

## Chapter V

### THE STRUCTURE OF INTER-INDUSTRY WAGE- DIFFERENTIALS IN GUJARAT

It is contended that the structure of industrial wages is supposed to reflect the pattern of industrialisation.<sup>1</sup> Following this, many hypotheses have been put forward regarding the behaviour of inter-industry wage differentials for developed and developing economies. Reynolds and Taft have argued that "the inter-industry wage dispersion tends to reach a maximum sometimes during the early stages of industrialisation and to diminish gradually after that point."<sup>2</sup> Alternatively it means that the countries which are going through the process of industrialisation will show widening tendency in their industrial wage structure while in the advanced industrial economies, the inter-industry wage structure would show narrowing. The analysis of these aspects has received considerable attention in foreign

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<sup>1</sup>See: John T. Dunlop. "The Task of Contemporary Wage Theory" in his ed.), The Theory of Wage Determination, London, McMillan, 1957. p.25.

<sup>2</sup>See: Reynolds L.G. and Taft C.H. The Evolution of Wage Structure, New Haven, Yale University Press, 1956. p 356.

countries which is seen by the large number of studies<sup>3</sup> which are undertaken to test these hypotheses. In India the studies<sup>4</sup> pertaining to such wage differentials are only a few. These studies have examined the changes in the inter-industry wage differentials for the country as a whole and most of them have

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<sup>3</sup>See: Cullen D.C. "Inter-industry Wage Structure 1899-1950" American Economic Review, June 1956. He shows that there is no long run narrowing trend, though during 1939-1950 the trend is one of narrowing.

Slitcher S.H. "Notes on the Structure of Wages". Review of Economics and Statistics, February 1950. He has argued that inter-industry wage differential has considerable stability over short period or moderately short period of time.

"Changing Wage Structures", I.L.O. publication in International Labour Review, March 1956. It has revealed that in Argentina, Japan, Sweden and U.S.A., despite their differences in economic development and economic structure, wage structures have narrowed down in all of them.

Maddy Pamela and Tilles V Arnold.

Also, "British and American Changes in Inter-industry Wage Structures Under Full Employment". Review of Economics and Statistics, November 1957. It shows the narrowing of wage structures. It is an exercise which has used different techniques and comparable data for USA and UK and discusses the differences in results.

<sup>4</sup>Sawhney P.K. "Inter-industry Wage Differentials in India", The Indian Economic Journal, September 1969. The author has examined the change in the structure between 1953 and 1963 using total earning per day and takes all employees-production workers and other employees covering 29 major industries using ASI and CMI data. He finds that the coefficient of variation has increased from 29.69 in 1953 to 34.40 in 1963

Wage Differentials in Indian Industry, by National Council of Applied Economic Research. It has made analysis of the changes in inter-industry wage differentials on the basis of rank shifts. It concludes that the differentials have widened.

"Inter-industry Wage Structure in India 1950-1961: An Analysis". by N.C. Agarwal and C.K. Johri in Indian Journal of Industrial Relations, April 1966.

"Inter-industry Wage Differentials in <sup>selected industries,</sup> India 1950-1961: An <sup>Analysis</sup> ~~Analysis~~", by Krishnakumar in The Indian Journal of Labour Economics, April-July 1970.

shown that the industrial wage structure in India has expanded. In the light of these results for the country as a whole it would be very interesting to study the trend in the inter-industry wage differentials in a state and in the smaller regional units like the districts within a state. Such studies are conspicuous by their absence in India. The present study is an attempt in this direction. It is proposed to study the changes in the structure of inter-industry wage differentials\* in the state and in the districts within the state of Gujarat. In industrial development Gujarat ranks third among the states in India. Moreover since the formation of the separate state of Gujarat from the erstwhile state of Bombay in 1960, the industrial development in the state has become rapid. On the other hand the pattern of industrialisation is typical in the state. It was (and still continues to be) considerably textile biased and lacked regional dispersion within the state. Since 1960 concerted efforts are made, through planning, to promote both regional dispersion and diversification of industries in the state. Because of these efforts the relative importance of textiles is being reduced in the industrial structure of the state. Many modern industries have come up. In the context of these

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\*Inter-industry wage differentials partly reflect the occupational differentials so the changes in the inter-industry wage differentials atleast partially may be due to the changes in occupational differentials and skill-mix of industries. However we have considered the inter-industry wage differentials as the differences in the average wage rates between industries irrespective of the differences in the skill-mix etc.

changes in the pattern and spread of industries, it is of great importance to know how the levels and relative wages have changed in different industries our time in the state.

Industrial Wage Rates, Inter-industry Wage  
differentials - level and changes:

Table V-1 shows the wage rates in 30 "Three digit" industries in the state of Gujarat for the period 1960-1969.

Table V-1

## Average Daily Industrial Wage Rates in 30 "Three digit" Industries in Gujarat: 1960-1969

Industry code	Industry	Year											Percentage rise in 1969 over 1960
		1950	1961	1962	1963	1964	1965	1966	1967	1968	1969		
1	2	3	4	5	6	7	8	9	10	11	12	13	
010	Gins and Presses	2.07	2.01	2.02	1.99	2.20	2.16	2.44	2.54	2.96	3.20	54.58	
202	Manufacture of Dairy Products	3.98	4.24	4.18	4.34	4.89	5.95	6.30	7.76	8.93	102.76		
205	Manufacture of Grain Mill Products	2.50	2.48	2.50	2.57	2.56	3.04	3.27	3.40	3.48	4.15	66.00	
207	Sugar Factories and Refineries	3.72	4.91	2.83	3.52	4.65	5.10	5.27	5.58	6.81	6.64	78.49	
209	Manufacture of Miscellaneous Food preparation.	2.7	3.15	3.31	3.14	3.42	4.05	4.75	4.66	4.74	5.24	89.16	
220	Tobacco Manufacturing	1.57	1.54	1.48	1.64	1.64	1.81	2.02	2.39	2.46	2.56	63.05	
231	Spinning, Weaving and Finishing of Textiles.	5.89	6.06	6.20	6.12	6.85	7.99	8.50	9.80	9.87	9.98	69.43	
239	Manufacture of Textiles not elsewhere classified.	2.27	2.30	2.47	2.67	2.98	3.33	3.83	4.53	4.75	3.96	74.44	
250	Manufacture of wood and cork except manufacture of furniture.	2.46	2.62	2.72	2.73	2.87	3.60	3.34	3.50	3.34	4.18	69.91	
271	Pulp, paper and paper board mills	2.61	2.66	2.90	3.07	3.20	3.52	3.77	3.86	4.40	4.39	68.19	
280	Printing, Bookbinding etc.	4.02	4.26	4.40	4.69	7.82	5.46	6.02	7.09	7.50	7.77	92.90	
300	Manufacture of Rubber and Rubber products	3.78	4.08	4.02	3.98	3.66	4.22	4.63	4.14	4.72	4.58	21.16	
311	Basic Chemicals, including Fertilisers	4.54	4.60	4.90	4.90	5.49	5.47	5.90	6.34	7.02	7.81	72.02	
319	Manufacture of Miscellaneous Chemical products.	4.33	4.88	4.75	5.04	5.37	6.10	6.87	7.53	8.22	8.22	89.83	
321	Petroleum Refineries etc.	6.15	6.63	5.96	6.46	8.06	7.94	10.25	11.55	12.39	12.65	105.67	

Contd....

Table V-1 (contd.)

Indus-try code	Industry	Year												Percentage rise in 1969 over 1960
		1960	1961	1962	1963	1964	1965	1966	1967	1968	1969			
1	2	3	4	5	6	7	8	9	10	11	12	13		
331	Manufacture of Structural Clay Products	2.69	4.14	2.68	2.66	2.92	3.21	3.33	3.69	3.78	3.73	3.73	58.66	
332	Manufacture of Glass and Glass Products	3.82	4.06	4.42	3.54	5.59	6.28	5.59	4.41	6.76	8.03	8.03	110.20	
333	Manufacture of Pottery, China and earthen-ware.	2.82	3.03	2.83	3.14	2.99	2.85	3.08	3.90	3.55	4.22	4.22	49.64	
334	Manufacture of Cement	5.85	5.74	5.67	6.13	6.12	6.49	8.12	8.32	8.58	9.76	9.76	66.83	
339	Manufacture of Non-metallic Mineral products not elsewhere classified.	2.35	2.51	2.52	2.53	3.03	2.70	3.32	3.55	3.77	3.90	3.90	65.95	
341	Basic (Ferrous) metal Industries	3.53	3.09	3.70	4.21	4.41	4.71	4.96	5.17	5.49	5.57	5.57	57.79	
342	Basic (non-ferrous) metal Industries	3.09	3.50	3.53	3.65	3.97	3.36	4.51	4.79	4.87	6.03	6.03	95.14	
350	Manufacture of metal products (except machinery and transport equipment)	2.99	3.19	3.29	3.44	3.61	3.77	4.14	4.42	4.77	4.97	4.97	66.22	
360	Manufacture of machinery (except electrical machinery)	3.95	4.10	3.60	5.02	4.15	4.49	5.00	5.32	5.51	5.79	5.79	47.07	
370	Electrical machinery apparatus, appliances	2.91	3.51	5.09	4.28	4.65	5.72	6.77	7.47	5.30	6.85	6.85	135.39	
381	Transport equipments (Shipbuilding)	3.72	4.04	3.49	3.87	3.79	4.65	5.27	6.58	8.05	8.32	8.32	123.65	
384	Repair of Motor vehicles and cycles	4.26	4.16	4.24	4.45	4.80	5.57	6.28	8.10	8.04	8.08	8.08	89.67	
395	Manufacture of jewellery and related articles.	-	2.30	2.83	2.96	3.34	3.70	4.75	6.03	7.46	8.07	8.07	222.80	
399	Manufacturing industries not elsewhere classified.	2.75	3.18	2.78	3.34	3.34	3.89	4.11	4.41	4.20	4.60	4.60	67.27	
511	Electric light and power	4.24	5.70	5.53	5.69	6.24	7.63	8.22	9.84	10.35	10.49	10.49	112.34	
	State (All Industries)	5.08	5.22	5.26	5.19	5.80	6.61	7.12	7.97	8.04	8.14	8.14	60.23	

Source: Computed from the data given in Annual Report, Notes and Statistical Statements under the Payment of Wages Act, 1936 for the year's from 1960 to 1969. Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Mandays worked in these industries are given in Appendix V-2.

ii) Wages are in respect of workers earning less than Rs.400/- per month.

It will be seen that between 1960 and 1969 the state industrial wage rate has risen by 63.23 per cent. Practically most of the industries have experienced faster wage rise than the state average. This is possible because of the obvious relationship between particular weights of industries (in terms of Mandays worked) and the weighted state average wage. For instance the wage rates of important industries (industries having large weights in terms of Mandays worked) will be nearer the state's weighted wage rates. Take the examples of industries like spinning, weaving and finishing of textiles (Industry code 231), Electric light and power (code 511) and Manufacture of cement (code 334), Basic chemicals including fertilisers (code 311), Manufacture of miscellaneous chemical products (code 319). These are some of the industries which have large weights and their wage rates influence the state wage rate. On the other hand if the low wage industries acquire greater weights they will tend to pull down the state's average wage. For instance in 1960, 10 industries paying lowest wages accounted for 9.18 per cent of the total mandays worked in industries in the state and in 1969 the lowest 10 industries accounted for 10.93 per cent of the total mandays. This increased weights of low wage paying industries would exercise down-ward influence on the state's average wage.

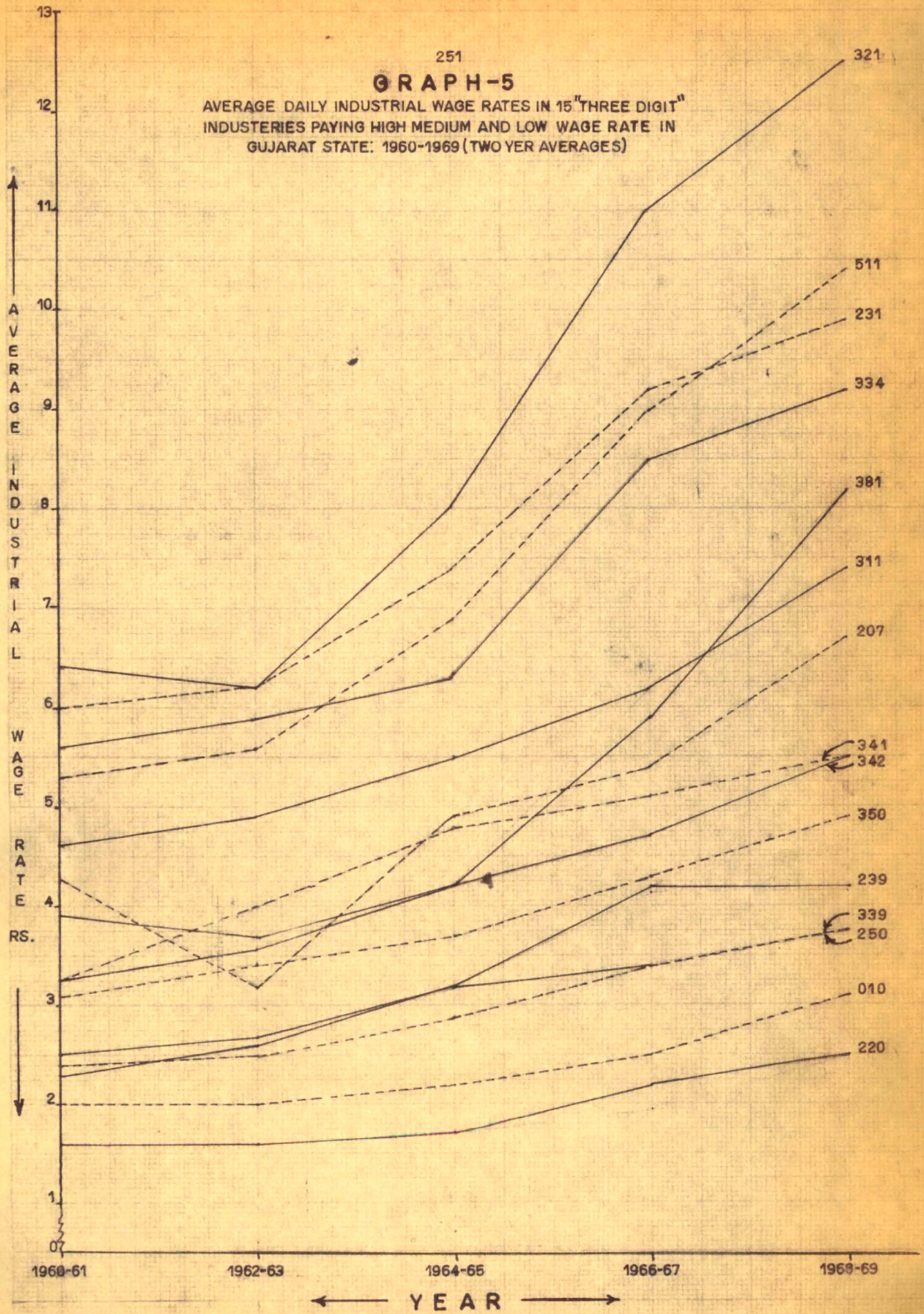
The percentage change would also be affected by initial wage rate level. If the initial wage rate level is very low

then small absolute change would show up as large percentage change. Moreover in 1960 only three industries i.e. Petroleum Refining etc. (Industry code 321), Spinning Weaving and Finishing of Textiles (code 231) and Manufacture of Cement (code 334) had higher wage rates than for the state as a whole. In 1969 there were six such industries - Petroleum Refining etc. (321), Electric Light and Power (511), Spinning Weaving and Finishing of Textiles (231), Manufacture of Cement (334), Ship building (381) and Manufacture of miscellaneous chemical products (311). Thus the number of industries with the wage higher than the state average has doubled between 1960 and 1969. Graph-5 shows the wage rates of five top wage paying (wage rate ranks in descending order I to V), five lowest wage paying (ranks XXVI to XXX) and five middle wage paying industries (ranks XIII to XVII) of 1960, during 1960-1969.



