CHAPTER VI

IMPACT OF PRICE BEHAVIOUR

In this chapter, the impact of agricultural - mainly food - prices is studied from two points of view: the push they give to other prices and their impact on saving, demand for non-food commodities and on the rate of growth in the rest of the economy in general. It was observed earlier that agricultural prices can affect the industrial climate or industrial production in two main ways - through higher costs of production and through the depression of demand for industrial commodities themselves. A shortfall in the availability of industrial raw materials of agricultural origin can directly affect industries based on them, and if the shortfalls persist, a recession can start in that and the related industries. Even though shortfalls in food production can have no such direct impact, their indirect impact can be significant and far-reaching.

A. Impact on Cost of Living, Wages and Prices in the Industrial Sector

1) Working class consumer prices

Let alone the impact on industrial climate, the immediate misery caused by the rising food prices can be staggering.
for the masses. The exact impact, in terms, of the lowered standards of living cannot be measured accurately. However, the Labour Bureau's Interim Index Numbers of Consumer Prices (working class) are a fair indicator. Both the General series and the series for the food group are separately available, and are presented in columns (1) and (2) of Table II below.

In the Graph II, both of the series are presented. It is easy to see how closely both the food and general group consumer prices move. One can also see that it is the food group which leads the general group indices. Whenever there is a decline in the prices, we generally see the food group index lying below the general index. When there is an increase in the prices, it is generally the food group index which is above the general index. Between 1949 and 1955, the consumer prices were fairly stable, though on the whole, there was a decline, which was not marked. Thus on an average, the food group index fell only by 0.73 per cent per annum, and the general index by 0.4 per cent. After 1955, however, the trend has been continuously upward, though between 1959 and 1961, there was stability. This short period of stability was followed by a sharp rise, especially after 1963. The food group index registered a rise per annum of 5.1 per cent, and the general index a rise of 4.7 per cent, between 1955 and 1965. As against
Table 11: Working Class Consumer Prices and Wages

<table>
<thead>
<tr>
<th>Year</th>
<th>All-India Index of Consumer Prices (working class) 1949 = 100</th>
<th>(2) With base shifted to 1951 = 100</th>
<th>Index Numbers of Money earnings less than Rs. 200 p.m. in various industries in October 1951 (Dec 51 = 100)</th>
<th>Index Numbers of Real Earnings of (1951 = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Food</td>
<td>General</td>
<td>Manufacturing</td>
<td>In Textile Industry</td>
</tr>
<tr>
<td>1950</td>
<td>101</td>
<td>101</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1951</td>
<td>104</td>
<td>105</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1952</td>
<td>102</td>
<td>105</td>
<td>96.1</td>
<td>97.1</td>
</tr>
<tr>
<td>1953</td>
<td>109</td>
<td>106</td>
<td>101.0</td>
<td>107.7</td>
</tr>
<tr>
<td>1954</td>
<td>101</td>
<td>101</td>
<td>96.2</td>
<td>107.7</td>
</tr>
<tr>
<td>1955</td>
<td>92</td>
<td>96</td>
<td>91.4</td>
<td>113.1</td>
</tr>
<tr>
<td>1956</td>
<td>103</td>
<td>105</td>
<td>100.0</td>
<td>115.4</td>
</tr>
<tr>
<td>1957</td>
<td>112</td>
<td>111</td>
<td>105.7</td>
<td>120.8</td>
</tr>
<tr>
<td>1958</td>
<td>118</td>
<td>116</td>
<td>110.5</td>
<td>122.3</td>
</tr>
<tr>
<td>1959</td>
<td>125</td>
<td>121</td>
<td>115.2</td>
<td>126.4</td>
</tr>
<tr>
<td>1960</td>
<td>126</td>
<td>124</td>
<td>118.1</td>
<td>134.4</td>
</tr>
<tr>
<td>1961</td>
<td>126</td>
<td>126</td>
<td>120.0</td>
<td>138.6</td>
</tr>
<tr>
<td>1962</td>
<td>130</td>
<td>130</td>
<td>123.8</td>
<td>144.0</td>
</tr>
<tr>
<td>1963</td>
<td>135</td>
<td>134</td>
<td>127.6</td>
<td>145.2</td>
</tr>
<tr>
<td>1964</td>
<td>145</td>
<td>132</td>
<td>144.8</td>
<td>150.8</td>
</tr>
<tr>
<td>1965</td>
<td>171</td>
<td>166</td>
<td>158.1</td>
<td>158.1</td>
</tr>
</tbody>
</table>

Notes: (P) - Provisional; (d) These indices include estimated figures for states, actual figures for which were not available. These states are Madras (including A.P.) in 1950, 1955, and Madras (including A.P.) and Madhya Pradesh in 1960.

