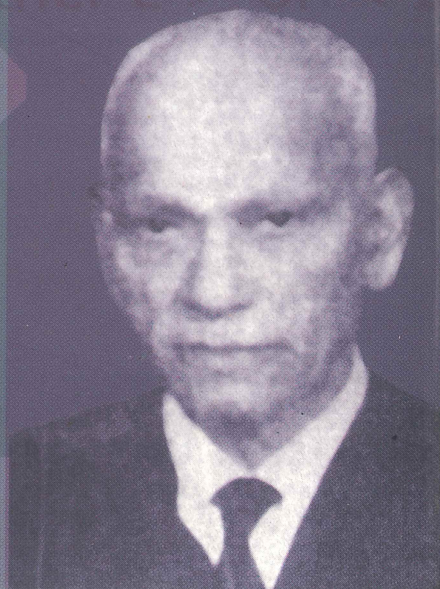




THEORETICAL VISION

B R SHENOY

Edited by R K Amin & Parth J Shah



A PROPHECY

A pre-condition for the full and efficient functioning of a free society is the absence of barriers to internal and external trade. Logic and experience have shown that this freedom will permit continued prosperity for the economy – the result of the use to capacity of its specialised talents through integration of the national economy with the world markets... Secondly, the full and efficient functioning of a free society demands recognition of the institution of private property, not only in respect of a family house, the durable consumer goods in it and a car, but also in respect of capital assets, the means of production...Experience has shown that the magic of ownership is among the most powerful forces making for progress.



B R SHENOY, 1975

Theoretical Vision

B R Shenoy



Centre for Civil Society

New Delhi

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editors' note

Milton Friedman described B R Shenoy as a prophet unhonored in his own country. P T Bauer has described him as a hero and a saint – a hero for resisting widely accepted fads and fancies, and a saint for remaining serene in the face of disparagement, neglect, and even abuse.

A few days before Professor Shenoy's death on 8 February 1978 I met him at the Gangaram Hospital, New Delhi, where he was undergoing treatment for a heart ailment. He looked worried. He said to me, "Amin, I feel sorry I could not change the mind of the government. I have to see our country's economy going to the dogs."

I replied, "Shenoy *saheb*, don't worry. Truth always wins, you have always spoken whatever is the truth. Surely, you are going to win."

Professor Shenoy was always tuned to ground realities. He never built up empty economic models, he never ignored empirical evidence. He was in fact, like a skylark which soars up in the sky but always keeps an eye on the nest. While theorising, Professor Shenoy always kept day-to-day problems of life in mind.

While delivering a lecture on national savings and industrial finance at Kerala University, he described his role in the following words:

"Dialogue with industrialists, bankers, businessmen and other men of affairs, and with subjects other than one's own, especially students of physical sciences, is always a rewarding experience. Men of affairs help to weigh our ideas in the scales of realities of life, and may save us from being catapulted away into speculative unrealities by false and impracticable concepts; and scientists remind us that every statement that we make must survive the rigorous test of logic and proved data. This double influence of men of affairs and of the scientific method is in evidence in the trend of effort in all social sciences, in economics no less than in other subjects."

Economics is not astrophysics. It deals with problems which have a bearing on daily events and the circumstances which confront and surround man and society. If economic theorising does not throw light on these mundane problems of man and society, that is, if the theorising does not explain and also help to prescribe, it is a waste of an economist's own time and that of those paying attention.

Sometimes it is remarked that a certain proposition may be correct in economic theory; but not in practice. But if economic theorising is not scientific and realistic, it may not be worth the while. We have perhaps

the best results when economic theory is well-informed with the realities of life and of the market and policy measures are well informed with the guidelines provided by economic theories.

This suggests the need for – and the importance of – two things. First, economists should gaze at the model of the world around them on which to build their theories, instead of relying wholly or mainly on models of their own creation. They should use much more freely than some of us seem to be doing the mass of statistical data now available on almost every phenomenon of significance. Secondly, it is desirable to have, not merely dialogues, as at seminars and lectures, between economists, men of affairs and administrators, but closer association of professional economists, business, industry and administration, preferably on a consultation basis.

Consultancy works better because there is a need to isolate the role of an economic analyst from his role as an independent counsellor-adviser. The merger of the two functions not only damages the stature and dignity of the profession, it also detracts from the development of the science and from the constructive contribution of economists to economic and social progress. In the case of resident staff economists, there is a danger of the two functions getting merged, and the role of the adviser getting lost. Professor Shenoy was able to strike a balance between the two.

Professor Shenoy was a brilliant orator. His lectures were lucid and eloquent, keeping listeners spellbound. Normally, it is difficult to keep an audience riveted on financial subjects, but his voice was sonorous, his style of presentation forthright and his arguments so convincing that the lay public would be attentive, sometimes captivated by his lectures. His writings were also frank, logical and supported by facts and data. That is why even the lay reader can enjoy this book.

As I told him in his last days, truth ultimately wins. China introduced economic reform in 1978. Margaret Thatcher introduced privatisation and deregulation in England. Soon after, America accepted supply-side economics and hard-headed socialist New Zealand introduced liberalism in 1984. With the fall of the Berlin Wall in 1989 in a short span of two to three years, all communist countries in Central and East Europe, including USSR, gave up communism and became liberal democracies. And last but not too late, India took a U-turn in 1991 and got rid of the license-permit *raj*.

This is our attempt to pay homage to the great soul by keeping his message alive through his writings.

prologue

Most of the theoretical writings in this volume date from 1932 to 1953, the time when B R Shenoy was studying at the London School of Economics, till the Indian Republic took its first steps on the road to economic development. After 1953, his time was taken up by practical policy issues and he became one of the most trenchant critics of the Indian government's policy measures, which ran counter to his dearly held beliefs about proper functioning of an economy. These writings offer the theoretical framework underlying his empirical analyses and policy critique.

Thus Section A provides the Context in which he wrote, which includes his basic philosophy of the Economic Constituents of a Free Society, and the Measures of Economic Progress he considered important. Readers might be surprised to learn that this included such humanistic concerns as reduction of inequalities – surprised because such concerns are usually associated with the socialist approach. Professor Shenoy was unique in that he did not lose sight of India's poverty and the need to eradicate it. But he repeatedly hammered the point that free market policies and not centralised planning were the means to that end.

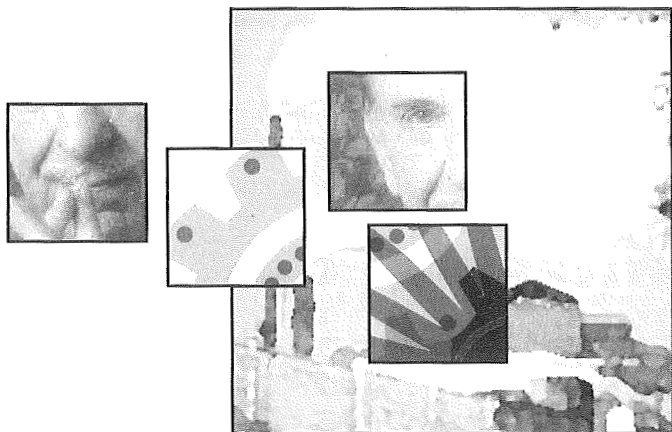
Section B, the section on Savings, focuses of the fundamentals of Classical Theories of Saving from the time of Adam Smith and Malthus, and goes on to dissect Static Equilibrium theories of saving. Since the Theory of Savings is the main basis for evolving an economic policy, his comprehensive surveys of saving theories is invaluable, and also unique. The chapter on Possible Sources of Finance which precedes these, and that on Indian National Savings which follows, bring to light one of Shenoy's greatest worries – the path that India was taking of economic development through deficit finance instead of real savings.

These worries are elaborated to a greater degree in his book *Post-War Depression and the Way Out* published in 1944. He demonstrated dangers of financing the Bombay Plan by newly created money and bank credit. In Section C, on Money Management, he explains the International Investment Gap and the Dangers of Inflationary Finance, going on to dissect inflation and corruption. Included are the articles An Equation for a Price Level of New Investment Goods and A Note on the Interdependence of Price Levels, first published in the *Quarterly Journal of Economics*. These articles point out the deficiency in the fundamental equations presented by John Maynard Keynes in his book *Treatise on*

Money published in 1930. As soon as Keynes realised that his fundamental equations were defective, he stopped the publication of the second edition of his book. But the equations presented by Professor Shenoy in lieu of the 'fundamental equations' still hold true.

More evidence of Professor Shenoy's sound grip of monetary economics can be found in Section D, which focuses on Gold/Currency/Banking. It takes the reader back to the Essentials of a Gold Standard, which was prevalent in important countries in the beginning of the 20th century. India during the 1930s had both the gold standard as well as the gold exchange standard. During this period, there was a controversy whether India should keep to a sterling-linked standard or have an independent standard based on gold. And secondly if India should have a link with sterling, what should the rate be? This article answers all these questions.

The banking community will be enlightened by the facts he alone unearthed about Abortive Central Banking Schemes which preceded the establishment of the Reserve Bank of India, and also throw light on the indigenous bankers or *shroffs* of whom India can still be justifiably proud. He had a sound knowledge of operational banking and wrote several articles on India's money market, China's silver standard, the Ceylon rupee. His welcoming of the long overdue Devaluation of the Rupee in 1966 will interest young readers. The chapter on Evolution of Currency in India and Ceylon is just a sample of the extensive work he has done in this field, and will delight students of history and economics alike. It is taken from his book *Ceylon Currency and Banking*, which throws light on the early currency history of India also.



context

1. Economic constituents of a free society
2. Measures of economic progress
3. 25 years of planning

section

A

Economic constituents of a free society

AUGUST 1977

This is the text of a letter to the newly formed government led by the Janata Party in August 1977, written by B R Shenoy in the hope that the socialist policies of the Congress party would be reversed. However, it was only 12 years later that the government acknowledged the truth of such logic

A free society is so called because its citizens and individuals are free in the sense of 'independence of the arbitrary will of another.' Individuals in a free society function, in the economic sphere, under the guidelines of the doctrine of pragmatism, pursuing a line of success and discarding the path of failure, success and failure being assessed by their own subjective criteria. Viewed functionally, a free society may also be termed, therefore, as a pragmatic society. As the terminal aim of the individual's activity is the maximum satisfaction of his consumption needs, and he is unfettered in this as in other matters, a free society is described as a society of consumer sovereignty.

The principal economic constituents of a free society are as follows:

- ♦ The economic affairs of a free society are controlled, directed and governed by truly sovereign consumers. Therefore, by definition as it were, all economic activity other than that delegated by consumers to the government – which they do in their capacity as sovereign voters – have, for their end objective, maximum consumer satisfaction
- ♦ Consumer control and direction of the economy is effected through a price-regulated market mechanism. Consumers continually register, in the shopping centres or other markets, their votes regarding their requirements, and their preferences get reflected in commodity price changes and in turnover.
- ♦ Traders interpret these prices and turnover signals, and direct producers to adjust their production programs to match the consumer needs thus recorded.

- ♦ Available investment resources, i.e. domestic savings and inflows of foreign savings get shifted, through such activity of traders and producers, and via the capital market – which is an integral part of the overall price-regulated market mechanism – or otherwise, into production channels which meet consumer preferences.
- ♦ In a modern society – whether it is free, communist or socialist – production involves time, and the production process has, for technological reasons, to commence in anticipation and in advance of demand. The forward market, which is another integral part of the over all price regulated market mechanism, helps such anticipatory production. The forward market may reduce to a minimum – or eliminate – the resource wastage from production errors, by projecting the changing market situations.

Experience has shown that the magic of ownership is among the most powerful forces making for progress. The power of the magic of ownership of the means of production is nowhere more convincingly demonstrated and highlighted than in Soviet agriculture

Operationally, the first link in the chain of the consumer-directed economic system is trade, which interprets and transmits consumer decisions to producers. That trade is the spearhead of all economic development emerges graphically when we imagine a community cut off from the rest of the country of which it has hitherto been an integral part. Production for the national market will soon be replaced by production to meet the limited needs of a small community; and its people are consequently destined to slip down into poverty and, possibly, into a more or less primitive way of life, depending on the size of the isolated community's market.

A PRECONDITION FOR THE FULL and efficient functioning of a free society is, therefore, the absence of barriers to internal and external trade. Logic and experience have shown that this freedom will permit continued prosperity for the economy – the result of the use of capacity of its specialised talents through integration of the national economy with the world markets, the demand of which – unlike the demands of the limited national markets – may not be easily satisfied

Second, the full and efficient functioning of a free society demands recognition of the institution of private property, not only in respect of a family house, durable consumer goods in it and a car, but also in respect of capital assets, the means of production. In a free society, because of discipline of a most ruthless consumer, the management, on pain of survival, has to keep continual watch over cost, quality and turnover. This calls for perpetual flexibility of decisions. Consumer discipline operates, in the case of the larger corporations, through its impact on the stock market quotations for the scrips of corporations. It is just not practical to achieve the requisite decision flexibility under social ownership – i.e. the ownership of none in particular! – of the means of production. Experience has shown that

These four freedoms constitute fundamental economic freedoms of free citizens. When the same freedoms are infringed, the charms of mundane life correspondingly diminish

the magic of ownership is among the most powerful forces making for progress.

The power of the magic of ownership of the means of production is nowhere more convincingly demonstrated and highlighted than in Soviet agriculture.

In 1964, the output of 3 per cent of the land and the collective farms, the private plots allotted to the workers, accounted for no less than one-third of the gross farm output of USSR and half of livestock production. Russia's dependence on the capitalist world for its food and other agriculture needs – this dependence is, incidentally, rather amazing as about one-third of the Soviet labor force is engaged in, and an equal proportion of total population lives on, agriculture – would have assumed disastrous dimensions if communist ideologies were to prevail and abolish completely private ownership of the means of production in Soviet agriculture. Will our own ideologues ever learn from this experience?

The third pre-condition for the full success of the consumer-directed economic system is economic freedom of the individual, particularly in respect to the following:

- (a) The distribution of his income between consumption and saving
- (b) The choice of consumption and the power to direct entrepreneurs through a price-regulated market mechanism, to import, or to fabricate at home, the commodities of his choice;
- (c) The distribution of his savings among the several alternatives; and
- (d) The choice of his occupation.

These four freedoms constitute fundamental economic freedoms of free citizens. When the same freedoms are infringed, the charms of mundane life correspondingly diminish.

QUITE OBVIOUSLY, the consumer-controlled system cannot come into being, nor function, without freedoms a) and b). Freedoms c) and d) are essential to ensure that the material and human resources of production get drawn into channels where the output is highest. These latter freedoms will, through continual resource shifts, minimise or eliminate less effective resource deployments, and thus make for the maximisation of the national product from the given quantum of resources.

(i) Tendency to maximise production, employment and income

Under consumer sovereignty, four *desiderata* are integral to the functioning of the system. First, to seek consumer patronage, entrepreneurs would strive to reduce costs and improve quality. With consumer approval and appreciation of such effort, high cost and low quality products would continually tend to be replaced, through resource shifts and technological progress, by low cost and high quality products. As already pointed out, this will continually tend to lift up production, and hence employment, income and the level of living.

(ii) Expansion of employment

Second, rapid expansion of employment is built into the economic system where everybody's concern is to meet the demands of the consumer – which, it may be noted, are most exacting, in addition to being ruthless. The expansion of employment at current, or rising, wage rates is not a function of investment – as Indian experience has shown – nor of a stepdown in the technology of production. It is solely a function of the expansion of overall production. Since consumer sovereignty makes for rapidity of growth of the national product it may, therefore, liquidate unemployment with corresponding rapidity.

The case of Japan illustrates the working of this built-in urge to expand employment. With the heavy pressure of population on land (291 persons per square kilometre), the average land-holding is but 1.01 hectare. The scarcity and high cost of capital induced farmers to adopt labor-intensive methods of cultivation in agriculture. Yet Japanese agricultural output is well above the world average, and Japanese agriculture employs 2031 workers per 1,000 hectares of cultivated land.

In USA, on the other hand, capital is less scarce, the average holding is 157.6 hectares, population density is but 22 per square km; and the country adopted capital-intensive methods of cultivation, the labor employed per 1,000 hectares of cultivated land there being a mere 17. These differing systems of cultivation were adopted, not under the direction of a planning commission, but by independent farmers in free economies, the course and destinies of which are, on the whole, determined by sovereign consumers. By contrast the Russian Gosplan copies the American methods of capital-intensive cultivation, notwithstanding low wages, with none too complimentary results.

The expansion of employment at current, or rising, wage rates is not a function of investment – as Indian experience has shown – nor of a stepdown in the technology of production. It is solely a function of the expansion of overall production

(iii) Social justice

Third, under full consumer sovereignty, there is no need, nor room for monopolies in production, distribution, imports or exports; and incomes of all individuals – wages, interest, rent and profits – would correspond to their respective contribution to the national product. Such a situation permits no windfalls. Hence none can appropriate someone else's earnings i.e. there can be no social injustice. Social injustice, on the other hand, is inevitable under socialist economic systems, which abound in monopolies, privileges and subsidies; and hence bring to privileged individuals and groups unmerited incomes, at the expense of the rest of the community.

(iv) Reduction of income contrasts

Fourth, income contrasts tend to decline as economic development progresses. This is so not merely because of the absence of social injustice but also as a consequence of, on the one hand, natural decline in interest, rent

and profits, the earnings of the economic elite, and the natural increase, on the other, of wages and salaries. As a free economy progresses, the proportion of wages and salaries to national product tends to increase and the proportion of interest, rent and profits tends to decline.

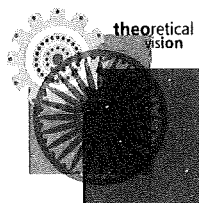
In Japan, wages and salaries rose continually from 41.3 per cent of GDP in 1960, to 50.8 per cent, in 1974. In West Germany, this percentage rose from 46.9 to 54.7 per cent. By contrast, in socialist India, the percentage fluctuated within a narrow range and was, in 1974-75, 28.2 per cent or lower than in 1960-61 at 29.9 per cent.

The growing prosperity of the masses of the people in free societies is evidenced by the overwhelming proportion of economic activity being directed to turning out articles of mass consumption and by the vast multiplicity of departmental stores, shopping centres and retail shops which purvey these products. The shoppers that crowd these places are not plutocrats but farm and factory workers and salaried people. Except in communist countries, cars are no longer a luxury transport, accessible only to the favored top crust of the community.

In a communist society, none of the economic constituents of a free economy hold true. The state determines the needs of consumers, arranges the distribution of goods and services and allocates resources among alternative uses. Individuals do not enjoy fundamental economic rights; and forward markets do not exist.

INDIVIDUAL FREEDOM IS WORTH having not only for its own sake; economic development is apt to be in proportion to the freedom which the individual has in the choice of his occupation, in the disposal of his income, and investment of his savings. If the individual is deprived of these economic freedoms – and we have been engaged in this nefarious business under the guise of planning – how different would such an individual be from a slave? Under the policy measures mis-called planning, we forgo both freedom and progress.

Given correct policies, the same quantum of domestic savings and foreign aid may take us strikingly fast on the road to prosperity. If, on the other hand, our policies are misconceived, no amount of foreign aid, as Indian experience has so conclusively demonstrated, can save us from economic chaos and social and political instabilities. The way out of this chaos is in our own hands. What we need most, today, is basic policy changes, not massive foreign aid.



Measures of economic progress

16 DECEMBER 1966

This is the text of the Hirachand Walchand Memorial Lecture delivered by the writer at a time when serious doubts were being raised about the country's economic achievements

To assess economic progress, we must first define the term. By economic progress we mean, first, a continued rise in the standard of living of the masses of the people. Since the masses of the Indian people are close to the margin of subsistence, the measure of economic progress will lie, for quite some time, in the consumption of food, the average of which is now below the nutritional norm, and the consumption of cloth, the average of which is also substandard.

In democracies, the expectation would be that, while the level of living of the masses rose fast enough, no sector should gain in affluence significantly faster than the national average. If the incomes of the more prosperous groups galloped ahead, whilst the economic condition of the masses remained comparatively stagnant, there will be complaints of social injustice. Therefore, the second test of economic development is reduction of income contrasts between the more affluent sectors of the community and the masses.

With this two-fold criterion of economic progress in our mind, it is easy to say what does not constitute economic progress.

- ♦ First, if the standard of living of the people as a whole did not rise, or lagged far behind the accelerating opulence of some groups, we do not have economic progress. Such a state of affairs may be described as economic development of the classes; it is not Indian economic development.
- ♦ Second, spectacular progress in nuclear science, the science of rocketry and space science, and the stockpiling of missiles and other nuclear weapons, in the context of shortages of food, clothing, housing and the like is not economic progress either. These developments may add enormously to the striking power of the nation and may be termed military development.

- ♦ Third, heavy engineering and heavy chemicals, mammoth river valley projects, idle production capacities and indiscriminate industrialisation, when the masses of the people are ill-clad and under-fed, do not constitute economic development. We may call it show-window economic activity and at best sectoral development.

Ordinarily, in free societies, production would adjust to the changing needs of consumers, this adjustment being effected by the pricing system. Prices of commodities in greater demand would rise and entrepreneurs would increase the output of such commodities under the inducement of higher returns on the capital invested, which higher prices would bring. Under such conditions, the increase in the national product may provide a dependable measure of the trend in consumption, i.e. the standard of living of the people in general.

THE MECHANICS OF economic progress may be briefly stated. Economic progress implies a rapid enough increase in the pace of effective capital formation; a corresponding increase in capital equipment per worker – including physical, institutional and human capital, which add to efficiency; larger output per worker for the same number of hours of work each day, the result of better capital equipment per worker; and a proportionately larger income per working family each year. If the average increase in output per worker is, say, at an annual rate of 10 per cent, then, the working families in the community should be richer by 10 per cent year after year.

The essential precondition for the smooth working of this mechanism is that each working family is able to retain for its own use its due share of the expanded output; and that it will not be mulcted of this expanded income through inflation, monopoly practices or other instruments. The initial stage of economic progress – a rapid enough pace of effective capital formation – would then lead unhindered to the final stage of a continued rise in the income of every working family.

The essential precondition for the smooth working of this mechanism is that each working family is able to retain for its own use its due share of the expanded output; and that it will not be mulcted of this expanded income through inflation, monopoly practices

If the average increase in the output and income per worker is 10 per cent, as assumed above, we have here a case of national economic progress, the rate of increase in national economic progress being commensurate with a 10 per cent increase in the output per worker. As the increased income accrues to every working family, economic progress involves progress of the masses of the people as well. The well-being – i.e. income, consumption and saving – of all working families would go up.

In such a context, overall employment will also increase. This is easily demonstrated. In 1967-68, Indian national income, at 1960-61 prices, amounted to Rs 16,500 crore. If we had economic progress at an annual rate of 10 per cent, Indian national income would go up in 1968-69 by Rs 1,650

With economic progress, capital accumulation would increase and, as the sophistication of the economy develops, the rate of interest on capital investments and the rates of profits may tend to decline, simultaneously with the continual rise in wages

crore to Rs 18,150 crore. Part of the increase in income is consumed, i.e., used up in purchasing consumer goods, and the rest is saved, i.e., utilised for the purchase of capital goods. In other words, in 1968-69, there would be need to produce Rs 1,650 crore worth of consumer and capital goods to meet this additional demand.

This would correspondingly add to employment. Thus, expansion of employment is a function of the expansion of output.

With the expansion of employment, the corresponding liquidation of unemployment and the increase in the incomes of working families, mass well-being will rise. In the absence of inflation and monopolies and of the other instruments of social injustice, there is nothing to indicate that the incomes of the capitalist minority may rise faster than the rate of increase in the incomes of the masses. On the other hand, with economic progress capital accumulation would increase and, as the sophistication of the economy develops, the rate of interest on capital investments and the rates of profits may tend to decline, simultaneously with the continual rise in wages. The faster pace of expansion of wages (the incomes of the masses) and the slower pace of expansion of interest and profits (the incomes of the capitalists) may, thus, lead to a reduction of income disparities.

It follows that true economic progress would, *ipso facto*, bring with it social progress as well, i.e. increase in mass well-being, expansion of employment and reduction of income disparities, the essential prerequisite for this development being the absence of factors causing social injustice, namely, inflation, growth of monopolies and other instruments of perverse income transfers.

Contemporary Japan, West Germany, Switzerland, Netherlands, UK, USA and certain other countries provide illustrations of economic growth being simultaneously accompanied by social progress. During the five years ending 1968 (under more or less non-inflationary conditions) wages in Japan rose by 65 per cent, while the national income doubled; in West Germany wages rose by 37 per cent, while national income rose by 39 per cent and similar was the experience of the rest of the countries in the table.

High labor productivity of the Japanese workers, when compared to workers in the rest of Asia, is not a new phenomenon that emerged after the Second World War. Hard work and high labor productivity may be the national characteristics of some people; and these characteristics take time to develop among those who may not possess them. It is not as if communities where productivity per worker is still low cannot hope for rapid economic growth. In such cases, labor is generally cheap and is used to substitute capital and other factors of production, so that the rate of growth of the aggregate national product can be rapid in such communities as well, given correct economic policies.

Index of wholesale prices, wages and national income

Year	GERMANY			INDIA			ITALY			JAPAN			SWITZERLAND			U.K.			U.S.A.		
	W.P.	Wages	N.I.	W.P.	Wages	N.I.	W.P.	Wages	N.I.	W.P.	Wages	N.I.	W.P.	Wages	N.I.	W.P.	Wages	N.I.	W.P.	Wages	N.I.
1959	95	69	67.1	87	.....	83.3	92	78	59.3	99	71	48.6	92	82	70.7	93	87	77.5	100	89	83.1
1960	97	76	79.5	93	.....	89.4	92	81	69.3	99	76	63.0	93	85	74.0	94	89	83.9	100	91	86.5
1961	98	83	87.1	95	.....	92.7	99	83	76.7	100	82	74.8	95	89	82.5	97	93	89.9	100	94	88.7
1962	100	93	94.1	96	.....	94.5	95	90	86.9	98	91	87.2	96	94	91.8	99	96	94.0	100	97	95.0
1963	100	100	100	100	.....	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1964	101	108	109.5	112	.....	107.1	103	115	109.7	100	110	114.3	101	105	110.2	103	105	108.0	100	103	107.5
1965	103	119	118.9	122	.....	101.0	105	124	118.2	101	120	127.9	102	111	118.4	107	109	115.2	102	106	117.1
1966	105	127	126.2	138	.....	101.9	107	128	127.6	103	133	146.7	104	117	127.4	110	114	120.4	106	111	128.8
1967	104	130	126.0	160	.....	111.0	106	134	138.1	105	147	173.6	104	123	111	111	119	125.4	106	115	135.5
1968	99	137	139.1	158	.....	.....	107	138	.....	106	165	203.3	104	128	.....	115	126	.....	108	122	147.9

W.P.: Wholesale Prices

N.I.: National Income

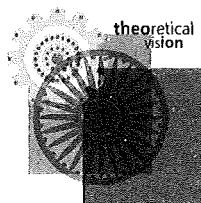
Sources:

1. International Financial statistics (IMF)

2. Estimates of National Income

What is new in Japan and what does not obtain in other Asian countries in the same measure is that Japan pursued policies favorable to accelerated production. Japanese national income more than doubled in six years, from 1960-1966; and the Japanese rate of savings in 1966 was about the highest in the world, being 34 per cent of GDP. The rate of saving in USA during the year was 18 per cent, in UK and Italy 19 per cent, in Germany 25 per cent, and in Switzerland 27 per cent. The rate of saving in India in 1965-66 was of the order of 8 per cent and in 1967-68 it was 6.6 per cent.

In Japan, wages and the well-being of the masses kept pace with the national product because the latter's expansion was not hampered by policies which would cause social injustice. Inflation was prevented from raising its head. From 1952 to 1968, wholesale prices in Japan generally remained within a narrow range of 97 in 1955 and 106 in 1968 (1963=100). Comparative absence of inflation and of policies producing monopolies also explains continued social progress, in the wake of continued economic progress in the other countries covered by the table.



25 years of planning

10 JUNE 1975

In this the writer expresses concern about the deterioration in the living standards of the rural population and other indicators, in sharp contrast to the growth in market-regulated economies

The aim of planning, on which we embarked in 1951-52, was four-fold: abolition of poverty, liquidation of unemployment, reduction of income inequalities and industrialisation. Simultaneously with the progress on these fronts, we sought to establish socialism through emphasis on the third objective, reduction of income inequalities; and the policy instruments of the 'social engineers' included nationalisation and measures to prevent or correct undue accumulations of wealth and economic power and to protect the underprivileged and weaker sections of society.

Investment acceleration, a *sine qua non* of planning, did not commence until about 1955-56, the last year of the First Plan. It took some more years to organise or fabricate the paraphernalia and policy implements of planning, and for the new policies to produce visible effects. Consequently, we find that the watershed of the economic impact of planning appears around 1960-61, not with the date of its inauguration.

To evaluate the achievements of planning under the four heads of its objectives: an overall measure of achievements on the poverty abolition front lies in the pace of expansion of per capita real income. During the decade ending 1960-61, this income rose to an annual rate of 1.7 per cent (compound). One would expect that, during the subsequent 12 years, when planning gained in sophistication and momentum and the annual average total investment, at constant prices, was over twice that in the 1950s, the liquidation of poverty would proceed at a faster pace. But the reverse was the case. The annual rise in the per capita real income dropped sharply, during the latter period, to less than half of that in the 1950s – to 0.8 per cent (compound).

The deceleration of income with the acceleration of planning raises serious doubts about the efficacy of planning as a means of attack on poverty.

Statistics of consumption correspond to this income trend. During the 1950s, in common with per capita real income, the consumption of food-grain tended upward, from 13.94 ounces per day in 1951 to 16.53 oz in 1961. Thereafter, despite the intensification of planning, there was little or no improvement in nutrition. If we exclude 1965 – when the monsoon brought bumper harvests, foodgrain consumption was lifted up to an all-time peak of 16.94 oz per day – it slid downwards during the first seven years of the 1960s to a low of 14.16 oz in 1967. During these years, the national average foodgrain intake was below jail rations (16.87 oz per day).

The recovery in this consumption during 1968 to 1971 is no evidence that planning began yielding results after all. The recovery was but a reflection of the breakthrough in the output of high-yielding varieties of wheat, and must be viewed in the context of the trend in the consumption of pulses, the main source of protein for the masses. In the 1950s, the consumption of pulses tended upward, reaching a peak of 2.43 oz per day in 1961, the watershed year. It fluctuated downward thereafter, consumption in 1974 (1.4 oz), being 43 per cent below the peak. Mass nutrition, therefore, remained low, if it did not deteriorate, notwithstanding the increase in the consumption of wheat.

The annual average consumption of edible oils, the main fat content of the poor man's diet, followed a similar

The deceleration of income with the acceleration of planning raises serious doubts about the efficacy of planning as a means of attack on poverty. Statistics of consumption correspond to this income trend

course. It rose in the 1950s, reaching a peak of 3.2 kg in 1960-66, and then tended downward with the progress of planning. It was at 3 kg in 1971-72, a fall of 15.6 per cent.

The trend in the consumption of cotton cloth presents a like pattern. It first tended upward, from 10.99 metres in 1951 to a peak of 14.78 metres in 1961-62, and – with the acceleration of planning – slipped downwards, falling to a low of 12 metres in 1973-74.

THE IMPACT OF planning on unemployment, despite mounting investment, has been no less disappointing. The annual average investment (at 1961-62 prices) in the Second Plan (1956-61) was 82 per cent higher than in the First (Rs 827 crore), 2.5 times as high in the Third (1961-66), and is placed at 4 times as high in 1973-74 (Rs 3,340 crore).

This rise in investment was 5.7 times as fast as that of population. Nevertheless, the expansion of employment consistently fell short of the natural additions to the labor force, and each plan bequeathed to its successor more unemployed than it received from its predecessor. Unemployment on the eve of the First Plan was 3.3 million. By 1971, it multiplied 5.7 times to 18.7 million, the estimate of the Unemployment Committee.

Plan achievement in social justice is negative too. This is evident in, first, the deterioration in the living standards of the rural population, which

accounts for about 80 per cent of the total population; and, second, in the increase in the number of agricultural workers, who constitute the lowest rung of the economic ladder. The rural per capita income, which was about 27 per cent of its urban counterparts in the First Plan, fell 24 per cent in the Second, to 20 per cent in the Third, to 18 per cent in the subsequent five

years (1966-71) and was as low as 16.7 per cent in 1972-73.

The downtrend in India was in contrast to an uptrend in Ceylon, Pakistan, Philippines and other underdeveloped countries which generally forged ahead of us when our planning accelerated

During the census decade 1961-71, the number of agricultural workers rose at an annual rate of 5.2 per cent to 47.5 million in 1971. Simultaneously, the number of cultivators decreased at an annual rate of 2.2 per cent to 78.2 million in 1971. Apparently, plan acceleration produced

economic pressures pushing down the better placed among the rural population (cultivators) into the ranks of the weaker sector of the community (agricultural workers).

Industrial workers too suffered social injustice. In 1969, the net output per worker accruing to the employer, after payment of wages and other costs, was 495 per cent of that in 1949, the result of an increase in the capital equipment per worker, which multiplied 8.7 times. But wages, adjusted for the rise in the cost of living, went up only by about 24.5 per cent. Much of the gain from the large output per worker was retained by the entrepreneurs.

FAO STATISTICS ON NUTRITION confirm the deterioration in the economic condition of the masses. The Indian per capita calorie intake steadily rose from 1,850 in 1954-55 to 2,110 in 1964-65, the year of the bumper harvest. It then tended downward and was at 1,990 in 1969-70. The protein content of the diet, after rising from 49 grams per day in 1954-55 to peak of 59.1 g in 1963-64 turned downwards. In 1969-70 it was at about its 1954-55 level.

The downtrend in India was in contrast to an uptrend in Ceylon, Pakistan, Philippines and the underdeveloped countries in general. Though, to begin with, some countries were behind India in this respect, they forged ahead of us when our planning accelerated; and in 1969-70 the Indian calorie and protein intake was about the lowest in the world.

Alone among plan objectives, industrialisation has made outstanding progress. Industrial production multiplied four times in little over two decades, its index rising from 37.7 in 1950 to 154 in 1974 (1970=100), an annual rise of 12 per cent (simple). Not many industrial countries exceed this pace. It ranged from 1.1 to 3.2 times the rates of expansion in Belgium, Canada, France, Norway, Sweden, UK and USA. But, as we shall presently see, this achievement has cost us dearly in resources, production, employment and income.

Why policy changes are necessary

♦ High costs and poor quality domestic manufacture

The uneconomic character of industrial production is evident in the difference – usually contrast – between the cost and quality of manufacture at home and abroad. To take a striking illustration, a home-made irrigation oil engine of 5 HP may cost Rs 3,150. At the prevailing exchange rate, the c.i.f (cost, insurance and freight) cost of a French engine may be Rs 1,900 and a Japanese one (of aluminum) an incredible Rs 315.

In 1972-73, the cost per ton of home produced ammonium sulphate was Rs 549 and of urea Rs 959. The c.i.f. import costs of these fertilisers were, respectively, Rs 203 and Rs 454. In March 1973, the cost of home-made DDT was 56 per cent higher than its international price and that of malathion, another pesticide, 94 per cent higher. Manufactures without a significant price-quality difference are rare, though the current price spurt abroad has produced some changes in the situation.

♦ Economic and social impact of import substitution

These price quality-differences have a double debit impact on the national product; and are a major cause of social injustice.

First, because of the higher production costs, the economy would now have – as a consequence of the import barriers – only one home-made engine, in place of 10 Japanese or over one-and-a-half of French engines; and only one ton of fertilisers and pesticide chemicals in place of 2.3 tons of each. The quantum of the home produced substitutes to import goods being less than the import goods kept out, the expansion of the national product would be correspondingly slower.

Much of this expansion of output may not have materialised in the absence of the captive domestic market and it compared poorly in respect of cost and quality with overseas manufacturers

Secondly, in the second innings of the production, i.e. when the newly manufactured oil engines, fertilisers and other substitutes to import are put to productive uses – because of the quantum-quality contrasts – the debit effects of the uneconomic import substitution on the national product would be still greater.

A simple exercise demonstrates that the loss to the Indian national production from this double impact may be enormous. In 1972-73, industrial production at 1961-62 prices amounted to Rs 1, 990 crore as against Rs 520 crore in 1950-51, the years immediately prior to the planning years. Much of this expansion of output (Rs 1,470 crore), it will be noted, may not have materialised in the absence of the captive domestic market and it compared poorly in respect of cost and quality with overseas manufacturers.

The costs of Indian manufactures, and the official exchange rate, may be, on an average, 75 to 100 per cent more than the cost of the corresponding import goods. At the free market rate in 1972-73 – when the average

premium (over the official rate) on the US dollar was 32 per cent – the cost difference may be of the order of 55 to 75 per cent. Taking the (more realistic) free market rate, we could, therefore, get for the same expenditure 55 to 75 per cent more of import goods than domestic manufactures.

On this basis, in the absence of import barriers – i.e., if we limited industrialisation (in defense of the law of corporate costs) to products which will stand international cost quality tests and depended on import for the rest of our industrial needs – the Net Domestic Product in 1972-73 would have been higher than it was by Rs 830 to 1,100 crore, or by 4.3 to 5.8 per cent.

To this must be added the larger output of the second innings of production which would ensue from, first, the more efficient and larger quantum of the imports; and, secondly, from the greater attention to agriculture – the output per unit of investment is several times that in industry – which would follow this policy change.

Per capita NDP rose during the past 12 years at an annual rate of 0.9 per cent (compound). If we could overcome the neo-mercantilist prejudice against imports and freely avail of the benefits of the superior and cheaper foreign manufactures – limiting industrialisation to our intrinsic economic capacity – and adopt certain other reforms, our per capita NDP may gather at a miracle rate of 8-10 per cent per year.

We adopted these policies as a means to an end, not as a political way of life, as in communist countries. It is time that we replaced them by policies that have stood the test of logic and empirical evidence

The logical link between social injustice and the costs – quality gaps between manufactures at home and abroad – is easily stated. Because of import barriers, the price of both home goods and import goods remained at the higher domestic costs. Imports, therefore, bring unmerited windfall profits, which accrue to traders, businessmen and

industrialists. In 1971-72 the total of these windfalls on private imports alone were several times the increase (Rs 69 crore at 1960-61 prices) in NDP during the year; and on total imports (excluding cereals), they were of an order of Rs 1,480 crore.

These amounts are extorted for the benefit of upper income groups from the general body of consumers – those who use commodities with an import content, which is almost everybody. We have here a simple case of perverse income transfers, from the indigent to the affluent. Canalising imports through state agencies State Trading Corporation (STC) and Minerals and Metals Trading Corporation, as is the case increasingly, does not alter the injustice of the system.

♦ Need to reorient policies of resource allocations

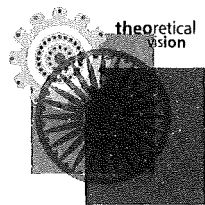
The remedy of the poor performance of planning lies in a basic transformation of our policies. We adopted these policies as a means to an end, not as a political way of life, as in communist countries. It is time that we replaced them by policies that have stood the test of logic and empirical evidence.

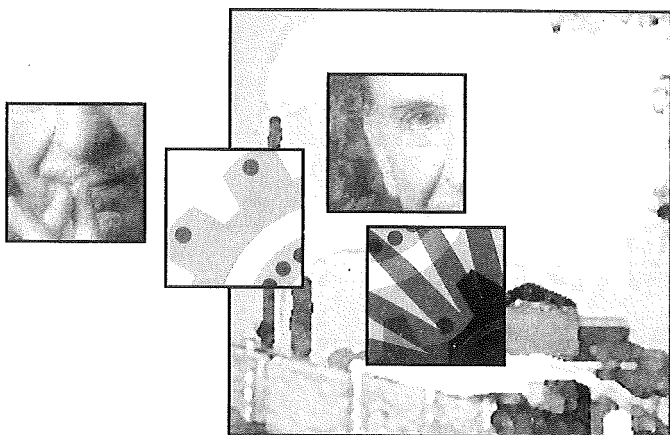
In poor economies, the supply of investment resources being, by definition, acutely scarce, the key to progress lies in their (comparatively) most productive use. There is, therefore, great need for continued shift of goods, funds and labor from sectors and plants where output is low to others where their output is high. In democracies, the shift in trade and its operations are controlled and directed by the collective decisions of consumers (demand). Trade, therefore, spearheads progress, because of the comparatively more effective deployment of investments. In the field of international trade, this implies absence of exchange controls and other barriers to imports.

TO QUOTE PROFESSOR Ludwig Erhard, the architect of the German economic miracle, barriers to foreign trade, in particular exchange control, are among the worst forms of economic intervention. This underlines, first, the basic importance of monetary reforms in any scheme of policy transformation; and, secondly, the fact that the bread-line economies can ill-afford to violate the law of comparative costs, the pivotal economic doctrine.

Planning minister D P Dhar's assertion: "We have gruesome evidence of what the 'free' market does to the poor" does not apply to the contemporary world. We have convincing evidence of the working of both systems of resource allocations – i.e. via the trade-directed price-market mechanism and via the slide-rule directives of a Planning Commission – in all continents, all climates, among populations of varying sizes and all races.

Witness what 25 years of planning have done to India's rural poor and the 'new poor' it has created in the urban sector. The *World Bank Atlas* shows that in the 1960s the annual growth rate in India – 1.2 per cent – was about the lowest in the world. Market-regulated economies have generally done vastly better. The growth rate in Japan was 8 times as high as in India; in Hong Kong, Malaysia, Singapore, Thailand and Taiwan it was 2.6 to 7 times as high.





savings

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section

B

Sources of finance for economic expansion

1940

This is a chapter from Shenoy's book *Bombay Plan*, which counters the prevalent thinking of the day that deficit financing could be used to give a big push to development

To begin with, it is important to emphasise, as has been done by planning authorities, that mere money or finance is by itself incapable of furthering any economic expansion. To bring this about, the authorities responsible for implementing the plan of economic expansion must get hold of workers of all kinds including specialists and managerial staff, machines as well as materials. The success of the Plan and the speed with which economic expansion is achieved would rest upon sufficient supplies of these agents of production being made available at the desired pace. For, it is men, machines and materials that construct the canals, roads, railways, factories, machinery, buildings and such other capital goods as envisaged by the plan. Money or finance, though important, is incapable of producing them on its own.

Money or finance can do no more than facilitate the transfer of productive factors from the rest of the economy to the planning authorities for their employment in the creation of capital goods. In other words, money is but an agent or vehicle for moving the factors of production from one part of the economy to another.

The aim of finance is thus to provide the planning authorities with the factors of production which they may require. The manner in which this is done would provide a natural basis for classification of the sources of finance.

Broadly speaking, the sources of financing a plan of economic expansion may said to be five-fold:

- ♦ Slack factors in the economy
- ♦ Current savings (voluntary as well as involuntary)
- ♦ Past savings held in the form of hoards
- ♦ Foreign borrowings

- ♦ Past investments of an obsolete character.

In most modern economies there exist, in lesser or greater degree, factors of production which are partially or wholly unemployed. For instance, in Great Britain during the inter-war years, about a million workers were idle and it was regarded as a normal feature of the economy. It would have been possible to make some economic progress by employing them for purposes of economic expansion. To the extent there may be room for employment of such slack factors, the normal working of the economy need not be disturbed by the plan. Creation of moneys or the lending of idle resources by the banking system, for deployment of the slack factors, would thus provide one source to finance the plan.

The volume of slack factors which may be absorbed into employment is limited. Thereafter any further progress would be possible only by drawing into the plan factors of production which are already in employment

But the volume of slack factors which may be absorbed into employment is limited. Thereafter any further progress would be possible only by drawing into the plan factors of production which are already in employment. That is to say, carpenters, weavers, farmers, domestic servants, textile laborers, workers engaged in the manufacture of consumer goods of all kinds etc. would have to be withdrawn from their trades for employment in the creation of capital goods as directed by the planning authorities.

The workers would require non-specific capital goods (e.g. implements, carts, trucks, other means of transport, power plants and machinery) useful in the new trades. Materials of common use in industries such as timber, iron and steel, agricultural raw materials, oil, coal, heavy chemicals and electricity would also be diverted. It is not, however, necessary that physical transfers of the men and things should take place in every case. They may, indeed, continue to work in the same factories and workshops as before. Only, instead of fashioning into shape articles of daily consumption for the market, they would now be employed in producing the instruments of production and other capital goods.

THIS DIVERSION OF MEN, machines and materials from the consumption trades into the instrumental trades must necessarily affect adversely, even if not immediately, the volume of the stream of consumption goods flowing into the market. Consequently, the community must suffer reduced real consumption. No manner of economic jugglery can possibly make it otherwise. If the community does not submit to reduced consumption, the means of production necessary for the prosecution of the plan of economic expansion cannot be drawn away from the consumption trades.

And, as the means cannot be procured from anywhere else in the economy, the plan may then have to be abandoned. Saving or reduced real consumption on the part of the community is thus an important source of finance for the plan.

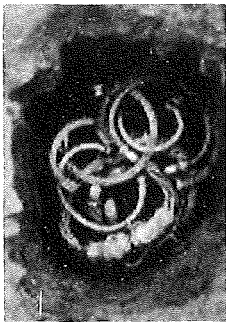
When sold in the foreign countries, however, they represent a source of finance which is distinct from current savings. It would be a means of gaining access to the real resources of foreign economies

It would be conducive to a speedy implementation of the plan, if reduced real consumption is maintained throughout the period of the plan at the level at which it has to be lowered at the beginning of the plan. The newly created capital goods and other resources could, then, be wholly mobilised for

purposes of furthering the plan, the increase in income which would accrue with the progress of the plan, being added to savings instead of expenditure on consumption. The community would receive the augmentation of income in the shape of the newly created capital goods. If, however, the level of its real consumption is to be increased during the lifetime of the plan, some of the newly created resources would have to be employed in the consumption trades. They would not be available for purposes of capital creation and the progress of the plan would be correspondingly slower.

As a source of finance, hoarded wealth includes gold, silver, jewelry, precious stones, and rare works of art, collections in the museums and such other highly priced articles. If the current savings of the community have been tapped completely, the method of mobilising finance for the benefit of the plan must be by disposing of these articles in foreign countries. By selling them at home, the objective of appropriating the hoards for the purposes of the plan would not be served. We would only be gathering in national savings in another form. The hoards of the country would, then, remain hoards. When sold in foreign countries, however, they represent a source of finance,

which is distinct from current savings. It would be a means of gaining access to the real resources of foreign economies for implementing the plan.



FOREIGN BORROWING PROVIDES another method of acquiring resources from abroad. It is immaterial whether borrowing is effected by the planning authorities, by the state or by any other institution or agency within the country. It is also immaterial what form the borrowing takes. It would suffice if the foreign exchange realised is made available for the plan. The banks, the railways or the investment trusts, for instance, may attract deposits, issue debentures or loans abroad. And in turn pass on the proceeds to the planning authorities, by directly or indirectly taking over the bonds or shares issued by the latter.

The method of drawing upon obsolete capital as a source of finance is somewhat less obvious than tapping the hoards of foreign credits. To maintain capital goods, the entrepreneurs set apart a depreciation fund from the proceeds of their output; and the economy sets apart certain agents of production for the same purpose. As the more modern instruments of produc-

tion designed by the plan would soon replace the older ones, it would be wasteful to bestow inordinate care on these old and obsolete units of capital. It would suffice if they just remained in working condition so as to be able to turn out the required stream of consumption goods until it was time for the new units of capital to be commissioned into service.

Except what may be required for effecting the minimum of repair, the depreciation fund and the corresponding agents may be appropriated for furthering the plan. The old units of capital, which represent the past investments of the community, would then be worked to exhaustion for purposes of the plan. The financial device of achieving this is similar to the device of acquiring the factors of production through savings. In place of repairing or renewing the obsolete capital goods, the excess of depreciation fund and the corresponding agents would now be allocated to creating more modern and more efficient units of capital.

It may be noted that hoards, past investments, and foreign borrowings are manifestations of the fundamental principle of saving. Hoarded wealth and old investments represent accumulations of

past savings and foreign borrowings may be said to represent future savings, from which they would be repaid. When hoards are sold abroad and technicians and materials are imported against them, or when the factors of production are diverted from the maintenance of capital to the creation of more capital goods, we are recapturing accumulated savings for current investment.

Similarly, we are only mortgaging our future savings when we utilise the proceeds of foreign loans for the execution of the plan. But essentially savings, hoards, past investments and foreign borrowings are different from currently generated savings, because they do not involve a diversion of the means of production away from the consumption trades of the national economy. Therefore, they justify separate treatment.

A favorable balance of trade, in which we may include visible as well as invisible items, is part of a community's current savings. This is clear from the manner in which the balance of trade comes into being: either by exporting goods which we abstain from consuming or by abstaining from import of articles of consumption from abroad against exports. The assets thus transferred or left abroad would be counted as savings by individuals to whose credit they accrue, in the same way as the unconsumed income held in the form of bank balances at home would be regarded as savings by the owners of these balances. Both are a result of abstinence.

The creditor countries, notably Great Britain, invest the surplus abroad in the same way as savings held within the country are invested in domestic trade and industry. Both investments are the result of saving and augment the national wealth and income. The balance of trade, thus, is covered

We are only mortgaging our future savings, when we utilise the proceeds of foreign loans for the execution of the plan. A favorable balance of trade is part of the current savings of the community

by our classification of current savings. It is not necessary to give it a separate place as the authors of the Second Five-Year plan have done.

MEANS OF PRODUCTION raised through created money in the hands of the planning authorities is indistinguishable from the voluntary savings accumulated by the people. Like the latter, created money too would draw the men and materials which planning authorities require away from the consumption trades. In both cases the result is reduced output of consumption goods and an equivalent fall in the level of real consumption. The only difference is that voluntary savings are created when savers willingly forgo a part of their consumption, whereas in the case of created money reduced consumption is imposed upon the unknowing public without their approval. It is clear therefore that the created money of the authors of the plan would form part of what we have called current savings.

Finally, the sterling securities in the possession of the Reserve Bank, just as gold in its reserves, would fall under our classification of past savings held in the form of hoards, in the same way as gold is held in the private hoards of the people. These securities embody the accumulated surplus exports of the country in the past, which formed part of the current savings at that time. Whenever the surplus foreign credits are converted into Indian currency, the Reserve Bank acquires such securities. And, like gold, they are a device of gaining access to foreign economies for the progress of the plan.

The following table summarises the relationship, between our classification of the sources of finance and that of the planning authorities.

Our classification		Classification by authors of the Plan
1.	Slack factors	Not considered
2.	Current savings	<i>Internal finance:</i> Savings Created money Balance of trade
3.	Hoarded wealth	<i>External finance:</i> Hoarded wealth Sterling securities
4.	Foreign borrowings	Foreign borrowings
5.	Obsolete investments	Not considered

What happens when we save

1944

This chapter from his book *Post-War Depression and the Way Out*, written when the writer was working for the International Monetary Fund at Washington DC, gives an insight into savings habits and their consequences

We may briefly review the economic changes that the saving activity may produce. To begin with, we must distinguish between saving from the individual and the collective standpoints. For an individual, saving exists short of his disposable income of the period, the magnitude of the difference between the two of that period. Contrariwise when expenditure exceeds disposable income the individual is said to dis-save, the difference being made good by drawing upon past savings or hoards, by borrowing or by liquidating an asset. When, however, expenditure exactly balances disposable income, the individual neither saves nor dis-saves.