### GRAPH-5

AVERAGE DAILY INDUSTRIAL WAGE RATES IN 15 "THREE DIGIT" INDUSTRIES PAYING HIGH MEDIUM AND LOW WAGE RATE IN GUJARAT STATE: 1960-1969 (TWO YER AVERAGES)



It will be noted from Graph-5 that out of 5 top wage paying industries in 1960, 4 industries i.e. Petroleum Refining etc. (industry code 321), Spinning, Weaving and Finishing of Textiles (code 231), Manufacture of Cement (code 334) and Electric Light and Power (code 511) have remained in a distinct top group. Even in the top group Petroleum Refining etc. (code 321) has paid highest wage rate throughout the period. On the other hand the <sup>lowest</sup> wage paying industries such as Manufacture of tobacco (code 220), Gins and Presses (code 010), Manufacture of Non-metallic mineral products (code 339), Manufacture of Wood and Cork except furniture (code 250) and Manufacture of Textiles not elsewhere classified (code 239) have remained low wage industries throughout the period.

Let us now see how the high-low wage differentials have changed over the period. Table V-2 shows the highest industrial wage as percentage of the lowest industrial wage during 1960-1969.

Table V-2  
Highest and the Lowest Industrial Wage Rates  
and Highest Industrial Wage Rate as  
Ratio of the Lowest: 1960-1969

Year	Highest wage rate	Lowest wage rate	Highest as ratio of the lowest
1	2	3	4
1960	6.15	1.57	3.917
1961	6.63	1.54	4.305
1962	5.96	1.48	4.027
1963	6.46	1.64	3.939
1964	8.06	1.64	4.915
1965	7.99	1.81	4.414
1966	10.25	2.02	5.074
1967	11.55	2.39	4.833
1968	12.39	2.46	5.037
1969	12.65	2.56	4.941

Source: Computed from Table V-1.

The above table clearly shows that the gap between the highest and the lowest wage rate has widened between 1960 and 1969. The highest wage as ratio of the lowest as shown in Column 4 of table V-2 has risen. The highest industry wage was 3.92 times of the lowest in 1960 and 4.94 times in 1969. Alternatively, between 1960 and 1969 the highest wage rate

industry (Industry code 321) has experienced faster wage rise i.e. 105.69 per cent than the lowest wage industry (Industry code 220) i.e. 63.05 per cent. In order to arrive at firm conclusions about the behaviour of the structure of wage differentials, we have examined the level and trend in relative and absolute dispersions of the inter-industry wage structure. The level and trend of the relative and absolute dispersions of the inter-industry wage structure are shown in table V-3.

Table V-3

Mean, Standard Deviation and Coefficients of Variation of 30 "Three digit" Industries in the State of Gujarat: 1960-1969

Year	Mean	Standard deviation	Coefficients of variation
1	2	3	4
1960	3.4940	1.1419	32.6831
1961	3.7423	1.2157	32.4863
1962	3.6946	1.1965	32.3855
1963	3.8590	1.2239	31.7165
1964	4.2870	1.5686	36.5909
1965	4.6586	1.6044	34.4391
1966	3.1536	1.8877	36.6290
1967	5.7060	2.2735	39.8446
1968	6.0690	2.4169	39.8245
1969	6.3933	2.4243	37.9206

Source: Computed from Table V-1.

Table V-3 highlights two aspects of inter-industry wage differentials. First, both absolute and percentage differentials (Standard deviation and coefficient of variation) are higher than what they are in inter-district structure of gross wage differentials of industrial wages (Table IV-5 ) and second, absolute as well as relative differentials have expanded between 1960 and 1969. Absolute dispersion which was Rs.1.14 in 1960 has increased to Rs.2.42 in 1969 which is an increase of 112.28 per cent. Similarly the relative dispersion has risen more or less continuously except that in the last year i.e. 1969 the coefficient of variation has shown a little contraction. However considering the entire period it is clear that the wage structure has expanded in relative terms also. Thus the trend in inter-industry wage differentials in Gujarat confirms the general hypothesis of Reynolds and Taft.<sup>5</sup> i.e. The inter-industry wage structure expands with the progress of industrialisation. Trend in the inter-industry structure is highlighted by Graph-6 . It shows the trend of relative wage rates in 15 industries (5 top wage paying, 5 middle wage paying and 5 lowest wage paying industries). The first group will have ranks of wage rates in 1960 (in descending order) I to V, second will have XIII to XVII and the third group<sup>is</sup> with ranks XXVI to XXX.

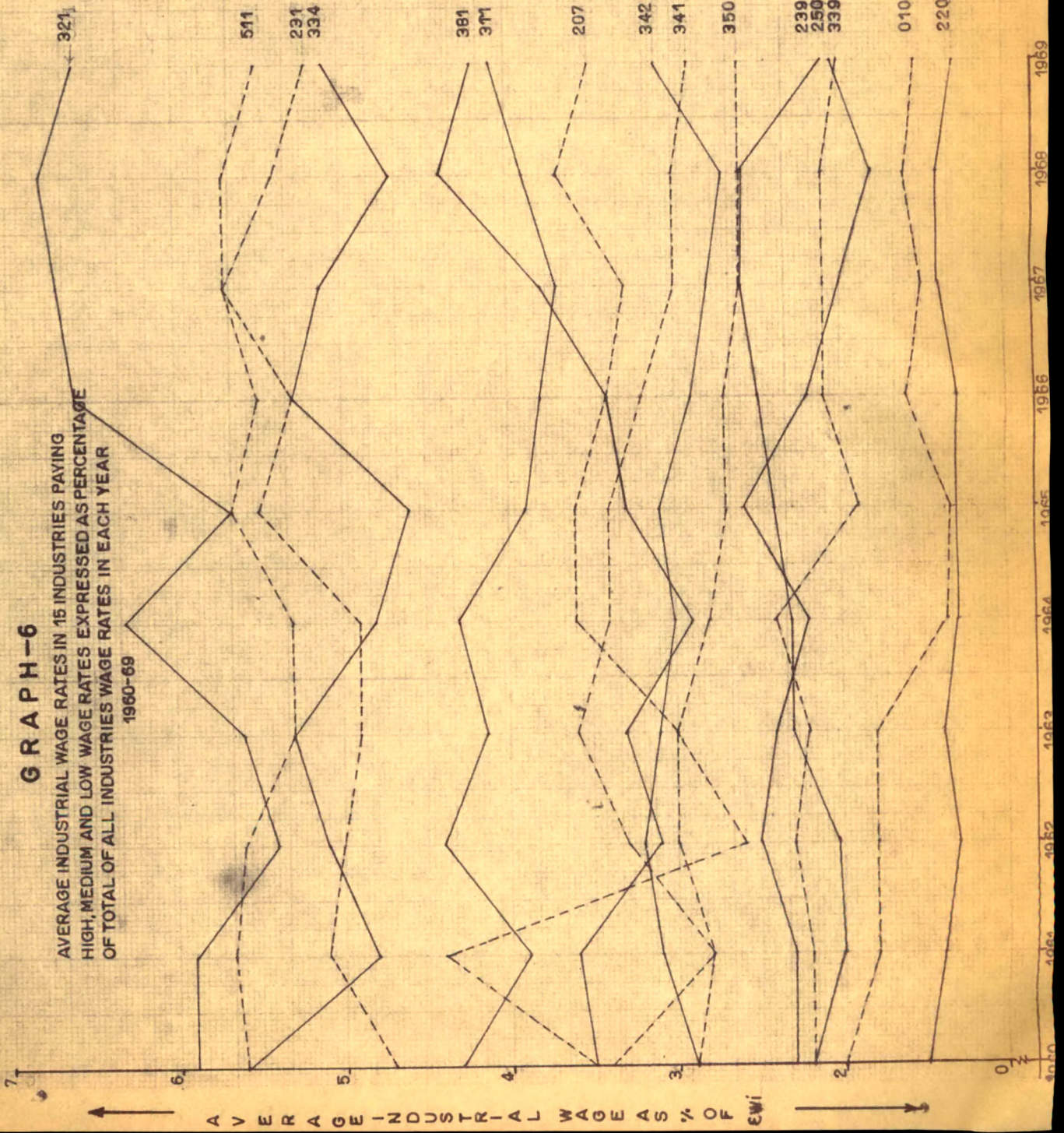
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<sup>5</sup>Reynolds and Taft. Op.Cit., p.356

**GRAPH-6**

AVERAGE INDUSTRIAL WAGE RATES IN 15 INDUSTRIES PAYING HIGH, MEDIUM AND LOW WAGE RATES EXPRESSED AS PERCENTAGE OF TOTAL OF ALL INDUSTRIES WAGE RATES IN EACH YEAR

1960-69



Wage rate in each industry is expressed as percentage of all wage rates in all industries in each year during the period. Thus only the relative positions of high, medium and low wage paying industries of 1960 are highlighted for the period 1960-1969. These computations are given in Appendix V-3.

It will be noted from Graph that among the 5 lowest wage paying industries of 1960 i.e. Manufacture of tobacco (code 220), Gins and presses (code 010), Manufacture of non-metallic mineral products (code 339), Manufacture of wood and cork except furniture (code 250) have actually come down in their relative positions in the inter-industry wage structure, during 1960-1969. Similarly general tendency appears even among the middle wage paying industry group. However the industries like petroleum refining etc. (code 321), Electric light and power (code 511), Ship building (code 381) have occupied higher relative positions at the end of the period than in the beginning.

It is noteworthy that the expansion of the wage structure has taken place without any significant shift in the ranks of individual industries. It has been hypothesised<sup>6</sup> that the ranking order of industries in the under-developed countries

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<sup>6</sup>Papola T.S. & <sup>Bharadwar V.P.</sup> "Dynamics of Industrial Wage Structure - An Inter-country Analysis". The Economic Journal, March 1970.

is changing more frequently than in a developed country. To examine the stability of ranks of industries, coefficient of rank correlation was computed between the ranks of industries in 1960 and in 1969. It was  $r = + 0.9420$ . This indicates that in the course of 10 years rank structure of industries has remained almost completely stable.

Wage rate and Employment:

It is not sufficient to know as to which industries pay high wage rates and which pay low wages. An equally important aspect of the wage structure is to find out the proportion of labour force distributed among the different industries with different wage rates. This is important because, on an average an industry may pay a very high wage rate but the labour force employed in that particular industry may be very small. In such a case a high wage has no practical significance from the view point of labour force employed in industry.

At this stage, when we want to consider the level and changes in employment in different industries, it is necessary again to point out certain limitations of the data collected under the Payment of Wages Act of 1936. The data on Mandays worked in different industries are for the units submitting returns only. It is, no doubt, obligatory for the firms to submit returns, if it is covered under the above mentioned Act. Still however, certain proportion of the firms does not respond and does not submit the returns. As a result in any particular



year in an industry in which the non-response is large, the employment (in terms of Mandays worked) would be underestimated as compared to another industry in which most of the firms have submitted returns. Even in the same industry, the comparison of employment at two points of time may be misleading due to the difference in the rate of non-response at two points of time. For instance the change in employment will be overstated if the proportion of firms submitting returns in the initial year is lower than in the end year. On the other hand the change in employment will be understated if the proportion of firms submitting returns has fallen in the end year as compared to the initial year. Apart from this, even when the proportion of firms submitting returns is the same, one cannot be sure that the composition of the firms submitting returns would be the same. In view of these limitations of the data on mandays, which arise from the procedure of collecting the data, we felt it necessary to find out the proportion of firms submitting returns or the extent of non-response in each of the 30 "Three digit" industries analysed here. This would enable us to know the nature and direction of the error. We have done this exercise for the years 1960 and 1969. This is shown in table V-4.

