CAPITAL, VAM AND WAGES

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FOREWORD

THIS short study on "CAPITAL, VAM AND WAGES" is of great ideological value to the Trade Union movement and the working-class.

The Indian bourgeoisie, like its class-brothers anywhere else and their intellectual apologists always accuse the working class that its productivity is not growing, that its wage-costs are rising, that the savings and accumulation of capital in the pipelines of economy are not growing and hence the national economy and people's interests are suffering.

These accusations against the working-class, the trade union movement and its struggles are nothing new. And the AITUC, as the prime class organisation of the workers, has been refuting these bourgeois accusations and the socalled science of economics behind them.

For some time past the AITUC has paid particular attention to the concept and measurement of VAM (Value Added by Manufacture) in order to answer the arguments of the bourgeoisie and expose their growing exploitation of the working-class in the capitalist structure in India and especially in its monopoly sphere. The concept and the volume of VAM is a powerful weapon in the ideology of the class-struggle waged by the working-class in India under the leadership of the AITUC.

The VAM produced by the workers' labour power and the falling share of the production-workers' wages in the total VAM, the terrific rate of exploitation of the worker at the hand of capital has been measured, quantified and scientifically argued in this booklet which Comrade Raza Ali undertook to do at our request. We need not repeat the salient conclusions drawn by him from the statistics as are available today in this field.

A further development of this subject, as more statistical material becomes available, can be undertaken at a later stage.

New Delhi —**AITUC**
20th January 1972.

PREFACE

THE present paper deals with an as yet small but key sector of our economy — the manufacturing industries. It analyses the movements in the productive capital, the manufacturing product and its components — inputs, labour costs and gross profit margin, the last two being the value added by manufacture. It studies certain critical indicators of the productivity of labour and capital from various angles, and draws certain indicative conclusions.

As this investigation of trends in India's manufacturing industries is based chiefly on the Census of Manufacturing Industries (CMI) data covering the 1949-1958 period, and the Annual Survey of Industries (ASI) data covering the 1960-1964 period, and as the main tables were compiled and computed at varying intervals while the actual writing was done in November 1971, the ten-year period and the five-year period corresponding to the CMI and the ASI data have been taken for the purposes of analysis. Further CMI-ASI data upto 1965 have been published only recently, and could not be used.

However, the present study does show that while, on the one hand, the process of capital expansion has been going on at a brisk pace and the productivity of labour has been increasing, on the other hand, the rate of capital expansion has been constantly overstepping the rate of increase in value added and the cost of production has been rising in Indian industries — threatening to retard the growth of production and even the process of industrialisation on the whole. The causes of these contradictory trends can be seen in (a) the rise of monopoly in the development of capitalism in India right at the onset of industrialisation, (b) the failure of government economic policies (industrial, fiscal and monetary), and above all, the inability of

the public sector, to give the required orientation to the process of industrialisation, (c) the building up of inflationary pressures in the economy.

There is therefore a crying need for appropriate government measures and social sanctions to check these adverse trends in the country's manufacturing industries so that this sector is not permitted to be used for amassing monopoly profits and for speculative purposes, but is made to play the role to which it is called upon in the interests of the country's economy.

New Delhi,
3rd December, 1971.

Raza Ali.

I

Overall Trend of Economic Development

IN INDIA, industrial development has been proceeding along capitalist lines for the past two decades. Our country is now sometimes called an agrarian-industrial country. But that is not a sufficient reason for self-complacency, because this development has been proceeding haltingly, bringing in its fold serious difficulties for the country and many hardships for the people which could and should be avoided.

A look at the net domestic product by industry of origin can show us the direction of India's economic development.

TABLE No. I - 1

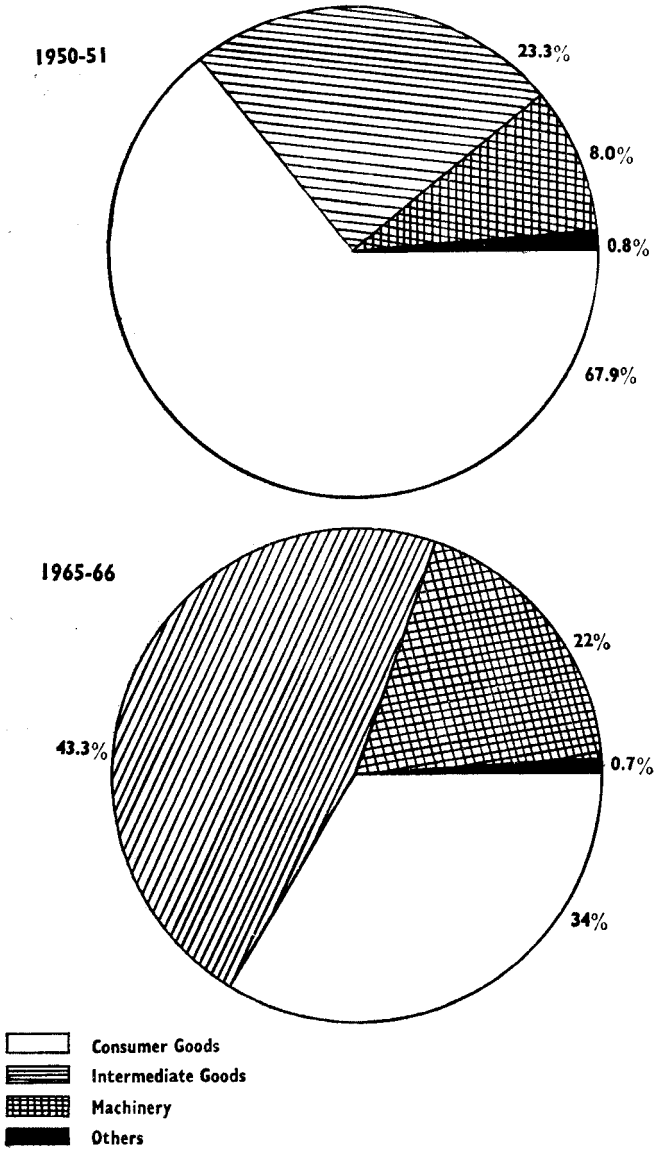
Net Domestic Product by Industry of Origin

(Current prices in Rs. Crores)

	1960-61	1965-66	Increase
Total Net Domestic Product	13,525 (100)	21,228 (100)	+1.56
Agriculture	6,954 (51.4)	10,202 (48.0)	+1.48
Industry	2,694 (19.9)	4,445 (21.0)	+1.65

The above table shows that between 1960-61 and 1965-66, the growth in the share of industry has been faster (1.65), than the

Structural Transformation of Indian Industries : Share of value added by different Sectors



growth in share of agriculture (1.48) or even the total growth of the net domestic product (1.56). The change in the relative proportions of industrial and agricultural sectors in this period has been from 19.9 per cent and 51.4 per cent to 21 per cent and 48 per cent respectively.

Together with industrial development a structural transformation of Indian industries has also been taking place. Table I - 2 shows the changes that have been taking place in the structure of Indian industries as reflected in the net value added produced in their three main groups, namely: (1) consumer goods, (2) intermediate goods, (3) machinery producing goods:

TABLE No. I - 2

Structural Transformation of Indian Industries[1]

Industries	Net value added at 1960-61 prices in Rs. Crores		Percentages	
	1950-51	1965-66	1950-51	1965-66
1) Consumer Goods	260.7	487.6	67.9	34.0
2) Intermediate Goods	89.5	620.2	23.3	43.3
3) Machinery	30.9	315.9	8.0	22.0
4) Others	3.1	10.3	0.8	0.7
Total	384.2	1,434.0	100.0	100.0

We thus see that between 1950-51 and 1965-66, while the share of consumer goods industry in the net value added by all industries decreased by about 50 per cent (from 67.9 per cent to 34.0 per cent), that of intermediate goods industry almost doubled (from 23.3 per cent to 43.3 per cent) and the share of machinery almost trebled (from 8 per cent to 22 per cent).

Hence, the trend of industrialisation in Indian economy is evident.

But it is also evident that this development has been proceeding quite haltingly.

For, in 1968-69 also the agricultural sector was still accounting for almost 50 per cent of the net domestic product while the industrial sector was marking time around 20 per cent[2]. Moreover, a review of industrial production for the 1961-70 period[3] reveals that whereas the growth rate of industrial product in the first quinquennium (1961-65) has been 10.8 per cent, in the second quinquennium (1966-70) it dropped down to 3.8 per cent only.

The growth rate of steel production tumbled from 17 per cent during the first half of the decade, to only 0.2 per cent during the second half. The corresponding fall for the average annual rate of production of capital goods was from 29 per cent to 5 per cent. Growth rate of the intermediate goods industries also fell from 8 per cent to 2 per cent per annum.

In the consumer goods industries group while the average annual growth rate of production of consumer non-durable goods industries declined from 4.1 per cent in the first half of the decade to 3 per cent in the second half, the average annual growth rate of production of consumer durable goods industries actually registered a rise from 13.3 per cent to 17.3 per cent for the corresponding periods. The latter has been the only significant exception to the overall declining trend in industrial production between the two halves of the seventh decade, despite consecutive bumper harvests during the second half of the decade.

Such a recessional crisis in industry cannot but seriously retard the whole process of industrialisation, particularly of a country which is at the initial stages of this process and has a long way to travel. It cannot but lead to a further increase in unemployment and throw further burdens on the people. It is indeed generated by the contradictions of the capitalist path of development with monopoly development having made serious inroads into the spheres of production and circulation.

While an investigation of the whole process of industrialisation is beyond the scope of the present study, an attempt, however, is being made to investigate some main trends in India's selected manufacturing industries covered by the Census of Manufacturing Industries (CMI) and the Annual Survey of Industries (ASI) for the 1949-1964 period. (See Appendix I)

II

Value Added and Surplus Value

FOR STUDYING various trends in production, the productivity of capital and of labour over a given period, an extensive use is made of the concept of value added and its derivatives. Many such studies concerning India's Manufacturing Industries have been appearing from time to time.

Marx had developed the concept of surplus value and its derivatives, the rate of surplus value, the rate of profit etc. for investigating the processes of capitalist production.

A study of trends in manufacturing industries based on the Marxist concept of surplus value is not merely of an ideological or academic interest. It provides a deeper understanding of these trends. Moreover, as it will be seen from the following considerations quantitatively the return to capital (or gross profit margin) and surplus value are identical. It means that although bourgeois economic schools have by and large rejected Marx's conception of the separation of capital into its constant and variable components as well as his theory of surplus value, nevertheless they have been forced to accept the concept of value added which is based in fact upon the separation of the newly introduced value in the process of creation of the finished product, and is obtained by subtracting the transferred value of the means of production from the total value of the product.

So, Value Added by Manufacture (VAM) is defined as "...that part of value of products shipped actually created within a given industry". It is calculated "by subtracting the cost of materials, supplies, containers, fuel, purchased electrical energy and contract work from the value of shipments."[4]

Hence, if R be the total cost,
Cm the cost of materials,
Cf the cost of fuel etc.,
Cs the cost of services purchased from other units and
Cd the provision for depreciation.
then V the value added is given by the equation;

$$V=R-(Cm+Cf+Cs+Cd) \quad \text{(i)}$$

But,
If Cl be the total labour cost,
& Ck the total return to capital,
then $V=Cl+Ck$ also (ii)
Therefore $Ck=V-Cl$
or $Ck=[R-(Cm+Cf+Cs+Cd)]-Cl$ (iii)

Now, Marx separated that part of capital which is transferred into the means of production — i.e. raw materials, auxiliary materials, tools of production consumed — from that which is transferred into labour power. The value of the means of production reappears in the product, i.e. transferred to the finished product so that no new value arises from it. But the case is different with that part of the capital which is transformed into labour power and in the process of production creates new value; it reproduces its own equivalent and on top of it a surplus — the surplus value.

On this basis, Marx developed his method of calculating the surplus value and the rate of surplus value as follows:

"We take the total value of the product and put the constant capital which merely reappears in it, equal to zero. What remains is the only value that has, in the process of producing the commodity been actually created. If the amount of surplus value be given, we have only to deduct it from this remainder to find the variable capital. And **vice versa,** if the latter be given, and we want to find the surplus value. If both be given we

have only to perform the concluding operation, viz. to calculate s/v, the ratio of the surplus value to the variable capital."[5]

Hence, if R be the total value of the product,
c the constant capital
v the variable capital,
s the surplus value,

then, $R-c=v+s$ (iv)

But, by definition,

$c=Cm+Cf+Cs+Cd$

and $v = Cl$

Therefore, from equations (i) and (iv),

$V=v+s$ (v)

$=Cl+s$

or $s = V-Cl$

$=Ck$ (vi)

from equation (iii).

