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Bulletin No. 159

TRENDS IN THE EMPLOYMENT
OF WOMEN, 1928-36

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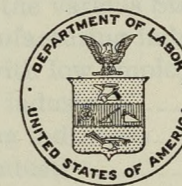
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CONTENTS

TRENDS IN THE EMPLOYMENT OF WOMEN, 1928-36

By

MARY ELIZABETH PIDGEON



BULLETIN OF THE WOMEN'S BUREAU, No. 159

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GENERAL TABLES

INDEXES OF EMPLOYMENT OF WOMEN AND MEN IN IMPORTANT WOMAN-EMPLOYING INDUSTRIES

Illinois
Massachusetts
Ohio
Virginia
New York

	Page
Letter of transmittal.....	1
Introduction.....	1
Sources of information on the employment of women.....	1
Method of analysis.....	2
General summary.....	3
Employment in all occupations.....	3
Comparison of employment in 1930 and most recent year reported....	3
Proportions women formed of all employees, 1930 and most recent year reported.....	4
Employment in manufacturing industries.....	4
Direction of employment trend for women and for men in most recent year reported.....	7
Proportions women formed of all manufacturing employees in 1930 and most recent year reported.....	7
Manufacturing employment in the various States.....	8
Employment in particular manufacturing industries.....	13
Industries with high and with low employment levels.....	14
Employment in the textile industries.....	17
Employment in the clothing industries.....	22
Employment in the shoe industry.....	22
Employment in the food industries.....	25
Employment in the paper and printing industries.....	27
Employment in electrical manufacturing.....	27
Employment in glass making.....	30
Employment in the rubber industry.....	30
Employment in certain metal industries.....	31
Employment in chemical industries.....	31
Employment in nonmanufacturing industries.....	31
Employment in service industries.....	32
Employment in telegraph and telephone operation.....	32
Employment in stores.....	33
Employment in clerical occupations.....	33
Appendix A.—Types of data reported and method of handling material..	35
The use of index numbers in analyzing trends in women's employment..	35
Data available on woman employment.....	35
Industry titles (for groups or details) as used in Women's Bureau dis- cussion and titles corresponding most closely as used in State reports.....	38
Appendix B.—General tables.....	42

TEXT TABLE

Indexes of employment of wage earners in manufacturing industries in five States.....	5
--	---

GENERAL TABLES

Indexes of employment of women and men in important woman-employing industries:

Illinois.....	42
Massachusetts.....	43
Ohio.....	44
Virginia.....	46
New York.....	48

CHARTS

Employment trends for women and men, by State:

All manufacturing.....	6
Bakery products.....	12
Textiles (total).....	18
Knit goods.....	19
Women's clothing.....	20
Men's clothing.....	21
Boots and shoes.....	23
Confectionery.....	24
Tobacco manufactures.....	26
Printing and publishing.....	28
Electrical machinery and supplies.....	29
Rubber products.....	30

LETTER OF TRANSMITTAL

UNITED STATES DEPARTMENT OF LABOR,
WOMEN'S BUREAU,

Washington, April 21, 1938.

MADAM: I have the honor to transmit to you a report on Trends in the Employment of Women, 1928-36.

Among the various demands for information of this type, which in the past has existed to such a meager extent, are those that come to us from persons interested in placing the unemployed and in advising women as to types of occupations that they may effectively seek or prepare themselves to enter.

With the material on employment and pay rolls by sex that is now being obtained semiannually by the Women's Bureau through the cooperation of the Bureau of Labor Statistics, it is hoped that this type of information can be much more fully developed in the future and can be put in such form as to be of continuous use in formulating policies and plans that will be to the advantage of employed women.

I greatly appreciate the cooperation of the various State agencies whose material has been made available to the Women's Bureau, much of it in unpublished form, for this analysis.

The study is the work of Mary Elizabeth Pidgeon, Chief of the Division of Research.

Respectfully submitted.

MARY ANDERSON, *Director.*

HON. FRANCES PERKINS,
Secretary of Labor.

TRENDS IN THE EMPLOYMENT OF WOMEN, 1928-36

INTRODUCTION

Many requests come to the Women's Bureau of the United States Department of Labor for information as to woman employment since the latest decennial census year, 1930. While at the present time no data are available on this subject for the entire United States,¹ there are scattering sources of material that give some indications as to the more general trends. Certain of these have been discussed in earlier bulletins of this Bureau, the latest of which sought to bring together information as to what was happening to employed women as a result of the general economic depression.² At present, when recovery from the worst depressed period has been experienced, it is of importance to examine the extent to which increases in employment have affected women, especially as compared to their level of employment in 1930 or the peak of 1929; and to ascertain to what extent women are advancing or receding as a proportion of all employed persons.

Though the Women's Bureau never has had facilities for preparing monthly reports as to women's employment and wages, and this information has not been provided by any other agency except in a very few States, there is now being initiated, through the cooperation of the United States Department of Labor and various State labor departments, a semiannual reporting of sample data that will give some idea of the current trends in women's employment and wages such as are reported periodically by the Bureau of Labor Statistics for the two sexes combined. The present bulletin, taken in connection with the earlier Women's Bureau publications on employment trends, will form a background from which this material can be developed as it becomes currently available.

SOURCES OF INFORMATION ON THE EMPLOYMENT OF WOMEN

Employment data from eight States are used in the present publication. In some cases the material is from an annual census, or a special census, in others from employment figures regularly reported or indexes constructed from such figures to show trends. The eight States represented employed, at the time of the United States Census

¹ The Census of Manufactures, taken biennially, reports only total number of wage earners and gives information by sex only once in 10 years. The Census of Distribution reports some data by sex for certain non-manufacturing groups, but since the figures are given only for reporting firms there is no adequate method of checking with 1930 data.

² Women's Bureau Bull. 73, Variations in Employment Trends of Women and Men (deals with Ohio figures), 1930; and Bull. 113, Employment Fluctuations and Unemployment of Women, 1928-31 (deals with periodic employment data on women from three States), 1933.

of 1930, nearly 55 percent of all the women engaged in manufacturing and mechanical industries in the entire United States. The list follows:

Illinois.	New York.	Rhode Island.
Massachusetts.	Ohio.	Virginia.
Michigan.	Pennsylvania.	

Some detail is shown in appendix A as to the types of reports available from these various States and the way in which they have been prepared for use here.

The analysis made in this report is based primarily on the indexes of employment of men and women in September of each year from New York, Illinois, and Ohio, and similar indexes constructed from figures reported by the Massachusetts annual census, which are given by sex in even years, and from the annual reports of the Virginia Department of Labor and Industry. These indexes are found in tables I to V in appendix B.³

In addition to use of the indexes mentioned, the proportions women constitute of all employees have been ascertained for several States. In Massachusetts, Ohio, and Virginia these are obtained from the figures on which the indexes were constructed. In Michigan, Rhode Island, and Pennsylvania they are based on a State census in a recent year and on the 1930 United States Census where the classifications are sufficiently alike in the two sources.⁴

METHOD OF ANALYSIS

The general trend of employment for each sex is measured by indexes wherever available. In particular, effort is made to relate the condition at the latest date to that prevailing in 1930 and at the 1929 peak, and to show the movement within recent years since the lowest point of the depression.⁵

In addition, in a few cases where actual figures enable such a comparison, the percentage change in the employment of women and men from 1930 to the latest report year available is shown and discussed. In these instances, and also in some others where the figures that can be supplied are not fully comparable from period to period, consideration is given to the proportions women form of the entire number employed in 1930 and at the latest time reported.

Since the public as a whole is interested particularly in the general situation and movement of employment, figures are discussed first for all occupations combined and for all manufacturing taken together. Thereafter, the particular States, and special groups and individual industries important in woman employment, are considered separately. Finally, the nonmanufacturing occupations of women are discussed.

³ September has been used as the base month because ordinarily it represents normal fall activity, less likely than many other months to characterize an extreme peak or a very low point, except for a few industries, such as fruit and vegetable canning, in which case this factor can be taken especially into account. Moreover, in making the analysis, consideration also has been given in some cases to the indexes for other months in these years, though these could not be published here in full.

⁴ Since the Pennsylvania census reports primarily an occupation rather than an industry classification, and includes those seeking work for the first time, comparisons with 1930 can be made only for total employment. For the basis of Michigan and Rhode Island comparisons, see appendix A, pp. 36-37.

⁵ Since the purpose of this study is to ascertain the general trends of employment and the employment situation, primarily of women, and not to test nor expound any phase of statistical method, familiarity with the use of index numbers is assumed. However, a brief explanation as to their use may be found on p. 35 in appendix A.

GENERAL SUMMARY

The employment situation of women varies widely from industry to industry, and also differs considerably from State to State. This is true of changes in numbers of women employed, and of changes in the proportions of women and men as well.

The usual picture shown from the various sources examined is that the manufacturing employment of both sexes has increased since the depression low, in some cases markedly. Though it has not always reached a level as high as in 1930, in some instances it has surpassed even the high point of 1929. In a few industries employment has continued to decline, and in the nonmanufacturing groups the advances usually have been small or there have been declines.

In the later years, women form a slightly larger proportion of all persons employed than they did in 1930, though there are many cases of particular industries in which women form a part of the workers smaller than formerly, notably in some of the textile and food groups, which have been among the largest employers of women.

On the whole, the general direction of employment change in an industry in any one State has been similar for the two sexes, though sometimes more extreme for one than for the other. However, there are a number of industries in which the employment movement differed for the two sexes. In these cases employment usually was declining for women though advancing for men in every State reported but New York.

EMPLOYMENT IN ALL OCCUPATIONS

All available indications show that the employment of each sex has increased markedly since the depression low. This is true in the States from which indexes or other figures can be obtained, and also is the case in all but a very few separate industries.

Comparison of Employment in 1930 and Most Recent Year Reported.

The fairly complete employment figures from Ohio and data from three other important industrial States in which a census has been taken—Michigan, Pennsylvania, and Rhode Island—show that in the most recent year reported (1934, 1935, or 1936, as the case may be) the employment of the two sexes combined was less than in 1930, a period before the lowest point of depression had been reached.

On the whole, women seem to have fared better than men in this particular comparison, since men's employment was less than in 1930 in each of the States mentioned, and women's employment, except in Rhode Island, either was above the 1930 level or was not so far below as men's. In Illinois, however, the 1936 indexes of employment based on the samples taken show a considerable decrease from 1930 for women and a slight increase for men. Also, as will be shown later on, there were some particular industries in which employment for men showed increase well beyond 1930, while that of women at the same time was less than in 1930. The summary following gives the extent to which employment in the most recent year reported was above or below that in the census year of 1930, prior to the lowest depression point.⁶

⁶ The comparisons given along these lines include persons who are or have been employed, omitting those never yet employed. This is done here, though certain of the State census figures include these new employees in their totals.

State and latest year reported	Percentage change in employment from 1930 to latest year reported		
	All employees	Men	Women
Michigan, 1935	-6.9	-8.0	-1.9
Ohio, 1935	-1.8	-1.9	-1.4
Pennsylvania, 1934	-6.2	-8.3	+ .8
Rhode Island, 1936	-5.8	-5.4	-6.6

Though some of these figures might seem to indicate that men were being replaced by women, a closer examination of the data reveal that this was not the case, *since the major declines for men ordinarily were not within the area of woman employment.* For example, in Michigan and Pennsylvania, where the movement differed most strikingly between the two sexes, the heaviest declines for men occurred in industries in which women usually are not engaged to any important extent, such as mining, heavy metal work, and the building trades, while in some of the other industries declines had been greater for women than for men.

Proportions Women Formed of All Employees, 1930 and Most Recent Year Reported.

Another method of measuring the relative employment standing of the two sexes is to note the proportion women formed of all persons in gainful work in 1930 and again in the latest year reported. Such data usually show women in a slightly better employment situation in the latest year reported than was the case in 1930. The figures are as follows:

State and latest year reported	Percent women were of all employees	
	1930	Latest year
Michigan, 1935	18.7	19.7
Ohio, 1935	24.8	24.9
Pennsylvania, 1934	22.9	24.6
Rhode Island, 1936	29.6	29.3

EMPLOYMENT IN MANUFACTURING INDUSTRIES

In the manufacturing industries taken together, the indexes show that the employment of both sexes has advanced markedly, and in most cases continuously, since the depression low. Figures from the States that regularly have presented such data by sex illustrate this and are shown in the following table.

Contrary to the showing of decreased employment in all occupations combined, the employment of both men and women in manufacturing in the latest year available surpassed the level of 1930 in more than half the cases reported. However, there are certain particular manufacturing industries in which this did not occur, and it was not true in the totals for men in New York, for women in Illinois, for either sex in Massachusetts, nor for Negro women in Virginia.

Of the few States with comparable data, in no case did the latest available index figures for manufacturing as a whole show the employment of either sex to be so great as at the peak of 1929, though there were a number of particular industries in which employment, especially for men, was greater than in 1929. Though the decline from 1929 to the low point in employment was greater in each case for men than for women, so was the recovery greater. Only in New

York was women's employment nearer than men's to the 1929 level. It must be remembered that there are some particular industries in which in the latest year reported women held a considerably less favorable place than men.

Indexes of employment of wage earners in manufacturing industries in five States—September of each year, 1928-36¹

[For sources see appendix tables I to V]

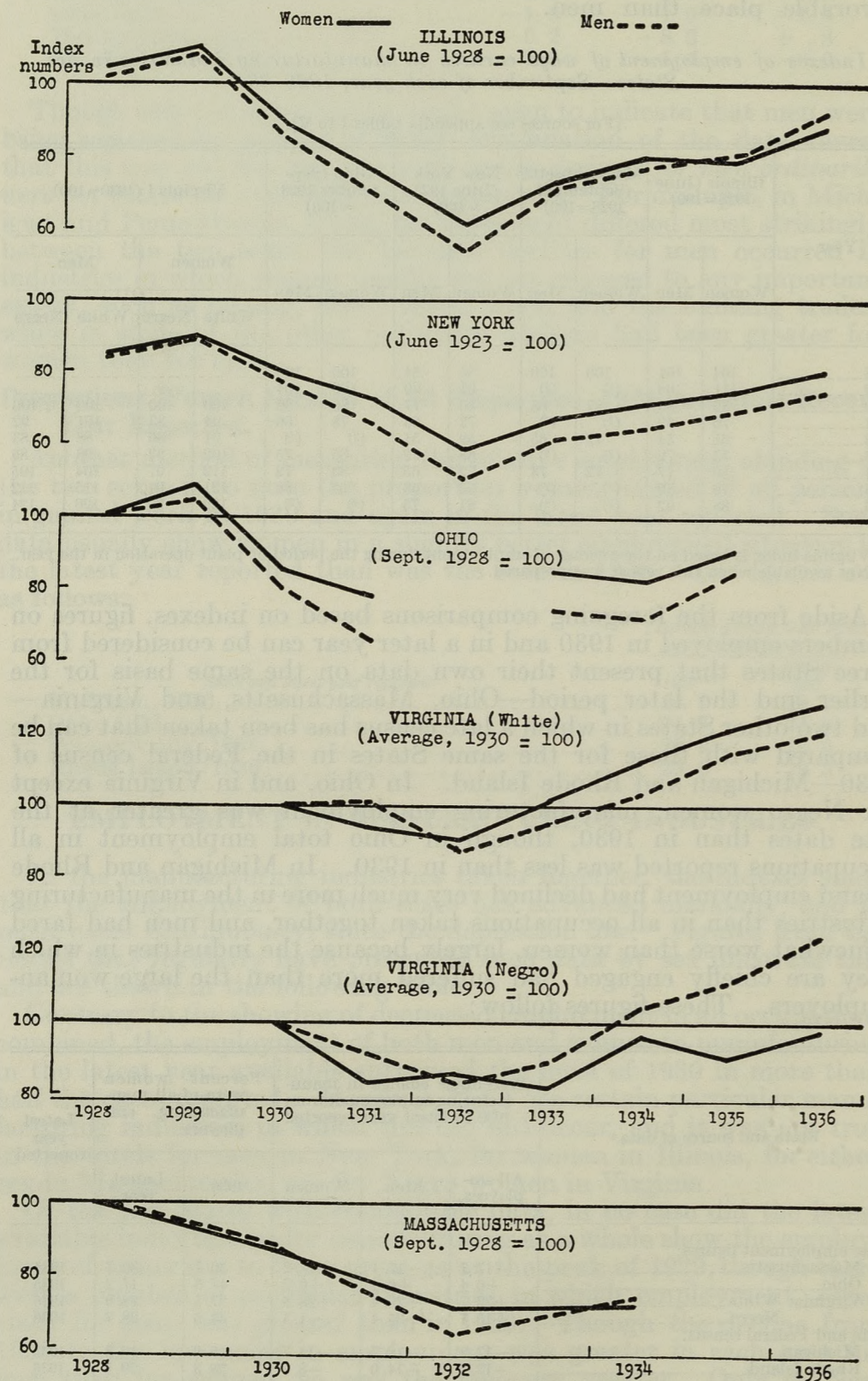
Year	Illinois (June 1928=100)		Massachusetts (September 1928=100)		New York (June 1923 =100)		Ohio (September 1928 =100)		Virginia ¹ (1930=100)			
	Women	Men	Women	Men	Women	Men	Women	Men	Women		Men	
									White	Negro	White	Negro
1928	104	101	100	100	85	84	100	100				
1929	111	108	(²)	(²)	91	90	109	104				
1930	89	85	87	88	80	77	86	80	100	100	100	100
1931	76	69	(²)	(²)	73	66	78	66	94	83	101	92
1932	61	54	(²)	(²)	59	51	(²)	(²)	91	86	88	83
1933	73	72	(²)	(²)	68	62	85	75	102	83	96	89
1934	80	77	72	73	72	65	83	72	112	97	104	105
1935	79	80	(²)	(²)	75	69	91	86	121	91	115	112
1936	88	92	(²)	(²)	81	75	(²)	(²)	129	99	120	124

¹ Virginia index is based on the average of employment during the period of plant operation in the year.
² Not available when this report was prepared.