Table V-4

Working Factories (covered under the Payment of Wages Act, 1936) and the Factories Submitting Returns in 30 "Three digit" Industries in Gujarat in 1960 and 1969

Indus- try code	1960			1969		
	Number of working facto- ries	Working facto- ries submi- tting returns	Facto- ries submi- tting returns as % of total working facto- ries	Number of working facto- ries	Working facto- ries submi- tting returns	Facto- ries submi- tting returns as % of total working facto- ries
1	2	3	4	5	6	7
010	603	391	64.8	527	334	63.3
202	11	10	90.9	19	10	52.6
205	108	92	85.1	99	77	77.7
207	8	8	100.0	19	12	63.0
209	479	462	98.5	652	426	65.3
220	201	134	66.6	265	173	65.2
231	1024	920	89.8	961	683	71.0
239	48	42	87.5	36	23	63.8
250	108	93	86.1	138	100	72.4
271	21	18	85.7	51	35	68.6
280	167	145	86.8	178	136	76.4
300	18	17	94.4	35	23	65.7
311	49	46	93.8	55	42	76.3
318	76	71	93.4	123	102	82.9
321	23	18	78.2	20	11	55.0
331	181	132	72.9	313	191	61.0
332	8	7	87.5	16	10	62.5

Table V-4 (contd.)

Indus- try code	1960			1969		
	Number of working facto- ries	Working facto- ries submi- tting returns	Facto- ries submi- tting returns as % of total working facto- ries	Number of working facto- ries	Working facto- ries submi- tting returns	Facto- ries submi- tting returns as % of total working facto- ries
1	2	3	4	5	6	7
333	20	18	90.0	43	31	72.0
334	11	10	90.9	6	6	100.0
339	70	46	65.7	194	120	61.8
341	48	47	97.9	156	128	82.0
342	85	77	90.5	86	67	77.9
350	154	132	85.7	291	233	80.0
360	464	428	92.2	674	537	79.6
370	15	15	100.0	88	65	73.8
381	10	9	90.0	7	6	85.7
384	124	110	88.7	172	130	75.5
395	4	4	100.0	216	154	71.2
399	94	79	84.0	165	117	70.9
511	87	79	90.8	78	54	69.2

Source: Annual Report Notes and Statistical Statements under the Payment of Wages Act, 1936; for the year 1960 and 1969, Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

It will be seen from table V-4 that the rate of response i.e. proportion of factories submitting returns is lower in 1969 than in 1960 for almost all industries. Therefore (assuming that the composition of the firms submitting returns has not altered materially) the actual change in employment in 1969 over 1960 would be greater than what we obtain from the factories submitting returns.

Secondly, in 1969, the non-response of the firms is slightly higher (as compared to 1960) among the 10 high wage paying industries than in the 10 low wage paying industries as shown in table V-5.

Table V-5

Working Factories Submitting Returns as Percentage of Working Factories in the Top 10 Wage Paying and Bottom 10 Wage Paying Industries in 1960 and 1969

Working Factories submitting returns as percentage of the working factories in					
Top 10 wage paying industries	Year		Bottom 10 wage paying industries	Year	
	1960	1969		1960	1969
1	2	3	4	5	6
321	78.2	55.0	220	66.6	65.2
231	89.8	71.0	010	64.8	63.3
334	90.9	100.0	239	87.5	63.8
511	90.8	69.2	339	65.7	61.8
311	93.8	-	250	86.1	72.4
319	93.4	82.9	205	95.1	77.7
384	88.7	75.5	395	100.0	-
280	86.8	-	271	85.7	-
202	90.9	52.6	331	72.9	68.6
360	92.2	-	399	84.0	61.0
395*	100.0	71.2	300*	94.4	65.7
381*	90.0	85.7	333*	90.0	72.0
332*	87.5	62.5	-	-	-

Source: Table V-4.

\* These industries belonged to the respective groups in 1969 but not in 1960.

Note: Top and Bottom wage paying industries groups are made on the basis of ranks of wage rates in descending order.

Table V-5 reveals the variation in response rate among the ~~firms the fact~~ that the high and low wage industries. It will be noted that in 1969 the non-response is slightly more in high wage industries than in the low wage industries. Therefore the percentage change in factory employment between 1960 and 1969 is likely to be more underestimated in the high wage rather than <sup>in</sup> the low wage industries. Keeping the above limitations in view, in what follows, we have analysed (1) The employment significance of industries paying high and low wages. (2) Have related the changes in wages with the changes in employment in industries between 1960 and 1969. Table V-6 shows the Mandays and their percentages to the total Mandays worked in 1960 and in 1969 in the top wage paying 5, 10, 15 industries, bottom wage paying 5, 10 and 15 industries and in Spinning, Weaving and Finishing of Textiles (code 231).

It is noteworthy that industries with high wage levels accounted for most of the employment in 1960. For instance the top wage paying 10 industries accounted for 82.29 per cent of the total Mandays worked in 1960. In 1969 the high wage industries still accounted for substantial employment. However between 1960 and 1969, the importance of the top wage paying industries in terms of Mandays worked has fallen. This is clearly seen, if we take either top wage paying 5, 10 and 15 industries. For example the top wage paying 5 industries

Table V-6

Proportion of Mandays worked and Changes in them in Industries with Different Levels of Wages: 1960 and 1969

Industries	Mandays worked		Mandays worked as percentage of total mandays worked	
	1960	1969	1960	1969
1	2	3	4	5
1. Top wage paying 5 industries.	65885599	53861263	73.94	55.27
2. Lowest wage paying 5 industries	5193930	7032841	5.82	7.21
3. Top wage paying 10 industries.	73324672	62430914	82.29	64.07
4. Lowest wage paying 10 industries.	8184653	10659294	9.18	10.94
5. Middle range wage paying 10 industries.	6906853	22873663	7.75	23.47
6. First 15 industries	74740049	69290929	83.88	71.11
7. Remaining 15 industries.	13696129	26672942	15.37	27.37
8. Textiles	60954047	51468243	68.41	52.82
9. State	89096928	97438329	100.00	100.00

Source: Calculated from the table V-8.

Note: i) Since Mandays worked are taken for 30 industries only, they will not add up to the state total.

ii) Mandays are of the factories submitting returns.

iii) Top, middle and bottom groups are on the bases of wage ranks in descending order in 1960 and in 1969.

accounted for 73.94 per cent of total Mandays worked in 1960 while in 1969 they accounted for only 55.27 per cent. Similarly top wage paying 10 and 15 industries were responsible respectively for 82.29 per cent and 83.88 per cent of Mandays worked in 1960 while their proportions in 1969 came down to 64.07 per cent (top 10 wage paying industries) and to 71.11 per cent (first 15 wage paying industries). Thus even after making an allowance for a slightly higher rate of non-response among the high wage industries, the fact remains that the employment significance of high wage industries is relatively reduced.

On the other hand the employment in the lowest wage paying industries (either we take 5, 10 and 15 lowest wage paying industries) is very low. For instance the lowest wage paying 10 industries in 1960 accounted for 9.18 per cent of mandays worked. This percentage is much lower if we consider only the 15 lowest wage paying industries. However it is significant to note that the employment in these low wage paying industries has increased between 1960 and 1969. For example the proportion of mandays worked in the lowest wage paying 10 industries increased from 9.18 per cent in 1960 to 10.93 per cent in 1969. In respect of lowest wage paying 5 industries the proportion of mandays rose from 5.82 per cent to 7.21 per cent and in 15 low wage paying industries it increased from 15.37 per cent to 27.37 per cent during the same period.

Alternatively if we group the 30 "Three digit" industries in three equal groups of 10 industries each, according to levels

of wages paid, we find a clear pattern of levels of employment in these high and low wage industries in 1960 and 1969. The information on this aspect is contained in the same table V-6. For instance in 1960 the proportion of mandays worked in the first or the top wage paying 10 industries is 82.29 per cent; in the lowest wage paying 10 industries 9.18 per cent and in the middle range wage paying 10 industries it is 7.75 per cent. In 1969, there is a fall in the proportion of mandays worked from 82.29 per cent to 64.07 per cent in case of top wage paying 10 industries. But in respect of lowest wage paying 10 industries and middle range wage paying 10 industries there is an increase in the proportion of mandays worked in 1969. This increase in proportion is very significant, i.e. 23.47 per cent in 1969 instead of 7.75 per cent in 1960 in respect of middle range wage paying 10 industries. Thus it can be said that while both in 1960 and 1969 the top wage paying industries accounted for a very large proportion of total employment, their importance in this respect has fallen sizably between 1960 and 1969.

This declining employment in the top wage paying industries is closely related to the fall in the employment in textile industry as revealed by table V-6. It will be noted that textiles alone accounted for a little above  $2/3$  of the total mandays worked in industries in 1960. And even in 1969 it accounted for 52.82 per cent of the total mandays worked in



industries. Thus between 1960 and 1969 the mandays worked in textile industry as proportion of the total mandays worked had fallen from about 2/3 in 1960 to about 1/2 in 1969. Another significant point which may be noted is that so far the top 5 or 10 wage paying industries are concerned, the proportion of employment in non-textile industry is very low and it has fallen between 1960 and 1969. It is shown in table V-7.

Table V-7

Proportion of Mandays worked in High Wage Paying  
Industries other than Textiles  
in 1960 and 1969

Top wage paying industries other than textiles	Proportion of mandays worked	
	1960	1969
1	2	3
Top 4	5.53	2.45
Top 9	13.88	11.25
Top 14	15.47	18.29

Source: Derived from Table V-6.

Textile industry is at "Three digit" level (231) i.e. Spinning, Weaving and Finishing of Textiles; These proportions are obtained as percentage mandays worked in top wage paying 5 industries minus percentage mandays worked in textile industry (231); Percentage mandays worked in top wage paying 10 .

industries minus percentage mandays worked in textile industry etc.

It will be noted that so far as the top 5 or 10 wage paying industries are concerned the percentage mandays worked in non-textiles have fallen. However considering the first 15 industries together there is an increase in the proportion of mandays worked. This means that the employment in industries which have X to XV ranks in the rank order (descending according to wage rates), have experienced rapid growth of employment between 1960 and 1969. This means that the non-textile industries which are somewhat important from the view point of employment do not belong to the category of top wage paying industries (first 10 high wage paying industries).

#### Percentage Changes in Wages and Employment:

The analysis of the foregoing pages dealt with the levels of employment in high and low wage industries in 1960 and in 1969. In other words we were concerned with the examination of the employment significance of industries paying high and low wages and how the importance (in terms of employment) of the industries in these high and low wage groups has changed in 1969 as compared to in 1960.

We may now turn to an analysis of the percentage changes overtime in wage rates and employment in different industries. The examination of such an aspect will enable us to know the the emerging pattern overtime. For instance, it will give us

the clear idea about the functional relationship between wages and employment, if we find that high percentage increases in employment are accompanied by high percentage changes in wage rates. Moreover we can find out whether the percentage change in employment and wage rates are related to the initial levels of employment and wages etc. To begin with we have presented in table V-8 wage rates, employment, and percentage changes in them during 1960-1969.

Table V-8

Average Daily Industrial Wage Rates, Mandays worked and Percentage Changes in them in 30 Industries in Gujarat: 1960-1969

Indus- try code -	Average daily industrial wage		Percen- tage change in 1969 over 1960	Mandays worked in factories submitting returns		Percen- tage change in 1969 over 1960
	1960	1969		1960	1969	
1	2	3	4	5	6	7
321	6.15	12.65	105.67	206461	222745	+ 7.8
231	5.89	9.98	69.43	60954047	51468243	- 15.6
334	5.85	9.76	66.83	685380	1061383	+ 54.8
511	4.94	10.49	112.34	1167543	987954	- 15.4
311	4.54	7.81	72.02	2872168	3194342	+ 11.2
319	4.33	8.22	89.83	1544341	4103149	+ 165.6
384	4.26	8.08	89.67	1193386	1899321	+ 59.1
280	4.03	7.77	92.90	963977	1242329	+ 28.8
202	3.98	8.07	102.76	230554	866488	+ 275.7
360	3.93	5.78	47.07	3506815	7497827	+ 113.8

Table V-8 (contd.)

Indus- try code	Average daily industrial wage		Percen- tage change in 1969 over 1960	Mandays worked in factories submitting returns		Percen- tage change in 1969 over 1960
	1960	1969		1960	1969	
1	2	3	4	5	6	7
382	3.82	8.03	110.20	453699	943634	+ 107.9
300	3.78	4.58	21.16	298178	387986	+ 30.1
207	3.72	6.64	78.49	266131	561926	+ 111.1
381	3.72	8.32	123.65	84183	120938	+ 43.5
341	3.53	5.57	57.79	313186	1827321	+ 483.3
342	3.09	6.03	95.14	360257	426206	+ 18.2
350	2.99	4.97	66.22	692550	1944876	+ 180.8
370	2.91	6.85	135.39	81363	1435212	+1663.9
333	2.82	4.22	49.64	855271	1095146	+ 28.0
209	2.77	5.24	89.16	3502035	3787330	+ 8.1
399	2.75	4.60	67.27	465942	956294	+ 105.2
331	2.69	3.73	38.66	1493144	1751341	+ 17.2
271	2.61	4.39	68.19	549675	831417	+ 51.2
395*	2.30	8.07	250.86	18970	757059	+3884.7
205	2.50	4.15	66.00	462992	364012	- 21.4
250	2.46	4.18	69.91	1087718	947892	- 12.9
339	2.35	3.90	65.95	356702	1111700	+ 211.6
239	2.27	3.96	74.44	321953	229665	- 18.7
010	2.07	3.20	54.58	2179168	2878680	+ 32.2
220	1.57	2.56	63.05	1248389	1061495	- 15.0
State	5.08	8.14	60.25	89096928	97438329	+ 9.4

Source: For Col. 2 and 3 Table V-1; For Col.5 and 6 Appendix V-2.

\*The wage rate and mandays are of 1961.

It will be seen from Col.4 and Col.7 of table V-8 that, while wage rates have increased in all industries between 1960 and 1969, employment (in terms of mandays worked in the factories submitting returns) has not increased in all the industries. There are six industries, two of which are high wage rate industries i.e. Industry code 231 and 511 and four low wage industries i.e. Industry code 205, 250, 239 and 220 which have experienced percentage fall in their employment between 1960 and 1969.