Source: (1) and (2) - Indian Labour Journal, January 1967, Table 13, p.103; (3) to (8) - Indian Labour Statistics
this rise in consumer prices, the wholesale prices of food articles increased by 5.7 per cent per annum, and the wholesale prices of all commodities increased by 5 per cent per annum. We thus see that consumer prices of the food group rose a little slower than the wholesale prices of the food group. This may be because, the working classes are covered by fair price shops and the prices charged by them receive a significant weightage in the compilation of consumer prices. The wholesale price for all commodities is not, however, comparable with the general group consumer prices, because the former include commodities like industrial raw materials and equipment which do not enter the latter.

ii) Trends in industrial wages

It is of interest to note how far the rising cost of living has affected industrial wages. Index Numbers of Money Earnings of Employees earning less than Rs. 200 p.m. in Manufacturing Industries and also Index Numbers of Money earnings of Workers in Mines are considered below for this purpose. Money earnings include wages, allowances, fringe benefits and other expenses like insurance contributions by employers. Both these series, with 1951 =100 as base, are published by Indian Labour Statistics, an annual publication of the Ministry of Labour and Employment, Government of India. Deflating these index numbers by the Index
Numbers of Consumer Prices (working class) with base adjusted to 1951 = 100, index numbers of respective real wages are obtained. Table 11 presents these series.

It may be noted that money wages are determined not only by cost of living but also by productivity in the respective industries, and relative strength of trade unions. Though cost of living is generally the most important determinant (the dearness allowance being linked with it automatically in several industries), wages show a downward rigidity in the face of a decline in the cost of living. In fact, in the period before 1955, wages have registered an increase even in the face of a decline in the cost of living. After 1955, however, both cost of living and wages have increased significantly year after year. But there is no strong correlation between the annual increases in the index numbers of wages on the one hand and those of cost of living on the other. This can be seen from Table 12 which presents increases in the index numbers of wages in manufacturing industries (of employees earning less than Rs.200 p.m.) as well as workers in mines, and in the index numbers of cost of living.

An absence of correlation in this respect does not mean, however, that cost of living has no impact on wages.
Table 12: Increases in the cost of Living and Wages

(Index Numbers of given years with 1951 = 100, minus Index Numbers of Previous years)

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost of living</th>
<th>Wages in Manufacturing industries</th>
<th>Mines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956</td>
<td>+8.6</td>
<td>+2.3</td>
<td>+33.7</td>
</tr>
<tr>
<td>1957</td>
<td>+5.7</td>
<td>+5.4</td>
<td>+16.3</td>
</tr>
<tr>
<td>1959</td>
<td>+4.8</td>
<td>+4.5</td>
<td>+10.7</td>
</tr>
<tr>
<td>1959</td>
<td>+4.7</td>
<td>+4.1</td>
<td>+12.5</td>
</tr>
<tr>
<td>1960</td>
<td>+2.9</td>
<td>+0.0</td>
<td>+ 6.5</td>
</tr>
<tr>
<td>1961</td>
<td>+1.9</td>
<td>+4.2</td>
<td>+ 8.4</td>
</tr>
<tr>
<td>1962</td>
<td>+3.8</td>
<td>+5.4</td>
<td>+ 6.9</td>
</tr>
<tr>
<td>1963</td>
<td>+3.8</td>
<td>+1.2</td>
<td>+13.8</td>
</tr>
<tr>
<td>1964</td>
<td>+17.2</td>
<td>+5.6</td>
<td>+ 2.1</td>
</tr>
<tr>
<td>1965</td>
<td>+13.3</td>
<td>-</td>
<td>+31.2</td>
</tr>
</tbody>
</table>
Wages may increase with a lag, and the lags may not be uniform throughout the period. Sometimes wages may not increase for a year or two, and then may at once be increased taking into account the increase in the cost of living over one year or two. Other factors, mentioned above, also enter the picture.