Hence, quantitatively, the total return to capital is the same as the surplus value.

The ratio of the total return to capital to the total labour cost (Ck/Cl), i.e. the total return to capital per unit of wages, becomes the same as the rate of surplus value which is the ratio of the surplus value to the variable capital, and hence expresses the degree of exploitation of labour power.

Furthermore, gross profit margin is defined as "gross profits as a percentage of value added". And the share of gross profits in value added is considered as the complement of the percentage share of wages — "100 minus percentage share of wages".[6]

Hence, **Gross profit margin** is quantitatively equal to surplus value, and the ratio of gross profit margin to wages is the same as the rate of surplus value.

III

Structural Changes in Productive Capital

A SUBSTANTIAL expansion of productive capital has been taking place in India's large-scale industries on the whole during the period under review. While in 1946, productive capital amounted to about Rs. 366.8 crores, it was Rs. 509.5 crores in 1949, and reached to Rs. 1,214.7 crores by 1958. In 1960 it totalled to Rs. 1,999.5 crores and continued to expand, reaching to Rs. 5,275.6 crores by 1964. This means that whereas the productive capital increased by 138 per cent during the 1949-58 period, its growth gathered momentum in the subsequent 1960-64 period, the corresponding increase being 164 per cent, as can be seen from Table No. III-1.

The same table shows the expansions in the components of productive capital, namely fixed capital and working capital.[7] Between 1949 and 1958, fixed capital increased from Rs. 227.6 crores to Rs. 631.1 crores — an increase of about 177 per cent. In the subsequent 1960-64 period it jumped from Rs. 1,286.6 crores to Rs. 3,797.2 crores — a rise of over 195 per cent.

As for the working capital, the increase in the 1949-58 period has been from Rs. 281.9 crores to Rs.583.6 crores, or about 107 per cent. Between 1960 and 1964, working capital increased from Rs. 712.9 crores to Rs.1,478.3 crores or by 107 per cent again.

Thus it can be seen that the total amount of fixed capital has substantially expanded in Indian industries — much faster than

II

Productive Capital And Its Components

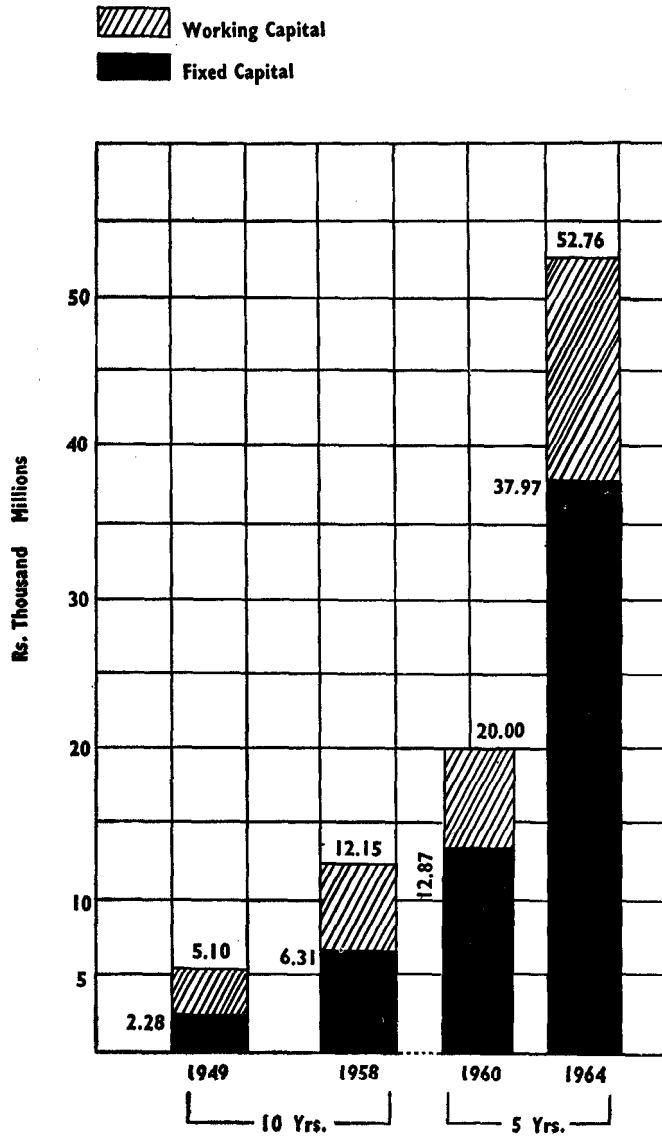


TABLE No. III-1

Productive Capital in Manufacturing Industries

Year	(Amount in Rs. '000) Total Productive Capital	Fixed Capital	Working Capital	Index (Base 1946 = 100) Productive Capital	Fixed Capital	Working Capital
1946	3,668,337	1,633,593	2,034,744	100	100	100
1949	5,095,796	2,276,289	2,819,507	138.7	139.3	138.6
1952	7,298,851	3,002,757	4,296,094	199.0	183.8	211.1
1955	8,619,708	3,984,810	4,634,498	235.0	243.9	227.8
1958	12,147,267	6,310,649	5,836,618	331.1	386.3	286.8
1960	19,995,367	12,866,299	7,129,068	545.1	787.6	350.4
1961	23,741,508	14,742,613	8,998,895	647.2	902.5	442.3
1962	34,368,176	23,200,596	11,167,580	936.9	142.2	548.8
1963	40,752,795	27,838,205	12,914,590	1,110.9	1,704.1	634.7
1964	52,756,276	37,972,886	14,783,390	1,438.2	2,324.5	726.5

Source : See Appendix I.

the whole productive capital — whereas working capital has been increasing at a much slower and even pace.

A better picture of the structural changes in productive capital is obtained from Table No. III-2.

TABLE No. III-2

Movement in the Structure of Productive Capital

Year	Productive Capital	Fixed Capital	Working Capital
1946	100	44.5	55.4
1949	100	44.6	55.3
1952	100	41.1	59.8
1955	100	46.2	53.7
1958	100	51.9	48.1
1960	100	64.3	35.6
1961	100	62.0	37.9
1962	100	67.5	32.4
1963	100	68.3	31.6
1964	100	71.9	28.1

From the above table we see that initially the share of working capital was higher than that of fixed capital in the total productive capital — being 55.4 per cent and 44.5 per cent respectively in 1946. But with time, or rather with the development of industries, the share of fixed capital in the productive capital went on increasing and by 1958 it was already greater than the share of working capital — being 51.9 per cent and 48.1 per cent respectively.

The structure of the productive capital thus changed qualitatively, signifying the onset of industrialisation.

From 1961 onwards there has been a sharp rise in the share of fixed capital — and correspondingly a sharp fall in the share of working capital — in the total productive capital which has been growing steadily. This trend cannot be explained merely by the inclusion of a large number of industries in the Annual

Survey of Industries data from 1959 onwards. For, even if we take the increases in the absolute amounts of productive capital and its components fixed capital and working capital from 1949 to 1964, we find that whereas productive capital increased ninefold (935.4 per cent), fixed capital increased more than fifteenfold (1568.7 per cent) and working capital only fourfold (by 424.1 per cent).

Therefore, bulk of the increase in the fixed capital and the change in the structure of the productive capital have been due to :

(i) Substantial additions to new investments during the second and the third plan periods.

(ii) Substantial investments have been in capital-intensive industries.

(iii) The process of deepening of capital has been continuing in Indian industries at a fair pace.

How the production capacities generated in this process of industrialisation have been put to use, and to what extent they have been put to use are questions worth investigating into.

IV

Manufacturing Product

EXPANSION in the productive capital, and particularly, increasingly heavier investments in the fixed capital have led naturally to increasing outputs in manufacturing industries. Growth of the gross output has been faster after 1959 due to heavy capital expansion, as mentioned earlier.

From Table No. IV-1 we find that whereas between 1949 and 1958 (a period of ten years) gross output increased from about Rs.976.1 crores to Rs.1,711.3 crores i.e. by about 75 per cent — the increase during the subsequent five years (1960-64) has been faster — from about Rs. 3,150.4 crores to Rs. 5,627.2 crores or about 78 per cent.

But all of it cannot be attributed to a better performance of industries because we find that if the general price index (wholesale, base 1952-53=100) rose by 7.1 per cent during the earlier ten-year period (1949-58), it shot up by as much as 20.6 per cent (from 122.9 to 148.3) in the course of five years (from 1960 to 1964). Which means a 195 per cent increase in the fixed capital resulted in a 78 per cent increase in the gross output of which 20.6 per cent was due to price rise.

Even granting the fact that capital-intensive industries have a long gestation period, and the fifteenfold growth in fixed investments was due to the initial momentum of the process of industrialisation, a barely fivefold increase in the gross output corresponding to a ninefold expansion in the productive capital with about 43 per cent of the achievement contributed through price rise (between 1949-64 general price index — whole-