Aside from the foregoing comparisons based on indexes, figures on numbers employed in 1930 and in a later year can be considered from three States that present their own data on the same basis for the earlier and the later period—Ohio, Massachusetts, and Virginia—and two other States in which a late census has been taken that can be compared with those for the same States in the Federal census of 1930—Michigan and Rhode Island. In Ohio, and in Virginia except for Negro women, manufacturing employment was greater at the late dates than in 1930, though in Ohio total employment in all occupations reported was less than in 1930. In Michigan and Rhode Island employment had declined very much more in the manufacturing industries than in all occupations taken together, and men had fared somewhat worse than women, largely because the industries in which they are chiefly engaged had suffered more than the large woman-employers. These figures follow:

State and source of data	Percentage change in manufacturing employment from 1930 to latest year reported			Percent women were of all manufacturing employees		Latest year reported
	All employees	Men	Women	1930	Latest year	
State employment figures:						
Massachusetts	-17.1	-17.1	-17.2	30.7	30.7	1934
Ohio	+6.4	+6.4	+6.2	17.3	17.2	1935
Virginia: White	+22.7	+20.4	+28.8	27.5	28.9	1936
Negro	+15.7	+24.4	-1.4	33.6	28.7	1936
State and Federal census:						
Michigan	-17.9	-18.2	-14.7	9.9	10.3	1935
Rhode Island	-12.5	-14.0	-8.7	28.3	29.5	1936

CHART 1.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN ALL MANUFACTURING, BY STATE

**Direction of Employment Trend for Women and for Men in Most Recent Year Reported.**

In the latest year reported the employment of both sexes was advancing over the previous year in manufacturing as a whole and also in most industries.⁷ It was declining for both sexes in the following industries: Tobacco manufacture in New York and Ohio; woolen and worsted goods in both Massachusetts and New York; the textile group as a whole, knit goods, carpets, the rubber group as a whole, rubber boots and shoes, and envelopes and stationery not elsewhere classified in Massachusetts; women's clothing in Ohio; rayon yarns (white workers), wooden fruit and vegetable packages (Negro workers), and fruit and vegetable canning (both white and Negro workers) in Virginia.

There were some industries in which the direction of employment change differed for the two sexes. Employment was advancing for men but declining for women in bakery products in Illinois, Ohio, and New York; in automobiles, rubber tires and tubes, cigars and cigarettes, radios, and wood products in Ohio; in men's clothing and drugs and industrial chemicals in New York; in paper boxes in Illinois; in cotton goods, textile dyeing and finishing, and rubber (other than boots and shoes) in Massachusetts; in the entire food group for white workers and the textile group and peanut cleaning for Negro workers in Virginia.

On the other hand, in the following smaller number of cases, the employment of women was advancing, that of men declining: In Illinois in men's clothing; in New York in silk, gloves, bags, and canvas goods, men's furnishings, women's headwear, and canning; and in Virginia, for white workers in cotton goods and boots and shoes, and for Negro workers in food as a group and in two of its subdivisions, confectionery and sea-food preparation, and in tobacco rehandling.

Proportions Women Formed of All Manufacturing Employees in 1930 and Most Recent Year Reported.

The proportion women form of all employees in different periods is an important indication of the relative standing of women in an industry. In the manufacturing industries as a whole, the proportions of women had increased since 1930 in Michigan, Rhode Island, and Virginia (white workers); they had declined in Ohio and Virginia (Negro workers); and remained exactly the same in Massachusetts. These figures may be seen in the summary on page 5. Women appear to have lost out wherever such reports exist for the textile group as a whole, in the making of cotton goods, silk goods, bakery products, and chemical and allied products; they appear to have gained in proportion in women's clothing.

The advance or decline in the proportion of women in the various industries from 1930 to 1934 or a later year was as follows:⁸

⁷ In this connection the reader is referred to p. 38, where the differences in industry titles used by the various States are indicated.

⁸ See also separate discussion for each State, pp. 8 to 11, and separate discussions for various industries, p. 13 ff.

Industry ¹	Proportion of women had increased since 1930	Proportion of women had decreased since 1930
All occupations.....	Michigan, Ohio	Rhode Island.
All manufacturing ²	Michigan, Rhode Island, Virginia (white).	Ohio, Virginia (Negro).
Chemical and allied products.....		Michigan, Rhode Island.
Clothing ³	Massachusetts, Michigan, Rhode Island.	
Men's clothing.....	Massachusetts	Ohio.
Women's clothing.....	Massachusetts, Ohio	
Food.....	Ohio, Rhode Island, Virginia (white).	Michigan, Virginia (Negro).
Bakery products.....		Massachusetts, Ohio.
Canning, fruit and vegetable.....	Ohio, Virginia (white)	Virginia (Negro).
Confectionery.....	Ohio, Virginia (white)	Massachusetts.
Leather:		
Boots and shoes.....	Ohio, Virginia (white)	Massachusetts.
Metals and machinery:		
Automobiles.....	Michigan	Ohio.
Electrical machinery and supplies.....	Massachusetts	Ohio.
Iron and steel.....	Michigan, Ohio	Rhode Island.
Metals other than iron and steel.....	Ohio	Rhode Island.
Paper and printing.....	Ohio ⁴	Massachusetts, Michigan, Rhode Island, Virginia (white).
Paper boxes.....	Virginia (white)	Massachusetts.
Printing and publishing.....	Ohio	Massachusetts, Virginia (white).
Rubber.....	Rhode Island	Massachusetts, Ohio.
Textiles.....	Virginia (Negro)	Massachusetts, Rhode Island, Virginia (white).
Cotton goods.....		Massachusetts, Rhode Island, Virginia (white).
Knit goods.....	Ohio	Massachusetts, Virginia (white).
Silk goods.....		Massachusetts, Rhode Island, Virginia (white).
Woolen and worsted goods.....	Ohio, Rhode Island	Massachusetts, Virginia (white).
Tobacco manufactures.....	Virginia (Negro)	Ohio, Virginia (white).
Cigars and cigarettes.....	Virginia (Negro)	Ohio, Virginia (white).
Wood products.....	Ohio	Michigan.

¹ Only those industries reported by more than 1 State.

² In Massachusetts the proportion was the same in 1930 and 1934.

³ In Virginia (white) the proportion was the same in 1930 and 1936.

⁴ In 1935 greater than in 1930 but less than in 1929.

MANUFACTURING EMPLOYMENT IN THE VARIOUS STATES

The manufacturing employment picture differed somewhat among the various States. In Illinois, advances since the depression were shown by 1935, but at the time of the latest report the 1930 level had not yet been reached by women in all manufacturing nor by either sex in some manufacturing industries. In the most recent year the employment of both sexes was above 1929 in women's underwear and above 1930 (but not so high as 1929) in paper-box making. It was greater than in 1929 for women in meat packing, and in chemical and allied industries; for men in all textiles, women's clothing, and confectionery.

In New York, by 1936, the picture was somewhat better than in Illinois. The employment of both sexes was above 1929 in silk, paper boxes, women's clothing, canning, and certain chemicals, most of these being large woman-employers. While employment in other industries frequently was above the 1930 level, there were many instances in which this was not the case, especially for men, as for example in such important employers of male labor as printing and publishing and certain metal industries.

In Ohio, by 1935, the situation was better than in the two States just discussed. Employment was above 1929 in a greater proportion of the cases than in the two other States, having reached such a level

for both sexes in knit goods, woolen and worsted goods, boots and shoes, food, canning, copper, tin, and sheet-iron products, and glass; for men in men's clothing, bakeries, and metal industries other than iron and steel; and for women in wood products. In the manufacturing total and in most of the particular industries the employment of both sexes was above the 1930 level, though it fell below for both sexes in women's clothing, automobiles, radios, tobacco manufactures, and cigars and cigarettes; for women in bakeries and for men in foundry and machine-shop products, wood products, and printing and publishing.

The proportion women formed of all employees in Ohio had increased since 1930 in all occupations and in more of the separate industries than in any other State reported, though women had lost out somewhat in the manufacturing industries as a whole, and in certain of those important in the State, such as men's clothing and rubber. The proportions women formed of persons at work in the various industries of Ohio in 1930 and in 1935 were as follows:

Industry ¹	With declining proportions of women		With increasing proportions of women	
	Percent women were of all employees		Percent women were of all employees	
	1930	1935	1930	1935
All manufacturing.....	17.3	17.2	All employees.....	24.8 24.9
Men's clothing.....	74.2	73.1	Women's clothing.....	76.3 79.5
Bakery products.....	20.5	17.3	Food.....	24.3 25.2
Metals and machinery:			Canning, fruit and vegetable..	47.4 55.8
Automobiles.....	6.7	5.9	Boots and shoes.....	49.1 51.5
Copper, tin, and sheet-iron products.....	15.6	15.5	Metals and machinery:	
Electrical machinery and supplies.....	20.9	20.5	Foundry and machine-shop products.....	3.1 4.0
Radios (not included in electrical).....	61.7	56.3	Gas and electric fixtures.....	42.2 49.3
Rubber.....	19.1	18.1	Iron and steel.....	3.0 3.2
Rubber tires and tubes.....	16.8	15.8	Metals other than iron and steel.....	16.9 18.0
Glass.....	16.9	15.2	Paper and printing.....	20.5 20.9
Tobacco manufactures.....	78.6	71.5	Printing and publishing.....	16.4 18.1
Cigars and cigarettes.....	84.5	79.9	Stone, clay, and glass.....	14.0 15.5
			Pottery.....	21.7 24.8
			Textiles:	
			Knit goods.....	80.0 80.5
			Woolen and worsted goods.....	58.6 61.7
			Wood products.....	8.8 11.9

¹ Wage earners only in everything but "all employees."

In Massachusetts the latest figures available at the time this material was analyzed were for 1934, and this may account partly for the fact that, while approximately two-thirds of the industries showed advances in employment over 1932, few employed as many persons of either sex as in 1930 and only the clothing industries as many of both sexes as in 1928. Women seem to have fared somewhat worse than men: In 1934 as compared to the reported year next preceding (1932), fewer women (though more men) were employed in cotton mills, textile dyeing and finishing, and rubber goods (other than boots and shoes); and fewer of both sexes in the textile total, knitting, woolen and worsted mills, carpet manufacture, and a miscellaneous paper-goods group. The proportions of women also had declined in most industries, clothing, electrical, and jewelry manufactures being the

only ones in which there had been advances in women's standing in Massachusetts since 1930, as the following shows:

With declining proportions of women ¹			With increasing proportions of women ¹		
Industry	Percent women were of all employees		Industry	Percent women were of all employees	
	1930	1934		1930	1934
Food:			Clothing.....	74.5	74.6
Bakery products.....	23.7	19.6	Men's clothing.....	69.3	70.1
Confectionery.....	72.3	71.9	Women's clothing.....	79.2	79.8
Leather:			Metals and machinery:		
Boots and shoes.....	41.9	41.2	Electrical machinery and sup- plies.....	26.3	30.8
Boot and shoe cut stock and findings.....	32.1	31.4	Jewelry.....	34.0	34.9
Paper and printing.....	30.0	27.9			
Envelopes.....	59.5	56.9			
Paper and wood pulp.....	20.4	19.3			
Paper boxes.....	52.4	43.9			
Printing and publishing.....	20.2	17.5			
Rubber.....	33.3	32.0			
Rubber boots and shoes.....	43.9	43.4			
Rubber, other than boots and shoes.....	22.7	20.7			
Textiles.....	41.3	39.1			
Carpets.....	33.8	29.2			
Cotton goods.....	43.9	42.2			
Cotton small wares.....	55.4	52.3			
Knit goods.....	70.7	68.1			
Silk goods.....	61.6	50.3			
Textile dyeing and finishing.....	21.7	20.1			
Woolen and worsted goods.....	37.5	34.2			

¹ For all manufacturing combined, the proportion was the same in both years—30.7 percent.

In Michigan women formed somewhat larger proportions in 1935 of all persons at work and of all those in manufacturing than they did in 1930. As in most States, the proportions of women had declined in chemical manufacture and in paper and printing, though they had advanced somewhat in the important automobile industry (the largest woman-employer in the State) and considerably in clothing. The proportions women formed of all employees in the manufacturing industries of Michigan were as follows:

With declining proportions of women			With increasing proportions of women		
Industry	Percent women were of all employees		Industry	Percent women were of all employees	
	1930	1935		1930	1935
Chemical and allied products.....	13.8	13.7	All employees.....	18.7	19.7
Food.....	18.1	15.8	All manufacturing.....	9.9	10.3
Iron and steel other than automo- biles.....	7.4	7.3	Clothing.....	51.7	61.1
Paper and printing.....	19.1	16.8	Metals and machinery:		
Wood products.....	9.0	8.5	Automobiles.....	6.1	6.9
Furniture.....	10.7	10.1	Iron and steel.....	6.4	7.0

In Rhode Island, as in Michigan, the proportion of women in manufacturing had increased; in the State first named, however, the proportion in all occupations had declined slightly. Great advances

were shown in clothing; declines as in other States in most textiles and in paper and printing. For these and other groups in Rhode Island, the proportions of women among all employees in 1930 and in 1936 were as follows:

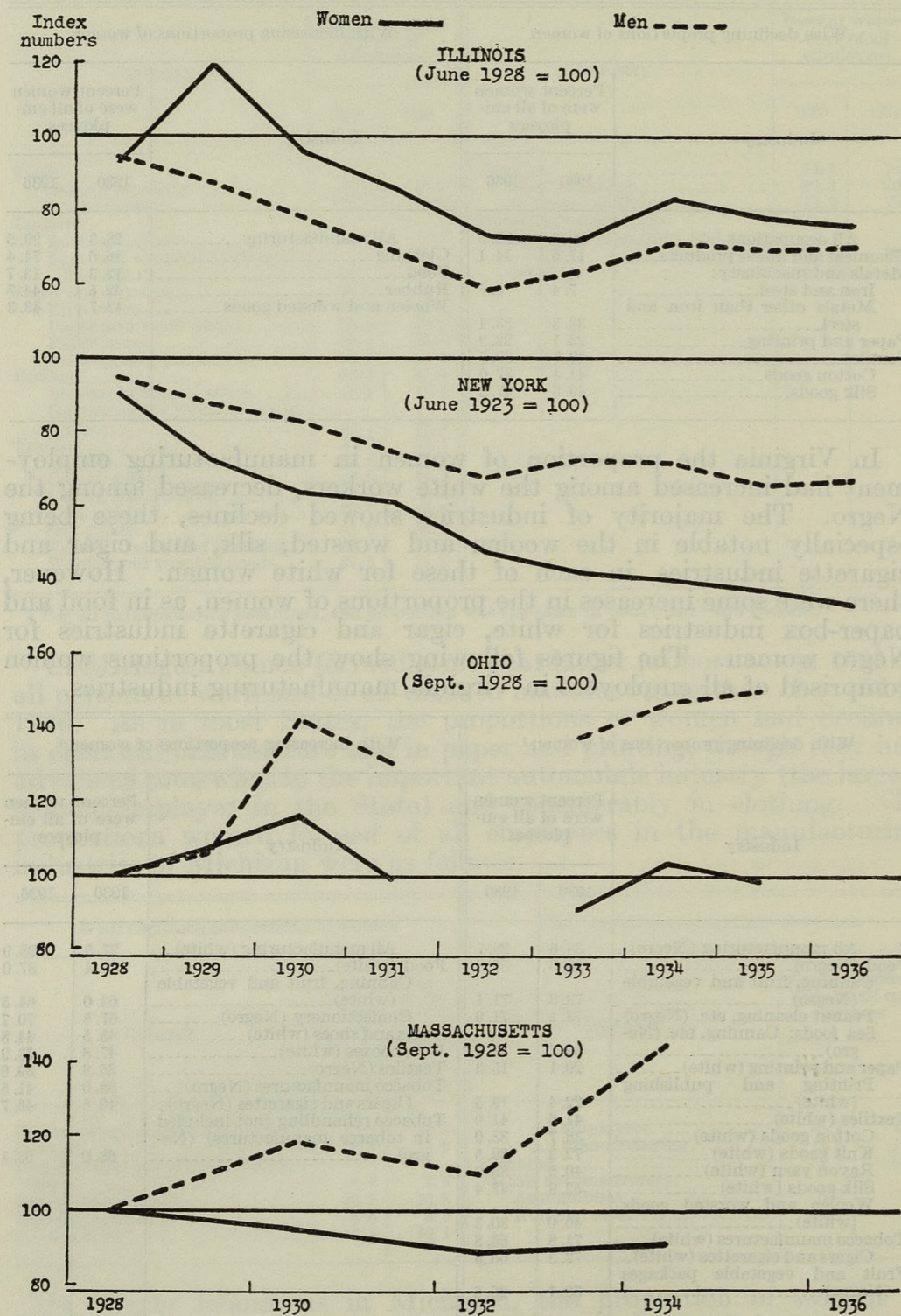
With declining proportions of women			With increasing proportions of women		
Industry	Percent women were of all employees		Industry	Percent women were of all employees	
	1930	1936		1930	1936
All occupations.....	29.6	29.3	All manufacturing.....	28.3	29.5
Chemical and allied products.....	17.5	14.1	Clothing.....	46.6	74.4
Metals and machinery:			Food.....	12.3	13.7
Iron and steel.....	7.4	6.5	Rubber.....	42.5	44.5
Metals other than iron and steel.....	39.3	33.4	Woolen and worsted goods.....	42.7	43.3
Paper and printing.....	23.1	22.9			
Textiles.....	40.7	39.5			
Cotton goods.....	41.4	37.0			
Silk goods.....	49.5	47.2			

In Virginia the proportion of women in manufacturing employment had increased among the white workers, decreased among the Negro. The majority of industries showed declines, these being especially notable in the woolen and worsted, silk, and cigar and cigarette industries, in each of these for white women. However, there were some increases in the proportions of women, as in food and paper-box industries for white, cigar and cigarette industries for Negro women. The figures following show the proportions women comprised of all employees in Virginia manufacturing industries.

With declining proportions of women ¹			With increasing proportions of women ¹		
Industry	Percent women were of all employees		Industry	Percent women were of all employees	
	1930	1936		1930	1936
All manufacturing (Negro).....	33.6	28.7	All manufacturing (white).....	27.5	28.9
Food (Negro).....	56.6	55.8	Food (white).....	31.4	37.0
Canning, fruit and vegetable (Negro).....	73.3	71.1	Canning, fruit and vegetable (white).....	63.0	64.5
Peanut cleaning, etc. (Negro).....	73.1	71.9	Confectionery (Negro).....	67.5	70.7
Sea foods: Canning, etc. (Ne- gro).....	39.7	38.3	Boots and shoes (white).....	43.5	44.8
Paper and printing (white).....	20.1	15.3	Paper boxes (white).....	47.8	53.9
Printing and publishing (white).....	22.4	19.5	Textiles (Negro).....	35.8	39.0
Textiles (white).....	44.6	41.9	Tobacco manufactures (Negro).....	38.0	41.5
Cotton goods (white).....	36.7	33.9	Cigars and cigarettes (Negro).....	40.6	46.7
Knit goods (white).....	72.3	69.5	Tobacco rehandling (not included in tobacco manufactures) (Ne- gro).....	63.0	63.1
Rayon yarn (white).....	40.5	35.9			
Silk goods (white).....	52.9	47.4			
Woolen and worsted goods (white).....	40.0	30.3			
Tobacco manufactures (white).....	71.8	66.8			
Cigars and cigarettes (white).....	72.3	66.4			
Fruit and vegetable packages (Negro).....	30.1	26.6			

¹ For white women in clothing, the proportion was the same in both years—88.8 percent.

CHART 2.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN BAKERY PRODUCTS, BY STATE



EMPLOYMENT IN PARTICULAR MANUFACTURING INDUSTRIES

The true employment situation in a given industry often is difficult to ascertain from the few consistent data available, since it may show radical differences according to geographic location and according to sex distinction, and no one industry is likely to show exactly the same movement for both sexes or for different States.

Thus, for example, in the shoe industry, the status of employment differed markedly according to locality, though taking the same general direction for the two sexes in several of the States. In Ohio the advance from the depression low was marked for both sexes, while in Illinois or Massachusetts this advance was slight in comparison.

Or, to take an example of a difference in the movement according to sex: In the making of bakery products in New York, Illinois, and Ohio in the latest year available, men's employment was rising but women's was declining, in New York falling to the lowest level recorded in the period studied.

One of the few industries in which employment has taken much the same general direction for the two sexes in every case reported is the canning of fruit and vegetables, in which the employment of both women and men in the latest year shown always was well above the high point of 1929. Likewise in the tobacco industry the movement ordinarily is much the same whatever the sex or locality reported, though the employment showing is as unfavorable as that of canning is favorable.

In most cases the employment of both sexes has risen above the depression low, as shown by the indexes of employment in the various industries for the four important industrial States from which they are available or could be computed, as well as those for Virginia. Employment sometimes has advanced beyond the 1929 level, somewhat more often has gone above the 1930 level but not so high as in 1929, quite frequently has not yet reached the 1930 point, and occasionally has continued declining until the latest year reported. The various industries that show these different pictures of employment are listed on pages 14 to 16.

INDUSTRIES WITH RELATIVELY HIGH EMPLOYMENT LEVELS

AS HIGH AS 1929¹ABOVE 1930 BUT NOT SO HIGH AS 1929¹

FOR BOTH SEXES

Photographic and miscellaneous chemicals (N. Y.).	All manufacturing (Ohio, Va.—White).
Clothing (Mass.).	Clothing (Va.—White).
Men's clothing (Mass.).	Men's furnishings (N. Y. ²).
Women's clothing (Mass., N. Y.).	Women's underwear (N. Y.).
Women's underwear (Ill.).	Food (Va.—White ³).
Food (Ohio).	Canning, fruit and vegetable (Va.—White ⁴).
Canning, fruit and vegetable (N. Y., ² Ohio).	Peanut cleaning, etc. (Va.—Negro ³).
Boots and shoes (Ohio).	Boots and shoes (Va.—White ²).
Copper, tin, and sheet iron products (Ohio).	Metals and machinery:
Paper boxes (N. Y.).	Electrical machinery and supplies (Ohio).
Glass (Ohio).	Gas and electric fixtures (Ohio).
Textiles:	Iron and steel (Ohio).
Knit goods (Ohio).	Sheet metal and hardware (N. Y.).
Silk goods (N. Y. ²).	Paper and printing (Ohio, Va.—White).
Woolen and worsted goods (Ohio).	Paper boxes (Ill. ³).
	Rubber (Ohio).
	Rubber tires and tubes (Ohio ³).
	Stone, clay, and glass (Ohio).
	Pottery (Ohio).
	Textiles (N. Y., Va.—White).
	Cotton goods (Va.—White ²).
	Knit goods (Va.—White).
	Silk goods (Va.—White).
	Woolen and worsted goods (Va.—White).
	Tobacco manufactures (Va.—Negro),
	Cigars and cigarettes (Va.—Negro).
	Tobacco rehandling (not included in tobacco manufactures) (Va.—Negro ²).

FOR MEN (NOT WOMEN)

Drugs and industrial chemicals (N. Y.).	All manufacturing (Ill., Va.—Negro).
Clothing:	Chemical and allied products (Ill.).
Men's clothing (N. Y., Ohio).	Women's headwear (N. Y. ⁴).
Women's clothing (Ill.).	Meat packing (Ill.).
Food:	Paper and printing:
Bakery products (Mass., Ohio).	Paper boxes (Mass.).
Confectionery (Ill., N. Y.).	Printing and publishing (Va.—White).
Metals other than iron and steel (Ohio).	Textiles:
Textiles (Ill.).	Knit goods (N. Y.).
Silk goods (Mass.).	Woolen and worsted goods (N. Y. ⁴).
	Tobacco manufactures (Va.—White).
	Cigars and cigarettes (Va.—White).

See footnotes at end of lists.

INDUSTRIES WITH RELATIVELY HIGH EMPLOYMENT LEVELS—Con.

AS HIGH AS 1929¹ABOVE 1930 BUT NOT SO HIGH AS 1929¹

FOR WOMEN (NOT MEN)

Chemical and allied products (Ill.).	All manufacturing (N. Y.).
Women's headwear (N. Y.).	Drugs and industrial chemicals (N. Y. ⁴).
Meat packing (Ill.).	Men's clothing (N. Y. ⁴ , Ohio).
Knit goods (N. Y.).	Confectionery (N. Y.).
Wood products (Ohio ⁴).	Metals and machinery (N. Y.).
	Electrical machinery and supplies (N. Y.).
	Foundry and machine-shop products (Ohio).
	Metals other than iron and steel (Ohio).
	Paper and printing (Ill., N. Y.).
	Paper boxes (Va.—White).
	Printing and publishing (N. Y., ⁵ Ohio).
	Textiles (Ill., Va.—Negro ⁴).
	Silk goods (Mass.).

INDUSTRIES WITH LOW EMPLOYMENT LEVELS

NOT UP TO 1930 THOUGH ADVANCE SINCE DEPRESSION LOW

LATEST YEAR SHOWS DECLINE FROM PRECEDING⁶

FOR BOTH SEXES

All manufacturing (Mass.).	Women's clothing (Ohio ⁷).
Food (Va.—Negro ²).	Canning, fruit and vegetable (Va.—White and Negro).
Bakery products (Ill. ³).	Envelopes (Mass. ⁷).
Canning, fruit and vegetable (Va.—Negro ⁴).	Textiles (Mass. ⁷).
Confectionery (Mass.).	Carpets (Mass. ⁷).
Sea foods: Canning, etc. (Va.—Negro ²).	Knit goods (Mass. ⁷).
Leather:	Rayon yarn (Va.—White ⁸).
Boots and shoes (Ill., Mass., N. Y.).	Woolen and worsted goods (Mass., ⁷ N. Y.).
Boot and shoe cut stock and findings (Mass.).	Tobacco manufactures (N. Y., Ohio ⁸).
Gloves, bags, canvas goods (N. Y. ²).	Fruit and vegetable packages (Va.—Negro ⁷).
Metals and machinery:	
Automobiles (Ohio ³).	
Electrical machinery and supplies (Ill., Mass.).	
Jewelry (Ill., Mass.).	
Paper and printing (Mass.).	
Paper and wood pulp (Mass.).	
Printing and publishing (Mass.).	
Job printing (Ill.).	
Rubber (N. Y.).	
Cotton small wares (Mass. ⁴).	
Tobacco manufactures (N. Y. ⁴).	
Wood products (N. Y.).	

See footnotes at end of lists.

INDUSTRIES WITH LOW EMPLOYMENT LEVELS—Continued

NOT UP TO 1930 THOUGH ADVANCE
SINCE DEPRESSION LOWLATEST YEAR SHOWS
DECLINE FROM PRECEDING

FOR MEN (NOT WOMEN)

All manufacturing (N. Y.).	Clothing:
Bakery products (N. Y.).	Men's clothing (Ill. ⁷).
Metals and machinery (N. Y.).	Men's furnishings (N. Y.).
Electrical machinery and supplies (N. Y.).	Women's headwear (N. Y.).
Foundry and machine-shop products (Ohio).	Food (Va.—Negro).
Radios (Ohio).	Canning, fruit and vegetable (N. Y.).
Paper and printing (Ill., N. Y.).	Confectionery (Va.—Negro ⁷).
Paper boxes (Va.—White).	Sea foods: Canning, etc. (Va.—Negro).
Printing and publishing (N. Y., Ohio).	Leather:
Rubber, other than boots and shoes (Mass.).	Boots and shoes (Va.—White).
Textiles (Va.—Negro).	Gloves, bags, canvas goods (N. Y.).
Cotton goods (Mass.).	Textiles:
Rayon yarn (Va.—White ⁴).	Cotton goods (Va.—White).
Textile dyeing and finishing (Mass.).	Silk goods (N. Y.).
Tobacco manufactures (Ohio ⁴).	Tobacco rehandling (Va.—Negro).
Cigars and cigarettes (Ohio ⁴).	
Wood products (Ohio).	

FOR WOMEN (NOT MEN)

All manufacturing (Ill., Va.—Negro ⁴).	Drugs and industrial chemicals (N. Y.).
Clothing:	Men's clothing (N. Y.).
Men's clothing (Ill.).	Food (Va.—White).
Women's clothing (Ill.).	Bakery products (Ill., N. Y., Ohio).
Food:	Peanut cleaning, etc. (Va.—Negro).
Bakery products (Mass., Ohio ⁴).	Metals and machinery:
Confectionery (Ill., Va.—Negro).	Automobiles (Ohio).
Paper and printing:	Radios (Ohio ⁷).
Paper boxes (Mass.).	Paper boxes (Ill.).
Printing and publishing (Va.—White).	Rubber:
Woolen and worsted goods (N. Y. ⁴).	Rubber tires and tubes (Ohio).
Tobacco manufactures (Va.—White).	Rubber, other than boots and shoes (Mass. ⁷).
Cigars and cigarettes (Va.—White).	Textiles (Va.—Negro).
	Cotton goods (Mass. ⁷).
	Textile dyeing and finishing (Mass. ⁷).
	Cigars and cigarettes (Ohio ⁷).
	Wood products (Ohio).

¹ First comparison excludes Virginia, since index of Virginia is based on 1930. Massachusetts when shown here is "as high as 1928," since 1929 is not reported for Massachusetts.

² Decrease for men in last year from that preceding.

³ Decrease for women in last year from that preceding.

⁴ Decrease in last year from that preceding.

⁵ As high as 1930.

⁶ Though a decline in last year, includes some which show an increase over depression low or are up to the 1930 or 1929 level.

⁷ Decline from depression low.

⁸ Decline from depression low for women.

The following pages present discussions of particular industries or groups. In each case the effort is made to give in the first paragraph a general picture of the situation, as to advancing or declining employment, following this with a comparison of the general employment levels of women with those of men, and finally showing the changes in the proportions women formed of all the workers in the industry or group.

Employment in the Textile Industries.

In the textile industries taken together, the indexes show that in the latest year reported employment was far above that at the depression low, usually was above that in 1930, and sometimes was even above the 1929 mark. Massachusetts was the one exception to this. This good employment status also was true of the separate industries composing the textile group. Striking advances beyond the 1930 level were those in the knit goods industry in Ohio, in silk goods manufacture in New York, and for white workers in the various textile groups in Virginia, especially silk and rayon goods (though not in rayon yarn).

Men fared better than women in almost every case, and throughout the period covered the employment level generally was the higher for men.