On the whole, the increases in the wages of workers in mines seem to be more than those in manufacturing industries. This may be partly due to the fact that the latter index numbers cover only employees earning less than 3.200 p.m. so that those who reach this mark, automatically fall outside the scope of the index numbers. This is reflected in the Index Numbers of real earnings—as well vide Table 11, columns (7) and (8)]. There is hardly an increasing trend in the real wages of workers in manufacturing industries, but real wages are seen to have improved in the case of mine-workers. However, in both cases, real wages have declined significantly after 1953.

iii) Product Prices

As already noted, the cost push exercised by agricultural prices acts both ways—through the push given to wages and through the raw material costs. It is not proposed here to study the nature and extent of cost push
In the Indian economy, individual industries will have to be studied separately at a disaggregated level, to make a proper appraisal of the effects of changes in costs on product prices and the lags involved. Even here, month to month or at least quarterly data would be necessary, rather than annual data. The lags in the effect of costs on product prices are to be measured in terms of months or weeks; if annual averages are taken, previous year's costs may be quite distant for current year's product prices.

However, only a modest attempt is made here to study broadly the relationship between index numbers of two main cost items - wages or cost of living and raw materials - on the one hand, and index numbers of product prices on the other.

Table 11, column (5), shows index numbers of money earning of employees earning less than Rs. 200 p.m. in the textile industry. These refer to calendar years. The index numbers of wholesale prices of cotton manufactures 1.

during financial years (say, April 1952 to March 1953) were related to the index numbers of money earnings in the textile industry of the immediately preceding calendar year (1952) and to the raw cotton prices during the immediately preceding cotton season (September 1951 to August 1952). The partial correlation coefficient between cotton manufacture prices and index numbers of money earnings, with the raw cotton prices held constant, turned out to be .9754, which is highly significant. However, the partial correlation coefficient between cotton textile prices and raw cotton prices was low and not significant.

Taking manufacturing industries as a whole, similar results were obtained. As the index numbers of money earnings in manufacturing industries cover only employees earning less than ₹.200 p.m., index numbers of working class consumer prices were taken instead as a trial. The wholesale prices of manufactures during the current financial year were related to the working class consumer price index numbers and wholesale price index numbers of industrial raw materials, both of the previous financial year. The partial correlation coefficient between the prices of manufactures and consumer price index numbers (cost of living) was .8246 which is significant. But the partial correlation coefficient between prices of manufactures and
prices of industrial raw-materials was quite low and not significant.

Both these calculations show the strong correlation between product prices on the one hand and money wages or cost of living on the other. But the relationships between product prices and raw material prices did not emerge significant. This may, however, be due to the level of aggregation at which correlations were worked out. A study of individual industries may throw up some significant relationships between the two.

B. Cost of Living and Wages of Agricultural Labourers

Agricultural Labourers constituted about 24 per cent of agricultural workers (cultivators plus agricultural labourers) according to the 1961 census. Their strength was 31.5 million as against the cultivators' strength of 99.5 million. Fortunately some statistics are available regarding the trends in consumer prices affecting them, compiled by the Labour Bureau. They relate to 12 states. The index numbers for these states separately as well as the weighted average of all these states, for years 1956 to 1965, with 1950-51 as the base are presented in Table VI in the Appendix.

2. Regarding the nature of these Statistics, see Appendix Note, Section D.
It can be seen from this Table that the consumer prices for agricultural labourers have also considerably risen. Comparing the 1965 index with 1950-51 (base year), we find that the highest increase has been in Mysore State where the foodgroup index was higher by 98 per cent and the general index by 82 per cent. The lowest increase has been in Rajasthan with 39 per cent rise in the foodgroup index and 32 per cent rise in the general index. Taking the weighted average series, we find that 1965 foodgroup index was higher by 60.8 per cent and the general index by 54.8 per cent, over 1950-51. The price rise, however, has been mainly concentrated in the recent years. Thus the 1965 foodgroup index is higher by 59.1 per cent over 1956 and by 53 per cent over 1961. Similarly the general index for 1965 is higher by 53.1 per cent over 1956 and 46.6 per cent over 1961. We may also note that as in the case of working class (industrial) consumer prices, the foodgroup index has led the general index.