III Manufacturing Product

Rs. Thousand Millions

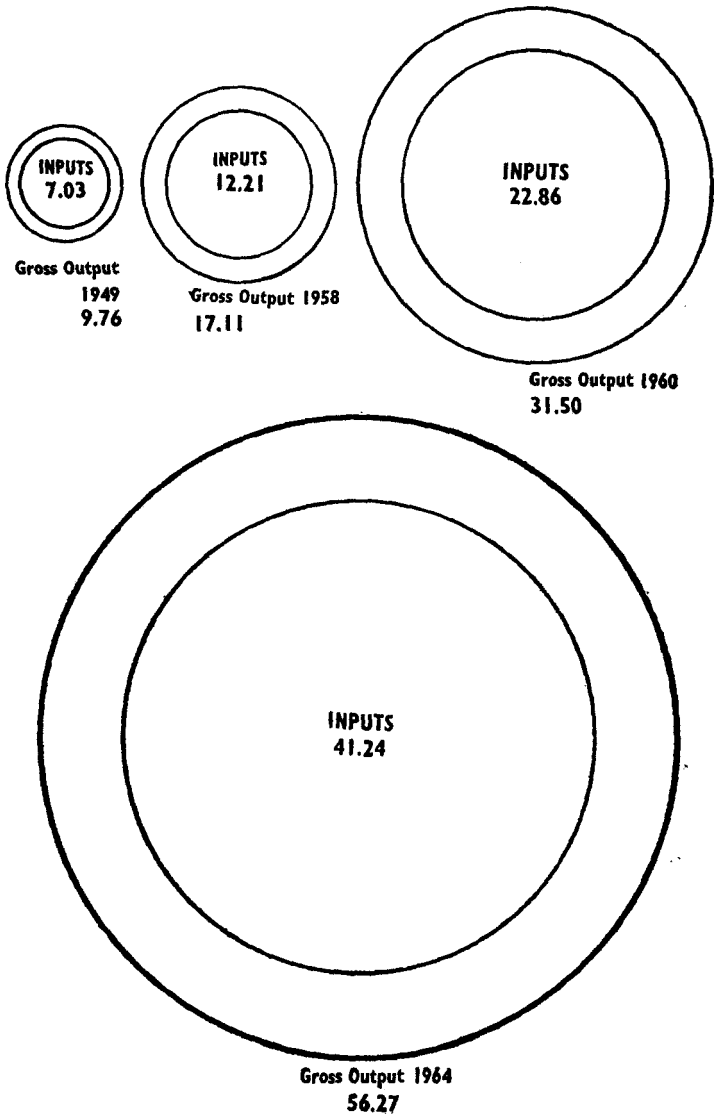


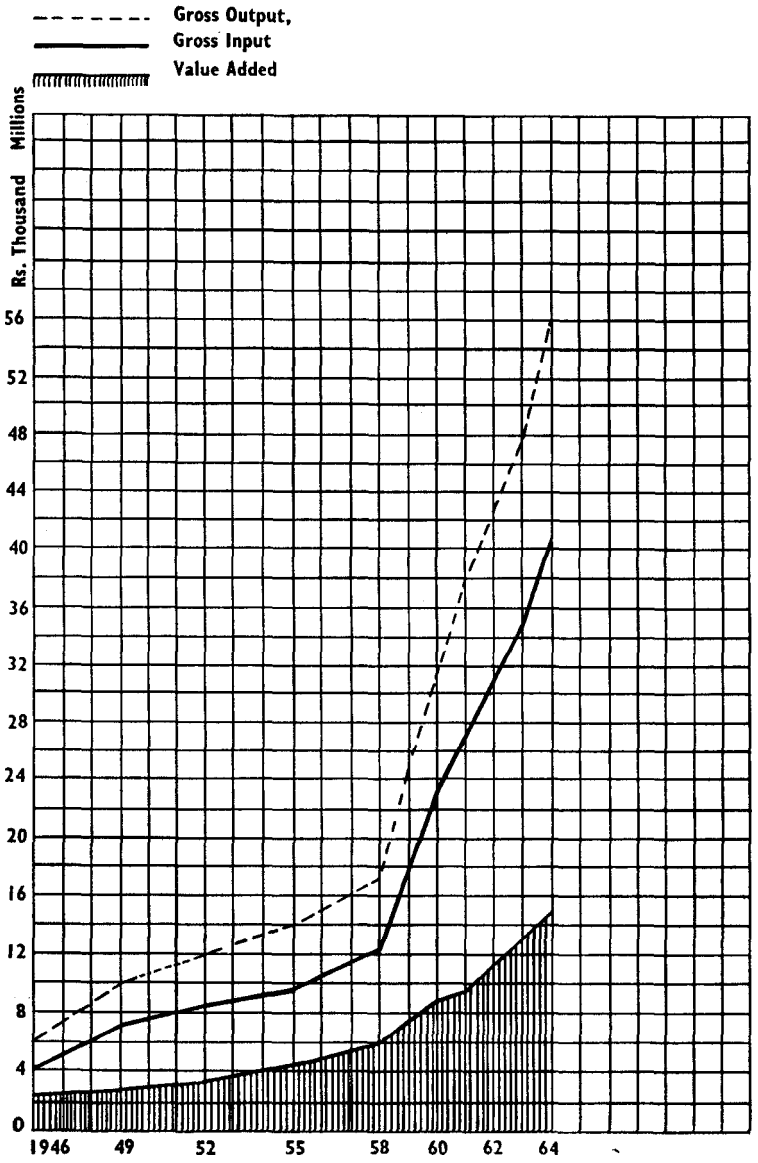
TABLE No. IV-1.

Structure of the Manufacturing Product.

(In Rs. thousand)

Year	Gross output	Gross input	Wages, salaries and benefits of all employees	Workers' wages	Total return to capital or surplus value	
					Net of wages, salaries and benefits of all employees	Net of workers' wages and benefits
1	2	3	4	5	6	7
1946	6,028,649	3,914,517	1,081,049	819,136	1,096,083	1,294,996
1949	9,760,692	7,033,751	1,771,883	1,453,349	955,058	1,273,592
1952	11,829,611	8,679,792	2,006,414	1,626,302	1,143,405	1,523,517
1955	14,061,027	9,866,488	2,311,449	1,752,370	1,883,090	2,442,169
1958	17,113,416	12,214,572	2,681,223	1,949,978	2,217,621	2,948,866
1960	31,503,766	22,860,025	4,815,594	3,423,592	3,828,147	5,220,149
1961	36,933,277	27,054,187	5,357,309	3,868,539	4,521,781	6,010,551
1962	41,764,549	30,608,477	6,278,551	4,423,292	4,877,521	6,732,780
1963	47,993,051	35,036,144	7,016,899	4,871,638	5,940,008	8,085,269
1964	56,272,176	41,237,060	8,295,133	5,480,955	6,739,983	9,554,161

IV Movement in the structure of Manufacturing Product



sale — has risen from 103.6 to 148.3), is surely not a performance for our industrial magnates to be very proud of.

Besides the output and input figures, Table No. IV-1 gives data regarding the total labour cost i.e. wages, salaries and money-value of benefits of all employees as well as workers' wages separately. On the basis of these data, total return to capital (or gross profit margin or surplus value) has been calculated from the value added twice — (i) as net of wages, salaries and benefits of all employees (i.e. what is called the total labour cost), and (ii) as net of the production workers' wages and benefits given separately in the CMI-ASI data.

Let us first take the total labour cost figures and study the movement in the value structure of the product (Table No. IV-2).

TABLE No. IV-2

Movement in the Value Structure of the Product—I

Year	Gross output	Gross input	Wages, salaries & money value of benefits of all employees	Return to Capital
1946	100	64.9	16.8	18.1
1949	100	72.0	18.1	9.8
1952	100	73.3	16.9	9.6
1955	100	70.1	16.4	13.3
1958	100	71.3	15.6	12.9
1960	100	72.5	15.2	12.1
1961	100	73.2	14.5	12.2
1962	100	73.2	15.0	11.6
1963	100	73.0	14.6	12.3
1964	100	73.2	14.7	11.9

It is indeed a baffling picture — While the share of total return to capital shows a falling tendency, the share of the capital outlay (inputs plus labour cost) has a correspondingly rising

tendency. Why then is a capitalist interested in producing anything at all? If the share of gross profit margin is going down, where will he find the capital in the industry to invest?

Moreover, the sum of total return to capital and total labour cost is the value added by manufacture which is industry's contribution to the country's national income. It means, therefore, that this contribution — the rise in the absolute amount of value added — is being made actually at an enormous cost to the nation.

If we study the value structure of the product by taking production workers' wages, and the total return to capital (gross profit margin) as the value added minus those wages, we get the following picture (Table No. IV-3).

TABLE No. IV-3

Movement in the Value Structure of the Product—II

Year	Gross output	Gross input	Wages and benefits	Gross profit margin or surplus value
1946	100	64.9	13.5	21.4
1949	100	72.0	14.8	13.0
1952	100	73.3	13.7	12.8
1955	100	70.1	12.4	17.3
1958	100	71.3	11.3	17.2
1960	100	72.5	10.8	16.5
1961	100	73.2	10.4	16.2
1962	100	73.2	10.5	16.1
1963	100	73.0	10.1	16.8
1964	100	73.2	9.7	16.9

Now, from Table No. IV-2 we see that in 1949, Rs. 100 of gross output required Rs. 72 of gross inputs and Rs. 18.1 of total labour cost — i.e. Rs. 90.1 of total capital outlay which gave about Rs. 9.8 of return to capital. In 1958, Rs. 100 of gross output required Rs. 71.3 of gross inputs and Rs. 15.6 of total

labour cost — i.e. Rs. 86.9 of total capital outlay which yielded about Rs. 12.9 of return to capital. Taking the whole period of 1949-58, the overall tendency appears to be a decreasing share of gross inputs, and labour cost, and an increasing share of return to capital in the gross output.

The pattern changes after 1959 — i.e. with the inclusion of more groups of industries in the CMI-ASI data and the impact of industrial development. Whereas in 1960, Rs. 100 of gross output required Rs. 72.5 of gross inputs and Rs. 15.2 of labour cost — i.e. Rs. 87.7 of capital outlay which yielded about Rs. 12.1 of return to capital, by 1964 Rs. 100 of gross output required Rs. 73.2 of gross inputs and Rs. 14.7 of labour cost to yield Rs. 11.9 of return to capital. This means that there appeared a rising tendency in the costs of gross inputs and falling tendencies both in the labour costs as well as in the return to capital.

But if only production workers' wages and benefits are separated from the value added and the salaries and benefits of the employees other than workers are allowed to remain in the gross profit margin, we get a better picture of the dynamics of the value structure of the product. Apart from the fact that such a procedure brings the value structure of the product closer to the Marxian model:— $R=c+v+s$ — a study of the ratios of wages to value added and of salaries and benefits of employees to value added will show that a substantial part of the latter be better considered under gross profit margin. (See Chap. VI — Wages and Earnings).

So turning to Table No. IV-3 we find that whereas in 1949, Rs. 100 of gross output was achieved with Rs. 72 of gross inputs and Rs. 14.8 of wages leaving a gross profit margin of Rs. 13, in 1958 Rs. 100 of gross output required an expenditure of Rs. 71.3 on gross inputs and Rs. 11.3 on wages, yielding Rs. 17.2 of gross profit margin or surplus value.

Hence in the 1949-58 period, there has been a falling tendency in the share of gross inputs and in the share of wages (i.e. in the

share of capital outlay) and a correspondingly rising tendency in gross profit margin (i.e. in the share of surplus value).

After 1959, the pattern of change in the value structure of the product has been as follows: in 1960, the proportions gross input: wages : gross profit margin in the gross output were 72.5 : 10.8 : 16.5. In 1964 their proportions were 73.2 : 9.7 : 16.9. It means increases in the portion of gross inputs and that of gross profit margin have been taking place at the expense of a decrease in labour's share (wages) in gross output.

It was not, therefore, the share of production workers' wages in the value of the product, but the expenditure shown under the head of "salaries and benefits of employees other than workers", which was responsible for showing a falling tendency of the return to capital in the post-1959 period as seen in Table No. IV-2. We shall take up that question in more details later on, after looking into the structure of gross inputs which appear to be increasing even faster than the gross output in Indian Manufacturing Industries.

V

Gross Inputs

THE PROCESS of large-scale production implies bigger outlay which means greater volume of gross inputs with respect to the labour costs. As Marx had pointed out, when the production is on a large scale "Constant capital greatly outweighs the variable, or... the living labour-power it employs is small compared to the mass of the means of production which it operates."[8]

But it also implies — due to advanced technology and increased productivity — what Marx called "cheapening of elements of constant capital," which sees to it that the output/input ratio (the production function) does not show a falling tendency.

Marx wrote... "With respect to the total capital... the value of the constant capital does not increase in the same proportion as its material volume. For instance, the quantity of cotton worked up by a single European spinner in a modern factory has grown tremendously compared to the quantity formerly worked up by a European spinner with a spinning-wheel. Yet the value of the worked up cotton has not grown in the same proportion as its mass. The same applies to machinery and other fixed capital. In short, the same development which increases the mass of the constant capital in relation to the variable reduces the value of its elements as a result of the increased productivity of labour, and therefore prevents the value of constant capital, although it continuously increases, from increasing at the same rate as its material volume, i.e. the material volume of the means of production set in motion by the same amount of labour power."[9]

What one finds in India's large-scale industries is not simply the increase in the volume of gross inputs nor the increase in the share of gross inputs in the constantly increasing capital outlays. It is the falling tendency in the output/input ratio that should give cause for concern. (Table No. V-1).

TABLE No. V-1

Output/Input Ratio

1946	..	1.54	1960	..	1.37
1949	..	1.39	1961	..	1.362
1952	..	1.36	1962	..	1.364
1955	..	1.43	1963	..	1.366
1958	..	1.40	1964	..	1.364

If we take the increases in the absolute amounts of outputs and inputs during the period 1960-64 (from Table No. IV-1) we find that whereas the outputs increased by 78 per cent, the value of inputs rose by 80 per cent.

Another study covering the 1959-65 period conveys the same story. While the value of output increased from Rs. 2,691 crores to Rs. 6,420 crores (138.6 per cent) and the value added increased from Rs. 759 crores to Rs. 1,687 crores (122.3 per cent), the value of inputs increased from Rs. 1,932 crores to Rs. 4,733 crores (i.e. by 145 per cent) in that period. Even the percentage rises in 1965 over 1964 have been 14.1 per cent, 12.2 per cent and 14.8 per cent respectively.[10]

What explanation can there be for such high values of gross inputs and for the falling output/input ratios ?

Table No. V-2 gives a breakdown of gross inputs in terms of its main components : (i) materials consumed, (ii) fuel, electricity, lubricants etc., consumed, (iii) work done by other concerns, and (iv) other inputs.

In 1949 gross inputs consisted of 92.45 per cent of raw materials, 4.76 per cent of fuel, electricity, lubricants, etc., 0.46 per

cent was the share of work done by other concerns and 2.32 per cent were other inputs. By 1958 raw materials accounted for 89.03 per cent of gross inputs while the shares of other components were 6.24 per cent, 0.83 per cent and 3.90 per cent respectively.

The 1960-64 figures further accentuate the trends noticeable in the 1949-58 period. While the percentage of raw materials kept on declining (from 82.98 per cent in 1960 to 78.60 per cent in 1964), the percentage of other components of gross inputs kept on rising: expenditures on fuel, electricity, lubricants etc. rose from 6.28 per cent to 7.01 per cent; work done by other concerns increased from 1.24 per cent to 1.42 per cent; and other inputs increased from 9.51 per cent to 12.97 per cent.