When we view the community collectively, there may be present in it all the three categories of individuals: the savers, the dis-savers, and those who neither save nor dis-save. The effect on the economy of the last group of individuals would be neither positive nor negative – it would be neutral. The same would be the case if the aggregate individual savings in the community were to be exactly balanced by the aggregate individual dis-savings. No net change of any kind would then be recorded in the structure of the economy. There would take place merely a change in the ownership of assets. The assets put on the market by the dis-savers would be exchanged, directly or indirectly, for the funds made available by the savers. The savings of the latter would, in this manner, get into the possession of the dis-savers and the aggregate expenditure of the community would be equal to its aggregate income. From the collective standpoint there would be neither saving nor dis-saving.

If, however, the volume of the aggregate saving were to exceed the volume of the aggregate dis-saving there would be saving from the collective standpoint, the magnitude of the excess being the measure of it. Here the sum total expenditure on consumption would fall short of the sum total income of all individuals in the economy. In the opposite case of the aggre-

gate savings of the savers falling short of the aggregate dis-savings done by the dis-savers, collective expenditure would exceed collective income and there would be present dis-savings from the collective standpoint. In an economy where saving existed, on balance, the old assets released on the market by the dis-savers would be insufficient to meet in full the demands of the total body of the savers. For doing this it would be necessary to create new assets representing new capital goods of the aggregate value of the volume of the collective saving.

In the opposite case of social expenditure exceeding social income, i.e., when the economy, on balance, does dis-saving, the demand for assets on the part of the savers would fall short of the supply of the assets released on the market by the dis-savers. The excess assets may then be exchanged for the funds imported from neighboring economies or the funds set apart against the depreciation of capital. A community such as this would be living on its capital.

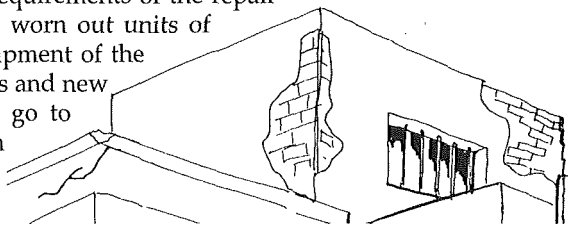
That is to say, the question of what happens when we save is intimately bound up with the behavior of the rest of the individuals in the economy with regard to saving and consumption expenditure. It depends on whether, collectively speaking, savings are zero, positive or negative. In the first case the saving process would merely amount to an acquisition, by the general body of savers, of the old assets put on the market by the dis-savers. The economy would remain a stationary one, the capital-creating activity in it being limited to the requirements of the repair

and replacement of the worn out units of the existing capital equipment of the community. New houses and new factories would merely go to replace those which have been pulled down because they are too old, and new

machinery would be produced only to take the place of the worn out and discarded units. And these replacement capital goods would be acquired, and their production would be financed, not from out of savings but from out of the depreciation funds set apart for the purpose.

Virtually the same would hold true of the saving process in an economy in which collective savings are negative. The savers in such an economy would merely acquire the old assets of the dis-savers, probably at a somewhat lesser price than would have been the case if stationary economic conditions had prevailed. For, the supply of the assets would now exceed the demand for them on the part of the savers. The creation of new capital

Replacement capital goods would be acquired, and their production would be financed, not from savings but from out of the depreciation funds set apart for the purpose. Creation of new capital goods would also be merely to maintain intact the existing stock of goods



goods would also be merely to maintain intact the existing stock of goods, if we were to assume that foreign capital had flowed in to finance the surplus expenditure of the community. If, however, it had been financed from out of the depreciation funds – and to the extent this had been the case – new creations of capital goods would be less than sufficient to maintain the community's capital goods.

WHEN, HOWEVER, collective savings are positive the saving process would amount to a somewhat different story. The saving activity would then record a change in the structure of the economy. For, only some among the savers would be able to secure old assets in which to invest their savings. In order to meet the demands of the rest, the community would have to produce, in addition to replacement capital, new capital goods of a value equal to the surplus savings of the community. This would augment the existing stock of such goods. When collective savings are positive the saving-investment process includes, therefore, not merely the acquisition of old assets from the security – or the real estate market – but also the creation of new capital goods. The activity of such excess capital creation, not merely the creation of replacement capital, is what

Speculators would probably see in it a future increase in demand on the part of savers, which would begin to be effective as soon as individual savings grow sufficiently in volume

constitutes the process of saving from the collective standpoint. If no such capital creation were to take place, socially speaking, no saving would be present, though individual savings may be there. In other words from the social angle of vision, saving exists only in a progressive economy. It is zero in a stationary economy and negative in a regressive economy.

We shall now examine in some detail the phenomenon of saving from the collective standpoint. Surplus social saving would take away from the consumption goods market an equivalent volume of money that might have, otherwise, flowed into it. Prices of consumer goods would consequently decline or, if the dealers should decide to withhold stocks from the market in order to prevent a fall in prices, reduced sales would take place at the old price level. In either case, either because of reduced profits or because of reduced orders from the dealers, the manufacturers would curtail the output of consumer goods. This would release from the consumption trades a quantity of labor, plant and materials, hitherto engaged in producing consumer goods but which are no longer demanded by consumers.

Looking at the same thing from another angle of vision, the first effect of an increase in individual saving (from which net social saving results) would be an increase in the unspent balances of individuals at the banks. Though individually the increase may be small, on the aggregate, the accumulations in the banks may appreciate almost as soon as the wave of increased saving started. Anxious to maintain the level of their profits, the banks would now seek creditworthy borrowers for the additional balances

and would be willing, if necessary, to relax the rigor of the loan conditions or even slightly to lower the rate of interest they charge.

This signal of an increase in the supply of short-term savings would produce certain reactions. Speculators would probably see in it a future increase in the demand for securities and real estate on the part of the savers, which would begin to be effective as soon as individual savings grow in volume sufficiently. The supply of the old assets put on the market by the dis-savers being insufficient to meet the enhanced demand, however, they would bid up their price by a margin which would be commensurate with the fall in the rate of interest or the estimated increase in the volume of savings.

The rise in the price-level of securities and capital goods would induce instrumental entrepreneurs to increase the production of such goods. They would, therefore, readily take over the labor, plant and materials no longer wanted in the consumption trades, and, with their help, would organise an increased output of capital goods. And the funds required for doing this they would raise from the banking system which, as we have seen, would be only too pleased to find a suitable outlet for their increased deposits.

In this manner, as a result of the forethought of the speculators, increased production of capital goods would be taken in hand almost simultaneously with the spread of the sentiment to save more. The savings of the public would be passed on by the banking system to the instrumental entrepreneurs even as they accumulate. On the one hand, therefore, individual savings would grow in volume and, on the other, the goods in process would keep maturing from the raw material stage towards the finished product, namely, capital goods. When individual savings will have grown sufficiently, the savers would seek long-term assets in which to invest them and the speculative demand for such assets would then be replaced by the genuine demand of the savers.

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The entrepreneurs would see in this growing demand an opportunity to embark upon flotation of new enterprises or to enlarge the size of the existing ones. New securities would, therefore, be put on the market and would be exchanged for the accumulated savings either by the savers directly or by those who may have already sold old assets to them. With the proceeds of these issues the new entrepreneurs would purchase the newly created capital goods. This would enable the instrumental entrepreneurs to repay the loans they had raised from the banks. From which we see that the production of capital goods, which the savers demand, would be financed from out of the savings themselves via the banking system.

The essence of the saving-investment process, then, lies in the release of labor, plant and materials from the consumption trades and their

Lowering the rate of interest would be interpreted by speculators as an indication of an increase in the volume of savings and they could consequently bid up the prices of securities and real estate

employment in the instrumental trades. The consumption goods which the savers abstain from consuming would not be produced at all, the means of production hitherto engaged in creating them having been diverted into the instrumental industries. In place of the 'saved' consumer goods, they would

now produce capital goods. Savings make available a certain quantity of the means of production and investment brings about their employment in the creation of capital goods. In the language of Professor Edwin Cannan, the saving process begins with saving 'on' the means of production and terminates with saving 'up' the capital goods.

The capital goods saved up would enable the economy to turn out a larger stream of consumption goods than before the commencement of saving. For, it would now have either a larger number of capital goods of the old type or, if the volume of savings was sufficient for the purpose, new capital goods of a relatively higher productive capacity. Savings, for instance, may bring about a replacement of hand-looms by power-looms, hand-ploughs by tractors, sailing ships by modern liners and so on. That is to say, savings produce an increase in the standard of living of the community. They are the basic essential of economic progress. In the absence of net social saving a rising standard of living for a growing population is inconceivable.

Expansionary credit

The foregoing analysis rested on the assumption that the banks did not create any expansionary credit. We were there mainly concerned with the consequences of the voluntary or the self-imposed restrictions on consumption on the part of the public. But the initial effects of voluntary saving, namely, a reallocation of men and resources from the consumption into the instrumental industries can be produced also through the device of creating credit in favor of the instrumental entrepreneurs in excess of the volume of voluntary saving.

As a result of the recent developments in the theory of the business cycle, interest in this phenomenon, now widely described as the phenomenon of forced saving, has been considerably enhanced.

We may briefly review what we consider to be its essential characteristics. Let us assume that the willingness of the banks to create expansionary credit occurs in a background of stationary economic equilibrium. To be able to find an outlet for this excess credit the banks would have to lower the rate of interest they charge. This would be interpreted by speculators as an indication of an increase in the volume of savings and they could consequently bid up the prices of securities and real estate. This, in its turn, would induce instrumental entrepreneurs to produce more capital goods. The new funds would, therefore, be acquired by them.

But, unlike under voluntary saving, there would not now be present in the economy labor, plant and materials wanting to be taken over into employment. Instrumental entrepreneurs, therefore, would have to attract them from the consumption trades. This they would proceed to do by offering them higher prices. As nothing will have happened in the meanwhile to indicate that there would arise an increase in the demand for consumption goods, the consumption entrepreneurs would be unable to resist this encroachment upon them on the part of the instrumental entrepreneurs. They would be compelled to surrender the labor and resources which the latter would demand. With the means of production thus acquired, the instrumental entrepreneurs would organise the creation of capital goods.

So far the changes produced would be more or less identical with the reactions which follow an increase in the volume of voluntary savings, except for a rise in the prices of the factors of production. But serious differences between the two phenomena would begin to appear when, as a result of the withdrawal of the means of production from the consumption trades, the magnitude of the flow of goods would begin to shrink. This would happen at the end of the first period of production of consumption goods.

The consuming public, however, would not be prepared for any such diminution. It would come upon them unawares. Owing to short supply, the prices of consumption goods would be moving up and they would find that the same amount of money expenditure now brings fewer consumption goods. Unwilling to submit to this back-door encroachment upon their consumption, the consuming public would seek to regain their customary level of real consumption. And, for doing so they would draw upon the larger money resources that would now be at their disposal.

For, it will be noted that, as a result of the higher prices paid to the factors of production, their incomes would now be at a higher level. In all probability they may also have built up larger bank balances during the first production period of consumption goods when incomes had begun to rise but prices had not yet risen. The price-level of consumption goods, therefore, would tend to rise for the double reason, namely, short supply and higher money expenditure.

The balance of the borrowed moneys left in their hands would be insufficient for the purpose. The projected capital goods in the process of production would, therefore, have to be abandoned before their completion.

The rise in the price level of consumption goods, it will be noted, is a device for rationing the reduced quantity now available. It is the consequence of the means of production being switched over from the consumption into the instrumental trades, which would materialise as soon as the borrowing entrepreneurs make use of the newly created credit for engaging means of production. It is thus wrong to suppose, as many seem to do, that such switching over is made possible through the reduced con-

The rising price level would bring obsolete and discarded methods of production within the range of profitability, and it would become worthwhile to engage labor and materials which are below the standard quality

sumption which results from a fall in the value of money incomes.

The rise in the price-level of consumer goods would turn the situation against the instrumental entrepreneurs. It would put into the hands of the consumption entrepreneurs the newly created money and would also raise above its original level the rate of profitability

in the consumption trades. Simultaneously, the prospects in the instrumental trades would become less bright. If we assume that the average period of production in these trades is longer than the average period of production in the consumption trades, the newly initiated production in the former will not as yet have been completed when the consumers discover the shortage in the supply of consumer goods and begin to bid up their price.

They would, therefore, still be drawing upon the funds they had borrowed from the banks. Unlike in the case of the consumption entrepreneurs, no new moneys would come into their possession. The consumption entrepreneurs, therefore, would now be in a position to outbid the instrumental entrepreneurs and reclaim into their trades the means of production which had been forcibly taken away from them.

This would create difficulties to the instrumental entrepreneurs. The rise in the prices of the factors of production would increase their costs and they would be unable to complete the planned creation of capital goods. The balance of the borrowed moneys left in their hands would be insufficient for the purpose. The projected capital goods in the process of production would, therefore, have to be abandoned before their completion. Alternatively they would have to be hastily converted into something less elaborate than had been planned at first, as the labor and other resources engaged on them would now be taken away by the consumption entrepreneurs.

IF, HOWEVER, THIS must be prevented and the instrumental entrepreneurs saved from the losses that would otherwise fall to their lot, the banks would have to create more loans in their favor and in amounts somewhat larger than the higher money receipts of the consumption entrepreneurs. This would then enable them successfully to outbid the latter and to retain in their employ the factors of production they require.

This would not, however, put an end to their difficulties. At best it can only postpone them. For, if we assume that the public would expend on consumption the full amount of the increase in income which would fall into their hands, the additional credits advanced to the instrumental entrepreneurs would reappear as income almost as soon as the latter begin to draw upon them to pay the higher rates of remuneration to the factors of production. It would, therefore, pass into the hands of the consumption entrepreneurs via the consumer goods market. As soon as this happens, the

difficulty which the instrumental entrepreneurs had sought to overcome would stare them in the face. To prevent this it would be necessary for the banking system to go on creating credit repeatedly at an accelerating pace and always faster than the rate at which expenditure on consumption goods may increase.

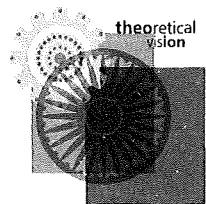
But, if the banks should agree to do this, incomes also would rise at an accelerating pace, the price level of consumer goods would keep soaring high and there would soon appear in the economy nearly all the symptoms of boom conditions. The rising price level would bring obsolete and discarded methods of production within the range of profitability, and it would become worthwhile to engage labor and plant of subnormal efficiency and materials which are below the standard quality. Production would be on the ascendant, employment would be full and the less capitalistic methods of production generally, in which unit costs are relatively higher, would receive more than their due share of importance.

BOOM CONDITIONS, HOWEVER, cannot last indefinitely. For, banks cannot go on creating credit unlimitedly. If not caution born of self-interest, the limitations imposed by the reserve ratio and the gold standard would, sooner or later, compel them to restrict extensions of credit. They would raise the rate of interest they charge and make loan conditions more stringent. When this happens, the instrumental entrepreneurs would be back again in the old predicament. The price level of securities and of capital goods would fall as a result of the rise in the rate of interest and they would be unable to compete with the consumption entrepreneurs in the price they would offer to the factors of production. These would be snatched away from them by the latter. They would suffer losses and those whose commitments exceed their capacity would go into liquidation. The output of capital goods would begin to shrink and there would appear unemployment in the instrumental trades.

In due course, this must produce its repercussions in the consumption trades as well. Growing activity in these trades, it will be noted, was the result of the rising expenditure on consumption made possible by the expansionary credit injected into circulation through the instrumental entrepreneurs. With the curtailment in the creation of credit and the emergence of unemployment, the volume of consumption expenditure would soon decline. Depression conditions would thus spread throughout the economy and as it spreads it would gain momentum, unemployment giving rise to more unemployment.

From the foregoing analysis we see that any attempt at economic expansion through the creation of credit, which does not correspond to an equivalent voluntary abstention from consumption on the part of the public, must necessarily lead to disaster, though at first it might produce all the outward symptoms of boom conditions. But being a paper-generated boom, it must be short-lived. When viewed with the inevitable reaction which must follow, the damage done might prove to have more than negat-

ed the advantages, if any, gained during the spurious expansion. In other words, artificially created paper or bank money can be no substitute for voluntarily generated savings as an agent of lasting economic progress.



Classical theories of saving

OCTOBER 1947

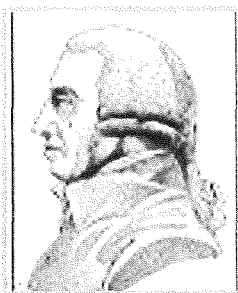
This originally appeared as an article in *The Indian Journal of Economics* and offers a concise evaluation of the theories which every student of economics must grasp

Saving is an essential condition of economic progress. Capital formation, a tool for building up the pace of progress, is possible only when somebody forgoes current consumption. Savings can be voluntarily generated at home, borrowed from abroad, compulsorily extorted by authority as through taxation (or other imposed reductions from incomes), or monetarily induced or created (the latter, however, can be successfully practised only within limits).

To begin with, some thought must be given to the development of the doctrine of saving. We shall begin by a study of the classic concept of the doctrine. To this school belong Adam Smith, Thomas Albert Malthus, David Ricardo, Nassau Senior, John Stuart Mill, and William Stanley Jevons.

ADAM SMITH (1723-1790)

Economists previous to Smith regarded capital as the sum of money invested in a concern, and viewed the phenomenon of saving more or less on the same lines as, perhaps, the average man has always been doing, i.e. as an accumulation of money out of income. Adam Smith, acutely conscious that money was not the real thing, made a strenuous effort to go beyond the monetary veil. He tried to view the problem in real terms, though the picture he visualised was far from correct. But, as in other respects, he set the framework of classical thought on the subject.



Adam Smith

Under the regime of division of labor, observed Adam Smith, the greater part of the wants of an individual 'are supplied by the produce of other men's labor, which he purchases with the produce, or, which is the same thing, with the price of the produce of his own'. Before this can be done, however, the individual has to complete his own production and sell the output.

It is necessary, therefore, continued Smith, that 'a stock of goods of different kinds...must be stored up somewhere, sufficient to maintain him, and to supply him with the materials and tools of his work, till such time, at least, as both these events can be brought about'. For instance, 'a weaver cannot apply himself entirely to his peculiar business, unless there is beforehand stored up somewhere, either in his own possession or in that of some other person, a stock sufficient to maintain him, and to supply him with the materials and tools of his work, till he has not only completed, but sold his web'.

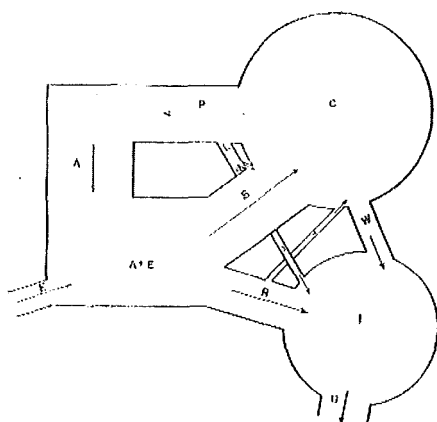
Accumulation was conceived as representing only one aspect of the phenomenon of saving, the other being thought to comprise the productive consumption or use of what was accumulated. Nor was an interval of time supposed to separate these two phases

THIS PASSAGE, PARTICULARLY the expression 'stored up', creates an impression which conflicts with the explanation which follows. Accumulation was conceived as representing only one aspect of the phenomenon of saving, the other being thought to comprise the productive consumption or use of what was accumulated. Nor was an interval of time supposed to separate these two phases.

Lest we imagine so, Adam Smith took care to emphasise that 'what is annually saved is as regularly consumed as what is annually spent and nearly in the same time too.' The only difference is 'it is consumed by a different set of people' i.e by 'productive' workers whereas the portion spent is consumed by 'unproductive' workers. Adam Smith's view of the phenomenon, then, was more in the nature of a diversion of the stream of goods from 'unproductive' into 'productive' channels than a mere assemblage of them. The diversion and the assemblage were conceived as more or less simultaneous operations, the two together comprising, not the latter alone, what we may describe as the saving process. The one was considered inseparable from the other and we find Adam Smith frequently using the expression 'productive employment of labor' as being synonymous with parsimony or saving.

That he imagined the activity of accumulation and the consumption of the stocks accumulated as continuous and not a discontinuous or intermittent process finds further support in his account of the working of what he has called the circulatory system of the economy. For convenience of reference we give below a diagrammatic representation of this system:

Adam Smith's circulatory system of the economy



A = Annual produce of labour

E = The 'spontaneous production of the earth'

A + E = The 'annual produce of land and labor'

C = 'Capital stock' of the community

I = Stock 'reserved for immediate consumption'

L = 'Spare revenue' of productive workers

M = Part of the 'spare revenue' (*L*) employed in 'maintaining unproductive hands'

N = Part of the 'spare revenue' (*L*) employed in 'maintaining productive hands'

L = *M* + *N*.

P = part of the capital stock directed towards the maintenance and equipment of productive labor.

R = 'Net revenue' comprising 'profits of stock' and 'rent of land'

S = 'Parsimony' or savings

U = Stock directed towards the maintenance of 'unproductive laborers, and those who do not labor at all'

W = 'Perversion' of the capital stock by the 'prodigality' and 'misconduct' of individuals and the state

The 'whole of the annual produce of land and labor' of a country (*A + E*) which is 'ultimately destined for supplying the consumption of its inhabitants', says Adam Smith describing his circulatory system, is divided into two parts. The first (*S*), which is 'frequently the largest' in the economically advanced and richer countries such as 'opulent countries of Europe', represents parsimony or saving. It is 'destined for replacing capital, or for renewing the provisions, materials, and finished work, which had been withdrawn from a capital' either by the prodigality of individuals or the state (*W*) or for maintaining and equipping productive labor (*P*).

The second part (*R*) would represent profits on capital and rent on land and would go to augment the stock of goods 'reserved for immediate con-

sumption' (I) i.e., for maintaining idle or unproductive labor (U). While (S) would constitute the mainstream which feeds the stocks of goods (C) destined for productive use (savings) and (R) and (W) the main streams which feed the stock of goods (I) destined for unproductive use (consumption), there are also streamlets which flow into either (C) or (I). Thus from out of (L), the surplus of income over the necessities of life of productive workers, a streamlet each flows into (C) and (I) [(N) and (M) respectively].

But the magnitude of (L) being small, both (N), the savings of productive workers, and (M), their unproductive expenditure (e.g. witnessing a 'play or puppet show'), would be of negligible value relatively to (S) or (R) respectively. Likewise only a small portion (Q), if any, of (R) is used in employing productive labor or saved. Being only 'net revenue' it was presumed to be mainly meant for consumption.

As productive workers reproduce 'together with a profit, the full value of their consumption', in all 'tolerably quiet and peaceable times', the magnitude of (A) would exceed that of (P) and $(S) + (N) + (Q)$ would be $=$ or $<$ $(P) + (W) + (M)$, $(S) + (R)$ would be $= (A) + (E)$, and (U) would be $=$ or $<$ $(R) + (W) + (M)$ and $<$ (P). (S), the parsimony, is 'much greater in rich than in poor countries' and 'bears a much greater proportion to' the amount of the 'revenue either as rent or as profit' (R). In times of war, due to unproductive military expenditure, (W) may exceed (S) so that (P) and, therefore, (A) and $(A) + (E)$ might diminish. If this continued (S) will fall in volume each succeeding year and the community may get progressively impoverished.

Ordinarily, however, the 'frugality and good conduct' of individuals is 'sufficient to compensate' for the extravagance of individuals and the state. (S), therefore, would be larger than (W) in all normal times so that the volume of (C), the stock of capital, would be continually on the increase.

TR MALTHUS (1766-1834),

None of the classicists who came after Adam Smith materially departed from the general framework of his theory of parsimony. They more or less echoed his views, some with minor alterations or additions, and all failed to correct his errors.

Malthus, who followed Adam Smith, agreed that the essence of saving lay in the productive employment of the saved stock of goods, i.e., their employment in trades which yielded visible and tangible things, including consumption and instrumental goods. Thus when a country gentleman employs a considerable part of his revenue in improving his farms and increasing their saleable value, everybody would readily pronounce this 'a saving from revenue to add to capital'. In terms of the circulatory system of Adam Smith this would be a case of the streamlet (Q) flowing into (C) from (R). But not his expenditure in 'paying masters to teach his sons and daughters the most fashionable accomplishments' and in providing them 'every



T R Malthus

species of education', though this may be a 'proper and creditable' expenditure which might bring 'future advantage', as it was not 'productive' expenditure, nor was there any present sacrifice involved in it.

Like Adam Smith, he thought it necessary to emphasise, however, that mere accumulation of consumption goods did not constitute saving. He pointed out that in a modern economy such accumulation on a large scale was in any case impossible. No doubt 'accumulation, to a certain extent, of common food and common clothing might take place', but 'the amount must necessarily be extremely confined'. Moreover, where accumulation of this kind did take place, its proper description would be hoarding, not saving, and no political economist of the present day can by 'saving' mean mere 'hoarding'.

In his analysis of the phenomenon of saving, Malthus went a step further than Adam Smith and examined the question of how savings were realised for the future and on a large scale. Adam Smith had, apparently, ignored this issue. Malthus believed that savings on a large scale and savings for the future were effected in the form of money, as most commodities, in addition to being inconvenient for carrying savings forward, may not last sufficiently long. 'A circulating medium', he observed, 'is absolutely necessary to any considerable saving', as no commodity 'can be an adequate substitute for a circulating medium, and enable us in the same manner to provide for children, to purchase an estate, or to command labor and provisions a year or two hence'.

Apparently unable to find any other solution, Malthus probably saw in money an easy escape from his difficulty. But in taking recourse to this exit, rather than spin out another solution based upon the classic ideas of the saving process, he may be said to have reverted, to that extent, to the pre-Smithian views of saving which both Adam Smith and he seemed so anxious to improve upon.

ON THE QUESTION of the economic consequences of saving to the community, Malthus differed from Adam Smith. For Smith 'every prodigal is a public enemy, and every frugal man a public benefactor'. As productive workers had the power to reproduce with profit the value of what they consumed, when 'a frugal man annually saves...like the founder of a public workhouse, he establishes as it were a perpetual fund for the maintenance...for all time to come' of an 'additional number of productive hands'. Saving contributes directly to the betterment of the community. A prodigal, on the other hand, by 'not confining his expense within his income...encroaches upon his capital' and, thereby, like the sinner 'who perverts the revenue of some pious foundation to purpose, tends not only to beggar himself but to impoverish his country'.

But Malthus conceived and propagated a different philosophy. With Lauderdale, Sismondi and others, he belonged to the early under-consumptionist school of trade cycle theorists and consequently felt unable to endorse the lead given by Adam Smith on the subject. He no doubt agreed

that, if kept within appropriate limits, saving was a virtue and that a state might easily get ruined by extravagance. He believed the equilibrium or the balance between spending and the increased output resulting from the newly created capital, determined in accordance with the law of proportions, was the 'most important truth' in political economy. But he was convinced that if the 'conversion of revenue into capital pushed beyond a certain point', the equilibrium would be upset, and this, he believed, 'may be accompanied by the most distressing effects at first, and by a marked depression of wealth and population afterwards', through the adverse effects of excessive savings upon prices, production, employment, and income.

To 'continue converting revenue into capital', he emphasizes, 'with a view to the permanent increase of wealth...when there is no adequate demand for the products of such capital' was as vain 'as to continue encouraging marriage and the birth of children without a demand for labor and an increase of the funds for its maintenance'. This theory of disequilibrium, based upon under-consumption, would seem to be the direct outcome of a combination of the classic idea of saving and a belief, violently held by Malthus, that general over-production was an economic possibility.

DAVID RICARDO (1772-1823),

Ricardo endorsed Smith's view regarding the main theme of the phenomenon of saving and, like Smith and Malthus, emphasised that there 'can be no greater error than in supposing that capital is increased by non-consumption' that is, a mere accumulation of consumption goods by withholding them from consumption did not constitute saving nor would it, in itself, augment the stock of capital. The saving process involved not merely such accumulation of consumption goods but also their simultaneous utilization in 'productive' employment. 'When we say that revenue is saved, and added to capital, what we mean', explained Ricardo, 'is that the portion of revenue; so said to be added to capital, is consumed by productive instead of unproductive laborers'.



David Ricardo

Regarding the source from which savings were effected, Ricardo's version was not in agreement with Smith's. Unlike Adam Smith, who divided (A) + (E) into parsimony (S) and net revenue (R) comprising profits and rent, Ricardo divided the 'whole of the produce of the land and labor of every country' into three parts of which 'one portion is devoted to wages, another to profits and the other to rent. It is from the last two portions only, that any deductions can be made for taxes, or for saving'. As wages, in accordance with his theory of wages, tended to conform to the 'natural price' or the minimum of subsistence, theoretically there was no room for saving from out of wages. If, however, in practice, some savings did result

Where an element of present sacrifice, which was considered an essential and vital factor, was absent in the creation of a good, it was not believed to embody any abstinence, though it may very well yield future advantage

from wage-incomes, it was only because 'in that case a part of the net produce of the country is received by the laborer, and may be saved or expended by him'.

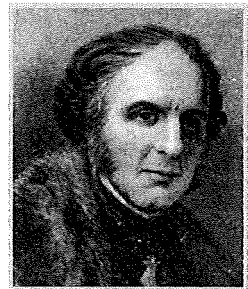
This way of looking at the matter differs from Smith on the question of the main component of saving. For Smith the stream of savings comprised principally that part of the current output,

other than net revenue, which was used or consumed by productive workers. For Ricardo, on the other hand, the major part of savings could flow only from net revenue, though this may, under certain conditions, be supplemented by savings from wages. The circulatory system of Smith basically rested upon the classic distinction between productive and unproductive activity, the demand for unproductive labor emanating mainly from net revenue. In his account of the distribution of current output Ricardo, however, seems to lump together wages paid to all workers, productive as well as unproductive. In terms of the symbols we have used to describe Smith's circulatory system, while Smith's savings were made up of $(S) + (Q) + (N)$, for Ricardo it consisted of only $(Q) + (N)$, though under his system the magnitude of (Q) would be larger than that of Smith.

N SENIOR (1790-1864)

Senior's theory of abstinence presents certain distinctive features. He defined savings in abstract or metaphysical terms instead of as a diversion of current output from unproductive to productive channels. The metaphysics, in part, being correct, to that extent Senior's approach to the problem may be said to mark an improvement over the classic approach. Abstinence or saving was described as 'the conduct of a person who...abstains from the unproductive use of what he can command and designedly prefers the production of remote to that of immediate result'. It is 'that agent, distinct from labor and the agency of nature, the concurrence of which is necessary to the existence of capital, and which stands in the same relation to profit as labor does to wages'. In illustration he cited the sacrifice involved when 'a tree or a domestic animal is allowed to attain its full growth' and not put to any 'immediate unproductive use', or, 'the additional sacrifice made when labor is undergone for a distant object' such as when a man 'plants the sapling or sows seed corn'.

Speaking generally, in a 'civilised society' saving was thought to arise when preference was shown to remote instead of immediate results in the 'use of all those instruments and materials which may be used at will, either for the purpose of present enjoyment, or for that of further production, such as, for example, the greater part of agricultural stock'. Where an element of



N Senior

present sacrifice, which was considered an essential and vital factor, was absent in the creation of a good, it was not believed to embody any abstinence though it may very well yield future advantage. For instance, the 'savage seldom employs in making his bow or his dart time which he would devote to the obtaining of any object of immediate enjoyment' and, therefore, practised no abstinence in creating it – the sacrifice of his leisure, apparently, not being considered as such.

He was at pains to correct 'the inaccurately expressed' statement of Adam Smith that an advance accumulation of a stock of goods of all the kinds required in production was essential for the satisfactory functioning of an economy under the regime of division of labor involving time. In the case of 'almost all those products to which we give the name of services', he pointed out, both 'production and sale are contemporaneous' so that, in their case, the necessity of stocking such goods to bridge the gap between production and sale did not arise. In other cases stocking was not quite so essential as the goods in question may be 'produced while the work was in progress', particularly where, as in respect of a work of art, 'years must elapse between the commencement and sale' of the output.

Unwilling to attribute so serious an error to so able an economist, Senior thought it possible that 'Adam Smith's real meaning was not that the identical supplies which will be wanted in the course of a progressive industry must be already collected' before the commencement of the enterprise 'but that a fund or source must then exist from which they may be drawn as they are required'. His own view was that this 'fund must comprise in *specie* some of the things wanted'. In other words, it was not as if Senior was trying to argue that the 'saved' consumption goods were not produced at all; he was merely demonstrating that it was not necessary that such goods should first be collected in a reservoir before productive activity began. It would suffice if the value of the goods required was held, say, in *specie*; the requirements could then be raised as productive activity progressed.

BUT THIS WAS NOT any material improvement over the Smithian concept, though Senior apparently imagined so. That there needs not take place a prior accumulation of goods had been stressed by others before him, including Smith himself. It would appear that Senior was trying to score over Adam Smith without making due allowance for all the qualifications introduced by the latter to his idea of accumulation. And there is no evidence to indicate that Senior did not subscribe to the classic view of the saving process as a diversion of consumption and instrumental goods from 'unproductive' to 'productive' channels, the only difference being the point regarding accumulation.

Further, from his reference to *specie* in the passage cited above, it would appear that, in addition, he agreed with Malthus as to the method of provision for the future and of saving on a large scale. In other words, although Senior spoke of the 'diversion of agricultural stock' from 'present enjoyment' for 'further production', he does not seem to have grown out of the

Smithian view of saving to arrive at the proper characterization of the saving process. Perhaps it was necessary first to discard the distinction, which he and other classicists had made, between 'productive' and 'unproductive' consumption and employment.

On the question of the source of savings, Senior seemed to agree with Ricardo. Of a wine retailer's sale proceeds, the portion devoted to 'keeping up his buildings and machinery and...in the purchase of wine, bottles, and corks to keep up the stock in his warehouse and shop' is not termed saving. Savings are drawn only from what remains of profits after the minimum of subsistence of the proprietor is met, as it is this portion which the wine-retailer may 'employ either in his own personal enjoyment and that of his friends, which is an unproductive use, or in the increase of his own capital'.

J S Mill (1806-1873)

Mill, though he referred to the earlier writers, probably with a little contempt, as the 'political economists of the old school', did not advance any new theory himself. He did little more than restate or summarise the existing position, which was not much different from what we have reviewed above. 'To consume less than is produced is saving', said Mill, and the 'word saving does not imply that what is saved is not consumed, nor even necessarily that its consumption is deferred; but only that, if consumed immediately, it is not consumed by the person who saves it'. Then follow the other



J S Mill

Smithian notions, that productive workers reproduce with a profit what they consume; that saving once made becomes a perpetual fund for the maintenance of a certain number of productive workers for all time; and that saving 'enriches, and spending impoverishes, the community along with the individual'.

In addition, Mill imagined that saving 'gives to labor either additional employment, or additional remuneration. If it finds additional hands to set to work, it increases the aggregate produce, if only the same hands, it gives them a larger share of it'. That is to say, Mill believed that savings produced immediate advantages to the working classes by the quantity of the consumption goods forgone by the savers. What was abstained from by the latter was thought to accrue to the credit of the former.

Like Malthus, Mill distinguished between saving and hoarding. If what is not consumed is 'merely laid by for future use, it is said to be hoarded; and while hoarded, it is not consumed at all'. At times, however, he did use the word saving in the sense of hoarding.

Mill agreed with Ricardo and Senior on the question of where the savings came from. Savings were drawn from the surplus of the produce of labor, after supplying the necessities of life to all concerned in the production: including those employed in replacing materials and keeping the fixed

capital in repair'. Net saving, that is to say, can be said to be taking place only when the capital stock of the community, on balance, increases. In a stationary state, capital does not on the whole increase' and net saving does not exist. Only individual savings cancel out individual improvidence, giving rise to only a corresponding transfer of the ownership of existing capital: the savers 'become the natural purchasers of the lands, manufactories, and other instruments of production owned by their less provident countrymen'.

W S Jevons (1835-1882)

Jevons, who would seem to have been greatly influenced by the ideas of Senior, preferred Senior's word abstinence to describe saving and quoted, apparently with approval, his abstract definition of it, emphasising that 'in reality abstinence is the endurance of want, the abstaining from enjoyment of utility which might be enjoyed'. He continued that abstinence or the 'temporary sacrifice of enjoyment is essential to the existence of capital'. Speaking algebraically, if U stood for utility and T for the time for which the utility was forgone, observed Jevons, UT would represent the value of abstinence.



W S Jevons

Notwithstanding this philosophic definition of saving, Jevons failed at first to make any advance over the classical view of the saving process. He conceived capital as the 'aggregate of those commodities which are required for sustaining laborers of any kind or class engaged in work. A stock of food is the main element of capital; but supplies of clothes, furniture, and all the other articles in common daily use are also necessary parts of capital'. Unlike Smith and other classical writers, instrumental goods were not included in the list, as to do so would be double counting, the latter being themselves considered to be the crystallised transformation of consumption goods.

He emphasised that 'capital is not the railway but the food of those who made the railway'. Further it is not correct to say that 'a railway is fixed capital'; the correct version is that 'capital is fixed in the railway', the 'true form of capital' being always the 'ordinary sustenance requisite to support laborers of all ranks when engaged upon their work'. Thus capital, the result of saving, consists of the abstained consumption goods, and the saving process, as imagined by his predecessors, could relate only to the flow of these goods. This process may be regarded as the utilisation of consumption goods for the maintenance of workers of all kinds – Jevons made no distinction between productive and unproductive labor – instead of being consumed by the persons exercising abstinence.

Later however, Jevons seems to have improved somewhat upon these ideas. In the fragment of *Principles* published long after his death in 1905, he observed that 'the saving is not in the commodities consumed but in the

durable work produced'. If a farmer makes a new road to his farm, the food of the laborers is unquestionably consumed, and tools and burrows may be worn out. But the saving is in the road'. In other words, though the saved consumption goods were used up, the savings got manifested in the road. The former were, so to speak, exchanged for the latter. And this may be said to come very near the correct version of the phenomenon of saving as it was

The classical economists imagined the phenomenon of saving to consist of a reallocation of the flow of consumption goods and the use of instrumental goods from 'unproductive' to 'productive' channels of consumption and employment

only the next step to realise that the abstained consumption goods were not produced at all, the road having taken their place. If so, Jevons came close to pricking the bubble, though he failed to do so exactly. By abandoning the fallacious distinction between productive and unproductive effort and by defining savings in abstract terms he certainly prepared the ground for someone to do the job.

Summary

To summarise, the classical economists imagined the phenomenon of saving to consist of a reallocation of the flow of consumption goods and the use of instrumental goods from 'unproductive' to 'productive' channels of consumption and employment. We have an example of their view of the saving process: the workers and materials drafted in organising a hunt were part of an 'unproductive' effort, whereas those employed in weaving more cloth or digging a canal or making better and more agricultural implements, were part of a 'productive' undertaking.

In other words, the diversion of workers, their food, materials and tools was supposed to be taking place from one set of consumption trades, namely, the 'unproductive' variety, into instrumental trades plus such of the consumption trades that produced visible and tangible consumption goods. The artificial distinction between productive and unproductive effort permeated the entire classical economic thought, and the classical writers could not grow out of these fallacious ideas of savings. A more scientific division of productive activity into consumption and capital trades was required.

The classical ideas of capital were closely allied to the classical theory of saving. Capital was thought to comprise both consumption and instrumental goods, but only such of them as were used for equipping and meeting the requirements of workers in productive trades; the rest, employed in industries producing the immaterial wants of man, were not capital. The test question to distinguish capital from non-capital was, whether a good was destined to be assigned to 'productive' or 'unproductive' hands. Capital became non-capital by mere change of direction. Among the classical school, Jevons alone took a more restricted view of capital. He included in it only consumption goods. For him, to include instrumental goods also

would be double counting, as the latter were themselves an embodiment of consumption goods.

None of the classical economists imagined saving to be an accumulation of consumption goods in the manner Roscher did. He made his primitive fisherman accumulate a stock of 100 fish, at the rate of one a day, and then live upon it while making a boat and net. On the contrary all of them, including Adam Smith, emphasised that the act of 'saving' consumption goods and their productive consumption were more or less simultaneous operations. Malthus and Senior doubted the practicability of such accumulation taking place on any large scale and Malthus and Mill designated such accumulation as hoarding and not as saving.

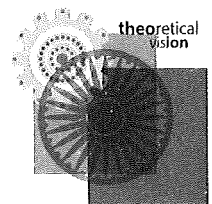
In view of their repeated clarification of this issue, it would seem somewhat strange that some of the modern criticisms of the classical theory should include the accusation that the classical writers believed savings to be an accumulation of consumption goods. The critics also generally failed to note that the classic concept of saving covered instrumental goods as well. J B Clark, for instance, argued at length in refutation of the classic concept of capital formation, namely, that 'the natural way to originate capital is to heap up food enough to live on for a long period and then, during the period, to make something useful, like a boat, a hut or a tool'. In addition to drawing upon his familiar philosophy of utility, he pointed out most conclusively 'no such store of food for laborers exists anywhere'.

LIKEWISE GUSTAV CASSAL, probably confining his attention only to Adam Smith's expression 'stored up', invoked in condemnation of the classicists the continuous character of the productive process which did not permit any noticeable accumulation of consumption goods. But, as we have seen above, the classical economists were all well aware of this fact and had indeed cited it as evidence against any misconception of their meaning. Professor D H Robertson has a similar view of the classic theory.

The principal error of the classicists, however, lay in the idea that the physical embodiment of saving was in the consumption goods, which the savers abstained from consuming, and that these goods continued to be produced whilst the relative saving was in process. This, coupled with their fanciful notion of productive and unproductive activity, clouded their vision and tied them up into a knot almost beyond redemption.

And the illogicality of their concepts placed some of them in situations from which they sought an exit only by making further errors. As consumption goods will not keep, Malthus and Senior believed that large-scale saving and saving for the future could be effected only through the medium of money. The idea that savings gave rise to the abstained consumption goods was probably the basis of Malthus' underconsumption theory of disequilibria. It was also doubtless responsible for the view that savings immediately furnish other persons with additional means of subsistence in proportion to the renounced consumption. The false logical support of both concepts is revealed as soon as it is recognised that the saved consumption

goods are not produced at all, instrumental goods, which the savers would now demand, having taken their place. The benefits conferred by savings only become visible at a future date when the newly created capital goods add to the production of society. These benefits are not immediate, as what comes into process immediately is but capital formation. Nor need one, like Malthus, feel oppressed by the dangers of unrestricted saving, apprehending a disastrous piling up of consumption goods.



Static equilibrium theories of saving

OCTOBER 1947

The writer gives a brief description of other savings theories which are based on the hypothetical conditions of a stationary economy, a serious shortcoming in his eyes

Adam Smith and his followers imagined savings to consist in a reallocation of the flow of consumption goods and the use of instrumental goods from 'unproductive' to 'productive' channels of consumption and employment. Saving was believed to result when, for instance, workers and materials employed in organising a hunt, which was an 'unproductive' undertaking, were drafted, instead, to weaving more cloth or digging a canal or making agricultural implements, all of which were 'productive' enterprises.

The saving process, in other words, was viewed as a diversion of the means of production from one set of consumption industries, namely, the 'unproductive' categories, into instrumental industries and such of the consumption industries as produced visible and tangible consumption goods. So long as the fanciful distinction between productive and unproductive effort permeated their entire economic thought, it was not to be expected that the classical writers could grow out of these confused ideas of saving which, however, contained elements of the modern concept of the phenomenon. For a clearer view of the saving process a more scientific division of productive activity between consumption and capital industries was essential. It was also necessary to perceive the error of thinking that the physical embodiment of saving was in the consumption goods, which the savers abstained from consuming, and that these goods continued to be produced whilst the relative saving was in process.

Marshall's theory of waiting

The immediate post-classical British economists made no significant contribution to the development of the theory of saving. Alfred Marshall (1842-1924) did little more than substitute the term 'waiting' for Senior's term

'abstinence', in order to be free, as he explained, from the criticism advanced against 'abstinence' that it carried a suggestion of moral struggle and merit which was not justified for savings by the well-to-do. Otherwise, like abstinence, waiting stood for 'postponement of enjoyment'. But the substitute implied a voluntary deferment of benefits, and therefore did not cover forms of involuntary saving. In this respect 'waiting' was not an improvement over 'abstinence'.

It is not clear whether Marshall had a correct view of the mechanics of the saving process. He had no clear idea of the structural changes, in the Austrian sense of the term, produced in the economy by the accumulation of capital. Saving was regarded as ensuing from 'an excess of income over necessary expenditure' without reference to the resulting real changes and, somewhat like Senior, he spoke, rather vaguely, of the general fund of capital being the product of labor and waiting.

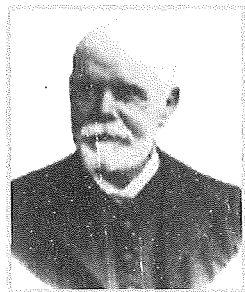
The credit for clearing up the classical confusion goes to the Continental, and the later English-speaking economists. Among these we may consider the theories of the following as representative of the ground: Leo Walras (1834-1910), Eugene von Bohm-Bawerk (1851-1914), John Bates Clark (1847-1938), Gustav Cassel (1866-1954), Philip Henry Wicksteed (1844-1927) and Knut Wicksell (1851-1926).

Walras' theory of capitalisation

Walras' theory of capitalisation was a distinct advance over the British classical theory of saving. An individual's income, derived from the sale of personal or material capitals, was conceived to be divided into two streams, one for the purchase of consumption goods and the other for the purchase of new capital goods. The latter represented savings and the former consumption expenditure. In practice all savers may not directly acquire material goods. They may purchase only securities, probably and more generally, only old securities.

Savings would, then, first flow into the hands of entrepreneurs (either directly, as when newly issued securities were exchanged for savings, or via the owners of old securities, who may replace old securities by the newly issued ones) who will use them to purchase new capital goods produced by other entrepreneurs.

Changes in the preference for consumption or saving would produce equal and opposite effects on the two streams of money flowing into the consumption goods market and the market for new capital goods, respectively. But these were matters of detail. In substance, personal and material capitals would be exchanged for consumption or new capital goods through the intermediary of entrepreneurs who would convert them into these categories of goods in the ratios of the demand for them. The transformation of personal and material capitals into new capital goods repre-



Walras

sented Walras' capitalisation. It was implicit in his account of the phenomenon that those goods which savers were said to abstain from consuming were not produced at all.

SAVINGS WERE BELIEVED TO exist only when new capital goods were produced, i.e., when the aggregate of the excess of incomes over consumption expenditures in a community was more than sufficient to maintain existing capital intact. If the excess of incomes just sufficed to replace durable capital (i.e., to cover depreciation and insurance), there was said to be no saving. If it was less than this amount there was capital consumption, and savings were negative.

The supply of savings or the aggregate of the excess of individual incomes over consumption represented the demand for new capital goods and the output of such goods represented the demand for savings on the part of entrepreneurs producing such goods. Equivalence between these two demands, which was essential to equilibrium, would be brought about through the instrumentality of the rate of interest. At a given rate of interest, *ceteris paribus*, there would be available a certain supply of savings and the newly produced capital goods would have a certain value. If the volume of savings exceeded the value of these capital goods, the interest rate would decline which, in its turn, would, on the one hand, reduce the flow of savings, and on the other, raise the value of new capital goods until equivalence was established between the two magnitudes. But the situation would still be unstable if the value of new investment goods differed from their cost of production.

The equilibration of value and cost would be, then, effected through an appropriate adjustment in the volume of output of new investment goods. Under equilibrium conditions, or at the equilibrium rate of interest, therefore, the supply of, and the demand for, saving, as well as the value and the cost of new investment goods would be identical.

Walras' theory, though it made a stride forward, remains a theory of static equilibrium. He supposed the production of capital goods for which the savers exchanged their money savings to be instantaneous with the act of saving, and the rate of interest to be the sole and sufficient agent for restoring equilibrium between the demand for, and the cost and value of, new capital goods.

He thereby ignored the dynamic problems arising from the fact that savers 'saved' only the means of production, that adjustments in the production of new capital goods (which under present-day conditions would take place in anticipation of demand) to the volume of savings require time, and the fluctuations in the value of money create disturbances which interfere with these adjustments and also create new forms and new problems of saving. Though he professed to analyse the production of new capital goods, he did not describe clearly the process of capital formation and the influence of changes in the volume of savings upon the time-structure of production.

Bohm-Bawerk's time-structure theory

Bohm-Bawerk demonstrated that the essence of saving lay in setting free a certain quantity of the original factors of production (labor and land) from the consumption industries for the creation of new capital goods, an idea which was only implicit in Walras' account. His account of the phenomenon of saving formed an integral part of his theory of capital formation and of the capitalistic processes of production (which he built upon the Jevonian concept of capital). He demonstrated with great clarity and success the changes in the capital intensity of production with emphasis on the time element, which followed changes in the volume of savings. This was his most noteworthy contribution to the development of the theory of saving.



Bohm-Bawerk

Before capital can actually be formed, observed Bohm-Bawerk, 'the productive powers necessary to its making must be saved by encroaching on the moment's enjoyment'. If Robinson Crusoe, who lived on berries, devoted one hour a day making a bow and arrow instead of engaging in gathering berries all 10 working hours, he would be saving one-tenth of his 'original productive powers'. But saving, in and by itself, did not produce capital. Crusoe, for instance, 'may save and stint as much as he please' and 'accumulate a store of berries...but that will never give him a single bow or arrow'. For capital to emerge, 'the negative element of saving must have added to it the positive element of devoting the saved goods to production as intermediate products'.

HAVING COMPLETED THE bow and arrows in, say, a month, Crusoe may spend all 10 working hours in ampler living, made possible by the bow and arrows. He would, then, however, not only be unable 'to acquire new capital, but will lose the old', as 'bows and arrows do not last forever'. For the maintenance of capital he has to 'employ at least one of the 10 hours in renewing his weapons'. Speaking in general terms, 'to retain capital in existence, man must make over, and devote to the service of the future, at least so much of the productive powers of the current period as he has consumed, during the current period, of the produce of former productive powers'. If, however, the technique of production should progress in the meanwhile and Crusoe learns to make the bow and arrows in 15 days, instead of 30, it would be 'sufficient for the upkeep of the capital if he works only half an hour daily at the repair of his weapons'.

In either case, current consumption would be, then, equivalent to the produce of the current supply of productive powers, the amount applied to the maintenance of capital being exactly balanced by the currently accruing flow of consumption goods from the pre-existing capital equipment, and savings would be nil. If, however, Crusoe devoted one hour 'to renewing his weapons, and less than nine to gathering berries and killing game', he

would be saving productive powers and an increase of capital would be possible. In other words, provision for depreciation did not constitute saving. Savings emerged only when there was a net accumulation of capital.

Bohm-Bawerk then proceeds to apply these ideas to a modern community 'embracing 10 millions of able-bodied persons'. The 'annual endowment' or the 'original productive powers' of such a community, 'leaving out of account the current uses of land, so as not to cumber the statement unnecessarily', would amount to 10 million years of labor. Its accumulated stock of capital was assumed to represent 'the fruit of 30 million labor-years (and a corresponding amount of uses of land)'. This was pictured to comprise intermediate products in various stages of maturity, depending upon the technical circumstances of the branches of production concerned, and the time-distance they had to travel before reaching the goal of human consumption. Considered with reference to this time distance, the capital stock of a community may be 'very appropriately pictured by a diagram of concentric annual circles' the outermost circle comprising goods) e.g., clothing which will flow out as finished consumer products within a year.