Further, the general index of working class (industrial) consumer prices for 1965 was higher by 58.1 per cent over 1956 (as against 53.1 per cent for agricultural labour) and by 31.7 per cent over 1961 (as against 46.6 per cent for agricultural labour). The foodgroup index for 1965 was higher by 62.9 per cent over 1956 (as against 59.1 per cent with agricultural labour) and by 35.7 per cent over 1961.
(as against 53.0 per cent with agricultural labour). We see here that compared to 1956 level, the 1965 index was higher in the case of working class (industrial) consumer prices than in the case of agricultural labourer's consumer prices. This is true both with respect to foodgroup index and the general index. Compared to 1961 level, however, we see that the 1965 index was higher in the case of agricultural labourers' consumer prices than in the case of working class (industrial) consumer prices. This is again true with respect to both foodgroup index and the general index. This has been so because, the consumer prices for agricultural labourers rose by just about 5 per cent between 1956 and 1961, and much of the increase was concentrated in the period after 1961. Though working class consumer prices also showed a greater increase between 1951-55 than between 1956-61, the rise between 1961-65 was very steep for agricultural labour with practically no rise between 1956-61. The steeper rise in the case of agricultural labourers' consumer prices could partly be due to the fact that villages are not covered by government fair price shops, which partially at least meet the requirements of urban working class.

Unfortunately we do not have index numbers of wages of agricultural labourers, to compare the same with their
consumer prices. Directorate of Economics and Statistics, Ministry of Food and Agriculture, have been, however, collecting statistics regarding daily wages paid to agricultural labourers in a few states, in a few selected villages. The statistics, however, are not enough to construct index numbers. Only one to four villages are covered in each state, the maximum of four being in Andhra Pradesh. Moreover, there are gaps in the statistics, with no data available for quite a number of months. We have tried here to have an idea of the proportionate rise in average wages between 1961 and 1965 in three states - Andhra Pradesh, Mysore and West Bengal. The data relate to four villages in Andhra, two in Mysore and three in West Bengal. The wages relate to 'Field Labour' and 'Other Agricultural Labour', and to wages per man and per woman. Only two years are chosen - 1961 and 1965, and data for only those months are taken which are available for both the years during the same month. Daily wages during such months were then averaged for the year for each category of workers - male, female, field labour and other agricultural labour. Such averages for 1965 were then expressed as index numbers with 1961 average as base (= 100), for each

3. They are published in the monthly, A.S.I.
category and in each village/district. As a last step, such index numbers - for all categories and villages - were averaged for each state. Thus, these index numbers represent average proportionate rise in wages of all categories and villages in each state, and not proportionate rise in the average wages.

Table 13 given below presents these index numbers as well as the consumer price index numbers in 1965 expressed as percentage over the same in 1961, relating to these states.

Table 13: Index Numbers of Daily Agricultural Wages and consumer prices for Agricultural Labourers in 1965 (Base 1961 = 100)

<table>
<thead>
<tr>
<th>State</th>
<th>Wage Index</th>
<th>Consumer Price Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Food group</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>127.0</td>
<td>132</td>
</tr>
<tr>
<td>Mysore</td>
<td>153.6</td>
<td>168</td>
</tr>
<tr>
<td>West Bengal</td>
<td>133.2</td>
<td>158</td>
</tr>
</tbody>
</table>

Though we need data with quite larger coverage to arrive at fairly reliable generalisations, we can at least see from the limited evidence, that wages have not kept pace with

4. See Appendix Table VII for these index numbers.
consumer prices. Thus in real terms there has been a deterioration. This is not true with respect to every category, but it is only a broad picture.

This need not be surprising in view of the fact that agricultural labour is in a very weak position, socially and economically, and has no bargaining strength. It is no wonder if this is the class worst hit by inflation following food shortage. Commercialisation and monetisation are increasing in the villages and the labour is paid only in money and not in kind. With mounting market prices for foodgrains, landlords or cultivators have no inclination to pay in kind whatever little they used to pay before. With money wages lagging behind consumer prices, agricultural labourer is forced to take a near starvation diet. Continued negligence of this godforsaken class may pose a serious social problem.