In the States for which numbers employed are reported for 1930 and for a later year, women comprised smaller proportions of all those employed in the entire textile group in the latest year available than they did in 1930 (excepting only the Negro workers in Virginia). With few exceptions the same is true of the textile industries within the group.

The proportions women formed of all employees in the various textile industries in 1930 and in the latest year reported were as follows:

	Percent women were of all employees	
	1930	Latest year reported
All textiles:		
Massachusetts	41.3	39.1
Rhode Island	40.7	39.5
Virginia (white)	44.6	41.9
(Negro)	35.8	39.0
Cotton goods:		
Massachusetts	43.9	42.2
Rhode Island	41.4	37.0
Virginia (white)	36.7	33.9
Knit goods:		
Massachusetts	70.7	68.1
Ohio	80.0	80.5
Virginia (white)	72.3	69.5
Woolen and worsted goods:		
Massachusetts	37.5	34.2
Ohio	58.6	61.7
Rhode Island	42.7	43.3
Virginia (white)	40.0	30.3
Silk goods:		
Massachusetts	61.6	50.3
Rhode Island	49.5	47.2
Virginia (white)	52.9	47.4
Rayon yarn: Virginia (white)	40.5	35.9
Textile dyeing and finishing: Massachusetts	21.7	20.1
Carpets: Massachusetts	33.8	29.2
Cotton small wares: Massachusetts	55.4	52.3

CHART 3.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN TEXTILES (TOTAL), BY STATE

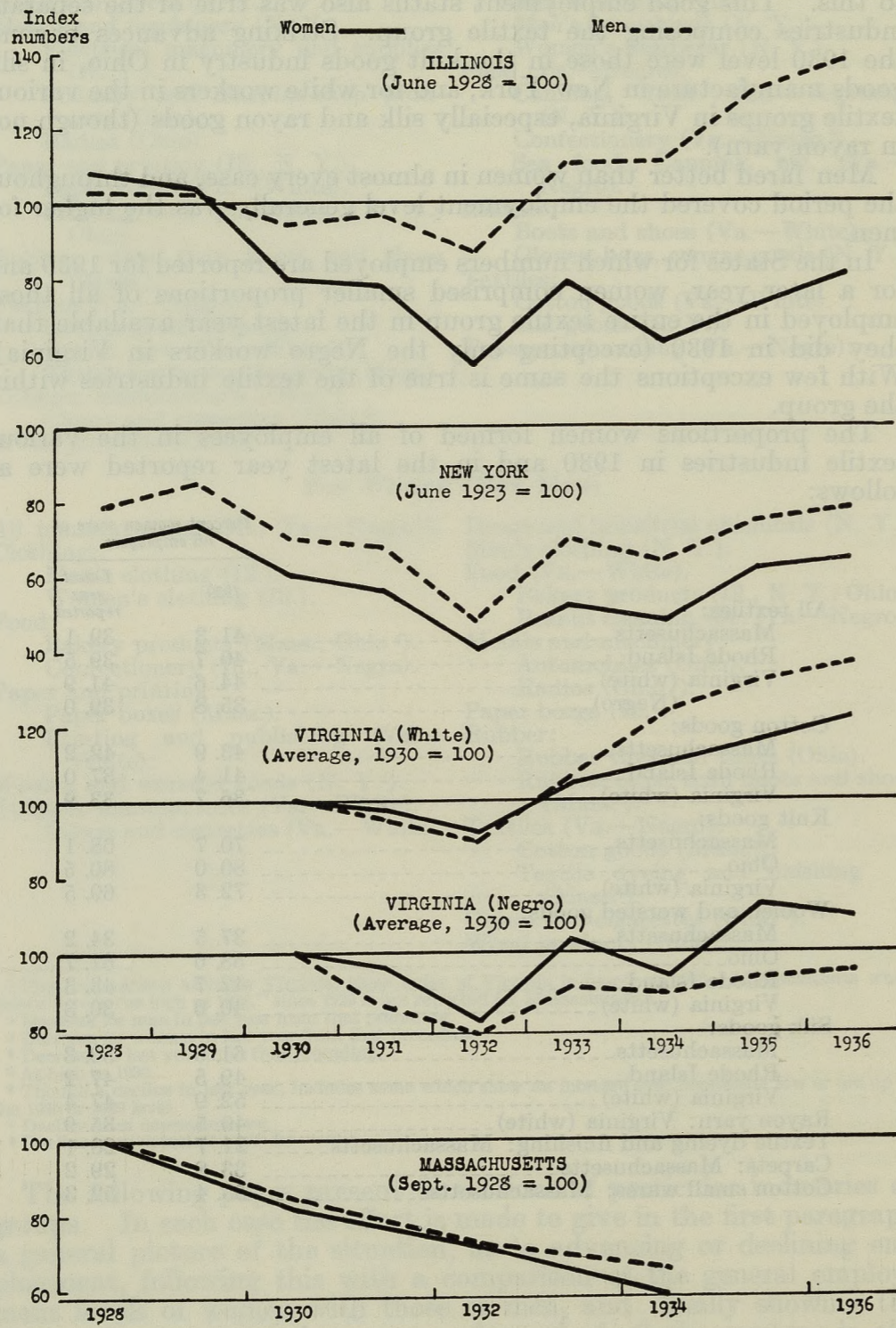


CHART 4.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN KNIT GOODS, BY STATE

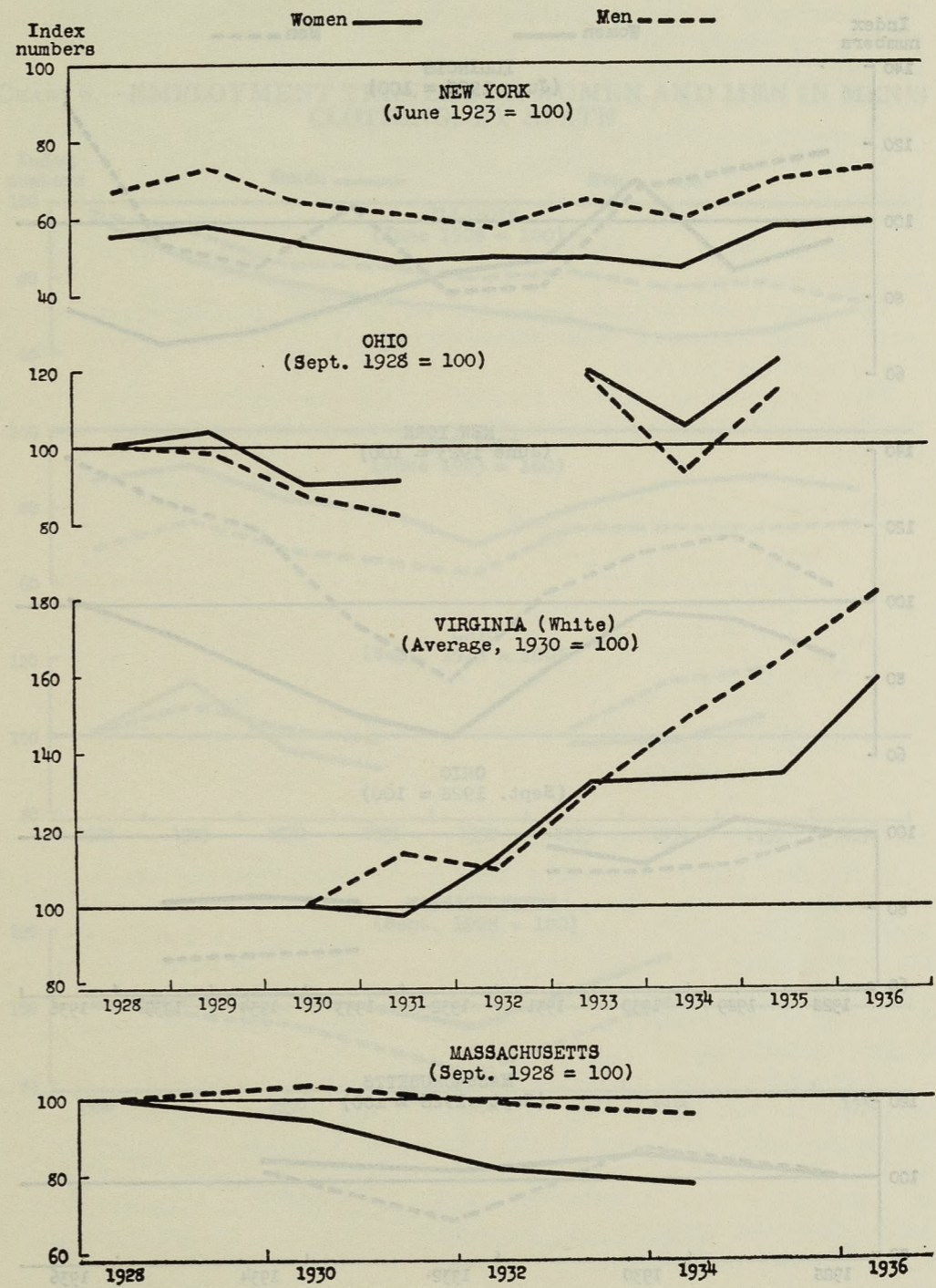


CHART 5.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN WOMEN'S CLOTHING, BY STATE

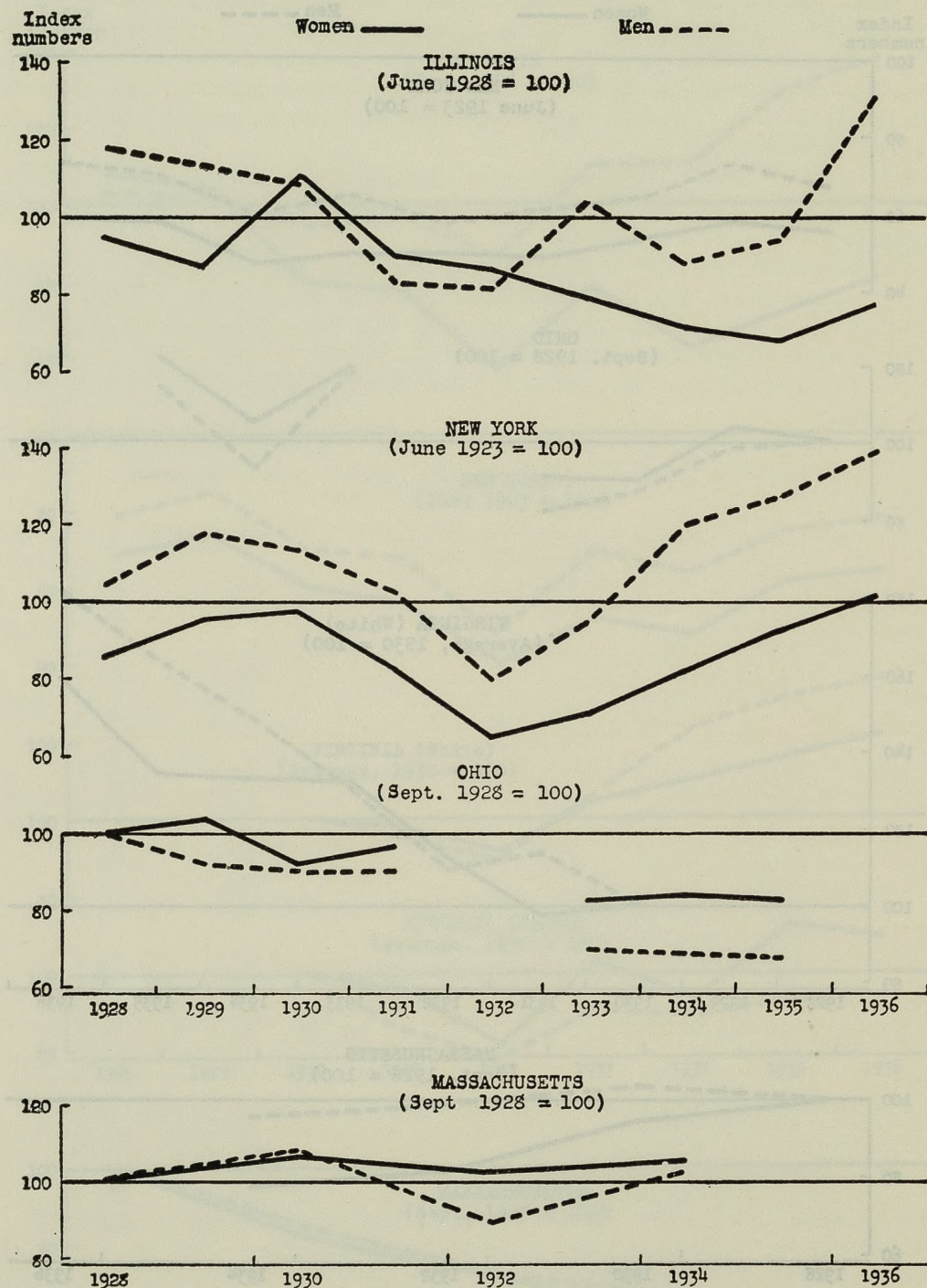
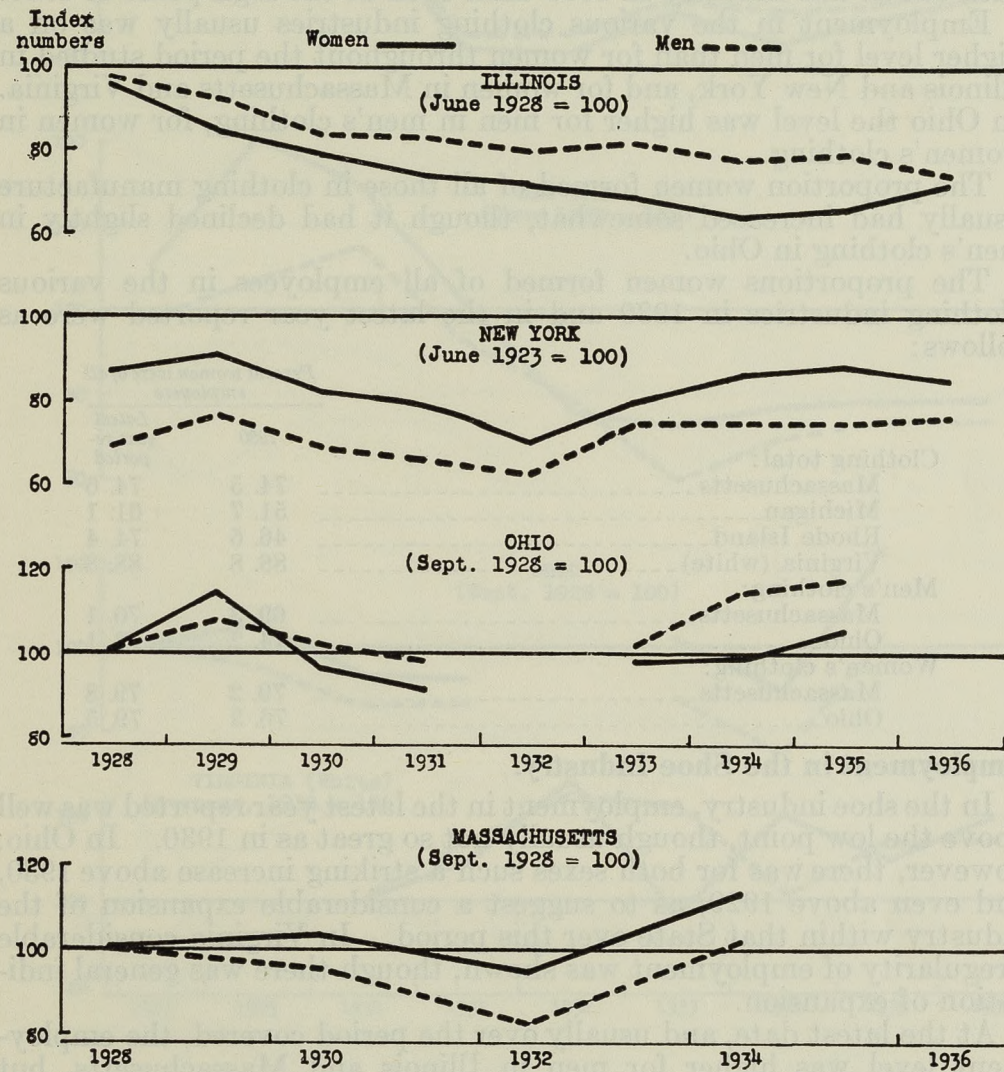


CHART 6.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN MEN'S CLOTHING, BY STATE



Employment in the Clothing Industries.