Thus we see that while the volume of materials consumed per unit of total inputs has been decreasing, the volumes of its other components, namely fuel, electricity, lubricants etc., the work-done by other concerns, and other inputs have been correspondingly increasing.

These trends are further strengthened after 1959 with the inclusion of more groups of industries in the ASI data and the advance of industrialisation. Greater consumption of power and lubricants, as well as other inputs, and a greater share of work done by other concerns indicate the advance and progressive specialisation in industrial activity.

The disturbing fact however is that this process has not depressed the costs of gross inputs while increasing their volume.

Not only the prices of raw materials have continued to rise, more than offsetting any cost advantage due to the decrease in their share of total inputs, but even the cheaper costs of all the rest of the inputs which must have resulted from higher technology, specialisation and productivity are conspicuous by their absence in the total cost of gross inputs and in the production function (output/input ratios).

It may be argued that depreciation factor has not been taken up separately. In the above analysis provision for depreciation

has been included under "other inputs". In the 1960-64 period, it accounted for approximately 40-45 per cent of "other inputs" i.e. about 5-6 per cent of gross inputs (Rs. 212 crores in 1963 for instance). But bearing in mind the fifteenfold increase in the fixed capital for a fivefold (475 per cent) increase in gross outputs and the ample literature on idle capacities in Indian industries, it can be safely concluded that a substantial part of the depreciation charges is, in the final analysis, consumer's bonus to the factory owner for keeping his machinery idle and workers on the streets.

TABLE No. V-2

Movement in the Structure of Gross Inputs

Year	Gross inputs	Materials consumed	Fuel, electricity, lubricants etc. consumed	Work done by other concerns	Other inputs
1	2	3	4	5	6
1946	100	90.93	5.93	0.21	2.93
1949	100	92.45	4.76	0.46	2.32
1952	100	92.01	5.10	0.51	2.39
1955	100	91.11	5.20	0.83	2.86
1958	100	89.03	6.24	0.83	3.90
1960	100	82.98	6.28	1.24	9.51
1961	100	82.60	6.29	1.10	10.02
1962	100	79.84	6.89	1.25	12.02
1963	100	78.50	7.46	1.34	12.69
1964	100	78.60	7.01	1.42	12.97

So it is not the machinery that is responsible for higher costs of inputs, but the lack of its full use which is serving as a contributory factor in keeping the costs of inputs high and in preventing the volume of outputs from rising and prices from going down.

When compensation for the services of capital (as 10 per cent return to capital) was also added to the non-capital costs (i.e. all

costs other than the return to capital) and their ratios to total receipts as well as to value added were worked out, the conclusion reached was:— "that average non-capital cost plus normal profit per unit of gross output and net output registered a sharp increase in the period studied."[11]

Hence we find that despite industrial progress, the average cost of production is rising in Indian Industries.

What is the mechanism by which the average cost of production is kept rising? The question requires thorough investigation. But to all accounts, it is the building up of inflationary pressures and the existence of monopoly prices apart from other factors such as excess capacities, fluctuations in the agricultural sector etc., which are keeping particularly the costs of "other inputs" high, and preventing the costs of gross inputs from going down with respect to their volume.

As Gadgil has remarked "That in India the most important prices in relation to products and services of modern large, organised business are **administered** may be taken to be an established fact."[12]

And how does a monopoly price behave?

Says Paul Samuelson: "Under oligopoly price tends to stay firm with output taking up the great variation... Plants stand idle, and the product is not cheapened, in the hope of coaxing out new quantity demanded. This downward inflexibility of "administered" (or named) prices, many economists fear, adds to the danger of creeping inflation. Why? Because if prices and costs rarely ever fall, there is but one way for the price index to go." [13]

Besides, given the phenomena of inter-locking, "proliferation" and production-wise concentration in different industries, the high profit margins of the industries manufacturing inputs other than materials consumed (resulting from higher productivity, prices being at best constant or at worse rising) get hidden as

costs of gross inputs and depress the total return to capital in industries having a much bigger weightage in the whole manufacturing sector — successfully cheating on taxes the exchequer in the bargain.

VI

Wages and Earnings

IN ANY discussion concerning production and costs, it has become almost a custom to put the blame on workers' wages along with material costs for the upward-moving price index. It has also become a custom to assume that wages and productivity keep increasing in consonance. Indeed, Keynesians find fault with Marx for being doubtful about it. Yet another common practice is to take the entire amount that is given under labour costs for determining workers' share in the value added or labour productivity.

Let us see how far such practices are justified.

From Table No. VI-1 we find that between 1949-1958, the total number of workers engaged in the manufacturing industries under study increased by 5 per cent (from 109.8 to 115.3), while the number of rest of the employees increased by 35.4 per cent (from 127.9 to 173.2). But the share of workers' wages and benefits in the value added decreased by 25.3 per cent (from 53.3 per cent to 39.8 per cent) while the share of the salaries and benefits of the rest of the employees in the value added increased by 9.4 per cent (from 10.6 per cent to 11.6 per cent).

The share of all earnings — i.e. workers' wages and benefits plus the rest of the employees' salaries and benefits — or what is termed as the share of total labour cost in value added decreased from 65 per cent to 54.7 per cent (i.e. by 15.8 per cent) in that period.

Between 1960-1964, the number of workers increased by 26 per cent (from 186.1 to 234.6) while the number of other em-

ployees increased by 68.2 per cent (from 253.9 to 427.2). But the share of workers' wages in the value added fell from 39.6 per cent to 36.5 per cent (i.e. by 7.8 per cent), while the share of other employees' salaries and benefits went up from 11.4 per cent to 13.7 per cent (i.e. by as much as 20.2 per cent).

The share of all earnings (i.e. the "total labour cost") in the value added continued to show the downward trend on the whole in this period also.

As regards the ratio of gross inputs at constant prices per worker, it rose by 54.2 per cent in the 1949-1958 period, and further by 18.6 per cent in the 1960-1964 period.

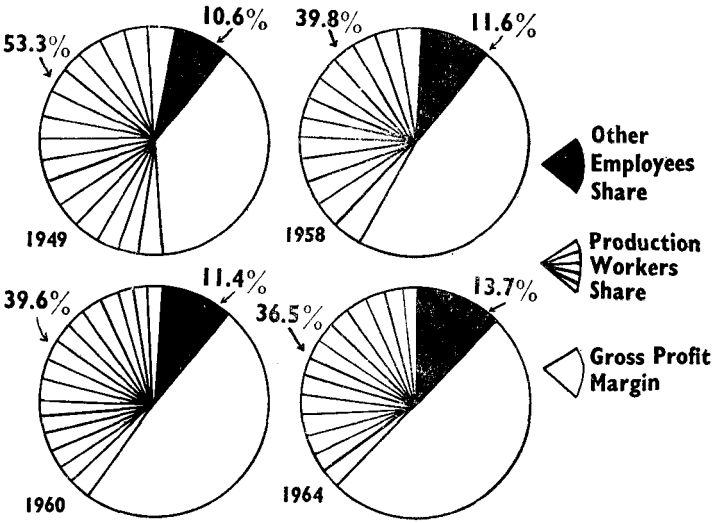
On the whole, from 1949-1964, the number of workers increased by 113.6 per cent, their productivity as measured by the amount of gross inputs per worker at constant prices increased by 91.5 per cent, while the share of their wages in the value added dropped down by 31.5 per cent.

Whereas, the number of employees other than the production workers increased by 234 per cent, the share of their earnings in the value added also increased by 29.2 per cent.

It means, firstly, that the number of employees other than workers is increasing at a much faster rate than the growth in the total number of workers. And their share of earnings in value added is growing still more rapidly than the share of workers' wages which, in fact, is declining.

Now, is this a normal phenomenon connected with the process of industrial development? In U.S. manufacturing industries, (see Appendix II) we find that at an earlier level of industrial development, in the course of 21 years (1909-1929) the number of employees other than production workers increased by 72 per cent, and the share of their earnings in value added increased by 0.9 per cent. The number of production workers in the same period increased by 33.6 per cent and the share of their wages in value added decreased by 9.5 per cent. In a subsequent

VA Workers & other Employees : Share of Value Added



VB Workers & other Employees : Index of growth (base 1946 = 100)

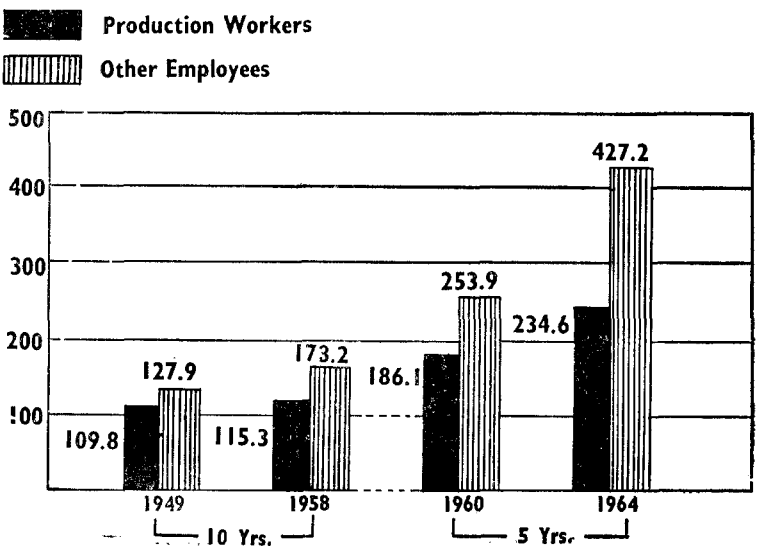


TABLE No. VI-1[14]

Workers and Other Employees : Wages, Earnings and Productivity

Year	Employees other than workers number-index	Workers number-index	Percentage of all earnings to value added (A)	Percentage of non-workers' salaries, benefits etc. to value added (B)	Percentage of workers' wages to value added	Gross inputs (at constant prices) per worker (Rs.)
1	2			3		4
1946 ..	100 (C)	100 (D)	48.1	7.9	38.7	—
1949 ..	127.9	109.8	65.0	10.6	53.3	4460.4
1952 ..	119.6	107.5	63.6	10.7	51.6	5692.1
1955 ..	152.7	114.6	55.1	10.6	41.8	6785.8
1958 ..	173.2	115.3	54.7	11.6	39.8	6878.4
1960 ..	253.9	186.1	55.7	11.4	39.6	7207.5
1961 ..	244.1	197.5	54.3	10.6	39.2	7852.2
1962 ..	298.3	208.2	56.2	11.9	39.6	8333.3
1963 ..	329.6	218.3	54.2	11.9	37.6	8732.8
1964 ..	427.2	234.6	55.3	13.7	36.5	8546.2 (E)
Percentage increase/decrease						
10 yrs. (1949-1958)	+ 35.4	+ 5	−15.8	+ 9.4	−25.3	+ 54.2
5 yrs. (1960-1964)	+ 68.2	+ 26	− 0.2	+20.2	− 7.8	+ 18.6
16 yrs. (1949-1964)	+234	+113.6	−14.9	+29.2	−31.5	+ 91.5

period, from 1947-1965, we find that these trends have not only continued, but become further accentuated.

What strikes the eye however is that Indian industries appear to be far more eager to increase the number of their non-workers, as well as to increase their earnings' share in the value added. It is noteworthy that whereas in the U.S. in the course of 19 years of well-known monopoly development (1947-1965), the share of non-workers' earnings in value added shot up by 49.6 per cent, in India in the course of five years only (1960-1964) the corresponding figure went up by 20.2 per cent, despite the huge gap in their industrial levels.

Evidently, the reasons are:

(a) that the earnings of the top executives in business are increasing quite disproportionately to the level of the economy,[15] and

(b) that our officialdom still continues with that old tradition established by that queer combination of Indian feudalism and British colonialism — an officer and his entourage of chaprasis and clerks and all that. (Perhaps this feature concerns the public sector enterprises more?).

Whatever be the reasons, it is clear that this trend of rapid growth in the share of non-workers' earnings does contribute towards raising the cost of production as part of the capital outlay, and towards depressing the figures for return to capital as part of the value added. But indeed, there are sound reasons to treat at least a considerable portion of this sum under the head of "salaries and money value of benefits of employees other than workers," as profit and hence a portion of the total return to capital (surplus value) which a capitalist is disposing of as it pleases him.