5. Impact on Savings

We may now study the impact of the prices analysed above, on the economy. First, we may take up the impact of the prices of food articles on a very important economic aggregate, viz., savings. Savings by the household sector

5. See Appendix Table VIII, 'Volume and Pattern of Savings'.
forms the better part of total savings, and it is this part which we can expect to be influenced most by the prices of food articles. In 1950-51, savings by the household sector in terms of current prices formed 75.9 per cent of total savings; this proportion increased to 82.3 per cent in 1955-56 and declined to 65.6 per cent in 1962-63, the latest year for which figures are available at the time of writing this. Savings by the government sector as per cent of total savings are 17.7, 11.5 and 27.4 respectively during these years, the rest being the proportion of savings by the corporate sector. These figures indicate the importance of households sector's savings, and it would be interesting to find the variables affecting them. We have taken only two variables here - net national domestic output and the wholesale price index numbers of food articles. Both savings and national output are considered in real terms i.e., at 1948-49 prices.

The following equation was obtained from regression:

(13 observations, 10 degrees of freedom):

$$\log Y = -0.549339 + 3.468302 \log X_1 - 1.831013 \log X_2$$

\( R^2 = 0.833220 \)  \hspace{1cm} Equation (1)

where \( Y \) is savings of the household sector at 1948-49
prices, in crores of rupees; $X_1$ is national domestic output at 1948-49 prices in abja rupees, and $X_2$ is the wholesale price index of food articles. The respective standard errors shown in brackets make $X_1$ significant at 0.1 per cent ($t = 6.9855$) and $X_2$ at 2 per cent ($t = 2.9152$). The $R^2$ turned out to be 0.833220, which is significant at 1 per cent.

The equation shows national income to be a very significant variable. Its regression co-efficient is quite high compared with that of the second variable, and compared also with its standard error. A one per cent increase in national income increases the household sector's savings by 3.46 per cent, with the prices of food articles being given. But a one per cent increase in the latter, the former being given, decreases the savings by 1.83 per cent. If both national income and the prices of food articles increase by one per cent, savings will increase only by 1.63 per cent. Thus, increasing food prices act as a significant brake on savings. In fact, savings will remain stationary, if food prices increase by 1.8901 per cent and national income increases by one per cent.

Since $R^2$ is quite high, the equation has a good predictive value and we can predict the savings of the household sector for the three years from 1963-64 to 1965-66.
Accordingly, the estimated household sector savings at 1948-49 prices (in crores of Rupees) are 928.59 in 1963-64, 902.34 in 1964-65 and 703.34 in 1965-66. The standard errors of these estimates are respectively 1.26, 1.33 and 1.39 (in crores of Rupees).

We may also note that much of household sector saving originates from the urban sector. The percentage contribution of this sector to total saving from the household sector (at current prices) was as follows: 61.3 in 1950-51, 40.6 in 1951-52, 79.7 in 1955-56, 78.3 in 1960-61 and 76.9 in 1962-63. The rest is being contributed by the rural sector. The percentage contribution from the urban sector showed an upward trend up to 1955-56 after which it has been declining, though the trend is not smooth either before or after 1955-56. A decrease in agricultural output adversely affects the capacity of the rural sector to save, but increasing agricultural prices offset this. In the case of the urban sector, an increase in nonagricultural national output should improve its capacity to save, if only the prices of food articles are given. But a stagnation of agricultural output, specially the output of food articles, will increase their prices, and thus adversely affect their capacity to save. Relative decline in the urban sector's contribution to savings in 1962-63 as compared to 1955-56, seems to be largely due to
The question is whether a fall in the urban savings following a rise in the food prices is more than compensated by the rise in rural savings induced by a possible rise in the income following rise in food prices. Here, we may take food prices and agricultural prices as synonymous. Equation (9) above shows the net effects taking into account total household sector savings. Since we find that the coefficient with respect to food prices is negative and equal to -1.83, which is nearly three times larger than the standard error, we have to conclude that the fall in urban savings induced by a rise in food prices is hardly compensated by increased rural savings. The net effect of rising food prices is quite detrimental to savings.

