. Moreover, it may also increase the precautionary demand for money. In short, the net effect of the variability of inflation-rate on demand for money depends upon the relative strength of these two effects, and no a-priori condition can be put on the sign-derivative of the money-stock with respect to thep rice-uncertainty variable.

In two previous papers by the present author a wealth-adjustment model of demand for money with permanent income and anticipated rate of inflation as its arguments were tested with Indian data spanning the period between 1951-75.[4] It was shown

2. Benjamin Klein "The Demand for Quality-adjusted Cash-balances". *Journal of Political Economy* (Feb.-Dec. 1977)

3. It may be pointed out here that Adolfo Diz in his study of Argentina Economy found that addition of this variable considerably helped in analysing the behaviour of per capita money stock for the sub-periods in which observed inflation rates were very high. The same issue has been dealt with by Moshin Khan in his recent analysis of hyper-inflation in European countries. The other important recent study is by Blajer. See (a) Adolofo Diz "Money and Prices in Argentina" in Meiselman (Ed.) *op. cit.* (b) M. Khan "Variability of Price-expectation", *Journal of Political Economy* (Aug. 1977) (c) M. Blajer "Demand for Money and the Variability of the Rate of Inflation" *International Economic Review* (June 1979)

4. (a) Mukund S. Trivedi, "Inflationary Expectations and Demand for Money in India", *Indian Economic Journal* (September 1980)

(b) Mukund S. Trivedi, "Inflationary Expectations and Demand for Per Capita Real Balances". *Arth-Vijnana* (Gokhale Inst. of Politics and Economics)

that the model performed remarkably well in explaining the behaviour of total as well as per capita real stock of money. More specifically, contrary to the widely-accepted a-priori supposition of static income-expectation[5], the evidence showed permanent income, rather than measured income, as a more appropriate scale variable in the demand for money function in India. Furthermore, the evidence conclusively established the empirical significance of anticipated rate of inflation in the Indian context. The present paper extends the previously mentioned investigation by attempting to assess the role of variability of inflation-rate in the demand for money function in Indian economy. The investigation is carried out in terms of per capita data and covers the same period (1951-75)[6].

II

The model investigated in the present paper may now be stated in a following functional form.

$$m_t = A(y_t^*)^{b_1} e^{(b_2 \dot{p}_t^* + b_3 v_t^* + u_t)} \quad \ldots\ldots (1)$$

where m = Per capita real stock of money.

y^* = Per capita permanent real income.

$\dot{p}^*$ = Anticipated rate of inflation.

v^* = Measure of the variability of inflation rate, explained subsequently.

e = The number base to natural logarithm.

u = The stochastic term assumed to be serially uncorrelated with zero mean and a constant variance.
(subscript "t" refers to time periods).

The unobservable variables y^* and $\dot{p}^*$ are defined as the respective distributed lag variables in actual per capita income y and

5. E.g. J. Adekunle "Demand For Money Evidence From the Developed and Less Developed Countries". IMF Staff Papers. (July. 1968)

6. Specifying the demand for money function in per capita terms involves the implicit assumption that demand for nominal stock of money is homogeneous of degree one in measured price-level and population. This may seem to be a restrictive assumption. However see Mukund S. Trivedi "Inflationary Expectations and Demand for Per Capita Real Balances". (*Artha-Vijnana*), Gokhale Institute of Politics and Economics.

observed inflation rate $\dot{p}$ which follows the second order Pascal lag scheme[7]. Accordingly

$$\overset{*}{y}_t = (1-h)^2 \sum_{i=1}^{\infty} (i+1)\, h^i y_{t-i} \qquad o < h < 1.$$

$$\overset{*}{\dot{p}}_t = (1-d)^2 \sum_{i=1}^{\infty} (i+1)\, d^i \dot{p}_{t-i} \qquad o < d < 1.$$

or equivalently in difference equation forms

$$\overset{*}{y}_t = (1-h)^2 y_t + 2h \overset{*}{y}_{t-1} - h^2 \overset{*}{y}_{t-2} \quad \ldots \quad \ldots \quad \text{(I. a)}$$

and

$$\overset{*}{\dot{p}}_t = (1-d)\, \dot{p}_t + 2d \overset{*}{\dot{p}}_{t-1} - d^2 \overset{*}{\dot{p}}_{t-2} \quad \ldots \quad \ldots \quad \text{(I. b)}$$

For proxying the variability of inflation-rate several alternative measures have been suggested in the literature.[8] The measure utilised principally in the present study is a distributed lag variable in the absolute change in the actual rate of inflation. It is also defined according to the second order Pascal scheme.