As regards the consonance or otherwise between productivity and wages, we found that if in 1949, a worker was converting Rs. 4460.4 worth of gross inputs into finished product (output) by adding his labour-power, his share in each rupee of value

added was 53.3 paise. But in 1964, when he was converting Rs. 8,546.2 worth of inputs — i.e. 91.5 per cent more in constant prices, otherwise it would be Rs. 12,674 or about 184 per cent! — his share in each rupee of value added came down to 36.5 paise (Table No. VI-1).

Which means that in Indian industries, while the productivity is increasing, share of wages in value added is going down.

And, as we have already seen while discussing the value structure of the product that the gross profit margin (total return to capital) does not show a particularly remarkable rate of growth, the only conclusion that remains to be drawn is that real wages are lagging behind productivity.

A study examining trends in wages, labour productivity and costs of production during 1951-1961 in seven industries of such high concentration as (1) cotton textiles, (2) jute textiles, (3) iron and steel, (4) cement, (5) paper and paper boards, (6) chemicals and chemical products, and (7) sugar, has come to the conclusion that the increase in labour productivity (= 66 per cent) exceeded by a sizeable margin the increase in real wages (= 28 per cent).[16]

In the chemicals and chemical products group of industries, labour productivity increased by 128 per cent; but real wages increased by 68 per cent. In cement industry, labour productivity increased by 199 per cent, while real wages increased by 52 per cent. In the iron and steel industry the respective figures were 32 per cent and 26 per cent.

Hence we find that the much-desired equilibrium between productivity, real wages, and prices, by which many economists swear for a smooth functioning of capitalist production, does not exist in Indian manufacturing industries.

It is worth noting that in the U.S. manufacturing industries, this feature has been associated with the development of monopolies.

For instance, Steindl has observed that "wages in comparison to the value of output tended to decline in concentrated industries, but not in the non-concentrated industries in the period 1923 to 1939."[17]

Or J. Blair has shown that in non-concentrated industries, like textile and furniture, the reduction in price has kept pace with the reduction in labour cost due to technical progress, whereas in concentrated industries (cement, steel, cigarettes), this has not been the case.[18]

It is remarkable that as regards the percentage share of production workers' wages to value added, the similarity between Indian and U.S. manufacturing industires is confined not only to the trend, but extends to its quantitative expression as well (as can be seen by a comparison of Table VI-1 with the Table in Appendix II). Whereas in the United States, during 1947-1965 this share decreased from 40.7 per cent to 31.5 per cent, in India during almost a quarter of that period (1960-1964), it decreased from 39.6 per cent to 36.5 per cent.

While the above facts are indicative of the monopoly trends in Indian industries, they also underline the degree of exploitation of Indian workers who, at their existing living standard are forced to leave out as much share of the return to capital in the value added as in the United States to the owners of the means of production.

VII

The Rate of Surplus Value

SO FAR we have operated with the concept of value added as it is accepted in practically all current economic statistics — i.e. as the sum of labour costs and the total return to capital (or gross profit margin), and determined by the difference between the values of outputs and inputs. To the extent gross profit margin has been shown to be quantitatively equal to surplus value, the two terms have been used interchangeably.

We shall now see what further meaning can be attached to value added.

Marx has shown that "the value of commodities, or the price of production regulated by their total value, resolves itself into: (1) A portion of value replacing constant capital, or representing past labour, which was used up in the form of means of production in making the commodity, ... (2) The portion of value representing variable capital, which measures the income of the labourer and is transformed into wages for him ... (3) Surplus value, i.e. the portion of value of the produced commodities in which the unpaid labour, or surplus-labour, is incorporated."[19] The components (2) and (3) of the value of commodities, Marx considered to be "the portion of value which always assumed the revenue forms of wages..., profit and rent," and it is "distinguished from the constant component (1) by the fact that **in it is embodied that entire value in which the new additional labour added** to the constant part, to the means of production of the commodities is materialised."[20] (emphasis added —R.A.)

While, ... "in breaking down the value added to the constant portion of capital into wages, profit and ground-rent it goes

without saying that these are portions of value...",[21] Marx warned that "...it would be a mistake to state the converse, namely, that the value of wages, rate of profit and rate of rent form independent constituent elements of value, whose synthesis gives rise to the value of commodities, apart from the constant component; in other words, it would be a mistake to say that they are constituent elements of the value of commodities, or of the price of production...."[22]

It is "the entire value component of the commodity representing the newly added labour" — the necessary labour and surplus labour — which gives rise to "the total value newly added to the value of means of production."[23]

Such an understanding of value added endows that concept with a meaning and importance which far transcends its consideration as a mere book-keeping operation intended to avoid double accounting of certain costs but otherwise devoid of any social content.

With this understanding, while wages in value added correspond to necessary-labour, surplus-value is to be conceived of as materialised surplus-labour. Marx repeatedly emphasised the importance of such an understanding because, as he put it: "The essential difference between the various economic forms of society, between, for instance, a society based on slave labour, and one based on wage-labour, lies only in the mode in which this surplus-labour is in each case extracted from the actual producer, the labourer."[24]

The rate of surplus value therefore, being the ratio of surplus-labour to necessary-labour, gives, "an exact expression for the degree of exploitation of Labour-power by Capital, or of the labourer by the capitalist."[25]

A study of trends in the rates of surplus value in industries is hence not merely of academic interest.

Table No. VII-1 gives the rates of surplus value in India's manufacturing industries for the 1949-1964 period.

From 1949 to 1958, the value added increased from Rs. 272.6 crores to Rs. 489.8 crores — by 79.6 per cent; wages (variable capital) increased from Rs. 145.3 crores to Rs. 194.9 crores — by 34.2 per cent; and surplus value increased from Rs. 127.3 crores to Rs. 294.8 crores — by 131.5 per cent. In that period, the rate of surplus value increased from 88 per cent to 151 per cent, i.e. by 71.6 per cent in ten years.

From 1960 to 1964, the value added increased from Rs. 864.3 crores to Rs. 1,503.5 crores — by 73.9 per cent; the variable capital (wages) increased from Rs. 342.3 crores to Rs. 548.1 crores — by as much as 60 per cent; and surplus value increased from Rs. 522 crores to Rs. 955.4 crores — by 83 per cent. In that period the rate of surplus value increased from 152 per cent to 174 per cent, i.e. by 14.5 per cent only.

Thus we see that:

(a) value added, variable capital, surplus value and the rate of surplus value, all have registered an upward trend;

(b) surplus value has increased fastest;

(c) variable capital has increased slowest.

This is as it should be since in the process of industrialisation, capital intensity is increasing, the organic composition of capital is increasing, technological factors are improving and productivity is also expected to increase, naturally.

But we find that between 1960-1964 despite the inclusion of more groups of large-scale industries, with still more improved technological level and productivity, the rate of surplus value increased by 14.5 per cent, because the wages (i.e. variable capital) increased by 60 per cent.

What could that mean? It could not be that the number of workers engaged had suddenly shot up quite disproportionately to the earlier period due to a big increase in the weightage of labour-intensive industries. The increasing ratio of gross inputs per worker (at constant prices, see Table VI-1) for this period

also rules out such a hypothesis. Could it be that the increase in real wages of workers far outstripped the increase in productivity in India's manufacturing industries during this period? Hardly anyone would affirm that. In fact, in a vast number of industries real wages are still below the need-based minimum.

TABLE No. VII-1

Rate of Surplus Value in India's Manufacturing Industries (Figures in Rs. thousand)

Year	Value added	Wages	Surplus value	Rate of surplus value (per cent)
1949	2,726,941	1,453,349	1,273,592	88
1952	3,149,819	1,626,302	1,523,517	94
1955	4,194,539	1,752,370	2,442,169	139
1958	4,898,844	1,949,978	2,948,866	151
1960	8,643,741	3,423,592	5,220,149	152
1961	9,879,090	3,868,539	6,010,551	155
1962	11,156,072	4,423,292	6,732,780	152
1963	12,956,907	4,871,638	8,085,269	166
1964	15,035,116	5,480,955	9,554,161	174
Increase per cent between				
1949-1958	79.6	34.2	131.5	71.6
1960-1964	73.9	60.0	83.0	14.5
1949-1964	451.3	277.1	650.0	97.7

The answer however, is provided by the consumer price index (working class). Whereas during the ten years (1949-1958), the index (base 1949 = 100) rose by 16 points, during the five years under consideration (1960-1964) it rose from 124 to 152 — i.e. by 28 points. A 23 per cent rise in prices in five years as compared to 16 per cent rise in the earlier ten years — herein lies the explanation for the disturbance in the movement of the trends. This sudden slowing down of the growth rate of return to capital per unit of wages is a result of inflationary pressures.

Marx had shown that an increase in workers' cost of living adversely affects productivity. It decreases the unpaid portion of total labour and thereby the surplus value also. Hence the rate of surplus value and the rate of profit fall, "proportionately more than the surplus value."[26] We, therefore, find that whereas between 1949-1958 a 79.6 per cent increase in value added resulted in a 131.5 per cent increase in surplus value and a 71.6 per cent increase in the rate of surplus value, between 1960-1964 73.9 per cent increase in value added yielded 83 per cent increase in surplus value, and only 14.5 per cent increase in the rate of surplus value.

In other words, between 1960-1964 the rate of increase of gross profit margin (or return to capital) per rupee of wages has slowed down because the value of rupee has gone down. The increase in wages is therefore not the cause, but the result of the increase in the value of commodities due to decrease in productivity brought about by the rising cost of living of workers.

Apart from the abovementioned particular aspect, we have seen that the rate of surplus value has been steadily increasing in India's manufacturing industries, and it measured 174 per cent in 1964.

It will be interesting to see how these magnitudes compare with international standards. According to Joseph Gillman, the rates of surplus value in the U.S. manufacturing industries were as follows: in 1919 — 135 per cent, 1923 — 128 per cent, 1928 — 159 per cent, 1933 — 154 per cent, 1938 — 149 per cent, 1939 — 149 per cent.[27]

It can be seen that the magnitudes of the rate of surplus value in India's manufacturing industries during the sixth and seventh decades are comparable to those of the U.S. manufacturing industries just before the second world war. But the growth in the rate of surplus value in Indian industries is much faster. In U.S. manufacturing industries the rate of surplus value increased by about 10 per cent in 20 years preceding the second world

war, while in Indian industries, it increased by 97 per cent in the 16 years under review.

An understanding of this high growth rate of the ratio of the two components of value added — i.e. gross profit margin to wages — is obtained by studying the rate of surplus value in various groups of industries taken separately.

TABLE No. VII-2

Rates of Surplus Value in Selected Industrial Groups in India and in the U.S.A.[28]

Industries	Rate of Surplus Value (per cent)	
	India (1964)	USA (1966)
1	2	
Textiles (Spinning, weaving etc)	88	201
Iron and Steel	277	166 and 254 (a)
Machinery except electrical ..	236	295
Electrical Machinery etc. ..	61	319
Chemicals	462 (b)	765
Miscellaneous food preparations	78	466
Motor Vehicles Manufacture	420	282
Rail-Road Equipment ..	89	267 (c)
Non-Ferrous Metals ..	797	319
Paper and Paper Products ..	224	296
Rubber products	286	273
Tobacco Manufactures ..	90	736
Petroleum Refineries ..	1622	780

It can be seen from Table No. VII-2 that:

(i) the rates of surplus value in Indian industrial groups cover an extremely wide range; from the minimum of 61 per cent in electrical machinery industries to the maximum of 1,622 per cent in the petroleum refining industry. In the U.S. industries the rate of surplus value ranges in the above table from 166 per cent in iron and steel

foundries industry to the maximum of 780 per cent in petroleum refining industry. Actually the maximum for the U.S. industrial groups for which separate data are given, is attained by the drugs industry (under "chemical and allied products") — 1,189 per cent.[29]

(ii) Certain Indian industrial groups are greatly lagging behind the U.S. in the rate of surplus value, the respective percentage being; textile — 88 and 201, electrical machinery etc. — 61 and 319, miscellaneous food preparations — 78 and 466, rail-road equipment — 89 and 267, tobacco manufactures — 90 and 736.