The indexes for the more important of the various clothing industries show ordinarily that the employment of both sexes had increased—sometimes considerably—above the lowest level of the depression. Two striking exceptions to this were found: Employment as last reported was lower than at any previous time for both sexes in the making of women's clothing in one State (Ohio) and for men employed on men's clothing in another State (Illinois). In New York the situation in women's clothing was very much better than that elsewhere reported, and that State had very many more employees of each sex in this industry in 1936 than even at the high point of 1929.

Employment in the various clothing industries usually was on a higher level for men than for women throughout the period studied in Illinois and New York, and for women in Massachusetts and Virginia. In Ohio the level was higher for men in men's clothing, for women in women's clothing.

The proportion women formed of all those in clothing manufacture usually had increased somewhat, though it had declined slightly in men's clothing in Ohio.

The proportions women formed of all employees in the various clothing industries in 1930 and in the latest year reported were as follows:

	Percent women were of all employees	
	1930	Latest year reported
Clothing total:		
Massachusetts	74.5	74.6
Michigan	51.7	61.1
Rhode Island	46.6	74.4
Virginia (white)	88.8	88.8
Men's clothing:		
Massachusetts	69.3	70.1
Ohio	74.2	73.1
Women's clothing:		
Massachusetts	79.2	79.8
Ohio	76.3	79.5

Employment in the Shoe Industry.

In the shoe industry, employment in the latest year reported was well above the low point, though usually not so great as in 1930. In Ohio, however, there was for both sexes such a striking increase above 1930, and even above 1929, as to suggest a considerable expansion of the industry within that State over this period. In Virginia considerable irregularity of employment was shown, though there was general indication of expansion.

At the latest date, and usually over the period covered, the employment level was higher for men in Illinois and Massachusetts, but higher for women in New York, Ohio, and Virginia. The proportion women formed of all workers in the industry was somewhat greater in a late year than in 1930 (or earlier) in Ohio and Virginia, but in Massachusetts women had lost out slightly. The proportions of women were as follows:

	Percent women were of all employees		
	Ohio	Massachusetts	Virginia (white)
1928	47.0	42.2	---
1929	49.6	---	---
1930	49.1	41.9	43.5
Latest report	51.5	41.2	44.8

CHART 7.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN BOOTS AND SHOES, BY STATE

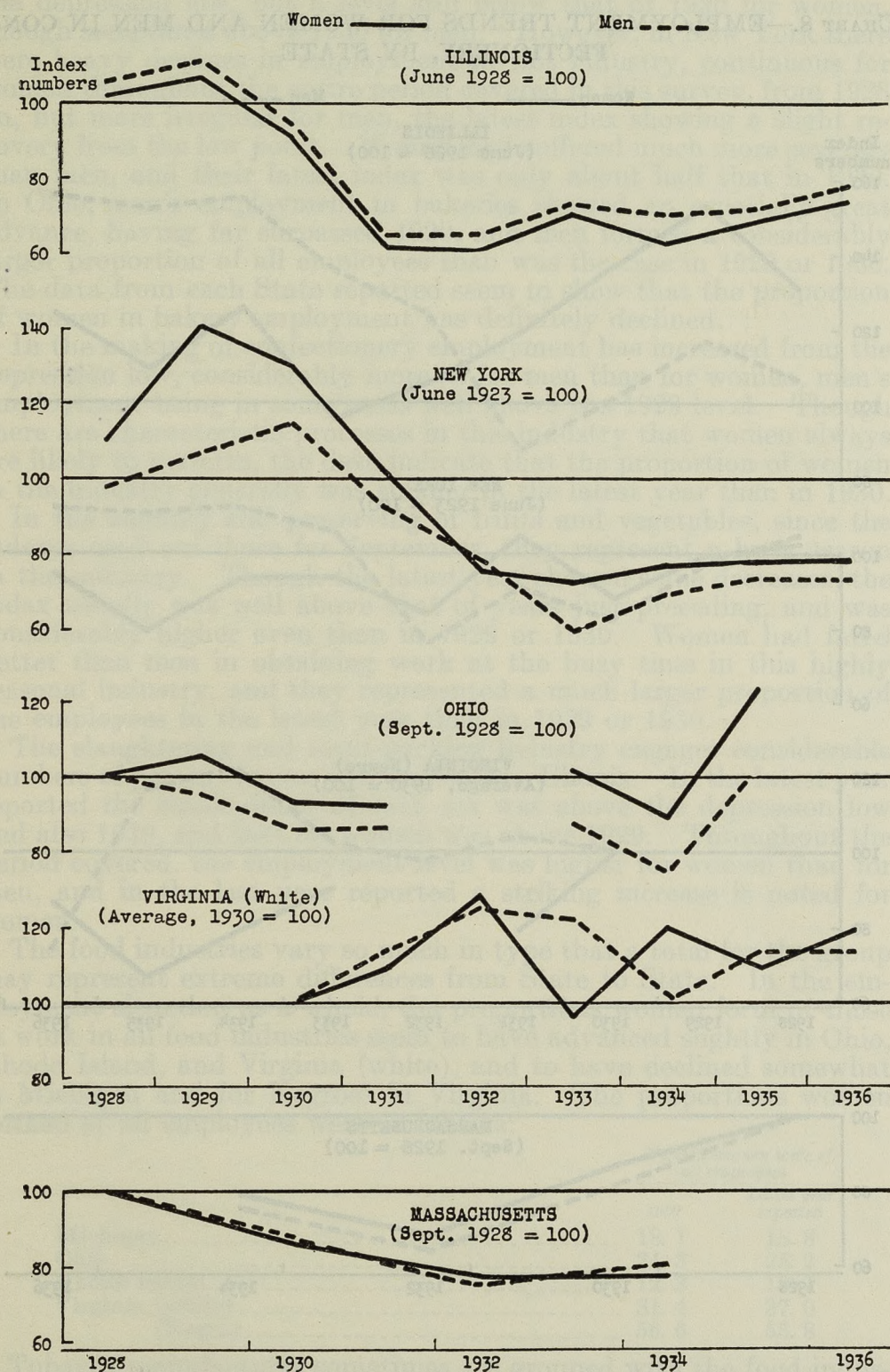
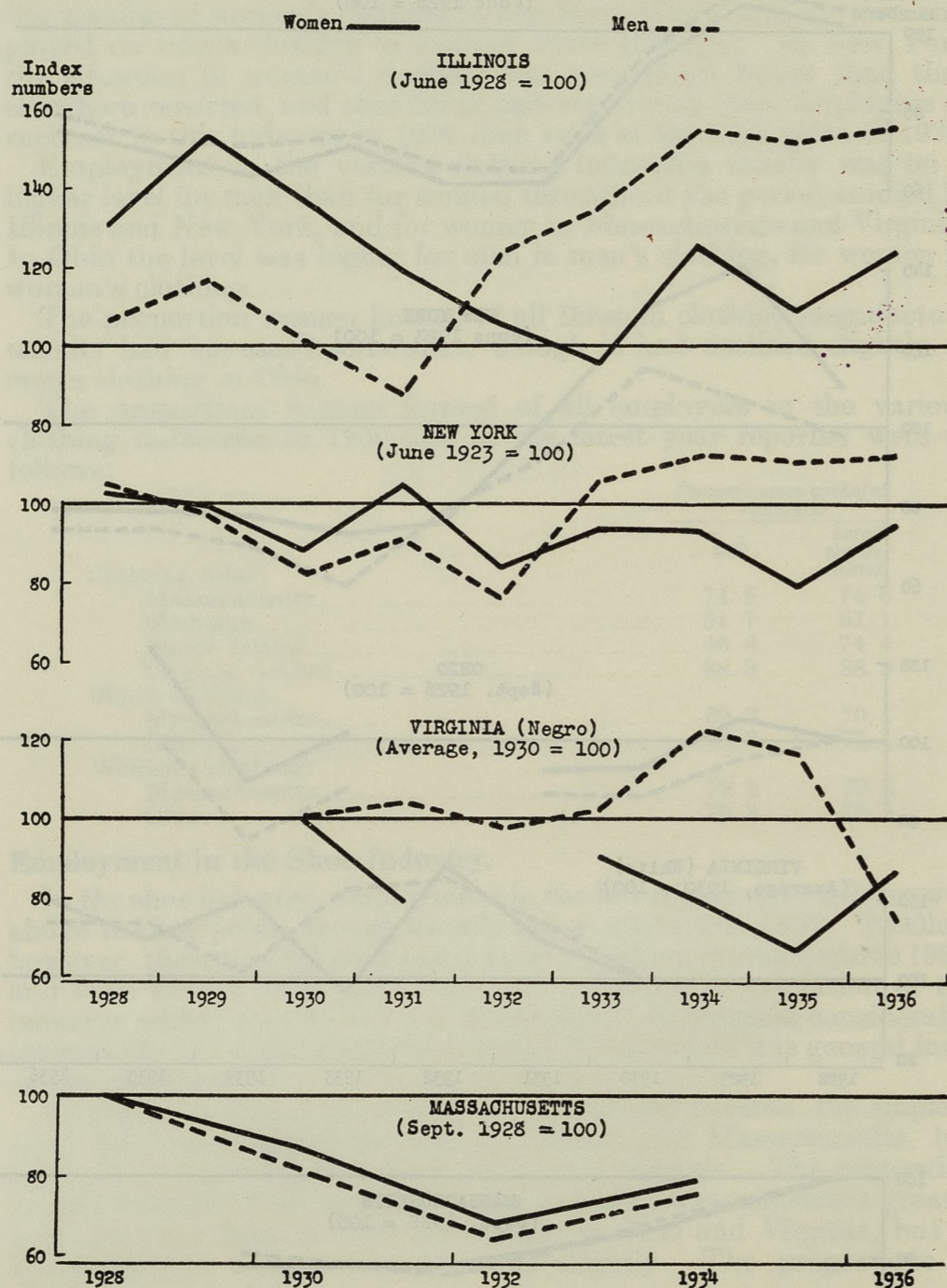


CHART 8.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN CONFECTIONERY, BY STATE



Employment in the Food Industries.

Employment in the making of bread and other bakery products showed the picture found in many other industries—an advance above the depression low, but a level still below that of 1930 for women, though sometimes above 1930 for men. However, in New York there were heavy declines in employment in this industry, continuous for women throughout the entire period covered in this survey, from 1928 on, but more irregular for men, the latest index showing a slight recovery from the low point. Women had suffered much more severely than men, and their latest index was only about half that in 1930. In Ohio, men's employment in bakeries showed an especially great advance, having far surpassed 1929, and men formed a considerably larger proportion of all employees than was the case in 1929 or 1930. The data from each State reported seem to show that the proportion of women in bakery employment has definitely declined.

In the making of confectionery employment has increased from the depression low, considerably more so for men than for women, men's employment being in some cases well above the 1929 level. Though there are characteristic processes in this industry that women always are likely to perform, the data indicate that the proportion of women in the industry generally was smaller in the latest year than in 1930.

In the canning and preserving of fruits and vegetables, since the indexes used are those for September, they represent a busy season in the industry. Though the latest year showed some decreases, the index usually was well above that of years just preceding, and was considerably higher even than in 1929 or 1930. Women had fared better than men in obtaining work at the busy time in this highly seasonal industry, and they represented a much larger proportion of the employees in the latest year than in 1929 or 1930.

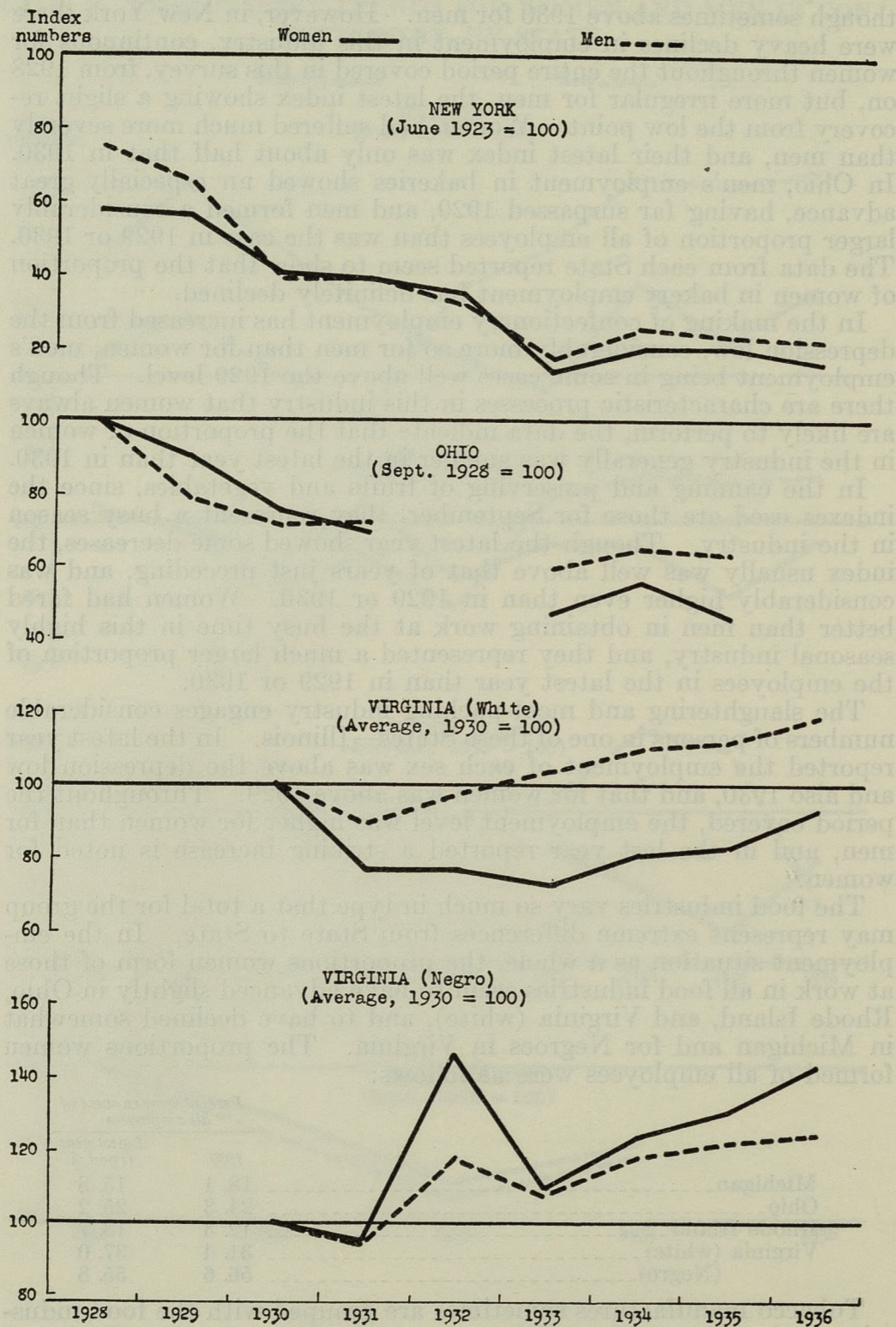
The slaughtering and meat-packing industry engages considerable numbers of persons in one of these States—Illinois. In the latest year reported the employment of each sex was above the depression low and also 1930, and that for women was above 1929. Throughout the period covered, the employment level was higher for women than for men, and in the last year reported a striking increase is noted for women.

The food industries vary so much in type that a total for the group may represent extreme differences from State to State. In the employment situation as a whole, the proportions women form of those at work in all food industries seem to have advanced slightly in Ohio, Rhode Island, and Virginia (white), and to have declined somewhat in Michigan and for Negroes in Virginia. The proportions women formed of all employees were as follows:

	Percent women were of all employees	
	1930	Latest year reported
Michigan.....	18.1	15.8
Ohio.....	24.3	25.2
Rhode Island.....	12.3	13.7
Virginia (white).....	31.4	37.0
(Negro).....	56.6	55.8

Tobacco manufactures sometimes are grouped with the food industries, and so they will be discussed at this point. In New York and Ohio, employment in tobacco factories showed an extreme decline and had recovered but little by the latest year reported, in some cases even

CHART 9.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN TOBACCO MANUFACTURES, BY STATE



having continued to fall. By the latest year reported, smaller proportions of the tobacco employees were women than had been the case in 1930. However, in Virginia, an important tobacco State, the picture was quite different. A much higher level of employment for both sexes was maintained throughout the period studied; and for both men and women advances were continuous from 1933 on, for white men from an even earlier date. By the latest year reported, women constituted a larger proportion than formerly of those in the industry who were Negroes. In tobacco rehandling, engaging chiefly Negroes, employment was very much more irregular, due largely to the general nature of the work and to shifts in the establishments doing business.