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7. Usually $\overset{*}{y}$ and $\overset{*}{\dot{p}}$ are specified in terms of the geometric lag scheme. However the Pascal lag scheme is a more flexible scheme and the geometric lag scheme is a special case of the Pascal lag scheme. Furthermore in our previous investigation related with demand for per capita real stock of money it was found that utilisation of Pascal scheme resulted in substantially greater improvement in terms of statistical results. See Mukund S. Trivedi *Op. cit.* (Artha-Vijnana.)

8. Perlman has used the simple deviation from the trend-rate of inflation as a measure of price-uncertainty variable. Diz uses a geometrically weighted average of the deviation of actual inflation rate from the generated series of expected rate of inflation. Blejer uses a geometrically weighted average of the variable based on the moving average of absolute rate of inflation. Thus v^e which is a measure for uncertainty variable is defined as

$$v_t^e = (1-a)\, v_t + a\, v_{t-1}^e \quad \text{where } v_t = \frac{1}{n} \sum | \dot{p}_{t-i} - \dot{p}_{t-i-1} |$$

Klein has emphasised the distinction between short-run and long-run predictability-the two things are not the same-and has constructed different measures based upon the moving standard deviations derived from moving averages of different time lengths. Another alternative measure would be to utilise residuals from the ARIMA model fitted to the data on actual rate of inflation.

Thus,

$$\overset{*}{v}_t = (1-a)^2 \; v_t + 2a \overset{*}{v}_{t-1} - a^2 \overset{*}{v}_{t-2} \qquad \text{.....(I. c)}$$

where $v_t = | \dot{p}_t - \dot{p}_{t-1} |$.

Taking logs on both sides of Eqn. (I) we get

$$\log m_t = \log A + b_1 \log \overset{*}{y}_t + b_2 \overset{.*}{p}_t + b_3 \overset{*}{v}_t + u_t \qquad \text{... (II)}$$

The above equation was estimated by employing the direct-iterative search method suggested by Dhrymes-Klein and Solow. The method involves utilising the second order difference equations (I. a), (I. b), and (I.c.). With assumed reasonable initial values of $\overset{*}{y}$, $\overset{.*}{p}$ and $\overset{*}{v}$, different series of $\overset{*}{y}$, $\overset{.*}{p}$ and $\overset{*}{v}$ can be generated corresponding to different values of h, g, and a.[9] The second step in estimation procedure is to iteratively estimate the demand for money equation (II), on a three-dimensional grid by plugging different generated series of $\overset{*}{y}$, $\overset{.*}{p}$ and $\overset{*}{v}$. The estimates for which the adjusted coefficient of determination $\bar{R}^2$ is the highest are to be chosen.

III

As previously mentioned the empirical investigation is based upon annual data covering the period between 1951-52 to 1974-75. The demand for money relation was estimated for both the definitions of money (currency + demand deposits, and currency + demand deposits + time deposits at commercial banks). The annual money supply figures are based on the monthly averages. The series on per capita real stock of money is derived by deflating the nominal money stock by wholesale price-index (1961-62=100); and total population. The per capita real income

9. By splicing available series on wholesale price index, a consistent series on actual rate of inflation which goes back upto 1934-35 was obtained. It was assumed that $\overset{.*}{p}$ in 1934-35, and upto 1935-36, were zero. For generating series on $\overset{*}{y}$ it was assumed that $\overset{*}{y}$ in 1950-51 and 1951-52 were 260 and 286 respectively. They are derived by taking three years moving averages of y between 1948-52. The procedure is dictated by the non-availability of consistent NMP series going beyond 1948.

is the *NNP* at constant prices (1960–61=100), deflated by total population. The money supply figures are taken from various R. B. I. Bulletins and Reports on Currency and Finance. The data on *NNP* and population are taken from C.S.O. National Accounts Statistics (1975). The series on wholesale price index (1961–62=100) is obtained by splicing the two official series, (with 1952–53 and 1961–62 base) and the series given by M. Mukherjee[10].