Relationship between increase in wage rates and increase in employment:

It can be found out from table V-8 that the 10 industries which have experienced very rapid increase in wage rates between 1960 and 1969 are in order. (i) Manufacture of jewellery and other related articles (code 395). (ii) Electrical machinery (code 370). (iii) Shipbuilding and repairs (code 381). (iv) Electrical power and light (code 511). (v) Manufacture of glass and glass products (code 332). (vi) Refining of petroleum etc. (code 321). (vii) Manufacture of dairy products (code 202). (viii) Non-ferrous basic metal industries (code 342). (ix) Printing and book binding etc. (code 280). (x) Manufacture of miscellaneous chemical products (code 319). It may be noted that these are new, modern and sophisticated industries. On the other hand the 10 industries which have experienced the

least increase in wage rates are in order. (i) Manufacture of Rubber and Rubber products (code 300). (ii) Manufacture of structural clay products (code 331). (iii) Manufacture of machinery except electrical machinery (code 360). (iv) Manufacture of pottery, chinaware and earthenwares (code 333). (v) Cotton Ginning, Pressing etc. (code 010). (vi) Ferrous basic metal industries (code 341). (vii) Manufacture of tobacco (code 220). (viii) Non-metallic mineral products not elsewhere classified (code 339). (ix) Manufacture of grain mills products (code 205). (x) Manufacture of metal products (code 350). Most of the processing industries and non-metallic mineral products (except cement) are included in this latter group. Manufacture of metal products and ferrous metal industries have also experienced low percentage rise in wages between 1960 and 1969. However if we examine the ranks of these same industries according to percentage changes in wage rates and employment in them during 1960-1969, there is no correspondence. It is shown in table V-9.

Table V-9

Ranks of Industries According to the Percentage Changes  
in Wage Rates and Employment: 1960-1969

Sr. No.	Ten industries with highest increase in wage rates			Ten industries with lowest increase in wage rates		
	Indus- try code	Percen- tage change in wage 1960- 1969 Ranks	Percen- tage change in employ- ment 1960- 1969 Ranks	Indus- try code	Percen- tage change in wage 1960- 1969 Ranks	Percen- tage change in employ- ment 1960- 1969 Ranks
1	2	3	4	5	6	7
1.	395	I	I	350	XXI	VI
2.	370	II	II	205	XXII	XXX
3.	381	III	XV	339	XXIII	V
4.	511	IV	XXVII	220	XXIV	XXVI
5.	332	V	X	341	XXV	III
6.	321	VI	XXIV	010	XXVI	XVI
7.	202	VII	IV	333	XXVII	XIX
8.	342	VIII	XX	360	XXVIII	VIII
9.	280	IX	XVIII	331	XXIX	XXI
10.	319	X	VII	300	XXX	XVII

Source: Derived from Table V-8.

Thus 5 out of 10 industries which have fastest increases in wage rates have also ranks among the first 10 in terms of fastest increase in employment.

Similarly if we consider the 10 industries which have the lowest wage rise between 1960-1969 and compare them with the employment changes in them (Col.6 and Col.7), We find that only in case of 3, out of 10 industries which have lowest percentage rise in wage rates, have their ranks among the last 10 i.e. ranks between XXI to XXX in terms of changes in employment. Thus 10 industries which have fastest increase in wage, 5 have also faster rise in employment. Among the 10 industries which have the lowest rise in wage, three i.e. 205, 220 and 331 have their ranks of percentage change in employment among the lowest 10. Alternatively the industries which have low percentage rise in wage rates have also experienced relatively faster growth of employment except in respect of Manufacture of grain mill products (code 205) and Manufacture of tobacco (code 220), in which cases there is actually fall in the total mandays worked in 1969 as compared to in 1960. In order to see the overall relationship between percentage changes in wage rates and percentage changes in employment in all the 30 industries coefficient of rank correlation was calculated between ranks according to percentage changes in wage rates and ranks according to percentage changes in employment. It was rank  $r = +0.1211$  which shows that there is no significant relationship between percentage changes in wages and percentage changes in employment in 30 "Three digit" industries in Gujarat.



Initial Levels of Wages and Employment and Percentage  
Changes in them between 1960 and 1969:

If we consider the 10 industries which have the highest percentage rise in their wages and 10 industries with the lowest percentage rise in wages and relate them with their initial wage levels we get the pattern as shown in table V-10.

Table V-10  
Ranks of Industries Experiencing High and Low Percentage  
Increases in Wage Rates According to  
their Initial Wage Levels

Sr. No.	Ten industries with highest increases in wage rates			Ten industries with lowest increases in wage rates		
	Industry code	Rank of percen- tage change in wage 1960-69 Ranks	Rank of Wage level 1960 Ranks	Industry code	Rank of percen- tage change in wage 1960-69 Ranks	Rank of wage level 1960 Ranks
1	2	3	4	5	6	7
1.	395	I	XXIV	350	XXI	XVII
2.	370	II	XVIII	205	XXII	. XXV
3.	381	III	XIV	339	XXVII	XXIII
4.	511	IV	IV	220	XXX	XXIV
5.	332	V	XI	341	XXV	XV
6.	321	VI	I	010	XXVI	XXIX
7.	202	VII	IX	333	XIX	XXVII
8.	342	VIII	XVI	360	X	XXVIII
9.	280	IX	VIII	331	XXIX	XXII
10.	319	X	VI	300	XXX	XII

Source: Derived from Table V-8.

Initial Levels of Wages and Employment and PercentageChanges in them between 1960 and 1969:

If we consider the 10 industries which have the highest percentage rise in their wages and 10 industries with the lowest percentage rise in wages and relate them with their initial wage levels we get the pattern as shown in table V-10.

Table V-10

Ranks of Industries Experiencing High and Low Percentage  
Increases in Wage Rates According to  
their Initial Wage Levels

Sr. No.	<u>Ten industries with highest increase in wage rates</u>			<u>Ten industries with lowest increases in wage rates</u>		
	Industry code	Rank of percentage change in wage 1960-69 Ranks	Rank of Wage level 1960 Ranks	Industry code y	Rank of percentage change in wage 1960-69 Ranks	Rank of Wage level 1960 Ranks
1	2	3	4	5	6	7
1.	395	I	XXIV	350	XXI	XVII
2.	370	II	XVIII	205	XXII	XXV
3.	381	III	XIV	339	XXIII	XXVII
4.	511	IV	IV	220	XXIV	XXX
5.	332	V	XI	341	XXV	XV
6.	321	VI	I	010	XXVI	XXIX
7.	202	VII	IX	333	XXVII	XIX
8.	342	VIII	XVI	360	XXVIII	X
9.	280	IX	VIII	331	XXIX	XXII
10.	319	X	VI	300	XXX	XII

Source: Derived from Table V-8.

Out of the 10 industries which have shown fastest increase in wage rates during 1960-1969, 5 had high initial wage levels i.e. they ranked among the first 10 industries according to wage levels. They are industries with code Nos. 511, 321, 202, 280 and 319. In other words, in half of the high wage paying industries percentage change in wage is positively related with the initial high wage levels.

Similarly if we take the 10 industries which have the lowest percentage rise in wage rates during 1960-1969 and compare them with their 1960 wage levels, we find that among the 10 industries experiencing the lowest percentage rise in wages, in 5 industries the ranks of wage rates are between XXI and XXX. Or in other words half of these 10 industries with low initial wages experienced low percentage rise in wages. In order to consider the relationship between initial wage level (1960) and percentage change in wage rates over 1960-1969 in all 30 industries we have calculated coefficient of rank correlation between wage levels in industries in 1960 and percentage changes in them in 1969. The rank correlation coefficient was +0.3286 which is, though not significant at 5 per cent level, is not altogether negligible with 28 d.f. We thus do find that the percentage changes in wage rates have shown positive relationship with the levels of wage rates in 1960. This also emphasizes the fact that since high wage industries of 1960 have shown relatively faster and low wage industries of 1960 have shown relatively slower increases in wage rates by 1969, the inter-

industry wage structure has expanded. Alternatively, this aspect i.e. the expansion of the wage structure can be explained in terms of the changes in real wage rates.

Industrial Real Wage Rates and Inter-industry wage Structure:

We have shown in table V-11 the averages of real industrial wage rates in 30 "Three digit" industries at two points of time i.e. 1960/1961 and 1968/1969. The real wage rates are calculated by deflating money wage rates with the cost of living index numbers (general) for industrial workers (Ahmedabad centre).

Table V-11

Real Wage Rates in Thirty "Three digit" Industries in Gujarat: 1960/61 and 1968/69

Industry code	Real Industrial Wage rates		Percentage change in 1968/69 over 1960/61
	1960/61	1968/69	
1	2	3	4
010	2.02	1.86	- 7.93
202	4.07	5.12	+ 25.79
205	2.47	2.30	- 6.89
207	4.27	4.06	- 4.92
209	2.93	3.01	+ 2.73
220	1.54	1.51	- 1.95
231	5.92	5.98	+ 1.01
239	2.26	2.63	+ 16.37
250	2.52	2.26	- 10.32
271	2.61	2.67	+ 2.29

Table V-11 (contd.)

Industry code	Real industrial wage rates		Percentage change in 1968/69 over 1960/61
	1960/61	1968/69	
1	2	3	4
280	4.11	4.60	+ 11.92
300	3.89	2.80	- 28.03
311	4.53	4.47	- 1.33
319	4.56	4.95	+ 8.55
321	6.33	7.53	+ 18.95
331	3.38	2.26	- 33.14
332	3.90	4.46	+ 14.35
333	2.90	2.34	- 19.32
334	5.55	5.52	- 00.55
339	2.41	2.31	- 4.15
341	3.28	3.34	+ 1.82
342	3.26	3.28	+ 0.61
350	3.06	2.94	- 3.93
360	3.97	3.40	- 14.36
370	3.18	3.66	+ 15.09
381	3.84	4.93	+ 28.38
384	4.17	4.86	+ 16.54
395	2.38	4.68	+ 96.63
399	2.94	2.65	- 9.87
511	5.27	6.28	+ 19.16

Source: Calculated from industrywise money rates given in table V-1.

Note: The cost of living index numbers (general) for Industrial workers (Ahmedabad centre) were:

Year	1960	1961	1968	1969
Index	100	101	165	167

It will be noted from table V-11 that in 14 out of 30 industries, wage rates have fallen during 1960/61 to 1968/69. There were 10 industries in which the changes in real wage rates during the period were only marginal (showing increase or decrease of less than 5 per cent). For explaining the change in the wage structure these 30 industries are classified into three groups each consisting of 10 industries. The groups are made according to the ranks of wage rates in 1960/61 (in descending order) in industries. Thus group I consists of first 10 industries (Ranks I to X) which is also described as Top wage paying 10 industries group. Group II will consist of industries with wage Ranks XI to XX. It is called Middle wage paying 10 industries group. The last 10 industries with lowest wage rates Ranks XXI to XXX will make group III. It is described as lowest wage paying 10 industries group. The percentage changes in real wage rates by 1968/69 in these three groups of industries are shown in table V-12.

Table V-12

Classification of Percentage Changes in Top, Medium  
and Low wage paying Industries of 1960/61  
during 1960/61 to 1968/69

Percentage change in 1968/69 over 1960/61	Top wage paying 10 industries (Group I)	Middle wage paying 10 industries (Group II)	Lowest wage paying 10 industries (Group III)
1	2	3	4
N ( 0 to 4 )	3	3	4
<u>Decrease</u>			
5 to 9	1	-	2
10 to 14	-	2	1
15 and above	-	3	-
<u>Increase</u>			
5 to 9	1	-	1
10 to 14	1	1	-
15 to 24	3	-	1
25 and above	1	1	1
Total	10	10	10

Source: Calculated from Table V-11.

Note: N will include increase or decrease of less than 5 per cent.

Table V-12 reveals that among the Top wage paying 10 industries, 6 have experienced increase in real wage rates, 3 of these have increases of 15 to 24 per cent. As against this, among the lowest wage paying 10 industries, only 3 and in the Middle group only 2 have shown increases in their real wage rates. It will be also noted that 5 industries of group II and 3 of group III have shown decline in their real wages, while in group I, only 1 industry has experienced a fall in real wages. Thus in the Top wage paying 10 industries (group I), there are more industries which have shown increase in real wages and these are (in 4 industries) high percentage increases (15 per cent and above). In the remaining 20 (group II and group III) only 5 industries have shown increase in real wages and only 3 of them (2 from group III and 1 from group I) have wage increases of 15 per cent and above. It is this pattern of percentage changes in the wage rates in the top, medium and the low wage industries which explains the expansion of inter-industry wage structure in Gujarat during 1960-1969.

Similarly the relationship between initial level of employment in industries and percentage changes in employment overtime was examined. For high and low employment providing industries the situation was as shown in table V-13.



Table V-13

Industries experiencing the Highest and the Lowest Percentage Rise in Wage Rates during 1960-69, by their levels of employment in 1960

Ten Industries which had the fastest percentage increase in employment (1960-69) Industry code	Rank according to percentage increase in employment	Rank according to 1960 level of employment	Ten Industries which had lowest percentage rise in employment (1960-69) Industry code	Rank according to percentage change in employment	Rank according to 1960 level of employment
1	2	3	4	5	6
395	I	XXX	331	XXI	VII
370	II	XXIX	311	XXII	IV
341	III	XXIII	209	XXIII	III
202	IV	XXVI	321	XXIV	XXVII
339	V	XXI	250	XXV	XI
350	VI	XIV	220	XXVI	VIII
319	VII	VI	511	XXVII	X
360	VIII	II	231	XXVIII	I
207	IX	XXV	339	XXIX	XXI
332	X	XIX	205	XXX	XVIII

Source: Derived from Table V-8.

It will be noted that out of 10 industries which had shown rapid percentage increase in employment (Col.1 and 2)

only in two i.e. industry code 319 and 360, employment levels were high in 1960 i.e. Rank VI and Rank II respectively (Col.3). In the same way out of the 10 industries which has shown the lowest percentage rise in employment, only in two i.e. industry code 339 and industry code 321, the employment levels were low in 1960 (Ranks XXI and XXVII respectively in Col.6). A coefficient of rank correlation between initial level of employment (1960) and percentage change in them by 1969 was calculated for all 30 industries. It was rank  $r = -0.2718$ , which is not a significant relationship between the employment level and percentage change in employment. However the rank correlation coefficient has negative sign showing a tendency that the industries which had high initial levels of employment have tended to experience relatively lower percentage increases in employment during 1960-69.