The inner circles would represent intermediate products in the order of the time required for reopening and would cover branches of production such as wood cutting, railway construction, mining and so on. At each stage of the production process 'new labor is added to the intermediate products', which then pass on to the next outer circle in a more advanced stage of production. The outermost circle would thus 'embrace the largest quota of the total mass of capital' in any annual stage of production, as 'every branch of production, without exception' would send its share of products to this circle, 'while decreasingly smaller quotas fall to the more remote classes' represented by the inner circles.

'Durable productive goods, which give off their use gradually in the course of several years belong naturally', however, 'to several circles simultaneously', and represent relatively larger amounts of capital than other goods which pass through fewer stages of production.

If the total capital of the community was represented by 10 yearly circles, each circle, from the outer to the inner, representing the products respectively, of 6, 5, 4, 3½, 3, 2½, 1½, 1, ½, and ¼ million labor-years the outermost circle being divided off each year after it has matured into consumption goods, the community would require annually 6 million labor-years to maintain the stock of its capital undiminished.

If, therefore, such a community spent four million labor years in 'present time production' i.e., applied them to the outermost circle, current consumption would represent the output of 10 million labor-years. This may happen if, say, three (instead of four) million labor years were applied to the outermost circle, or if production was reorganized so that the outermost circle would contain the products of 'five instead of six million labor-years'. In either case current consumption would comprise nine million labor-year, and a million labor-years would be available for investment in more lengthy capitalistic processes of production.

With increased savings 'many workers, relatively speaking, would be put to mining, railway building, regulation of rivers, machine-making and the like, and few to wine-growing, silk-spinning, lace-making, beer-brewing, cloth-making and the like'. If technical progress enabled the maintenance of capital with less of the original factors of production than before, the community might either increase current consumption or use the difference for creating additional capital goods.

IN A SOCIALIST STATE, saving and the formation of capital was effected by authoritarian control and direction of the factors of production, while, in an individualistic economy, where entrepreneurs decide, in the first instance, how the productive powers shall be employed, the distribution and the creation of new capital is determined by the impulse of prices.

The output of either category of goods would expand when 'lively demand promises a profitable price' and would contract when 'prices fall below a paying level', until the pattern of production 'has adapted itself to the desire for the particular commodities'. In the example cited above, 'if every individual...were to consume exactly his year's income', then, 10 million labor-years would be 'changed

In a socialist state, saving and the formation of capital was effected by authoritarian control while, in an individualistic economy the distribution and the creation of new capital is determined by the impulse of prices

each year into the form of consumption goods'. If, on the other hand, each individual consumed, on the average, three quarters of his income, and saved the rest, seven-and-a-half million labor-years would be 'transformed into consumption goods' and two-and-a-half million labor-years 'will be spent in the increasing of capital'.

The saved productive powers were all assumed to be employed in the creation of capital goods, as 'an economically advanced people does not hoard'. The saved part of the income, through the purchase of shares or securities, or via bank deposits, 'increases the purchasing power' of entrepreneurs, causes 'an extra demand for means of production or intermediate products', and induces investment in such products.

Though hoarding was ruled out, dis-saving was thought possible as 'individuals may consume, on the average, more than their income'. This would lead to a diminution of the community's capital, 'the steps of the process' being an increase in the demand for consumption goods, a rise in their prices, and a consequent reorganisation of production. The outermost circle would be extended to cover seven instead of six million labor-years (by diverting into it the produce of one million labor-years from the lower circles), five instead of four million labor-years would be employed in 'present time production', so that current consumption would be equivalent to the output of 12 million labor years, and the amount devoted to the replacement of capital would be reduced from six to five million labor-years. The stock of capital would, as a consequence, diminish by two million labor

years, and, by implication, the length of the time-structure of production would suffer a corresponding diminution.

With this theory of saving, Bohm-Bawerk had little difficulty in disposing of the classical suggestion of struggle or moral desert in the act of saving, the socialist thesis, propounded by Rodbertus and Lassalle, that capital was the product of labor solely, and Senior's concept that saving was an independent third factor, along with Nature and labor, in production. The element of suffering depended upon the level of income of the savers. Its presence or absence was immaterial to the formation of capital, for which it was 'simply the fact of a saving that is indispensable'. Increased productivity of labor could not by itself create capital. It was the decision to release part of the resources from current consumption (rendered possible by the enhanced productivity of labor) that gave rise to it.

Saving 'does not stand beside' Nature and labor 'but behind them', capital being the result of diverting these two factors from current consumption for the production of intermediate products for future use. Though production and saving constituted 'two equally indispensable conditions for the formation of capital', Nature and labor were 'the only true productive powers' in the sense of being the original factors of production. The saved productive powers have to be applied to production before capital may come into being.

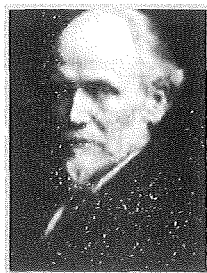
Clark's theory of abstinence

J B Clark, though he used Senior's term abstinence, viewed the phenomenon of saving as production of capital goods in substitution of consumption goods. 'Abstinence', observed Clark, 'is the relinquishment, once for all, of a certain pleasure from consumption and the acquisition of a wholly new increment of capital'. It is 'nothing more than electing to take our income in the form of wealth-creating goods, instead of in pleasure-giving goods. It is on these latter goods, which we elect not to take – and which are, therefore, not produced for us – that we practice abstinence'. Like Walras, saving was believed to exist only when it 'originates new capital', i.e., makes a 'net addition to the fund of productive wealth' in the economy. In a 'static state there is no abstinence or creation of new capital'. A loom in a cotton mill would produce, 'in addition to the net income' it would yield, 'a sinking fund which replaces itself without imposing' on 'the owner any further abstinence.

Abstinence would be called for only for the 'starting of an entirely new series of capital'. Clark did not pause to reflect that the division of income into 'net income' and depreciation, which yielded the concept that there was no saving in a static economy, was somewhat arbitrary, though it had the sanction of well-established accounting practice. Though he visualised correctly the mechanics of the saving process, he was, probably, not familiar, like most contemporary English-speaking economists, with Bohm-Bawerk's capitalistic theory of production and saving.

Cassel's monetary theory

Gustav Cassel defined saving as a 'restriction in the satisfaction of wants to enable the production of real capital to increase its presently supply'. It consisted 'in a particular method of applying the factors of production', the finished goods which the saver abstained from consuming being 'never actually produced'. Like Walras, Bohm-Bawerk and Clark, Cassel allowed conventional ideas of accounting to determine what constituted saving, though he recognised the functional similarity between depreciation allowance and saving. He was of the view that savings emerged only in a progressive economy. Depreciation allowance did not constitute saving.



Gustav Cassel

Though it may be argued that even under stationary economic conditions some sacrifice was essential 'to the constant maintenance of real capital' as, otherwise, increased current consumption would be possible, such sacrifice scarcely corresponds to the customary connotation of the term saving, though it is undoubtedly a service of the same quality as saving which leads to a net increase of capital. In the one case eventual economic impoverishment results and in the other economic betterment.

Cassel defined savings, and would measure economic progress, in terms of real capital. Clark, though he saw correctly the mechanics of the saving process, made no use of Bohm-Bawerk's concept of capital formation and failed to picture correctly the changes in the capital structure resulting from an increase in the rate of saving. An 'increase in real capital made possible through saving' was conceived to represent, without further elaboration, 'the material creation of capital'. Cassel's attention was centred more on the monetary aspects of the phenomenon. Like Walras he examined the flow of money income in its two streams, one applied to buying consumption goods and the other 'for buying fixed or floating real capital'.

Since, in a closed economy, for a given period, total money income was, by definition, 'exactly sufficient to buy the total outcome of the process of production', changes in the volume of savings merely influenced via the two money streams, the ratio of the production of consumption goods and capital goods. A general increase in savings need not, as some feared, cause a stagnation of production as it merely caused a shift in demand and production from consumption goods to capital goods. Nor was there any danger of a too rapid progress of the economy leading to a glut of production in excess of the community's buying power, as an increase in production also led to a corresponding increase in income.

Saving was believed to be automatically 'invested from the time of its origin' somewhat as follows. Income 'arises in the moment when the work is done', though it may be paid out only at intervals. It is then 'lent to the factory and invested in its floating capital', so that when a part of the income is 'saved' after pay day and in due course 'invested', the corresponding creation of capital will have already taken place at the moment the

income was earned. Investment merely amounted to exchanging 'a money claim for the possession of real capital'.

Under equilibrium conditions, capital formation or investment was thus assumed to be *ipso facto* equivalent to savings. Stated algebraically, $I/s = P/100 C$, where C stands for total capital, p the annual percentage increase in C , I/s the rate of savings, and I the annual income. In other words, annual income was equal to the product of the reciprocal of the rate of increase in saving and the percentage increase in capital formation multiplied by total capital. If the rate of increase of capital (or the rate of economic progress) was 3 per cent, which was approximately true of Sweden at the turn of the 19th century, and the rate of saving one-fifth of income, annual income would be normally to 15 per cent of capital.

IN A UNIFORMLY PROGRESSIVE ECONOMY (under equilibrium conditions), p and s being both constant, total income would increase at the same rate as capital and so would both of the two streams of consumption and saving into which income bifurcated. Any material divergence in the rates of increase of income and capital might emerge only during transition periods. In a 'trade boom the production of fixed capital increases at a faster rate than the total income, and the production of consumption goods at a slower rate' so that there would then be a maladjustment in the distribution of income as between consumption and saving in the distribution of production as between consumption goods and capital goods (the latter ratio of distribution being now different).

Total money income of the community being assumed to be equivalent to total production (which, however, may not apply to a trade boom as the banking system might, under the circumstances of rising profits in the consumption trades, be induced to create expansionary credit). Cassel argued that there would then ensue a fall in the price of fixed capital accompanied by a rise in the price of the use of capital (capital-disposal) under the influence of a rise in the prices of consumption goods. This was tantamount to a rise in the rate of interest. The movement in prices outlined above 'will continue until equilibrium is restored between the total value of newly produced real capital and the income available for the purchase of it' (savings).

Wicksteed's commodity theory

Wicksteed dealt but briefly with the 'processes of saving'. Saving was conceived to consist in (i) 'increasing our stock of relatively permanent or slowly maturing commodities by the application of resources and efforts which might have been applied to the increase of our stock of relatively perishable or quickly maturing ones', e.g., 'from gathering wild fruit to sowing and tending corn' and (2) 'deflecting energies and resources to relatively indirect means of securing our ends (by embodying them in tools and apparatus) from relatively direct



Wicksteed

means of securing them (by employing the tools and apparatus we already have)', e.g., 'from tickling more fish to building boats and making fishing nets or other 'long-service commodities'.

In either case the savers 'abstain from short service commodities and cede them to others as payment for embodying their efforts in long service or slowly maturing commodities'. What happened in principle when savings were accumulated to build a house was that 'by such agencies as Savings Bank and the like a number of persons' pool their savings (i.e. 'refraining from drawing things out of the circle of exchange') and 'when I have been saving a few months, and have diverted from current use say a 20th part of the resources necessary for the construction of a house, I have unconsciously combined with 19 others to furnish house builders with things they want, and from which we have abstained'.

There seems to linger in this definition, which is otherwise so satisfactory, a vestige of the concept that consumer goods formed part of what the savers abstained from. The wages paid to the workers engaged in the construction of a house and, therefore, the articles of their consumption, no doubt formed part of the capital put into the house. But this is not the same thing as saying that these goods were abstained from by savers who then ceded them to the workers. In a properly ordered economy the consumer goods from which the savers abstained were not produced at all, the equivalent resources being diverted to the capital industries. In the present case the savers get a house each in place of abstained consumption. That the workers had to live while they were engaged in construction does not alter this fact. What they consumed or did not consume was a separate story with a separate set of consequences.

Their saving-consumption behavior was not directly related to the abstinence of the savers who paid them their wages. The wage-earners may not, in all likelihood do not, consume the same things as the savers abstained from, and part of the wages may be saved.

WICKSTEED VISUALISED clearly the 'process of accumulation' for the future, which had confused Malthus and Senior. He observed that 'mere hoarding of precious metals', which was the view of the classics, constituted 'but a very small part' of the provision for the future. Accumulation for the future was not done in short or long service commodities as 'moth and rust corrupt'. It was done with the aid of the 'machinery of exchange and the principle of division of labor'.

Even as 'one man can make chairs for another' in return for what the latter may produce, similarly, one may obtain from another, at a future date, what he may then want in exchange for his current savings. If 'A may want in the remote future something which he has not got, which he cannot make and which in any case would not keep, but for which he is very willing to spare or to make some equivalent-in-value, in the present or the approximate future', what he does is 'to look for B, who can make (or put him in touch with C who can make) the thing he expects to want' at the

Experience shows the replacement of a unit of current labor and land by 'an equal quantity of stored up resources of a similar kind' (capital) generally tends to increase productivity

future date 'and who will do so in consideration of receiving now or in the proximate future some of those equivalent-in-value things which A possesses or can make in the proximate future'. By this chain method of division of labor through time (the details of which may be intricate and varied embracing as it does the banking system, the commodity

and the capital market viewed in their working through time) current savings, large or small, may be transmitted to any point or period of time in the future.

Wicksell's static theory

Wicksell built a logically complete and satisfactory theory of saving under the assumptions of static equilibrium. His exposition rested on the solid foundation of the Walrasian concept of the mechanics of the saving process and the Bohm-Bawerkian concept of capital formation, with which he linked some elements of his own theory of the rate of interest. He also dealt with some important aspects of the phenomenon, such as involuntary saving and dissaving, and hoarding and dishoarding, which manifest themselves in a monetary economy.



Wicksell

The essence of saving lay in the production of fixed capital goods in substitution for consumption goods, 'the commodities of which the saver forgoes the consumption' being, 'in a properly ordered system', not 'produced at all'. The labor and normal resources hitherto employed in production of these goods would be placed 'directly (or by means of money, credit, or credit institutions) at the disposal of an entrepreneur' who would convert them 'gradually, as the savings are effected, into more or less fixed capital goods, i.e. real capital'. As a result 'production will have become more capitalistic, i.e. directed more towards the future, and consequently, as a rule, more fruitful'. If, on the other hand, capital was 'not maintained by renewal' but was consumed, 'the longer processes, which are characteristic of the present technique of production, must be curtailed or interrupted one by one', so that the whole of production would eventually 'return to the small dimensions of primitive times'.

The sequence between saving and the accumulation of real capital was believed to be close. This was apparent when, say, a landowner decided to forgo a hunt and purchased, instead, the shares or bonds of a neighboring railway company and the latter employed the workmen and the horses which might have been engaged in the hunt, in the construction of a railway. Investment followed saving closely even when savings were entrusted to a bank, as the latter would lend the savings 'as quickly as possible to some enterprise which employs them productively'.

Capital, the 'fruit of the cooperation of the two original factors, labor and land', was viewed as 'a single coherent mass of saved-up labor and saved-up land, which is accumulated in the course of years'. Since experience shows the replacement of a unit of current labor and land by 'an equal quantity of stored up resources of a similar kind' (capital) generally tends to increase productivity, and since the quantity of capital is scarcer than the current supply of labor and land, 'it follows that the marginal productivity of the saved resources of labor and land is greater than that of the current resources'. The remuneration to capital (even as remuneration to current labor and land) will be 'in accordance with its marginal productivity', and the difference between the two marginal productivities, which is the same thing as the excess of the marginal productivity of capital over the 'recompense for the actual capital used up in production', is the interest on capital. This concept of the genesis and justification of interest together with the Bohm-Bawerkian theory of capitalistic production form important ingredients of Wicksell's account of the saving process.

Capitalistic production implied stratification of capital in various stages of maturity ('goods in transit'), representing current labor and land stored up for use at various dates in the future, so that, under equilibrium conditions, as capital (of whatever maturity) was consumed in production, fresh capital would take its place. If the technical duration of capital was (i.e. if the resources are saved up for) two years, there will be present in the economy, at any moment, one-year capital and two-year capital, and each particular year's production would be 'due (1) to current labor and land (2) to resources which have been saved and capitalised during the two preceding years', i.e. one unit of one-year capital and one unit of two-year capital.

To maintain the capital of the community undiminished, equivalent units of current labor and land must be saved up and 'devoted (1) to production of goods which will only be used in the following year, (2) to goods which will only be used in the year after that', and one unit of one-year capital 'carried forward' for use (as it matured into two-year capital) in the following year.

Wicksell's concept of capital being carried forward through time, a process which, in itself, was believed to add to the productivity of capital, is somewhat unrealistic. It may broadly apply to his highly simplified 'copy book example' of a community producing a single commodity, namely, wine, the value of which automatically grew with years. But in respect of intermediate products, each year sees the addition of some more of the original factors of production before they are passed on to the next higher stage of the productive process until they mature into finished capital goods for employment in production.

The productivity of the finished capital goods would, no doubt, depend upon the number of years of capital accumulation, or the amount of the original factors of production which have been put into them. In this sense it may be appropriate to speak of capital as one-year capital, two-year capital and so on. But once the productive process has been completed, the

productive efficiency of capital may not improve by simply carrying it forward from year to year.

Though the 'marginal productivity of two-year-old capital must, within very wide limits, be greater than that of one-year-old capital and *a fortiori* than that of current labor and land', accumulation of capital for two years, instead of only one year, before employment in production, would depend upon this becoming profitable, and such profitability would be determined by the rate of interest. The per annum interest on two-year capital (or the excess of the marginal productivity over the marginal productivity of one-year capital) should be at least equal to the interest on one-year capital (or the excess of its marginal productivity over the marginal productivity of current labor and land). This would imply a larger return on the 'two-year capital than on the one-year capital by a margin at least corresponding to the difference between simple and compound interest.

IF THE INTEREST ON one-year capital is, say, 5 per cent, 'then the marginal productivity of two-year-old capital must necessarily be related to that of one-year-old capital at least as 1.05:1; and consequently to current resources of labor and land, so that the two-year-old capital will yield at least 10.25 per cent interest for its two years'. If the return on two-year capital was less than 10.25 per cent, the technical duration of capital will be only one year, and 'anybody who wished to save capital for two years or more would prefer to split up the hypothetical two-year capital investment into two successive one-year investments'. They would, for instance, 'buy up labor and land in the market in one year in the form of implements, slaughter animals etc., sell them in the following year, and thus repeat the same operation' so as to ensure compound interest at the rate of 5 per cent, rather than indulge in the (to them) costly enterprise of extending the technical duration of capital.

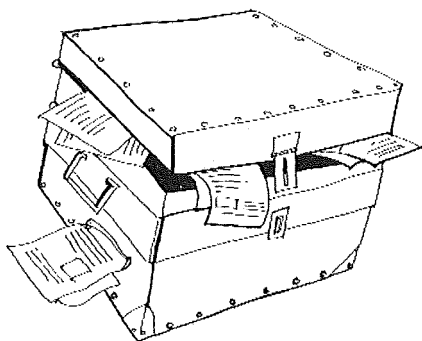
On the other hand, under equilibrium conditions, 'interest on two-year investments could not be permanently more than double, say three or four times, that of one-year investments' as, in such circumstances, one-year investments 'would be exchanged more and more for two-year investments until interest on the latter became slightly more than double, or, calculated per annum, as great as the former'. When the leveling of the two interest rates has been achieved and full equilibrium restored, the 'whole available capital will now be distributed between one-year and two-year investment' in such proportion 'that the above relation between the marginal productivities will obtain'. The appreciable difference which actually exists between interest rates for long and short periods 'should be regarded partly as an increased risk premium for long-term loans, partly as due to the fact that...short-term debts on good security are largely used as cash (money substitutes)' and hence are in special demand.

If in this background capital accumulation increased, i.e. if more of current labor and land were devoted to future use, two consequences would follow. The quantity of current labor and land participating in the direct

production of consumption goods being now less, their marginal productivity will rise. Simultaneously, the marginal productivity of capital, the supply of which was now larger, would decline. Interest on one-year capital (in the technical sense) would, then, fall by a larger margin than interest on two-year capital, as the two sets of marginal productivities, the differences in each of which measure the rates of interest for the two categories of capital, would move in opposite directions in the former case and in the same direction in the latter.

IN THE EXAMPLE CITED above, if, as a result of capital accumulation, 'the marginal productivity of one- and two-year capital goods is reduced relatively to that of current labor and land by, say, 1 per cent', then interest on one-year capital would fall to 4 per cent, and on two-year capital to about 9 per cent. Two-year capital investment would thus be relatively more profitable than one-year investment (though interest on both groups of capital has fallen), the accumulation of new capital will be devoted more, or wholly, to two-year investments (one-year investment expanding relatively little or even contracting), and it will be extended 'to fields which it had previously not entered' until two-year interest fell to $(1.04)^2 - 1$ or rather more than 8 per cent. And, as capital accumulation continued, 'investment for three, four or five years, etc., which have previously been unremunerative, in spite of their higher marginal productivity', would begin to 'yield a profit and will therefore be made'.

This process will continue until interest fell to nothing, or the marginal productivity of all capital fell to the marginal productivity of current labor and land, stationary conditions prevailed in the economy, and 'the inducement of new savings ... ceased'.



Wicksell drew attention to certain manifestations of the phenomenon of saving, such as hoarding and dishoarding, which arise in a monetary economy. Hoarding was defined as holding 'money *qua* money' with the object of 'procuring something else for it at a future time'. But the object in view will be attained only in so far as 'somebody else at the same time hoards a

sum equal to that which I withdraw from my hoard, for immediate use as a medium of exchange'. The amount of money in circulation and, presumably, the price level would then 'remain much the same' and the individual would 'at a future date consume that he now forgoes and which somebody else will then forgo' through reciprocal hoarding.

The theories restricted their analysis of the phenomenon of saving to the hypothetical conditions of a stationary economy or of a uniformly progressive one in which due balance among the several economic variables was postulated to remain undisturbed

Though for the individual hoarding may then seem almost as good as saving, from the social standpoint the only result will be retarded 'velocity of circulation of all existing money' as a portion of it 'will habitually be withdrawn from circulation'.

If, however, 'everybody adopted the same procedure at the same time' and hoarded uniformly, it 'will not have involved any sacrifice and the result will prove to be exactly nothing'. At the

time of hoarding prices will fall and 'everybody will continue to obtain just as many commodities for their remaining income' as they would in the absence of hoarding. At the time of dishoarding 'the prices of all commodities will rise, and nobody will be able to increase his consumption'. When hoarding was partial, as distinguished from *in concerto* hoarding, it 'to that extent exercises a depressing influence on prices, even though it may be infinitesimal as regarding each individual' and other individuals 'thereby obtain more for their money' (Robertson's automatic splashing). When the hoards are drawn on, 'say, in old age,' this 'involves sharing in the consumption of others' (through Robertson's automatic stinting imposed upon the latter). In effect the initial hoarding and the subsequent dishoarding amounted to 'a sort of consumption loan which those who save give to their contemporaries and of which they subsequently claim the capital (though without interest), from the same generation or from the next'.

The hoarding 'regularly practised in earlier times by princes' chiefly as 'a reserve for future wars was of a somewhat different character' from individual hoarding considered above. At the time these funds were accumulated by taxation 'the reduced personal incomes were more or less counter-balanced by cheaper prices of commodities'. When on the outbreak of war the 'treasuries were broken into and came into circulation' prices rose and compelled the community 'to restrict their consumption, whereby supplies became available for the unproductive consumption of the opposing armies, thus assuming the character of a disguised war tax'.

The same applied to the 'state issues of paper money' in times of war, but they 'were more dangerous because they could be expanded indefinitely'.

Some 'further peculiar phenomena', but with different effects on the economy, arise when 'banks are opened in a country' where formerly 'the greater part of money was hidden in safes and coffer'. Loans of these funds

by the banks would induce 'increased enterprise', which would withdraw 'some labor and natural resources from the production of present commodities' and enable the creation of real capital. This development became possible by the 'enforced general reduction of consumption' consequent upon higher prices which would ensue when the idle funds are 'put into circulation'. Wicksell adds that banks can achieve the same result independently by increasing the volume of credit.

Notwithstanding these peregrinations into involuntary and monetary forms of saving and dissaving, Wicksell's analysis of saving was restricted 'to the economic phenomena of equilibrium in the ordinary sense – to static analysis as distinguished from dynamic'. The effect of an increase in volume of savings and capital, which he has examined, related to the situation subsequent to the corresponding adjustments in the economy and the restoration of full equilibrium. He did not dwell upon the economic changes of the transition from a lower to a higher level of saving. He was alive to the importance of further investigating the process of capital accumulation during a trade cycle, which was 'not a little enigmatic'. But he has refrained from this difficult task since he had restricted the scope of his work to static analysis.

Summary

The foregoing theories represent a great stride forward in the development of the theory of saving. They redeemed the theory of the saving process from the classical confusion. Using the terminology of Professor Edwin Cannan they clearly established the simple but important truth that the essence of the saving process consisted in saving 'on' the means of production and saving 'up' the capital goods created with the aid of the saved means of production.

Bohm-Bawerk and Wicksell took the theory a step further by drawing attention to the error of regarding production as taking place in a fixed period of time, usually one year, and related the time length of production and economic progress to the rate of saving, which was essential for a correct visualisation of the saving process. A prolongation of the period of production and the attendant improvement in productive efficiency followed upon an increase in savings, and a reduction in the rate of savings had the opposite effect on the time structure of production.

Wicksteed portrayed with great clarity and success the process of transmitting current savings for future use by the device of the chain method of division of labor through time. Wicksell dwelt briefly on certain manifestations of saving such as hoarding and dishoarding, and their incidence upon current consumption, which engaged the attention of later writers, in particular, Robertson and the Austrian school of economists as part of their exposition of the trade cycle.

But the theories were essentially equilibrium theories. They restricted their analysis of the phenomenon of saving to the hypothetical conditions of a stationary economy or of a uniformly progressive one in which due

balance among the several economic variables was postulated to remain undisturbed. Equivalence between the demands for, and the supply of, savings was assumed to be an established datum of the problem, the available savings being supposed to be wholly absorbed in investment.

WALRAS CONCEIVED INVESTMENT to be instantaneous with the act of saving and Cassel with the 'origin' of income even before income was paid out, and, under equilibrium, Wicksell thought the former to closely follow the latter. These assumptions, like a stationary economy or the even more hypothetical uniformly progressive economy, in which they were believed to hold true, were, however, far removed from the dynamic complexities of real life in which production, to meet the demands of savers, took place in anticipation of the act of saving.

Though Bohm-Bawerk did not base his argument on the assumption of stationary economic conditions, he ruled out the possibility of hoarding in an economically advanced community, the subject of his analysis, and, by implication, may be said to have assumed equivalence between investment and savings. The nature of the phenomenon under conditions of disequilibrium was either left alone or equilibration between saving and investment was believed to result through the agency of the rate of interest (Walras) or the pricing system (Cassel) without going deeper into the problem. Wicksell recognised the importance of a close study of the phenomenon of saving and capital formation during a trade cycle, but his preoccupation being static analysis, he refrained from undertaking it.

The view of Walras, Bohm-Bawerk, Clark and Cassel that savings emerged only when the aggregate of unconsumed incomes exceeded the cost of the maintenance of capital seems to be somewhat arbitrary. The capital equipment of a community is not a magnitude which, once it is brought

The capital equipment of a community is not a magnitude which, once it is brought into being, will necessarily last for all time independently of our decisions with regard to spending and saving from out of current income

into being, will necessarily last for all time independently of our decisions with regard to spending and saving from out of current income. The activity of creating capital for repair and replacement of the existing capital stock as clearly involves a deflection of the means of production from current consumption to the capital trades – which is the essence of saving – as the activity

which leads to an augmentation of that stock, the difference being not one of quality, but of quantity.

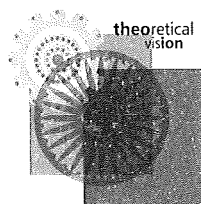
In the absence of such deflection, it is possible to realise increased present satisfaction of wants. This would apply alike to progressive, stationary, or regressive economies. That in the first case the deflection of resources is more than sufficient, in the second just sufficient, and in the last less than sufficient to maintain the community's capital equipment undiminished, has little to do with the question of what constitutes saving. Savings may

be said to result as soon as resources are applied to the creation of capital (whereby the community would sacrifice a potential increase in current consumption) irrespective of the quantitative relationship of the capital so created to the pre-existing capital stock or to the rate of its depreciation. The establishment of such relationship is merely a matter of arithmetic or accounting.

COMMON PRUDENCE MAY SUGGEST the desirability of saving at least at a rate sufficient to keep the existing capital intact so that the flow of future income may not diminish. Similar considerations are probably behind the concept of the distinction between 'gross' and 'net' income (due allowance being made for depreciation in the latter). Though these concepts are doubtless of value, as, for instance, in assessing the rate of economic progress of a community, they need not condition our views regarding the mechanics or the essence of saving. From the standpoint of the saving process, there seems to be no logical basis for drawing a distinction between the three kinds of economies, saving in lesser or larger measure being present in all of them.

It is difficult to conceive of an economy in which no saving at all exists. Among the writers reviewed above, Cassel recognized the functional similarity between depreciation allowance and saving. Nevertheless, he accepted the conventional views regarding saving. Wicksell, however, took a more rigorous view of the matter and believed savings and capital formation to be taking place even during a depression, through at a slower pace.

To relate the concept of saving to the state of the economy raises the almost insuperable difficulty of a satisfactory definition of what constitutes a correct depreciation allowance in order to maintain the existing capital equipment, particularly under conditions of technological progress and obsolescence of such equipment. The customary allowance for depreciation varies, and decisions regarding it are often arbitrary or fortuitous, depending upon laws of taxation, progressiveness of the management, or the level of profits. This difficulty, already great for individual savings, is even greater, as Professor Hayek has pointed out, for savings in the social sense, as, in the latter case, in addition to making allowance for dissaving, we have to decide whether involuntary capital losses should be treated as a further debit item against aggregate individual savings.



Indian national savings

10 JUNE 1975

A theoretical understanding of the importance of savings comes in handy to interpret empirical data, as the writer has done in this analysis issued in the form of booklet at the time

We do not have a regular series of statistics on national savings. While the Social Accounts statistics of member countries, published in the *Yearbook of National Accounts Statistics* and in the *Annual Statistical Yearbook* of the United Nations, contain data on savings of a good number of countries, it does not give this data for India. We hope that the Central Statistical Organisation, which produces India's national income statistics, will rectify this deficiency before long.

In the meanwhile, we have to rely on the annual surveys on savings – Estimates of Savings and Investment in the Indian Economy – conducted by the Reserve Bank of India and published in *Reserve Bank of India Bulletin*. These surveys relate to the period 1950-51 to 1962-63. For some unknown reason, this series ceased to appear thereafter.

The Planning Commission paid little attention to the subject. The annual plan documents do not contain any detailed data on saving. Not that the economists of the Planning Commission did not accept the doctrine that under no circumstances can investment over a period exceed the quantum of savings generated during the period plus foreign aid; but, while accepting the necessity of the equivalence between saving and investment, they seriously believed that, if only we could embark on, and proceed with, a well integrated, mutually complementary and consistent program of investment, the economy will produce the required volume of savings to match the volume of investment. They assumed that this would happen automatically as part of the mechanics of the economic process, though they did not pursue this proposition by any realistic or detailed analysis of the mechanics as applied to a live model.

Consistent with this dogmatic assumption, the Planning Commission did not think it at all necessary to make any estimate of the rate and quantum of national savings before formulating their programs of investments.

To them this was a futile exercise; in their line of thinking, it was much more meaningful to assess the 'needs' of the people, formulate production targets on the basis of these 'needs' and determine the quantum of investments for achieving the targets, leaving alone the actual flow of savings from the economy.

Though the first four plan documents talked vaguely (and in very general terms) of national savings, their programs of investments were independently formulated by reference to the criterion of 'needs' and targets and were not designed to be adjusted to any estimated quantum of savings. Formulation of investment programs independently of estimates of saving holds true also of the annual plan documents, though the latter contain rather laconic statements of the estimates of the rates of savings in the preliminary comments on the economic situation. It is, however, not clear how precise these latter estimates may be.

In the Annual Plan 1967-68, we are told that the rate of saving in 1965-66 was 10.4 per cent of national income; in 1966-67, 8.2 per cent; and in 1967-68, 6.4 per cent. But the Annual Plan for 1968-69 states the rate of saving in 1966-67 to be 9 per cent, in 1967-68 'around' 8 per cent and in 1968-69 'about' 8.5 per cent. The later annual plan document has not cared to explain the difference of 0.8 percentage point in the rates of saving for 1966-67 and of 1.6 percentage points in the rate of saving in 1967-68, between its own estimates and those of the earlier annual plan document.

The dogma that savings will get generated to match whatever investments we could engage in, has caused not a little damage to monetary stability and to economic and social progress in India and in other countries which have pursued similar policies. It has resulted in over-investment, printing press finance of budget, deficits (see Table 1) and inflation. As I have explained elsewhere, inflationary finance is the tap root of most of India's economic ailments.

The chain reactions of inflation are, briefly, as follows. Inflation has given rise to balance of payments difficulties. The latter has led to drastic

Table 1 **Union Budget deficits** (In Rs crores)

Year	Change in cash balance (increase)	Receipts from treasury bills	Increase in long term debt of Central Government with banks	Budget deficit (1+2+3)
1959-60	- 34.8	72.3	232.1	269.6
1960-61	24.5	49.0	101.5	175.0
1961-62	- 4.2	68.7	10.9	175.4
1962-63	-18.4	124.6	110.4	216.6
1963-64	9.5	82.4	190.0	281.9
1964-65	60.3	61.6	104.7	226.6
1965-66	- 45.6	168.3	139.5	262.3
1966-67	- 62.4	307.7	90.5	335.8
1967-68	- 41.4	164.9	64.3	270.6
1968-69	13.7	246.0	50.0	309.7

cuts in imports and more severe import licensing. This has driven up the prices of import licenses to fantastic levels. Inflation and the unearned incomes from import licenses have caused enormous income shifts from the masses to a thin top layer of the moneyed minority. In the context of semi-stagnant national income, this has produced family budget pressures on a wide front, giving rise, in its turn, to social and political tensions and instabilities. Physical restrictions on imports have fostered the domestic production of high-cost and low-quality substitutes to import goods, to the detriment of overall economic development. There is little hope of these multiple economic ailments being remedied if we do not put a stop to printing press finance, i.e., adjust our aggregate investment programs severely within the available quantum of domestic savings and foreign aid.

The statistics of savings of the Reserve Bank survey, need processing to yield the correct trend in saving. The Reserve Bank has converted the quantum of saving from current prices into constant prices by using the General Index of Prices. This has inflated the amount of the saving at constant prices, as an example will show.

As may be seen from Table 2, in 1960-61, the quantum of saving (or investment) at current prices was Rs 1,370 crore. This amount is made up of two parts: first, non-inflationary and voluntary savings (or investment) and, second, savings corresponding to the investment financed by the printing press, which amounted to, during the year, Rs 175 crore. Even as adding water to milk does not increase the aggregate milk content of the mixture, the use of printed money to finance investment does not add to total national savings. As indicated above, this is little more than a device for drawing the savings of the rest of the community into the public sector. Total non-inflationary savings at current prices in 1960-61 amounted to Rs 1,195 crore. Expressed as a percentage of national income at constant prices, this yields a rate of saving of 8.2 per cent.

THE RESERVE BANK, on the other hand, assumes deficit financing to add to national savings an equal amount and, accordingly, states the amount of the national savings in 1960-61 to be Rs 1,370 crore at current prices and Rs 1,235 crore at 1948-49 prices; the rate of saving for the year (in either case) being placed at 9.7 per cent. This does not squeeze out the water of inflation from national savings. For doing so, the amount of printing press finance must be deducted from the quantum of saving. The balance remaining would, then, represent non-inflationary savings. When expressed in constant prices, the latter become a comparable series.

Table 2 gives statistics of saving for the period 1950-51 to 1967-68. They are drawn from the Reserve Bank surveys for the period 1950-51 to 1962-63; are conjectures for 1963-64 and 1964-65; and are taken, or derived from, the annual plan documents for 1967-68 and 1968-69. In arriving at the quantum of non-inflationary savings, adjustments have been made for deficit-financed investments, on the lines indicated above, and a non-inflationary rate of saving has been arrived at.

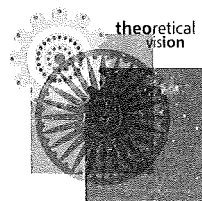
Statistics of saving

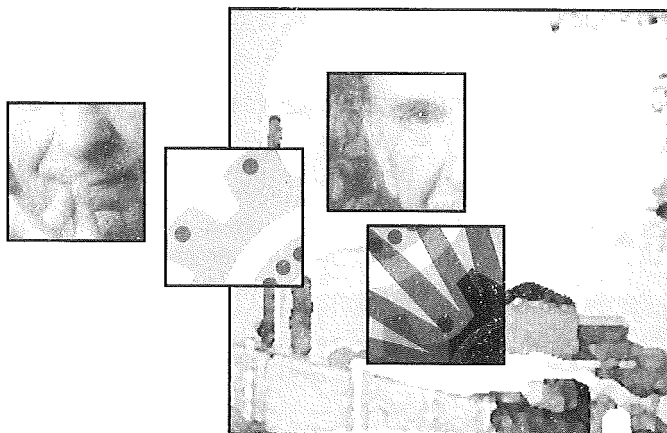
Table 2

Year	National income at current prices	National income constant prices (1948-49 = 100)	R.B.I. Rate of saving(4)	R.B.I. Quantum of saving at current prices	Budget deficits(-) or surplus(-)	N.I. at current prices less budget deficits (2-6)	Quantum of savings at current prices less budget deficits (5-6)	Rate of saving at current prices (8-7)	Whole - sale prices (1952-53=100)	Quantum of savings at constant prices (1950-51=100)	Rate of saving at constant prices (11 as % of 3)
1	2	3	4	5	6	7	8	9	10	11	12
1950-51	9530	8850	5.7	542	+12	9,542	554	5.8	112	495	5.6
1951-52	9970	9100	5.3	529	+1	9,971	530	5.3	119	500	5.5
1952-53	9620	9460	4.2	408	+64	9,756	335	3.4	100	374	4.0
1953-54	10480	10030	5.4	565	61	10,419	504	4.8	101	557	5.6
1954-55	9610	10280	8.0	764	5	9,605	759	7.9	90	947	9.2
1955-56	9980	10480	9.7	971	160	9,820	811	8.3	99	914	8.7
1956-57	11310	11000	9.5	1076	185	11,125	892	8.0 ⁽¹⁾	105	949	8.6
1957-58	11390	10890	7.0	798						106	
1958-59	12600	11650	7.4	932		12,600	932	7.4	112	930	8.0
1959-60	12950	11860	8.5	1102	270	12,680	832	6.6	119	784	6.6
1960-61	14140	12730	9.7	1372	175	13,965	1,197	8.6	128	1,050	8.2
1961-62	14800	13060	9.3	1374	175	14,625	1,198	8.2	123	1,090	8.4
1962-63	15400	13310	9.7	1498	217	15,183	1,282	8.4	127	1,125	8.5
1963-64	17210	13970	9.7	1669	282	16,928	1,387	8.2	139	1,118	8.0
1964-65	20430	15000	10.4	2125	227	20,203	1,898	9.4	151	1,407	9.4
1965-66	20340	14660	10.3	2095	262	20,078	1,833	9.1	174	1,180	8.0
1966-67	23120	14950	9.0	2081	336	22,785	1,745	7.7	203	962	6.4
1967-68	27500	15792	8.0	2200	271	27,229	1,929	7.1	206	1,049	6.6

We find from the table that the rate of saving remained stable at around 8 per cent of national income for about a decade ending 1965-66. This rate should have, in fact, tended upward as Indian national income, at constant prices, rose during the period by about 40 per cent. Ordinarily, when incomes rise savings may rise too. Apparently, something was holding up this rise.

Since 1966-67, the rate of saving declined. It fell from 8 per cent during the year to 6.4 per cent in 1966-67. This decline is largely explained by the low level of agricultural production and therefore, of national income, for the second year in succession. In 1967-68 we had a bumper harvest. Agricultural production rose by Rs 2,620 crore during the year, lifting up national income by 8.5 per cent. This should have led to a recovery in savings; or more than a recovery. But savings went up by but 0.2 percentage points to 6.6 per cent.





money management

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section

International investment gap

30 NOVEMBER 1971

First published in the *Journal of Developing Areas*, Western Illinois University, this article gives a good theoretical basis for understanding balance of payments difficulties

Six major developments claim attention when we review international capital movements during the past 25 years. Foremost is an appreciable rise in the outflow of capital from European creditor countries following the recovery phase of the post-war reconstruction and development. Others are:

- ♦ A high proportion of official aid to total capital outflows
- ♦ The emergence of India as the world's single largest aid recipient
- ♦ The spectacular progress of the foreign trade and capital exports of West Germany and Japan
- ♦ The continued dominance of the US as a provider of capital to the developing countries, though many countries joined the US in giving aid
- ♦ Finally, an unduly large international investment gap, i.e., wide disparities between the capital exports of creditor countries and the current external resources of home origin – as measured by the current account surpluses adjusted for changes in monetary gold holdings – available to them to finance capital exports.

This gap, the manner of its covering and its debit effect on aid to developing countries will be our prime concern here.

Switzerland and the US offer a study in contrasts. Switzerland has been exporting capital, sometimes in the context of current account deficits and always in excess of its own current net external resources, and the amounts involved have frequently been considerable. During the four years 1961-64, Switzerland had a total goods and services deficit of \$1,041 million. But it added, during this period, \$540 million worth of gold to its monetary reserves and, on top of that, financed \$1,547 million of fresh external investment.

At the other extreme is the US. Its recorded outflow of capital from in the eight-year period 1960-68 totalled \$62,353 million. This was less than the sum of the current account surplus and the export of monetary gold by

\$7,121 million, or by 10.25 per cent. Other creditor countries (including the US prior to 1960) ranged between these extremes.

This raises the question of how Switzerland found finance for its external investments and covered its current account deficit, and what happened to the unaccounted for balance of pay-

ments (BoP) surplus in the US. For an answer, we have to take a close look at the errors and omissions in the BoP statements. Ordinarily, when the BoP accounts are reasonably correct and comprehensive, errors and omissions should be relatively insignificant. But we find from the table on the next page that this has not generally been the case in the post-war period.

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Errors & Omissions

To recall briefly the methodology of the BoP: these statements, which are a record of all the economic transactions of the country, are compiled on a double entry system of book-keeping comprising two parts: current account and capital account. Every item of export, for instance, gives rise to a current account credit entry and payments for exports give rise to an offsetting capital account debit entry; every item of import gives rise to a current account debit entry and payments for the imports an offsetting capital account credit entry.

The two legs of the entries, which ensue from every economic transaction, appear (exceptions apart) one on each side of the accounts; and the two entries balance one another. It necessarily follows that, when the balance of payment accounts are accurate and comprehensive, the net current account deficit on surplus would be exactly balanced by compensatory reverse net position – either a surplus or a deficit as the case may be – on the capital account side, due notice being taken of changes in the monetary gold reserves.

But all entries in the accounts are rarely, if ever, wholly accurate; and the comprehensiveness of the two wings of the accounts may not be identical. Disparities may, therefore, arise in the two legs of individual transactions and hence in the aggregate amounts of the two wings of the BoP statements. We find that these disparities exist whether or not the international transactions of a country are subjected to exchange control.

When exchange transactions are free, or in the absence of total exchange control, there may not exist comprehensive and centralised records of the international transactions of the country concerned. The BoP statements are, then, constructed from the customs returns; from the reporting of commercial banks, financial institutions and other agencies whose operations involve foreign exchange transactions; and through surveys and estimates.

In such a context, disparities in the complementary entries may arise almost under any head of trade or other transactions; and the number of

BALANCE OF CREDITOR COUNTRIES

		1946-1948			1949-1952			1953-1959			1960-1969		
		A	B	A+B	A	B	A+B	A	B	A+B	A	B	A+B
1	Belgium	-788	-24	-812	99	15	114	648	-289	359	318	150	468
2	France	-4552	-12	-4564	-2516	29	-2487	-1748	185	-1563	525	660	1185
3	Germany	-1029	17	-1012 ^{2/}	-907	-48	-955	6904	400	7304	20453	3030	23483
4	Japan	-982	21	-961	116	-25	91	-55	59	4	3903	111	4014
5	Netherlands	-1049	-10	-1059	-241	-50	-291	629	-162	477	173	743	916
6	Sweden ^{3/}	-150	5	-145	239	7	246	-120	355	235	-486	550	64
7	Switzerland	-177	343	166	307	108	415	586	751	1337	346	5784	6130
8	UK	-1519	274	-1245	517	N.A.	517	2714	868	3582	4211	1479	5690
9	Total of 1 to 8	-10246	614	-9632	-2386	36	-2350	9568	2167	11735	29443	12507	41950
10	Annual average	-4101	402	-3699	-596	14	-582	1364	359	1723	2944	1251	4195
11	USA	-21901	2021	23922	15472	1761	17233	24552	3047	27599	69474	-7121	62535
12	Grand Total	-11655	2635	14290	13086	1797	14883	34120	5214	39344	98587	5386	104303
13	Annual average	-3200	1076	4276	3272	454	3726	4871	794	5665	10663	460	11123

1/ Adjusted for changes in monetary gold holdings. 2/ These figures relate to the year 1958; figures for 1946 and 1947 are not available. 3/ Errors and Omissions are included in "Private capital" in the case of Sweden, for the years 1947, 1948, 1950, 1951 and 1952; and, in the case of UK, for the years 1947-1954. A= Current account deficit or surplus, adjusted for changes in monetary gold holdings; B= Errors and Omissions in the BoP statement

Source: Statistics for 1946-1959 from IMF BoP Yearbook; 1960-1968 from International Financial Statistics US figures: BoP Yearbook.

these transactions being innumerable and the aggregate amounts so enormous, some entries may be inexact or escape recording altogether. Add to this the urge to elude deliberately – under duress or by design – the recording of some varieties of transactions in certain circumstances, and it is easy to see why the BoP is not, in fact, balanced, and calls for an overall balancing entry. Disparities in the accounts may offset one another, as when opposite errors arise in individual items on the same side of the account or similar errors (i.e. understatements or overstatements) arise on the opposite sides of the accounts. But net disparities, large or small, are an invariable rule.

When the two sides of the balance sheet of a business firm do not balance, accountants go over the entries until the errors are detected and the balance achieved. This procedure being inapplicable to the BoP statements, the net amount of the disparity in this case is corrected by an appropriate overall Errors & Omissions entry, so that the two sides of the accounts balance exactly. This entry is usually described as 'net' to indicate the mutual offsetting of some of the errors.

WHEN THE TWO SIDES of the account do not balance either because of an understatement of the recorded credits or because of an overstatement of the recorded debits (or both), the recorded BoP statements should show an overall net debit position; and the balancing Errors & Omissions entry would be a corresponding positive amount. Errors & Omissions would be, here, the case of net inflows of funds from abroad.

Conversely, when the two sides of the accounts do not balance either because of an understatement of the recorded debits or because of an overstatement of the recorded credits (or both), the recorded BoP statements would show an overall net credit position; and the balancing Errors & Omissions entry would be the corresponding negative amount. The Errors & Omissions would be, here, a case of net outflow of funds abroad.

Thus, if the sum of the current account credits is represented by E , the sum of the current account debits by M , net imports or export of capital by C , net Errors & Omissions by O , then, as the two sides of the BoP statements must balance one another, the current account deficit or surplus $E - M$ would be exactly balanced by the sum of the capital account surplus or deficit and the Errors & Omissions $C + O$; so that the reverse of the current account deficit or surplus would be exactly equal to the capital account surplus or deficit, and we have the equation $M - E = C + O$. It follows that $O = M - (C + E)$.

In other words, the amount of Errors & Omissions is equal to the difference between M , the current account debits, and $C + E$, the sum of the

When the two sides of the accounts do not balance either because of an understatement of the recorded debits or because of an overstatement of the recorded credits (or both), the recorded BoP statements would show an overall net credit position

current account credits and net capital imports or exports. When $(C + E) > M$ (denoting an understatement of the recorded debits or an overstatement of the recorded credits, relative to actuals), the more common Indian experience in the 1950s and 1960s, O will be negative and its value $(C + E) - M$; and when $M > (C + E)$ (denoting an understatement of the recorded credits or overstatement of the recorded debits, relative to actuals), the more common Swiss experience after World War II, O will be positive and its value $M - (C + E)$.

Disparities in entries in the two wings of the BoP statements, which get collected under the balancing head Errors & Omissions (E&O) broadly constitute two streams: first, the E&O arising from fortuitous factors or institutional or other limitations and, second, the rest of the E&O which, as we shall presently see, comprise largely unidentified private capital movements.

The first category of E&O comprise disparities in the debits and credits which arise, among other ways, from delays in reporting, errors in recording, or differences in coverage of the inward or outward payments. These factors received much expert attention since the inter-war period, more especially after the coming of the IMF (International Monetary Fund) in 1946. Member-countries have a statutory obligation to furnish the BoP among other statistics. The relevant IMF Articles state that BoP statistics are among the 'mini-

Under exchange control, concealed movements of funds have necessarily to be effected through the unofficial market for foreign exchange. Movement of funds effected through this market would not therefore, appear under E&O

imum necessary' information for the 'effective discharge of the Fund's duties'; and members are required to furnish the desired information in 'as detailed and accurate a manner as is practicable, and, so far as possible, to avoid mere estimates'.

This has led to efforts, both by the IMF and its members, to improve the quality of BoP statistics. Consequently, this category of disparities contributing to E&O may be less today than in the past, more especially in the case of developed countries, which already had a lead in this regard over most others.

Some international transactions – more particularly (private) flight capital, transfer payments and invisibles by their very nature – may not always be fully recorded or reported; and under exchange control, given adequate circumspection, the transactors may be able to elude their cognisance more successfully than most other transactions. Under exchange control, concealed movements of funds have necessarily to be effected through the unofficial market for foreign exchange, as such transactions cannot be openly put through the official market for foreign exchange, i.e. from the proceeds of trade appearing in the customs returns and from the recorded transfer payments, capital flows and other invisibles. Transactions in the unofficial market are beyond the reach of the BoP net: and the movement of

funds effected through this market would not therefore, appear under E&O.

But, when the unrecorded movement of funds is financed by the unofficial market, as in the case of countries which are not subject to exchange control, disparities would arise between the aggregate 'debits' and the aggregate 'credits' in the BoP. This would happen because the receipts of foreign exchange would be duly entered into BoP books; but the disposal of these receipts would not figure there. Such disparities get collected under E&O. The phenomenon is well illustrated by the flight of capital from the US in the 1960s, the flight being reflected in the large E&O in the BoP of the country.

A close study of the contents in the E&O in the BoP statistics of over 50 countries led to the observation in the *IMF BoP Yearbook* that private capital movements are in general 'the least adequately reported'. One of the reasons given for this is that such movements are not 'stable' and hence not capable of being estimated from 'partial evidence'; and that 'considerable possibilities for error' may exist also in respect to 'services and private donations'. The *Yearbook* concludes that the net E&O 'are likely to reflect unreported or inaccurate data' of private capital movements, private donations and other invisibles.