D. Impact on Industrial Sector

The detrimental effect is not restricted to savings. As we have observed in the earlier chapter on the mechanics of inflation, rising food prices adversely affect the

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6. This is not necessarily due only to low rural propensity to save, though it might be one factor. What is more, increase in the absolute level of food prices need not necessarily mean increase in the net incomes of agriculturists.
demand for commodities other than food and thus the industrial climate, because, food is the most essential commodity the demand for which should be satisfied before everything else. We can study how the picture obtains in India. We have selected two indicators to such an adverse impact of food prices. First is the unsold stocks of cotton cloth with mills, and second, capital issues granted.

Regarding the first indicator, we have taken as the dependent variable the stocks of cotton textiles with the mills in December as a proportion of availability. Availability is taken to be production during calendar year plus stocks at the end of the previous year, minus exports during the calendar year. Imports are ignored as they are not significant. Two independent variables taken as affecting the stocks are wholesale price index of food articles and that of cotton manufactures. As regards the former, we have taken average prices of 9 months - April to December, as affecting the stocks in December. However, we could not obtain comparable monthly prices for all the 15 years (i.e. on base 1952-53 = 100) in respect of cotton manufactures, but they are available on annual basis (April to March). For the later 9 years, for which we could obtain monthly indices, the annual averages (April to March) of prices corresponded fairly closely to the average prices of four
months from September to December. Thus it did not seem unjustified to take these annual averages as a variable affecting cotton stocks in December. These data were then adjusted for linear trend, before fitting regression. Appendix Table IX presents the details as well as the actual adjusted series used for regression.

The following linear equation was obtained from the data (15 observations, 12 degrees of freedom):

\[ Y = -119.68 + 2.20652 X_1 - 0.01124 X_2 \]

\[ E^2 = .680330 \quad \text{Equation (2)} \]

where \( Y \) is adjusted index numbers of stocks of cotton textiles with the mills at the end of December as a proportion of availability of cotton textiles, \( X_1 \) is adjusted index numbers of wholesale prices of food articles between April and December, and \( X_2 \) is adjusted index numbers of wholesale prices of cotton manufactures. The respective standard errors make \( X_1 \) highly significant (significant at 0.1 per

It may be noted that stocks as proportion of availability have shown a declining trend. This may be largely due to the fact that with increasing national income people are in a position to buy greater amount of clothes. However, taking national income as a separate variable, did not give us significant results.
cent level) and $X_2$ not significant. $R^2$ is significant at one percent. An increase in the index numbers of wholesale prices of food articles by one point, leads to an increase by 2.21 in the index numbers of stocks at the end as proportion of availability, at a given point of time and given the prices of cotton manufactures. This supports the hypothesis that rising food prices adversely affect the demand for consumer goods other than food to a significant extent. The prices of cloth, though a seemingly directly and closely related variable, has no such influence on unsold stocks.

We can now examine the impact of agricultural prices on climate for investment. Consents for capital issues can be taken as an approximate index of investment envisaged. The Table 14 below presents statistics regarding consents for capital issues relating to both government and non-government companies during 15 years, from 1951 to 1965.

Table 14: Consents for Capital Issues - Government and Non-Government Companies (Amount in Crores of ₹.)

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>59.56</td>
<td>39.79</td>
<td>81.39</td>
<td>110.57</td>
<td>125.39</td>
<td>230.15</td>
<td>135.37</td>
<td>422.97</td>
<td>203.46</td>
<td>289.63</td>
<td>248.02</td>
<td>381.50</td>
<td>544.32</td>
<td>392.27</td>
<td>275.78</td>
</tr>
</tbody>
</table>

Source: Office of the Controller of Capital Issues; published in Currency and Finance Reports of the Reserve Bank of India.
Two models were tried here, in one of which we took the commodity terms of trade between agriculture and the rest of the economy, i.e., agricultural prices relative to nonagricultural prices. Time in numbers was taken as another variable. In this model, only time came out as a significant variable, the relative prices being insignificant. In the second model, we took absolute index numbers of agricultural prices instead of relative prices, time being retained as another variable. In both of the models tried, capital issues consented relate to the calendar years and agricultural prices (relative or otherwise) relate to the financial year immediately preceding the calendar year. Thus, if, for example, capital issues relate to the year 1965, the agricultural prices relevant to the same are of the year 1964-65.