(iii) Certain Indian industrial groups have outstripped the U.S. in the rate of surplus value, the respective percentages being; iron and steel — 277 in India, as against 166 and 254 in U.S.; motor vehicles manufacture — 420 (India) and 282 (USA), non-ferrous metals — 797 (India) and 319 (USA), petroleum refineries — 1,622 (India) and 780 (USA).

Variations in the rates of surplus value among industrial groups are bound to exist due to a large number of factors. It is to be noted that as a rule the rates of surplus value are higher in those industrial groups in which the degree of concentration and productivity are high.

But such extreme variations as we find in the rates of surplus value in Indian industries reflect the extremely uneven nature of industrial development in India.

Secondly, they reflect the simultaneous availability of advanced technology and very cheap labour which characterises the industrial development in India in the present-day world, and leaves in certain sectors such huge profit margins per unit of wages about which even the most ambitious entrepreneur of the initial period of industrialisation in the U.S. could have only dreamt of.

Finally, they reflect the development of strong monopoly trends in Indian industries right at the onset of industrialisation.

VIII

Overall Trends In Manufacturing Industries

SO FAR we have studied movements in the productive capital, manufacturing product and its components — inputs, labour costs and gross profit margin.

We have also considered two ratios of overall industrial activity, the output/input ratio and the rate of surplus value (gross profit margin/wage ratio).

We shall now consider some other ratios of overall industrial activity concerning capital-intensity, labour productivity and productivity of capital before arriving at general indicative conclusions.[30]

Since in most of the Indian economic literature labour costs are taken as a whole — i.e. workers' wages plus salaries and benefits etc. of employees other than workers — for calculating various productivity ratios despite the fact that it vitiates the results particularly in some cases, and despite the fact that in the practice of U.S. statistics only production workers' wages are taken in such cases, these ratios have been calculated twice to give both versions so to say, and to be comparable with other studies in this field.

Capital-Intensity

The following Table gives the ratios of productive capital (K) to all employees (N), and productive capital (K) to production workers (W) in constant prices (Rupees):

TABLE No. VIII-1

Capital Intensity Ratios

Year	K/N	K/W
1949	2918.8	3231.2
1952	4342.9	4786.6
1955	5281.4	5927.9
1958	6011.1	6840.1
1960	5602.5	6304.5
1961	6188.2	6890.8
1962	8268.6	9356.6
1963	8920.5	10157.3
1964	9366.6	10933.2

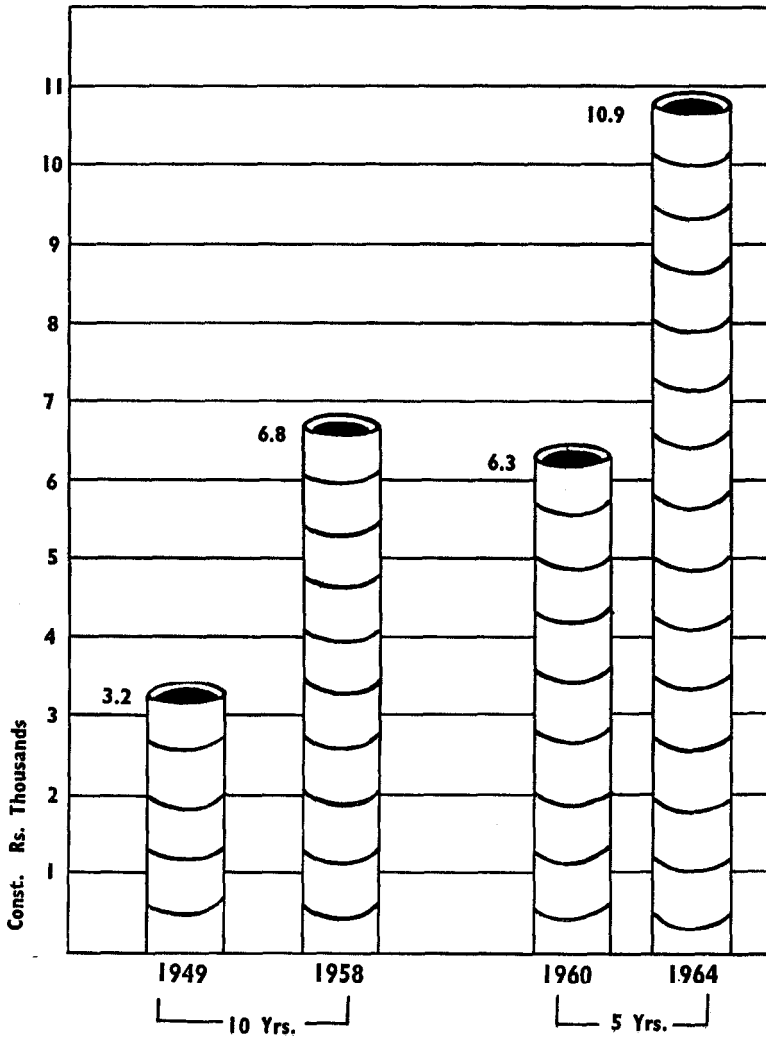
Capital-intensity, whether considered in relation to all employees or workers only shows an upward trend in Indian industries. Its growth has been faster in the 1960-1964 period than during 1949-1958. Considered as productive capital to total number of workers ratio, it increased by 111 per cent during ten years (1949-1958), and by 73 per cent during five years (1960-1964). Over the whole 1949-1964 period, productive capital to workers ratio (K/W) increased from Rs. 3231.2 per worker to Rs. 10933.2 per worker (at constant prices) or by 238 per cent. Even considered as productive capital to all employees ratio, it increased from Rs. 2918.8 per employee in 1949 to Rs. 9366.6 per employee in 1964, i.e. by 220 per cent.

Hence **the process of capital expansion has been going on at a brisk pace in manufacturing industries particularly from the period corresponding to the second five year plan.** This trend was also seen in studying movements in the productive capital.

Productivity of Labour

Productivity of labour has been considered from two angles; as the ratio of value added to total number of workers (V/W) and as the ratio of gross inputs to total number of workers (C/W).

VI Capital Intensity Ratio
(Productive Capital per worker)



These ratios have been calculated twice i.e. in relation to production workers (W) as well as in relation to all employees (N).

We see from Table No. VIII-2 that productivity of labour shows an upward trend throughout. From 1949 to 1958, while the value added to workers ratio (V/W) increased from Rs. 1729.1 per worker to Rs. 2758.5 per worker, or by 59 per cent, the gross inputs to workers ratio (C/W) increased from Rs. 4460.4 per worker to Rs. 6878.4 per worker, or by 54 per cent. Same trend is seen when these ratios are taken in relation to all employees. While the value added to all employees ratio (V/N) increased from Rs. 1561.9 per employee to Rs. 2424.2 per employee, or by 55 per cent in this period, the gross inputs to all employees ratio (C/N) increased from Rs. 4028.8 per employee to Rs. 6044.4 per employee or 50 per cent.

TABLE No. VIII-2

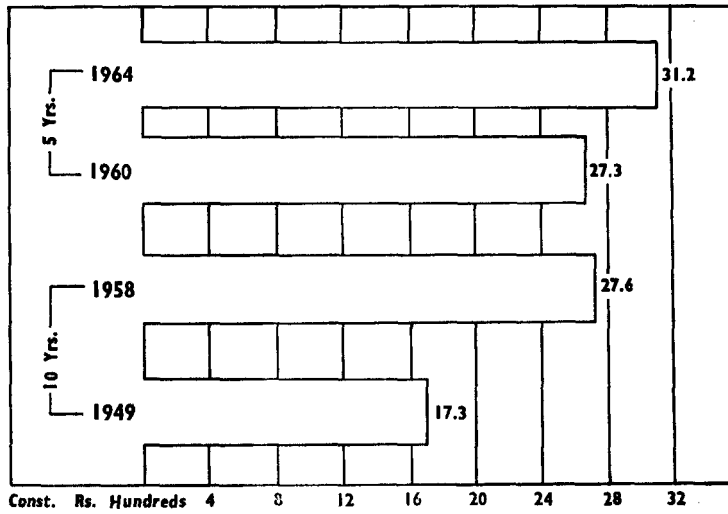
Productivity of Labour

(in constant Rs.)

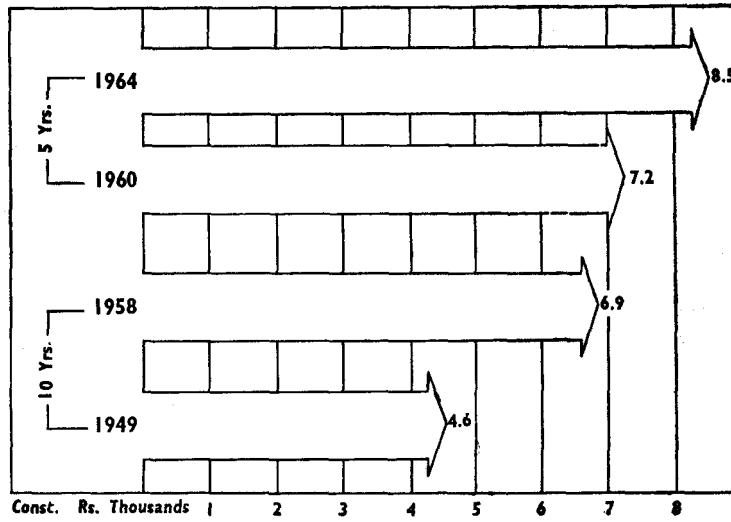
Year	V/W	C/W	V/N	C/N
1	2	3	4	5
1949	1729.1	4460.4	1561.9	4028.8
1952	2065.6	5692.1	1874.2	5164.6
1955	2884.6	6785.8	2570.0	6045.3
1958	2758.5	6878.4	2424.2	6044.4
1960	2725.3	7207.5	2421.9	6405.3
1961	2867.3	7852.2	2574.9	7051.7
1962	3037.2	8333.3	2684.0	7364.1
1963	3229.4	8732.8	2836.1	7669.2
1964	3115.8	8546.2	2669.4	7321.5

Between 1960-1964, while V/W ratio increased from Rs. 2725.3 per worker to Rs. 3115.8 per worker, or by 14 per cent, the C/W ratio increased from Rs. 7207.5 per worker to Rs. 8546.2 per worker, or by 19 per cent. Same trend is seen when these ratios are taken with respect to all employees in this period. While

VII A Productivity of Labour
(Value Added per worker)



VII B Productivity of Labour
(Gross Inputs per worker)



the V/N ratio increased from Rs. 2421.9 per employee to Rs. 2669.4 per employee, or by 10 per cent, the C/N ratio increased from Rs. 6405.3 per employee to Rs. 7321.5 per employee, or by 14 per cent. Hence there has been a faster growth rate in the gross inputs to labour ratios as compared to the value added to labour ratios.

Taking the whole 1949-1964 period, we find that whereas the value added to workers and value added to all employees ratios increased by 80 per cent and 71 per cent respectively, the gross inputs to workers and gross inputs to all employees ratios increased by 91 per cent and 81 per cent respectively.

Hence:

i. Whether these productivity ratios are related to workers only or to all employees, the trends are the same. Only their growth rates slow down when they are taken with respect to all employees.

ii. Whereas in the 1949-1958 period value added per worker (or employee) increased faster than gross inputs per worker (or employee), in the 1960-64 period there was a reversal in this trend.

iii. The extent of this reversal was such that in the whole 1949-1964 period gross inputs to labour ratio registered a much bigger increase than the increase in the value added to labour ratio.

It means that since 1960, (a) gross inputs (in real terms) per worker went up faster than value added per worker, and/or (b) growth rate of value added per worker went down.

Had (a) been the only reason for the C/W ratio to increase by 91 per cent as compared to the 80 per cent increase in the V/W ratio, then it becomes very difficult to explain the sharp fall in the growth rate of V/W ratio during the 1960-1964 period in which it increased by only 14 per cent, as compared to the 1949-1958 period in which it had increased by 59 per cent, even making allowance for the fact that the latter is a ten year period and the former a five year period.

VIII Productivity of Capital : Value Added per Rupee

0.54

1949

0.40

1958

0.43

1960

0.29

1964

Moreover, movements in gross inputs (Chapter V) have shown that there has been no cheapening of the inputs accompanied with industrial development i.e. rise in productivity has not been accompanied by a fall in prices. Whereas, movements in wages and value added (Chapter VII, Table No. VII-1) have shown that the growth in value added has been depressed due to inflationary pressure resulting in a sharp rise in the consumer price index (working class) and correspondingly, in workers' cost of living which in its turn, dampened the growth rate in productivity.