An OECD study, after reviewing the BoP data of 15 aid-giving and 50 developing countries receiving the aid, has arrived at a similar conclusion regarding the 'large item of E&O in favor of OECD countries'. It observes that, apart from 'unrecorded export of goods and services from OECD countries' – i.e., conscious and unconscious smuggling which may not be considerable – these E&O represent short- and long-term capital inflows into OECD countries from developing countries and the rest of the world.

IF WE ACCEPT THIS IMF-OECD assessment, E&O may be said to comprise mainly of unrecorded movements of private capital. The private capital content of these E&O may be, perhaps, larger in the case of the developed countries which might have succeeded in minimising the first category of E&O than in the case of most others. If so, the answer to the query which gave rise to this discussion would seem to be that the overall surplus foreign exchange receipts (i.e. receipts which are not balanced by recorded outward payments) as in the case of the US in the 1960s, are largely accounted for by unrecorded exports of private capital, which appear in the BoP statements as negative. E&O and the foreign investments in excess of the recorded foreign exchange receipts, as in the case of Switzerland in the post-war period, are financed by unrecorded inflows of foreign funds, representing largely private capital, which appear in the BoP statements as positive E&O.

It seems reasonable to say that the amount of the net positive E&O of the creditor countries, including USA, may represent the broad order of magnitude of flight capital from developing into developed countries

Unrecorded flight capital flowing into OECD

The OECD study referred to above states that the E&O in favor of the OECD countries include three broad categories of foreign capital flows:

(1) unrecorded withdrawals by OECD countries of the investment capital and investment income from the developing countries; (2) unrecorded short- and medium-term investment, i.e. 'flight capital' from the developing countries; and (3) unrecorded 'flight capital' from the rest of the world.

Inflow of flight capital of category 2 above lends support to the frequent assertions in India and certain other developing countries that corrupt and other undeclared income, commonly referred to in India as 'black' or 'No. 2' money, is held in secret accounts abroad by traders, businessmen, industrialists, politicians, and administrators, their favorite destination being Switzerland.

Of the three OECD categories of unidentified capital movements, categories 1 and 2 are of special interest to us, as they represent perverse capital movements – from the developing to the developed countries – and may detract from the pace of economic growth. Net capital flows from the developed countries would be, then, less than the recorded capital flows, by the sum of 1 and 2. As the amounts involved are not just marginal, this phenomenon, therefore, requires more attention than it has received. There is no data for ascertaining the precise volume of 1 and 2. But some general observations seem permissible in an effort of to quantify the OECD findings.

For analytical convenience, we may divide the world into three broad groups. Group A consists of developed and capital-exporting creditor countries; Group B has the capital-importing developed countries; and Group C the developing countries. In the OECD findings, flight capital from Group C countries is included in flight capital of categories 1 and 2 by definition. It follows that flight capital of category 3 comes from developed countries – Groups A and B – viewed as a whole. We find from the attached statistical tables that all Group A countries, other than USA, have been net importers of flight capital from 1960-68. In this period, no part of the category 3 capital could, therefore, come from Group A countries, other than the US. It would ensue only from the US – which has been exporting this category of capital on phenomenal scale in the 1960s – and from Group B.

THUS IF, IN THE CASE OF, say, Switzerland, p_1 , q_1 and r_1 stand for, respectively, the inflows of flight capital of categories 1, 2 and 3; u_1 and b_1 for inflows of flight capital of category 3 from the US and Group B countries, respectively; k_1 for the 'first category' of E&O – i.e. E&O other than unrecorded capital movements referred to in section II above; and O_1 for E&O of Switzerland, then, since, by inference $r_1 = (u_1 + b_1)$, we have the equation $O_1 = (p_1 + q_1) + (u_1 + b_1) + k_1$.

This equation would apply to all countries in the attached table, excluding the US. Therefore, ΣO_1 , the total E&O of these countries (excluding the US), would be equal to the sum $\Sigma (p_1 + q_1) + \Sigma (u_1 + b_1) + k_1$.

It will be noticed that u_1 stands for only a part of the global outflows of flight capital from the US – the part accruing to the remaining countries in the table alongside. If the balance flowing into the rest of the world is represented by L , then the total outflow of flight capital from the US, which may be represented by U_c , as measured by the negative E&O of the country, would be the sum ($\Sigma u_1 + L$). If the net total E&O of the countries in the attached table, including the US, is represented by O_t , then O_t would be equal to the sum of the total E&O of the US, a negative amount, and the total E&O of the rest of the countries in the attached table, a positive amount. We have, therefore, the equation:

$$\begin{aligned} O_t &= \Sigma O_1 - U_c \\ &= \Sigma O_1 - (\Sigma u_1 + L) \\ &= \Sigma (p_1 + q_1) + (u_1 + b_1) + \Sigma k_1 - (\Sigma u_1 + L) \\ &= \Sigma (p_1 + q_1) = \Sigma (b_1 + k_1) - L \end{aligned}$$

Therefore $\Sigma (p_1 + q_1) = O_t - \Sigma (p_1 + k_1) + L$1

$= O_t \pm X$, where X stands for the difference between $(b_1$ and $k_1)$ and L will be positive or negative, depending on whether $L >$ or $<$ $\Sigma (b_1 + k_1)$

Equation 1 demonstrates that, in the 1960s, $\Sigma (p_1 + q_1)$, the amount of the flight capital from the developing to the developed countries, is equal to the net total E&O of the latter (including the US), namely, O_t less Σb_1 , the net total capital flight from Group B countries, less Σk_1 . The k_1 part of the E&O of the countries in the table (excluding the US), plus L , the amount of the capital flight from USA into the 'rest of the world', i.e., countries other than those in the table.

We have no means of ascertaining the magnitudes of Σb_1 , Σk_1 and L in equation 1. But the currencies of most Group B countries have been, since the mid-1960s or earlier, either convertible under Article VIII of the IMF or *de facto* stable in terms of hard currencies. It would seem that, exceptions apart, this evoked confidence in the stability of these currencies. This is evidenced by the fact that in the 1960s most Group B countries had net positive E&O, indicating net inflow of flight capital from the rest of the world. For Group B countries as a whole, such capital inflows amounted to \$347 million during the decade ending 1969, and \$468 million during the second half of this decade. This suggests that capital flight of category 3, Σr_1 , from B group countries, may apply only to such countries in this group as have unstable currencies; and the value of Σb_1 may be, therefore, comparatively small in the 1960s.

We have seen above that, as a result of the effort to improve the accuracy and comprehensiveness of the BoP statements, the magnitudes of Σk_1 too may have been comparatively small since World War II. The magnitude of L , the flight capital from the US to Group B and C countries, may not be large either. In view of the comparative instability of the currencies, it is doubtful if any part of the US capital would be drawn into these countries other than Canada. The bulk of the U_c therefore, may be Σu_1 , L being comparatively minor.

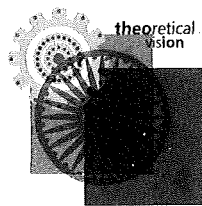
It follows that the total unrecorded flight capital from the developing into the developed countries may not be far short of O_t , the net total E&O of the creditor countries in the attached table, including the US. Under certain circumstances it may be larger than O_t . Its deviation from O_t would be by the difference between L and $\Sigma \{b_1 + k_1\}$. As both the latter two amounts are comparatively small, the difference between them would be small too – this difference would be smaller than the larger of the two amounts. The magnitudes of the flight capital may be larger than O_t if $L - \Sigma \{b_1 + k_1\}$ is positive; and smaller than O_t if negative. It, therefore, seems reasonable to say that the amount of the net positive E&O of the creditor countries, including USA, may represent the order of magnitude of flight capital.

We find in the attached statistical table that the value of O_t , the net E&O of creditor countries, was \$3,610 million for the nine years 1960-1968. The foregoing discussion indicates that this represented the order of magnitude of the unrecorded export of capital from developing countries into creditor countries other than the US. This is a case of part of the development aid flowing back into European aid-giving countries.

During the period under review their capital exports, including private capital and official aid to developing countries, amounted to \$37,682 million. The reverse capital flow was 9.5 per cent of the latter and the net capital flow 90.5 per cent of gross capital flows. The bulk of the perverse capital flows may be from such of the underdeveloped countries as suffer from continued currency depreciation, have rigid exchange rates and are subject to total exchange control – in Asia: Burma, Ceylon, India and Pakistan.

Need for basic reform

The problem of perverse capital flows raises basic issues which call for separate attention. But there can be no lasting remedy without the restoration of monetary convertibility and external and internal economic viability. The basic preconditions for achieving monetary convertibility at realistic exchange rates, are a policy of continued zero inflation and abolition of current account exchange controls and import restrictions – the latter would be facilitated by control of inflation. The return of internal and external economic viability of these countries rests on serious review of indiscriminate import substitution, and the adoption of policies of industrialisation with a high regard for comparative costs and quality of output. Disregard of these key economic doctrines has been a major factor behind economic chaos and the recalcitrant BoP difficulties.



Dangers of inflationary finance

1940

In this chapter of the book *Bombay Plan*, the writer points out the ills which accompany the use of created money to fund development. This was a recurring theme in his writings

We shall restrict our enquiry here to the consequences of the creation of expansionary currency or credit in favor of entrepreneurs for purposes of economic expansion. We shall not, that is to say, occupy ourselves with the effects on the economy of the inflationary finance which a state may indulge in to make good its budgetary deficits.

With a view to bringing out in bold relief the nature of the changes which we wish to emphasise, let us assume increased savings to be taking place in a background of economic equilibrium. Increased savings would take away from the consumption goods market an equivalent volume of money which might, otherwise, have flowed into it. Through reduced prices or reduced sales at old prices this would lead to a curtailment in the output of consumer goods which, in turn, would release from the consumption trades a quantity of labor, plant and materials, hitherto engaged in producing consumer goods that are no longer demanded by consumers.

Looking at the same thing from the money market and the capital market angles of vision, increased savings would add to the balances in the banks to the credit of their constituents. Anxious to maintain their level of profits the banks would, thereupon, seek creditworthy borrowers and lower the rate of interest they charge by a margin which may be necessary for attracting borrowers. A fall in the rate of interest would be interpreted by the capital market as a signal of increased demand in the proximate future for securities and real estate, which will begin to be effective as soon as individual savings grow sufficiently in volume. The available supply of these assets, however, being insufficient to meet this enhanced demand, speculators would bid up their prices.

The rise in the price level of capital goods would induce instrumental entrepreneurs to increase their output. This they would proceed to do by raising the necessary funds from the banking system which, as will be clear, would be only too pleased to accommodate them. With the help of the funds thus acquired, they would engage the factors of production thrown out of work from

Lowering the bank rate of interest would mislead speculators into believing that an increase in volume of savings is taking place, and they would bid up the prices of real estate and securities

the consumption goods trades. As the capital goods in the process of production mature into finished products, individual savings accumulating in the banks would grow in volume and, at the appropriate time, the savers would exchange their savings for the capital goods. These would, then, be employed by them or their agents, a joint stock company, for adding to the stream of the output of consumption good. In this manner savings, by creating capital, would enhance the community's level of consumption, that is, its standard of living.

We may now proceed to examine the effects of an attempt to bring about these results through the medium of created money. As in the case of increased savings, let us assume that the new money is created in a background of economic equilibrium. To be able to find an outlet for this excess supply of funds, the banks would have to lower the rate of interest they charge. This would mislead the speculators into believing that an increase in volume of savings is taking place, and as under conditions of increased voluntary savings, they would bid up the prices of real estate and securities. This, in turn, would induce instrumental entrepreneurs to produce more capital goods. The new funds, therefore, would be acquired by them for this purpose.

IN THE CASE OF A PRECONCEIVED plan of economic development, however, the newly created moneys would be taken over by the Supreme Economic Council directly, the inducements offered by the interest-price changes being unnecessary for bringing it about. But in either case the subsequent developments, which we shall now proceed to review, would be incidentally the same. Without any sacrifice of truth in what follows we may, therefore, refer merely to the case of credit created in favor of the Supreme Economic Council.

Unlike under an increase in voluntary saving, there would not be present in the economy, at this moment, labor, plant and materials just out of work and wanting to be taken over into employment. The Supreme Economic Council, therefore, would attract them from the consumption trades through the inducement of higher prices. Unable to offer the same high prices, the consumption trades would be compelled to surrender the factors of production required by the Council. With the help of these it would then begin to organise the creation of capital goods.

Except for a rise in factor prices, the changes produced so far would be more or less identical with the changes which follow an increase in the volume of voluntary savings. But progress in the direction initiated would soon be attended with difficulties. For, as a result of the withdrawal of the means of production from the consumption trades, the magnitude of the flow of consumption goods would begin to shrink at the end of one period of production of consumption goods. Short supply would raise the prices of these goods and the consuming public would discover that the same amount of money expenditure now brings fewer consumption goods.

Reduced consumption, however, not being out of choice, and being unwilling to submit to it, they would thereupon seek to regain their customary level of real consumption. And the higher remuneration paid to the factors of production will have placed them in funds for attempting to do so. The price level of consumption goods would, consequently, jump up for two reasons: short supply and higher money expenditure.

The projected capital goods in the process of production would, therefore, either have to be abandoned altogether before their completion or, alternatively, they would have to be hastily converted into something less elaborate

The rise in the price level of consumer goods would be the beginning of the end of the new projects financed by inflation. It would raise the profit rate in consumption trades above their original level and would thereby bring part or whole of the newly created money into the pockets of the consumption entre-

preneurs. The additional funds and the higher profits would induce these entrepreneurs to increase the scale of their output, and for doing so they would outbid the instrumental entrepreneurs and reclaim into their trades the factors of production which had been, so to speak, forcibly taken away from them.

This would place the Supreme Economic Council in a serious predicament. It would find that the reduced supplies of men, machines and materials now available to it would be quite insufficient to complete the five-year scheme of capital construction taken in hand. The financial reflex of this situation would be that at the higher factor prices now ruling, the balance of the created moneys now remaining behind in the possession of the Council would be quite inadequate to see it through the plan. The projected capital goods in the process of production would, therefore, either have to be abandoned altogether before their completion or, alternatively, they would have to be hastily converted into something less elaborate than had been planned at first. In either case, a loss of at least a part of the capital already invested would be inevitable.

If, however, this calamity is to be prevented, the banks would have to be called upon to create more credit in favor of the Council and in amounts somewhat larger than the higher profit receipts of the consumption entrepreneurs. This would then enable them, though being in a position to offer sufficiently high remuneration to the factors of production, to retain these

factors in their employ. It is important to note, however, that this would only postpone their difficulties, not put an end to them. For, the new monies created would pass into the hands of the consumption entrepreneurs via the consumer goods market almost as soon as the Council would begin to employ them to pay the higher rates of remuneration to the factors of production. When this happens, the difficulty which the Council had sought to overcome would stare it back in its face.

AND TO PREVENT THIS IT would be necessary for the banking system to go on creating credit repeatedly, at an accelerating pace, always faster than the rate at which the public's expenditure on consumption goods may increase. This process, however, cannot proceed indefinitely. If not caution born of self-interest, the limitations imposed by the reserve ratio and the gold standard would, sooner or later, compel the banks to restrict further extensions of credit. Failure to do so might lead to a violation of currency law and might jeopardise the standard of currency itself. And no sooner credit would be restricted than the Supreme Economic Council would find itself in hot water.

If, however, these limits should be ignored and the currency standard should be suffered to be abandoned, the economy might be faced with the danger of a complete collapse of the currency system, as happened in Germany and certain other European countries after the last war. And all this might happen long before any substantial progress could be attained in the execution of the plan. It is clear, therefore, that it would not only be futile but also ruinous to attempt economic expansion through inflation.

In the long run, created money which is only meant to increase the productive capacity of the nation would not be of self-liquidating character, as it is sometimes believed. That is to say, it is not as if the aggregate output of the nation would soon increase and restore the ratio between goods and the money in circulation. So that, once the intervening time lag was over, there would be no inflation whatever in the economy.

This line of argument is based on misconceptions about the real character of the processes through which inflationary finance operates. Otherwise there would be no limit to prosperity to which the printing press may not take us. Actually, however, as a result of the tug-of-war between the consumption and the instrumental entrepreneurs which, as we have explained, must ensue as a result of inflationary finance, orderly progress of the economy, such as that permissible under voluntary savings, would be impossible in a regime of created money. Disturbances upsetting to such progress would begin to appear within the brief space of one production period of consumption goods.

As a result of the tug-of-war between the consumption and the instrumental entrepreneurs, which, must ensue as a result of inflationary finance, orderly progress of the economy, would be impossible in a regime of created money

Nor is there any device by which the evils of inflation may be securely bottled up so that the creation of capital initiated by it might continue unhampered.

To achieve this impossible feat it would be necessary to prevent the consumption price level from rising which, as we have seen, was the starting point of the evil effects of created money. The consumption price level

This comes to the same thing as saying that the only method of combating the harmful consequences of inflation is to balance every inflationary issue of money by equivalent deflationary measures

could be prevented from rising only if the surplus purchasing power put into the pockets of the people by inflation is mopped up. This comes to the same thing as saying that the only method of combating the harmful consequences of inflation is to balance every inflationary issue of money by equivalent deflationary measures. And as the newly created

moneys must not be permitted to remain in the pockets of the consumers long enough to enable them to bid for goods, deflation must follow close on the heels of inflation.

In other words, the only method of preventing the evils of inflation is not to indulge in it!

It is but idle to imagine that this can be otherwise. Any attempt to control the evils of inflation by executive decrees must either prove a failure or must inevitably lead to such a complete regimentation of the economy as to render inflation wholly superfluous to achieve the object for which recourse was had to it. It would be futile to attempt to regulate prices by issuing price control orders so long as surplus purchasing power remained in circulation and was being continually added to. As our experience of the working of such orders during the present war has shown, they can amount to no more than a farce.

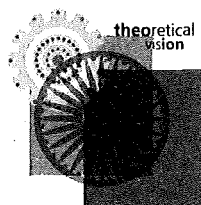
TO MAKE THE orders effective it would be necessary to go beyond the measures of price control and introduce nation-wide rationing over the entire range of consumer goods. But rationing cannot eliminate black markets, which must thrive whilst the people are in possession of excess moneys to spend. To prevent the means of production, which must be conserved for purposes of the plan, from being drawn away for producing goods for the black markets, it would be necessary to take recourse to physical measures of control designed to curtail the output of consumption goods such as restricting access to transport facilities, issue of priority certificates for acquiring raw materials, rationing the supply of instrumental goods and so on. These controls must apply over every aspect of the economy if leakages in them must be avoided.

When this happens, expansionary issue of money would be quite unnecessary to finance the plan. The public would be unable to spend on consumption their incomes in excess of what it costs to pay for the rationed goods. And, as black markets would now exist, they would have no alter-

native but to save the surplus. The savings thus accumulated must be either hoarded or invested. In either case they can be drawn into the plan, in the first through the device of, what Professor D H Robertson has called 'applied lacking'. And in the second by blocking all channels of investment excepting those offered by the plan.

The creation of money required for bringing about applied lacking would not be expansionary in character as that would only amount to salvaging the hoarded savings of the public. Investment of such moneys would be in substitution of, not in addition to, private expenditure on consumption. The new moneys would merely be in the nature of duplicates to the ones which had got lost or mislaid, so to speak, in the course of the circulation. The savings of the people acquired either directly or with the collaboration of the banking system would be quite sufficient to take over for purposes of the plan the factors of production disengaged from the consumption trades. Inflation would be wholly uncalled for.

From this we see that any attempt to isolate and put out of action or into cold storage the harmful tendencies of inflation must necessarily end up in eliminating inflation itself. What is more, the factors of production acquired for implementing the plan would not, then, be made available at all through the expansionary creation of money but through savings generated by the device of restricting the output of consumption goods. In other words, either we have inflation with all its evils or no inflation at all. It is quite impossible to separate the phenomenon of inflation from its evils so as to enable undisturbed progress of the plan. If, therefore, there should be room for a reduction in consumption (increase in savings) this is best mobilised for purposes of the plan by imposing appropriate measures of control, as was done in Russia, than through inflation.



Inflation: causes and cures

1962

In this article which first appeared in the annual issue of *Capital*, and later in two books of Shenoy's writings, the writer again urges analysts not to talk of inflation as an inevitable part of economic development

What is the explanation for the current phase of the price rise, which began in May 1955, and for the current worsening of the price situation, which began in April 1962? The official explanation is that it is the natural and inevitable outcome of economic development. A more dangerous and misleading economic untruth was never spoken.

Recent experience of a number of countries – Canada, West Germany, Italy and Japan among them – and, to some extent, our own experience, demonstrates that the official thesis has no empirical support whatsoever. From 1953 to 1959, West German national income rose at an annual rate of over 12 per cent. And yet, prices in Germany rose only by about 1 per cent per year during the same period. The Japanese national income rose at an annual rate of 12.3 per cent, probably a world record for a sustained rise at this high rate. But the Japanese price index showed a rise of only 2 per cent over the whole period.

The Italian experience is no less impressive. Though the Italian national income over the six-year period went up by 49 per cent, prices fell, instead of rising, by 1 per cent. Far from economic progress generating inflation in the post-war world generally, rapidity of development has been in proportion to the achievement of monetary and fiscal stability.

Indian experience, too, seems to indicate the absence of any relationship between inflation and accelerated economic development. During the first four years of the First Plan, Indian national income grew at an annual rate of 3.6 per cent. This was accompanied by a price fall of about 14 per cent. During the five years ending 1959-60, Indian national income rose at a much slower annual pace of 3 per cent, but prices went up by about 32 per cent. If the official view had a rational basis, prices should have risen in the earlier years as well and at a rate higher than in the later years.

Economic development, even like the growth of an infant into manhood, is not a disease to cause an inflationary upset. Development must be a weird phenomenon indeed, if, as it progresses, the masses of the people must suffer their real incomes to fall continually for the benefit of the upper income groups, traders, businessmen and industrialists, a fraction of the community. And yet this is what would happen, if prices must rise with development.

The fact of the matter is that prices rise not because of development but from the futile attempt to invest non-existent resources. This provides almost the sole explanation for the price rise of 42 per cent during the 1957-62 period. When plan investments far exceeded the available resources, the relationship between over investment and inflation is easily seen.

When plan outlays are balanced by savings, the moneys issued out through such outlays would be flowing into Plan outlays. We have then a simple case of moneys being taken out of the pockets of the savers and put into another set of pockets, the recipients of the Plan outlays. These transactions would leave the monetary circulation unaffected.

THE SAME WOULD apply when the investments are financed from past savings, held as currency reserves. When the reserves are drawn upon to pay for the import requirements of public sector enterprises, finance of the transaction would take the form of deficit financing by the Government of India – foreign exchange documents appropriated for the public sector will be replaced by equivalent treasury bills in the assets of the Reserve Bank. No issue of money into circulation will take place. When the reserves are drawn upon for use in the private sector, the transaction would be financed either from hoarded savings – idle cash, bank deposits or an investment asset, say, government debt – or by credit creation by commercial banks in favor of private sector firms, which claim the currency reserves to pay for their import requirements. Here, hoarded savings or created commercial bank money would be exchanged for the foreign exchange asset of the Reserve Bank. The transaction would not add to the monetary circulation.

The same would apply, too, when investments are financed by imported savings (foreign aid). Foreign exchange representing foreign aid would accrue to the Reserve Bank of India as, in terms of the Foreign Exchange Regulation Act 1947, all foreign exchange accruing to Indian nationals must be surrendered to the bank, the latter paying the equivalent in Indian money. This applies to all foreign aid, whether for use in the public or the private sector. In the case of aid received by the Government of India, government deposits held with the Reserve Bank of India will go up.

When foreign aid is drawn upon to pay for import requirements, this takes the form of a reduction in the foreign exchange assets of the Reserve

We have then a simple case of moneys being taken out of the pockets of the savers and put into another set of pockets, the recipients of the Plan outlays. These transactions would leave the monetary circulation unaffected

Bank and a corresponding reduction of its deposit liabilities – government deposits in the case of aid utilised by the public sector and commercial bank deposits in the case of aid utilised by the private sector. There will be no additions to the monetary circulation on account of such transactions.

That is to say, however large investments may be, subject to the sole condition that they are matched by equivalent savings – current, past or imported – no inflation would result. Assuming, of course, the availability at home of factors of production, complementary to the capital imports represented by foreign aid and drafts on currency reserves.

There is but one major answer to our query regarding the cause of the current phase of the price rise, as also of the worsening of the price situation. Like the debasement of the coinage by medieval kings, both are direct outcomes of reckless expenditure by the state. The medieval kings ran into financial difficulties through emptying their treasuries on wars, monuments, mausoleums, palaces or forts; we have run into financial difficulties through squandering our scarce resources – over 80 per cent of the national savings and foreign aid – on steel mills, gigantic river valley, irrigation and power projects, heavy industries and heavy chemicals. Like that of the medieval kings, our investment outlays have exceeded the availability of funds through the normal channels of finance. In other words, we are engaged in the queer attempt to 'invest' non-existent resources.

The link between such 'investments' and the price rise is easily seen. Investments in excess of available resources take the form of budget deficits. The medieval kings filled the gap through the debasement of the coinage; they availed of the monopoly of issuing currency to put less gold or silver in their coin than the face value on them warranted, using the difference to cover their excess expenditure over revenue.

Like that of the medieval kings, our investment outlays have exceeded the availability of funds through the normal channels of finance. In other words, we are engaged in the queer attempt to 'invest' non-existent resources

We are doing a more sophisticated version of the same thing. We cover our

budget deficits through borrowing from the Reserve Bank under Ways and Means Advances, in the first instance, to be followed subsequently by the issue to the Reserve Bank of treasury bills and long-term government loans. As the Reserve Bank produces the necessary funds for the advances through resort to the printing press, we have here a case of budget deficit being covered by printed money.

There is little difference between debasement of the coinage and printing money. In both cases the monetary circulation would increase. Under modern conditions, part of the printed moneys would accrue to commercial banks from the contractors and others who receive them, and the banks thereupon add to the finance they provide – through loans, advances, discounts and overdrafts – for investment in the private sector. Over-investment through created moneys thus spreads from the public sector to the

private sector. But over-investment, as it cannot add to the available physical resources, cannot add to the flow of the national product either. The expansion of money ensuing from overproduction will, therefore, outpace output and a price rise will emerge inevitably. Overinvestment from 1954 to 1962 led to an expansion of money by 60 per cent, while the national product rose by 27 per cent. Money supply having outpaced output by 33 per cent, prices rose by about 34 per cent.

If over-investment should drive prices up, how did prices fall by 3.4 per cent in 1961-62, and remain virtually steady in 1957-58? Did we slow down the pace of our investments during these years? The answer to these questions takes us to an important factor in the Indian price situation. In 1961-62, Plan investments in the public sector were stepped up by 7.2 per cent to Rs 1,148 crore over the level attained in the preceding year; in 1957-58, the budget deficit was at an all-time peak of Rs 495 crore. If, nevertheless, prices failed to rise during these two years, the credit should go to general-purpose foreign aid and the drafts on currency reserves. But for the operation of this factor, the extent of the price rise might have been vastly higher.

The mechanics of how foreign aid and drafts on currency reserves control or moderate inflation is easily seen.

During the period 1954-55 to 1961-62, budget deficits amounted to over Rs 1,800 crore and scheduled bank credit increased by Rs 869 crore. Yet, money supply rose only by Rs 1,256 crore, or less than half the sum of the moneys issued into circulation (Rs 2,125 crore) through budget deficits and commercial bank credit creation. The rest of the

The rest of the inflationary funds returned into the Reserve Bank to purchase foreign exchange sold by the Bank, Rs 619 crore being drawn from the currency reserves and the balance from the general purpose foreign aid

inflationary funds returned into the Reserve Bank to purchase foreign exchange sold by the Bank, Rs 619 crore being drawn from the currency reserves and the balance from general purpose foreign aid. From 1960-61, when our currency reserves approached rock bottom, inflationary funds have been pumped out of circulation almost wholly by foreign aid.

In 1957-58, though the total expansion of money through budget deficits and credit creation by commercial banks (Rs 62 crore) amounted to Rs 557 crore, sales of foreign exchange by the Reserve Bank from the general-purpose foreign aid and the drafts on currency reserves reduced the actual expansion of money to Rs 72 crore, which represented an increase of 3.1 per cent over the monetary circulation of the preceding year; prices therefore rose but nominally by less than 1 per cent during the year.

In 1961-62, the decline in prices by 3.6 per cent was, in part, a reaction to the steep price rise of 7.4 per cent in the preceding year. This rise reflected inflation only partly: it was principally due to a short supply of industrial raw materials and manufactures, the prices of which shot up unduly as a result; with the improvement in supply of these commodities in 1961-62, there was a quick reversal in the scarcity price rise. Taking the two years

Foreign aid tied to specific projects can be used only for purchasing the import needs of the projects concerned; it will cancel freshly created credit to finance the new projects

1960-61 and 1961-62 together, we get a more consistent picture, though figures of money supply during these two years are not strictly comparable with those of the preceding period.

While the budget deficits and commercial bank credit creation during the

two years amounted to Rs 441.3 crore, money supply rose only by Rs 324.4 crore; the rest of the expansionary money was withdrawn from circulation, Rs 67.4 crore from the currency reserves and the balance from general purpose foreign aid. The actual expansion of money represented an increase of 11.9 per cent over the money supply in 1959-60; the increase in the national product having fallen short of the expansion of money, prices rose during the period by 3.5 per cent.

THOUGH ALL FOREIGN AID, other than PL 480, brings foreign exchange, which the Reserve Bank sells against cash, it is important to note in the context of the foregoing discussion that general purpose foreign aid alone counters inflation. This is so because general purpose foreign aid, like the drafts on currency reserves, are saleable to any party. It can, therefore, withdraw from the pockets of the people inflationary funds already issued out through budget deficits or commercial bank credit creation.

Foreign aid tied to specific projects can be used only for purchasing the import needs of the projects concerned; it will cancel, that is to say, freshly created credit to finance the new projects; it cannot be used to withdraw the inflationary funds already with the public, nor can it remedy the foreign exchange crisis, as it will not provide foreign exchange to cover worsening of the balance of payments position ensuing from imports for the new projects. This explains the pressures we are exerting on the Aid-India Club for general purpose aid. With our currency reserves at rock bottom, such aid alone can correct both inflation and the foreign exchange crisis.

Foreign aid tied to specific projects can be used only for purchasing the import needs of the projects concerned; that is to say, it will cancel freshly created credit to finance the new projects and seems to indicate the principal explanation for the current spurt in commodity prices. The tempo of investment in the public sector has continued, more or less, according to plan. This is to say, over investment and inflation have been progressing apace. But the suction pump drawing inflationary funds out of circulation has been comparatively inactive. There has been an acute shortage of funds issued out through budget deficits – credit creation having therefore remained in circulation, this led to a reversal of the preceding downtrend in commodity prices.

Prices generally rise by the extent of the increase in money supply over the national product. The apparent violations of this rule are often largely attributable to special circumstances: among them a reaction to a preceding artificial price rise as after the Korean war; export restrictions in times of

bumper harvests – as during the middle three years of the First Plan; price controls – as during the war period 1942-46; changes in the velocity of circulation of money; increases in the cash balances held by the public, when real incomes rise, and so on. By ignoring these special factors, it is easy to amuse ourselves over the failure at times of prices to respond to changes in the flow of money incomes. The price of such amusement is delusion. The phenomenon of prices, falling behind money supply-rise after 1952-53, seems to support the view that price controls have vitiated the official price index.

The corrective to boiling water – rising prices – is to remove from underneath it the fire of budget deficit. It is little use getting angry when prices rise or blaming hoarders

For a solution of the problem, we must tackle it at its roots. The futile and self-damaging effort to 'invest' non-existent resources must be abandoned. This would necessitate drastic cuts in the public sector plan outlay. This latter requirement will demand a drastic cut in the civilian expenditures charged to Revenues, for which vast scope exists.

Once inflation has taken place as a result of the attempt to 'invest' non-existent resources, prices will rise. The corrective to boiling water – rising prices – is to remove from underneath it the fire of budget deficit. Having resorted to deficit budgeting, it is little use getting angry when prices rise or blame 'those who hoard, speculate and profiteer'. It is equally wrong to say 'raising prices for private profit in this national emergency was a treachery to the country.'

Despicable though profiteering is, the real act of treachery lies in printing money to meet government outlays and in misdirecting the resources of the nation in spectacular rather than useful channels of investment. It is this policy that has involved the double crime of retarding economic development and of denying the common man the elementary needs of living. We like to shout from the house-tops that we are a progressive people, abreast of the thinking of the enlightened part of the world in this nuclear era; yet, in the field of economic and monetary policies, we often speak the language of medieval monarchs.

We are, instead, seeking to make the traders a scapegoat. Monopolies and semi-monopolies apart, contrary to popular belief and the emphatic assertions of administrators, traders have no more control on prices than the thermometer has on temperature. Like the rest of the community, traders are but creatures of prices which are determined for all by the forces of supply and demand over which individual traders have no control. The abnormal profits accruing to them under rising prices are a consequence, not a cause, of inflation. Inflation cannot be controlled by tampering with its consequences; nor by replacing the normal channels of trade by the admittedly more expensive and less efficient machinery of state trading and cooperatives. Inflation continuing, sales in the open market or through fair price shops cannot hold back prices in general; with the prospect of rising prices, part of the (official) stocks released on the market are likely to be

added to hoards. To force traders, through police action, to sell at below replacement prices might drive stocks into black markets, where consumers would have to pay higher than open market competitive prices.

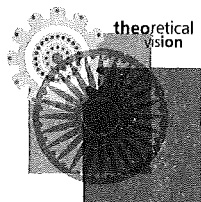
It is a sad commentary on the economic and monetary enlightenment of the Indian people that vested interests should be able to sell to us queer notions that legislative and administrative measures can restrain rising prices caused by inflation or that rising prices are part of the package of economic growth.

We have squandered away our currency reserves, which stood at Rs 1,769 crore in April 1946. We have piled up an external debt of which there is little hope of repayment; and an internal debt which has increased tremendously, the repayment of which involves a great deal of further inflation. We have undermined the currency standard by inflating the money supply, which has led to price rise.

THE PATTERN OF distribution of the national income has become more anti-socialistic than ever. The middle classes among the fixed income groups have slipped down the inclined plane of economic well-being; the working classes in the industrial sector have not benefited from the vastly expanded industrial and business activity. The economic condition – employment, money wages, indebtedness – of agricultural labor has deteriorated materially as revealed by two official surveys. The drop in the level of living of the masses of the people, is reflected in the downward fluctuation of the national average per capita consumption of food and cloth.

There has emerged too a pronounced shift of income from the rural to the urban sectors of the economy. We have hamstrung the economy with statist policies, controls, restrictions, licenses, quotas and concessions which, on the one hand, have retarded economic growth through blocking the springs of production and obstructing the flow of output and, on the other, have undermined the moral standards of the nation through the graft and corruption which they have given rise to. On top of it all, we have erected a highly vulnerable and unstable industrial structure, in deliberate defiance of the law of comparative costs; the output of our industries – because of poor quality and high costs – is generally unsaleable abroad; much of it sells only in the highly protected and inflation-fed domestic market.

The only beneficiaries of these perverse developments are businessmen, industrialists, the corrupt functionaries of the state – the civil servants and the politicians – and the body of touts, contact men and other intermediaries which have sprung up as part of the distributive machinery of the instrument of statist economic controls.



Price policy

16 DECEMBER 1960

In reaction to Prof V N Gadgil's paper prepared for a panel of economists advising the government, which detailed 'immediate action necessary' in the field of price policy, Shenoy wrote that the root cause should be removed: expansion of money supply beyond expansion in the national product

Professor V N Gadgil in his latest paper observes that 'a great deal of agreement on main features' of policy has emerged and 'in a number of directions partial action has been taken and certain important agencies etc established', so that 'all that is required is to bring together the various elements into a meaningful practical program'.

It is assumed that the price policy which is taking shape, both conceptually and in administrative action, is a 'long-term continuing policy'. It is also assumed that the 'immediate minimum program' will have two aspects; first, stabilisation of prices of agricultural produce and, second, holding the price level, especially as it impinges on the less affluent classes of consumers. The objective of the first is 'both protection and incentive to the agriculturist producer'; and of the second, presumably, egalitarian considerations.

His program of action is explained by reference to the 'central area' of this policy, namely, food grains and their prices. Control of foodgrain prices necessarily raises the questions of (a) prices of substitute crops; (b) prices of important materials of production; and (c) prices of consumer goods requirement of the agriculturist. It is believed that price control of foodgrain may automatically bring in control over the prices of pulses, as, being largely grown as 'mixtures' with foodgrain, the prices of pulses and cereals are known to move together.

The arrangement of crop substitutability is such that price control of foodgrain may not demand price control of a whole lot of agricultural output. Land under foodgrain permits of division into three categories: areas under jute, wheat and millets. In the jute area, jute competes with rice, in the wheat area certain oilseeds compete with wheat, and in the millets area cotton and groundnut compete with millets. To prevent land under wheat being shifted to non-food crops, price control of cereals would involve, therefore, price control of jute, cotton and certain oilseeds. Of the compet-

ing crops, jute is left alone for certain special reasons. It is not necessary to bother about the prices of sugarcane, tobacco and orchard crops as they do not play an important part in this context. This reduces the control to one of the price control of the 'main cereal foodgrain and of oilseeds and cotton'.

In times of falling prices, to maintain floor prices through open market purchase is 'relatively simple'. In times of rising prices, maintenance of ceiling prices becomes difficult

PRICE CONTROL OF agricultural output necessitates price control of the materials of production and the essentials of consumption by those engaged on the farm. With regard to the materials of production, fodder and farmyard manure are byproducts of cereal cultivation and, therefore, need no price-control attention. Artificial fertilisers are 'today either under control or fairly easily amenable to control'. The distribution of cement, iron and steel and their pricing are already under control. Price control of oilseed cakes is 'part of the problem of overall control over oilseeds', the implication here being probably that price control of oilseeds will amount to price control of oilseeds cakes. Price control, however, is necessary of cement, iron and steel, diesel oil, engines and transport, coal and bricks.

With regard to consumer goods, sugar – and therefore *gur* (jaggery) – salt and kerosene were already under control; vegetable oil, hair oil and soap would be price-controlled via the control over oilseeds prices. Tea, betel-nut and tobacco may be left out as 'non-essentials'. This leaves for extended price-control attention, among the essentials of consumption, only cloth. To bring the urban area under price control, to this would have to be added house rent control.

In the foregoing list, we have experience of price control, either currently or in the past, of all commodities except oilseeds and their products.

In the task of price control, imports and commodities subject to large-scale production such as iron and steel, cement, or even coal and sugar do not present great difficulties. Agricultural production being, on the other hand, scattered in tiny units over wide areas, price control, 'through some sort of market mechanism becomes unavoidable'; the idea is to keep prices 'during any defined period within a given margin'. In times of falling prices, to maintain floor prices through open market purchases, is 'relatively simple'. In times of rising prices, maintenance of ceiling prices becomes difficult, since the trader might outbid the government and the latter 'will not obtain supplies' at 'standard purchase prices'. This 'difficulty' is sought to be overcome by keeping retail prices in check 'through offering through a number of retail outlets a sufficient supply at reasonable prices' as the ability of the trader to make 'an artificially increased bid' rests on expectations on the trend of retail prices. If, in such a context, the 'government fixes its prices at a fair level' it would obtain 'adequate supplies'.

PL 480 supplies of wheat are today adequate to keep the price of wheat under control. This would also keep under control the prices of millets in

the wheat area; wheat stocks should help to check prices even in the predominantly millet area, though millets have a strictly limited market. To achieve the same result in the rice area acquisition of a large 'quantity of rice stocks immediately' from the US is essential.

In the scheme of price control the initial step is the announcement by the government of 'standard purchase prices' of cereals, which will remain in force for periods not longer than a year at a time. It will also be desirable to announce 'floor prices' for longer periods, say, for five years. Apparently, the annual standard prices will be above the five-year floor prices. The purchase points should be spread throughout the country so that the advantages of price control may accrue to 'small cultivators'.

In some commodities, processing plays so crucial a role that farmers are compelled to sell their produce to traders because they do not possess processing facilities. Rice mills and oil expellers are illustrations. These should be immediately taken over in the public sector to be in due course handed over to cooperative marketing and processing societies, a countrywide network of which must be organised by the government. Exports and purchase for export, since export purchases by the trade causes undue price fluctuations, should be also nationalised. With regard to distribution, the present system of fair-price shops should be extended to be ultimately replaced by 'cooperativisation' of distribution. The prevailing division of the country into zones should be abandoned in the interests of 'progressive integration of the national economy'.

The objective of this scheme of price stabilisation is stated to be the success of 'the production program of government in the agricultural sector' and bringing 'completely under control by the end of the Third Five-Year Plan' the 'food problem'.

Causes of the price rise

The need for price stabilisation is evident in the prevailing context of rising prices. During the past seven months, the General Index has gone up at an annual rate of 11 per cent. The price rise is a general one: it is not confined to any particular sector. We cannot usefully discuss the problem of price stabilisation without examining the causes of the price rise. It is difficult to see how relief from price rises may be had without removing the causes.

A general price rise is a monetary phenomenon – the result of an expansion of money at a rate faster than the expansion of the national product. This takes us to a field which we have covered over and over again a number of times. But since we last examined the subject, a new factor has appeared on the scene. The expansion of money today is the result of two factors: first, heavy budget deficits, and second, disbursement from counterpart funds generated principally by PL 480 transactions. Budget deficits are an old phenomenon. Disbursements from counterpart funds are of recent origin and have been on the increase latterly.

In 1955-56, when the current phase of inflation began, inflation was wholly due to budget deficits and the attendant secondary expansion of

money by commercial banks. Budget deficits of the year amounted to Rs 228 crore and the secondary expansion of money Rs 70 crore. This was partly offset by a balance of payments deficit of Rs 30 crore. A small part of the expanding Reserve Bank money having gone into the reserves (Rs 7 crore) of commercial banks, money supply during the year rose by Rs 264 crore, a jump of 14 per cent as against an expansion of the national product by 1.9 per cent. The expansion of money having far outstripped the national product, prices went up by 11 per cent.

During the next four years ending 1959-60, budget deficits amounted to Rs 1,255 crore. This was offset by Rs 1,056 crore of balance of payments deficits, which were more or less evenly financed by foreign aid (Rs 540 crore) and drafts on currency reserves (Rs 516 crore). The secondary expansion of money by commercial banks during the period amounted to Rs 177 crore, the increase in their cash reserves being Rs 68 crore. This set of operations accounted for an increase in money supply of Rs 308 crore.

PL 480 counterpart funds

Actually, money supply during the period went up by Rs 519 crore. The difference, Rs 211 crore, represents – inclusive of 'errors and omissions' – disbursements from counterpart funds. The contribution to inflationary forces ensuing from budget deficits is much larger than these two figures might indicate. In the absence of the contribution from counterpart funds, the expansion of Reserve Bank money from budget deficits as moderated by balance of payments deficits might have been Rs 199 crore.

The expansion of Reserve Bank money from the use of counterpart funds was, thus, somewhat larger, the two contributions being in the ratio of 100:106. Both factors had their due share in the secondary expansion of money of Rs 177 crore and both contributed to the increase in the reserves (Rs 68 crore) of commercial banks. In the absence of drafts on counterpart funds, it is, therefore, a fair guess that the total expansion of money during this four-year period might have been Rs 252 crore, or somewhat less than half of the actual expansion (Rs 519 crore).

The national product during the four-year period (1956-57 to 1959-60) went up by 12 per cent and money supply expanded by 24 per cent. The General Index, as a consequence, rose by 19.5 per cent. In the absence of drafts on counterpart funds, we might have had comparative price stability during this period, as money supply would have then expanded by 15 per cent as against an expansion of the national product by 12 per cent. If so, it seems reasonable to argue that the price rise during the first four years of the Second Plan period is almost wholly assignable to the use of counterpart funds. It is only in the first year (1955-56) of the current phase of inflation that the price rise was due to budget deficits.

In subsequent years, had it not been for the disturbances caused by counterpart funds, price stability might have been attained: though the budget deficits were compensatingly heavy too. It follows that, to achieve price stabilisation, the three factors in the situation – budget deficits, balance of

payments deficits and drafts on counterpart funds – must be so adjusted mutually that the net expansion of money gets restricted to the needs of finance of an expanding output at stable prices.

This takes us to the factors responsible for budget deficits and the phenomenon of counterpart funds. During the past five years, the annual average budget deficits rose by Rs 240 crore relatively to the annual average deficit of the preceding three years. The corresponding figure of the increase in plan investments was Rs 492 crore. The increase in plan investments being larger than budget deficits, it is reasonable to infer that the deficits were the outcome entirely of accelerated plan investments. They cannot, with the same justification, be attributed to increases in other heads of expenditure, not excluding defence, the annual average outlay on which rose by Rs 57 crore during the two periods under comparison.

Budget statistics show that the latter increases, and part of the accelerated plan investment, were covered by the larger resources acquired by the state during the latter period relative to the earlier. If so, we cannot control budget deficits, in an effort to control the price rise, without restricting the available plan outlays. Any scheme of price stabilisation must begin with restricting plan investments to the available resources. Budget deficits must

be limited to imported savings – foreign aid for the public sector, other than loans and grants from counterpart funds – and domestic savings accruing to the state, otherwise than through credit creation.

To achieve price stabilisation, the three factors in the situation – budget deficits, balance of payments deficits and drafts on counterpart funds – must be so adjusted mutually that the net expansion of money gets restricted

The disposal of counterpart funds raises the question of the finance of PL 480 imports. Payments for these imports are made in created money raised from the Reserve Bank against the issue of

treasury bills. The moneys are held by the Technical Cooperation Mission (TCM, an agreement with the US). Though the relative treasury bills may be retired from the sale proceeds of PL 480 imports, the counterpart funds with TCM do not lose their character of created Reserve Bank money. Their total magnitude on 31 March 1960 was Rs 461 crore. Disbursements from the latter during the Second Plan period (1956-57 to 1960-61) are estimated at Rs 149 crore. PL 480 counterpart funds may rise to Rs 1,068 crore as a result of the fifth agreement in the series concluded on 4 May 1960.

In terms of PL 480 Agreements, the counterpart funds are meant to be disbursed partly to cover US Embassy and other US uses in India, partly for grants to the Government of India, and partly as loans to public and private sector enterprises. The possible extra-economic involvements of the command over disposal of such large sums in the hands of a foreign power is an issue which is outside the scope of this paper, though this consideration adds weight to our conclusion that the present arrangements to pay for PL 480 imports need basic changes. But whatever uses the counterpart

funds may be put to, overdrafts on the funds have added to the Reserve Bank money with the public in the same way as budget deficits have been doing for long. The phenomenon may, with some justification, be caricatured as a case of extra-territorial deficit financing by a foreign power.

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If the deposits with the Reserve Bank are invested in government debt, the problem of inflation, which will attend disbursements from counterpart funds, will remain.

THIS UNCERTAINTY may be remedied if PL 480 imports are treated as a long-term loan. The grant element in the PL 480 aid may, then, take the form of lower prices for the imports or may be canalised through Titles II and III of PL 480. Repayments of the loan may be made in rupees on a long-term amortisation basis. Disbursements from these payments may get absorbed in the economy without causing inflation as, their amounts being small, they fall within the expanding money needs of a developing economy.

If the necessary steps to prevent inflation, from budget deficits and PL 480 finance, are not taken, prices will rise. In the context of inflation, even as the anti-inflationary measures, including price controls, which we have hitherto adopted have not proved of any avail as instruments of price stabilisation, the system of controls outlined by Professor Gadgil will remain futile. The analogy of the experience of King Canute with the rising tide will apply. To achieve price stabilisation, it is imperative to pursue a policy of monetary equilibrium through correct monetary and fiscal measures. It is not possible to purchase immunity from the natural effects of laxity in this regard through organisational devices and market operations visualised in the paper under review or, indeed, by any other gadgets.

Inflation is all-pervasive, it affects all commodities, sooner or later. From this standpoint it is not possible to isolate for separate attention producers' goods entering into agricultural production, consumer goods entering into the consumption of agricultural labor or of the less affluent classes of the community, essential goods from non-essential goods, byproducts of manufacture, joint or composite products, or raw materials from finished products. Under continuing inflation, they will all move forward, though some may lag behind others.

As our own experience has confirmed, it is not practical or indeed possible to hold down prices in general when inflation drives them up. Any attempt to hold down individual prices will alter the price pattern and, therefore, the pattern of returns on investment and, in due course, the pattern of production. In a rising market, this will reduce the output of the price controlled commodities and add to the built-in pressures undermining price control. In a falling market, price control of individual groups of commodities will be undermined by budgetary pressures and inflation which must ensue, sooner or later, from the program of unlimited purchas-

es of price-supported commodities.

The fact that agricultural land is divided into specific crop areas – wheat area, rice area and millets area – and that, therefore, the shiftability of land from one crop to another is limited, does not negate the economic law of substitutability. This law will operate when the price pattern gets disturbed. Production needs many more things than land. If land cannot be shifted, the other inputs of production will be such that the pattern of production will respond to the altered price pressures.

INCIDENTALLY, ONE IS PUZZLED at the mechanics, outlined in Professor Gadgil's paper, of simultaneous purchases and sale of foodgrain as a means of price stabilisation. This part of the paper seems to need further clarification. In a rising market, to check prices, the appropriate operation is net sales, not net purchases. One wonders how it is possible to hold the price line by sales at one end – the wholesale market – and purchases at the other – the retail market. The two markets are inter-related.

The system of controls outlined by Professor Gadgil will remain futile. The analogy of King Canute with the rising tide will apply. It is imperative to pursue a policy of monetary equilibrium through correct monetary and fiscal measures

to attempt to purchase in such a context, whether at standard prices or at market prices, would be to accentuate the price rise. But Professor Gadgil insists: "The possibility of government obtaining supplies at standard price thus depends on the government's ability to sell, side by side, sufficient quantities through spread out distributive outlets at retail."

Though this is referred to as 'elementary analysis', the purchases and sales simultaneously is unfamiliar. If, on balance, net sales result from these contrary operations, prices may be checked to the extent of the net sales. If, on the other hand, net purchases result, accentuation of the price rise may be the consequence.

Our own experience has shown that any attempt to purchase at rigid prices in a rising market cannot produce success. It is difficult to see how the technique outlined in the paper may help to improve on this experience.

It is not clear, too, how control of the supplies and prices of wheat can also control prices of millets, or how the control of the price of sugar can control price of *gur*, and of oilseeds the price of oilseed cakes, edible oils and soap. Control of the price of cotton has not controlled the price of cloth and the imports of raw materials and other goods at phenomenally low landed costs have not controlled the price of the manufactures from the imported raw materials or of the market prices of other import goods. In the context of inflation, if the prices of oilseeds are held below competitive levels, neither the prices of oil nor the price of soap will be controlled automatically; the latter price will reflect the state of inflation and the profit margins of oil mills and soap manufacturers may rise unduly.