#### Productivity and Wage Rate:

The inter-industry wage differentials are usually explained in terms of economic factors<sup>7</sup> such as productivity, cost of

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<sup>7</sup>Slitcher S.H. Op.Cit.,

Ross A.M. and Goldner W. "Forces affecting the inter-industry wage structure". Quarterly Journal of Economics, May 1950.

Garbarino J.W. "A theory of inter-industry wage structure variations". Quarterly Journal of Economics, May 1950.

Brown D.G. "Expected ability to pay and inter-industry wage structure in manufacturing". Industrial and Labour Relation Review, October 1962.

For India, See: Sawhney P.K. Op.Cit.,

Krishnakumar, Op.Cit.,

labour as the proportion in the total cost, capital intensity, skill-mix of labour force and institutional factors like the degree of trade unionism, role of wage boards etc. However in the present study our source of data is the information collected under the Payment of Wages Act of 1936 and the data on the above mentioned explanatory variables are not collected under the said source. Therefore we have examined only the relation between productivity and wage rate from the data available under the Annual Survey of Industries, we have computed productivity per man hour which is value added by manufacture divided by man hours worked in an industry. Wages include wages and salaries per man hour. We have selected 16 "Three digit" industries which are broadly common under the Payment of Wages Act of 1936 and the Annual Survey of Industries. These 16 industries with their classification code numbers at "Three digit" levels are shown in table V-14.

However despite these similarities of industries at "Three digit" level under the two sources, some limitations will remain. For instance under the Payment of Wages Act of 1936, the wages are collected for those getting less than Rs.400/- per month and coverage extends to all factories employing 10 or more and using power and even to those establishments which are specially brought under the preview of the Act by the state Government concerned. On the other hand under the Annual Survey of Industries, there is no such

Table V-14

Sixteen Industries Common at Three digit Level Under  
the Annual Survey of Industries and  
Payment of Wages Act, 1936

Code Number of industrial classifica- tion under Annual Survey of Industries	Name of the Industry	Code Number of industrial classifica- tion under the Payment of Wages Act of 1936
1	2	3
205	Manufacture of Grain Mill Products	205
209	Manufacture of Miscellaneous Food Preparation	209
220	Tobacco Manufacture	220
231	Spinning, Weaving and Finishing of Textiles	231
239	Cotton Ginning, Pressing, Cleaning	010
271	Pulp, Paper and Paperboard Mills	271
280	Printing, Publishing and Allied Industries	280
311	Basic Industrial Chemicals including Fertilizers	311
319	Manufacture of Miscellaneous Chemical Products	319
331	Manufacture of Structural Clay Products	331
339	Manufacture of Non-metallic Mineral Products not elsewhere classified	339
341	Ferrous Basic Metal Industries	341
360	Manufacture of Machinery except electrical machinery	360
384	Repair of Motor Vehicles and Cycles	384
334	Manufacture of Cement	334
511	Electric Light and Power	511

Source: Handbook of Basic Statistics, 1965 and 1966, Bureau of Economics and Statistics, Government of Gujarat; Annual Report Notes and Statistical Statements under the Factories Act, 1945 and Payment of Wages Act, 1936.

limitation in terms of wages paid. The data are collected for employees - production workers and others irrespective of the amount paid. Moreover the Annual Survey of Industries covers all factories employing 50 or more workers and using power and factories employing 100 and more workers without power only. Due to these limitations our attempt to examine the relation between productivity and wage rate would only give tentative result. The conclusion can provide only a broad clue as to the relation between productivity and wage rate. With a view to provide check, we have related productivity with the wage rate as per the Payment of Wages Act of 1936 and also with the wage rate computed from the data under the Annual Survey of Industries. The levels of productivity and wage rates for 16 selected industries during 1960-64 and percentage changes in productivity and wage rates are given in Appendix V-4. For examining the relationship between the productivity and the wage rate we have calculated the coefficient of rank correlation between productivity and wage rate. These are shown in table V-15.

Table V-15  
Coefficients of Rank Correlation Between Productivity  
and Wage Rates in 16 Selected Industries in  
Gujarat for the Period 1960-1964

Year	Rank Correlation Coefficients between	
	Productivity and wage rate (ASI)	Productivity (ASI) and wage rate (P.W.Act, 1936)
1	2	3
1960	+ 0.8353	+ 0.7015
1961	+ 0.8429	+ 0.6858
1962	+ 0.7893	+ 0.6393
1963	+ 0.8295	+ 0.7280
1964	+ 0.8442	+ 0.6412

Source: Computed from Appendix V-4 and Table V-1.

Note: ASI - Annual Survey of Industries.

P.W.Act - The Payment of Wages Act, 1936.

It can be seen from table V-15 that in each year during 1960-1964, we get significant coefficients of rank correlation between productivity and wage rate either in case of workers getting less than Rs.400/- per month under the Payment of Wages Act of 1936 or All Employees-Production Workers and others under the Annual Survey of Industries. Between the two

however the relation between productivity and wage as shown from the data of Annual Survey of Industries in Column 2 of table V-15 is very high. Thus the above analysis shows that the industries which have the high level of productivity have also shown high wage rate levels in 16 industries in the state of Gujarat.

To find out the relation between the changes in wage rate and productivity we have calculated the coefficient of rank correlation between percentage change in productivity and percentage change in wage rate in these 16 industries between 1960 and 1964. The coefficient of rank correlation between percentage change in productivity and percentage change in wage rate (using wage and productivity data of Annual Survey of Industries) was + 0.2956. While between productivity (Annual Survey of Industries) and wage rate (Payment of Wages Act, 1936) was -0.3897. The coefficients show opposite signs. However neither of them are significant at 5 per cent level of significance. (with 14 d.f.)

Thus, even though levels of productivity and levels of wage rates are related, it is difficult to conclude about the relationship between the changes in productivity and changes in wage rates.

Trends in the Inter-industry Wage Differentials  
in the Districts of Gujarat:

The main objective here is to examine the trend in the inter-industry wage differentials in districts and highlight their characteristics. It is not possible to examine the factors which have led to the particular trends in the structure. Because the data on explanatory variables which affect the wage rates in different industries such as productivity, capital intensity, skill proportions of labour force, degree of unionism etc. are not available at district level. And hence no attempt is possible in this direction. Moreover it was not possible and also not necessary to examine the inter-industry wage structures for all 16 districts. Because in districts like Sabarkantha, Banaskantha, Amreli, Broach and Panchmahals only few industries existed and hence there would not be enough observations to examine the wage dispersion. Moreover in these districts the industrial activity as such was very limited. Due to these reasons the inter-industry wage dispersion is examined in 10 districts which are:

(1) Ahmedabad (2) Surat (3) Baroda (4) Kaira (5) Mehsana  
(6) Rajkot (7) Bhavnagar (8) Jamnagar (9) Junagadh (10) Suran-  
dranagar. Table V-16 shows coefficients of variation (which  
measure relative dispersion) for 10 districts for the period  
1960-1969.



Table V-16  
Relative Dispersion (Coefficients of variation) of the Inter-Industry Wage Structure  
in 10 districts of Gujarat, 1960-1969

District	Year										
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
1	2	3	4	5	6	7	8	9	10	11	
1. Ahmedabad	27.8742	26.7301	27.9437	26.0030	28.2822	37.1776	31.5897	32.5964	36.1395	33.4744	
2. Surat	30.5397	26.5960	29.3147	34.4056	28.3452	33.8685	29.1682	39.0610	33.7169	32.0950	
3. Baroda	38.2453	38.3800	33.0068	28.9912	37.2121	38.5391	46.9213	42.9870	44.8023	42.8020	
4. Kaira	38.5406	34.9859	39.1878	43.4146	37.7108	43.1396	46.1323	46.9201	41.4722	42.9972	
5. Mehsana	32.0834	28.6680	30.0344	28.6352	31.2845	37.4298	34.9467	36.6135	36.0431	41.5073	
6. Bhavnagar	-	-	32.9318	25.6268	27.6273	26.4383	31.9102	38.2065	38.4802	40.5637	
7. Rajkot	-	-	27.4575	41.8561	39.7353	35.0025	37.2247	40.8503	43.7256	39.5267	
8. Jamnagar	-	-	33.0918	34.1644	32.5193	32.9902	32.0527	39.4013	38.7436	36.5940	
9. Junagadh	-	-	36.1870	29.5156	30.1069	36.2016	36.5702	38.1969	36.6080	39.6509	
10. Surendranagar	-	-	36.5494	29.3877	28.0835	46.7043	57.3379	41.6216	33.7433	34.9295	
State	32.6831	32.4863	32.3855	31.7165	36.5909	34.4391	36.6290	39.8445	39.8245	37.9206	

Source: Computed from the wage rates in Industries for each of the 10 districts shown in Appendix V-5.

Table V-16 shows a clear trend of expansion in the percentage wage dispersion in industrial wage structures in all the districts. It is particularly marked from 1964 in most of the districts. It will be also noted that in 1962 there are four districts which have lower relative wage dispersion in their industrial wage structures. They are Ahmedabad, Surat, Rajkot and Mehsana. In 1969 also there are four districts in the lower wage dispersion group. It is thus very interesting to note that the proportion of districts with high and low percentage industrial wage dispersion has remained unchanged between 1962 and 1969. Whether the composition of these districts is the same or not is shown in table V-17.

Table V-17

Changes in the Levels of Relative Wage Dispersion of Inter-industry Wage Structures in 10 Districts: 1962-1969

Year 1962	Year 1969	
	Districts with low relative dispersion	Districts with high relative dispersion
1	2	3
<u>Districts with low* relative dispersion in the inter-industry wage structure:</u>		
1. Ahmedabad	Ahmedabad	-
2. Surat	Surat	-
3. Rajkot	-	Rajkot
4. Mehsana	-	Mehsana
	<u>2</u>	<u>2 = 4</u>
<u>Districts with high** relative dispersion:</u>		
1. Baroda	-	Baroda
2. Bhavnagar	-	Bhavnagar
3. Junagadh	-	Junagadh
4. Jamnagar	Jamnagar	-
5. Kaira	-	Kaira
6. Surendranagar	Surendranagar	-
	<u>2</u>	<u>4 = 6</u>

\* Low is defined as lower than for the state as a whole.

\*\* High is higher than for the state as a whole.

It will be seen that of the 4 low percentage wage dispersion districts of 1962, two have remained in the low dispersion group in 1969 also. They are Ahmedabad and Surat. The districts which within the state are industrially well advanced. Similarly both in 1962 and 1969 the districts of Baroda, Bhavnagar, Kaira and Junagadh have remained in the high wage dispersion group. Among others, Mehsana and Rajkot have become high wage dispersion districts in 1969 while Jamnagar and Junagadh have turned low wage dispersion districts in 1969. We computed the coefficient of rank correlation between the districts ranks according to the levels of coefficient of variation in 1962 and 1969. The rank correlation coefficient was  $r = + 0.4061$ . Though this is not significant at 5 per cent level (with 8 d.f.), it does show in a limited way that the districts which had high percentage wage dispersion of wage structures have continued to be in the same position in 1969 also.

#### Inter-district Variations in Wage Structures:

We have examined below the relationship between level of industrialisation and wage structure among the different districts in the state of Gujarat. It is argued that the extent of wage dispersion is very low both at the most developed and the most underdeveloped state of the economy<sup>8</sup> and in the early stage the wage structure expands from the low level of

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<sup>8</sup>Dunlop John T. "Task of Contemporary Wage Theory".  
Op.Cit., p.25.

dispersion upto a point and once again narrows down once the mature stage of industrialisation is attained. Coming to the districts of Gujarat we cannot clearly classify the districts as developed and underdeveloped districts. Because all have been developing though, the rates of industrial development have been uneven. However we can say that within the state, Ahmedabad and Surat did have sizable industrial development when the new state came into existence in 1960. While Baroda, Kaira, Mehsana, Rajkot, Jamnagar, Bhavnagar, Junagadh and Surendranagar were in transitional stage of industrial development. But the fact remains that the districts are at various points or distances on the path of industrialisation. It is in this context that we have to interpret the relation between the level of industrialisation and the extent of dispersion in the wage structures in the districts. For the purpose we have used the extent of factory employment in the districts as the index of industrialisation. To examine the relation between the level of industrialisation and the level of wage dispersion, we have calculated the coefficient of rank correlation between districts ranked according to factory employment and coefficients of variation (showing relative dispersion of inter-industry wage structure) for each year during 1962 to 1968 for which the data were available. These rank correlation coefficients are given in table V-18.

Table V-18

Coefficients of Rank Correlation Between Factory  
Employment and Wage Dispersions in 10 districts  
in the State of Gujarat for 1962-68

Year	Coefficients of Rank Correlation
1	2
1962	- 0.4303
1963	- 0.1757
1964	- 0.0424
1965	+ 0.1455
1966	- 0.2484
1967	- 0.0656
1968	- 0.1212

Source: Computed from Table V-16 ; The data on Factory employment were taken from Handbook of Basic Statistics, Government of Gujarat 1965,1966, Bureau of Economics and Statistics and for 1967 and 1968 the data were copied from the Registers under the Factories Act, 1938, Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

It would be seen from table V-18 that there is no significant correlation between extent of inter-industry wage dispersion and the level of industrialisation among the 10 districts in the state. However the negative sign of the coefficient shows the direction in which the two variables tend

to be correlated i.e. relatively more industrialised districts tend to have low dispersion in their industrial wage structures.