Employment in the Paper and Printing Industries.

Since the depression, employment has advanced in the paper and printing industries as a whole and in the subdivisions comprising this group. In paper and printing, employment of women reached the 1930 level in Illinois, New York, Ohio, and Virginia (white) but for men only in Ohio and Virginia (white), and for neither sex in Massachusetts. The printing and publishing industry, ordinarily forming a considerable part of the total, showed the same trend as the whole group in most cases, though there were exceptions.

The employment level generally was higher for men than for women in the various industries in this group in Massachusetts and New York, in job printing in Illinois, and in the major groups in Virginia. However, it was the higher for women in the Ohio industries in this group, in paper-box making in Virginia and Illinois, and in paper and printing also in Illinois.

In several instances smaller proportions of women were employed in the late year than in 1930, though paper and printing as a whole as well as printing and publishing in Ohio and paper boxes in Virginia (white workers) employed slightly larger proportions of women in the latest year reported than in 1930. The proportions women formed in the paper and printing group as a whole in 1930 and in a late year were as follows:

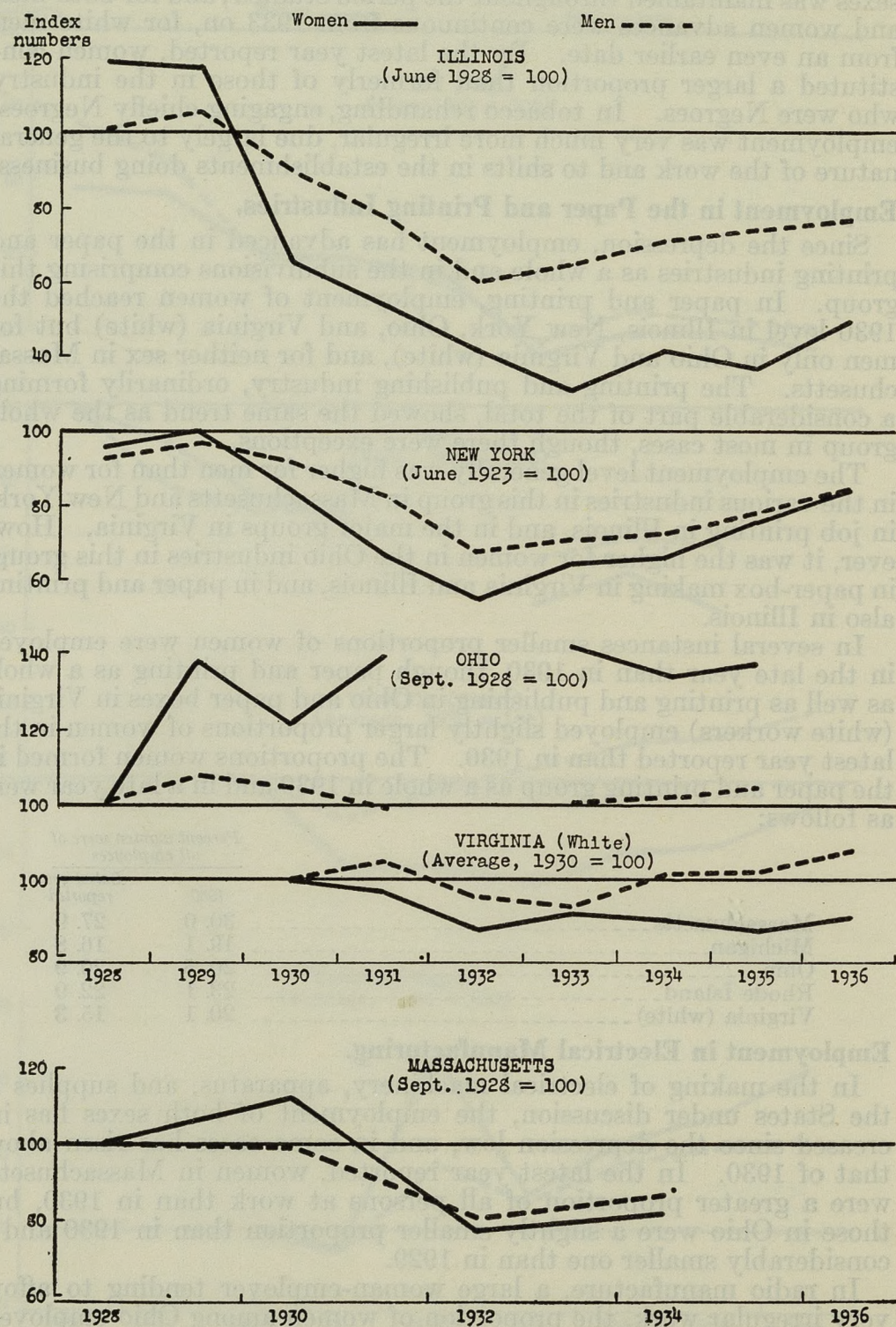
	Percent women were of all employees	
	1930	Latest year reported
Massachusetts.....	30.0	27.9
Michigan.....	19.1	16.8
Ohio.....	20.5	20.9
Rhode Island.....	23.1	22.9
Virginia (white).....	20.1	15.3

Employment in Electrical Manufacturing.

In the making of electrical machinery, apparatus, and supplies in the States under discussion, the employment of both sexes has increased since the depression low, and in some cases has risen above that of 1930. In the latest year reported, women in Massachusetts were a greater proportion of all persons at work than in 1930, but those in Ohio were a slightly smaller proportion than in 1930 and a considerably smaller one than in 1929.

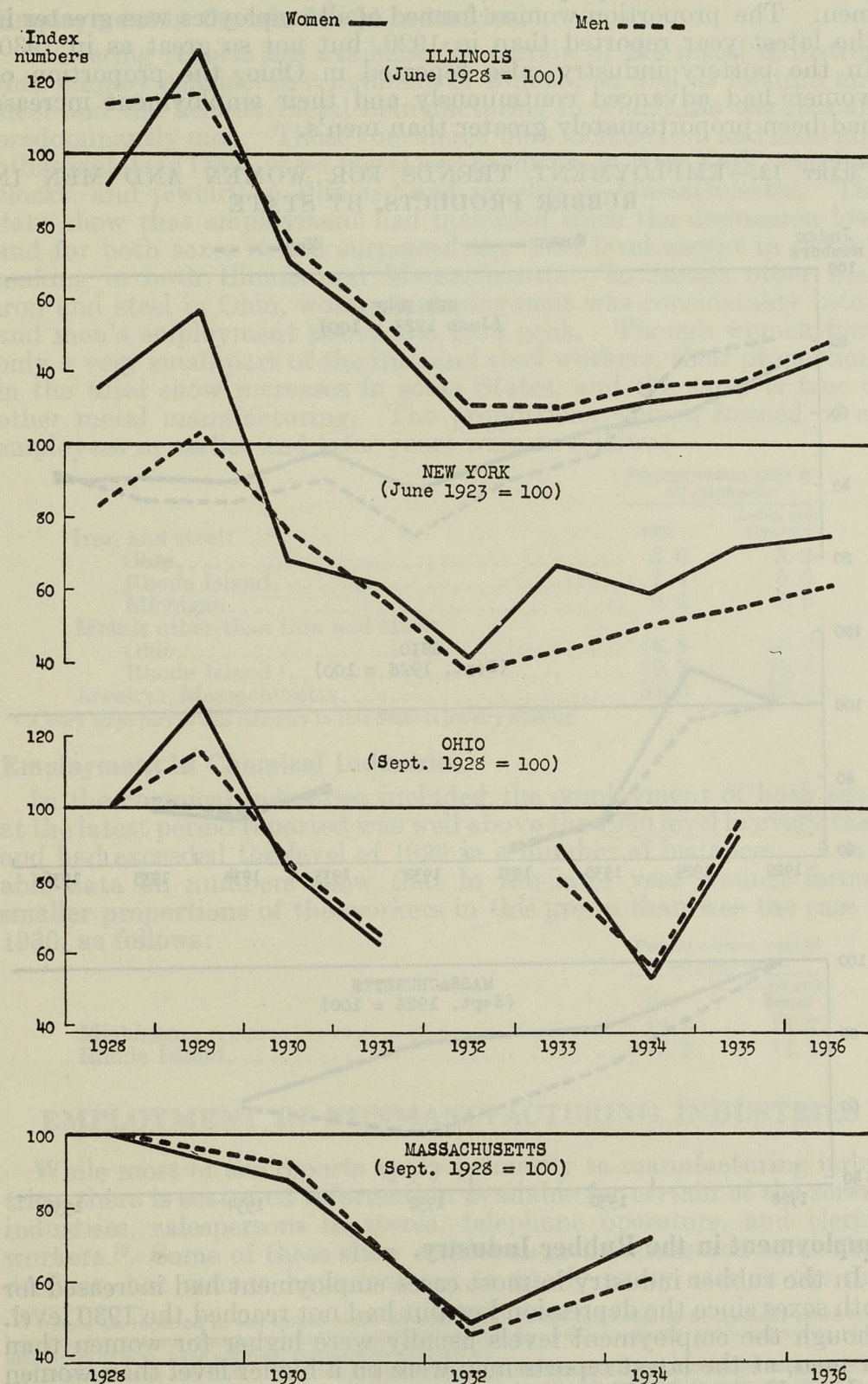
In radio manufacture, a large woman-employer tending to afford very irregular work, the proportion of women among Ohio employees fluctuated widely from year to year but was similar in 1929 and 1935, the years in which it was smallest—just over 56 percent.

CHART 10.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN PRINTING AND PUBLISHING, BY STATE¹



¹ In the case of Illinois, job printing only.

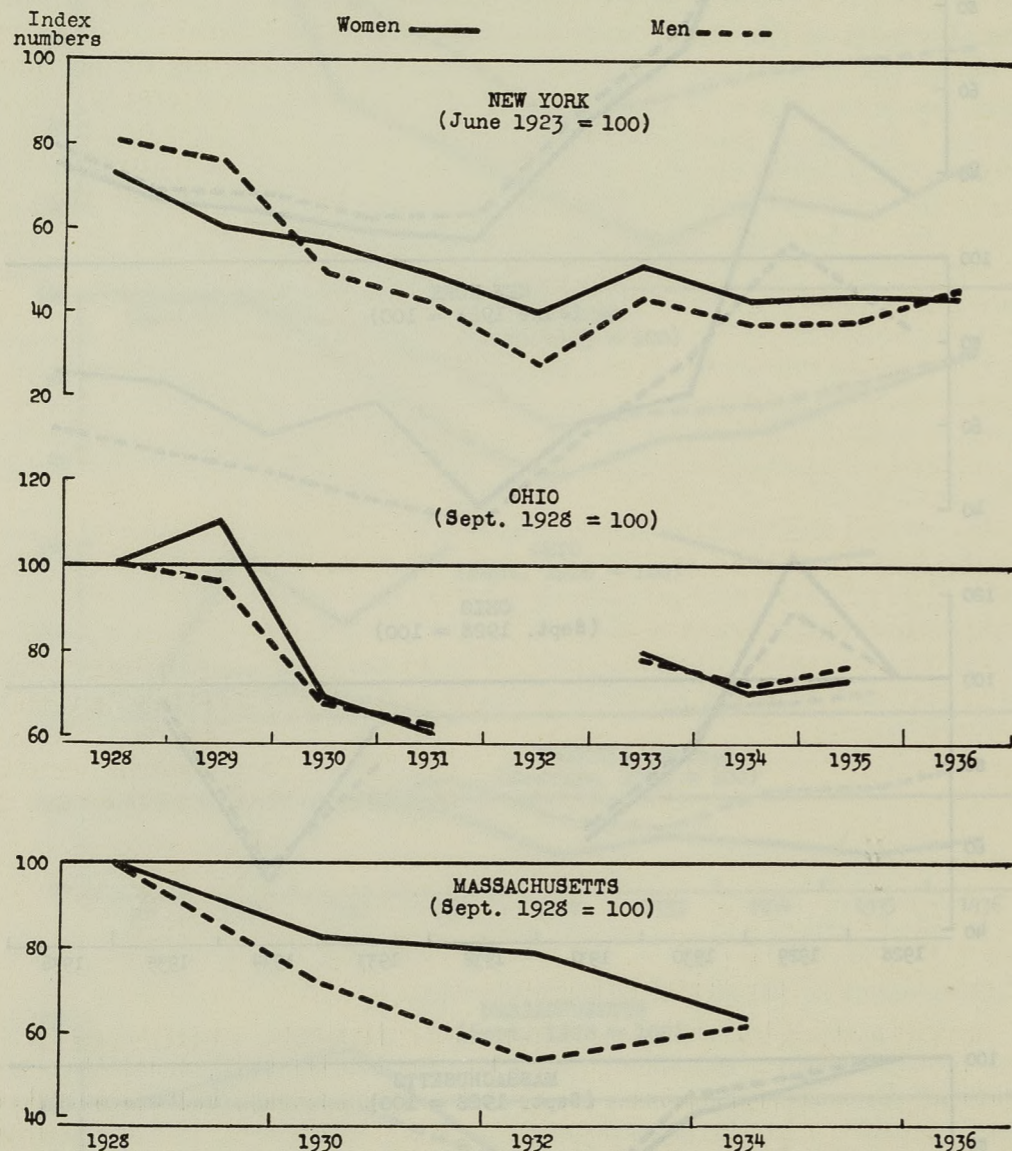
CHART 11.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN ELECTRICAL MACHINERY AND SUPPLIES, BY STATE



Employment in Glass Making.

The glass industry, where figures were available (Ohio), showed greatly increased employment, far above 1929 for both women and men. The proportion women formed of all employees was greater in the latest year reported than in 1929, but not so great as in 1930. In the pottery industry, also reported in Ohio, the proportion of women had advanced continuously and their employment increase had been proportionately greater than men's.

CHART 12.—EMPLOYMENT TRENDS FOR WOMEN AND MEN IN RUBBER PRODUCTS, BY STATE



Employment in the Rubber Industry.

In the rubber industry in most cases employment had increased for both sexes since the depression low but had not reached the 1930 level. Though the employment levels usually were higher for women than for men, at the latest reports men were on a higher level than women in New York and Ohio. Late reports from Ohio and Massachusetts showed women forming smaller proportions of those employed than

in 1930, though in Rhode Island they formed a somewhat larger proportion in 1936 than in 1930.

Employment in Certain Metal Industries.

Scattering reports are available for certain of the metal industries that employ considerable numbers of women, as well as for iron and steel and the heavier metal manufacturing in which the workers are predominantly men. Those considered here include iron and steel and other metals in Ohio, sheet metal and hardware in New York, watches, clocks, and jewelry in Illinois,⁹ and jewelry in Massachusetts. The data show that employment had increased since the depression low, and for both sexes it had surpassed the 1930 level except in jewelry making in both Illinois and Massachusetts. In metals other than iron and steel in Ohio, women's employment was considerably below and men's employment above the 1929 peak. Though women form only a very small part of the iron and steel workers, their proportions in the total show increases in some States, and the same is true of other metal manufacturing. The proportions women formed of all employees in earlier and later years were as follows:

	Percent women were of all employees	
	1930	Latest year reported
Iron and steel:		
Ohio.....	3.0	3.2
Rhode Island.....	7.4	6.5
Michigan.....	6.4	7.0
Metals other than iron and steel:		
Ohio.....	16.9	18.0
Rhode Island ¹	39.3	33.4
Jewelry: Massachusetts.....	34.0	34.9

¹ A very large part of this industry in this State is jewelry making.

Employment in Chemical Industries.