As a point of reference we first present the results for the model in which v is excluded as an explanatory variable[11].

$$\text{(A)}\quad \text{Log } m_{1t} = -2{\cdot}62 + \underset{(10{\cdot}94)}{1{\cdot}23}\ \log \overset{*}{y}_t - \underset{(10{\cdot}12)}{{\cdot}03}\ \overset{.*}{p}_t$$

$$E_1 = {\cdot}3,\ h = {\cdot}8,\ d = {\cdot}6,\ R^2 = {\cdot}860,\ \bar{R}^2 = {\cdot}847,\ DW = 1{\cdot}70.$$

$$\text{Log } m_{2t} = -16{\cdot}26 + \underset{(19{\cdot}12)}{3{\cdot}01}\ \text{Log } \overset{*}{y}_t - \underset{(12{\cdot}6)}{{\cdot}06}\ \overset{.*}{p}_t$$

$$E_2 = {\cdot}4,\ h = {\cdot}9,\ d = {\cdot}7,\ R^2 = {\cdot}950,\ \bar{R}^2 = {\cdot}945,\ DW = 1{\cdot}67.$$

(E_1 and E_2 are the respective inflation rate elasticities. Figures in parentheses indicate "t" values of the estimated coefficients).

The model to which the above-estimated equation belong was augmented by incorporating some measure of price-uncertainty variable. Initially, besides the measure, $\dot{v}$ mentioned in the previous section – we had also experimented with some simpler measures: (a) a three year moving standard deviation of the annual rate of change of prices – denoted hereafter as S_1, (b) a three year moving coefficient of variation – S_2, and (c) absolute deviation of actual rate of inflation from the generated series of $\overset{.*}{p}$. The results, are reproduced in the following estimated equations.

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10. M.Mukherjee "National Income of India", Statistical Publishing Society (1969).

11. It may be pointed out here that the coefficient of log y^* is a direct measure of elasticity of m w.r.t. $\overset{*}{y}$. However this does not apply to the coefficients of $\overset{.*}{p}$ and v. The respective elasticity measures w.r.t. $\overset{*}{p}$ and $\overset{*}{v}$ are given by $b_2 \cdot \overline{\overset{.*}{p}}$ and $b_3\ \overline{v^*}$.

(A) $\text{Log } m_{1t} = -2{\cdot}48 + 1{\cdot}21\ \overset{*}{y}_t - {\cdot}034\ \overset{*}{p}_t - {\cdot}0016\ S_1$

(10·14) (9·71) (·65)

$R^2 = {\cdot}864,\ \bar{R}^2 = {\cdot}843,\quad DW = 1{\cdot}71$

$\text{Log } m_{2t} = -16{\cdot}42 + 3{\cdot}82\ \overset{*}{y}_t - {\cdot}061\ \overset{*}{p}_t - {\cdot}0001\ S_1$

(17·8) (12·38) (·48)

$R^2 = {\cdot}951,\ \bar{R}^2 = {\cdot}943\quad DW = 1{\cdot}69$

(B) $\text{Log } m_{1t} = -2{\cdot}54 + 1{\cdot}22\ \overset{*}{y}_t - {\cdot}032\ \overset{*}{p}_t + {\cdot}0001\ S_2$

(10·84) (9·35) (1·19)

$R^2 = {\cdot}871,\ \bar{R}^2 = {\cdot}854,\quad DW = 1{\cdot}46$

$\text{Log } m_{2t} = -16{\cdot}67 + 3{\cdot}86\ \overset{*}{y}_t - {\cdot}062\ \overset{*}{p} + {\cdot}0004\ S_2$

(18·90) (12·16) (·57)

$R^2 = {\cdot}951,\ \bar{R}^2 = {\cdot}943\quad DW = 1{\cdot}50$

(C) $\text{Log } m_{1\,t} = -2{\cdot}35 + 1{\cdot}19\ \overset{*}{y}_t - {\cdot}03\ \overset{*}{p}_t - {\cdot}0001\ S_3$

(9·69) (8·95) (1·02)

$R^2 = {\cdot}868,\ \bar{R}^2 = {\cdot}847\quad D.W. = 1{\cdot}70$

$\text{Log } m_{2t} = -15{\cdot}63 + 3{\cdot}67\ \overset{*}{y}_t - {\cdot}056\ \overset{*}{p}_t - {\cdot}009\ S_3$

(18·85) (11·25) (2·1)

$R^2 = {\cdot}962,\ \bar{R}^2 = {\cdot}956,\quad DW = 2{\cdot}17$

(In all the above mentioned equations, $\bar{R}^2$ maximising values of h and d are respectively ·8 and ·6. For m_2 equations these values are ·9 and ·7).