Conclusion:

1. The inter-industry wage structure in Gujarat has expanded during the period 1960-1969.
2. The expansion of the inter-industry wage structure has occurred in terms of both relative and absolute dispersions, the latter being much larger than the former.
3. The high-low differentials have also widened during the period.
4. The inter-industry wage differentials are larger than inter-district industrial gross wage differentials.
5. In 1960 most of the factory employment was provided by 10 high wage industries, textile industry (231) being the predominant among them. In 1969 also 10 high wage industries accounted for a substantial employment. However between 1960 and 1969 the importance of 10 high wage industries (in terms of employment provided) had fallen.
6. The employment provided by 10 lowest wage paying industries as proportion of the total mandays worked increased between 1960 and 1969.
7. A very significant increase in employment took place in the middle 10 industries - the industries which paid medium wage rates.

8. There is no significant relationship between percentage changes in wage rates and percentage changes in employment during 1960-1969. However among the 10 industries which had experienced the fastest increase in wage rates, 5 had faster growth of employment. On the other hand among the 10 industries which had experienced the lowest increase in wage rates only 3 had low growth of employment.
9. The initial wage levels and percentage changes in wage rates have shown positive relationship which is high but not significant. The expansion of the inter-industry wage structure is explained by the fact that high wage industries of 1960 have experienced relatively faster percentage increase in wage rates than the low wage industries. In terms of the behaviour of real wages the expansion of inter-industry wage structure has occurred because among the high real wage paying industries of 1960/1961 many have experienced relatively larger increase in real wage rates during 1960-1969. Whereas among the medium and the low wage paying industries in majority, the real wage rates have either remained unchanged or have fallen.
10. The industries which have high level of initial employment (1960) have experienced lower percentage rise in employment by 1969. In other words the initial levels of employment and percentage changes in them overtime are negatively related, though this relationship is also not significant.
11. Levels of productivity and wage rates have shown positive and significant relationship for 16 industries for which such relationship was examined. However it is uncertain and difficult to conclude whether percentage changes in productivity and percentage changes in wages are at all related.

12. The inter-industry wage differentials have expanded in districts also.
13. The levels of relative dispersion in inter-industry wage structures in districts and the degree of industrialisation are not significantly related. However the negative sign of the rank correlation coefficients shows that more industrialised districts tend to have low inter-industry wage dispersion.



Appendix V-1List of "Three digit" Industries in Gujarat

Code	Name of Industry
1	2
010	Gins and Presses
202	Manufacture of dairy products
203	Canning and Preservation of Fruits and Vegetables.
204	Canning and Preservation of Fish and other Sea-foods.
205	Manufacture of grainmill products.
206	Manufacture of bakery products.
207	Sugar Factories and Refineries.
208	Manufacture of Sugar Confectionery Cocoa and Chocolate.
209	Manufacture of miscellaneous food preservations.
214	Soft drinks and Carbonated water industries.
220	Tobacco manufactures.
231	Spinning, Weaving and Finishing of Textiles.
232	Knitting Mills.
233	Cordage, rope and twine industries
239	Manufacture of Textiles not elsewhere classified.
241	Manufacture of boots and shoes (except rubber footwear)
243	Manufacture of wearing apparel (except footwear)

## Appendix V-1 (contd.)

Code	Name of Industry
1	2
244	Manufacture of made-up textile goods, except wearing apparel.
250	Manufacture of wood and cork, except manufacture of furniture.
260	Manufacture of furniture and fixtures.
271	Pulp, paper and paper board mills.
280	Printing, bookbinding etc.
291	Tanneries and leather finishing.
292	Manufacture of leather products, except foot-wear and other wearing apparel.
300	Manufacture of Rubber and rubber product.
311	Basic chemicals, including fertilisers.
319	Manufacture of miscellaneous chemical product.
321	Petroleum refineries etc.
331	Manufacture of structural clay products.
332	Manufacture of glass and glass products, excepting optical lenses.
333	Manufacture of pottery, china and earthen-ware.
334	Manufacture of cement.
339	Manufacture of non-metallic mineral products not elsewhere classified.
341	Basic Metal Industries (Ferrous)
342	Basic Metal Industries (Non-ferrous)
350	Manufacture of metal products, except machinery and transport equipment.

## Appendix V-1 (contd.)

Code	Name of Industry
1	2
360	Manufacture of machinery, <b>except</b> electrical machinery.
370	Electrical machinery apparatus, appliances and supplies.
381	Transport equipments (Ship building)
383	Manufacture of motor vehicles.
384	Repair of motor vehicles and cycles
385	Manufacture of Bicycles.
389	Manufacture of Transport equipment not elsewhere classified.
391	Manufacture of professional scientific measuring and controlling instruments.
392	Manufacture of photographic and other optical goods.
393	Manufacture of watches and Clocks.
395	Manufacture of jewellery and related articles.
396	Manufacture of musical instruments.
399	Manufacturing industries not elsewhere classified.
511	Electric light and power.
512	Gas manufacture and distribution.

Source: Taken from Annual Report, Notes and Statistical Statements, under the Payment of Wages Act, 1936, Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

## Appendix V-2

Manday worked by Workers earning less than Rs.400/- per month  
in 30 "Three digit" Industries in Gujarat: 1960-1969

Industry code	Year										
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
1	2	3	4	5	6	7	8	9	10	11	
010	2179168	3028800	3106024	3899229	5028914	3363417	2688696	2888454	2997369	2878680	
202	230554	193244	242783	316704	21854	433622	563384	587149	732343	866488	
205	462992	412459	474850	472835	448190	384761	331628	320177	351838	354012	
207	246131	132726	353576	169696	296299	265166	344170	200092	381234	561926	
209	3502035	3470490	4082365	4002281	3770771	3905770	3364508	3432470	4280266	3787330	
220	1248389	1286510	1418958	1168022	1246451	1416120	1221746	1176220	1157923	1061495	
231	60554047	61129041	61425237	59535982	63570575	61486559	58904125	53941868	51270951	51468243	
239	321959	320766	367801	355123	325862	280775	274902	230457	226006	229652	
250	1087718	1130401	1230736	1125331	1100651	885630	961781	944049	654398	947892	
271	549675	583956	731056	870694	912450	926787	907055	799255	871773	831417	
280	963977	1122623	1288699	1419133	1428255	1214393	1427433	1189930	1264162	1242329	
300	298178	310738	300288	292265	371068	393835	357258	265521	353875	387986	
311	2872168	3066524	2405677	2959283	2258136	2555044	3114145	3343720	3556905	3194342	
319	1544341	1922037	2903946	2826458	3321303	2660855	3359542	2855296	3509698	4103149	
321	206461	228184	220576	212189	130546	234434	283393	275929	233223	222745	
331	1093144	1228900	1664725	1659324	1758811	1623750	1585400	1562328	1600275	1751341	
332	453699	508082	598978	367261	952935	978636	376848	484957	942040	943634	
333	855271	612452	935923	1003335	720332	742601	718192	915777	827629	1095146	

contd.....

## Appendix V-2 (contd.)

6

Industry code	Year										
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
1	2	3	4	5	6	7	8	9	10	11	
334	685380	777740	888295	857750	869890	956905	929339	627572	970147	1061383	
339	356702	608709	652168	715442	786599	867335	1014131	943311	1043530	1111700	
341	315166	442101	521197	482909	855431	1092656	1396787	1345456	1331316	1827321	
342	360257	363857	413853	441351	459544	398403	376532	377274	369477	426206	
350	692550	794261	915756	1241791	13119726	1454165	1703440	1746800	1598178	1944876	
360	3506815	4131810	4038254	4397044	4792505	5450932	5866629	6028945	5573088	7497827	
370	81363	116263	712496	721934	1010298	1073438	1094985	1114603	766551	1435212	
381	84183	67686	80517	114565	153668	197638	180523	178580	115972	120338	
384	1193386	1320322	1467714	1612971	1671698	1696962	1834378	1918381	1901519	1899321	
395	-	18970	55521	87257	131105	54019	192986	317147	583502	757059	
399	465942	839611	635145	724933	754415	773183	617418	681426	817733	956294	
511	1167543	1079189	1239429	1212202	1088588	1089134	1075639	1105537	1070778	987954	

Source: District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Mandays are in respect of Factories submitting returns.

ii) List of Industries is given in Appendix V-1.

## Appendix V-3

Industrial Wage Rates of Workers earning less than Rs.400/- per month in 15 Industries expressed as Percentage of the total of all 30 "three digit" industries

wage rates in each year: 1960-1969

Industry code	Year										
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
1	2	3	4	5	6	7	8	9	10	11	
321	5.86	5.90	5.37	5.58	6.26	5.68	6.62	6.74	6.80	6.59	
231	5.61	5.39	5.59	5.28	5.32	5.71	5.49	5.72	5.42	5.20	
334	5.58	4.75	5.11	5.29	4.75	4.64	5.25	5.15	4.71	5.08	
511	4.71	5.07	4.98	4.91	4.85	5.45	5.31	5.74	5.68	5.46	
311	4.33	3.85	4.42	4.23	4.26	3.91	3.81	3.70	3.85	4.07	
207	3.54	4.37	2.55	3.04	3.61	3.64	3.40	3.25	3.74	3.46	
381	3.54	3.59	3.14	3.34	2.94	3.32	3.40	3.84	4.42	4.21	
341	3.36	2.75	3.33	3.63	3.42	3.37	3.20	3.62	3.01	2.90	
42	2.94	3.11	3.18	3.15	3.08	3.11	2.91	2.79	2.67	3.74	
350	2.85	2.84	2.96	2.97	2.80	2.69	2.67	2.58	2.51	2.59	
250	2.34	2.33	2.45	2.35	2.23	2.57	2.16	2.04	1.85	2.17	
339	2.24	2.23	2.27	2.18	2.35	1.93	2.14	2.07	2.07	2.03	
239	2.16	2.04	2.22	2.30	2.31	2.38	2.47	2.64	2.60	2.06	
010	1.97	1.79	1.82	1.79	1.71	1.54	1.57	1.48	1.62	1.66	
220	1.49	1.37	1.33	1.41	1.27	1.29	1.30	1.39	1.35	1.33	
Total of all 30 "three digit" industries wage rates ( $\Sigma W$ )	104.82	112.27	110.84	115.77	128.61	139.76	154.61	171.18	182.07	191.80	

Source: Calculated from Table V-1.

Note: i) 15 industries are with ranks I to V; XIII to XVII and XXVI to XXX of wage rates in descending order in 1960.

ii) Name of industry can be known from Appendix V-1.

## Appendix V-4

## Productivity and Wage Rates in 16 selected Industries ("three digit") during 1960-1964 in Gujarat State

	1960		1961		1962		1963		1964		Percentage change in productivity and wage rate in 1964 over 1960							
	Productivity (PW Act)	Wage rate (ASI)	Productivity (PW Act)	Wage rate (ASI)	Productivity (PW Act)	Wage rate (ASI)	Productivity (PW Act)	Wage rate (ASI)	Productivity (PW Act)	Wage rate (PW Act)	Productivity (ASI)	Wage rate (PW Act)	Productivity (PW Act)	Wage rate (PW Act)				
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	1.27	0.47	2.50	1.49	0.56	2.42	1.99	0.48	2.50	2.36	0.56	2.57	2.01	0.72	2.56	58.2	52.1	2.4
	1.93	0.52	2.27	1.57	0.67	3.15	1.16	0.69	3.31	1.24	0.70	3.14	1.70	0.59	3.42	-27.9	13.4	23.4
	1.02	0.42	1.57	-	-	-	-	-	-	0.79	0.25	1.64	0.24	0.26	1.64	-17.7	-38.0	4.4
	1.31	0.88	5.89	1.50	0.98	6.06	1.35	1.01	6.20	1.40	0.92	6.12	1.42	1.11	6.85	12.9	26.1	16.2
	0.46	0.36	2.07	0.59	0.42	2.20	0.52	0.31	2.20	0.56	0.35	1.92	0.52	0.23	2.20	13.0	5.5	6.2
	1.25	0.51	2.61	1.31	0.71	2.66	1.22	0.55	2.90	1.35	0.56	3.07	1.30	0.62	3.20	4.0	21.5	22.6
	1.26	0.94	4.03	1.66	0.86	4.26	1.45	0.94	4.40	1.65	0.91	4.65	1.42	0.99	7.82	4.4	5.3	94.0
	4.62	1.25	4.54	4.76	1.14	4.60	4.22	1.19	4.30	5.68	1.34	4.20	5.70	1.46	5.49	23.3	16.8	-19.4
	5.86	1.21	4.32	5.58	1.16	4.88	4.07	1.28	4.75	7.81	1.33	5.04	5.33	1.45	5.37	-9.1	19.8	26.7
	0.61	0.41	2.69	0.66	0.48	4.14	0.47	0.32	2.68	0.62	0.45	2.66	0.72	0.47	2.22	20.0	14.6	8.5
	1.71	1.15	5.35	3.12	1.29	5.34	3.35	1.41	5.67	3.81	1.45	6.13	4.34	1.69	6.12	153.8	46.9	3.9
General Averaged (339)	0.70	0.39	2.35	0.86	0.41	2.51	1.09	0.46	2.52	0.96	0.52	2.53	0.89	0.60	3.03	27.1	53.2	28.9

Contd.....