In the chemical industries included, the employment of both sexes at the latest period reported was well above the 1930 level in every case, and had exceeded the level of 1929 in a number of instances. Available data on numbers show that in the later year women formed smaller proportions of the workers in this group than was the case in 1930, as follows:

	Percent women were of all employees	
	1930	Latest year reported
Michigan.....	13.8	13.7
Rhode Island.....	17.5	14.1

EMPLOYMENT IN NONMANUFACTURING INDUSTRIES

While most of the reports apply primarily to manufacturing industries, there is scattered information available for certain of the service industries, salespersons in stores, telephone operators, and clerical workers.¹⁰ Some of these show employment increases and some show declines, but women have lost out in nearly every case in the pro-

⁹ Others are reported in the Illinois State figures, but since the index has to be specially constructed, based on the percent change in identical establishments from month to month, these industries, chiefly employers of men, have not been prepared for this report.

¹⁰ Massachusetts and New York give reports only for manufacturing, though New York includes in this laundry and cleaning establishments. Reports on certain nonmanufacturing industries are given in the periodic data from Illinois, Ohio, and Virginia, and in the census figures from Michigan, Rhode Island, and Pennsylvania.

portion they form of all workers, and the level of employment almost always is higher for men than for women.

Employment in Service Industries.

In laundries and cleaning and dyeing plants the employment of both sexes in the latest year reported had improved since the depression lows, but it still was far below the 1929 and 1930 levels in every case but those of men in New York and women in Virginia. In Ohio the slight decline from the preceding year was somewhat greater for men than for women. Where figures are available, the proportions of women show some decline, markedly so in Michigan, though in Rhode Island they have remained stationary. The proportions women formed of the workers in these industries were as follows:

	Percent women were of all employees ^s	
	1930	Latest year reported
Michigan.....	50.4	43.3
Ohio.....	58.4	57.1
Rhode Island.....	48.4	48.4

In hotels and restaurants the employment of both sexes in Illinois had declined markedly in 1935, the most recent year reported for this group. In Ohio, restaurants were employing very many more men and women in 1935 than in 1929, and the advances in hotels also had been considerable, though not so many were at work there as in 1929. According to all available reports, women had definitely lost to men in these industries, the proportions they formed of total employees being as follows:

	Percent women were of all employees	
	1930	Latest year reported
Michigan.....	55.4	50.3
Rhode Island.....	44.0	32.5
Ohio: Hotels.....	49.6	45.1
Restaurants.....	55.0	50.7

The Ohio reports include considerable numbers of service workers in hospitals and in office buildings. In both of these, especially office buildings, many more of both sexes were employed in 1935 than in 1930. Women had gained somewhat in hospital service, lost in office-building service, as the following proportions of women among all employees in these industries show:

	Percent women were of all employees	
	1930	Latest year reported
Service workers in hospitals.....	76.9	77.1
Service workers in office buildings.....	38.7	31.3

Employment in Telegraph and Telephone Operation.

Reports from Ohio and Illinois give telegraph and telephone operation. Women in this group ordinarily are telephone operators for the most part, the men more likely to be telegraph operators. Those from Illinois show almost continuous employment declines for both sexes since 1929. In Ohio the employment of both men and women in these occupations increased slightly from the lowest point but in 1935 still was far less than in 1930. Women have declined wherever

data are available, in some cases considerably, as is shown by the following proportions women formed of all such employees:

	Percent women were of all employees	
	1930	Latest year reported
Michigan.....	55.0	52.3
Ohio.....	57.4	54.3
Rhode Island.....	61.2	54.0

Employment in Stores.

Periodic reports show employment in stores to have increased continuously since the lowest point, 1930, for both sexes in Ohio and for men in Illinois; among women in Ohio even the 1929 peak was surpassed. In Illinois, though women were losing in the 2 latest years reported, their levels still were well above the 1930 mark. From the figures available, women in stores seem to have lost somewhat in comparison with men, except in Rhode Island, as is shown by the following proportions women formed of all employees in stores:

	Percent women were of all employees	
	1930	Latest year reported
Michigan.....	22.9	20.2
Ohio.....	50.5	48.7
Rhode Island.....	23.9	25.6

Employment in Clerical Occupations.

Ohio reports show for both sexes increased employment as bookkeepers, stenographers, and office clerks in the latest year reported, though fewer were then at work in these occupations than in 1930. The proportion of these who were women remained fairly stable, being 48.5 in 1930 and 48.9 at the latest report.

APPENDIX A.—TYPES OF DATA REPORTED AND METHOD OF HANDLING MATERIAL

THE USE OF INDEX NUMBERS IN ANALYZING TRENDS IN WOMEN'S EMPLOYMENT

Index numbers, or relatives, provide a method of reducing data for various periods to a common denominator. The confusion of dealing with large numbers is thus avoided, and the figures for each period are reduced to exactly the same basis as those for every other period considered. The base used for this purpose may be one specific figure, or the average for a year or for a series of years. The last named sometimes is considered more sound but is not always possible to obtain for use with a new or irregularly reported series of data.

For determining general direction it makes very little difference what base is used, since the curve formed on a series of figures will take the same *direction* no matter what the base. If the same base is used for two series—for example, for men's employment and women's employment—the relation between the curves will be the same whether the base is one figure or the average of several figures.

The *level* of the curve, however, will be greatly affected by the base taken. For example, if a period of peak employment or prices as in 1929 be taken as a starting point, employment in the following months was so much lower that the resulting curve will be plotted on a very low level. If a period of depression such as 1933 be taken as the base, employment in the following months had risen somewhat and the resulting curve, while taking the same *direction* as that first described if made from the same data, will be on a very much higher *level*.

An effort usually is made to take as normal a time as possible for a base—for example, an average for 1928. In using employment figures for women it sometimes has been convenient to take as a starting point the month or year when reporting began. Thus the New York employment indexes by sex are constructed on June 1923 as the base period, since such reporting was initiated at that time.

In preparing material for use in the present analysis, September 1928 was taken as the base for constructing the employment indexes from both the Massachusetts and the Ohio figures and the year 1930 for those from Virginia. For Illinois a different method had to be used, as will be explained below.

DATA AVAILABLE ON WOMAN EMPLOYMENT

For the five States following, periodic indexes of employment by sex are available or have been prepared for use in the present analysis.

Illinois.—The State Department of Labor computes percent change in employment of wage earners from month to month for men and for women in identical plants from data furnished by a sample number of employers reporting regularly and constituting a representative coverage of workers in manufacturing, power

laundries, trade, and certain service industries (as well as others that are chiefly employers of men). From these changes, indexes for every month of the 9 years have been constructed by the link-relative method, using June 1928 as the base. These are published here for the month of September in each year, 1936 being the latest available (table I).¹¹ These indexes were made for every industry for which as many as 1,500 women were reported in September of 1930 or 1935.

Massachusetts.—The State Department of Labor and Industries takes a regular census of employment of wage earners in manufacturing annually, in even years collecting this by sex.¹² Since the coverage is complete rather than by sampling, indexes have been computed in the Women's Bureau from these unpublished figures, which are reported in the form of average employment for each month, the latest available at the time data were analyzed for this report being 1934. September 1928 is used as a base, and the indexes for September of each year are published here (table II). Indexes were constructed for every industry in which as many as 1,500 women were reported either in September 1928 or in September 1934 as well as for the main industry groups; these latter had to be formed by selection from the list, which in the original is arranged alphabetically and not grouped.

New York.—The New York Department of Labor receives monthly reports on wage earners similar to those for Illinois, that is, from a sample coverage of employers, in manufacturing, including laundries. In this case a fixed list of firms is used from month to month. With the use of proper weighting for the coverage, the State constructs and publishes every month an index by sex. That for September of each year is used here, the latest available being 1936 (table V). June 1923 is the base used by the State for this index.

Ohio.—The Ohio Department of Industrial Relations annually collects from employers employment data reported by month. These figures cover about 95 percent of the wage earners at work in manufacturing in the State. Since the coverage is relatively complete rather than by sampling, the Women's Bureau has prepared indexes by sex, basing these on September 1928. In the present analysis the figure for September of each year has been used, the latest available being 1935 (table III). Indexes were constructed for every industry or group in which as many as 2,000 women were reported in September of either 1928 or 1935.

Virginia.—Annual reports of the Virginia Department of Labor and Industry show the year's average number of wage earners employed in manufacturing and a few service industries, the latest available being 1936. The Women's Bureau has constructed indexes from these, using the 1930 data as the base (table IV). Though the classification was changed in 1930, this seems not to have affected to any great extent the woman-employing industries discussed here. All those industries or groups are considered here in which as many as 500 women are reported in any 2 years.

From the sources described above, actual figures are available by sex to show the number employed in 1930 and in a regular series of later years for Massachusetts, Ohio, and Virginia. Since in each case they are collected by the State on the same basis, they can be compared for the same State from year to year.

Each of the following States has published figures from a special employment census taken in a recent year, including reports by sex. In some cases certain of the data from these—for example, the employment totals—can be compared to those of the 1930 Census of Occupations. Where industry coverage in the State census includes clerical workers (as in Michigan and Rhode Island) the industrial grouping of the United States Census of 1930 is used for comparison.

Michigan.—The census in Michigan, taken in 1935, covered a random sample of somewhat less than half the employable workers 15 years of age or older, from which estimates of the totals were made. All persons able and wanting to work

¹¹ Indexes used are computed by the Women's Bureau. The State began in 1936 to compute indexes by sex, based on the 1930 average as 100. These are for the major groups and have not as yet been issued for certain of the individual industries that are important woman-employers; for example, an index is given for leather goods and one for the food industries, but no separate index for the boot-and-shoe nor for the meat-packing industry.

¹² In odd years the State uses the schedule on which the U. S. Bureau of the Census takes the biennial Census of Manufactures, and this calls for the sex of employees only once in 10 years.

were included, except those not before employed unless they had made application for jobs within a month past. Those never employed but having applied for work are included in the total number of employables reported by the State, but they are excluded from the discussion in this report, since comparisons are made with United States census data that do not include such workers. (See p. 3.) Where a comparable figure for 1930 was obtainable, those industries for which as many as 2,000 women were reported are considered here.

Pennsylvania.—The Pennsylvania census, taken in 1934, covered employable workers 15 years of age or older, though excluding agricultural workers and those unemployed through illness of considerable duration. This differed somewhat from the Federal census of gainful workers, in that it included young persons seeking work for the first time, a group that is not included in the present study; but since these young persons can be excluded only from the total, industry comparisons cannot be made. (See p. 3.) An occupational rather than an industrial classification is used, and while this may be more valuable for certain purposes, such as use in listing type of job for placement in employment, it does not lend itself to comparison with figures reported by the more traditional industry classifications, and hence these data could be used in the present report only for total employment.

Rhode Island.—The Rhode Island census, taken in 1936, included all employable persons 10 years old and over. As in Michigan and Pennsylvania, those not previously employed but seeking work are excluded from this report. (See p. 3.) Where a comparable figure for 1930 was obtainable, those industries for which as many as 200 women were reported have been considered here.

INDUSTRY TITLES (FOR GROUPS OR DETAILS) AS USED IN WOMEN'S BUREAU DISCUSSION AND TITLES CORRESPONDING MOST CLOSELY AS USED IN STATE REPORTS

Industry titles (for groups or details) as used in Women's Bureau discussion	Industry titles as used in State reports						
	States with periodic indexes of employment available					States with recent employment census but no periodic index available	
	Illinois	Massachusetts	New York	Ohio ¹	Virginia	Rhode Island	Michigan
All occupations.	All industries			All employees		All industries	All industries.
All manufacturing.	All manufacturing	All manufacturing	All manufacturing ²	All manufactures	All manufacturing	Manufacturing and mechanical industries. ³	Manufacturing and mechanical industries.
Chemical and allied products.	Chemical and allied products					Chemical and allied industries.	Chemical and allied industries.
Drugs and industrial chemicals.			Drugs and industrial chemicals.				
Photographic and miscellaneous chemicals.			Photographic and miscellaneous chemicals.				
Clothing		Clothing ³					
Men's clothing	Men's clothing	Men's clothing ³	Men's clothing	Men's clothing, including shirts and coat pads.	Clothing ³	Clothing industries	Clothing industries.
Men's furnishings.			Men's furnishings				
Women's clothing.	Women's and children's clothing.	Women's clothing	Women's clothing	Women's clothing, including corsets.			
Women's headwear.			Women's headwear				
Women's underwear.	Women's and children's underwear.		Women's underwear				
Food				Food and kindred products.	Food and kindred products.	Food	Food and allied industries.
Bakery products.	Bakery products	Bread and other bakery products.	Bakery products	Bakery products			
Canning, fruit and vegetable.			Canning and preserving.	Canning and preserving.	Fruit and vegetable canning, etc.		
Confectionery	Confectionery	Confectionery	Candy		Confectionery		
Slaughtering and meat packing.	Slaughtering and meat packing.						
Peanut cleaning, etc.					Peanut cleaning, etc.		

Sea foods: Canning, etc.					Sea foods: Canning, etc.	
Leather:						
Boots and shoes	Boots and shoes	Boots and shoes, other than rubber.	Shoes	Boots and shoes, cut stock and findings. ⁽⁴⁾	Boots and shoes	
Boot and shoe cut stock and findings.		Boot and shoe cut stock and findings.				
Gloves, bags, canvas goods.			Gloves, bags, canvas goods.			
Metals and machinery.			Metals and machinery (including electric).			
Automobiles				Automobiles and parts.		Automobile factories.
Copper, tin, and sheet-iron products.				Copper, tin, and sheet-iron products.		
Electrical machinery and supplies.	Electrical machinery, apparatus, and supplies.	Electric machinery and supplies (including radios). ⁽⁴⁾	Machinery and electrical apparatus.	Electrical machinery, apparatus, and supplies.		
Radios				Radios and parts (not included in electrical).		
Foundry and machine-shop products.				Foundry and machine-shop products.		
Gas and electric fixtures.				Gas and electric fixtures and lamps and reflectors.		
Iron and steel				Iron and steel and their products.	Iron and steel industries; machine and machine tools.	Iron and steel, machinery and vehicle industries.
Iron and steel, other than automobiles.						Auto repair shops; blast furnaces and steel rolling mills, other than iron and steel; machinery and vehicles. ³
Jewelry	Watches, clocks, jewelry.	Jewelry			⁽⁵⁾	
Metals, other than iron and steel.				Metal and metal products, other than iron and steel.	Other metal industries; jewelry. ³	
Sheet metal and hardware.			Sheet metal and hardware.			

¹ The group "all employees" includes, besides wage earners, bookkeepers, stenographers, and office clerks, and salespersons not traveling; but the "all industries" group and the manufacturing, service, and transportation totals include only wage earners.
² Includes laundries and dry cleaning. ³ Compiled by Women's Bureau. ⁴ See entry next above. ⁵ See entry next below.

INDUSTRY TITLES (FOR GROUPS OR DETAILS) AS USED IN WOMEN'S BUREAU DISCUSSION AND TITLES CORRESPONDING MOST CLOSELY AS USED IN STATE REPORTS—Continued

Industry titles (for groups or details) as used in Women's Bureau discussion	Industry titles as used in State reports						
	States with periodic indexes of employment available					States with recent employment census but no periodic index available	
	Illinois	Massachusetts	New York	Ohio	Virginia	Rhode Island	Michigan
Paper and printing...	Paper goods and printing and publishing.	Paper and printing ³	Paper and printing	Paper and printing	Paper and printing	Paper and allied industries; printing, publishing, and engraving. ³	Paper, printing, and allied industries.
Envelopes		Envelopes and stationery, n. e. c. ³					
Paper and wood pulp.		Paper and wood pulp.					
Paper boxes	Paper boxes, bags, and tubes.	Boxes, paper and other, n. e. c.	Paper boxes and tubes.		Paper boxes, bags, etc.		
Printing and publishing.		Printing and publishing.	Printing and book-making.	Printing and publishing.	Printing and publishing.		
Job printing.	Job printing						
Rubber		Rubber ³	Rubber and gutta percha.	Rubber products		Rubber factories	
Rubber boots and shoes.		Boots and shoes, rubber. ⁽⁵⁾		Rubber, tires and tubes.			
Rubber tires and tubes.							
Rubber goods, other than boots and shoes.		Rubber goods (other than boots and shoes) and rubber tires and inner tubes.					
Stone, clay, and glass.				Stone, clay, and glass products.			
Glass				Glass			
Pottery				Pottery, terra-cotta, and fire-clay products.			
Textiles	Textiles	Textiles ³	Textiles ⁽⁶⁾		Textiles ³	Textiles	
Carpets		Carpets and rugs (not rag).					
Cotton goods		Cotton goods			Cotton goods	Cotton mills	
Cotton small wares.		Cotton small wares					
Knit goods		Knit goods	Knit goods (except silk).	Hosiery and knit goods.	Knitting-mill products.		