The following equation was obtained (14 observations, 11 degrees of freedom).

\[
\log Y = 8.028289 - 3.144681 \log X_1 + 0.098780T \\
R^2 = 0.88004
\]

Equation (3)

where \( Y \) is the amount of consented capital issues in crores of rupees, \( X_1 \) is wholesale price index of agricultural prices.

8. The observation for 1951 could not be taken because the agricultural price index for 1950-51 was not available.
and $T$ is time in numbers. Time is highly significant, its regression co-efficient being over 8 times larger than its standard error. But $X_1$, the agricultural prices, is also significant (significance level being 1 per cent) the regression co-efficient being nearly 4 times larger than its standard error. $R^2$ is also significant at 1 per cent. The equation shows that with every one per cent increase in agricultural prices, the amount of capital issues fall by 3.14 per cent, at a given point of time.

In the results obtained above, the terms of trade between agricultural and nonagricultural commodities as such have shown no impact on industrial climate. In fact, there has not been much variation in the terms of trade either, the range being 93.6 to 108.1. What has affected industrial climate adversely is an increase in agricultural/food prices even in absolute terms irrespective of movements in the prices of nonagricultural commodities. This is because an increase in agricultural/food prices threatens to increase cost of production so much that any rise in the prices of nonagricultural commodities is considered a poor compensation. The problem of increasing cost of production and falling demand as a direct result of rising agricultural/food prices becomes quite evident in the Indian scene at this stage. The rise in the prices of manufactures has not been adequate
enough to compensate for this. Even if there is a significant improvement in the relative prices of manufactures, it can hardly help matters in the face of sagging demand for them.

Against the background of what is analysed above, it is interesting to note the recent industrial experience of India, described as a recession. There has been no decline in economic activity or even in industrial production in general. Certain industries, however, notably, engineering, textile and food processing have registered a decline in growth rates and even in absolute production. Increase in industrial output itself showed a slow down. As against the average annual growth rate of 9.1 per cent between 1960 and 1964, the 1965 level was only 5.6 per cent above 1964 level and the 1967 (Jan-Sept) level was only 1.4 per cent higher than the 1966 level. Cotton textile output did not increase in 1965, but in 1966 and 1967 (Jan-Sept), showed an absolute decline over the previous years by 2.8 per cent and 1.9 per cent respectively. Output of woollen textiles has been falling since 1965 itself. Output of transport equipment industry fell by 9.2 per cent in 1966 and 3.9 per cent in 1967 (Jan-Sept). Metal products output declined by 7.5 per cent in 1966 and 6.5 per cent in 1967 (Jan-Sept). Though several industries tried to adjust by reducing
production and keeping part of capacity idle, others faced 
the problem of burdensome inventories. The ratio of stocks 
to production rose significantly in the case of pig iron, 
finished steel, bicycle tubes, caustic soda, air-conditioners, 
radio receivers, bicycles and clocks. Several factories in 
Greater Bombay and West Bengal reported lay-offs.

Though the situation is complicated and does not admit 
of an easy diagnosis in terms of just one or two factors, 
the failure of agricultural production both in 1965-66 and 
1966-67 seems to be an important force. The failure of 
harvests acted directly by cutting the supply of raw materials 
for agriculture-based industries like textiles and food 
processing. The demand side can also be said to have been 
affected through erosion of purchasing power in the hands of 
both farmers (due to the decline in production, which may 
be partly offset by the rise in prices) and urban consumers 
(due to rising food prices). The general decline in agri-
cultural production and also in some important industries 
mentioned above, resulted in declining demand for transport, 
which in turn adversely affected industries like wagons, 
trucks, tyres and tubes. Railway wagon industry was one of 

Table 1.12
the worst hit by the recession. There were, of course, other causes too. Scarcity of foreign exchange severely limited the imports available to engineering and chemical industries. Besides, in order to curb inflationary forces, the government also curtailed its expenditure by postponing or cancelling some orders to private industries, or by curtailing its own investment programmes.

The proximate causes apart, it appears reasonable to believe that the recession developed out of an inherent imbalance in the economy built over several years, by a policy of giving disproportionately greater emphasis on heavy industries at the cost of inter-sectoral balance.