## Appendix V-4

## Productivity and Wage Rates in 16 selected Industries ("Three digit") during 1960-1964 in Gujarat St

Industry	1960			1961			1962			1963			Wage rate (FW Act)	Wage rate (ASI)	Wage rate (FW Act)
	2	3	4	5	6	7	8	9	10	11	12	13			
1															
Manufacture of grain mill products (205)	1.27	0.47	2.50	1.49	0.56	2.48	1.99	0.48	2.50	2.36	0.56	2.57			
Manufacture of miscellaneous food preparation (209)	1.93	0.52	2.27	1.57	0.67	3.15	1.16	0.63	3.31	1.24	0.70	3.14			
Tobacco manufactures (220)	1.02	0.42	1.57	-	-	-	-	-	-	0.79	0.35	1.64			
Spinning, Weaving and Finishing of Textiles (231)	1.31	0.83	5.89	1.50	0.98	6.06	1.25	1.01	6.20	1.40	0.93	6.12			
Cotton Ginning and Pressing (010)	0.46	0.36	2.07	0.59	0.42	2.30	0.52	0.31	2.20	0.66	0.35	1.92			
Pulp, Paper and Paper board mills(271)	1.25	0.51	2.61	1.31	0.71	2.66	1.22	0.55	2.90	1.35	0.56	2.07			
Printing, Publishing and Allied industries (280)	1.36	0.94	4.03	1.66	0.86	4.26	1.45	0.91	4.40	1.63	0.91	4.69			
Basic industrial chemicals including fertilizers (311)	4.62	1.25	4.54	4.76	1.14	4.60	4.22	1.19	4.90	5.62	1.34	4.90			
Manufacture of miscellaneous chemical products (219)	5.86	1.21	4.33	5.58	1.16	4.88	4.07	1.28	4.75	7.81	1.32	5.04			
Manufacture of structural clay products (331)	0.61	0.41	2.69	0.66	0.42	4.14	0.47	0.39	2.68	0.62	0.45	2.66			
Manufacture of cement (234)	1.71	1.15	5.85	3.12	1.29	5.34	3.33	1.41	5.67	3.81	1.45	6.13			
Manufacture of non-metallic mineral products not elsewhere classified(399)	0.70	0.39	2.25	0.86	0.41	2.51	1.09	0.46	2.52	0.96	0.52	2.53			



	1960		1961		1962		1963		1964		Percentage change in productivity and wage rate in 1964 over 1960							
	Productivity	Wage rate (ASI) (PW Act)	Productivity	Wage rate (ASI) (PW Act)	Productivity	Wage rate (ASI) (PW Act)	Productivity	Wage rate (ASI) (PW Act)	Productivity	Wage rate (ASI) (PW Act)	Productivity	Wage rate (PW Act)						
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
es (341)	1.21	1.08	3.53	0.90	0.55	3.09	0.94	0.67	3.70	1.13	0.63	4.21	1.40	0.84	4.41	15.7	-22.3	24.9
apt	1.16	0.74	3.93	1.48	0.79	4.10	1.33	0.57	3.60	1.43	0.72	5.02	1.70	0.83	4.15	46.5	12.1	5.5
	0.07	0.70	4.26	0.82	0.84	4.16	0.73	0.33	4.24	0.79	0.87	4.45	0.85	0.96	4.80	-12.4	21.1	1.6
1)	4.63	1.21	4.94	7.79	1.46	5.70	5.89	1.70	5.53	3.83	1.62	5.69	4.91	1.92	6.24	4.9	58.6	26.3

vey of Industries for Gujarat, results are published in Handbook of Basic Statistics for 1965 and 1966, Government of Gujarat.  
 ort, Notes and Statistical Statements under the Factories Act of 1943, Payment of Wages Act of 1936 for 1960-1964; Chief Inspector of Factories,  
 of Gujarat, Ahmedabad.

y = Value added by manufacture  
 = Man hours workers.

= Salaries and Wages , from Annual Survey of Industries (ASI)  
 = Man Hours

= Total wages (Basic wage + D.A. + Arrears) , under the Payment of Wages Act of 1936 (PWAct)  
 = Man days

brackets in Column 1 show industry code number.

## Appendix V-4 (contd.)

Industry	1960			1961			1962			1963			Pro- tiv	
	2	3	4	5	6	7	8	9	10	11	12	13		
1														
Ferrous Basic metal industries (341)	1.21	1.08	3.53	0.90	0.55	3.63	0.94	0.67	3.70	1.13	0.63	4.21	1.	
Manufacture of machinery except electrical machinery (360)	1.16	0.74	3.93	1.48	0.79	4.10	1.33	0.67	3.60	1.43	0.72	5.02	1.	
Repair of motor vehicles and cycles (384)	0.07	0.70	4.26	0.82	0.34	4.16	0.78	0.83	4.24	0.79	0.87	4.45	0.	
Electric light and power (511)	4.68	1.21	4.94	7.72	1.46	5.70	5.89	1.73	5.53	3.33	1.52	5.69	4.	

Source: (i) Annual Survey of Industries for Gujarat, results are published in Handbook of Basic Statistics for 1965 and 1966, Government of Gujarat; (ii) Annual Report, Notes and Statistical Statements under the Factories Act of 1948, Payment of Wages Act of 1936 for 1960-1964; Government of Gujarat, Ahmedabad.

Note: ~~422~~

(i) Productivity =  $\frac{\text{Value added by manufacture}}{\text{Man hours workers}}$

(ii) Wage rate (ASI) =  $\frac{\text{Salaries and Wages}}{\text{Man Hours}}$ , from Annual Survey of Industries (ASI)

(iii) Wage rate (PWAct) =  $\frac{\text{Total wages (Basic wage + D.A. + arrears)}}{\text{Mandays}}$ , under the Payment of Wages Act of 1936 (PWAct)

(iv) Figures in brackets in Column 1 show industry code number.

Appendix V-5.1Average Daily Wage Rates in 30 "Three digit" Industriesin the State of Gujarat: 1960-1969

Indus- try code	Year									
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9	10	11
010	2.07	2.01	2.02	1.99	2.20	2.16	2.44	2.54	2.96	3.20
202	3.98	4.24	4.18	4.34	4.89	5.95	6.30	7.76	8.93	8.07
205	2.50	2.48	2.50	2.57	2.56	3.04	3.27	3.40	3.48	4.15
207	3.72	4.91	2.83	3.52	4.65	5.10	5.27	5.58	6.81	6.64
209	2.77	3.15	3.31	3.14	3.42	4.05	4.75	4.66	4.74	5.24
220	1.57	1.54	1.48	1.64	1.64	1.81	2.02	2.39	2.46	2.56
231	5.89	6.06	6.20	6.12	6.85	7.99	8.50	9.80	9.87	9.98
239	2.27	2.30	2.47	2.67	2.98	3.33	3.83	4.53	4.75	3.96
250	2.46	2.62	2.72	2.73	2.87	3.60	3.34	3.50	3.34	4.18
271	2.61	2.66	2.90	3.07	3.20	3.52	3.77	3.86	4.40	4.39
280	4.03	4.26	4.40	4.69	7.82	5.46	6.02	7.09	7.50	7.77
300	3.78	4.08	4.02	3.98	3.66	4.22	4.63	4.14	4.72	4.58
311	4.54	4.60	4.90	4.90	5.49	4.47	5.90	6.34	7.02	7.81
319	4.33	4.88	4.75	5.04	5.37	6.10	6.87	7.53	8.22	8.22
321	6.15	6.63	5.96	6.46	8.06	7.94	10.25	11.55	12.39	12.65
331	2.69	4.14	2.68	2.66	2.92	3.21	3.33	3.69	3.78	3.73
332	3.82	4.06	4.42	3.54	5.59	6.28	5.59	4.41	6.76	8.03
333	2.82	3.03	2.83	3.14	2.99	2.85	3.08	3.90	3.55	4.22
334	5.85	5.34	5.67	6.13	6.12	6.49	8.12	8.82	8.58	9.76

Contd...

## Appendix V-5.1 (contd.)

Indus- try code	Year									
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9	10	11
339	2.35	2.51	2.52	2.53	3.03	2.70	3.32	3.55	3.77	3.90
341	3.53	3.09	3.70	4.21	4.41	4.71	4.96	5.17	5.49	5.57
342	3.09	3.50	3.53	3.65	3.97	4.36	4.51	4.79	4.87	6.03
350	2.99	3.19	3.29	3.44	3.61	3.77	4.14	4.43	4.77	4.97
360	3.93	4.10	3.60	5.02	4.15	4.49	5.00	5.32	5.51	5.78
370	2.91	3.51	5.09	4.28	4.65	5.72	6.77	7.47	5.30	6.85
381	3.72	4.04	3.49	3.87	3.79	4.65	5.27	6.58	8.05	8.32
384	4.26	4.16	4.24	4.45	4.80	5.57	6.28	8.10	8.04	8.08
395	-	2.30	2.83	2.96	3.34	3.70	4.75	6.03	7.46	8.07
399	2.75	3.18	2.78	3.34	3.34	3.89	4.11	4.41	4.20	4.60
511	4.94	5.70	5.53	5.69	6.24	7.63	8.22	9.85	10.35	10.49

Source: Calculated from  $\leftarrow$  Annual Report, Notes and Statistical Statements under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Mandays worked in these 30 industries are given in Appendix V-2.

ii) Wage rates are in respect of workers earning less than Rs.400/- per month.

iii) Names of "Three digit" industries are given in Appendix V-1.

Appendix V-5.2Average Daily Wage Rates in 23 "Three digit" Industries  
in the district of Ahmedabad: 1960-1969

Indus- try code	Year									
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9	10	11
010	2.29	2.07	2.10	2.19	2.47	2.42	2.52	2.89	3.27	3.73
202	3.48	3.44	3.55	4.14	4.05	5.58	6.89	7.31	7.43	-
205	2.67	2.90	2.89	3.03	2.93	3.35	3.53	3.82	2.71	4.34
209	2.03	2.86	3.23	4.49	5.17	7.85	7.29	7.23	3.42	7.15
214	2.72	3.20	2.63	3.91	3.54	2.20	3.54	6.25	7.13	9.66
231	6.34	6.51	6.63	6.57	7.37	8.58	8.93	10.39	10.56	10.63
232	4.17	4.18	3.95	4.21	3.01	4.53	4.23	5.05	6.11	4.81
250	2.61	2.54	2.73	2.79	2.81	1.69	3.09	3.39	3.40	4.30
271	2.54	2.62	2.90	3.07	3.44	3.52	3.93	3.89	4.88	4.42
280	4.59	4.43	4.56	4.86	4.98	5.77	6.60	6.66	6.63	8.03
300	3.40	4.08	3.13	3.72	2.56	2.91	3.69	4.31	3.62	3.79
311	5.25	5.26	5.41	6.41	6.18	7.76	8.02	7.80	8.53	7.74
319	4.15	4.65	3.96	3.86	4.10	4.55	5.15	6.15	4.78	5.97
331	3.34	3.56	3.03	2.87	3.27	3.95	4.21	4.90	4.40	4.36
333	2.56	2.45	2.49	2.57	2.86	3.84	4.11	3.09	3.42	3.37
339	3.17	3.13	3.07	3.31	3.86	4.16	4.35	4.83	5.23	5.28
341	4.10	3.63	4.05	4.45	4.32	5.29	5.07	5.13	6.11	5.59
342	3.65	4.07	4.12	4.19	4.40	4.55	4.72	4.88	3.67	5.51
350	3.60	3.43	3.32	3.82	3.89	3.97	4.49	4.49	4.86	5.05
360	4.04	3.76	4.50	4.17	4.18	4.68	5.00	5.66	5.65	6.09
370	3.01	3.53	3.30	4.34	4.05	4.54	4.90	5.11	5.24	5.38
384	4.37	4.69	4.84	4.61	4.26	6.20	5.57	8.44	8.57	9.18
399	3.50	3.45	3.33	4.07	3.88	4.44	4.62	4.68	4.96	5.09

Source: Calculated from District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Names of "Three digit" industries are given in Appendix V-1.

Appendix V-5.3Average Daily Wage Rates in 26 "Three digit" Industries  
in the district of Surat: 1960-1969

Indus- try code	Year									
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9	10	11
010	1.95	1.85	1.99	1.85	1.90	1.92	2.24	2.26	2.95	3.00
205	2.15	2.06	1.85	2.18	2.26	2.26	2.80	2.51	2.78	3.56
206	2.24	2.00	1.97	2.17	3.13	1.96	2.82	3.20	4.10	4.06
207	2.56	-	3.29	3.27	3.69	3.69	3.78	5.18	3.03	6.63
209	2.15	2.06	2.16	2.40	2.50	2.78	3.08	3.61	4.02	4.04
214	2.47	2.33	1.82	3.10	3.75	3.40	3.44	3.81	3.86	4.23
220	2.40	2.71	2.93	3.92	3.65	3.95	4.26	3.35	4.20	5.16
231	4.55	4.78	4.81	4.68	5.51	7.31	6.88	7.77	7.74	7.70
239	2.49	2.38	2.26	2.55	2.87	3.31	3.64	3.97	4.50	4.25
243	3.52	3.89	3.72	7.16	3.52	4.14	5.03	4.60	4.01	4.02
250	2.04	2.31	2.35	2.27	2.50	5.14	2.98	2.85	2.88	5.88
271	2.89	2.93	3.08	3.30	3.31	3.69	3.92	3.95	4.62	4.92
280	3.27	3.62	3.72	3.70	4.09	4.50	4.47	4.77	5.86	5.94
300	3.42	2.93	3.41	3.62	3.94	3.85	4.47	4.11	3.82	3.24
311	1.59	2.71	3.00	3.28	5.52	5.82	6.63	7.14	7.44	8.86
319	3.71	4.38	4.74	5.34	5.39	6.00	6.65	8.67	8.27	8.01
331	2.04	2.30	2.43	2.39	2.46	2.66	2.72	2.97	3.40	3.12

Contd....

## Appendix V-5.3 (contd.)

Indus- try code	Year									
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9	10	11
339	0.84	2.87	2.00	-	1.76	2.42	3.35	3.12	2.75	2.76
341	3.37	3.80	4.35	4.06	3.70	3.91	4.70	4.78	5.24	5.89
342	2.76	3.12	3.17	3.40	3.69	6.47	4.16	4.71	4.79	4.88
350	2.06	2.74	-	2.87	3.02	3.80	3.73	4.10	4.56	5.00
360	3.21	3.05	3.92	3.41	3.72	3.54	4.55	4.79	5.21	6.27
370	3.05	3.81	2.71	2.96	3.59	4.26	4.61	4.35	4.54	5.29
384	3.68	3.83	4.07	4.16	4.80	5.75	6.20	7.15	7.23	7.95
395	1.60	2.18	2.60	2.77	3.24	3.56	4.94	9.33	7.57	8.14
399	3.62	3.78	4.15	4.38	4.46	4.39	4.12	6.51	4.75	6.01

Source: Calculated from District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Names of "Three digit" industries are given in Appendix V-1.