Hence, **the overall conclusion would be that while the productivity of labour has increased during the period under review, its gains have been considerably eaten away mainly by inflation and high cost of production.**

Productivity of Capital

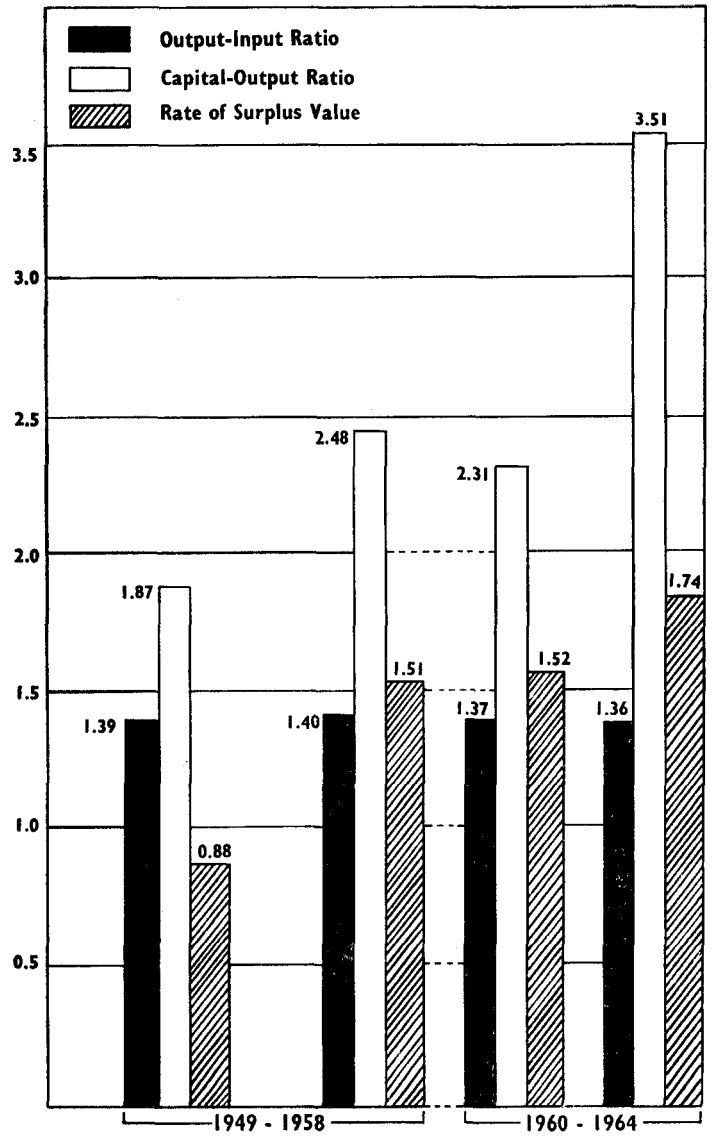
Productivity of capital has been considered in two ways: (1) as the ratio of value added to productive capital (V/K) and (2) as the ratio of value added to capital outlay (V/K_1).

From Table No. VIII-3 we find that in the 1949-1958 period, the value added to capital ratio (V/K) decreased from 0.5351 to 0.4033, or by 24 per cent. In the 1960-1964 period, i.e. in the course of five years, this ratio further decreased from 0.4323 to 0.2850 i.e. by 34 per cent. During the whole 1949-1964 period, V/K ratio decreased by 46 per cent.

As for the value added to capital outlay ratio (V/K_1) — i.e. value added to gross inputs plus labour costs or to constant capital plus variable capital — it increased from 0.3097 in 1949 to 0.3289 in 1958, i.e. by 6 per cent. While in the 1960-1964 period, it decreased from 0.3123 to 0.3035 or by 3 per cent. In the whole 1949 to 1964 period, the V/K_1 ratio registered a fall of 2 per cent.

In other words, if Rs. 100 of capital in Indian industries created Rs. 53 worth of value added in 1949, then in 1958

IX Productivity Indicators



Rs. 100 of capital yielded Rs. 40 of value added, and in 1964 the same capital yielded Rs. 28 only. Or if we take capital outlay i.e. the sum of constant capital and variable capital which the capitalist put into production — then we find that while Rs. 100 of capital outlay resulted in Rs. 31 of value being added by labour-power in 1949, that value added increased slightly to Rs. 33 in 1958, only to go down the drain subsequently. In 1960 Rs. 100 of capital outlay created Rs. 31 of value added, and in 1964, the same amount yielded Rs. 30.

Thus we see that productivity of capital has been declining in India's manufacturing industries.

TABLE No. VIII-3
Productivity of Capital

(constant Rs.)

Year	V/K	V/K_1
1949	0.5351	0.3097
1952	0.4315	0.2948
1955	0.4866	0.3444
1958	0.4033	0.3289
1960	0.4323	0.3123
1961	0.4161	0.3048
1962	0.3246	0.3024
1963	0.3179	0.3081
1964	0.2850	0.3035

While the value added to capital outlay ratio rose by 6 per cent between 1949-1958, it fell by 3 per cent between 1960-1964. Since a large number of large-scale industries were added to the statistical data from 1959 (Appendix I), it only means that their inclusion has, instead of raising the capital productivity ratio, brought it sharply down. Evidently, they have been contributing more to excess capacities than to output, which is why the V/K ratio went crashing down — 34 per cent in 5 years, as compared to a 3 per cent fall in the V/K_1 ratio.

Furthermore, if we consider the reciprocal of V/K ratio, i.e. the K/V ratio which happens to be the capital-output ratio, we get the following picture.

TABLE No. VIII-4

Capital-Output Ratio (K/V)

1949	—	1.8687
1958	—	2.4795
1960	—	2.3132
1964	—	3.5087

It means that from 1949 to 1958, capital-output ratio increased by 32 per cent, from 1960 to 1964 it increased by 51 per cent; and for the whole 1949-1964 period, the increase in that ratio amounted to 87 per cent.

The implications of these trends are grave indeed:

a. The falling V/K ratio, taken with the sharply rising K/N (capital intensity) ratio implies that **the rate of capital expansion has been constantly overstepping the rate of increase in value added.**

b. The rising K/V ratio, taken with an adverse production function (the falling tendency in the output-input ratio, Table No. V-1) and the diminishing growth rate in the V/N (labour productivity) ratio implies that **the cost of production is rising. That means increasing increment of capital is required to produce every additional rupee of value added in India's manufacturing sector. In other words, every additional rupee invested in industry yields lower and lower output.**

IX

Conclusions

CAUSES for the appearance of these trends, as indicated by the whole discussion, could now be seen to be the following:

Firstly, while vast expansion of capital has taken place, it has not improved the efficiency of production measureable to it. Huge production capacities are kept idle depressing thereby the growth in value added, while keeping the costs high for high profit yields.

Secondly, the historical affliction of the process of industrialisation with monopoly development right at its initial stages in India is extracting very high costs from the economy, literally as well as figuratively. While monopoly development may yield a higher rate of accumulation than under competitive capitalism, it chokes off investment from the monopolised fields of industry. A monopoly would rather not invest in its own field from its accumulation, lest that would increase output and reduce price, and affect its own profit rate. Instead, it seeks outlets anywhere outside, being guided by what is called the marginal rate of profit.[31] This phenomenon of monopoly development is retarding the growth of output in Indian industries while keeping the prices and investments high.

A recent study of drug industry for instance, is a case in point.[32] The drug industry is a capital-intensive industry, but with a small capital turnover ratio. Bulk selling prices of basic drugs are known to range from 160 per cent to 350 per cent of ex-factory costs, and the retail prices go anything from 600 to 2000 per cent up. Gross profits as percentage of capital employed are said to be continuously rising. Yet, instead of increasing output and bringing prices down in such a vital industry, the companies are reported to have their "diversification plans", tuned to "the manufacturing of cosmetics, food products and similar consumer goods which assure higher profits."

Thirdly, the monopoly practice of administered prices and the phenomenon of monopoly spread could not but contribute considerably to raise the cost of production, to cause depressions and thereby to retard the very process of industrialisation.

Fourthly, government fiscal and monetary policies have been directly responsible for building up inflationary pressures which have pushed the price index up.

It has to be borne in mind that nationalisation or the creation of a public sector cannot be an end in itself. It is the most decisive means for elaborating and carrying out the whole series of industrial, fiscal and monetary policies — the whole gamut of economic policies — with a certain purpose.

Not that an awareness of this fact has been totally lacking in government circles. As S. A. Dange pointed out, once the Planning Commission had at its head a person — Gadgil — who thought: "The monopoly capital and its handmaid of urban and rural finance capital are hampering the growth of production and productive forces in industry, trade and agriculture." Hence, "Unless the backbone of monopoly capital is broken by nationalisation and the ramifications of rural financial capital are set aside by cooperativisation of the small holder and unless the capitalist market-price mechanism is broken by socialisation of

wholesale trade in foodgrains and industrial crops and of export-import, our economy and our democracy cannot go forward."[33]

Evidently, the pulls in the other direction have been stronger in the government.

Far from breaking the backbone of monopoly capital, it has been allowed to thrive with its adverse effects on the economy. A recent Reserve Bank of India's study concerning trends in employment growth in the factory sector (1951-1958) shows that "the fixed investment required for creation of an additional job in the factory sector and mines combined, increased from Rs. 23,000 in the First Plan to Rs. 27,000 in the Second Plan and further to Rs. 39,000 in the Third Plan at current prices."[34]

It is incorrect to attribute this trend merely to "increased emphasis on heavy and basic industries in the Second and Third Plans and rise in prices," as that study does. Had that been the case, had the creation of every additional job extracted so high a price, then it was a miracle that so many countries could create additional jobs after all and could attain such high industrial level. Secondly, the setting up of heavy and basic industries is not the cause of price rise; on the contrary, it is the pressure of other factors on price and the disturbance in the productivity-cost-wages equilibrium which makes the development of heavy and basic industries **an increasingly costly affair** for the economy.

A specific feature of the development of capitalism in India has been that monopolies appeared on the economic scene earlier than small and medium capitalist enterprises which gained any considerable weightage in industry much later.

And now, in the industrial phase of this development, the pernicious effects of this feature are being felt with increasing force.

While an exhaustive examination of the whole structure of economic policy and the social framework of economic activity is needed to bring out the full implications of these trends and

features and to work out the corresponding counteracting measures, no such examination and measures can yield any result unless these are carried out by the government.

Declining productivity and rising industrial costs, retarding the growth of industrial sector itself, cannot but lead the country to a serious economic crisis.

For, with an adverse production function, and a rising capital-output ratio one cannot hope to go very far, or continue for very long; can one?

NOTES AND REFERENCES

1. *Commerce,* Annual Number, 1968.
2. Estimates of National Product: 1960-61 to 1968-69. (Central Statistical Organisation).
3. *Economic Times,* August 8, 1971.
4. *The Economic Almanac* — USA, (1967-68), p. 566.
5. K. Marx, *Capital Vol. I,* pp. 218-219, Moscow, 1961.
6. J. Steindl, *Maturity and Stagnation in American Capitalism,* Oxford Univesity Institute of Statistics, Monograph No. 4, p. 71.
7. According to ASI terminology, *fixed capital* includes the costs of land, buildings, machinery and tools etc. including those under construction. and *working capital* comprises of inventory, cash in hand and at bank and the algebraic sum of sundry creditors (as represented by outstanding factor payments, purchase of goods and services, short-term loans and advances) and sundry debtors (comprising amounts due to the factory on account of sale of goods and services and advances towards purchase and payment). *Economic Times,* March 24, 1968.
8. K. Marx, *Capital Vol. III,* p. 151, Moscow, 1959.
9. K. Marx, *Capital Vol. III,* p. 231, Moscow, 1959.
10. *Economic Times,* March 24, 1968, "Anatomy of Indian Industries".
11. Raj Krishna and S.S. Mehta: "Productivity Trends in Large Scale Industries", *Economic and Political Weekly,* October 26, 1968.
12. D. R. Gadgil, *Planning and Economic Policy in India,* p. 141.
13. Paul Samuelson, *Economics: An Introductory Analysis* (Seventh Edition), p. 495.
14. *Table* VI-1 :
    A. by "all earnings" is meant wages, salaries and money values of benefits of all employees including production workers.
    B. by "non-workers" is meant employees other than production workers, as given in the CMI-ASI data.
    C. 127,372 = 100.
    D. 1,387,010 = 100
    E. figures in this column were arrived at, first by deflating the gross input figures given in table IV-1 by the general (wholesale) price index (base 1952-53 = 100) and then dividing these sums by the number of workers for the respective years. The 1964 figure is less than 1963 figure because from 1963 to 1964 the price index jumped by 15.8 points (from 132.5 to 148.3) and therefore the

value of gross inputs correspondingly fell from Rs. 4123.7 crores at current prices to Rs. 2780.6 crores at constant prices.