As can be seen from the above equations the results are disappointing. Except the m_2 equation in (c), the price-uncertainty variable comes out to be statistically insignificant and $\bar{R}^2$s in all the equations do not indicate perceptive improvement over the earlier estimated equations in which the uncertainty variable was excluded.

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12. This measure is based upon the procedure used by M. Friedman in his "Money and Business Cycles", reprinted in "*Optimum quantity theory of Money*". It may be also pointed out that K. Brunner and A. Meltfer has also used three year moving standard deviation of interest rate as a measure of general economic uncertainty.

However, using the $\overset{*}{v}$ measure defined in equation (Ic), the results were considerably improved. This can be seen from the following estimated equation.

$$\text{(D) Log } m_{1t} = -6{\cdot}99 + 1{\cdot}96 \text{ Log } \overset{*}{y}_t - {\cdot}031 \overset{.*}{p}_t + {\cdot}02 \overset{*}{v}_t$$

$$(5{\cdot}01) \qquad (10{\cdot}45) \quad (3{\cdot}0)$$

$$R^2 = {\cdot}880, \ \overline{R}^2 = {\cdot}861, \ DW = 1{\cdot}84$$

$$h = {\cdot}7, \ d = {\cdot}6, \ a = {\cdot}8$$

$$\text{Log } m_{2t} = -19{\cdot}26 + 4{\cdot}17 \overset{*}{y}_t - {\cdot}052 \overset{.*}{p} + {\cdot}044 \overset{*}{v}_t$$

$$(11{\cdot}63) \quad (12{\cdot}82) \quad (6{\cdot}78)$$

$$R^2 = {\cdot}967, \ \overline{R}^2 = {\cdot}961, \ DW = 2{\cdot}19$$

$$h = {\cdot}8, \ d = {\cdot}7 \ a = {\cdot}8$$

In both the equations (m_1 and m_2) the estimated co-efficients of $\overset{*}{y}$, $\overset{.*}{p}$ and $\overset{*}{v}$ are highly significant.

The Durbin–Watson statistics for both the equations suggest the acceptance of null hypothesis of zero auto–correlation at five percent level of significance and $\overline{R}^2$ shows considerable improvement. Thus augmenting the earlier wealth–adjustment model by the $\overset{*}{v}$ enhances its empirical performance reasonably well. Of course the model requires to be investigated in greater depth by utilizing other measures of price–uncertainty variables and to the extent the present results of our investigation may be treated as suggestive rather than as definitive. This caveat assumes added importance in as much that in the present paper we have ignored the effects of general economic uncertainty on the demand for money.

It may be that variability of the inflation rate variable may be picking up the effects of general economic uncertainty, rather than inflation rate uncertainty per se. Obviously this point necessiates further investigation.

However bearing this caveat in mind the evidence reported in the present paper does seem to indicate the importance of variability of inflation rate in the money–demand relation.

Post-script

After this paper was completed the analysis has been further extended. The results and further evidence are presented in the forth coming technical monograph "Demand for money in India", by the present author.

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13. It may be here pointed out that the coefficient of $\dot{y}$ in m_2 equation would be definitely considered as too high. The extremely high elasticity of m_2 w.r.t. $\dot{y}$ reported in the present paper may be due to a substantial rising trend in the growth of time-deposits. This suggests the need for a more disaggregative and extensive analysis. However, it may be mentioned that in a recent study by Majumdar, Raghavachari, and Venktachalam, the measured income elasticity of demand for time deposits is found to be near 3. See N.A. Majumdar, T. Venkatachalam and Raghavachari, "The High Saving Phase of the Indian Economy" *R. B. I. Occasional Papers* (1980).