Foodgrain imports under PL 480

It is difficult to accept the view that the phenomenally large PL 480 imports of foodgrain are an unmixed blessing from the standpoint of price stabilisation or of the general interests of the national economy. If imports make good the shortages arising from crop failures, they would prevent adverse effects on the national product through under-feeding workers and through price dislocation; if they make good the market shortages arising from increasing employment, the imports may help to increase capital formation and prevent inflation – born of over-investment – if the factors of production complementary to labor and of wage-goods other than foodgrain become available.

If foodgrain prices go out of alignment with other commodity prices, the effects on the national product (and employment) may be adverse. Buffer-stock operations in foodgrain, from now on, become wasteful

If, however, import of foodgrain is pressed beyond the market saturation point, foodgrain prices would go out of alignment with other commodity prices. That would render the food position basically worse by strengthening the incentives to move shiftable land and resources away from food crops. The shift being artificial, the effects on the national product (and employment) may be adverse. Buffer stock operations in foodgrain, from now on, become wasteful and damaging in their effects.

This holds true in all situations. A policy of waste of public funds cannot cease to be such, or get transformed into a virtue, because it is pursued in the wake of another policy-error, inflation, in the name of a program of price stabilisation.

The prevailing food price situation seems to be an advance warning of the price distortions and damages which may result from unduly large buffer stocks. The more usual trend in India has been for food articles to lead other commodity groups in times of a general price rise. Since 1956-57, largely because of the buffer stock phenomenon, the rise in foodgrain prices has become tardy and these prices at times fell when most other group indices continued to move upward. The unusual lagging behind of foodgrain prices persists, the inflationary funds impinging more heavily on other commodities. This may interfere with the Third Plan objective of self-sufficiency in foodgrain by 1965-66. Once the foodgrain supply position has reached the market saturation point, further foreign aid should be in essential commodities other than foodgrain.

Agricultural production and prices

The poor rate of increase in agricultural production, at least since 1955-56, cannot be explained as being due to any adverse price factor. During the five years ending 1959-60, food articles rose by 42 per cent and industrial raw materials by 40 per cent, as against a rise of 16 per cent in manufactures. Despite this heavy price advantage, agricultural production during

the four years ending 1958-59 rose by 12 per cent and fell by 4 per cent in 1959-60. On the other hand, industrial production in 1959 was 35 per cent higher than for agricultural production. To look up, what has been wanting during these years is not a program of price support; price support in the context of rising prices is, operationally, pointless.

For an explanation of the slow increase in agricultural production, we have to look elsewhere than the prices of agricultural commodities. It is possible that responsibility may lie in the pattern of Plan investments. In the Second Plan the largest bulk – probably 79 per cent – of public sector resources went into non-agricultural projects, the public sector appropriating 60 per cent of plan resources. Under the Third Plan, the public sector proposes to utilise 64 per cent of plan resources and the bulk of it – probably 77 per cent – would go into non-agricultural projects.

The industrial private sector, by virtue of its efficiency and organisation, is generally able to claim its requirements of capital through the organised capital market, specialised institutions or otherwise. In an integrated economy pressures tend to be shifted to weaker sectors. The institutional

The industrial private sector, by virtue of its efficiency and organisation, is generally able to claim its requirements of capital. In an integrated economy, pressures tend to be shifted to weaker sectors

arrangements for the supply of capital and credit to agriculture have remained poor since long, and credit available has fallen short of requirements. Interest rates paid by farmers in general on capital and credit have been high even in normal circumstances relatively to the interest rates paid by traders, industrialists and businessmen.

Mainly as a result of the unduly large drafts of resources into the public sector and away from agriculture, the effective interest rates paid by farmers are believed to have risen to fantastic levels. We have no dependable statistics on this subject. One writer has put it as high as 19 to 75 per cent on secured loans and very much higher on unsecured loans. While acute scarcity of capital remains, favorable weather conditions, semi-stagnation of agricultural production might continue, price support or no price support.

Seasonal price-support measures

This is not to argue against the whole scheme of price support. Price support measures to smooth out seasonal price variations are eminently desirable. This should form part of our long-term policy for the betterment of agriculture. Some seasonal price variations were a functional necessity. Low price at harvest time, and rising prices thereafter, were the market's device of inducing the trade to hold stocks for retailing out until the next harvest. If we assume that a price difference of 15 to 20 per cent may cover the cost of stronger depreciation, loss through pests, and normal profits, price variations in excess of this margin would amount to an unmerited shift of income from producers to dealers, or to consumers.

In cotton (and possibly also ground-nut) seasonal price variations were not significantly higher than this margin. In the case of rice, *jwar*, jute, wheat, gram and certain oilseeds, the farmers were deprived of about 1/5th to 1/3rd of their legitimate dues, allowance of about 20 per cent being made for the functional price difference. Seasonal price-support measures should add a considerable proportion to the incomes of farmers, which today they are unfairly deprived of by the trader.

To ensure that seasonal price support operations did not develop into long-term price support measures, the agency responsible for the operations should be a non-political body and the stocks purchased during a season should be all disposed of before the next season

Seasonal price variations may be smoothed out by taking the surpluses off the market at harvest time. For full success of the policy, it is important that intervention is no more than seasonal. To ensure that seasonal price support operations do not develop into long-term price support measures, the agency responsible for the operations should be, firstly, a non-political body, functioning wholly on business lines, and, secondly, the stocks purchased during a season should be all disposed of before the commencement of the next season. If a seasonal price difference of about 20 per cent is maintained, the agency should be, normally, able to meet costs from profits.

THE PROBLEM OF cyclical price variations is the most difficult of the agricultural price problems. Cyclical price support measures are, in effect, a device for transferring income from the rest of the community to the producers of the price-supported commodities. It would put into their pockets more income than free market forces would entitle them to.

In countries such as USA, where agriculture is a minor sector of the national economy, the incidence of the subsidy may be spread out thinly over the larger sector, and the proceeds may provide substantial relief to farmers. Even so the policy has not succeeded in the United States – it has only survived. It has led to undue stockpiling of agricultural commodities and wastages.

In India, where 70 per cent of the population would be recipients of the aid, the burden would fall on the remaining 30 per cent. The strain of the subsidy would manifest itself in a shortage of budget resources for open market purchases of agricultural produce. This in due course, would lead to either abandonment of the policy, or inflation.

In either case the remedy would be worse than the disease. If the dilemma did not appear in one season, it would come in the next, as 'successful' price support must stimulate output. Crop planning and restrictions of production were not practical policy in a background of 67 million tiny production units spread over a sub-continent. To restrict price support to some crop would be invidious, would cause discontent, and would distort the pattern of agricultural production.

Conclusion

We now bring together the principal conclusions from this discussion:

The need for price stabilisation is evident in the prevailing context of rising prices. The price rise is general, the natural outcome of the expansion of money outpacing the national product. No scheme of price stabilization has any chance of success unless the causes of the price rise are eradicated.

The inflationary expansion of money is the result of two factors: first, budget deficits, and second, disbursements from counterpart funds generated by PL 480 imports and TCM aid. During the current phase of inflation, budget deficits alone contributed to the inflationary price rise in the first year of the phase, 1955-56. During the next four years, expansion of money resulted both from budget deficits and disbursements from counterpart funds. Though budget deficits of the period (Rs 1,255 crore) were heavy, their effects on money supply were largely counteracted by heavy balance of payments deficits (Rs 1,056 crore).

THE INFLATIONARY EXPANSION of money during the period was almost wholly due to disbursements from counterpart funds, which amounted to Rs 211 crore, inclusive of 'errors and omissions'. The expansion of money might have been Rs 252 crore, an increase of 15 per cent. Since the national product rose during the period by 12 per cent, this suggests that, in the absence of the use of counterpart funds, we might have had comparative price stability. Actually, during the four-year period, price rose by 20 per cent.

To achieve price stabilisation, budget deficits must be limited to imported savings – i.e. foreign aid for the public sector, other than loans and grants from counterpart funds – and total public sector investments must be limited to imported savings plus domestic savings accruing to the state otherwise than through credit creation.

Total PL 480 counterpart funds under the five Agreements amount to Rs 1,068 crore. They have, therefore, a tremendous inflationary potential. Transfer of counterpart funds to the Reserve Bank from the State Bank would prevent inflation only if these deposits are blocked like the No. 1 Account deposits of the IMF. In such a case, PL 480 transaction might cause deflation by the amount of the undisbursed counterpart funds. If, however, TCM deposits are invested in government debt, inflation will continue.

This uncertainty may be remedied if PL 480 aid is treated as a long-term loan, repayments being made in rupees on a long-term amortisation basis. If inflation is not avoided, even as the anti-inflationary measures of the past proved of no avail, price control measures now envisaged will be futile.

Inflation is all-pervasive, affecting all commodities sooner or later. It is not practical to hold down prices in general under inflation, and any attempt to do so would alter the price pattern and the production pattern. This will undermine price control.

Incidentally, in a rising market, the appropriate operation is net sales, not net purchases. It is not clear how simultaneous purchases and sales can

stabilise prices. Control of the price of oilseeds will not automatically control prices of oilseed cakes, edible oils and soap. Similarly, control of the price of wheat cannot in itself control prices of millets.

Foodgrain imports beyond the market saturation point would throw

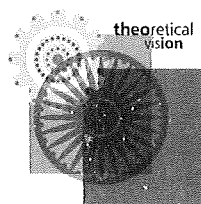
foodgrain prices out of alignment with the rest of the price structure and thereby accentuate the food problem through the resulting disincentives to domestic production. The prevailing trend of foodgrain prices already contains a warning of this phenomenon. PL 480 after the market saturation point in foodgrain should be in commodities other than foodgrain.

The poor rate of increase in agricultural production since 1955-56 cannot be explained by the price factor. Agricultural price during the period rose by about 40 per cent, as against a rise of 16 per cent in manufactures, yet agricultural production lagged far behind industrial production.

It is possible that responsibility for the slow rise in agricultural production may lie in the pattern of plan investments. During the Second Plan the bulk of the public sector plan resources went into non-agricultural projects. The organized private sector has been able well to meet its requirements of capital. This accentuated the scarcity of capital in agriculture, which is reflected in the fantastic interest rates paid by farmers. Under these conditions, semi-stagnation of agricultural production seems inevitable.

This is not to argue against the whole scheme of price support – a strong case exists for measures to smooth out seasonal price variations. These measures, however, must not be allowed to grow into cyclical price support of agricultural output. To do so might cause inflation and failure of the program.

It is not practical to hold down prices in general under inflation. Any attempt to hold down individual prices would alter the price pattern and the production pattern. This will undermine price control



An equation for the price level of new investment goods

1931

This first appeared as an article in the *Quarterly Journal of Economics*. Here Shenoy points out discrepancies in Keynes' famous formulation and offers an alternative

Keynes' *Theories on Money* is a landmark in monetary economics. It clarifies as well as stimulates. A perusal of his work inspired the present writer to work out an equation for the price-level of new investment goods. In the following an attempt will be made to first formulate and then briefly to explain and interpret this new equation.

Since the notations used by Keynes serve our purpose adequately – although I am conscious of the defects pointed out in their definition – in my judgment they are not of a character to affect materially the points under discussion. It saves time, space and the trouble of fresh definition. Besides, since two of his fundamental equations will be made use of in arriving at the equation which is to follow, there are definite advantages to this.

Thus, E may be taken to stand for the money income of the community, S for the rate of saving, I' for the cost of production of new investment goods, I for the value of these new investment goods, R for the volume of current output of consumption goods, C for the volume of current output of investment goods, O for the volume of current output of goods as a whole, P for the price level of R , P' for the price level of C , and π for the price level of output as a whole.

The two most fundamental Keynesian equations which will be made use of and referred to in the course of our discussion may also be adopted here. These are the equations for the price levels respectively of consumption goods and of output as a whole.

Thus:

$$P = \frac{E}{O} + \frac{I-S}{R} \quad (1)$$

$$\text{and } \pi = \frac{E}{O} + \frac{I-S}{O} \quad (2)$$

Now, since the sale proceeds of new investment goods are equal to the difference between the sale proceeds of output as a whole and the sale proceeds of consumption goods (for by definition, $O = R + C$) we have,
 $P'C = \pi.O - P.R.$

$$= O(\pi - P) + P.C \text{ by expressing } R \text{ in terms of } O \text{ and } C.$$

$$= O \left\{ \frac{I-S}{O} - \frac{I-S}{R} \right\} + P.C$$

by resolving π and P into their respective component factors as given in (1) and (2) above.

$$= \frac{R(I-S) - (R+C)(I-S)}{R} + P.C$$

$$\text{Therefore } P' = \frac{I-I'}{C} - \frac{I-S}{R} + P.$$

$$= \frac{E}{O} + \frac{I-I'}{C} \text{ by resolving } P \text{ into its component factors as given in (1) above} \quad (3)$$

Again adopting Keynes' notations, if we take W to stand for the rate of earnings per unit of human effort, $W1$ for the rate of efficiency earnings and e for the coefficient of efficiency, so that $W = e.W1$, then,

$$P' = W1 + \frac{I-I'}{C} \quad (4)$$

$$= \frac{1}{e}.W = \frac{I-I'}{C} \quad (5)$$

since $I-I'$ represents the profits realised by the production and sale of new investment goods we can write equation (4) thus :

$$P' = W1 + \frac{O2}{C} \quad (6)$$

THIS EQUATION, LIKE the fundamental equations of Keynes in respect of P and π , gives us a simple mathematical formula for the price-level of new investment goods. It states that the price level of new investment goods is made up of two factors, the first of which represents the level of efficiency earnings, i.e. the cost of production, and the second of which is positive, zero or negative according to as the value of new investment goods is more than, equal to, or less than cost of new investment goods.

It will be observed that, unlike the price levels of consumption goods and of output as a whole, the price level of investment goods is independent of, or more strictly is not directly influenced by the rate of savings by the community. And equation (6) tells us the simple truism that the price level of new investment goods, as for any other goods, is equal to the rate of efficiency earnings of the factor of production plus the rate of profit per unit of output of new investment goods.

Thus our equation is on all fours with the fundamental equations of Mr. Keynes. Indeed in every detail it appears to be one of their family and seems to restore the missing member.

It defines the price level of new investment goods on precisely the same lines as the price levels of consumption goods and of output as a whole. Mr. Keynes, however, does this on a different and in my judgement defective lines. At first he assumes it to be some quantity P and postpones to section (iii) of the chapter on Fundamental Equations the consideration of the question, "What does determine the price of new investment goods?"

In this section, entitled *The Price-level of New Investment Goods* he does not seem satisfactorily to answer this question. We shall attempt briefly to review his line of argument. After making certain preliminary remarks about the choice before the public between spending and saving and the subsequent choice between securities and hoarding, in which to invest or keep their savings, he observes that the public preference for savings-deposits relatively to 'securities' depends on their expectations of the return to be obtained from the savings-deposits and from other securities respectively, which is obviously affected by the price of the latter and also by the rate of interest allowed on the former.

He continues: "If, however, the banking system operates in the opposite direction to that of the public and meets the preference of the latter for savings-deposits by buying securities which the public is less anxious to hold and creating against them the additional savings-deposits which the public is more anxious to hold, then there is no need for the price level of investments to fall at all."

THIS ONLY MEANS that if the banking system behaves in the manner indicated there is no need for the price level of investments to fall, that is to say, the banking system can prevent a fall in their price level. The passage does not answer the vital question: what does determine the price of new investment goods, what are the component factors that constitute it? Again, it refers to the price level of investments and not of the new investments with which we are concerned.

Lower down in the same paragraph he observes, "A fall in the price level of securities is therefore an indication that the 'bearishness' of the public...has been insufficiently offset by the creation of savings-deposits by the banking system – or that the 'bullishness' of the public has been more than offset by the contraction of savings-deposits by the banking system. This passage does not answer the question at issue any more than the preceding

one. It only means that a fall in the price level of investments is an indication of the resultant of the relative behavior of the public and the banking system in respect of securities and savings-deposits.

The two passages together state nothing more than that under the conditions mentioned, the banking system can control the price level of investments and perhaps therefore of new investments; control – that is to say, either prevent it from falling or help it keep rising. But they do not tell us anything about the component factors of the price level which the banking system is in a position to raise or to depress. Indeed, they do not take us any nearer to the question at issue than the analogous statement that the banking system can control the price level of R and O takes us to the knowledge of the component factors of P and π , the price levels respectively of R and O . What follows later in the same section is little more than a summary of the passages above and seems still to miss the question he proposed to consider.

Our equation (4), on the contrary, clearly indicates the component factors on which depends and which determine the price level of new investment goods.

Our equation, moreover, helps to indicate the degree of independence and also the degree of interdependence of the price levels respectively of consumption goods, of new investment goods, and of output as a whole. All the three price levels are simultaneously affected by a spontaneous change in the first term of the right-and side of the equation, i.e., in the rate of efficiency earnings of the factors of production. The price level of new investment good is not directly influenced by the rate of saving by the community, just as the price levels of consumption goods and of output as a whole are not directly influenced by the value and the cost of new investment goods respectively, for S is not a factor entering into P' , I is not a factor entering into P and I' is not a factor entering into π . Thus, while a change in S will influence P and π , it will not directly influence P' . Similarly, while a change in I' will influence P and P' , it will not *directly* influence π ; and finally, while a change in I will influence P' and π , it will not directly influence P .

Assuming for the present that the rate of efficiency earnings of the factors of production remains unaltered, the magnitude and direction of the movements of the price levels respectively of consumption goods, of new investment goods, and of output as a whole, will depend upon the magnitude of the three equations (1), (3) and (2). That is to say, the degree and the direction of the changes in P , P' and π relatively to one another will depend upon the degree and direction of the changes in the three factors $I' - S$, $I - I'$ and $I - S$ respectively. The changes in these latter factors again depend on the relative values of I , I' and S , i.e. the value and the cost of new investment goods and the rate of savings respectively.

Now, assuming for the present that the values of I , I' and S are all unequal to one another, six different combinations of relationships between their values are possible. For each one of these six relationships we get one

set of relations between the three factors $I' - S$, $I - I'$ and $I - S$. And accordingly we also get one set of relations between the price levels respectively of consumption goods, of new investment goods, and of output as a whole for each single set of relations between the latter three factors. The six different sets of relationships we may summarize as follows:

- Case A' When $I' > S > I$,
 $I' - S$ is positive ; $I - I'$ is negative ; and $I - S$ is negative.
 Therefore, P will tend to rise; P' will tend to fall; and π will tend to fall.
- Case B' When $I' > I > S$
 $I' - S$ is positive ; $I - I'$ is negative; and $I - S$ is positive
 Therefore, P will tend to rise; P' will tend to fall; and π will tend to rise
- Case C' When $I > I' > S$,
 $I' - S$ is positive ; $I - I'$ is positive ; and $I - S$ is positive
 Therefore, P , P' and π all will tend to rise.
- Case D' When $I > S > I'$
 $I' - S$ is negative; $I - I'$ is positive; and $I - S$ is positive.
 Therefore, P will tend to fall; P' will tend to rise; and π will tend to rise.
- Case E' When $S > I > I'$
 $I' - S$ is negative; $I - I'$ is positive; and $I - S$ is negative.
 Therefore P will tend to fall; P' will tend to rise; and π will tend to fall.
- Case F' When $S > I' > I$
 $I' - S$ is negative; $I - I'$ is negative; and $I - S$ is negative
 Therefore, P , P' and π all will tend to fall.

Avoiding for the present the temptation of going into the detailed interpretation of each one of these six different cases separately, we may draw some broad conclusions from them. When the values of I , I' , S are in the descending order of magnitude (as in Case C') all the three price levels tend to rise, and when these are in the ascending order of magnitude (as in Case F') all the three price levels will tend to fall. These two cases represent the crest and the slough respectively of the credit cycle.

But in the remaining four cases it is interesting to note that when the price level of consumption goods tends to rise, the price level of new investment goods tends to fall (Cases A' and B'), and when the former price level tends to fall, the latter price level tends to rise (as in Cases D' and E'). In these four cases, during the upward phase of the credit cycle, P rises, and during its downward phase P falls, while in each case P' moves in the opposite direction.

When the rate of saving is in excess of the cost of new investment goods, the price level of consumption goods will tend to fall. But in which direction P' will move simultaneously with (or subsequent to) this movement of P , depends on whether the value of new investment goods is (under this situation) less than both S and I' (Case F'), more than both S and I' (Case D') or is between S and I' (Case E').

In the first case (Case F') P' will tend to fall with P , while in the second case (Case D') P' will tend to move in the opposite direction to P , i.e. P' will tend to rise. In case E', P and P' , though on opposite sides of the equilibrium, will be moving in the same direction. In case D' the rise in P' will be more than is required to counteract the fall in P , so that the price level of output as a whole (π) will tend to rise. But in case E', the rise in P' will be less than is required to counteract the fall in P , so that P' will tend to fall. In case F', of course, since both P and P' fall, π will also tend to fall.

Similarly, when the cost of new investment goods is in excess of the rate of saving, P will tend to rise. But in which direction P' will simultaneously tend to move depends on the value of I , relatively to this relation between I' and S . Thus in case C', P' will tend to rise, while in cases A' and B', P' will tend to fall. In case A', the countervailing fall in P' will be large enough to bring down the price level of output as a whole, while in case B' it will not be so large, with the result that π will tend to rise.

Finally, the cases A' and F' make it clear that when π rises, P and P' cannot both fall and when π falls, P and P' cannot both rise. But when P and P' both rise or both fall, π rises in the first case and falls in the second.

IN THE ABOVE analysis we have assumed that the values of I , I' and S are all unequal to one another. By this we have cases in which two of these three terms may have identical values. Under this latter condition six different sets of relations between P , P' and π are possible. These may be summarised as follows:

- Case A When $I' = S > I$,
 $I' - S$ is zero; $I - I'$ is negative; and $I - S$ is negative.
 Therefore, P will be in equilibrium; P' will tend to fall; and π will tend to fall
- Case B When $I' > S = I$
 $I' - S$ is positive; $I - I'$ is negative; and $I - S$ is zero.
 Therefore, P will tend to rise, P' will tend to fall and π will be in equilibrium.
- Case C When $I = I' > S$,
 $I' - S$ is positive; $I - I'$ is zero; and $I - S$ is positive.
 Therefore, P will tend to rise; P' will be in equilibrium; and π will tend to rise.
- Case D When $I > I' = S$

$I' - S$ is zero; $I - I'$ is positive; and $I - S$ is positive.
Therefore, P will be in equilibrium; P' will tend to rise; and π will tend to rise.

- Case E When $I = S > I'$
 $I' - S$ is negative; $I - I'$ is positive; and $I - S$ is zero.
 Therefore P will tend to fall; P' will tend to rise; and π will be in equilibrium.
- Case F When $S > I = I'$
 $I' - S$ is negative; $I - I'$ is zero; and $I - S$ is negative
 Therefore, P will tend to fall; P' will be in equilibrium; and π will tend to fall.

Here again, while not entering into the detailed interpretation of each of the six cases separately, we may arrive at some broad conclusions. It becomes clear from Cases A and D, that when P is in equilibrium, P' and π will be either both above equilibrium (case D) or both below it (case A). Case D will occur during the downward phase of the credit cycle, and Case A during the upward phase.

Similarly when P' is in equilibrium, P and π both will be either above equilibrium (case C) or both below it (case F). The latter will be found to mark the genesis of the boom and the former (case C) the downward phase of the cycle. Finally, when π is in equilibrium, P and P' will be on the opposite sides of equilibrium.

There remains to consider one more case of the relationship between P , P' and π , namely, when I , I' and S are all of the same value. In this case (which we may call case X) the second terms of all the three equations will be zero and we will have a unique relationship between P , P' and π (i.e. $P = P' = \pi = W_1$). All the three price levels will be equal to the rate of efficiency earnings of the factors of production.

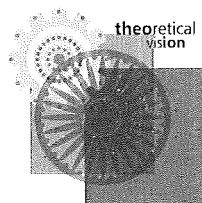
These conclusions in respect of the relative movements of P , P' and π for different values of I , I' and S are important for an interpretation of the credit cycle in the light of the analysis made possible by our new equation (4). This would require too much space to be undertaken here, but it may be stated that if the 12 different cases considered above are arranged in the order A, A', B, B', C, C', D, D', E, E' and F, F', they will be found to mark 12 well-defined and consecutive stages or turning points, Case B' marking the crest and case E' marking the slough of a complete cycle i.e. from slough to slough. The 13th case (case X) is difficult to conceive of as occurring in practice under the capitalistic order of society.

WE MAY NOW consider one more aspect of equation (4). Its right hand side does not involve, that is to say P' is not directly affected by, either the 'bearishness' or the 'bullishness' of the public on the one hand, and the willingness or ability of the banking system to inflate or deflate the volume of

savings-deposits on the other. The influence of these factors on P' is not of such direct character as one may be tempted to imagine from the passages of Keynes quotes in Section III above, as also from the following which, as stated by him, is a summary of his argument in section (iii), chapter 10 of Book III: The price level of investments as a whole and hence of new investments is that price level at which the desire of the public to hold savings-deposits is equal to the amount of savings-deposits which the banking system is willing and able to create.

This is not to say that the behavior of the banking system, the rate of interest, and the sentiment of the public have no bearing whatever on the price level of new investment goods. Indeed, some of these may prove to be potent factors with which to bring about a change in P' . But the change in question will be worked out not directly but indirectly via their impact on one or more of the factors on the right-hand side of equation (4), that is to say, by their impact on I , I' , or W' . And if we ignore for the present the spontaneous changes in W' , since these do not usually occur under the capitalistic order of society, a change in the price level of C would normally be the result of a change in the second term of the equation.

That is to say, these factors will first impinge upon I or I' , the value and the cost of new investment goods respectively. The banking system, therefore, in whatever way it may behave, cannot directly influence the price level of C . As in the case of the price levels of R and O , it has to work via the second term of the equation.



Interdependence of price levels

1933

This chapter first appeared in the *Quarterly Journal of Economics*, and was a significant contribution to economic theory at the time

We will examine here the degree of independence and the degree of interdependence of P , P' and π , the price levels respectively of R , the liquid consumption goods and services flowing to the market and purchased by the consumers; of C , the new investment goods; and of O , the total output of goods in a unit of time. This will be based upon the analysis made possible by the equation for P' in combination with the two fundamental Keynesian equations for P and π . They are:

$$P = \frac{E}{O} + \frac{I' - S}{R} \quad (1)$$

$$P' = \frac{E}{O} + \frac{I - I'}{C} \quad (2)$$

$$\pi = \frac{E}{O} + \frac{I - S}{O} \quad (3)$$

Where

E stands for the money income of the community,

S for the rate of saving,

I' for the cost of reproduction new investment goods,

I for the value of these new investment goods,

R for the volume of current output of consumption of goods,

C for the volume of current output of investment goods,

O for the current output of goods as whole, (so that $O=R+C$)

π for the price level of O

$W1 = E/O$, rate of efficiency earnings of the factors of production.

First we shall examine the inter-relationship of P and P' .

I' and $W1$ being factors entering into P and P' , it is obvious that changes in these would cause changes in both the price levels. But when P' and P vary owing to variations in I and S respectively, the reaction of this on the price level is not obvious. At first sight it would appear that P and P' can move

independently of one another when the movement in the first is due to a change in S , and the movement in the second is due to a change in I .

But the independence of P and P' in these particular circumstances is not as real as it might seem at first sight. For, in the first case, if owing to changes in S , the second term of the right-hand side of equation (1) becomes either positive or negative and is expected to remain so at least for one production period, then, under the influence of abnormal profits or losses, investments in the production of R will be extended or curtailed. That is to say, there would then result an increase or decrease in I' ; which in turn will cause a change in P' .

Similarly, in the second case, if owing to changes in I , the second term of the right hand side of equation (2) becomes either positive or negative, and is expected to remain so at least for one production period then, as in the above, under the incentive of abnormal profits or losses, I' will increase or decrease (due to increased or decreased investment in the production of C), thus leading to a change in P' .

It would seem therefore, that variations in either P or P' , whatever their underlying causes, would lead to variation in the other price level simultaneously or subsequently: this is obvious when the variation in question is due to changes in I' or W_1 , and somewhat obscured (but none the less real) when caused by changes in S or I . In the latter case, the reaction on the other price-level concerned is effected by an induced change in I' .

KEYNES, HOWEVER, comes to a different conclusion on this question. He observes: "The reader will observe that the price level of consumption goods is entirely independent of the price level of investment goods. Given the level of efficiency wages, and the difference between the cost of new investment goods (as distinguished from their selling price) and the volume of saving, the price level of consumption goods is unequivocally determined, quite irrespective of the price level of investment goods".

In view of our observation, however, it would seem incorrect to put such emphasis on the independence of P and P' relatively to one another. And although on occasions Keynes appears to recognise the interdependence of the two price levels, nevertheless, he seems to hold the view that P and P' enjoy an appreciable degree of independence from one another.

We shall next examine the relative directions in which the two price-levels may move. The first terms of the right-hand side of equations (1) and (2) being identical, the relative directions of movement of P and P' would depend on the relative directions of movement of their respective second terms, i.e. upon Q_1 and Q_2 , where Q_1 and Q_2 stand for $I' - S$ and $I - I'$, the volume of profits realised on the production and sale of R and C respectively.

Now, under the capitalistic order of society a change in the first term in either direction results only as the consequences of a change in the second term: entrepreneurs acting under the stimulus of abnormal profits or losses induce a change in the same direction in W_1 . When profits are positive

and are rising, competition among entrepreneurs (combined with action on the part of organised labor if prices and therefore cost of living are also rising) would induce $W1$ upwards; and when profits are negative and are falling (rising in magnitude), competition among the factors of production, combined with pressure on the part of entrepreneurs would force $W1$ downwards.

That is to say, $W1$, whenever it moves, would move in the same direction as profits. Owing to its comparative rigidity, however, it is possible that $W1$ may remain stationary for some time, while profits are moving in the one or the other direction. This would particularly be the case when such movement of profits is only temporary, and of slight degree. But it is difficult to imagine situations in practice in which $W1$ and profits, looking to the community as a whole, would move in opposite directions to one another.

The above argument would hold true of all the three equations for the price-levels of R , C and O . It follows, therefore, that: (1) when $W1$ is moving $Q1/R$, $Q2/C$, Q/O will also have been moving in the same direction as $W1$, and hence in one and the same direction; and (2) when $W1$ is stationary these three terms (if not also stationary) may be moving in the same or in opposite directions to one another. In the latter event the movement of profits in opposite directions cannot last for a period long enough to set moving forces of competition among entrepreneurs or the factors of production as the case may be, to raise or to lower $W1$. For when $W1$ gets moving in any direction, profits will also have been moving in the same direction as $W1$.

IN THE FIRST of these two alternatives it is obvious that P and P' would move in the same direction since their respective component factors (namely, $W1$ and profits) would then be all moving in one and the same direction. But in the second, if $Q1/R$ and $Q2/C$ choose to move in opposite directions (but not otherwise) the two price levels would move in opposite directions also.

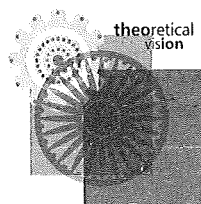
It would seem unlikely, however, that the movement of these two rates of profit in opposite directions can last for longer than one production period. For, if they did, there would then take place a shifting of production as between R and C which would arrest the tendency in question of $Q1/R$ and $Q2/C$. And since entrepreneurs anticipate profits or losses, this shifting of production would take place sooner, causing correction in the direction of movement of profits sooner also. Thus it would seem that $Q1/R$ and $Q2/C$ might not be able to move in opposite directions for the full duration of production period. The duration of movement in opposite directions of these two terms being thus limited, we may conclude that P and P' when in movement would move practically always in one and the same direction except, if at all, for one production period, when they might, but need not necessarily, move in opposite directions. Practical evidence would also seem to support this conclusion.

From this it does not follow that P and P' cannot remain on opposite sides of equilibrium. This would seem inevitable during a credit cycle, if and P' were to move one after another and not abreast. There may arise, therefore, occasions when entrepreneurs producing C enjoy abnormal profits while those producing R suffer abnormal losses, and vice-versa. But the profits and losses in question would then be moving in opposite directions. We shall next consider the relationship of π to P and P' . Since $O = R + C$ (by definition), it is obvious the price level of O is dependent upon the price level of its two constituent parts R and C . This dependence is expressed by the equation:

$$\pi = \frac{P.R + P'.C}{O} \quad (4)$$

IN THIS EQUATION, P and P' when they move, would move practically always in one and the same direction. And under competitive conditions of a capitalist regime it is extremely unlikely that R and C would move in opposite directions to P and P' respectively. It follows, therefore, that P and P' being factors entering into π , a change in their magnitudes would also cause a change in π ; and π cannot remain stationary when P and/or P' are moving.

Equation (4) also tells us that the price level of output as a whole is an average of the price levels P and P' , the average in question being determined by the formula $P.R + P'.C/O$. It follows that the value of π must lie somewhere between magnitudes of P and P' , it cannot remain either above or below these two; if π is in equilibrium, P and P' , if not also in equilibrium, must remain on opposite sides and not on the same side of equilibrium; if any two of the three price levels are in equilibrium also; and finally, if P and P' move in one direction, π must move in the same direction also.



Price inflation

28 NOVEMBER 1977

Several times, the writer returned to the topic of the need to distinguish between monetary and non-monetary causes of inflation. This was written as a letter to the Janata government, which distributed copies among party members

The problem of price inflation is no less formidable, nor of less critical importance politically, than any other major economic problem. Indeed, if not properly tackled soon enough, price inflation – which, harasses virtually every household except the business community and the richer farmers – may well be politically disastrous, especially if other major economic problems too remain unresolved. It is good to see that the Janata party leadership is keenly aware of the crucial need to control price inflation.

But from the public pronouncements of party leaders, it would appear that the thinking on the subject is less than clear in respect of the causes of inflation and hence in respect of its remedies.

Price inflation may ensue from two factors, monetary and non-monetary. A distinction must be made between the two, if we must avoid serious policy errors.

Non-monetary factors causing price inflation

The non-monetary factors include crop failure, inadequate imports, price rigging by traders who have monopoly control over stocks, global short supply of commodities, e.g. petroleum, commodity taxation, labor unrest and seasonal and other temporary shortages. These factors may drive up the prices of the individual commodities affected, of their substitutes, and, in less measure, of the manufactures based on these commodities. But as a rule – extreme cases of famine conditions in a dominantly agricultural economies apart – a general rise in commodity prices cannot arise from non-monetary factors.

Monetarily caused price inflation

The second factor responsible for price inflation is monetary – an overall expansion of money, i.e., an expansion of money which outpaces the expansion of the national product. Money, like water, is all-pervasive. When the

expansion of money outpaces the expansion of the national product, the prices of commodities in general would go up, even as the level of the water in a tank would rise when rain in the catchment area exceeds the absorptive capacity of the soil. This over-expansion of money would show up in (a) an increase in the money supply per physical unit of the national product, as a simple matter of arithmetic; and (b) an increase in the General Price Index, as a natural consequence of this increase in money supply. These two factors (a) and (b) constitute the evidence, the index and measure of price inflation, ensuing from the monetary factor.

In India, we have found that price inflation, as evidenced by the rise in general price index, progressed with the expansion of the money supply per physical unit of national product (See table). Thus, in 1976-77, money supply of physical unit of the national product (Rs 6,983) was 3.7 times its level (Rs 1,965) in 1954-55, the zero inflation year; and the general price index multiplied simultaneously 4.4 times. The close movement of the two – i.e., commodity prices and the over-expansion of money – held true for almost any year, in relation to the zero inflation year. It will be noted that price moves faster than money supply. This reflects the general tendency to purchase and stock goods, rather than hold cash, as tomorrow's prices may well be higher than today's.

Since March 1977, when the Janata government assumed office, overall money supply was rising at an annual rate of 10.3 per cent and prices at an annual rate of 7.5 per cent as on 10 September 1977.

Individual price movements

The General Price Index, however, reflects only the price inflation resulting from monetary factors. This index, being but a national average of the prices of all commodity groups, conceals the price inflation resulting from non-monetary factors. The price impacts of the latter become apparent when we review individual price movements.

Thus, during the year ending 10 September 1977, when money supply rose by 14.5 per cent, the behavior of commodity prices varied: when the price of most commodities went up, the price of some fell, the rises and falls being by varying degrees. The price of pulses shot up by 54 per cent, of edible oils by 28 per cent, and of cotton textiles by 13 per cent. On the other hand, the price of sugar, *khandsari* and *gur* fell by 20 per cent, of fertiliser by 5 per cent and of fibre by 2.1 per cent.

The explanation, broadly, for the varying price movements of individual commodities is the impact of non-monetary factors. In the case of pulses, to the upthrust in prices caused by the monetary factor was added pronounced physical shortage of supply. In the case of sugar and *gur*, on the other hand, non-monetary factors had produced a relative improvement in the supply position, when compared with the situation years ago. The altered supply-demand position was such that the price upthrust of the monetary factor was more than negated, and sugar and *gur* prices declined.

1954-55 4 June 1955	
1955-56 1956-57 1957-58	
1958-59 1959-60	
1960-61 1961-62 1962-63	
1963-64 1964-65	
1965-66 1966-67 1967-68	
1968-69 1969-70	
1970-71 1971-72 1972-73	
1973-74 21 Sept. 1972	
1974-75 20 March 1976 1975-76	
19 March 1977 1976-77	
10/9 Sept. 1977 17/16 Sept 1977	

Importance of identifying the causes of inflation

It is important to identify, as a first step, the factors responsible for the price rise which we may wish to bring under control. This identification is essential for three reasons:

(i) Though both factors – monetary and non-monetary – may operate simultaneously, they are not functionally inter-related, i.e., the operation of either factor does not involve the emergence of the other factor too.

(ii) Non-monetary factors impinge on the prices of the individual commodities affected, while the monetary factor impinges on the prices of all commodities, though the non-monetary factors may accentuate, or more than negate, the price inflation ensuing from the monetary factor.

(iii) Naturally, therefore, the remedy for price inflation would depend on the factors causing it, that is price inflation ensuing from the monetary factor cannot be corrected by non-monetary measures; and price inflation ensuing from non-monetary factors cannot be corrected by monetary measures.

THUS THE CORRECTIVE to the price inflation of pulses and edible oils – which represent the working of non-monetary factors – lies in remedying the shortages through liberalising imports or through increasing domestic production. Edible oils illustrate the efficacy of this remedy: liberalised imports of edible oils reduced the extent of the price inflation from 81 per cent in June 1977 to 28 per cent in September 1977, relative to the price position a years ago. In the case of pulses, on the other hand, price inflation deteriorated during the same period, as outside sources of supply did not exist and shortages could be corrected by increased domestic production alone. To the extent that the price rise may be attributed to the monetary factor, some price relief may, however, result from a control of money supply.

Current phase of money cost inflation

The problem of price-inflation in India is of both categories – and the shortages of pulses and edible oils in particular merit urgent attention. Shortages arising from non-monetary factors periodically recur, the commodities affected vary, and the duration of a pronounced inflation in their prices may be short-lived. But the price inflation problem caused by the monetary factor – a never-ending general rise in prices – has been with us for over two decades in its current phase, if we exclude the war-caused inflationary expansion of money which began in 1941-42.

This price inflation is among the three most major economic maladies bequeathed to us by the Congress regime, the other two being a continued

But the price inflation problem caused by the monetary factor – a never-ending general rise in prices – has been with us for over two decades in its current phase, if we exclude the war-caused inflationary expansion of money

Overall bank credit -- and total money supply -- continued to move up with the progress of deficit financing, selective credit controls leaving no visible dent on its uptrend

downtrend, from 1961-62, in the per capita production and income of 72 per cent of the total population, the agricultural population, and the mounting unemployment. In April 1977, the Janata government, discarding the Agricultural Prices Commission's fallacy that any

increase in foodgrain prices would set price inflation aflame, allowed farmers the full benefit of market prices for *rabi* foodgrain and abolished wheat zones. Credit for this major and most essential policy U-turn goes to the first Janata minister of agriculture Prakash Singh Badal.

THE PRESENT MINISTER Surjit Singh Barnala extended this policy last September to paddy and other *kharif* foodgrain. These measures should go a long way in boosting food production. Given the matching resource allocation reforms to ensure an adequate flow of funds into the farm sector, we will have removed two formidable hurdles which have been inhibiting the expansion of agricultural production; and we may then look forward with assurance to reversal of the downtrend in the per capita output and income of the agricultural population, without which all talk of economic development must remain largely meaningless.

We hope that the same measures of realism would prevail in tackling the inflation problem, and that the minister would adopt truly effective means of inflation control.

The current phase of inflation dates back to June 1955. A year later, in May 1956, when prices had risen by 14.8 per cent, the Union Government, being 'fully seized' of the urgency and importance of achieving 'price stability' -- to quote the late T T Krishnamachari's budget speech of 19 March 1957 -- adopted 'measures' for 'containing inflationary pressures'. Since then, 'anti-inflationary' measures have continued unabated. They assumed a peremptory character when price galloped ahead, at record rates, in 1973-74 and part of the following year; and the Congress administration spoke of India's war against inflation, with blitz operations against hoarders, arrest of smugglers, raids by income-tax squads, stiff increase in interest rates, a supplementary budget to increase taxation, and reinforced selective as well as overall credit squeeze. The Emergency enhanced the ruthlessness of price control action.

Nevertheless, price inflation has persisted and continues to date. This is so because we have been seeking to correct money-caused price inflation by non-monetary measures. It is time we recognised the futility of this. This category of inflation can be controlled only by eliminating overexpansion of money. This overexpansion of money ensues when aggregate government outlay exceeds its aggregate receipts, both on revenue and capital accounts, and the resulting budget deficit is coveted by printing money or, which is the same thing, by borrowing from the Reserve Bank of India. Both ways of recovering budget deficits constitute deficit financing. Such

financing needs to be controlled or eliminated if we are to have zero inflation. Political disaster may result if we persist in ignoring – as the Congress regime has been doing – this simple economic truth.

In particular, money-caused price inflation cannot be remedied – contrary to the belief of Congress policymakers – by selective credit controls, an extended public distribution system, or anti-hoarding measures.

Selective credit controls

Selective credit controls – loans, discounts of bills, and advances, against the commodities selected for price controls – were introduced in May 1965, in the wake of renewed price inflation caused by deficit financing. Originally applied to rice and paddy, the list of commodities brought under selective credit controls was extended to include most foodgrain, certain other food articles, and certain major raw materials, among them oilseeds and cotton.

Selective credit controls, no doubt, led to a downtrend in bank credit against the commodities which came under the purview of such control, but this made an impact on the total bank credit, not on the total money supply. The selective credit restraint was easily countered by the expansion of credit extended against other commodities and hypothecable assets; and the overall bank credit – and total money supply – continued to move up with the progress of deficit financing, selective credit controls leaving no visible dent on its uptrend.

Thus, the aggregate credit against commodities subjected to selective credit controls was small, being but 9.8 per cent of total bank credit in March 1971 and 5.6 per cent in March 1975. Traders and the market had, therefore, little difficulty in making good the credit denied against these commodities by credit raised against other assets.

We find the total bank credit moved up without a break from Rs 760 crore in 1954-55. By 1976-77, it had increased 17.5 times. Neither credit control blitz operations of 1973-74 nor the emergency (June 1975 to March 1977) succeeded in leaving any mark on this uptrend. Indeed, total bank credit, instead of being held back by selective credit control, multiplied faster than money supply. The latter went up in the same interval, only by 6.7 times.

In other words, total money supply responded to deficit financing, and the General Price Index responded to the trend in total money supply. Selective credit control was a futile exercise.

Proposed extension of PDS

The proposed massive extension of the public distribution system (PDS), with an increasing number of commodities covered by it, can make no impact on price inflation caused by the monetary factor, as PDS does not add to overall supplies, nor reduce the overexpansion of money. On the other hand, an extended PDS may enhance the budget burden of consumer subsidies.

Anti-hoarding measures can terminate neither holding nor price inflation. Panic sales of stock do not add to the overall supplies; nor reduce the monetary circulation. They can only shift or scatter stocks

In the context of deficit budgets, this may accentuate the malady of inflation. There is also the danger that, through procurement of supplies for distribution at penalty prices – as has been the case in respect of wheat and rice, until the recent abolishing of monopoly procurement – the output of these supplies may get retarded and their shortages may

persist. The PDS may seem attractive politically, but it may turn out to be a most expensive deadweight on the budget and the national economy, like the rice distribution system and the rice subsidy of Ceylon.

Nor can PDS remedy poverty. With 45.5 per cent (264 million) of the total population below the poverty line – in terms of the draft Fifth Plan definition of poverty – the idea of some variant of 'negative income-tax' relief is a prohibitive proposition, both administratively and fiscally. In any case, the distribution of a few articles of food and certain necessities of life at subsidised prices may not make much of a dent on poverty.

It may be noted that cereals and cereal substitutes alone account for 64.5 per cent of the final consumption of the Indian people; and for those below the poverty line the consumption is substandard. This demonstrates the impossibility of tackling the problem of our poverty through the PDS technique. It is much more realistic to deal with this problem through an expansion of production. Poverty in India is pre-eminently a developmental issue. The state may contribute to its solution much more through economies in consumption expenditures, through correcting resource wastage and misdirections, and through removing the various economic roadblocks which hinder the expansion of production at capacity pace.

Police action against traders

Nor can price inflation, whether ensuing from the monetary factor or the non-monetary, be tackled with any hope of success through the police action against traders, under the ESMA (Essential Commodities Maintenance Act), MISA (Maintenance of Internal Security Act) or worse.

The theory that hoarding may cause a general price rise is a fallacy that has been continually reasserted, though it is without any logical basis or empirical evidence to support it. Hoarding involves costs – interest, storage charges, depreciation and wastage; and hence becomes viable only when the anticipated price inflation at least covers the cost of holding. If there is no price inflation, there can be no holding, as holding would then involve losses, by the cost of holding. Thus, it is not as if – as many seem to think – holding is the starting point of inflation. The starting point is the expansion of money beyond the economy's needs. It follows that to strike inflation at its roots, we have to stop inflationary creation of money.

Nor is it as if only price inflation is on the move, and so it can be curbed by dehoarding, through police action or credit restraints. The fallacy of this

reasoning is easily seen. Panic sales of stock do not add to the overall supplies, nor reduce the monetary circulation. Such sales, in the background of continued overexpansion of money, can only shift stocks – depending on who comes under the anti-hoarding hammer – from producers to dealers, from wholesalers to retailers, and private godowns to government godowns, or from all of these into millions of private stocks of families with prudence and the requisite liquidity. Anti-hoarding measures can terminate neither holding nor price inflation. They can only shift or scatter stocks.

To analogise this argument, it is the whip (inflationary expansion of money) that drives the horse (prices). It is the moving horse (rising prices) that causes the carriage to roll on (stockpiling to increase). The initiative for the horse and carriage to move or to stop, or prices to rise or remain stable, and stockpiling to increase or decrease lies, not in the carriage stockpiling, but in the whip. When the whip is cracked and the horse gallops, to think that dehoarding can reverse the price rise is hoping that the carriage can pull the running horse backward.

Yet, during the past two decades, rather than strive to adjust money flows to national product, we have been placing major reliance on anti-hoarding measures as a means of inflation control; and, these measures proving ineffective, prices have continued to rise. If, to quote Morarji Desai, the Janata party must 'honor its pledges to the people for the removal of their suffering and hardship in the matter of prices', we must abandon the Congress regime's fallacies of inflation control; and settle down to a program of drastic cuts in government expenditure and capital account outlay in excess of budget collections of national savings and foreign aid.

THE FOREGOING ANALYSIS applies, too, to cases of price inflation of individual commodities in short supply, resulting from non-monetary factors. The commodities dehoarded by police action – in the context of short supply and consequential price inflation – are most likely to be picked up by discerning consumers, or by retail traders. Hoards will thus only get scattered. The phenomenon of holding will persist. Any price fall from panic sales will, therefore, soon be reversed, and price inflation will continue to reflect the scarcity of the commodity concerned. This price inflation is not a law and order problem to call for police and military measures. It can be corrected only by additions to overall supply through imports or expanded domestic production.

The working of this principle is well illustrated by the outcome of Operation Dehoarding against wheat in Bulandshahr and elsewhere in UP in June 1974. This operation was a well-planned blitz; and, under the shock of panic liquidation of stocks, prices crashed in all *mandis* subjected to raids. But the price fall was local and temporary. Wheat prices soon recovered even in the *mandis* where prices crashed; and continued their uptrend, the index and measure of supply shortages. The national average of wheat prices took little or no notice of Operation Dehoarding.

Policy conclusion

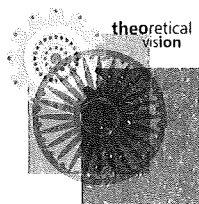
The policy conclusions emerging from the foregoing discussion may be briefly recalled:

- (i) Price inflation is of two categories, (a) that caused by monetary factors, that is by an overexpansion of money; and (b) that caused by non-monetary factors, for example crop failures or inadequate imports. Inflation (a) impinges on commodities in general and its extent is indicated by a rise in the General Price Index and an expansion in money supply per physical unit of the national product; and inflation (b) impinges only on the individual commodities affected. It is most important, as a first step, to identify the factors causing price inflation, as inflation (a) cannot be corrected by measures applicable to inflation (b); and inflation (b) cannot be corrected by measures applicable to inflation (a).
- (ii) We have inflation of both categories in India. Price inflation of pulses, of edible oils and petroleum are examples of inflation (b); and a doubling of the General Price Index since 1968-69, in response to a corresponding increase in money supply per physical unit of the national product, is a case of inflation (a), which has been with us since 1954-55, zero year of the current phase of inflation. This category of inflation has been the source many of our major ailments, among them perverse income shifts, social tensions and political unrest and instabilities.
- (iii) The remedy for inflation (b) is non-monetary: increased imports and expanded domestic production.
- (iv) The remedy for inflation (a) is to adjust the expansion of money to the expansion of the national product. This calls for elimination of inflationary deficit financing. This can be done in two ways: by reducing government outlays, and by increasing revenues and government borrowings. As government outlays and revenues are already excessive, and have been causing great national damage, elimination of inflationary deficit financing must be achieved through drastic cuts in expenditure and outlays.
- (v) The anti-inflationary policy measures of the Congress regime date back to May 1956 and assumed blitz dimensions in 1974. Yet, they failed to make any visible dent on price inflation. The explanation lies in the fallacious measures of inflation control, more particularly, the attempts to curb money-caused inflation by non-monetary measures. If the Janata government must achieve inflation control, these fallacies of the Congress regime must be discarded.
- (vi) Selective credit controls have not corrected money-caused price inflation. The restriction of credit against the commodities selected for credit controls have been more than balanced by the expansion of credit against mortgageable assets.
- (vii) The proposed extension of the public distribution system (PDS), is no remedy to money-caused price inflation, as this does not add to

overall supplies nor reduce the money circulation. It may well add to budget deficits, accentuate price inflation and turn out to be an expensive deadweight on the budget and the national economy.

(viii) With 45.5 per cent (264 million) of the total population below the poverty line, and with 64.5 per cent of the total national expenditure on cereals and cereal substitutes, it is not feasible to tackle the problem of Indian poverty by the PDS technique. This problem is part of the main national task of economic development.

(ix) Nor can price inflation of either category be relieved or remedied by police action against traders, a favorite theme of the spokesman of the Congress regime and now of the Janata government. Such police action can only scatter stockpiles. The only remedy for price inflation is to eliminate the overexpansion of money, when price inflation is the result of such overexpansion; and to increased supplies through imports or expanded domestic production, when price inflation is the result of shortages of supplies, ensuing from non-monetary factors.