Appendix V-5.4Average Daily Wage Rates in 22 "Three digit" Industries  
in the district of Baroda: 1960-1969

Indus- try code	Year									
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9	10	11
010	1.88	1.80	2.03	1.96	2.03	2.08	2.51	2.54	-	3.33
205	2.46	2.74	2.25	2.67	3.06	3.78	3.68	4.24	3.39	5.44
209	2.15	2.73	2.63	2.58	2.81	3.07	3.32	2.82	2.68	3.19
220	1.38	1.38	1.31	2.03	1.43	1.67	2.48	2.55	2.86	3.44
231	5.60	5.50	5.62	5.27	6.86	8.20	8.28	9.12	9.81	9.80
250	3.80	4.84	5.35	3.83	4.29	5.76	5.03	5.77	7.33	4.98
280	4.19	4.66	4.82	4.39	4.86	4.66	6.05	7.04	8.27	8.30
300	3.71	3.74	3.92	3.38	4.00	4.30	4.77	4.31	4.84	5.15
311	5.32	6.33	5.00	3.06	2.96	2.86	5.61	3.73	4.10	4.35
319	5.06	5.64	5.03	5.34	5.73	6.97	7.70	7.90	9.19	9.12
321	4.78	6.00	4.20	5.26	7.71	6.95	10.25	11.67	13.12	12.92
331	2.17	2.89	2.49	2.92	3.22	3.53	3.39	4.92	4.46	3.85
332	4.18	4.34	4.43	4.44	5.97	7.43	7.32	8.34	7.66	7.92
339	2.48	2.32	2.62	2.51	2.82	2.72	2.63	2.77	3.54	3.45
341	2.97	2.44	3.02	4.02	4.22	4.60	4.71	5.99	5.28	6.12
342	1.98	-	4.08	3.25	3.60	4.59	3.96	6.14	4.50	4.62
350	3.00	2.77	3.46	3.08	3.38	3.91	4.57	4.85	5.08	5.25
360	4.33	5.23	4.22	3.94	4.24	4.89	5.77	4.88	5.35	4.92
370	2.98	4.42	4.48	4.61	4.99	6.54	12.45	9.02	4.85	8.53
384	3.87	3.84	4.26	4.52	4.64	5.62	5.89	6.97	7.24	7.44
392	1.87	2.23	2.25	2.29	2.78	2.72	3.37	3.58	3.75	4.01
399	1.70	1.85	2.49	3.09	3.10	3.92	3.69	4.07	4.07	3.60

Source: Calculated from District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Names of "Three digit" industries are given in Appendix V-1.



Appendix V-5.5Average Daily Wage Rates in 20 "Three digit" Industries  
in the district of Kaira: 1960-1969

Indus- try code	Year									
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9	10	11
010	2.31	1.88	1.36	2.08	2.16	2.02	2.09	2.23	3.15	3.30
202	4.23	4.51	4.55	4.46	5.33	6.86	7.15	8.84	10.74	8.83
205	1.88	1.83	2.05	2.16	1.99	2.45	2.24	2.57	2.91	2.58
209	2.21	2.46	2.28	2.13	2.18	2.61	3.70	4.83	5.61	5.00
220	1.32	1.25	1.18	1.21	1.29	1.42	2.30	2.13	2.35	1.57
231	5.54	5.62	5.86	5.80	6.42	7.74	8.62	9.43	9.91	9.57
239	3.47	3.64	3.00	3.06	3.99	3.43	5.62	6.98	7.27	8.74
271	1.66	1.70	1.73	1.83	1.90	2.02	2.46	2.68	2.81	2.75
280	3.09	2.90	2.97	2.88	3.24	4.19	4.63	5.37	6.13	6.44
292	3.34	2.56	3.84	2.84	3.34	3.97	4.05	3.49	4.19	4.01
311	3.28	3.15	3.54	3.49	3.90	4.22	4.59	5.14	5.05	5.14
319	3.90	3.46	3.50	6.93	3.87	4.37	4.94	4.46	4.92	5.38
331	2.08	3.04	2.50	3.07	3.23	3.17	3.33	3.54	4.58	4.86
332	2.11	4.19	3.84	3.94	5.32	4.14	4.23	2.45	5.86	6.53
334	5.49	4.62	6.02	6.73	4.67	6.83	8.24	9.98	10.07	10.93
339	2.10	2.26	2.57	2.58	2.65	2.92	2.97	2.97	3.53	3.64
350	2.59	2.90	3.37	3.47	3.27	3.41	4.33	4.86	5.26	5.04
360	3.43	3.41	3.68	3.56	4.61	4.75	4.61	5.99	6.59	7.19
370	2.22	2.54	2.69	2.89	3.26	2.19	4.77	5.94	6.44	4.98
384	4.15	4.01	4.23	4.38	5.71	4.61	6.11	7.20	7.87	8.05

Source: Calculated from District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Names of "Three digit" industries are given in Appendix V-1.

Appendix V-5.6Average Daily Wage Rates in 12 "Three digit" Industries  
in the district of Mehsana: 1960-1969

Industry code	Year									
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9	10	11
010	2.54	2.31	2.19	2.41	2.54	2.15	2.63	2.97	3.20	3.19
205	2.05	2.04	2.34	2.05	2.02	3.06	2.92	3.26	3.26	3.24
209	2.26	3.39	3.05	3.40	3.22	3.92	3.77	3.23	3.99	4.45
220	2.37	2.37	2.36	2.58	2.72	3.08	3.32	3.55	2.81	2.53
231	5.40	5.36	5.69	5.64	6.16	6.91	7.86	8.87	8.47	8.67
233	2.50	2.28	2.33	2.71	2.74	2.95	4.00	4.79	4.92	5.00
250	2.79	2.77	2.97	3.12	3.38	3.24	4.04	4.22	5.01	4.52
300	4.31	3.93	3.72	4.78	3.15	2.49	2.62	2.92	2.80	2.75
350	2.14	3.44	2.94	3.90	3.24	2.00	-	4.36	4.70	4.25
360	3.46	3.83	3.41	4.16	4.88	3.19	4.08	4.75	4.75	3.87
384	3.15	3.61	3.12	3.94	4.06	5.15	5.48	6.44	7.54	8.47
399	4.00	4.27	4.30	4.45	4.47	4.18	3.96	6.09	5.65	6.63

Source: Calculated from District Registers under the payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Names of "Three digit" industries are given in Appendix V-1.

Appendix V-5.7Average Daily Wage Rates in 12 "Three digit" Industries  
in the district of Junagadh: 1962-1969

Industry code	Year							
	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9
010	3.33	2.81	3.51	2.21	4.15	4.08	4.15	3.57
209	2.50	2.76	3.03	3.52	3.76	4.78	4.55	5.01
231	5.98	5.53	6.32	5.72	7.32	9.34	9.13	9.28
311	4.02	4.01	4.75	6.08	5.08	5.50	6.32	7.22
331	2.28	2.61	2.95	2.92	3.19	3.13	3.34	3.80
333	2.26	2.46	2.29	2.80	2.77	2.65	3.00	3.51
334	4.90	5.40	6.30	5.61	8.56	7.54	7.05	9.86
339	2.71	2.63	3.56	1.83	3.60	3.15	3.00	2.54
350	2.99	3.16	3.07	2.95	3.15	4.11	3.76	4.58
360	3.91	2.81	3.97	3.23	4.00	-	6.18	5.10
381	1.76	4.17	4.50	4.97	5.81	6.69	7.29	7.38
384	2.55	4.19	4.38	4.81	6.43	7.66	7.77	7.18

Source: Calculated from District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Names of "Three digit" industries are given in Appendix V-1.

Appendix V-5.8Average Daily Wage Rates in 23 "Three digit" Industries  
in the district of Bhavnagar: 1962-1969

Industry code	Year							
	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9
010	1.84	1.94	2.16	2.67	2.43	2.42	3.88	2.86
202	2.23	2.64	2.77	3.22	3.29	3.54	3.97	4.35
205	2.06	2.19	2.34	4.18	3.63	4.35	3.59	3.59
208	3.11	3.28	4.09	3.84	4.07	4.19	4.34	4.48
209	3.24	3.42	4.25	4.41	5.10	5.01	4.48	5.01
220	1.89	2.66	3.65	2.71	2.75	3.03	3.14	3.22
231	5.00	4.40	5.46	6.38	7.08	7.89	8.25	8.57
233	1.88	1.58	1.85	2.07	2.03	1.88	2.24	2.45
250	3.00	2.63	2.70	2.80	3.85	2.62	3.23	3.47
292	4.00	4.13	4.40	4.92	5.13	5.38	6.31	7.24
300	4.38	4.77	4.94	5.43	5.40	5.45	5.48	6.60
311	2.43	3.13	3.82	3.82	4.91	3.92	4.01	3.48
319	2.59	2.67	2.65	2.87	3.35	3.18	3.82	3.81
331	3.05	2.63	3.04	3.53	3.57	2.90	3.48	3.11
333	2.97	2.97	2.87	2.33	2.46	2.46	2.67	3.27
339	3.30	2.45	2.39	2.89	2.18	3.00	2.94	2.42
341	6.02	3.84	4.38	4.26	5.35	5.06	4.85	5.58
350	3.53	3.33	2.93	4.13	4.56	4.36	4.52	4.23
360	3.26	3.55	3.67	4.22	4.43	5.09	3.95	5.63
381	3.61	3.04	3.21	3.90	5.26	6.10	6.60	7.56
384	3.78	3.97	4.29	4.38	5.46	6.03	6.91	6.95
399	3.90	3.63	4.30	4.43	4.90	5.27	4.95	6.90
280	4.12	4.41	4.91	3.67	6.74	8.66	9.81	9.68

Source: Calculated from District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Names of "Three digit" industries are given in Appendix V-1.

Appendix V-5.9

Average Daily Wage Rates in 12 "Three digit" Industries  
in the district of Jamnagar: 1962-1969

Industry code	Year							
	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9
010	1.63	1.73	1.80	1.71	2.00	2.10	1.89	2.15
209	3.26	3.47	3.64	4.11	4.27	4.39	4.59	5.61
231	4.78	4.73	5.40	5.56	7.33	8.47	8.80	8.07
319	3.99	3.24	3.34	4.36	7.73	5.31	7.58	4.63
334	6.67	6.21	6.61	6.85	7.62	9.36	8.31	9.05
339	2.58	3.06	2.99	4.02	4.74	3.67	4.89	4.95
350	3.63	3.17	4.00	3.57	3.95	4.45	4.45	4.75
360	4.49	4.53	4.09	3.64	5.02	5.59	5.44	6.44
370	4.04	2.82	3.46	4.55	4.38	3.40	4.63	4.54
381	4.31	4.67	4.84	7.37	5.12	7.09	8.89	9.96
399	2.82	2.61	3.07	3.29	3.80	3.46	2.69	4.65
311	5.80	6.00	6.14	5.30	5.72	6.41	6.71	8.77

Source: Calculated from District Registers under the Payment of Wages Act, 1936; Chief Inspectors of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Names of "Three digit" industries are given in Appendix V-1.

Appendix V-5.10Average Daily Wage Rates in 18 "Three digit" Industries  
in the district of Rajkot: 1962-1969

Industry code	Year							
	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9
010	1.65	1.17	1.74	2.03	2.62	2.61	2.47	1.93
208	3.34	3.03	2.46	3.60	3.82	4.03	4.99	5.10
209	3.03	3.01	3.24	3.53	3.14	4.08	5.13	5.40
214	3.00	3.78	3.87	4.84	5.00	5.77	8.43	6.49
231	2.74	2.16	1.34	3.00	3.31	5.36	3.70	4.10
271	2.69	2.92	3.08	3.61	3.22	3.30	3.36	3.60
280	3.48	3.66	2.82	3.23	3.65	4.60	3.54	4.34
321	5.66	6.67	7.43	8.16	9.23	12.17	12.25	12.40
331	2.02	1.91	2.25	2.49	2.99	3.41	3.63	4.61
333	3.22	3.20	3.05	3.28	3.58	3.75	4.00	4.65
339	2.43	2.20	2.73	2.51	3.22	4.62	3.54	3.67
341	3.95	4.79	4.34	4.22	4.81	4.71	4.40	5.20
350	3.32	3.38	5.74	3.68	4.35	4.39	5.13	5.05
360	3.88	4.73	4.56	4.92	5.80	4.87	5.44	5.79
370	3.28	2.30	4.34	5.57	4.52	4.23	5.06	4.75
384	4.61	6.07	3.96	4.14	6.48	4.80	6.53	6.39
393	3.65	2.11	3.97	4.14	3.31	4.00	4.81	4.94
399	2.77	3.17	2.93	-	3.15	4.92	3.85	4.29

Source: Calculated from District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Names of "Three digit" industries are given in Appendix V-1.

Appendix V-5.11Average Daily Wage Rates in 11 "Three digit" Industries  
in the district of Surendranagar: 1962-1969

Industry code	Year							
	1962	1963	1964	1965	1966	1967	1968	1969
1	2	3	4	5	6	7	8	9
010	1.86	2.28	2.47	2.38	2.26	2.71	4.78	2.97
205	2.80	3.33	2.18	2.46	2.93	2.59	3.03	4.15
209	5.70	3.91	5.21	7.96	13.05	8.39	7.08	8.88
231	4.38	4.26	5.04	5.37	6.27	7.04	7.72	7.16
311	4.39	4.98	3.47	4.72	5.66	5.99	6.23	6.32
331	1.29	1.37	2.29	1.62	2.61	2.24	2.12	3.22
333	3.09	3.58	3.40	2.31	3.88	4.99	3.77	4.74
341	4.94	2.54	2.73	3.65	5.50	3.16	4.92	4.17
350	2.67	2.71	3.51	2.77	5.03	4.05	4.18	4.09
360	4.81	3.12	3.74	3.38	3.47	3.89	4.23	4.24
391	3.66	3.34	3.70	3.87	3.98	4.33	4.17	4.09

Source: Calculated from District Registers under the Payment of Wages Act, 1936; Chief Inspector of Factories, Government of Gujarat, Ahmedabad.

Note: i) Wages are in respect of workers earning less than Rs.400/- per month.

ii) Names of "Three digit" industries are given in Appendix V-1.