15. That there is a very high disparity ratio between the highest salaries and the lowest wages in the private sector, is an accepted fact. The following table concerning, on the one hand, the wages in cotton textiles, Bombay (among the highest), and in the jute textiles, West Bengal (among the lowest), and on the other hand, the average post-tax salary income of the highest salary earners, was quoted by D. R. Gadgil from the Report of the Commission of Enquiry on Emoluments and Conditions of Services of Central Government Employees, 1957-1959:

	Category	*Income Per Annum in Rs.*	
		1948-49	1956-57
I	Total emoluments of an unskilled worker:		
	(a) Cotton Textiles, Bombay ..	999	1185
	(b) Jute Textiles, West Bengal ..	702	806
II	Average post-tax salary income of the highest salary earners ..	77250	286929
III	Disparity ratio :		
	II : I (a) ..	77	242
	II : I (b) ..	110	356

D. R. Gadgil, *op. cit.*, p. viii. See also his memorandum on existing differentials in salaries and wages, submitted to the Panel of Economists, Government of India Planning Commission, in December 1956 (pp. 14-27).

16. H.B. Shivamaggi, N. Rajagopalan, T.R. Venkatachalam: Wages, Labour Productivity and Costs of Production, 1951-1961. *Economic and Political Weekly,* May 4, 1968.
17. J. Steindl, *op. cit.*, p. 70.
18. J.M. Blair, Labour Productivity and Industrial Prices, Appendix H of Monograph No. 22 of the Temporary National Economic Committee.
19. *Capital, Vol. III,* p. 831, Eng. edition, Moscow, 1959.
20. *Ibid.,* pp. 831-832.
21. *Ibid.,* p. 832 footnote, (it is "the constant portion of value..." in 1909 Edition. Charles H. Kerr & Co., Chicago, Ernest Untermann's translation).
22. *Ibid.,* p. 832.
23. *Ibid.,* p. 833.
24. *Capital Vol. I,* p. 217.
25. *Ibid.,* p. 218.
26. *Capital Vol. III,* pp. 833-835.
27. Joseph M. Gillman, *The Falling Rate of Profit,* Appedix 2. The figures for total constant capital include depreciation, depletion and

amortization expenditure. Taxes are not deducted from wages, but they amounted to 3 per cent in 1939, and increased subsequently.

28. *Sources* : Statistical Abstract of U.S., 1968;
U.S. Census of Manufactures 1958 (Vol. III) and
1963 (Vol. I)
1966 Annual Survey of Manufactures.

The rate of surplus value in the U.S. industries has been calculated from wages net of taxes, which amounted to 22.5 per cent in 1966.

a. 166 per cent is the rate of surplus value in the U.S. iron and steel foundries, and 254 per cent in steel rolling and finishing industries.
b. Indian Statistics give separate figures for "miscellaneous chemicals" and "basic industrial chemicals." In both cases the rate of surplus value has worked out to 462 per cent. So this has been put against the U.S. figure for "chemicals and allied products."
c. U.S. figures are for "transport equipment" under which "motor vehicles and equipment" only is given separately.

29. It would not be surprising if the rate of surplus value in India's drugs industry also turns out to be among the highest in view of very high profit margins known to exist in that industry.

30. Throughout constant prices have been used in working out these ratios. Double deflation method was used to arrive at value added in real terms. While the figures for productive capital, gross outputs and inputs were deflated by general wholesale price index (base 1952-53 =100) wages were deflated by the consumer price index (working class, base 1949=100).

31. See Sweezy, *The Theory of Capitalist Development,* p. 275.

32. R. Venkatachary, "Drug Prices and Cost of Production", *Economic Times,* November 13 and 14, 1971.

33. S. A. Dange, *Gadgil and the Economics of Indian Democracy,* pp. 35-36.

34. *Reserve Bank of India Bulletin,* July 1971, p. 1000.

APPENDIX 'I'

A NOTE CONCERNING STATISTICAL DATA

The present study of some major trends (and their implications) in large-scale Indian industries is based chiefly on the data furnished by the Census of Manufacturing Industries (CMI) and the Annual Survey of Industries (ASI), as these reports still remain the main source of information in this field, despite their well-known deficiencies.

The Annual Survey of Industries (ASI) is a comprehensive study which covers practically the whole range of manufacturing activity in India. It is conducted by the Central Statistical Organisation (CSO) since 1959 with calendar year as the reference period. It covers factories registered under the Factories Act of 1948.

Data concerning factories employing 50 or more workers and using power, or employing 100 or more workers and not using power, are collected on a complete enumeration basis. Such factories are put under Census Sector. Smaller factories employing 10 to 49 workers and using power or employing 20 to 99 workers and not using power come under the Sample Sector and are covered on the basis of a probability sample.

Factories covered by the Census Sector account for the bulk of the activity of the manufacturing sector of the Indian economy. In 1964, for instance these factories accounted for 94 per cent of the total productive capital of all the factories (i.e. in both Census and Sample Sectors), 84 per cent of employment, 84 per cent of gross output, and 89 per cent of the value added by manufacture. (*Economic Times,* March 24, 1968).

However, main limitations of the CMI-ASI data are the following:

i. The CMI data, covering the 1946 to 1958 period relate to 29 industries. In 1959, the industry coverage was changed, and with the inclusion of ASI data the total number of industries covered was extended to 63.

ii. All the units of the industries covered by the CMI-ASI, were not reporting regularly every year. The coverage, however, improved with the inclusion of ASI data. While the CMI data relate to more than 80 per cent of the industries to which they pertain, the ASI data have a coverage of 95 per cent.

iii. Figures given by the reporting units might not have been accurate, and/or their accounting practices might have differed.

Of these limitations, the first one does rule out a strict comparison between the 1946-1958 data and the 1959-1964 data with respect to one aggregate. It is also an important factor accounting for certain jumps in the 1958 and 1960 figures, seen so clearly in a number of cases. The second limitation, particularly where it concerns failures of large units to send their returns regularly, affects an inter-temporal comparability of aggregates in the respective industry group.

But, by and large these limitations do not prevent a study of some broad trends in the macro-productivity of Indian large-scale industries. While refraining from drawing any conclusion by a direct comparison between the pre-1959 or post-1959 data concerning one factor, it is still possible to draw *indicative conclusions* from a study of a trend in a factor of production or in a productivity ratio, as well as from their comparative study in certain cases over the entire period.

APPENDIX 'II'

U.S. MANUFACTURING INDUSTRIES : EMPLOYEES AND PERCENTAGE EARNINGS TO VALUE ADDED.

Census year	*Employees other than production workers*	*Production workers*	*Percentage pay roll (all employees) to value added*	*Percentage earnings of non-workers to value added*	*Percentage wages of production workers to value added*
1	2			3	
1899 ..	380	5098	47.4	7.1	40.3
1909 ..	750	6260	50.3	11.0	39.2
1929 ..	1290	8370	46.6	11.1	35.5
1939 ..	1719	7808	51.8	15.1	36.7
1947 ..	2376	11918	53.4	12.7	40.7
1955 ..	3862	12957	53.4	16.9	36.4
1960 ..	4551	12212	53.7	19.8	33.8
1965 ..	5009	12978	50.5	19.0	31.5
Percentage increase/ decrease between					
21 yrs. 1909-1929	+ 72	+33.6	— 7.4	+ 0.9	— 9.5
19 yrs. 1947-1965	+110.8	+92.8	— 5.5	+49.6	—22.7

Source : *Economic almanac* (1967-1968) — computed.

SHARE OF WAGES IN VALUE ADDED

It appears that the downward trend in the percentage share of wages in value added has neither been uniform in, nor common to all U.S. manufacturing industries. While most of the concentrated industries show a downward trend, most of the non-concentrated industries register in fact the opposite — upward trend.

For example, taking the figure for the years 1919, 1929 and 1939 it has been found that the share of wages to value added in such non-concentrated industries as textiles and textile products has been 41.5 per cent,

45.5 per cent and 50 per cent respectively; in leather industry it has been 40.5 per cent, 46.5 per cent and 51.4 per cent respectively. Whereas in concentrated industries such as cement, the corresponding percentage figures were 34.5, 28.4 and 25.7; in the case of machinery the percentage figures were 44.0, 37.6, 38.1; in ship and boat building industry — 65.5, 60.7 and 61.3 respectively to 1919, 1929 and 1939.

An extreme case has been that of chewing gum industry (which comes under Food and Kindred products classification). In this industry, the degree of concentration has been so high that in 1935, its four largest producers accounted for 92 per cent of its total output. And the share of wages in value added in this industry for 1919, 1929 and 1939 was 10.4 per cent, 7.3 per cent and 7.6 per cent respectively. (J. Steindl: *op. cit.* tables, 9, 19, 21, 22, 23.)

Furthermore, even in concentrated industries, the trend has not always been in one direction only. At times, these industries do register an upward trend in the percentage share of wages to value added. That that happens due to a narrowing of the profit margin resulting from competitive pressures is very well illustrated by the example of the U.S. motor vehicles industry: The series showing percentage share of wages to value added for motor cars "suggests that in this industry periods of strong competition have been alternating with a slackening of competitive pressure. Up to 1923 competition seems to have been strong enough to prevent any fall in the share of wages. Subsequently competitive pressure relaxed, until in 1935 it was renewed. The intense competition up to 1923 was obviously due to the policy of Ford who was expanding his markets at that time and was able to force his competitors to follow his policy of limited profit margins. It is known that subsequently his share in the market fell owing to the success of other firms in producing quality cars. This seems to be the explanation of the relaxation of competitive pressure: Ford was no more able to limit the profits margins of his competitors by cutting prices, because he could not compete with their products. In the middle thirties it appears that the Ford company began to try again to gain additional markets by price competition" (J. Steindl; *op. cit.*, pp. 100 and 106.)

Since a cut in the profit margin is reflected as a rise in the percentage share of wages to value added (from 43.1 in 1919 it rose to 45 in 1923 which was the period of competitive pressure; from 1923 onwards with the slackening of that pressure it registered a downward trend reaching 36.9 in 1931; it started climbing up again as the competitive pressure renewed, being 39.8 in 1935 and 51 in 1937), a fall in the percentage share of wages to value added can also mean a rise in the profit margin due to a stepped up pricing of the output. For, as gross profit margin

equals to output minus input minus wages, a rise in output cost while input cost and wages remain constant will show a corresponding rise in the profit *margin*.

Therefore, it can be concluded that the downward trend in the share of wages to value added can also reflect the process of concentration in manufacturing industries as a whole and results from:

i. the disproportionality in productivity and wage trends,

ii. the existence of administered prices.

A question arises: where does the extra profit that goes into a monopoly price come from? As no new value is created in the process of change from a competitive price to a monopoly price, what then is the source of that extra profit in the monopoly price which rises above the price of production?

With brilliant insight Marx had pointed out that the extra profit comes from the deduction from real wages of workers, and/or from the profit of other capitalists:

> "The monopoly price of certain commodities would merely transfer a portion of the profit of the other commodity-producers to the commodities having the monopoly price. A local disturbance in the distribution of the surplus-value among the various spheres of production would indirectly take place, but it would leave the limit of this surplus-value itself unaltered. Should the commodity having the monopoly price enter into the necessary consumption of the labourer, it would increase the wages and thereby reduce the surplus-value, assuming the labourer receives the value of his labour-power as before. It could depress wages below the value of labour-power, but only to the extent that the former exceed the limit of their physical minimum. In this case the monopoly price would be paid by a deduction from real wages (*i.e. the quantity of use-values received* by the labourer for the same quantity of labour) and from the profit of the other capitalists." (Karl Marx, *Capital,* Vol. III, pp. 839-840, English Edition, Moscow, 1959).