Economics of corruption

FEBRUARY 1975

In this lecture delivered at the H A College of Commerce, Ahmedabad, the writer put forward the thesis that corruption is an inevitable by-product of the policy of interventionism

I n the outside world – unfortunately, not in India – there are two distinct camps in economics: interventionists and non-interventionists. Communists represent the extreme case of interventionists. Interventionists of the socialist hue were in control when we came to direct our own economic-political affairs after Independence in 1947; and with the growth in economic chaos which attended the pursuit of socialist policies, communists have been on the ascendant through infiltration and the propagation of their theory which blames capitalism on the growing chaos. Their strategists argue that there is no hope whatever of any escape from the chaos other than via the adoption of communism.

There is little indication of any shift to non-interventionism among economists in the academies, in government and its agencies, in business firms and in chambers of commerce. This applies, too, to publicists and intellectuals, though there is increasing recognition of the failure of socialist policies. Strange as it may seem, the strongest opposition to a policy U-turn would be mounted by the chambers of commerce and industry.

It is not widely known in India that interventionism has invariably undermined the viability and progress of all breadline economies which adopted interventionist policies, and that no country, whether developed or underdeveloped, which entrusted the direction of its economic affairs to the price-market mechanism, has had anything but bumper returns. If we are to be saved from economic-political disaster, it is time that we abandoned ideological predilections and subjected our policies to a basic transformation.

Both theory and experience have shown that corruption is among the inevitable by-products of the policy of interventionism. Corruption necessarily grows as these policies progress. Indian is a classic illustration of the functional link between corruption and interventionism.

Some people have stated that corruption is an age-old institution in India, that it goes back to the Mughal days. We are told that, in the Punjab and elsewhere, when the income of a young official of marriageable age is considered by interested parties, due note is taken not only of his recorded income but also of the unrecorded – though none-the-less real – income opportunities which his official position offers. Corruption certainly dates back to the Public Works Department of the British days.

We will not linger on this argument. Corruption and its ally inflation do not hurt us any less because they are old and universal ailments – they undermine character and mass well-being all the same. Our concern here is the effect of corruption on mass well-being. And this effect is considerable.

If monopolies did not exist, there would be no monopoly gains, and the question of this category of corruption does not arise. Monopoly gains are unearned windfall

Corrupt payments financed by monopolies

Now, what is corruption? The corrupt incomes we are concerned with are illicit payments made to officials and politicians in power, or payments to party funds, for monopoly documents which bring windfall monopoly incomes. It is a matter of detail whether the payments are made directly, through intermediaries, or indirectly, as contributions to election funds or payments at fantastic rates for advertisements in the souvenirs issued on the occasion of party functions. Payments are made by the recipients of the monopoly documents to those who issue these documents, i.e., the officials who work under the general or specific directives of politicians in office.

It follows that corrupt payments are part of the monopoly gains. If monopolies did not exist, there would be no monopoly gains, and the question of this category of corruption does not arise. Monopoly gains are unearned windfalls, payments are made to gain those windfalls; and, looking at the phenomenon from the standpoint of accounts they debited, by the recipients of monopoly documents to the monopoly incomes. The net gain from the monopoly documents is the windfalls less the corrupt payments made for acquiring the documents. The transactions being illicit are, of course, not recorded.

Corruption from import licensing

The most highly sought after monopoly instruments are import licenses, as the total amount of the windfalls they bring are enormous. Total imports in 1972-73 amounted to Rs 2,150 crore, of which Rs 780 crore (36.3 per cent) were on private account and Rs 1,370 crore (63.7 per cent) on government account.

The 'premium' that a license fetches continues to be enormous. In the case of copper, the market price is over 3.5 times the landed cost. The controlled price (which is based on the landed cost) is Rs 10,000 per ton, the market price Rs 36,000 per ton. The price of copper import licenses would

therefore be of an order of 2.5 times the face value of the licenses. The prices of or 'premiums' on import licenses may vary from 30 to 35 per cent to five times or more of the landed costs. This means that, on an average, imports worth Rs 10 crore bring windfall profits ranging from Rs 3 to Rs 50 crore, depending on the commodity. At an average premium of 75 per cent, the monopoly gain from private sector imports alone will amount to an annual order of Rs 585 crore.

IT IS NOT AS IF nationalisation of imports eliminates the windfalls and the corruption. So long as the windfalls obtain, corruption will go with it. Nationalisation may shift the recipients of the corrupt payments. If the corrupt among the officials and politicians controlling the operation of the State Trading Corporation (STC) are no longer in a position to claim the payments, corruption may change form. The windfalls may get absorbed in over-staffing, raw material leakages (which are but a variant of corruption) or production inefficiencies.

As a rule, licenses are non-transferable, so transactions in the market for import licenses are not legal. The Alladin's lamp of import licensing produces fortunes as though from nowhere for a large community of importers and dealers in import licenses. The cost of production of import licenses being zero, the premiums they fetch are windfalls, and when to the gains from private sector imports are added the gains from the nationalised import trade, the total amount of the windfall gains may be of an order of Rs 1,600 crore annually.

Unearned monopoly gains on so large a scale cannot be wholly retained by the recipients of the import licenses. The inevitable competition to acquire the import licenses would necessarily bring a share to those responsible for issuing the licenses – the administrators and the politicians. As a practical matter, there is nothing that anyone can do to prevent this.

If Mr A from among those responsible for the issue of the import licenses is beyond corruption, the only outcome will be that Mr A will forgo his share of the corrupt payments. Possibly, the shares of B,C,D and the rest who collaborate in the issue of the licenses, would go up. The chances are that these others would conspire to have Mr A transferred to another department, in order to make things safe for them. The possibility of the entire body of people, including politicians, responsible for the issue of import licenses being beyond corruption is too unreal to merit any analytical notice.

Corruption from public sector contracts

Import licenses are not the only goldmine of corruption. Government contracts and contracts in public sector undertakings are among the other documents in great demand for the fabulous incomes which they yield. When Rs 100 crore is accounted to have been 'invested' in public sector projects, the whole of it does not go into the projects concerned. At some places, the amount actually invested would be at 60 per cent, others at 80 per cent.

What happens to the balance? The balance is the windfall of the contractor. For the same reason that the windfalls from import licenses cannot be all kept by the recipients of these licenses, the windfalls from public sector contracts cannot be all retained by the contractors. They have to share a part with the persons whose responsibility it is to accept and issue these contracts. Contractors have to make corrupt payment to the administrators, engineers and politicians concerned before they may get the contracts.

What are the amounts involved? The *RBI Report on Currency and Finance* for 1973-74 places total public sector plan outlays in 1972-73 at Rs 3,960 crore. If contractors have to distribute 10 per cent of these amounts to get the contracts, the total corrupt payments under this head are of the order of Rs 400 crore. If they have to distribute 15 per cent, corrupt payments in 1972-73 were of the order of Rs 600 crore.

Corruption from smuggling and other illicit transactions

To this must be added corrupt payments on account of:

- (1) Other control measures – every control creates monopolies, and payments are demanded and made for acquiring the monopolies concerned
- (2) International trade – smuggling in gold, watches, radios, razor blades, cloth, art-silk yarn and other such goods, and smuggling out silver, rice and the like
- (3) Internal trade – smuggling, mainly of rice and wheat, from the surplus to the deficit state and urban areas
- (4) Various administrative services, hurdles or penalties – petty or large bribes paid for pushing files and to the income-tax, customs and police officials.

By the very nature of things, the total amounts of the corrupt payments are not known or ascertainable, even their orders of magnitude. The actual amounts in each corrupt deal can be known only to the two parties to the deal and the intermediaries. But, quite obviously, the totals would not be tens of crores of rupees but several hundreds of crores of rupees.

By far the largest amounts of the corrupt payments would be from import licenses, public sector contracts, and smuggling.

Any administration exposed to these Himalayan corruption potentialities would succumb to the temptation. With so much money to be had, even the German civil service, reputed for its integrity and efficiency, may fall a victim.

If I may quote notorious smuggler Haji Mastan Mirza's statement: "Smuggled goods do not rain from the heavens, they move on roads." They cannot move so freely without the active co-operation of the officers of the various customs and excise departments.

Eradicating corruption

How can corruption be prevented when an import license – a piece of paper which costs nothing but the signature of the concerned official to

produce – authorising the import of, say, copper worth Rs 5 crore fetches in the market over Rs 12 crore? Competition for the document would necessarily bring into being corrupt payments. Schemes to prevent this are not worth a moment's notice. The various reform schemes will only shift the parties receiving the corrupt payments. Corruption will continue. If, for instance, the issue of import licenses is entrusted to an independent board of men of the highest integrity, corrupt activity will move from the government departments concerned to the independent Board and its staff.

The only hope of eradication of corruption on the current scale is a complete U-turn in our policies – abolition of import control and exchange restrictions, a drastic scaling down of public sector outlays, auctioning away to the highest bidders in the private sector the existing public sector undertakings, removal of the system of permits, licenses and quotas as Professor Erhard did in Germany and limiting government activities to their natural sphere.

There is, however, little hope of any U-turn in our policies. Prime minister Indira Gandhi, addressing a public meeting at Mangalore on 11 January 1975, declared that she would not budge from her party's policies merely for political exigency. She added, "We have not done it and we will not do it. We feel strongly about our policies and we are not going to listen to anybody." Corruption being a by-product of the prevailing policies, this means that corruption will continue; this will not only undermine national character but also economic growth and social progress.

Black market incomes

Import licenses, government contracts and other instruments of statist control over the economy yield phenomenal illicit incomes to the recipients of these instruments. Their total magnitude can be placed at an order of Rs 750 crore annually. The largest bulk of it – of an order of Rs 460 crore – ensued from the traffic in import licenses; an order of Rs 260 crore from contracts in public sector undertakings and other programs of 'development', and the rest from price controls, permits and concessions.

This phenomenon adds unduly to the undeclared cash transactions in the economy as distinguished from transactions paid for by cheque. First, the recipient of an import license who has incurred illicit payments for acquiring it cannot enter these payments in his books. But being part of his costs, he has somehow to recover the amount from the sales of the goods imported against the license; he arranges to get some of his receipts in unaccounted form, i.e. cash. This may take the form of fictitious inter-sales to non-existent parties or receipts of payments partly in cash and

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partly by cheque, the receipt being made out only for the latter.

Secondly, being illicit earnings, they cannot be entered in the books or figure in the income-tax returns. The earnings must be held in cash – not as deposits with a bank – and payments from them, whether for consumption or for investment, must be in cash.

The amount of the black incomes being so considerable, the attendant necessity for cash transactions has, in recent years, altered the currency component of the Indian monetary circulation. The amount of currency with the public has risen relatively to the amount of bank money. In 1951-52, the amount of currency with the public represented 69.5 per cent of the total monetary circulation. Since then the industrial sector of the economy, where the banking habits of the people are better developed than in the rural sector, has expanded by 92 per cent, or at an annual rate of 9.2 per cent.

The currency part of the circulation has grown to meet the pronounced increase in black market transactions. The annual accruals of illicit incomes are much more than the annual average increase (Rs 470 crore) in the Indian national income

ORDINARILY, THIS SHOULD have led to an increase in the ratio of bank money – cheque currency – to the total monetary circulation. Yet, it is the currency part of the monetary circulation that has gone up; the latter has fluctuated upward with the intensification of statist economic policies, the ratio of currency to the total money at the close of 1961-62 being 73.2 per cent. The currency part of the circulation has grown to meet the pronounced increase in black market transactions.

The annual accruals of illicit incomes are much more than the annual average increase (Rs 470 crore) in the Indian national income of the decade ending 1960-61. If such large incomes were to remain permanently illicit, their cumulative effect might soon become intolerable, through black market transactions growing in extent and volume. But 'black' incomes are being continually converted into 'white' incomes. We may briefly recall some of the devices through which this is effected.

Probably the most common device – because it is the simplest to operate – is to understate domestic expenditures. If a black marketeer's household expenditure is Rs 3,000 per month, it may be shown in the books as, say, Rs 1,000 per month. This would permit monthly overdrafts on black incomes of Rs 2,000 to meet household expenditures. Equivalent open incomes being thereby left unspent, they take the place of the black incomes utilised for household expenditure: we have here a case of the conversion of black earnings into white. But the amounts that may be transferred into white incomes in this manner are limited by the magnitude of domestic expenditure, and one would have to wait for a long time to transform large amounts of black money.

The application of this technique to marriage expenditures and to the costs of buildings and equipment might enable larger sums to be redeemed

from the black label. One is often struck by the comparatively low declared costs of impressive residential structures put up by businessmen and corrupt state officials. The explanation frequently is that a house costing, say, Rs 150,000 is accounted to have cost but Rs 60,000; the balance represents payments from black income. This is a case of Rs 90,000 of black money

The phenomenon is revolting to the national conscience. But there is no remedy to it other than to strike it at its roots – abandonment of the policies of statism

being baptised into white money, through the former now becoming an openly marketable asset – a residential building.

Considerable amounts of illicit earnings may be converted into white with the collusion of bullion dealers. An individual Bulchand with illicit earnings of

Rs 200,000 may engage in a fictitious 'sale' of 'ancestral jewelry' of this value to a bullion dealer, Chimanlal. Chimanlal will then make an entry in his books of purchase of Rs 200,000 of jewelry from Bulchand and of payment to the latter of Rs 200,000, thereby converting black funds into white. He can now deposit the amount in a bank, entering it in his books as the proceeds of the sale of inherited jewelry.

But the transaction presents a problem to Chimanlal, the bullion dealer. His accounts will show a purchase of non-existent jewelry. The security of his position from the clutches of income-tax authorities requires that the 'purchase' must be balanced by equivalent 'sales'. To make the fiction realistic, Chimanlal gets the jewelry 'melted' at a refinery or goldsmith, the costs of such melting being duly entered in the books of Chimanlal and of the refinery or goldsmith, this operation calling for collusion of the latter. Having 'melted' the jewelry into bullion, Chimanlal straightens out the position in his books by showing in it 'sales' of bullion to numerous *benami* parties (fictitious individuals). Once the purchase is cancelled by such sales, Chimanlal's position is well fortified.

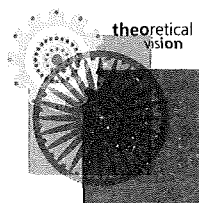
For the services thus rendered by Chimanlal to Bulchand, the former charges the latter a commission at the market rates for such services, the current rates being placed at 8 to 10 per cent of the sums involved. This covers the payments for 'melting' the jewelry paid to the refinery or the goldsmith.

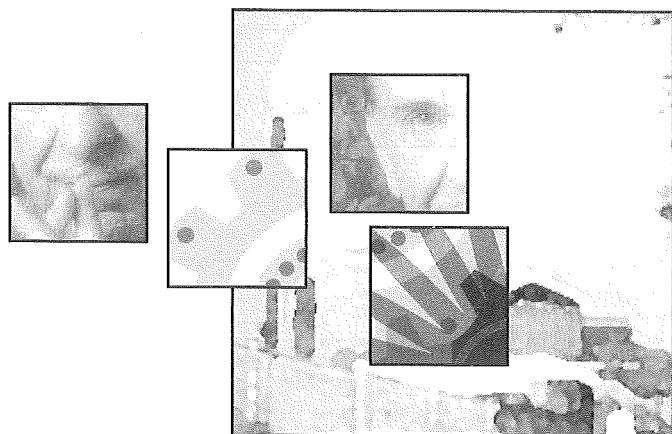
SINCE HOUSE CONSTRUCTION cannot go beyond needs and 'ancestral jewelry' may have limits, black-marketers may resort to other techniques of changing the label of their earnings. One such is to 'purchase' the business losses of individuals. This is a rather complicated operation and needs clarification. A businessman Premchand, who has suffered a business loss of Rs 200,000 may 'sell' this loss to another businessman Mansukhlal, who has black money for conversion into white. Premchand would then make after-the-event entries in his books to show that the losses suffered by him represented the balancing profits of Mansukhlal; the relative transaction being stated to have been effected with the latter. This fiction would enable

Mansukhlal to bring out his black funds into the open, as they would be now declared as business profits. Forward transactions, especially on the stock exchange, are rather easily amenable to the application of this technique. It is believed to be in vogue extensively, the transactions being put through specialist brokers and go-betweens who have come into existence to meet the large demand for such services.

Considerable demand exists, too, for the concealment of open incomes, the chief motivation behind this being tax evasion, as the tax rates on the upper income slabs are exorbitant. We have developed police-proof techniques to bring this about – these latter are generally the reverse of the techniques for converting black money into white. They include overstatement of domestic and marriage expenditure and of cost of buildings and equipment, and 'purchase' of business profits.

With two decades of experience behind us, the needs of the black market have been by now well institutionalised. As has been aptly remarked by one writer, the black market sector of the Indian economy today is well past the take-off stage of development. The phenomenon is revolting to the national conscience, and there is no remedy to it other than to strike at its roots – abandonment of the policies of statism. So long as statist policies remain, corruption too will remain.





Gold/Currency/Banking

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Essentials of a gold standard

APRIL 1937

In this article written for the *Journal of the Indian Institute of Bankers*, the writer explained why the convertibility of legal tender currency into gold must not be subjected to any restrictions

When the currency unit of a country is gold itself, circulating in the form of full-bodied coins, or representing a fixed quantity of gold, we have a gold standard. The value of the currency unit may vary with that of gold, but the standard continues to be a gold standard even when the price of gold may be subject to the control of central bank(s) with vast gold reserves. If the central banks succeed in maintaining a stable price level under a gold standard, the currency standard will not cease to be a gold standard. Only it will have the attributes of a tabular standard as well.

There are several ways in which the currency unit of a country may represent a fixed quantity of gold and therefore there are many variants of the gold standard. Under a gold standard, full-bodied gold coins remain in active circulation. They represent the final standard of value; paper money and other money media in common use are redeemable in them. The value of the monetary unit would be identical with that of the gold content of the coin. Under a gold bullion standard gold coins need not, and usually do not, form a part of the monetary circulation, but the legal tender currency is freely convertible into gold bullion at a fixed rate: the price of gold remains fixed and so also the gold value of the currency unit.

The same result is obtained under an indirect gold standard, although by a somewhat different method. Notes or silver tokens, which in many cases are the standard currency of the country following an indirect gold standard, are convertible by the currency authority at a fixed rate, into the currency of a country following a direct gold standard. The gold equivalent of the latter currency unit being fixed, the gold value of the former is fixed also. For example, the Indian rupee is linked to gold via the pound sterling, the sterling equivalent of the rupee being 6d.

To these variants of the gold standard, we must perhaps add one under which, by rigorous exchange control, the external value of a currency unit

is fixed in terms of gold exchange. Private dealings in gold and exchange are forbidden, imports or exports of gold on private account do not take place, and all receipts of foreign currencies by domestic individuals and firms are compulsorily acquired by the exchange controlling authority. These are then rationed out to importers at a rate consistent with a certain gold parity of the currency unit, i.e. a rate falling within the 'gold points' corresponding to that parity. A competitive exchange rate which would register the correct economic value of the currency unit in terms of foreign exchange is not practicable, since exchange dealings are monopolised and a private market in foreign exchange dealings is absent.

SUCH A SITUATION MUST BE distinguished from exchange 'pegging', under which a free foreign exchange market exists, and private dealings are not subject to any restrictions whatever. The currency authority intervenes only to prevent currency from falling below or rising above a certain level.

Under an ideal gold standard, the currency unit must represent, or its value must be identical with, that of a fixed quantity of gold. In other words, an ideal gold standard requires that the price of gold remains fixed. If the price of gold were subject to fluctuations, however slightly, the gold equivalent of the currency unit would also fluctuate by a corresponding margin. It would not then represent a fixed quantity of gold but a varying quantity of gold, subject to upper and lower limits.

For instance, the pound sterling represented 113.001597 grains of fine gold, and under an ideal gold standard the price of gold in Great Britain must not differ from £3 17s 10¹/₂d per standard ounce. Actually it varied between £3 17s 10¹/₂d and £3 17s 9d per standard ounce. The pound sterling, therefore, represented, not a fixed quantity of gold, but between 113.001597 grains and 113.1833 grains of fine gold, according to gold price.

Under a gold currency standard, in order that the price of gold remain absolutely fixed, the following conditions may be fulfilled:

- (1) The mint must be free and open to the public. No seigniorage or brassage must be levied. The minting authority must be above suspicion and gold coins must contain exactly the number of grains of fine gold fixed statutorily
- (2) There must be full freedom to melt coins for sale as bullion
- (3) If the monetary system comprised legal tender tokens of paper or metal, these must be freely convertible into gold coins in unlimited quantity and gold coins similarly convertible into them on demand at the currency authority
- (4) There must be no restrictions whatever – legal, administrative or moral – and no tariff duties or quota restrictions on the import or export of gold from the country.

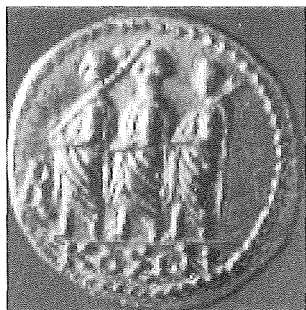
Conditions (1), (2) and (3) above would ensure that the value of the currency unit is identical with that of the gold content of the coin. If seigniorage is charged, the coin would be worth more as money than as bullion and therefore would not be melted.

There is also a danger of overissue of the coins under stimulus of the profits of coinage. This would depress the gold value of the currency until it corresponded to the actual gold content of the coin, namely, the statutory equivalent minus the seigniorage charge. If the gold content of the coin is left untouched and the mint levied a brassage, gold would not be taken to the mint until the price fell by a margin corresponding to the brassage, i.e., until the coins were at a premium (in terms of bullion gold) by the amount of the brassage.

The levy of a brassage or a seigniorage would thus cause the monetary standard to deviate from the ideal gold standard. In France and Germany, for instance, the mint levied a brassage of $\frac{1}{4}$ per cent. In Holland, since the brassage charged was higher, the coin could be worth more as coin than as bullion by as much as 1 per cent. In India and Mexico, the mint charges were even higher. They were $2\frac{1}{10}$ per cent and $4\frac{3}{4}$ per cent respectively.

AS SOME TIME must elapse before gold can be converted into coins at the mint, no interest is earned on the capital amount represented by the gold for this duration. In Great Britain, under the Bank Charter Act of 1844, all persons 'are entitled to demand from the Issue Department of the Bank of England, notes in exchange for gold bullion at the rate of £3 17s 9d per ounce of standard gold,' subject to the metal being melted and assayed by persons approved by the bank at the expense of the owner. If the gold were taken to the mint, it would yield $1\frac{1}{2}$ d more per ounce, but the owner has to take his turn and wait the time taken for minting. The difference of $1\frac{1}{2}$ d per ounce is about equal to 20 days' interest at 3 per cent per annum. This difference was responsible for fluctuation in the price of gold by the same amount.

If an ideal gold standard is not to be compromised, it becomes necessary to provide gold coins for gold bullion immediately, which involves an unremunerative locking up of capital to keep in stock an adequate supply of coins. But the same result can be obtained if the central bank bought gold at the mint price without making any deduction. Just as the cost of minting must be borne by the state, the loss of interest during the time taken for minting must be similarly borne.



Freedom to melt coins for use as bullion is an effective remedy to the possible overissue of coins, bringing about a fall in their value below that of their bullion content, just as a free and open mint would prevent a rise. The two-sided convertibility without limit, as between legal tender notes and coins, similarly ensures that the two monetary units would be identical in value. It would prevent inflationary issue of paper notes and a premium appearing on coins and bullion in terms of paper notes.

Condition (4) ensures that the internal gold value of the currency conforms to its external value. Freedom to export gold prevents exchanges from falling below the gold export point corresponding to the statutory price of gold, and freedom to import it prevents the external value of the currency from rising above the gold import point. When the gold standard is an international standard, free import and export become indispensable.

IN THE ABSENCE OF THE free movement of gold in and out of the country, free internal convertibility cannot prevent the external value of the currency from falling below its internal value. If the difference between the two values persists and is appreciable, gold will be smuggled out; maintenance of free internal convertibility will cause difficulties and sooner or later, convertibility must be restricted or abandoned. When this happens, a premium on gold will appear internally also. In South Africa, for instance, as a military measure in November 1914, an embargo was imposed on export of gold to all foreign ports. Internal convertibility of notes into sovereigns, however, was not suspended and gold coins were smuggled out.

When sterling was unpegged in mid-1919, the premium on gold in terms of sterling went up to 50 per cent in February 1920. The banks found themselves in the unenviable position of having to import sovereigns from Great Britain, bought at a premium, to pass at par to smugglers at home, who sent them back again abroad. There was a clamor by the banks to proclaim their notes inconvertible. As a consequence, a Select Committee of the House of Assembly investigated the effectiveness of the embargo. The result was the Currency & Banking Act of 1920, declaring notes inconvertible.

Under a gold bullion standard, condition (4) must be coupled with the mutual convertibility of notes and gold at the same rate. There must be no difference whatever in the buying and the selling price of gold at the currency authority. If different, it is a deviation from an ideal gold standard.

Under a gold bullion standard, condition (4) must be coupled with the two-sided convertibility of notes and gold at one and the same rate. There must be no difference whatever in the buying and selling price for gold at the currency authority. Such a difference is not warranted by the technique of the gold standard. On the contrary, its presence, as pointed out earlier, causes a deviation from an ideal gold standard. While it is possible to make out a case in justification of the difference, in that it represents the loss of interest during the time taken for minting; no such justifications can exist under a gold bullion standard. It cannot be explained away as 'handling charges' for gold, as these must fall equally on buyers and sellers.

In a vast country like India or the US, it may be necessary to provide for the convertibility of notes into gold in more than one centre, to prevent a premium appearing on gold in parts of the country removed from the seat of convertibility, which may rise up to the cost of transporting gold between the two centres. The same result can be obtained by providing for the free transfer of gold from the seat of the currency authority to any part of the country.

In China, notes of the commercial banks were convertible only at the branch of issue, the name of which was stamped across their faces. Although largely attributable to over-issue, this restriction of convertibility could have led to the discount at which these notes circulated in the remoter parts. In Canada, owing to the discount at which commercial bank notes circulated in the interior, the 1891 Revision of the Bank Charter Act of 1871 laid down that the banks should make arrangements to redeem their notes at par by establishing branches or agencies around the country.

As an analogy to the above, under an ideal exchange standard, the buying and the selling rates for exchange at the currency authority must be identical. The value of the currency unit would then remain fixed in terms of the objective standard, namely, the foreign gold standard currency concerned, just as under a direct gold standard, the value of the currency remains fixed in terms of gold. In practice, however, under an exchange standard, the buying rates and the selling rates of exchange differ. These rates correspond to the gold import point and the gold export point, if the currency were on a direct gold standard. The Reserve Bank of India, for instance, is required to buy sterling at 18³/₁₆d a rupee and sell it at 17⁴⁹/₆₄d a

These factors have imparted to the liquid funds deposited in these centres a high degree of mobility. The funds are sensitive to changes in money rates between the centres, making the money centres vulnerable

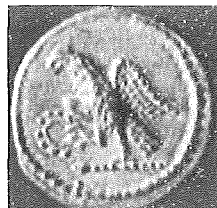
rupee. Just as the technique of a gold standard does not warrant a difference between the buying and selling rates of gold, similarly, is not necessary that there should exist a difference between the buying and selling exchange rates. The rupee can be effectively linked to the sterling, as it is today, without any difference in the two rates. Indeed the

presence of a difference implies fluctuation in the sterling equivalent of the rupee, which is a deviation from an ideal exchange standard.

Keynes' proposed reform

In actual practice, an ideal gold standard does not exist. Even in countries on a direct gold standard, the price of gold fluctuates, although within narrow limits. Nor are theoretical economists or practical financiers and bankers in favor of eliminating this fluctuation. On the contrary, a case has been made out to widen the difference between the buying and the selling prices for gold. The object of this reform is to acquire a higher degree of autonomy with respect to the domestic credit policy than has been possible under an international gold standard. Since the proposed reform affects the character of the currency standard, it must be given some attention here.

There exist today three rival world money centres of major importance – London, New York and Paris – against only one before the war. There has been a vast increase in the international short-run funds and each centre today is as much a debtor as a creditor vis-a-vis the rest of the world. Also, the development in air transport, falls in the rates of interest, insurance and freight charges have diminished the distance between the gold points.



These factors have imparted to the liquid funds deposited in these centres a high degree of mobility. The funds are sensitive to changes in money rates between the centres, making them vulnerable. A *laissez-faire* policy towards foreign lending, under the circumstances, might compel a sacrifice of the stability of domestic industry and trade. "Occasions often arise", observed Keynes, referring to this situation, "when the short-term rates of interest appropriate to the domestic position have become inappropriate to the foreign position, placing the Central Bank in a dilemma as to what its bank rate policy ought to be."

TO SOLVE THE DILEMMA, he suggested a device to segregate the international deposit business of the centre, and the means of controlling it, from the domestic business arising out of internal trade and industry. To quote: *...the difference between a Central Bank's obligatory buying and selling prices of gold should be made somewhat greater than hitherto, say 2 per cent, so that there may be at least this difference between the gold points irrespective of the actual cost of transporting gold (double the amount of which would have to be added on to the 2 per cent to give difference between the gold points). But a Central Bank would be free at any time if it wished to encourage the movement of gold inwards or outwards, to quote closer prices within the legal limit.*

Temporary movements of funds from one centre to another to earn a higher rate of interest have to take account of the possible cost of that transaction. The net gain would be the interest rate differential minus the cost of bringing the funds back, or plus the gain in exchange account. This gain or loss is limited by the distance between gold points. For instance, if the distance is $\frac{1}{2}$ per cent, it also measures the possible loss of exchange in converting one currency into another. In the case of a long-term loan, say 10 years, this factor can possibly reduce the interest income by $\frac{1}{20}$ per cent per annum. But in the case of a short period loan, say for three months, the cost of exchange would reduce the interest income by 2 per cent per annum.

Thus if there is a fair distance between the gold points, a greater difference can exist between the short money rates in two centres without gold flowing out of the one to the other. Within the limits set by this difference, therefore, the bank rate can be varied to suit the requirements of domestic industry, unmindful of credit conditions elsewhere. Hence Keynes' suggestions for widening the difference between buying and selling rates.

Arguments against the proposed reform

The reform can be effective only in short-term disturbances abroad. A long-term higher rate of interest in the foreign centre, for instance, would cause outward movement of funds, depress domestic exchanges to the gold export point corresponding to the legal maximum selling price for gold, and gold would flow out of the country. A 2 per cent rise in the selling price for gold would be no deterrent to the flight of capital from the country's

currency, in case there is any doubt regarding the willingness or the ability of the country adopting this device to remain on the gold standard at the existing parity. Besides, the interest rate differential in favor of the foreign centre must not exceed the worst loss on exchange involved in the transfer of funds to the foreign centre and back.

EVEN AS A REMEDY FOR short-term fluctuations, the effectiveness of the measure is limited, particularly if disturbances in foreign centres are due to speculative anticipation. If, for instance, a future rise in the New York bank rate above the London bank rate is foreseen by the market, there will occur an anticipatory movement of funds from London to New York before the Bank of England can raise the selling price of gold. The anticipated future events (a rise in the selling price of gold caused by a rise in the New York bank rate) will be rejected in the forward exchange market, forward sterling will be at a discount on spot sterling against dollars, and it will be profitable to purchase dollars spot and sell them forward. In such cases, widening the gold points would cause a movement of funds in advance of the anticipated rise in bank rate in the foreign centre, instead of at the time of the rise.

It would be no remedy to raise the selling price of gold today. For if this were done, the selling price would be at or near the legal maximum when the anticipated rise in the New York rate actually materialises. There would be little or no margin left for a further rise in the selling price and the central bank would be compelled to raise the bank rate to protect its reserves, thus sacrificing the requirements of domestic industry, to control the volume of short-term foreign lending. The net result would, therefore, be no better than under the present system, in some respects worse.

Secondly, adoption of the reform by a centre which aspires to be an important depository of international short loan funds would prove injurious to its interests. Such funds would fight shy of a centre which has powers to penalise them when they want to take refuge elsewhere or temporarily shift to another centre to earn a higher rate of interest. Also, a currency whose exchange value is subject to fluctuation over a range of nearly 3 per cent (in place of a range of less than one per cent under the present system in the sterling-dollar and the sterling-franc rates) would lose favor as a medium for the finance of international trade. If the centre allows acceptance credit to foreigners, there will be an increasing tendency on their part to discount the bills drawn on the centre and remove the proceeds elsewhere when exchanges become favorable. For instance, if Great Britain adopts the reform, international finance may fly to New York and Paris.

Keynes admits this argument as partly valid, but maintains that it can be 'entirely overcome by an agreement for uniform action by all the leading countries' to supplant the existing 'haphazard and fluctuating gold points, different between every pair of countries and open to all kinds of minor uncertainties with a fixed and uniform system between every pair of countries.' However, an agreement by all the leading countries would be difficult to realise. A country with vast resources and reserves, willing to suffer

wide fluctuations (e.g. USA) may not find the same compelling urge to join the agreement as others. In fact, by opting out, it may be rewarded with an increasing share, if not a monopoly, of the international banking business.

Even if we ignore or overcome this difficulty and a uniform 2 per cent maximum margin between the buying and the selling rates of gold is agreed upon by all countries, it is important that the freedom to move the rates over this range is exercised by all of them with the same frequency. Otherwise, international short loan funds will show an increasing preference to remain in a country which uses the device rarely, if ever. Policy combined with financial strength will decide which centre is the favored one. The agreement would succeed in conferring upon others the distinction of being a domestic economy, not by segregating the international deposit business from the domestic business of internal trade and industry, but by all of them losing the international deposit business to a particular centre.

Third, a widening of the distance between the gold points, would add to the risk cost of international remittance of funds. This would be borne by the country's industry. It would increase speculative activity in foreign exchanges and bullion, since fluctuation in the price of both would permit of a wider range of speculative profits. Also, the central bank would be favoring the import or the export industries and correspondingly injuring the other (by a levy or a bounty subject to a maximum of nearly 3 per cent) when it lowers the buying price of gold to the legal minimum, or raises the selling price to the legal maximum. Thus, if the reform has in it the promise of bank-rate policy to suit the requirements of domestic equilibrium, the promise is tempered by a penalty which falls on one section of industry or the other.

A country with vast resources and reserves, willing to suffer wide fluctuations (e.g. USA) may not find the same compelling urge to join the agreement as certain others

Fourth, the freedom to alter the price of gold, supplemented by the bank rate policy, could turn out to be a weapon in the hands of a central bank. Not only would it make its own gold reserves less readily accessible for the rest of the world, but it might also draw out gold from the world's monetary reserves, which some countries might ill afford. There is a danger of each country raising the selling price of gold to the legal maximum, to protect its own reserves, thus contributing to and hastening the breakdown of the standard in the country or countries in the grip of difficulties.

The practical utility of Keynes' scheme, in realising the objectives of national autonomy in respect of short-term credit policy, is thus doubtful. It unnecessarily reverses the movement towards a narrowing of the distance between the gold points, which must be interpreted as an evolutionary attempt to reach a more perfect gold standard. The difficulties faced by Great Britain during the post-stabilisation period must be attributed in large part to deeper causes than a narrowing of the gold points or to any deficiencies in the technique or mechanism of the gold standard.

The difficulties fall equally on all the rival centres, and if one country

The difficulties faced by Great Britain during the post-stabilisation period may include the overvaluation of the pound-sterling in 1925, coupled with a fall from a position of unchallenged leadership

feels the pressure more than the rest, the reasons must be sought elsewhere: in the overvaluation of the pound-sterling in 1925, coupled with the under-valuation of the franc and certain other currencies shortly afterwards; fall from a position of unchallenged leadership in

economic and financial affairs coupled with the rise of the US with its vast resources as a leading creditor nation of the world; and the general economic advancement of the backward countries, which diminished Great Britain's relative supremacy.

The practical limitations of Keynes' scheme only illustrate the futility of attempts to dodge the logic of economic facts. Financial leadership of the world and the business of international banking must necessarily pass on to the greatest creditor nation of the world with vast and increasing liquid funds. Others must play a secondary role and confine themselves to their limited resources. If Amsterdam continued to behave as if London and New York did not exist or that it still enjoyed the privileged position it did during the war, it must find itself at the mercy of its short-term creditors, whose deposits may have been invested in international banking. It is little use for Amsterdam, under the circumstances, to blame the gold points for its difficulties or attempt to erect artificial 'windscreens' in self-defense.

Keynes' scheme can at best only postpone or retard the changeover of leadership to the financially most powerful country. Before the war, moral pressure against convertibility in parts of the Continent and remnants of bimetallism in France caused a widening of the gold points, but none of these could be regarded as depositories of the global short-loan fund.

Price levels, central bank, and other considerations

When the gold standard is an international standard', its working must conform to certain principles, which the Macmillan Committee on Finance and Industry, in its 1931 report, defined as 'rules of the game'. Later, the Monetary and Financial Commission of the World Economic Conference formulated an ambitious definition of these rules. It is largely a matter of opinion, however, as to what exactly constitute the rules of the game.

All that can be said with certainty is that the essentials of the standard outlined in this article must be adhered to: it must be a free gold standard, the convertibility of legal tender currency into gold (or its equivalent under an exchange standard) or the export of gold must be subject to no restrictions. Exchange stability would then be guaranteed, and the price levels in all countries would move together. To these must be added the desirability for mutual understanding and cooperation among the central banks.

But any attempt to say more, is to tread on uncertain ground or to enter into the region of monetary theory. The suggestion to maintain stable price levels as a part of the gold standard belongs to the latter class. The desirability of maintaining a stable price level is a controversial issue of mone-

tary theory, and may involve, in addition, questions pertaining to limitations of the gold standard and an ideal monetary standard. The practicability of a stable price level takes us into the field of central banking policy and its limitations. Strictly speaking, these are not problems of the gold standard. They are problems of what constitutes an ideal monetary standard, and whether the gold standard can rise up to that ideal. With these we are not immediately concerned – a free gold standard can function irrespective of the desirability or practicability of a stable price level.

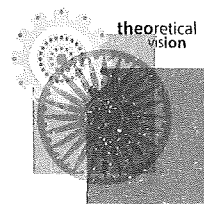
It has also been suggested that high tariff walls and trade restrictions militate against the rules of the game, since they can put a strain on the working of the gold standard. But the gold standard is not an end in itself for which all other economic activities must adjust themselves or make sacrifices: it must be regarded as an instrument for facilitating exchange and for providing for a smooth functioning of the body economic. Each country is free to formulate its own wider economic policy. The task of the gold standard is to subserve the policy, not to control or dominate.

IT IS MORE GENERALLY accepted that the central bank must not allow gold to accumulate in its reserves beyond a certain level. To allow it would be to invite the charge of 'gold sterilisation'. It is open to question, however, how far this accumulation is a deliberate act ruthlessly pursued with the purpose of adding to the difficulties of the gold standard mechanism in other countries and how far the central banks play a passive role. It can be argued, for instance, that the gold stocks in the vaults of the Central Bank in countries with vast accumulations of credit balance are analogous to the liquid funds lying idle in the banking systems of all countries, idle because of the limited scope for their employment in a period of depression.

If so, can the banking system be accused of 'sterilising' liquid funds and causing or contributing to the deflationary movement of prices? Perhaps the explanation advanced by the banking system is that they would be only too eager to earn some return on their moneys and be saved the trouble of having to use their reserves to prevent a big drop in their dividends; but that they cannot find creditworthy borrowers.

Likewise, the accumulation of gold stocks in one or two countries could be explained by low volume of foreign lending due to politico-economic reasons and by the tendency for liquid funds to remain in one or two centres. A solution to the problem is an increase in the volume of investments in the world at large and a revival of foreign lending with confidence.

The central bank may support inflationary finance to diffuse the accumulated gold around the world via a rising domestic price level. But the power of a central bank to do this by stimulating private investment is limited. Its powers to break a boom or to cause a falling price level are more dependable than its devices of generating a boom. For, it can more easily withhold credit than induce unwilling entrepreneurs to embark on fresh investments.



Evolution of currency in India and Ceylon

1941

From the book *Ceylon Currency and Banking*, this chapter is of more than academic interest as moves get underway for a common currency for the Indian sub-continent

Concrete information on which to base a consistent and connected narrative of the monetary system of the early times is not only sparse but also, generally, difficult of interpretation. Such information as I have been able to gather from numismatic and historical works is presented in this chapter. Some of the monetary denominations, especially the *pagoda* and the *fanam*, which were in common use until sometime after the beginning of the British rule, have their roots in this early period. The term *fanam* is used today to signify six cents.

Ceylon was subjected to the cultural and the economic influence of mainland India from very early times. *Kahapanas* or *puranas*, the early coins of the island, were of Indian origin. The date of their issue on the mainland is obscure. Sir Alexander Cunningham thought that the earliest specimens could be traced as far back as 1000 B C. Vincent Smith was inclined to assign them to 300 BC. on the evidence then available. Recently Babu Durga Prasad has found reason for believing that the first estimate was, probably, not far off the mark. He would place the early issues about the 8th century BC.

It is certain, however, that *puranas* were anterior to the time of Gautam Buddha and were well established in India in the fourth and third centuries BC, when the great Maurya empire was supreme. They became the established currency of the whole of India, at some period, during the campaigns of Chandragupta, and the settlement of the empire under Asoka, his grandson. The *Arthashastra* mentions their having been minted (in addition to other coins) in Magadha, modern Bihar, in the time of Chandragupta. It is not known how long after their issue in India *puranas* found their way into Ceylon. But it is conjectured that they were in the island in the second half of the third century BC.

Puranas were pieces of much alloyed thin silver (or more rarely copper) cut from a hammered sheet of metal and clipped to the proper weight. They were either rectangular or circular, the former shape being, probably, the more ancient. Their original standard of weight is supposed to have been the weight of a silver *dharana* (about 57.6 grains) or 32 *unjas* or *ratis* (or *raktikas* weighing about 1.8 grains each) as laid down in the works of Manu and the older law books.

Their obverse is covered with punch marks, which are often overlapping and were, clearly, impressed at different times. The marks on the reverse are fewer in number; in the majority of cases there is only one: these are less distinct, and smaller in size. The symbols impressed are of wonderful variety, some 564 having been enumerated.

As to explaining the punch marks on the obverse, there is no general agreement. Babu Durga Prasad has recently advanced the theory that they represent the 'test marks' of the *Rupadarshaka*, a currency officer of the king

IT IS NOT clear who struck and issued the early coins. But it seems probable that, as in Lydia, this was done first by the goldsmiths or silversmiths, private merchants or guilds (*seni*), later submitted by them for the approval of the local king or governor, whose stamp was put on the reverse, and that subsequently the privilege of issue passed under royal control. As to explaining the punch marks on the obverse there is no general agreement. Babu Durga Prasad has recently advanced the theory that they represent the 'test marks' of the *Rupadarshaka*, a currency officer of the king, who was entrusted with the responsibility of certifying the genuineness of coins. Others are of the view that they are the marks of the original issuing authority or represent endorsements by bankers and guilds through whose hands they passed.

Puranas found in Ceylon, like those found in India, vary greatly in weight. The Ceylon specimens range between 28 and 39 grains. Original shortweight, varying degrees of wear and erosion, and probably also clipping are possible explanations. If the original weight of the coins was irregular and all of them had the same value as media of exchange, as may be inferred from references to money in contemporary Buddhist literature, *puranas* were only tokens, that is, they did not circulate in Ceylon at their intrinsic value. As imports were the only source of supply, they may have had scarcity value.

Puranas formed the bulk of the coinage in Ceylon for many centuries. In northern India they did not remain current much after the beginning of the Christian era, while in the south they continued in use for a couple of centuries or so later. Since the currency of this island was closely connected with that of south India, in all probability, the employment of *puranas* ceased in the south and in Ceylon about the same time.

They are proof of the early trade of the country with India, of which there is ample evidence in the annals of both countries. Traders from

Magadha are known to have made regular voyages to Burma and Ceylon across the Bay of Bengal. But the exact nature of the merchandise traded is largely based on conjecture. One of these conjectures is that the Magadh traders brought with them cotton materials, beads and other ornaments,

Imported money was supplemented, for small change, probably, by tamarind seed. Ceylon documents are silent as to the existence of a *cowry* currency, which was in use in India

axes and arrowheads of steel, and cooking and other vessels of earthenware, copper, or brass. They took back with them Ceylonese produce which included ivory, wax, incense, and also pearls and gems for which Ceylon was famous.

Trade between the two countries increased with the coming of Mahendra, the prince monk, about the middle of

the third century B.C. This must have followed the growth of Buddhism in the island. It seems significant, therefore, that the earliest specimens of *puranas*, found in Ceylon, have been assigned to this period.

The use of money was first more common in the trading centres on the coast, where the merchants from Magadha called, and the seat of kings in the interior. It then spread elsewhere as internal trade developed. Imported money was supplemented, for small change, probably, by tamarind seed. Ceylon documents are silent as to the existence of a *cowry* currency, which was in use in India. The economy, however, was never wholly, nor even mainly, a money economy. As a rule, the villages were practically self-supporting, they continued to be so almost until modern times, and had little use for money. Exchange of the village produce as well as of such of the imported wares as reached the villages was done through barter.

From the close of the regime of the *puranas* down to the 14th century, the currency history of India permits of division into two parts, northern and southern. This was because northern India had been subjected to a series of foreign invasions. Its currency was continually modified by foreign influences whereas, with a few exceptions, the currency of the south was left untouched, to develop on purely Indian lines. The currency history of Ceylon was linked with the latter.

BUT THERE EXIST few signposts to enable a satisfactory narrative of peninsular monetary history to be written. Although modern research has had much success in piecing together the skeleton of its political history, sufficient information on essentials, for our purposes, is lacking. Numismatists have not bestowed the same attention upon the currency of the south as they have done upon the more attractive currency of the north.

During the first two centuries of the Christian era, or probably longer, the currency of southern India consisted chiefly of imported Roman gold, and partly of *puranas* and spherules of plain gold, which last were the earliest specimens of purely southern money. With the cessation of *puranas* as money in the north, the source of their supply was cut off and consequently their proportion in the local circulation diminished. Their place was

taken by Roman gold coins, which circulated in southern India as freely as did the English sovereign on the continent of Europe before the Great War, but in much larger numbers. These, along with the Roman bronze small change, partly imported and partly minted at Madura, were commonly used in the bazaars.

The Tamil states were visited freely by ships from both East and West. Pepper, pearls, and beryles were precious commodities not procurable elsewhere, and pepper in particular fetched an enormous price in the markets of Europe. While Europe was eager to buy these commodities, there was no attractive merchandise which southern India could buy with as great eagerness. There was some demand for European wines, vases, and lamps, but payment for Indian exports had to be made mainly in gold for which the India appetite had always been strong. This largely sufficed to meet the demands of domestic circulation, and it was not necessary to do much minting locally.

The flow of Roman coins into southern India probably began with the opening of direct Rome-India trade relations, after the annexation of Egypt by Rome in the early half of the first century B C. Early in the Christian era, Roman ships from the Egyptian province of the Empire began visiting the Malabar coast in large fleets. They brought the *aurei* to Tamilakam just in time to take the place of the receding numbers of the *puranas*. The *aurei* comprised the main currency of the peninsula for a couple of centuries or more. The decline in their circulation synchronised with the decline of Rome and the rise of the Persians as a maritime people, who first rivaled and then eclipsed the trade of the Rome-Egyptian merchant fleets with India.

From AD 364, the date of the final division of the Empire, a slight revival of trade set in, but with the fall of Alexandria, in AD 638, all direct Roman trade with the East ceased. Roman gold could not have remained in circulation long thereafter.

The currency history of Ceylon followed more or less the same lines. During the first two centuries of the Christian era the circulation consisted of *puranas* and Roman coins which latter, as in India, were not in exchange for pearls and gems. Hoards of gold and silver coins of the period between Augustus and Nero (who died in AD 68), many of which have been discovered in India, however, find no counterpart in Ceylon. It is possible, therefore, that the Roman traders arrived in the Island after they became familiar with the Indian coast. The decline of *puranas* in the circulation was coeval with the ascendancy of the *solidus* which remained the main currency of the Island for the first two centuries of the Christian era. It is not clear if they continued as such for a much longer period or whether some other currency replaced them. Sufficient evidence on the subject is not forthcoming.

While Europe was eager to buy these commodities, there was no attractive merchandise which southern India could buy with as great eagerness. Payment for Indian exports had to be made mainly in gold, for which the India appetite has always been strong

The disturbed political situation may have prevented a speedy revival of minting which by now had probably become a forgotten art, as Roman coinage had rendered unnecessary a minting establishment in the country

ing. But there are references to Roman coins as late as the beginning of the 6th century AD.

The earliest among the extant specimens of locally minted Ceylon coins, which were chiefly of copper, have been assigned to the first half of the 2nd century BC. Most of them, however, belong to the Christian era and the last of the group were the 'maneless lion' type

which were in use in the reign of Mahasen (AD 277-304). Their mode of manufacture was crude. It is possible that, like the later Dutch issues, or the mediaeval English coinage, they were struck as so many to a unit weight of metal, the *tola*, and that little attention was paid to the exact weight of individual coins – this may explain extreme variations of weight. They all, however, had the same face value, and probably served as subsidiary money.

Later, from about the last half of the 4th century AD, their place was taken by Roman bronze coins or 'third brass', which were dumped into India and Ceylon by the western merchants. Large numbers of them have been discovered, at almost every petty port, with the noticeable exception of Trincomalee, which the Roman ships could not have frequented, as well as at various places in the interior. Their supply was cut short when direct trade with Rome came to an end, but they remained in circulation until the middle of the 7th century AD. That they were in long use is seen from their worn condition, the legends on the majority of them being quite illegible.

Mixed with the Roman coins have been occasionally found specimens of the Andhra, the Parthian, the Indo Parthian, the Kushan, the Gupta, and the Sassanian coins. They reached the island through trade, and were valued for currency purposes in terms of more familiar media of circulation.

The 6th and 7th centuries are the 'dark ages' of Ceylon. Internal strife, which prevailed, has left few contemporary records of the period. Such meagre evidence as is available has led to the conjecture that payments in bullion, by weight, obtained as in contemporary south India, where, *rane engili* or 'olden fingers' were the most common currency. Uncoined gold may have been current in the island as dust, in small ingots, or as *rane engili*. The unit of weight used was the *kalanda* (68-70 grains) while in India it was the *kalanju* (45-54 grains).

The practice may have originated with the cessation of the inflow of Roman coins. The disturbed political situation may have prevented a speedy revival of minting, which by now had probably become a forgotten art, as Roman coinage had for long rendered unnecessary the maintenance of a minting establishment in the country. The earliest mention of coins by name occurs in the latter half of the attempts at local coinage which subsequently developed into the 'Lankeswera' coins or *kahapanas* of gold.

They may have been struck first as a deliberate revival of the *kahapana* of the Buddhist scriptures, supposed at the time to have been a gold coin.

The weight of the coin, which had a fair admixture of alloy, was a *kalanda*, which was practically identical with the later Roman *solidus*. When the *solidus* became scarce, a *solidus*-weight of bullion was, probably, accepted in its stead, which subsequently became the standard for the new coinage. Other gold coins of the period were *ada* (or half) *kahavanua* (about 34-35 grains), *pala* or *deka* (about 17-17.5 grains), *aka* (about 8.5-8.75 grains), and *massa* (about 3.4-3.5 grains). Rhys Davids assigned their issue to Parakrama Bahu I (1153-1186) who, it was argued, introduced into Ceylon the art of minting on his return from the Indian expedition in the 12th year of his reign. H W Codrington, however, has adduced valid reasons for thinking that they were issued, some about AD 900 and the rest during the 10th century.

THE KAHAVANUA COULD not have brought about a speedy return of the lost habit of accepting money by tale, in a country where habits die hard. Rather, as happened in modern China, where every new dollar meant to replace the ingots of 'sycee' silver was accepted by the community not by tale but by weight, the new coins in Ceylon may have been subjected to like treatment. Not being pure gold, they may not have received much popular favor and in all probability coin and bullion remained current together for a considerable time. In the kingdom of Kotte taxes due from goldsmiths, carpenters and blacksmiths were so paid as late as 1614.

The coinage up to the end of the 10th century was of alloyed gold, perhaps eked out with a few silver pieces. During the Tamil occupation of the capital (Polonnarua) and of the northern provinces of the island (AD 1001-1073) when anarchy prevailed among the Sinhalese princes, it is not likely that any coins were struck by the latter. But when Vijaya Bahu I (AD 1055-1111) expelled the Tamils and reoccupied Polonnarua (1073), minting was begun once more.

The coins issued, however, were much debased. They became worse in the 12th and 13th centuries. At first they were of very poor gold, and then of silver washed with gold. Both were officially passed as gold, but could not have been accepted by the merchants and bankers for anything but their intrinsic value. Small change was of copper. Later, from the time of Parakrama Bahu I, the coinage of precious metals wholly ceased and there arose a new fraud of washing base metal with silver. The state of Ceylon currency, during the period, is reminiscent of that of the decadent and bankrupt Roman Empire in the third century.

The debasement of the coinage was closely connected with the financial position of the exchequer. Civil war, which prevailed almost continuously until the strong hand of Parakrama Bahu I established internal peace, by the destruction it caused affected adversely revenue receipts, while repeated wars with the Tamil invaders drained state resources.

Though Parakrama Bahu I enjoyed the rare privilege of undisputed power, and the country had a long spell of peace under his rule, the financial position did not improve. Probably, it became worse. His daring expe-

ditions of conquest into Kakadwipa and Ramayana, which meant the sending of a fleet of transports 1,500 miles from home to the further side of the Bay of Bengal, and the incursions into southern India in aid of the Pandyan king and later against the Cholas, could not have been striking financial successes, although undoubtedly they threw additional lustre on the royal name and may have brought some booty and tribute. Vast sums were spent on religious and royal buildings and in making Palastipura, the seat of the king, 'one of the strongest and most beautiful cities in India'.

The construction of inland lakes 10, 20, even 40 miles in circumference – one of them being the famous Sea of Parakrama – which were among the most remarkable engineering feats of the period involved enormous initial outlay though, after a period, they were productive of good results. These schemes exhausted and impoverished the country financially. Unable to balance the budget by taxation, the Sinhalese kings debased their coinage. Debasement increased with financial difficulties until at the time of Parakrama Bahu I the country had, perhaps, the worst coinage of the period.

In the middle of the 14th century, before the Portuguese arrived, the debased coinage of Ceylon was superseded by the *pagoda* and *fanam* currency which was supreme in south India at the time. Its circulation was continuous in the Island until the early part of the British rule. The earliest specimens of the coins in India have been attributed to the early Chalukyas (AD 550-753), from the appearance on them of the boar, the cognisance of this dynasty. This coin-type was issued by several dynasties and clans, which, probably, explains the dissimilarity of their weights (50-60 grains). But their standard is supposed to have been one *kalanju*. Those issued by the Vijayanagar kings (1336-1565) are regarded as representative of the type. They were also coined in halves under various names, such as *pratap* and *mada*. Subsidiary to the *pagoda* and its half was the gold *fanam*, which was one-tenth of a *pagoda* and weighed about 5-6 grains. Small change was of copper and was called *cashu* of which the English corruption is 'cash'.

THE ORIGIN OF the word *pagoda* is obscure. Its Indian name was *varaha* (Tamil: *varagan*). Codrington has advanced the plausible theory that, from the various issues of the half *pagoda* being known by the name of the kin who struck them and the legends on them reading 'Sri Pratapa Krishna Raya, Sri Pratapachyutha Raya' and the like, it usurped the name properly belonging to its half. And to the Portuguese it was universally known as *paradao de ouro*, from which was derived *pagoda*. This name has superseded all other designations in English.

The *pagoda* being too large a value for the day-to-day transactions of the vast majority, the most common unit of circulation was the *fanam* and its subsidiary coins. The *fanam* is first mentioned in 1344 by Ibn Batuta. In his day it weighed about 5.8 grains, but does not seem to have had a fine gold content of more than about 4.2 grains. Sometime between 1454 and 1505 there was struck the *fanam* in imitation of the silver *fanam* of the mainland.

The foregoing review indicates that, during the early times, the curren-

cy system of Ceylon largely conformed to that of southern India, except, probably, between the 10th and 14th centuries, when, it seems probable, the Sinhalese kings issued a separate coinage. But if, during this period, bullion, in the form of *rane engili*, passed current in the island, as seems likely, the closeness between the two systems was practically continuous.

If we are to see the currency history of Ceylon, during the period in its proper perspective, it is necessary, to have an idea of Indo-Portuguese currency developments

The Portuguese Period

The currency history of the island under the Portuguese is no less obscure than the early period. The headquarters of the Portuguese possessions in the East was Goa. The chief mint of the Empire was in Goa and the minting of coins in other possessions was discouraged. The Portuguese currency policy, as a result, was greatly influenced by the currency needs of Goa. The requirements of other possessions did not play more than a secondary part. If we are to see the currency history of Ceylon, during the period, in its proper perspective, it is necessary, therefore, to have an idea of the Indo-Portuguese currency developments.

When Vasco da Gama arrived on the Malabar coast in May 1498 the principal coin in circulation in southern India was the *fanao* or *fanam* of more or less base gold. Throughout the Vijayanagar Empire, which covered practically the whole of the southern part of the peninsula, the standard coin was the gold *pagoda* and its half the *pratapa*. Writing about 1516, Barbosa states that it is coined in certain cities of this kingdom of Narasinga, and throughout all India they use this money, which passes in all those kingdoms; its gold is a little inferior.

Soon after the conquest of Goa, in 1510, from the Muslims, to whom, in the meanwhile, it had passed from Vijayanagar, D'Albuquerque struck *cruzados* in gold, *esperas* in silver, and *leaes* (singular, *leal*) in copper as the equivalents, respectively, of the locally current *pagodas*, *barganins* and *bazarucos*. Although the issue was said to have been made at the entreaties of the inhabitants, it does not seem to have received much popular support. The new gold and silver coins could not rival the popularity of the local money and did not last beyond 1519. Only the *leal* continued to be struck by the viceroys and remained in circulation; it was rated in varying terms of the *reis*, from time to time.

Thereafter, the currency in the higher metals consisted largely of *pardaos d'ouro* or *pagodas*, *xerafims* of gold, and silver *larins* (originally made in Lari on the Persian Gulf but later, owing to its popularity, extensively imitated) or *tanás de prata* (also called hook money or *kokku kasi*) in addition to the gold coins of Portugal and Venice. Of the gold coins, *pagodas* were more numerous than the rest. The Hormuz *xerafim* and the *larin* were the common trade coins of the west coast and of the Arabian Sea. Thus the currency system introduced by D'Albuquerque was soon superseded by one of mixed denominations of *pagodas*, *tangas* and *leaes*.

The monetary system of Portugal, during the period, consisted of the *crusado* of gold (weighing 54.75 grains) which was the equivalent of the ducat, its multiple the *portuguez* (weighing 547.585 grains), valued at 10 *cruzados*, and small change of copper called *real* (plural: *reaes*, *reis*). A few of these gold coins found their way into the circulation of Goa but not the *real*, which, however, was adopted as a monetary unit of account, as in all Portuguese possessions in the East. Local money was valued in terms of *reis* for uniformity of reckoning and in a unit familiar to the rulers.

The Portuguese first arrived in Ceylon in 1505, eight years after Vasco da Gama had rounded the Cape of Good Hope. The visit was followed 13 years later by the construction of a fort in Kolontota, the Colombo of today. But it was not until 1597 that the king of Portugal and Spain was proclaimed sovereign of Ceylon.

When the Portuguese arrived in the island its currency system was the same as on the mainland and comprised gold *pagodas*, gold *fanams* and the locally minted silver *fanams* (the Sinhalese *fanams*). In addition, there were also in circulation *larins*, which are constantly mentioned throughout the Portuguese period. A principal coin of the Arabian Sea, in all probability, it was introduced by the Muslim merchants before the coming of the Portuguese, although the first record of its use occurs under the year 1517.

For the first 30 years of the Portuguese occupation, the more common media of circulation remained the gold *fanam*, the silver *fanam* and the *larin*, while the larger money units comprised besides the gold *pagoda*, which was more numerous than the rest, a large variety of money units, as in most small trading nations of the world during the period. Among the latter could be counted a few Portuguese gold pieces minted in Portugal, the Venetian *sequin*, and the Hormuz *xerafim*. An idea of the components of the circulation of this period may be had from the *Inventario do Thesouro do Rei de Ceylao*, that mentions the following collections of coins:

King's treasure at Kotte

5444 new <i>xerafims</i> of Hormuz	each of 300 <i>reis</i>
6005 <i>cruzados</i> and Venetians	 each of 7 <i>tangas</i>
556 Portuguese <i>d'ouro</i>	 each of 15 <i>pardaos</i>
122,330 new <i>fanams</i>	 at 30 the <i>xerafim</i>
120 <i>tangas de prata (larins)</i>	 at 5 the <i>pardao d'ouro</i>
5 <i>pardaos d'ouro</i>	 of 6 <i>tangas</i>

Temple treasure at Sitawaka

142 new <i>xerafims</i> of Hormuz
2 Portuguese <i>d'ouro</i>
3 <i>madrafoxes</i> of 21 <i>tangas</i> each
10 ^{1/2} <i>pardaos d'ouro</i>
1 <i>dobrao d'ouro</i>
8 <i>pardaos</i> 2 <i>tangas</i> in <i>larins</i> (i.e. 42 <i>larins</i>)
9 ^{1/2} ounces of <i>fanoes chocroes</i>

This includes nearly all the kinds of money that were current in Goa, with the addition of the *fanam*, which has not been mentioned in the case of Goa. The meagre numbers of the *pagodas* and *larins* do not do justice to their actual proportion in the total circulation. An explanation that has been suggested is that *larins* and *pagodas*, being the more common media of circulation, were first drawn upon to pay the troops etc., in the campaign against Mayadunna, king of Sitawaka, while the other coins remained in the treasury. There is ample evidence of the extensive circulation of *pagodas*. In 1550, Mayadunna, we are told, had paid a war indemnity of 100,000 *pagodas*, and, about 1555-56, the Sinhalese are said to have hired Portuguese soldiers at the rate of 15 *pardaos d'ouro* per man. Later in the century, about 1596, the Portuguese are reported to have captured seven elephants loaded with treasure, five of which carried *larins*, a fact which vouches for the currency of this coin as well.

The Portuguese, however, failed to improve the currency system of the island. They do not seem to have made any serious attempt to substitute the local circulation by a money system of their own. Probably, the meagre success which attended their efforts in Goa, in the Direction, deterred them. The issues from the Goa mint were progressively debased notwithstanding the efforts, which were made from time to time, to prevent it, and could not have remedied the disorganised state of the monetary circulation. The gold S Thome (52.8

The issues from the Goa mint were progressively debased notwithstanding the efforts, which were made from time to time, to prevent it, and could not have remedied the disorganised state of the monetary circulation

grains), which was struck in 1548-49 to pass as the equivalent of the *pagoda*, was followed in 1550 by the silver S Thome (408.6 grains). The latter was debased in 1554. In 1579 there was struck silver *xerafim* (340.4 grains) to take the place of the Hormuz *xerafim*, which too, like the silver S Thome, suffered progressive debasement. The silver S Thome, the coinage of which was stopped in 1556, reappeared in 1595, as by now there was a scarcity of money of higher denominations, which had been driven out by the debased silver coins.

AFTER THE FALL OF THE Vijayanagar Empire, the *pagoda*, which had been hitherto free from debasement, varied in weight and lost in fineness, as it was now issued by the late feudatories of the Empire. Debasement of the coin became worse in 1631. Meanwhile there flowed into the island American silver in the form of *patacas* or Spanish pieces-of-eight. Payments in terms of these have been recorded in Jaffna about 1560 and many stores of the coins were found in 1584 at the sack of Sitawaka. By 1640, as in a great many other countries, it had become a chief medium of circulation in the island.

The multiplicity of coin-types, which remained in circulation simultaneously, practically throughout the Portuguese period, was the source of a

great deal of confusion. Being products of several mints, which followed as many mint regulations, the coins were of different standards of weight and fineness, both of which followed as many mint regulations, the coins were of different standards of weight and fineness, both of which, moreover, were subjected to frequent alterations, nearly always downwards. Several coins of varying weight and fineness, and sometimes of different metals, answered, at one and the same time, the same description of *pagodas*, *patacoes*, *xerafims*, *sequins*, *larins*, *tangas*, S. Thomes, or *fanams*.

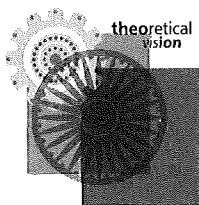
The Portuguese sought an escape from this confusion by adopting the *real*, in which they kept their accounts, as the common unit of valuation for all coins, and by creating moneys of account with fixed values in *reis*. Thus there arose two distinct modes of monetary reckoning, one in terms of the money of account or the standard of value, and the other in the terms of the actual coins, which served as the medium of exchange, both bearing the same denomination. The value in *reis* of the former remained stationary while that of the latter fluctuated. Sometimes this led to the curious position of an imaginary money of account without a coin to represent it. It resulted through the lapse from circulation of the latter and the persistence, through habit, of the former.

Thus there were *pardaos de tangas* or *pagodas* of account valued at 300 *reis* each, as distinguished from the *pardao d'ouro*, which name stood for the gold coin. The latter, at first rated at 360 *reis*, was allowed later to find its own level. Similarly there was a *xerafim* of account of 300 *reis* and *xerafim* the coin from Hormuz, reckoned as equal to the gold *pagoda*. Likewise, during the first half of the 16th century, when silver was in great demand in the Far East, there was created a *tanga* of account of 60 *reis*, following the rise in the valuation of the *larin* or *tanga de prata* from 60 *reis* to 72 *reis*.

The table of valuations which remained in force from about 1614, of the money of account of the more common denominations, in Ceylon *reis*, was as follows:

<i>Fanam</i> of silver (<i>fanao de prata</i>).....	=	6 bazarucos
	=	5 <i>reis</i>
<i>Tanga</i>	=	60 <i>reis</i>
<i>Larin</i>	=	100 <i>reis</i>
<i>Xerafim</i>	=	300 <i>reis</i>
<i>Patacao</i>	=	400 <i>reis</i>

The Ceylon *reis* was different from the *reis* of Goa: five of the former were considered equal to 4.5 of the latter. The market value of the coins varied appreciably from the value assigned to the corresponding units of account given in the table. In the middle of the 17th century, for instance, the *larin* was worth 120 Goa *reis* and the *xerafim* 360 Goa *reis* while, in the table, they are worth 100 Ceylon *reis* and 300 Ceylon *reis* respectively.



Export of gold

In this analysis of the colonial government's currency policy, published in the *Indian Journal of Economics*, the writer gives a glimpse of the dramatic events that took place when the rupee went off the gold standard.

On the morning of 21 September 1931 (8:30 a m) the Government of India received information from the Secretary of State that England had decided to suspend the gold standard. Perhaps the communique contained instructions to take measures for abandoning the standard in India as well. Forthwith the Governor-General by ordinance suspended (before 10 a m) Section 5 of the Indian Currency Act 1927.

The Gold Standard Amendment Act in England, suspending Sub-section 2 of Section 1 of the Gold Standard Act 1925, which made it obligatory on the part of the Bank of England to sell gold at a fixed rate specified therein, however, could not pass through all its legislative stages until late in the evening that day (about 11 pm). Thus, legally the rupee went off the gold standard even earlier than sterling.

The suspension of Section 5 of the Currency Act in India, however, was unnecessary if the object in view was merely the suspension of the gold standard, and perhaps it was done in a state of panic. For consistently with the supposedly offending section remaining in force, the rupee could have been redeemed – without violating the law – in 18d sterling instead of in 18d gold (8.47512 grains of gold) or equivalent sterling, as indeed it was so redeemed later: the section merely laid down that the rate of delivery of sterling for rupees by the currency authority was to be determined with reference to the Bank of England's legal buying rate for gold.

This rate being fixed, whatever the market price of gold in London, the currency authorities in India would have been perfectly within the limits of law in redeeming the rupee on the basis of a par rate of 18d sterling, whether or not sterling was on gold. When this was realised by the government, or so it would seem, the ill-merited suspension was set aside by another ordinance on 24 September 1931.

Thus on the latter date the Currency Act 1927 came back into force, continuing the link of the rupee with sterling. The rupee, therefore, automati-

cally went off the gold standard with sterling. Subsequently, there arose an almost unceasing export of gold from the country at an even faster rate than the output of the mines of South Africa, and is still continuing, although the rate of flow has slowed down somewhat. The total of these exports by the first week of January 1935 came to 27.5 million fine ounces, valued at about Rs 220 crore.

It is being maintained equally strongly by the public on the other hand that the exports of gold are in the highest degree injurious to the people and that the government should take measures to prevent the outflow and itself buy the gold

This has given rise to much discussion in the country. On the one hand the government emphatically asserts that the free and unrestricted outflow of gold is in the biggest interests of India. In his budget speech of March 1932, Sir Schuster for instance, observed: *...we are absolutely certain that in the present circumstances the best interests of India are being served by allowing free movement of gold to continue...* It is being maintained equally strongly by the public, on the other hand, that the exports of gold are in the highest degree injurious to the people and that government should take measures to prevent the outflow and itself buy the gold. The Federation of Indian Chambers of Commerce and Industry gave crystallised expression to this view when it resolved on 26 March 1932:

(a) *the federation views with great concern the continuous and heavy export of gold from India...and strongly urges upon the government of India the desirability of placing an immediate embargo on the export of gold from India as such a heavy and continuous drain of the precious metal will seriously endanger India's future monetary reconstruction*

(b) *the federation further urges on the government the necessity of purchasing gold in the open market at a price fixed on the basis of day-to-day ruling rate...*

AS ALWAYS, THIS discussion has resulted, exceptions apart, in some confused thinking. In this paper we shall make an attempt to see if it is possible to clear the issues involved, but shall confine ourselves only to the more important among them. First, how are the exports of gold related to the continuance of the rupee-sterling link at 18d sterling a rupee? Second, if the rupee had not been linked to sterling, would the gold value of the rupee have been above or below 18d sterling, i.e., would the sterling value of the rupee have been above or below 18d? Third, in the light of the answer to the second question, what would have been the best policy to adopt in the interests of the country? Having done with these questions, we shall examine the policy actually followed by the government. Before coming to these problems however, we shall first indulge in certain preliminaries.

When two unstable currencies are linked to one another at fixed ratios, they must necessarily tend to rise or fall together in terms of gold, provided always the movement of gold between the two countries both ways is subject to no restriction whatever. That is to say, if the mark, for instance,

were related to the franc at a par rate of 5 francs to a mark by the familiar device of buying and selling francs at rates based before the par rate, then, Rm 1 and francs 5 should command in the market the same number of grains of fine gold. For if they did not, the export and import of gold, as the case may be, between France and Germany, would bring about the assimilation of the gold currencies of the two countries.

If for instance the gold value of the mark should happen to be higher than that of 5 francs, that is it say, if the mark price of gold is found to be lower than the franc price converted into marks at the marks-franc market rate, then gold will flow from Germany to France to realise the difference between the two prices. This will give rise to a Circle of Exchange which for convenience of reference later we may call the Circle of Exchange no. 1: gold will be bought in Germany for marks exported to France and sold for francs converted into marks at the currency authority.

This operation would yield to a bullion dealer a larger number of marks than he started with, and under the stimulus of profits, this would be repeated. The process would continue as fast as gold can move until equi-

CIRCLE OF EXCHANGE NO. 1



librium is reached: the market price of gold will rise in Germany as a result of the increased demand till it corresponds to the franc price in France. Or if inflation be not in progress in France, correspondence in the two parties could be brought about in part by a fall in the franc price. During the process of equilibrium the mark exchanges would be at the upper franc point owing to the increased demand for marks and until equilibrium is reached, expansion of currency in Germany would continue.

The length of the period of transition, however, would depend on whether the franc is comparatively stable or depreciating in value. In the latter event the pull on gold from Germany would be stronger, and equilibrium may perhaps never be reached. In any case, when equilibrium had been reached, it would have brought about a partial fall in the gold value of the mark. Simultaneously, it would have also been responsible for either preventing a further or faster depreciation of the franc, or for raising it in value if it were stationary.

In like manner in the reverse situation also, namely, of the mark having lower gold value than the franc, exports of gold would result, but this time

from France to Germany, giving rise to a circle of exchanges which may be called Circle of Exchange no. 2: ultimately, the franc price of gold would have risen, causing an expansion of currency in France and a partial loss in the gold value of the franc, which would have either prevented a further or faster depreciation of the mark or have raised it in value. During the period of exchanges, franc-mark exchanges would be at the 'lower franc point'. Also, in the first case, in the event of the mark continuously depreciating, a state of equilibrium may never perhaps be reached. It will be noticed that while the Circle of Exchange no. 1 moves in a clockwise direction, the Circle of Exchange no. 2 moves in the anti-clockwise direction.

CIRCLE OF EXCHANGE NO. 2



For the purpose of bringing about the equilibrium it is not necessary that gold should actually be landed either in France or Germany as the case may be. The importing country may, if necessary, direct it to another part of the world, without injury to the operation of the circle of changes.

IN ACTUAL PRACTICE, however, some difference in the gold value of the two currencies owing to expenses incidental to transporting gold and the fluctuations in the exchanges between the upper and the lower franc points is possible without causing any movement of the gold between the two countries. For example, if $(\delta + a)$ francs be the upper limit of the mark, and $(\delta - \beta)$ francs the lower limit and x_1 francs the cost of transporting gold worth 5 francs from France to Germany, then gold will not be imported into Germany, until the value of the mark is lower than the value of the francs by more than the gold value of $(x_1' + \beta)$ francs. Similarly, gold will not be exported from Germany to France until the gold value of the mark is above that of 5 francs by more than the gold value of $(x_1' + a)$ francs, where x_1' represents the expenses of transporting one mark worth of gold from Germany to France.

That is to say that if the gold value of a mark be 'a' grains of fine gold and the gold value of 5 francs be 'b' grains of fine gold, then if $a < b$, no gold will be exported from Germany to France until $(a - b)$ is greater than or at least equal to the gold value of $(x_1' + a)$ francs. Similarly, if $b > a$, no gold will be exported from France to Germany until $(b - a)$ is greater than or at

least equal to the gold value of $(x_1 + \beta)$ francs. But once these limits have been reached or passed, movements of gold will take place, which will tend to keep the difference of the values of a and b within these limits.

These limits for the sake of convenience may be termed 'gold limits' and should be distinguished from 'gold points' in the case of currencies on gold standard, and the upper – and lower – exchange points in the case of currencies on exchange standards, e.g. the upper sterling and the lower sterling points of the rupee. Gold limits differ from gold points, inasmuch as the gold values of the currencies concerned do not lie between them as in the case of gold points; they determine merely the limits of difference in the gold values of the two currencies before the movement of gold takes place; x_1 and x_1' not being fixed quantities, the gold limits are not fixed limits as well; also the difference between limits does not depend merely upon the cost of transport of gold, and other incidental expenses as in the case of gold points but in addition, on the difference between the upper and the lower exchange point: gold limits and gold points, however, have one point in common, namely, that in both cases they mark points at which movements in gold would take place between the two countries.

THE CONVERSE OF the above proposition also holds true, i.e., if on linking two unstable currencies to one another at a fixed ratio, gold suddenly begins to flow from one to the other and continues to do so in the same direction, then this is an indication of the currency of the country from which the exports of gold take place having been undervalued by the currency authority in terms of gold.

That is to say, continuing the example of France and Germany that we have chosen, if on linking the mark to the franc, say, on 24 September 1931, both the currencies having gone off the gold standard three days earlier,

Sooner or later – and the sooner the better would it be for itself and the country generally – the currency authority would be compelled to abandon the link between the mark and the franc, or perhaps give up the show of maintaining the link

gold suddenly begins to flow out of Germany in exchange of francs, this is a sure indication that the mark is undervalued by the currency authority, the Reichsbank, and that the difference in the gold values of the mark and the franc is greater than the gold values of $(x_1' + a)$ francs. But for this being the case, it would not be profitable to export gold from Germany to France and bullion dealers, be they French or German, do not get busy for nothing.

They are an indication, in other words, that the franc price of gold when converted into marks at the market rate is higher than the mark price by more than the difference appropriate to the corresponding gold limit, and has remained so all the time exports have taken place. The state of the franc-mark exchange would give further evidence, if it were needed, of the undervaluation of the mark. So long as this undervaluation lasts, the mark

exchanges would be above par and at or near to the upper franc by $(\delta + a)$; it would be prevented from rising above this by the operation of the mechanism of the exchange standards which require the currency authority to buy exchanges at the upper exchange point.

If on the contrary, gold suddenly begins to flow from France to Germany, this is an indication of the mark being overvalued by the currency authority, a further clue to which will be found in the mark-franc exchanges which would be at a lower franc point; the mark would be prevented from falling below this limit by the obligation of the currency authority to sell the exchanges at this point.

The chain of events outlined above presumes that the movements of gold between the two countries in both the directions, as also the two-sided convertibility of marks and francs, are subject to marks having a lower gold value than francs, restrictions are placed on the sale of franc exchange or the import of gold into Germany is prohibited or rendered impossible by not making available franc exchange for such imports. Then, if these restrictions are enforced with rigor, whatever the depreciation of the mark, gold will not flow from France to Germany.

This will interfere with the anti-clockwise movement of the Circle of Exchange no. 2, and the forces that would have lowered the value of the franc to the level of the mark would not be allowed to function freely.

The market rate of exchange, already nearabout the lower franc point, will fall below it owing to the currency authority not fully meeting the demand for exchange, that is to say, owing to the demand for exchange being greater than the supply. There will thus result a disparity between the market rate of exchange and the official rate of exchange. By the extent of the margin between the two, the currency authority in Germany will be suffering losses every time it sells francs for marks. Supposing the market rate of exchange to be $(\delta - \lambda)$ francs per mark, and the official rate $(\delta - \beta)$ francs, then the loss on every mark worth of exchanges sold would be $(\lambda - \beta)$ francs.

THIS LOSS OF THE currency authority, however, would be the gain of the exchange dealers, in the first instance, to whom the currency authority may ration out the exchange, and if they are forced to pass it on to their customers, it will be the gain of the importers. But sooner or later – and the sooner it does the better would it be for itself and the country generally – owing to the losses it would suffer, the currency authority would be compelled to abandon the link between the mark and the franc or – as it would be more appropriate to say perhaps – give up the show of maintaining the link. For, to all practical purposes, the link can be said to have snapped when the market rate of exchange persisted below the lower franc point.

But under the circumstances, should the mark have the higher gold value than francs, there being no restriction upon the clockwise movement of the Circle of Exchange no. 1, the forces which bring about equilibrium between the two gold values will have full and free play. That is to say, gold

will flow from Germany to France and the mark will have the franc saddled on to it. In carrying the burden of the franc on its shoulders, however, the mark will be dragged down in gold value.

Such an arrangement would be ideal for France, especially if on 21 September 1931 her advisers were in doubt as to whether it was the mark or the franc that was to have a higher gold value, supposing her interests lay in assembling all the available forces for preventing a depreciation of

France cannot be a willing partner to a game which involves a drain of the hoardings of her people in return for depreciating mark paper while at the same time lowering the gold value of her currency

the franc as far as possible. By interfering with the anti-clockwise movement of the Circle of Exchange no. 2, she can see to it that the mark does not hang on to the franc, weighing down its value. But if the circle of exchange should move in the clockwise direction, the mark having a higher gold value than the franc, it will be compelled to take on its shoulders the franc. Thus whether it be heads or tails, France will have it.

Perhaps there will be opposition from Germany when the ignorant and hard-up peasantry and middle-classes of that country begin selling gold and bullion dealers export that gold in return, depreciating franc securities (in terms of gold). But if the French Secretary of State, unofficially guided by the advice of the Governor of the Bank of France, were to be responsible for the German currency and exchange policy, it is always open for him to say that the steps taken are in the best interests of Germany. He or his spokesmen in Berlin would then point out that the franc securities which Germany is getting for its gold yield interest while gold yields none, that German credit has improved in the world market as a consequence of the gold exports; that it has been able to pay off its foreign obligations, thereby saving interest charges on them; that the sellers of gold are making profit in terms of the marks and that it would be unfair to interfere with their liberties in this respect; and so on.

The camouflage would be complete if the prime minister of deputies in the government of France is determined to stand behind the credit of Germany. The French press in Germany would also echo these arguments and help in creating a smokescreen over the real guiding factor, namely, that German gold was necessary for supporting the franc and meeting France's gold obligations.

In like manner, if the purchase of franc exchange by the currency authority or the import of gold into France were subject to restrictions similar to that in the first case, then if $a > b$ the mark would be able to leave behind the depreciating franc, while if $b > a$, the franc would be compelled to lift the burden of the mark. In the former event, mark-franc exchange rate in the market already at or near to the upper sterling point will rise above it and there will result a disparity between the market rate of exchange and the official rate. To the extent of the margin between the

two, the currency authority will be suffering losses every time it sells marks for the franc exchange.

Supposing the market rate of exchange be $(\delta + 8)$ francs, and the official rate $(\delta + a)$ francs, then the loss on every mark of exchange bought would be $(8 - a)$ francs. This loss, however, would be the gain of exporters if the dealers in foreign exchange were compelled to pass it on to them. But sooner or later the currency authority would be compelled to abandon the link of the mark and the franc. But in the event of $b < a$, the mark will force itself upon the franc and the latter will lose a part of its gold value.

This arrangement would be ideal for Germany if the interests of the country demand a prevention of the depreciation of the mark. But its enforcement upon France would depend upon whether Germany is responsible for the currency and exchange policy of France. For, otherwise, France cannot be a willing partner to a game which involves a drain of the hoardings of her people in return for depreciating mark paper, while at the same time lowering the gold value of her currency. If the salvation of France were to lie in depreciating her currency, there are better ways of doing so than by exchanging gold for mark paper, while at the same time keeping within the country the profits of gold appreciation.

The policy of linking two unstable currencies to one another at a fixed ratio is objectionable on fundamental grounds. Since it involves the instability of two currencies, it is extremely unlikely that in practice the difference in their gold values will fall within the gold limits. If occasionally, should it so happen for the simple reason of their instability, it would be more the result of accident than design. More often than not the difference would fall outside the gold limits and would generate a series of disturbing forces over which the currency authority will have no control.

If the difference between the gold values of the currencies is wider than the appropriate gold limit, as one can confidently expect it would be, then the country whose currency is undervalued would experience three important phenomena: gold exports, expansion of currency, and depreciation in that order. If the mark, for instance, has higher gold value than the franc, Germany will experience exports of gold, expansion of currency and depreciation.

In respect of the exports of gold, Germany would be a loser. Consistent with the exchange value of the mark, the mark price of gold will not have risen sufficiently high during the time exports of gold take place. That is to say, the seller of gold, even when he parts with it, would be getting fewer marks than he should. The loss he would thus be making will be wholly due to the undervaluation of the market incidental to its being linked to the franc. The link prevents the free adjustment of the mark exchanges and acts as a powerful lever for drawing out gold from the womb of German hoards by the delusion of a higher mark price than was available when the mark was on gold. Indeed, this loss is inevitable as long as the mark is chained to the franc, and the only way of avoiding the loss is to break the chain or to cause the breaking of it by imposing an embargo on the export of gold.

If the downward movement of the franc continues, the loss to the sellers of gold would be greater. For the price of gold would rise every time the franc falls in value and the appreciation in the value of gold will have slipped out of the hands of the sellers. The loss of the sellers would be the gain of the bullion dealers and of the speculators of gold.

The exports of gold would be converted into francs and the francs offered to the currency authority in exchange for marks. In place of gold gone out of the country, therefore, there would now be franc paper in the strongrooms of the Reichsbank. This franc paper would depreciate in gold value with every fall in the franc exchange in term of gold currencies. In the meantime gold will have appreciated in value. Thus by linking the mark to the franc, Germany would be forced to exchange a progressively appreciating commodity – gold – for a progressively depreciating commodity – franc paper. Germany would therefore not merely be deprived of the profits resulting from the appreciation of gold, but will be compelled to suffer losses resulting from the depreciation of the franc paper.

All this time, however, the French spokesman in Berlin, the French press in Germany, and one or two German teachers of economics (the even balance and stability of whose minds are unruffled by political considerations) would be singing praises of interest-yielding franc securities!

NO DOUBT A PART of the franc paper could be made use of for paying Home Charges, if Germany be habituated to make any such payments to France, and another part for redeeming German franc debts, maturing, say, on 1st January 1932. But these payments could as well be made on the due date even if gold were bought by the Reichsbank instead of francs, by selling gold on that date. From the date of buying gold until the date of payment, the currency authority would not then lose the appreciation in the value of gold nor suffer the loss on the franc paper. Also, if Germany were a traditional franc exchange standard country, on 21 September 1931 there would have been in the reserves a large volume of franc securities. These could have been made use of to the last franc before selling gold.

From the point of view of Germany the exports of gold would be as good as split. They would not have the normal effect on the German exchanges. For, the link of the mark to the franc would prevent export of gold from raising exchanges above the upper franc point ($\delta + a$). In terms of gold currencies, the value of the mark, apart from being raised by the outflow of gold, would fall, ironically enough as a consequence of exports. They would be split in the altogether purposeless attempt of bringing the difference in gold values of the two currencies to within their gold limits.

In the process the mark-franc link will have forced upon the country a policy of currency expansion, whether or not this is to the benefit of the country. Consistent with the maintenance of the link, the Reichsbank will be unable to neutralise the inflationary issue of currency. Any attempts in this direction can only lead to a corresponding additional stimulus to the exports of gold. Even supposing a certain measure of inflation is beneficial

to the German body economic, say, to neutralise the evil effects of deflation indulged in during the years preceding the abandonment of gold, the measure of inflation consequent upon the continuance of the link with the franc would not be in consonance with the requirements of the situation, but would be determined wholly by the nature and degree of the fluctuation of the frank or the extent of differences between the magnitudes of a and b!

Also, the inflation that would thus be thrust upon Germany would not be under the control of the Reichsbank but would depend on the forces that determine the fate of the franc. Even apart from the general objections to inflation as such, a policy which lands Germany into an altogether unplanned inflation of this sort is possible only when the French government has control over the German currency policy.

Inflation would bring about currency depreciation which would be real nonetheless because the mark exchanges would be at the upper franc point. The depreciation would be visible in and would be determined by the franc exchanges in terms of gold currencies. As in the case of inflation, the extent of depreciation would be determined not with reference to the requirements of the country's foreign trade, but by the state of the franc.

Thus the linking of two unstable currencies to another at a fixed ratio leads to exports of gold involving heavy losses both to the sellers of gold and to the currency authority, and lands the country in an erratic measure of currency expansion, and unplanned depreciation. Under the circumstances, therefore, the

If inflation inspired a flight from the currency and gold tended to flow out of the country, it would be desirable to prohibit the exports of gold, and for the government to buy the gold

best policy would be to abandon the link. Having thus acquired freedom of action, the country could then follow the course that best suited her requirements. Inflation and depreciation could then be indulged in, if that was found to be the right thing to do, to heart's content. If inflation inspired a flight from the currency and gold tended to flow out of the country, it would be desirable to prohibit the export of gold, and for the government to buy the gold.

The buying of gold by the government would be an easy method of causing inflation. It could keep within the country the fruits of gold appreciation, which otherwise fall on the lap of bullion dealers or speculators in gold. These profits are in the nature of unearned increment, and it is only proper that they should go to relieve the burden on the general taxpayer. Once the government knows its own mind about the extent of the depreciation to be effected, the element of risk involved in such a course is reduced to minimum.

We can now bring together some of the conclusions of the above analysis:

- (1) When two unstable currencies are linked to one another at a fixed ratio they must necessarily rise or fall together in terms of gold
- (2) If the difference between the gold values of the two currencies is wider

Gold limits differ from gold points, in as much as the gold values of the currencies concerned do not lie between them as in the case of gold points

than the gold limits, then gold will flow from the country whose currency is undervalued to the other. The exports of gold will continue until the difference in gold values comes within the gold limit.

(3) Conversely, if on linking two unsta-

ble currencies to one another at a fixed rate, gold suddenly begins to flow out of one to the other, and continues to do so, this is an indication of the gold-exporting country having its currency undervalued, in terms of gold.

Further evidence of this would be that, if the undervalued currency, for instance, be the mark, the mark-franc exchange rate would be above par and at the upper franc point.

(4) (a) The above propositions presume that the movement of gold and the two-sided convertibility of the currencies are subject to no restrictions whatever. If for instance, restrictions are put upon the sale of franc exchange by the currency authority, or the import of gold into Germany prohibited or made impossible by not making available franc exchange for the purpose, in the event of a being $< b$, the mark will have no choice but to shoulder the burden of the franc. But the franc will then be free to leave behind the mark if the latter depreciated more than the former. In the latter case, a difference will appear in the market rate of exchange and the official rate, which will lead to the abandonment of the link. This arrangement would be ideal for France if her interests lay in preventing the depreciation of the franc.

(b) If, on the other hand, restrictions are placed on the buying of exchange by the currency authority and on the import of gold into France, while the mark could be free to leave behind a depreciating franc, the franc will not be free to do so in the event of b being $< a$. In the former case a difference will appear in the market rate of exchange and the official rate, which will lead to the abandonment of the link. This arrangement would be ideal for Germany.

(c) The policy of linking two unstable currencies to another at a fixed ratio is fundamentally objectionable. For, it leads to exports of gold from the country whose currency is undervalued, expansion of currency and depreciation. The link inevitably involves losses on the exports of gold, and the inflation and depreciation caused by it are without a plan and beyond the control of the country concerned. Under the circumstances, the best policy for the government would be to abandon the link, impose an embargo on the exports of gold and to buy the gold.

With these conclusions in our mind we may now examine the situation in India.

1. By order of the government all the banks in India were closed for three days from 22 to 25 September 1931. This gave time to the government to study the situation and formulate the details of policy. The decision to continue the link of the rupee to the sterling, however, was already taken by the secretary of state on the 21st itself and, a few hours after the suspension of

Section 5 of the Indian Currency Act, he communicated his decision to the Federal Structure Sub-Committee of the Round Table Conference, on that day.

On 24 September, it was perhaps still not clear to the authorities whether it was the rupee or the sterling that was to have a high gold value. Adequate measures, however, were forged to meet all contingencies. These were issued in the form of an ordinance on the evening of that day.

This ordinance restricted the sale of sterling by the government. It provided that sterling would be made available for the following purposes only:

- (1) Normal trade requirements but not for the import of gold or silver coin or bullion...;
- (2) for contract completed before 21 September 1931;
- and (3) for personal and domestic purposes

Certain rules were framed under the ordinance which empowered a managing governor of the Imperial Bank to call upon any recognised bank to satisfy him that it had not been selling foreign exchange for any purpose other than those specified in the rules, and that it had sold all its purchases of foreign exchange before asking for more. He could also suspend for seven days the recognition of a bank for not satisfying him in these respects pending action by the government.

2. Thus the ordinance of 24 September linked two unstable currencies to one another at a fixed ratio. Exports of gold from India were not prohibited nor were any other restrictions imposed upon them. But the imports of gold into India – should they seek an entrance in the event of the rupee being overvalued – were made impossible by the provision that exchange would not be made available for such imports.

This is a unique instance in currency history, in that it restricted the imports of gold into a country, while abandoning the gold standard, while at the same time leaving the exports free and unrestricted. It affords, however, a clue to the working of the mind of the government and its intentions. Also, limitations were put on the sale of sterling by the currency authority. Thus the situation on 24 September clearly falls within the ambit of our conclusion 4 (a) above.

That is to say, the measures taken by the government ensured that if the rupee should have a higher gold value than sterling, sterling will be supported by the rupee, there being no restrictions on the clockwise movement of the Circle of Exchange no. 1, while if the reverse turned out to be the case, the anti-clockwise movement of the Circle of Exchange being restricted sterling would be free to leave behind the depreciating rupee. This arrangement was ideal for England under the circumstances.

Actually, however, the former of the two alternatives came to be realised. The demand for sterling ceased after 26 September, and the rupee-sterling exchange, steadily began to rise until by the end of October sterling quotation reached 1s 63¹/₂d. Tenders for \$500,000 were invited by the gov-

ernment at this point and allotted at 1s 63³/₂d. The weekly offer was raised by successive stages to \$1 million, and there was no week in which government was not able to obtain the full amount offered for tender and effect purchases of intermediates at 3¹/₂d above the tender rate. The same situation continued up till 31 March 1934 and thereafter.

Exchange was thus being offered to the government instead of the reverse for the Circle of Exchange was moving in a clockwise direction. It was clear that sterling was firmly saddled on the rupee, and the restrictions on the anti-clockwise movement of the Circle of Exchange were therefore removed on 30 January 1932 by notification in the *Gazette of India*.

Exports of gold have influenced the currency situation: they have led to an excess issue of currency both coins and notes. In this respect the year 1931-32 divides itself into two parts: the period upto the end of September, 1931 and the rest of the year. During the first period, currency was being returned to the government at a rate commensurate with and even exceeding that of the previous two years. But during the latter period, both notes and coins came to be absorbed on a scale which varied with the volume of gold exports. For the year 1930-31, the net absorption of currency was Rs 21.4 crore. During the previous two years, on the contrary, on balance the country had returned to the currency authority Rs 40.5 crore and Rs 33 crore worth of currency respectively. In 1933-34, again the net absorption of currency was Rs 13.2 crore. In effect this amounted to an expansion of currency which was commensurate with the rupee value of gold exports.

The phenomenon of the export of gold on a large scale after September 1931 shows that by fixing the exchange rate value of the rupee at 18d sterling, the rupee has been undervalued by the government. That is to say, if on 21 September 1931, the rupee were delinked from sterling, it would have shown a higher gold value than sterling, i.e. the rupee-sterling exchanges would have been above 18d sterling. This conclusion is strengthened by the state of the rupee-sterling exchanges.

THE EXCHANGE VALUE of the rupee, barring short periods, for practically the whole of the period following September 1931, was above par and at the upper sterling point. Indeed, in view of the fact that intermediates were sold at 3¹/₂d above the weekly tender rates, even when these were 1s 63³/₂d during periods when such sales were made, the rupee in effect can be said to have risen above the upper sterling point. There have been several occasions when owing to severe falls in the cross-rate, sterling exchange has shot up to 18⁵/₃₂d.

If from the middle of October to the end of November the rupee was weak, it was due to certain temporary disturbing factors which led to speculation of a fall. The widespread campaign by the Currency League for the devaluation of the rupee below 16d coincided with the discussions on the Reserve Bank Bill in the Legislative Assembly, and speculators probably had entertained the hope that by amendments to the Bill there was a chance of providing for the devaluation of the rupee. They had, therefore, made

extensive forward purchases of exchange. The banks were thus unwilling sellers except at low rates, and exchange fell gradually to 1s 5^{13/16} d.

This situation, however, righted itself immediately the government made it clear that it was not willing to accept amendments to the Bill which would alter the ratio. By 28 December, exchange was firm again and above par.

When England suspended the gold standard, the Government of India had before it three possible policy alternatives: (1) to continue the link of the rupee to sterling at the existing ratio or a different one; (2) to abandon the link and allow the rupee to find its own level; and (3) to link the rupee to gold at a convenient parity.

In view of the inadequate stock of gold in the reserves, the last of the alternatives was not practical, at any rate immediately. Also, it would have been extremely difficult to make the right choice of gold parity for the rupee, when the currencies of the larger part of the world seemed to be on the defensive and inspired anything but confidence. At all events the fixing of the gold value of a currency unit is too complicated a problem to be decided upon in a moment of excitement and hurry. Ruling out this alternative, the government had one of two policies to choose from.

BUT IN THE FIRST INSTANCE, it could not make up its mind, since it was not clear what the gold value of the rupee was to be. It was a case of sitting on the fence. While restoring the link of the rupee to sterling, it restricted the sale of sterling by the currency authority and enforced a virtual embargo on the import of gold into India. Consistent with the restrictions on the sale of exchange, the rupee could not be said to have been on a free sterling exchange standard even as restrictions upon the sale of export of gold amount to the abandonment of a free gold standard. If sterling were to have a higher gold value than the rupee, these restrictions would snap the link, preventing the rupee from eking out a living at the expense of sterling. But if it turned out to be the reverse, the restrictions on the sale of sterling and the imports of gold would remain a dead letter, and sterling would get the support of the rupee.

Actually, however, sterling fell lower than the rupee, and when this was established beyond doubt by the rapidity with which the circle of exchange began to move in the clockwise direction and gold flowed out of the country on 30 January 1932, the restrictions on the sale of exchange were removed. This marked the date when the government came off the fence in favor of the rupee-sterling link at 18d a rupee.

In this connection, it may be mentioned that England cannot afford to view with equanimity a depreciating sterling. Practically the whole of that country's investments abroad, the result of savings of the 19th century, are

Consistent with the restrictions on the sale of exchange, the rupee could not be said to have been on a free sterling exchange standard even as restrictions upon the sale of export of gold amount to the abandonment of a free gold standard

payable by sterling; by far the larger part of its food supply comes from overseas; and its industries depend upon imported raw materials. Under the circumstances, it would much rather overvalue the currency than undervalue it, as indeed it did at such enormous sacrifice in 1925. It was therefore essential that all the available resources should be assembled together to prevent, as far as possible, the depreciation of the sterling to too low a level. The link of the rupee to sterling at 18d ratio acted as a brake in the downward fall of sterling. It was therefore too much to expect that the government would forgo this relief by delinking the rupee.

It must be said, however, that the experts of the government were never wanting in their attempts to defend their policy. Perhaps the ablest defense was that made by Sir George Schuster. The finance minister in his budget speeches of 1932 and 1933 argued that in the past 30 years India on balance had hoarded Rs 700 crore worth of gold and that the amount exported was only a fraction thereof; that it would be unfair to interfere with the liberty of the seller in disposing of their gold abroad to tide over the present crisis; that it was only proper to draw upon the accumulated reserves in times of trouble; that the future of gold was uncertain and it was therefore best that India disposed it of now; that a part of the proceeds at least of the gold had been invested; and so on.

All this might indeed have come true, but they do not justify disposing of gold at a loss, nor do they justify sending out from the country the fruits of gold appreciation which could have been made use of to relieve the burden on the taxpayer. The objection is not against gold going out of the country, nor against the hard-hit seller drawing upon his reserve strength; much less against the proceeds being invested; but against a policy which makes inevitable the parting of gold at a lower price consistent with the fixed exchange value of the rupee: which enforces upon the country an altogether unplanned and erratic inflation and currency depreciation, on the absurd basis of the difference between the gold values of two unstable currencies wholly unrelated to what the requirements of the body economic may be; and in the bargain dumps on the country a mass of progressively depreciating sterling paper in exchange for a progressively appreciating commodity, gold. If a certain other policy while promising to ensure all the advantages mentioned by Sir George Schuster and many more besides, also ensures the avoidance of its evils, that policy is worth at least a moment's consideration.

But perhaps the strongest point of Sir Schuster would seem to be that the exports of gold had improved India's credit in the world market; that they had enabled the remittances on account of Home Charges to be made without having had to borrow; that they had enabled the repayment of sterling debts which had matured on 1 January 1932, of the value of \$15 million; and that they had strengthened the government's currency reserves.

In support of this contention, the finance minister formulated a balance sheet of gold exports and the disbursement of its sale proceeds for the 15-month period September 1931 to December 1932. To quote:

In this period of fifteen months, India on balance exported 107.08 crores of gold. We may thus take it that private individuals during this period acquired out of the proceeds of gold exports balances in external currency, probably mainly in sterling, to the extent of \$80^{1/3} million. During this same period exports of merchandise were 181.37 crores and imports 161.45 crores, giving us a favorable balance of 19.92 crores equivalent to, say \$15 millions. This sum also may be taken as having been converted into external currency balances by private individuals from October 1, 1931 to December 31, 1932, amounts to \$95^{1/3} millions. Out of this sum government has acquired by its purchases in the market as currency authority no less than \$69^{2/3} millions.

In the first place government has used about \$34 millions in meeting its ordinary recurrent commitments.

Secondly, it has used \$15 million in discharging the 5^{1/2} per cent sterling loan which matured on January 1, 1932, thereby liquidating an obligation which cost it \$825,000 equivalent to Rs 110 lakh per annum, and greatly strengthening its credit in London.

Thirdly, government has added about \$11 million to its currency reserves, and lastly, the balance of \$9^{1/4} million was added to the government's treasury balances, and is really potentially available for further strengthening of its currency reserves.

Government, therefore, made good use of the abnormally high amount of sterling which it was able during these fifteen months to purchase as a result of the gold exports.

This is an account of how during a 15-month period, slightly over 14 million ounces of gold valued at Rs 107.08 crore left the country and how Sir Schuster got in exchange for it a mass of progressively depreciating commodity, sterling paper, and what use he made of that paper. However, it is no better justification for parting with gold at a loss nor for depriving the country of the benefit of the rise in its price than the first series of arguments advanced by him.

It may be helpful, however, to picture to ourselves what the situation would have been like if, on prohibiting the export of gold, Sir Schuster had bought the gold. The total purchases of the government for a period of 15 months would then have been 14 million ounces of fine gold, supposing the same amount of gold had been offered for sale. Of this, about 2.6 million ounces would have been needed to pay debts due on 1 January 1932 (\$15 million). On 21 September 1931, there was in the government reserves \$16 million sterling. This could have been passed on to England as part of the Home Remittances. The balance \$18 million of remittances would have required about 2.9 million ounces of gold. The remaining gold could have been put in the government's reserves and balances, in part replacing the sterling securities in them.

Thus our external liabilities could have been met in lesser gold than we have had to part with actually. Gold in the reserves would have inspired greater confidence than sterling, both internally and externally, and it would have enabled stabilisation of our currency independently of England, and with less embarrassment to ourselves. Also, the profits of

appreciation of gold in the reserves would have accrued to the government.

3. The profits that the sellers of gold were alleged to have made were wholly illusory. They were similar to the profits that anyone can realise or feel that he has realised by measuring six yards into a piece of cloth only a moment back three yards long when bought from the shop, by cutting down the length of the yardstick to one-half. We have seen above that far from making profit, the undervaluation of the rupee by the currency authority makes inevitable the suffering of a loss. Also, ignoring temporary fluctuations, the price of gold since September 1931 has been steadily rising: it rose from \$5-3-8 a fine ounce to over \$7.

THIS CONCLUSION IS not upset but rather strengthened by an examination of the index numbers. If rupee prices have not risen in proportion to the rise in the price of gold but have actually remained more or less steady, we cannot conclude that the sellers of gold have gained in terms of commodities. For, to determine the loss or gain, comparison has to be made with what the situation would have been like if the rupee had continued on

For, to determine the loss or gain, comparison has to be made with what the situation would have been like if the rupee had continued on gold. Rupee prices would then no doubt have fallen

gold. Rupee prices would then no doubt have fallen and the fewer rupees the seller of gold would then have got would have been of higher commodity value. We cannot ignore this factor in an examination of the significance of index numbers. Whatever the result of this investigation, if on other grounds it can be shown that the seller of gold has got

fewer rupees than he should or that he would have received a larger number of rupees if he could have deferred his sales, our conclusion would be strengthened rather than weakened.

4. There remained then the third alternative of abandoning the link and pursuing an independent course. This would have given us the freedom to decide upon a policy either on the lines of further inflation and depreciation before stabilisation, or stabilisation without further depreciation. In the first instance, at any rate, although as indicated by the state of the exchanges during the period preceding 21 September 1931 the rupee would have fallen below 18d gold, the exports of gold subsequent to that date are abundant evidence that it would have remained much above that of sterling.

It was no use therefore arguing, as was done by Sir Schuster, that the future of the delinked rupee being uncertain, to avoid the risk of its falling below sterling it was better to link it thus. Supposing further depreciation were to be ruled out, in respect of Home Charges, divorce from sterling would have provided some relief. But if advantages were to be found to lie on the side of inflation and devaluation in view of the major part of the world having taken to that path, as observed above, it would have been advisable to restrict the exports of gold and for the government to buy gold.

This would not have involved the government in any more inflation than was desirable. In any case the measure of inflation, unlike that resulting from the buying of sterling paper that the rupee-sterling link necessitated, would not have been beyond the control of the currency authority. It could have been held in check at will or neutralised by floating loans, selling securities, curtailing the normal outflow of money through the normal channels.

If too large an amount of gold, for instance, were to be found to have accumulated with the government, rather than invest it in an unstable currency, it would then have been far more preferable at a convenient time to dispose of the excess, for redeeming such of the external debts as could be redeemed or for buying up others, and float an equal loan at home or replace them. This would have, while neutralizing inflation to the desired degree at the same time, relieved the country of a part of its external debts; stimulated the habit of investment at home for, it would have involved in part at least the replacement of hoards with government bonds; would have retained within the country interest dues formerly paid to foreigners, would have saved the country the losses on the sales of gold inevitable under the rupee-sterling link; and would have kept at home the benefits of the rise in its price.

A part of the gold would have been required sooner or later for currency stabilisation. Having realised at such enormous cost to ourselves the dangers of a sterling exchange standard, we could then have taken this opportunity of establishing the rupee on a gold bullion standard, of the type that was in operation in England before 1931 or is in France today, and not the spurious one recommended by the 1926 Hilton Young Commission.

In the buying of gold by the government, little or no risk would have been involved. In any case, it could never have been anything like the risk involved in buying an unstable currency like sterling. Once the government made up its mind at what level to fix the price of gold statutorily, there was no risk whatever in buying gold at prices lower than this. On the contrary, the transaction would have yielded to the government the profits represented by the difference between the prices. But the policy actually followed by the government made the suffering of a loss inevitable by the extent of the fall in the gold value of the securities bought. The buying of gold, therefore, would have brought us profits in place of losses.

But what would have been the effect of this on the sterling? In the absence of support from the rupee, sterling no doubt would have fallen lower than it did. The low level mark of sterling would then have been lower than \$3.15 reached in November 1932. If the government attempted to prevent this fall, it could have been only at a terrible cost to itself, even supposing that foreign credits were available for the purpose. The Exchange Equalisation Fund under the circumstances would have been filled and emptied several times.

Undervaluation of the rupee and the flow of gold, however, saved all this trouble. But if an embargo was placed on Indian exports, the rupee

would have ceased to support sterling. It would also have been the same if the government were to buy the gold. To ask for this, like asking for Dominion Status, was too much; it was pitch your ambition too high.

But can we now ask for just a little favor? If it ever be the intention of the government to place the rupee on a gold bullion standard, gold would be needed for the purpose. A larger part if not the whole of sterling securities in the reserves today could be replaced by gold. But that would involve throwing on the market sterling now resting with the government, and to that extent putting pressure upon the Exchange Equalisation Fund, or in the alternative lowering the value of sterling. Besides, is there much hope of the rupee being put on any other than a Sterling Exchange Standard?

To summarise our conclusions: the linking of two unstable currencies to one another at a fixed ratio is objectionable on fundamental grounds. It involves losses on the exports of gold and lands the country whose currency is undervalued in inflation and depreciation without a plan. It deprives the country of freedom of action in respect of her currency and exchange policy, and prevents the adjustment of it to the requirements of her body economic. Inadvisable on principle if a country normally has a favorable or balanced BoP, linking should be wholly avoided when the currency concerned is unstable or going adrift.

And yet, the government continued the link of the rupee to sterling in September 1931, and landed us in instability in the name of stability. While they were certainly not prepared to let the rupee be a drag on sterling – this would have meant a drain of gold from England, further inflation and further depreciation at a time when all forces were assembled in checking the progress of these at too fast a pace – the reverse situation, namely, the rupee providing a support to sterling, was altogether welcome. Adequate provision for this was, therefore, made in the ordinance passed on the evening of 24 September.

Prohibition of the sale of sterling for importing gold into India – incidentally, a measure which is unique in the history of currency devaluation in the world, in that restrictions are then usually placed on the exports of gold leaving free the imports – and restrictions on its sale generally ensured that if sterling were to remain higher than the rupee, it could leave behind the latter. But there being no restrictions on the exports of gold from India, their imports into England, or the buying of sterling by the currency authority the rupee could not escape sterling being saddled to it. It is a matter for regret that this aspect of the case went unnoticed, for an understanding of it would have left no doubt in our minds as to the purpose of continuing the link of the rupee to sterling at the 18d sterling ratio.

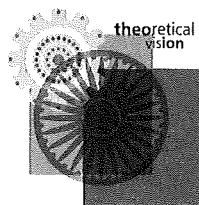
Actually the latter of the two alternatives having come true India was forced to suffer all the consequences incidental to it: losses on gold exports, unplanned and erratic expansion of currency and depreciation, and exchange of appreciating gold for depreciating paper.

The best policy under the circumstances, however, would have been to delink the rupee and then follow what course was best suited to our

requirements. If devaluation were then to be decided upon, it would have been desirable for the government to restrict the exports of gold and itself buy it. While avoiding all the evils of the rupee-sterling link, this would have retained within the country the profits of gold appreciation; enabled us to effect devaluation and inflation according to plan; stimulated the habit of investment; improved our credit abroad; brought within the country part of the interest charges now paid to foreigners; saved us the losses on sterling paper that the rupee-sterling link dumped upon us; and would have kept us in adequate supply of gold for stabilisation on the lines of a gold bullion standard.

But if we were to have these advantages, it could only be at the expense of England's getting the benefits it got from the rupee-sterling link. Sterling under the circumstances would have been far lower than \$3.15 which it was in November 1932, and the cost to it in preventing this, if attempted, would have been enormous. It would not have been able to pay off – at any rate in time – its gold obligations without considerable sacrifice.

To ask for an embargo on gold, therefore, is asking for far too much. For, the embargo would have led to the snapping of the link and the abandonment of sterling to a worse fate than actually befell it.



Aborted central banking schemes

10 JUNE 1945

Part of the writer's thesis on *Some Aspects of a Central Bank for India* at the London School of Economics, this is a unique piece of research into the evolution of the Reserve Bank of India

The Reserve Bank Bill, which was thrown out by the Legislative Assembly in 1928, was not the first serious attempt to establish a Reserve Bank in India. There were several schemes previous to 1928 which were similarly set aside by different authorities. Treatises on Indian banking, in passing references to the subject, state that the first proposal of the kind was made in 1836, ignoring two interesting schemes prior to that date. Warren Hastings was responsible for one in 1773, and Robert Rickards, a member of the Government of Bombay, for another in 1808.

Hastings, 1773

The first central banking scheme was more than a mere proposal – the bank was working for some time before it was dissolved by order of the East India Company's directors in England. The bank was the result of a 'Plan for a General Bank in Bengal and Bihar' placed before the Board of Revenue in January 1773 by Warren Hastings which, after certain amendments, was finally approved by the Board on 13 April of the same year.

It is interesting that one of the primary causes that led to a demand for the bank was the inconvenience caused to the money market by the withdrawal of money from the Company's treasury in times of revenue collection. To quote the words of a minute adjoining the plan:

The great complaints which are made from all the Northern Districts of the two provinces, of the inability of the farmers to pay their rents, on account of the uncommon plenty and cheapness of their grain, are primarily owing to the great drains which have been made of the current coin in the Districts by the collections, which for some years past have centred in the Public Treasuries of the city of Moorshidabad and at the Presidency, and to the want of an equal trade to carry it back again into circulation.

'The object of the bank', continued the minute, 'is to provide an effectual remedy to this growing evil'. The manner in which this was to be done

was given in some detail in the body of the plan. The collectors were to pay into the local branch of the bank all the revenues they received in return for 'bills on the Capital House at the Presidency...' The *hundian*, or the rate of discount on these bills, was to be fixed by mutual agreement 'according to the distance, risk, and charge of transporting the sums in *specie*, if necessary to the residency or from place to place; or to the facility of remitting the sums by Bills in the Districts.'

While ensuring the receipt by the government of the full value of the rents paid to them, this was expected to obviate the otherwise costly necessity of conveying forwards and backwards, by the government in the one case and merchants in the other, of loads of cash under military escorts, traveling agents, etc. In modern parlance, therefore, the first object of the bank was to act as bankers to the government.

THROUGH ITS BRANCHES around the two provinces, it was also to provide easy and cheap means of remittance to 'the merchants and others who may have dealings in the country.' To prevent the bank taking advantage of its privileged position in exacting high discount rates, the plan laid down that 'tables of *hundian* which merchants shall pay for bills shall be affixed at each *cutchery* of the districts and in the most public places of the Presidency and Moorshidabad.'

Another object of the bank was as stated in a circular letter to the district Collectors, to 'enforce the currency of the *sicca* rupees' as the standard coin of the provinces. This was to be done by insisting upon payment by the bank to the government of the revenues received by it in *sicca* rupees. It was thus hoped that the bank in its turn would insist upon or show a preference for dealing in the same coin. And as a result of the influence of the bank on the community, it was possible that the coin would acquire increasing currency and popularity.

The proposed constitution of the bank was also interesting. It was not to be on the Company's 'own immediate account,' but was to be organised as a private corporation under the patronage of the Company. This was because the expense of the collections and the official emoluments 'in the former case would far exceed the moderate profits the bank might derive.' Secondly, 'the want of time and ability in the Government either to superintend or control so complicated and expensive a business is an insuperable objection to it.' It will be noted that these are precisely some of the objections advanced today against the central bank being state-owned and state-managed. The plan therefore provided that 'a Principal House, or Bank, under the conduct of one or more responsible *shroffs*, be established at the Presidency, through which all remittances of the Revenue shall be made from the districts of the

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Provinces; and an inferior House under the charge of one or more *gomastas* (clerks) dependent on the principal in each district or Collectorship.'

Two distinguished and well-established *shroffs* were appointed managers of the bank. It was at first contemplated that they 'shall enter into an engagement with the government and give security for the performance of these stipulations.' But both the bankers declined to offer security, and it was agreed to 'adjust the accounts at the end of each month and to pay into the Treasury the balance which may be in their hands.'

The bank was established in April 1773, and it soon began to spread its branches around the two provinces. But from the very start the managers encountered difficulties. In a representation to the government they complained that the collectors were not paying revenues into the bank immediately upon receipt, but only at times when bills were required; that in Dinapore a rival bank was established; and that the collectors required the agents of the bank to attend in person at the *cutchery* to draft the bills, a practice which 'discredits the bank'. They also asked for preferential rates of coinage at the mint as enjoyed by Juggat Seth.

In December 1773, new regulations were made by the government to remedy these grievances, and the requested minting privileges were granted. At the same time the Collectors were warned that 'any attempt to counteract or obstruct the business of the Bank would be noticed with the severest displeasure.' The bank, however, proved to be a short-lived experiment, the Court of Directors in England having disapproved of it.

Whether or not this germ of a central bank would have evolved in course of time into a fully developed central bank is now mere speculation. But considering that in the early seventies of the 18th century banking in the modern sense was still in its period of inception, and central banking theory was yet to be formulated, the 'General Bank' of 1773 was perhaps not a poor beginning. It was organised as a private corporation under the patronage of the state. It was to act as bankers to the government and thus remedy the inconveniences caused by the withdrawal of money from circulation into the treasury. It was to facilitate trade by providing easy and cheap means of remittance to merchants.

And, finally, it was expected to enforce the currency of the *sicca* rupee as the standard coin of the state. All these are certainly central banking functions, and it is interesting that the Bank of England did not at this time possess the privilege of the custody of public revenues. Nor could it facilitate trade remittances, with no branches. Both these functions were contemplated in Warren Hastings' Plan.

Rickards 1808

The second proposal of a central banking nature was made by Robert Rickards, a member of the Government of Bombay, in his memorandum to

the Government of Bengal, dated 29 July 1808 – i.e. about two years after the establishment of the Bank of Bengal. It was more elaborately planned than the first scheme and perhaps superior to it in many respects.

The primary objective that he had in mind while drafting the scheme was a reduction of the Company's debt. We will not enter into the details of how this

was to be done. Suffice it to say that the shareholders' part of the Bank's capital – the income from the government's share of the capital – a loan of £3,500,000 in bank-notes to the government, and a Sinking Fund, to be built up by an annual contribution of £1,000,000, were to be used for the purpose.

The outline constitution of the 'General Bank' (as Rickards proposed to call it) was interesting in many ways. It was not to be a State Bank, nor was it to be a purely private institution. If entrusted to the exclusive management of private individuals, these were 'just as liable to enter into hurtful combinations to promote their own interests as a Government is to injure public credit by arbitrary acts to relieve occasional distresses. By their union these parties will operate as a check on each other.' The General Bank of Rickards, therefore, was to be a quasi-public institution. Its management, accordingly, was to be composed of a Court of Directors numbering between 6 and 8, all of whom were to be 'independent men', with the exception of one, who was to be a government nominee.

The chief concern of the government nominee would be the 'successful operation of the Sinking Fund and other public advantages derivable from the whole institution'. He was also to act as a check 'to speculations tending to promote private advantages derivable from the whole institution.' He was also to act as a check 'to speculations tending to promote private advantages at the expense of public good.' But the presence of the government member, Rickards assures us, would not compromise the independence of the bank, because all decisions would be made by a majority vote. The bank would thus be in a position to resist inflation on the part of the government as a means of raising cheap revenue.

It was to have three head offices, one each at Bombay, Calcutta, and Madras. In this he anticipated the constitution of the Imperial Bank of India. In addition to the head offices, he contemplated the establishment of 'subordinate banks or offices' round the country, to facilitate remittance business and popularise bank-notes.

The capital of the bank was to be £12.5 million of which £8.5 were to be subscribed by the public and £4 million by the government. It was to be entrusted with the right of issuing notes and the convertibility of the notes was to be guaranteed by the government. According to Rickards, the bank would so manage the note issue as 'never to exceed in amount the quantity of precious metal a society would otherwise demand and of which it was

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intended to be a useful and cheap representative.' And he imagined that the 'constant and immediate convertibility into *specie*' would restrict the volume issued to this limit. It may be noted that, in his method of regulating currency issue, he anticipated the doctrines of the Currency Principle of a later date. Regarding its functions, Rickards observed: 'The Bank thus constituted to be conjoined with the Company's treasury in the receipt and payment of sums on account of Government, to be a Bank of discounts, to grant credit on unexceptionable security, and at such times only, as the Bank shall in their own judgement deem perfectly unobjectionable, and also to engage in the business of exchange by granting bills at a more reasonable rate than can be procured from individuals, in favor of merchants applying for the same on any part of the company's territories...' To these functions he later added the selling of exchange bills on England.

RICKARDS RECOGNISED THAT THE success of the bank required the co-operation of the great private bankers who, as a result of their vast resources and extensive branch organisations, wielded considerable influence over the business community. Owing to the competition the bank might offer them, he thought it likely that initially these bankers might attempt to obstruct the bank. He would meet their opposition by competing with them. The bank would offer lower rates of discount, exchange, and remittance to the public than the corresponding rates charged by the private bankers. He expected the bank would be in a favorable position as a result of the vastness of its organisation, control over government balances,

Through their 'means' and 'money-connections', he hoped that the bank would be in a position to extend its benefits beyond the British territories over 'the whole extent of India'

and – if granted by the government – the privilege of the remittance of *specie* free of cost. 'When the *shroffs* are thus driven out of this part at least of the money market,' he continued, 'they may not improbably seek, in the gradual course of time, a connection with the Bank.' He would then offer them seats on the

directorate of the bank. And thus, through their 'means' and 'money-connections', he hoped that the bank would be in a position to extend its benefits beyond the British territories over 'the whole extent of India'.

The advantages he expected of the bank were many. In the first place, the rates of exchange between districts, which were 'liable to sudden and violent fluctuations', would be lowered to 'a very near approximation of the real par of exchange'. Secondly, in case of monetary stringency in any part of the country, 'a neighboring district or the Presidency will always be at hand to relieve.' Thirdly, as a result of these advantages, 'the mercantile body will be free from the losses and inconveniences now suffered in exchange and from the artifices of *shroffs*, and therefore find their pecuniary intercourse with every part of British India much facilitated'.

The Governor-General forwarded this plan to the Company's directors, with the remark that 'the ideas of Mr Rickards appear to resolve themselves

into mere speculation, without embracing objects capable of being realised, while the machinery proposed by that gentleman...was extremely cumbrous and complicated...' The directors did not take a different view of the plan, and rejected it after some time.

Rickards' General Bank, like that of Warren Hastings' before him, was clearly a central bank. It was to have the

monopoly of issue. It was to act as bankers to the government. By competition with the private bankers it was to stabilise rates of exchange, remittance, and discount. It was to mobilise its resources to relieve local monetary distress in any part of the country. Finally, it was to control the operations of the *shroffs*, who were almost the sole components of the contemporary financial system of India.

They were of the opinion that a single state bank become an instrument of general good by facilitating the employment of the redundant capital of this country (England) for the general improvement of Indian commerce

Body of Merchants, 1836

The next proposal for the establishment of a central bank was made in 1836. In that year 'a large body of merchants interested in East Indies' submitted to the Court of Directors a project for a 'great banking establishment for British India.' They were of the opinion that a single state bank, 'confining its transactions strictly to banking principles and business,' and 'established by Act of Parliament and possessed of adequate capital, would, under judicious management and control, become an instrument of general good by facilitating the employment of the redundant capital of this country (England) for the general improvement of Indian commerce, giving stability to the money system of India, and preventing those occasional fluctuations to which it is at present subject, and also by affording the company facilities and advantages in their future financial arrangements.'

THE BANK WAS TO TRANSACT THE general banking business for the government and, in particular, 'facilitate the receipt of revenue and its diffusion, and furnish the remittance to Great Britain of the sums required there for the Home Charges.' The Bank of Bengal, they observed, owing to its limited capital, could not be of much assistance to the government in times of distress, whereas the new bank would be more useful.

The project was sent to the directors of the Bank of Bengal for their opinion. They naturally disagreed with the view that their bank was incapable of satisfactorily discharging the functions enumerated in the scheme. In particular, they were ready at once to take over the management of government business. In case additional capital was needed they 'doubted not that the community of the Presidency had the means and would have the desire to make the addition'.

As a consequence this scheme was also dropped.

Bartle Frere, 1859-66

After this date, one finds numerous incidental references in official correspondence to the establishment of a central bank. And after the establishment of the Banks of Bombay and Madras these were sometimes in the direction of amalgamating the three Presidency banks. Early materialisation of the project seemed likely since successive Finance Members were not adverse to it.

Perhaps the first such allusion was made by Wilson in his minute of 1859, concerning the management of a sound paper currency in India. His scheme for the creation of a government Issue Department, he observed, was not inconsistent with the establishment of a central bank, on the lines of the Bank of England, provided it restricted itself to the functions of the banking department of the latter. His successor Laing also believed that 'a State Bank was a great protection against the frequency, the intensity, and duration of commercial panics'. And in 1866 Sir Bartle Frere favored the amalgamation of the three Presidency Banks. But the government of India gave little attention to these suggestions.

Dickson

The subject surfaced again, when the old Bank of Bombay had lost a large part of its capital. And Dickson, the Secretary of the Bank of Bengal submitted a scheme to the government of India for the amalgamation of the Presidency banks.

His plan was to increase the combined paid-up capital of the three banks to Rs 5 crore to form the capital of the new bank. The shareholders of the Banks of Bengal and Madras were to contribute additional capital of Rs 80 lakh and Rs 44 lakh respectively at a premium of 25 per cent. The Bank of Bombay was to go into liquidation and its shareholders were to contribute Rs 1 crore capital to the new bank, also at the same premium. The proceeds of the premium were to be added to the amalgamated reserves of the banks.

In the constitution of the new bank the local boards at Bombay and Madras were to be retained, 'but the supreme control and the rules and regulations for the conduct of business must rest in and be laid down by the Board in Calcutta.' The latter, therefore, was to form the supreme management of the amalgamated bank.

Dickson had no doubt that the 'united bank' thus constituted would not only be able 'to meet the legitimate requirements of commerce...But...to control their recurring monetary crises...' the government would have 'an absolute guarantee for the unvarying management of their Treasuries...; a certainty of greater economy in the use and distribution of their balances throughout India; uniform management of the Public Debt...; and a powerful agent in aiding them in all financial measures....' He thought it possible that at a later date the privilege of issue (withdrawn from the Presidency Banks in 1862) could be restored to the new bank as in the British model.

The Viceroy, however, was opposed to the idea of amalgamation on 'public grounds'. He feared that a powerful institution like the one pro-

posed might overshadow the state. The banks of Bombay and Madras would resent their control from Bengal. And in any event he thought it difficult to find men of leisure and ability to manage the bank. Among the shareholders of the Bank of Bombay there was a strong body opposed to amalgamation, and it was only by a narrow majority that the proposal was carried at a general meeting. Under these circumstances Dickson thought it proper to withdraw his scheme.

In 1870 a member of the Governor-General's Council again raised the idea of 'a real state bank...thoroughly under government control'. But the Government of India was decisive on the point. It 'looked upon the establishment of a state bank in India as a matter of great uncertainty, perhaps of impossibility.'

Rothschild and others, 1898

The matter seemed to have rested there for about three decades. In 1898, however, some of the witnesses before the Fowler Committee supported the idea of a central bank. Alfred Rothschild outlined a plan for such a bank in his written statement to the committee. He advocated a bank 'with privileges similar to those held by the Bank of England.' It was to be a shareholders' bank and not a state bank, for its management 'requires a technical skill and adaptability which can hardly be looked for in a government department'. The three Presidency banks were to be absorbed by it, and its capital was to be the same as 'that of the Bank of England – namely, £14 million'. He would make the Board of Management of the bank 'as influential as possible and composed of representatives of the chief merchants and bankers, the government having the right to appoint its own representatives, as it is most desirable that the policy of the Government of India and that of the bank should be in absolute harmony'. The bank was to be entrusted with the management of the currency also.

He expected that the bank would impart 'security and permanence to the currency system', stabilise the exchanges and the rates of discount. Confidence in the financial system of the country that might then ensue would stimulate the flow of capital from abroad. In times of financial difficulties the government would find the bank to be of great help.

The committee did not deal with the question of a central bank, which was outside its terms of reference. Hambro, one of the members, however, in a separate memorandum pointed out that 'the success of the recommendations of the committee, if adopted, will very much depend on the banking wants of the country being assisted in times of pressure and curtailed in times of slackness.' This, he believed, 'could only be done by the establishment of some institution...formed on somewhat similar lines to those of either the Bank of England or the Bank of France.'

Dawkins

This memorandum of Hambro became the subject of correspondence between the Secretary of State and the Government of India for some time.

The latter called for opinions on it from the provincial governments, Presidency banks, and the chambers of commerce. Since these opinions, however, were found unsatisfactory or conditional in character, an informal conference was convened between the Financial Department of the Government of India and the representatives of these other bodies. At this conference the question of amalgamating the Presidency banks was discussed, and Dawkins, the Finance Member, placed before it a scheme for an Indian central bank.

This bank was to have an 'expert direction in London – particularly conversant with both Indian and London money markets – elected by and responsible to the shareholders, who would be mainly in India. In India itself there would be a central management apportioning its time and energies between the various centres, and in close relation to local directorates of the Presidency towns'.

The Bank was not to deal in foreign exchange for business purposes, but only for purposes of borrowing funds in London on its own account, or for 'making remittances in payment of stock or other authorised investments and in payment of loans.' Note that in times of monetary stringency the bank was to have the privilege of issuing 'covered notes upon the payment of a tax of 10 per cent.'

Among the advantages of the bank, he counted an adequate control over the money market, a more 'rapid return into the general circulation of money raised by taxation,' and 'a relative steadiness in the rates of discount, which would be of vital importance to sound business'.

The project, however, could not materialise, for the Secretary of State found it difficult to come to a decision. He wrote on March 22, 1900: 'There are circumstances, however, at the present time which prevent my coming to an early decision on the proposals now submitted to me.'

Edward Law

Dawkins was followed by Sir Edward Law as Finance member. He submitted to the Government a minute on the 'Establishment of a Central Bank'. But the government felt uncertain and recommended to the Secretary of State that 'the scheme be held in abeyance.' But they wished it to be recorded, nevertheless, that it was their 'deliberate opinion that it would be distinctly advisable, if practicable, to establish a Central Bank in India so as to relieve the Government of its present heavy responsibilities.' The Secretary of State accepted this recommendation.

In his minute Sir Edward Law examined the desirability and the cost to the government of establishing a central bank. While in principle he was convinced of the first, to him the cost appeared prohibitive. For the safety of the bank he thought extra capital over the combined capital of the Presidency banks would be necessary. He also thought that the Presidency banks would demand compensation from the government to make good the fall in their dividends that might follow the increase in capital. He calculated the cost on the basis of this compensation being at 6 per cent per

annum. In addition to the question of cost, he was doubtful of 'securing a thoroughly suitable Board of Directors having the necessary leisure to devote to the business'. He suggested, therefore, the suspension, if not the rejection, of the idea of establishing a central bank.

The question was not further considered until the deliberations of the Chamberlain Commission in 1913. Two schemes of a 'State Bank for India' were placed before this Commission, one by Sir Lionel Abrahams, then Assistant Under-Secretary of State for India, and the other, at the Commission's own request, by John Maynard Keynes, himself a member of the Commission.

Abrahams

Abrahams' memorandum, as stated by him, was in many respects 'in effect a development in more definite form of suggestions put forth in the correspondence that passed between the Secretary of State, the Government of India, and other bodies in India,' correspondence which followed the memorandum of Hambro.

His idea was to amalgamate the three Presidency banks into a central bank. The Board of Directors of the bank were to be Government nominees, 'following the precedents of the Bank of France, the German Reichsbank, the Austro-Hungarian Bank, Bank of Russia, and the Bank of Japan.' He was skeptical of the idea of entrusting the management of the bank to the shareholders' representatives, even if these were to be guided by a 'code of rules sanctioned by the Government.'

It was to act as bankers to the government, and as such was to have the custody of the government's balances, with the exception of £1 million which the latter would keep with itself to meet 'unseen emergencies.' It was to manage the paper currency and provide for inland remittances to the business public.

But the bank was not to engage in the business of exchanges. It would have meant unequal and, therefore, unfair competition with the exchange banks. The duty of supporting the exchanges was to rest with the state and not with the bank, although, 'as a matter of convenience, the carrying out of particular transaction relating to it....might be entrusted' to the bank.

It may be remarked, however, that the maintenance of the internal and the external stability of the currency being complementary functions to each other, their dual control might have led to important practical difficulties. This was, therefore, one of the weaknesses of Abrahams' scheme.

John Maynard Keynes

Keynes' scheme was based on the Continental model, like that of Abrahams. It was more elaborately drafted than all the preceding ones. The framers of the Imperial Bank of India Act 1921 – it is the name Keynes would give to his bank – seem to have borrowed freely from it. And if the Imperial Bank of India has failed to show the results Keynes hoped of his bank, the reason probably is to be found in the fact that the bank was not

given control over the paper currency, and that the currency system was not based on his principles.

The term 'state bank' has misled some reviewers of the scheme into the belief that he recommended the establishment of a State Bank in the post-war sense of the term. It was designed, on the contrary, to be a compromise between a purely private bank and a purely state bank. To put it in his own words, he expected of his bank 'the best of both worlds'.



John Maynard Keynes

The state bank which he recommended embodied three principles which he considered essential for the successful functioning of a central bank in India. It would be responsible to the state with a high degree of day-to-day independence for itself. Second, while making use of the business talent and experience of the shareholders' representatives, it enabled the bank to take a 'broad and not always commercial view of policy.' And third, in view of the vast extent of the country, the administration of the bank embodies 'a high degree of decentralisation.'

THE CENTRAL BOARD was not to have direct dealings with the public – this was the function of the local boards. The duties of the central board were to be, chiefly, determination of bank rates, remittance and distribution of funds between the centers, between India and London, and questions of general policy. While the general volume of the transactions of any kind were to be within the ultimate control of the central board, the nature of the individual transactions making up the total was to be left to the discretion of the local boards.

With the exception of £1 million to meet unseen emergencies, the government balances were to be held with the bank. It was modeled on the pre-war Reichsbank. The normal reserve backing was to be 60 per cent of the total issue; but this could be lowered to 40 per cent on payment of a tax to the government. The elasticity thus imparted to the currency supply, would serve the requirements of the seasonal fluctuations in the demand for money. But, for the same reasons as were advanced by Abrahams, the responsibility of maintaining exchange stability was not to be part of the bank's functions. It was to remain the duty of the Secretary of State.

While recognising the desirability of the central bank, the Commission observed that it was not in a position to make precise recommendations and that 'a careful study of conditions on the spot was essential'. It therefore suggested a separate and expert enquiry into the question. The war suspended consideration of the Commission's recommendation and the expert enquiry was not carried out. The terms of reference of the Babington-Smith Committee did not include examination of the question of a central bank. And, apart from incidental references in the evidences given before the Committee, there was no serious discussion on the subject.

Young, 1926

The amalgamation of the Presidency Banks in 1921, to form the Imperial Bank of India, did not put an end either to the demand or to the necessity of a central bank. The question, therefore, was again raised by and before the Hilton Young Commission of 1926, which recommended the establishment of a central bank. The bank recommended by the Commission is best described as a quasi-public institution. Though its capital was privately subscribed, its management had government nominees on it. But the independence of the bank was secured by the provision that the representatives of the shareholders were to be in the majority.

The management of the bank was to be decentralised on the model of the Imperial Bank of India. There were to be three local boards, one each at Bombay, Calcutta, and Madras. The representation of the shareholders on the local boards was to be direct, while their representation on the central board was to be indirect – namely, through the presidents and vice-presidents of the local boards – and one member elected by each of the local boards. The central board, which was to consist of 14 members, was to have only five government nominees on it.

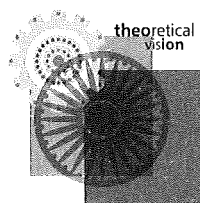
THE FUNCTIONS OF the bank were limited to those which are appropriate to a central banking institution. On the one hand, competition with the commercial banks was avoided, and, on the other, the importance of the liquidity of the bank's assets was looked into. It was to have the monopoly of note issue: it was to act as sole bankers to the government, and manage its balances, debts, issue new loans, arrange for remittance on Home Charges, etc. Through the mechanism of rediscount it was to provide emergency currency to meet seasonal demands. It would adopt the well-known proportional reserve system as the system of currency and would have sole control over it. It would be able to issue multiple volume of currency over a given volume of gold, and render possible seasonal expansion of currency supply. It was to act as bankers to the commercial banks whose banking reserves were to be centralised with it. Unlike the banks of Abrahams and Keynes, the Commission's bank was to have full responsibility for maintaining the stability of the exchanges.

The recommendations of the Commission were accepted by the government, and those relating to the central bank were introduced into the Assembly in a Bill entitled the Gold Standard and Reserve Bank of India Bill, on 25 January 1927. (Perhaps the only recommendation of importance which was dropped in the Bill was the provision for local boards.)

From the very start the Assembly showed a lack of enthusiasm for the measure. They saw in it none of their pet schemes for a gold currency, and they were skeptical of the Gold Bullion Standard.

On March 24 the Bill was referred to a joint select committee, and when it emerged from their hands on 18 August it was in all essentials very much different from the original. Among the changes effected, two were conspicuous. First, the private bank was made into a state bank. And second, the

number of directors was raised to 15, of which five were to be government nominees, six were to be elected by the legislatures, and the remaining four were to represent special interests like the chambers of commerce. On these two points, however, the difference between the government and the Assembly proved to be formidable, and, since no compromise could be effected on them, the government had finally to abandon the Bill on 10 February 1928. This put an end to a long series of attempts to establish a central bank in India, the first of which was made as early as 1773.



Devaluation of the rupee

MARCH 1967

In this, the Dr Ramaswamy Mudaliar Lecture at the University of Kerala, the writer argues that the 1966 devaluation was not drastic enough

The long overdue devaluation of the rupee in June 1966 was a step in the right direction. But the new exchange rate did not take the rupee to its equilibrium level. The effects of devaluation on a wide range of exports were more or less negated by export duties and the abolition of export-promotion incentives. Therefore, we cannot look forward to any significant increase in exports and any appreciable improvement in our balance of payments position.

Critical comments on the effects of devaluation have generally failed to take note of this inadequacy of the extent of devaluation. They argue that, though nine months have passed since the rupee was devalued, the benefits of devaluation promised by its advocates are still not in evidence, while some of the apprehensions of the opponents of devaluation seem to have materialised. In particular, we are told that Indian exports have not only failed to move up, they have declined. Export earnings, expressed in sterling, fell from £ 603.6 million in 1965-66, the fiscal year preceding devaluation, to an annual rate of £521.4 million during the six months following devaluation. India's balance of payments difficulties and the foreign exchange crisis have, therefore, continued unabated.

On the other hand, so the argument runs, during the eight months following devaluation, wholesale prices rose by 9.2 per cent, or at an annual rate of 13.8 per cent; and the working class cost of living rose, in six months, at an annual rate of 14.4 per cent. A good number of firms suffered bad financial jolts, as their deferred payments liabilities (representing essential imports) were blown up, in rupee terms, by 57.5 per cent – the extent of the devaluation – at one stroke. The import content of the production costs of industry and transport have been similarly blown up upsetting, in particular, the profit and loss accounts of marginal firms.

These developments have cast doubts on the wisdom of devaluation, which was intended to produce certain functional changes in the economy as a means to stepping up exports, in order to relieve foreign exchange

scarcity. Before discrediting devaluation, we have to examine whether any factors have hindered these changes. To do this, it may be helpful to briefly recall the nature of the functional changes and the complex of economic pressures that called for devaluation to bring about such functional changes.

THE NEED FOR devaluation arose from, first, continued inflation, which had driven up prices far ahead of the prices prevailing in India's principal trading partners, and in countries competing with India in world markets. Secondly, this inflationary upsurge in domestic prices was not accompanied by a downward adjustment in the rupee exchange rate, to allow for the depreciation in its value. The devaluation of the rupee in September 1949 was insufficient even at that time. From September 1949 until June 1966, £100 worth of export brought no more than Rs 1,333 to exporters though, in the meanwhile, the costs of producing export goods had continuously risen and general prices rose by over 80 per cent as a counterpart of the depreciation of the rupee. This reduced profits from exports, or converted them into losses.

By contrast, the domestic market was much more attractive. Here if costs were rising, prices rose even faster, in line with universal experience in times of inflation. As an escape from this penalty on exports, manufacturers switched their attention increasingly to the home market at the expense of overseas markets. Thirdly, as part of the policies of planning, we have brought about a pressurised expansion of the industrial sector: import substitution to 'save' foreign exchange, physical restraints on imports and exchange control contributing to this process in no small measure. This industrial bulge has inevitably involved a colossal diversion of resources into new industries, at the expense of traditional and export industries.

We have evidence of the preferential attention to the home market and of a corresponding neglect of markets abroad in India's production statistics and export performance. While the production of non-export goods rose phenomenally, the production of export goods – notably tea and jute, the major earners of foreign exchange – lagged behind expectations. The output of tea rose far less than was produced by rivals abroad, and the output of jute manufactures rose far less than the increase in the world demand for jute as measured by the expansion of world trade. Though Indian national income, at constant prices, rose by 44 per cent during the decade ending 1964-65; exports at constant prices declined from Rs 743 crore in 1955-56 to Rs 603 crore in 1964-65; as a ratio of national income, exports declined from 6.1 per cent in 1955-56 to 4.1 per cent in 1964-65.

Any evaluation of the achievements of devaluation has to assess first the extent to which devaluation has succeeded in eliminating the relative penalty on exports. If this penalty is not removed in full, i.e., if devaluation is partial and does not take the exchange rate to its equilibrium level, this is apt to be reflected in the poor recovery in export production and in exports. The crucial question in evaluating the achievements of devaluation is,

It follows that, if the new rupee exchange rate was the equilibrium rate, the prices of import licenses would have fallen to zero, or close to it. But devaluation led only to a sharp drop in these prices, with no import licenses touching zero

therefore, whether the new exchange rate of £1 = Rs 21 is the equilibrium rate.

To answer this question, we have three criteria to go by: first, the premiums, in Indian money, on foreign exchange, in the free markets abroad; second, the gap between the landed costs and market prices of import goods; and third, the continuance of exchange control and import restrictions.

All three criteria indicate that the new exchange rate is not an equilibrium rate. In Zurich, on 15 February 1967, the rupee-dollar rate was \$1 = Rs 10.45 and the rupee-sterling rate, £1 = Rs 29.26. Two markets for foreign exchange, with diverging price quotations, indicate that the official exchange rate is unduly low and that the demand for foreign exchange at this rate far exceeds the available supply of it; i.e. the official rate overvalues the rupee, though the precise extent of this overvaluation may be indeterminate.

TO ILLUSTRATE OUR second criterion arithmetically, if the equilibrium exchange rate of the rupee was, say, \$1 = Rs 26, the Indian market prices of £ 100 worth of import goods would be equal to Rs 2,600 plus insurance and freight charges, import duties and normal trading profits. On the other hand, prior to devaluation, when the official exchange rate was £1 = Rs 13.33, the cost of £100 worth of import goods to importers, were much lower, being Rs 1,333 plus the usual additional payments mentioned above; and the holders of import licenses made windfall profits, in our example, of about Rs 1,270 on every £100 worth of imports. Import licenses, therefore, were much sought after documents, the prices they commanded in the market being a rough measure of the windfalls; and our example demonstrates that this phenomenon rests on currency overvaluation.

It follows that, if the new rupee exchange rate was the equilibrium rate, the prices of import licenses would have fallen to zero, or close to it. But devaluation led only to a sharp drop in these prices, with no import licenses touching zero. The new exchange rate of £1 = Rs 21, lifted up the costs to importers of £100 worth of import goods to Rs 2,100 plus the usual additional payments. This correspondingly reduced – but did not eliminate – the windfall profits on imports. As price inflation has continued since devaluation, the gap between costs and prices has widened; and the values of import licenses are recovering or, as in the case of art-silk yarn, have even exceeded their pre-devaluation levels. The failure of the prices of import licenses to fall to zero is evidence that the new exchange rate is not an equilibrium rate.

The logic of the third criterion is simple. As an equilibrium exchange rate would produce balance of payments equilibrium, the domestic demand for import goods would be met in full, under an equilibrium

exchange rate; so that there would be no need for any physical restraints on imports. This is well illustrated by the examples of 27 member-countries of the IMF, which abolished the system of import licensing, in terms of Article VIII of the Articles of Agreement following the successful adoption of equilibrium exchange rates.

As the new exchange rate still contains an element of overvaluation; the rupee receipts from exports would be less than commensurate with the depreciation of the rupee and of the rise in the rupee costs of export production; so that exporters would suffer a corresponding penalty when compared with the gains offered by home markets, though the amount of these penalties may be now less than before devaluation.

Moreover, much of the benefits of devaluation were negated – simultaneously with devaluation – first, by export duties on 12 traditional items of exports, which accounted for about 56 per cent of total exports; and, secondly, by the abolition of all export promotion incentives, which had accrued to 20 per cent of exports, the money values of these incentives being sometimes, as in the case of cotton textiles, of the order of 50 per cent or more of export receipts.

Thus, despite devaluation by 57.5 per cent, the relative attractiveness of the home and overseas markets has not been restored to its norm. This has deterred the essential shift-back in production for export. Continued price inflation since devaluation, by adding to the relative gain from the home market, as against overseas markets, has further handicapped the shiftback.

This explains the failure of exports to respond to devaluation. It is not as if this failure is evidence of the inefficacy of devaluation as a remedy to the balance of payments crisis. Rather, it is that, as the present writer had pointed out in July 1966, *de facto* devaluation was fractional or nil over a wide range of exports, the 'full benefit of devaluation' applying 'only to a negligible margin of exports; and to invisibles'. There is little hope of any appreciable improvement in India's export performance unless inflationary finance is wholly eliminated, and the rupee is devalued to its equilibrium level; or, alternatively, left free to find its own level.

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The decline in exports during the five months following devaluation represents the combined effect of several factors. First, exports had already started a downtrend in April 1966 prior to devaluation. The decline subsequent to the devaluation in June may be but a continuation of this downtrend, though the decline in the first two months of the post-devaluation period might be due also to the unsettlement of trade contracts consequent upon devaluation. Second, the decline in the national product by 3.7 per cent in 1965-66 had, subject to the usual time-lag, a depressing effect on the volume of goods available for export in 1966-67. Third, continued deficit

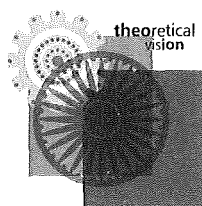
financing – which, as evidenced by the increase in the rupee indebtedness of the government, amounted to Rs 1,270 million during the nine months of 1966-67 – ate into potential exports, or which is the same thing, diverted investment resources away from export trades, for fabricating goods to meet the extra demand ensuing from deficit financing. Finally, the slowing down of foreign aid in 1965-66 led to a decline in aid-financed imports. This caused potential exports to be drawn upon, wherever possible, to fill the void in the market supply of import goods.

It is not legitimate to attribute to devaluation the price inflation of the post-devaluation period. Prices rose before as well as after devaluation. Curiously, during eight months prior to and following devaluation, prices rose at an annual rate of 14 per cent. It is odd to suggest that the price inflation which followed devaluation was the result of devaluation. On what shall we blame, then, the price inflation before devaluation?

The fact of the matter is that price inflation before as well as after devaluation is the result of inflationary deficit financing, i.e. money creation to cover the excess disbursements of the government over the sum of its rupee receipts and foreign aid. This led to an expansion in the money supply, at an annual rate of over Rs 100 crore during the six months following devaluation. Prices are rising as the national product is expanding at a slower pace than money supply – possibly, the national product is stagnant, if not on the decline.

Industrialists who complain that devaluation has suddenly blown up their production costs on account of the inputs of import goods, and their deferred payments' liabilities, have no moral or economic case. Prior to devaluation they had been getting £100 worth of their import requirements at the artificially low landed costs of Rs 1,333 plus the usual incidental payments, though the market values of these import goods were much higher, sometimes five times their landed costs.

These gaps between landed costs and market prices represented wholly unmerited subsidies, extorted from a starving people, through currency overvaluation. Rather than thus ride on the backs of helpless consumers, it is time that Indian industrialists reviewed the cost structure and the real economic viability of their undertakings; relied more on their own abilities and the efficiency of their plant and organisation; and turned out end-products of quality, at competitive costs, to keep their factories running. Even at the new exchange rate, they are receiving unconscionably high subsidies. It is the exploited consumer who is the aggrieved party, not the opulent industrialist.





CENTRE FOR CIVIL SOCIETY

The Centre for Civil Society is an independent, nonprofit, research and educational think-tank devoted to improving the quality of life for all people of India by reviving and reinvigorating civil society. The motivation behind the Centre is the poignant paradox of intelligent and industrious people of India living in a state of destitution and despondency. But we don't run primary schools, or health clinics, or garbage collection programs. We do it differently: we try to change people's ideas, opinions, mode of thinking, the mindset by research, seminars, and publications.

We champion limited government, rule of law, free trade, and individual rights. These principles promote civil society – peace, harmony, and prosperity.

The Centre was inaugurated on 15 August 1997, signifying the necessity for achieving economic, social, and cultural independence from the Indian state after attaining political independence from an alien state.

WHAT IS CIVIL SOCIETY?

Civil society is an evolving network of associations and institutions of family and community, of production and trade, and of piety and compassion. Individuals enter into these relationships as much by consent as by obligation but never under coercion. Civil society is premised on individual freedom and responsibility, and on limited and accountable government. It protects the individual from the intrusive state, and connects the individual to the larger social and economic order. Civil society is what keeps individualism from becoming atomistic and communitarianism from becoming collectivist. Political society, on the other hand, is distinguished by its legalised power of coercion. Its primary purpose should be to protect, and not to undermine, civil society by upholding individual rights and the rule of law.

RELATIONSHIP BETWEEN CIVIL AND POLITICAL SOCIETY

The 'principle of subsidiarity' demarcates the proper arenas for civil and political society, and for local, state, and central government within the political society. The principle suggests that the state should undertake those tasks that people cannot undertake for themselves through voluntary associations of civil society. The functions thus assigned to the state must be entrusted first to local governments. The functions that local governments cannot perform should be given to state governments and only those that state governments are unable to undertake should be delegated to the central government.

The rampant growth of the political society – the institutions of government – since independence has hindered the flourishing of civil society in India. It is only by rethinking and reconfiguring the political society that India will be able to achieve economic prosperity, social peace and cohesion, and genuine political democracy. The focus on civil society enables one to work from both directions; it provides a 'mortar' program of building or rebuilding the institutions of civil society and a 'hammer' program of readjusting the size and scope of the political society. Both programs are equally critical and must be pursued simultaneously. Weeds of the political society must be uprooted and seeds of a civil society must be sown.

SUPPORT

In accordance with its purpose, the Centre accepts support only from individuals and institutions of civil society.

RESEARCH AGENDA

- Law, Liberty, and Livelihood
- Education: Choice and Competition
- Market-based Initiatives for Environmental Concerns
- Good Governance: Laws, Budgets, and Performance
- Provision of Social Services: The Role of Civil Society
- Assuring Quality and Safety: Self Regulation or State Regulation?
- Birth to Death Certification
- Radio Privatisation
- Role of the Private Sector in Provision of Infrastructure
- Farmers and Consumers: Is the State or Market a Better Intermediary?
- Protecting and Creating Jobs: De-regulation of Labor Markets
- Government as Manager or Supervisor of Financial Markets?
- India in the Global Market: Liberalisation of Trade
- Corporatisation and Privatisation of Public Sector Units

EDUCATION PROGRAMS

- Liberty & Society Seminar
- Economics in One Lesson Seminar
- Liberty, Art & Culture Seminar
- Research Internship Program
- School Lecture Series
- Business Journalism Workshop

JEEVIKA

A National Livelihood Documentary Competition was held in January 2004.

DIALOGUES & PANEL DISCUSSIONS

The Centre holds regular Dialogues to provide a discussion forum for topical issues. Some Dialogues held:

- IPR: CopyLeft, CopyRight, CopyConsent?
- Fighting Poverty Diseases
- Corporate Social Responsibility?
- Should We Ban Quacks?
- Liberalisation & Livelihood
- Economics Curriculum in Schools
- Education Policy: Choice and Competition

FRIENDS OF FREEDOM

To provide a platform for self-development and deeper understanding of the principles and policies of liberalism, graduates of our seminars come together to form Friends of Freedom (FoF). Young professionals and others interested in liberal values also become members.

PUBLIC INTEREST LITIGATIONS

- BALCO: With the help of advocates Parag Tripathi and Suranya Aiyar, the Centre filed an intervention PIL in the Bharat Aluminium Company (BALCO) privatisation case to support that the privatisation of public sector companies is in the public interest; its opposition serves only parochial interests.
- VIP Security: To stop harassment and inconvenience under the guise of VIP Security to ordinary citizens of Delhi in using roads.

LEGISLATIVE ALERT

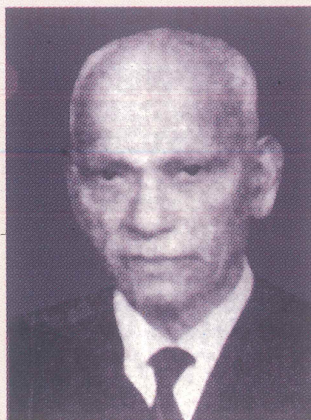
A bill pending in the Parliament is analysed, clause by clause and an alternative bill is drafted. The changes are then discussed with interested Members of Parliament, formally and informally.

SWAMINOMICS

The Centre maintains www.swaminomics.org and www.swaminomics.com to house the popular Sunday column 'Swaminomics' in *Times of India* by Swaminathan S Anklesaria Aiyar.

RESOURCE CENTRE

The Centre maintains a library of several thousand books, publications of a large number of public policy research institutes and computers with internet access. It is open to the public for use but borrowing privileges require membership. The Centre plans to open similar resource centres throughout India.



B R Shenoy
1905-1978

Born in village Ballicoth near Mangalore, B R Shenoy had a brilliant academic record, topping his Master's batch in the faculty of arts at Benares Hindu University. After completing his M Sc (Economics) from the London School of Economics, he taught at Poona, Ahmedabad, Kollagur and Colombo. He then worked with the Ceylon government as Commissioner of Currency, and Economic Adviser, Department of Commerce and Industry.

From 1945 to 1953, he was with the Reserve Bank of India as Director of rural economics and monetary research. For a year, he served on the Board of Directors of the Bombay Bullion Exchange while working as an Alternate Executive Director of the IMF and World Bank.

In 1954, he became a professor at Gujarat University. This was also the year when, as a member of the panel of economists advising the government, he wrote his famous one-man Minute of Dissent to the Second Five-Year Plan proposal. For the rest of his life, he wrote prolifically in newspapers and journals advocating a free market, and lecturing at academic and industry forums.

THE MAN WHO SAW INDIA'S TOMORROW

Events do tend to overtake us, sometimes overwhelm us. But if our thoughts and actions are grounded in strong principles, we will not get swept away by the tide. In this book, a compilation of writings by liberal economist B R Shenoy, the reader gets one more chance to revive the fundamentals, to remember that logical economic theory must form the basis of all policy.

They say the world is changing very fast. But thinkers and philosophers know that the more things change, the more they remain the same. An economy's growth should always be based on savings, a country like India which was underdeveloped in 1932, when Shenoy began writing, is still at the developing stage. Those who are concerned about the way the economy is moving might like to develop their own understanding of the global economy, based on the economic principles laid out in this book.

The author was uniquely placed, because of his years in academics and government, and in international financial institutions to analyse data as they were put out, and to question the formulations of even such contemporary greats as John Maynard Keynes.

Price: Rs 150
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