Rayon yarn					Rayon yarn	Silk mills	
Silk goods		Silk, silk goods, and rayon goods.	Silk and silk goods		Silk and rayon goods		
Textile dyeing and finishing.		Dyeing and finishing, textiles.					
Woolen and worsted goods.		Woolen and worsted.	Woolens, carpets, felts.	Woolen, worsted, and wool-felt goods (including fur and felt hats).	Woolen and worsted goods.	Woolen and worsted mills.	
Tobacco manufactures.			Tobacco	Tobacco manufactures. ³	Tobacco manufactures. ³		
Cigars and cigarettes.				Cigars and cigarettes.	Cigars and cigarettes.		
Tobacco rehandling					Tobacco rehandling (not included in tobacco manufactures).		
Wood products			Wood manufactures	Lumber and its products.		Lumber and furniture industries.	
Fruit and vegetable packages.					Fruit and vegetable packages.	Furniture.	
Furniture							
Nonmanufacturing: Laundry and dyeing and cleaning.	Laundrying, cleaning, and dyeing.		Laundrying and cleaning.	Laundries, dry cleaners, and renovators.	Laundries	Laundries, cleaning and pressing.	Laundries, cleaning, dyeing, and pressing shops.
Hotels and restaurants.	Hotels and restaurants.					Hotels, restaurants, cafes, saloons, apartments.	Hotels, restaurants, boarding houses, etc.
Hotels				Hotels			
Restaurants				Restaurants			
Service workers in hospitals.				Hospitals			
Service workers in office buildings.				Office buildings (including window cleaning).			
Telephone and telegraph.	Telephone companies.			Transportation—telephone and telegraph.		Telephone, telegraph, and radio.	Telegraph and telephone.
Trade	Department and variety stores.			Salespersons (not traveling), stores, retail and wholesale.		Wholesale and retail trade.	Wholesale and retail trade.
Clerical				Bookkeepers, stenographers, and office clerks—all industries, all manufactures.			

³ Compiled by Women's Bureau.

⁵ See entry next below.

⁶ See entry next below.

TABLE III.—INDEXES OF EMPLOYMENT OF WOMEN AND MEN IN IMPORTANT WOMAN-EMPLOYING INDUSTRIES IN OHIO, SEPTEMBER OF EACH YEAR, 1928-35¹

[September 1928=100]

Industry	Women								Men							
	1928	1929	1930	1931	1932 ²	1933	1934	1935	1928	1929	1930	1931	1932 ²	1933	1934	1935
All employees.....	100.0	109.1	96.9	90.5	-----	(2)	88.4	95.5	100.0	104.2	86.6	72.3	-----	(2)	74.6	85.0
Wage earners in—																
All industries.....	100.0	109.0	92.6	86.5	-----	84.5	85.4	93.2	100.0	103.1	84.3	69.4	-----	71.3	72.0	82.8
All manufactures.....	100.0	108.8	86.0	78.2	-----	85.2	83.1	91.3	100.0	104.4	80.3	65.5	-----	74.5	72.1	85.5
Textiles:																
Hosiery and knit goods.....	100.0	104.0	90.4	91.2	-----	119.9	104.4	122.2	100.0	99.1	87.5	82.1	-----	119.5	92.7	114.8
Woolen, worsted, and wool-felt goods, including fur and felt hats.....	100.0	134.3	108.5	97.7	-----	114.8	89.8	134.9	100.0	122.4	125.9	96.2	-----	122.9	94.8	137.9
Clothing:																
Men's clothing, including shirts and coat pads.....	100.0	113.9	96.5	91.4	-----	98.3	98.9	105.0	100.0	107.7	101.9	98.4	-----	101.9	114.2	117.2
Women's clothing, including corsets.....	100.0	103.4	91.9	96.9	-----	82.7	84.0	82.4	100.0	92.3	90.0	90.2	-----	70.0	69.0	67.1
Food and kindred products.....	100.0	110.4	115.3	112.0	-----	111.5	128.3	130.3	100.0	105.5	113.7	111.5	-----	109.9	120.7	122.2
Bakery products.....	100.0	107.1	116.6	99.8	-----	91.0	103.8	99.6	100.0	106.7	142.7	130.2	-----	137.9	147.2	150.2
Canning and preserving.....	100.0	118.9	134.9	157.4	-----	163.0	222.9	242.1	100.0	114.4	105.2	128.8	-----	86.8	118.5	130.6
Boots and shoes, cut stock and findings.....	100.0	105.9	93.5	92.4	-----	101.5	89.2	123.0	100.0	95.7	86.0	86.8	-----	87.8	74.2	102.7
Tobacco manufactures ³	100.0	89.9	74.9	69.2	-----	46.9	55.3	45.6	100.0	78.6	70.9	71.5	-----	59.2	64.5	63.2
Cigars and cigarettes.....	100.0	88.6	73.8	67.6	-----	36.5	38.5	36.4	100.0	69.2	64.8	68.9	-----	37.9	42.6	43.8
Paper and printing.....	100.0	117.0	103.7	101.6	-----	109.6	104.9	111.5	100.0	105.6	99.0	92.9	-----	100.2	100.7	103.7
Printing and publishing.....	100.0	138.8	121.9	139.7	-----	142.7	134.5	137.8	100.0	108.1	104.6	99.6	-----	100.0	101.6	104.5
Electrical machinery, apparatus, and supplies.....	100.0	129.1	83.0	62.1	-----	89.7	53.1	92.8	100.0	115.8	84.6	65.8	-----	80.4	56.1	96.7
Radios and parts.....	100.0	132.8	116.8	86.4	-----	67.1	62.3	46.9	100.0	181.3	127.3	93.9	-----	70.7	46.4	64.0
Iron and steel and their products.....	100.0	97.0	68.9	55.2	-----	69.9	66.4	80.2	100.0	107.5	77.9	54.2	-----	71.4	62.7	83.5
Foundry and machine-shop products.....	100.0	99.4	66.3	55.2	-----	74.2	65.8	87.1	100.0	109.5	79.3	56.4	-----	59.0	63.0	79.2
Metals and metal products, other than iron and steel.....	100.0	138.5	80.4	72.9	-----	96.3	101.1	111.7	100.0	113.1	94.4	83.8	-----	106.5	107.8	121.8
Copper, tin, and sheet-iron products.....	100.0	116.1	99.7	93.8	-----	113.6	107.1	120.4	100.0	114.5	110.8	103.6	-----	121.6	121.0	134.9
Gas and electric fixtures and lamps and reflectors.....	100.0	179.5	69.5	58.4	-----	73.6	98.5	103.3	100.0	113.7	83.5	69.2	-----	71.9	84.1	92.9
Rubber products.....	100.0	110.1	69.2	60.4	-----	79.4	70.1	73.5	100.0	96.9	67.7	61.4	-----	78.2	71.7	76.5
Rubber tires and tubes.....	100.0	111.8	64.6	53.5	-----	70.5	65.9	64.9	100.0	96.0	67.9	61.4	-----	75.7	72.3	73.1
Automobiles and parts.....	100.0	108.9	68.1	50.7	-----	36.9	58.6	46.1	100.0	96.6	64.7	52.3	-----	36.6	44.0	50.4
Lumber and its products.....	100.0	96.3	86.7	90.2	-----	99.6	109.5	105.3	100.0	101.4	76.1	61.9	-----	63.1	58.0	66.4
Stone, clay, and glass products.....	100.0	90.9	70.2	60.5	-----	58.3	68.2	82.5	100.0	96.8	73.7	61.2	-----	55.2	64.4	76.8
Glass.....	100.0	110.7	87.2	90.2	-----	114.8	149.3	151.5	100.0	113.7	77.1	84.5	-----	100.7	135.9	152.4
Pottery, terra-cotta, and fire-clay products.....	100.0	84.5	62.1	48.0	-----	51.3	53.0	73.5	100.0	75.7	61.9	42.7	-----	46.4	44.0	62.0
Service industries:																
Hospitals.....	100.0	114.4	111.4	110.2	-----	97.1	108.1	117.6	100.0	114.1	117.4	113.3	-----	110.2	116.5	122.4
Hotels.....	100.0	106.4	103.8	95.3	-----	71.6	78.2	90.8	100.0	104.9	97.2	92.8	-----	73.6	89.3	102.2
Laundries, dry cleaners, and renovators.....	100.0	107.5	100.0	94.2	-----	74.5	77.3	76.7	100.0	109.4	113.1	103.3	-----	90.0	92.6	91.5
Office buildings (including window cleaning).....	100.0	113.6	118.3	115.0	-----	126.6	135.6	134.3	100.0	120.3	124.9	133.3	-----	161.6	183.2	196.7
Restaurants.....	100.0	115.9	120.6	111.6	-----	91.8	107.6	125.0	100.0	112.8	114.8	107.1	-----	98.8	114.9	141.3
Transportation—Telegraph and telephone.....	100.0	122.9	106.1	95.5	-----	62.5	63.5	63.5	100.0	110.4	104.2	87.5	-----	66.7	69.6	70.8
Bookkeepers, stenographers, and office clerks—																
All industries.....	100.0	110.5	106.9	95.9	-----	(2)	90.1	95.9	100.0	108.1	112.7	96.8	-----	(2)	93.6	99.7
All manufactures.....	110.0	112.1	103.2	87.8	-----	(2)	85.1	91.8	100.0	108.4	104.1	86.2	-----	(2)	83.1	91.8
Salespersons (not traveling) in—																
Stores, retail and wholesale.....	100.0	105.8	97.1	99.4	-----	(2)	102.7	108.5	100.0	120.3	97.2	98.9	-----	(2)	107.1	116.7

¹ Indexes constructed by the Women's Bureau from employment figures reported each year to the Ohio Department of Industrial Relations. All industries included in which 2,000 or more women were reported in either September 1928 or September 1935.

² Figures not obtainable.

³ Compiled by Women's Bureau. Includes cigars and cigarettes and chewing and smoking tobacco and snuff.

TABLE IV.—INDEXES OF EMPLOYMENT OF WHITE AND NEGRO WOMEN AND MEN IN IMPORTANT WOMAN-EMPLOYING INDUSTRIES IN VIRGINIA, 1930-36¹

[Average for 1930=100]

Industry	Women							Men						
	1930	1931	1932	1933	1934	1935	1936	1930	1931	1932	1933	1934	1935	1936
WHITE														
All manufacturing.....	100.0	94.0	90.9	101.5	112.4	121.4	128.8	100.0	101.0	87.5	96.0	103.8	115.0	120.4
Manufacturing, exclusive of highly seasonal industries ²	100.0	94.3	91.8	100.8	109.5	114.7	123.8	100.0	100.7	87.5	95.5	103.5	113.7	119.4
Textiles ³	100.0	98.1	91.3	104.6	109.5	115.6	121.9	100.0	95.5	88.9	106.7	123.0	131.9	136.3
Cotton goods.....	100.0	82.3	90.2	96.1	115.6	132.7	133.5	100.0	94.3	99.8	116.4	142.6	155.4	150.5
Knitting-mill products.....	100.0	98.3	112.9	132.9	133.1	134.4	159.4	100.0	113.7	109.6	131.0	149.6	164.4	182.1
Rayon yarn.....	100.0	92.5	74.8	87.2	84.1	76.3	73.4	100.0	86.3	70.8	84.0	92.3	90.8	89.2
Silk and rayon goods.....	100.0	122.8	100.7	125.2	140.7	166.6	173.2	100.0	116.3	101.1	144.2	163.7	189.0	215.6
Woolen and worsted goods.....	100.0	120.9	104.9	110.3	93.9	117.6	123.0	100.0	115.2	123.2	139.7	149.1	179.0	189.0
Clothing ⁴	100.0	106.6	109.6	128.0	147.8	156.4	176.6	100.0	97.7	125.0	120.5	134.3	169.4	175.2
Food and kindred products.....	100.0	75.6	68.0	92.7	119.9	160.3	151.0	100.0	90.6	78.5	85.0	91.8	109.6	117.7
Fruit and vegetable canning, etc.....	100.0	90.6	78.5	112.1	151.8	214.5	199.2	100.0	120.5	89.7	103.4	122.7	201.3	186.6
Leather goods:.....	100.0	109.2	128.9	96.5	120.6	109.8	119.7	100.0	114.0	125.3	122.3	100.7	113.9	113.6
Boots and shoes.....	100.0	77.0	77.0	72.8	81.4	82.7	93.4	100.0	89.6	97.6	103.5	109.7	111.5	118.3
Tobacco manufactures ⁵	100.0	73.9	70.7	66.5	77.3	78.0	89.9	100.0	87.8	96.6	100.1	107.7	110.1	118.3
Cigars and cigarettes.....	100.0	101.3	96.5	102.8	102.7	102.8	107.5	100.0	112.5	107.2	124.3	136.1	140.8	149.1
Paper and printing.....	100.0	87.8	87.3	92.8	95.8	102.2	110.1	100.0	80.2	66.2	87.8	83.8	81.7	86.5
Paper boxes, bags, etc.....	100.0	97.0	86.3	91.1	89.3	86.4	90.1	100.0	104.2	95.5	92.3	101.3	101.6	107.3
Printing and publishing.....	100.0	97.0	86.3	91.1	89.3	86.4	90.1	100.0	104.2	95.5	92.3	101.3	101.6	107.3
Service:.....	100.0	98.6	86.9	96.2	116.1	129.7	149.9	(6)	(6)	(6)	(6)	(6)	(6)	(6)
Laundries.....	100.0	98.6	86.9	96.2	116.1	129.7	149.9	(6)	(6)	(6)	(6)	(6)	(6)	(6)

NEGRO

All manufacturing.....	100.0	83.4	85.6	82.7	96.6	90.7	98.6	100.0	91.5	83.4	89.3	104.6	111.9	124.4
Manufacturing, exclusive of highly seasonal industries ²	100.0	85.7	98.3	88.2	89.8	94.1	101.3	100.0	91.8	84.0	91.3	109.6	113.4	131.0
Textiles ³	100.0	96.0	81.4	103.2	93.4	112.1	109.1	100.0	85.4	78.7	90.8	88.3	93.4	95.0
Food and kindred products.....	100.0	70.2	70.7	73.1	78.4	87.7	89.9	100.0	81.7	83.3	82.5	81.4	96.7	92.8
Confectionery.....	100.0	79.3	(6)	90.4	79.2	66.9	87.0	100.0	103.3	97.3	101.8	122.1	116.0	74.9
Fruit and vegetable canning, etc.....	100.0	55.5	54.0	57.3	69.2	83.3	83.0	100.0	72.8	75.0	65.0	71.6	103.1	92.5
Peanut cleaning, etc.....	100.0	128.3	107.8	134.6	116.1	124.9	119.5	100.0	89.7	78.5	81.0	83.8	97.8	127.1
Sea foods: Canning, etc.....	100.0	68.9	64.3	65.0	80.3	89.1	93.8	100.0	81.1	92.3	99.8	90.2	106.0	99.5
Tobacco manufactures ⁵	100.0	95.5	146.3	109.3	123.8	130.3	143.1	100.0	94.4	118.1	107.8	117.9	122.0	124.0
Cigars and cigarettes.....	100.0	82.1	172.9	120.4	141.0	154.4	167.0	100.0	89.4	121.0	103.4	121.3	125.8	130.4
Tobacco rehandling.....	100.0	99.2	97.7	92.0	125.2	91.3	108.0	100.0	102.4	77.4	80.8	89.6	108.7	107.3
Wood products:.....	100.0	98.9	95.9	100.4	112.7	90.8	79.2	100.0	67.2	72.4	82.3	101.7	96.9	94.1
Fruit and vegetable packages.....	100.0	98.9	95.9	100.4	112.7	90.8	79.2	100.0	67.2	72.4	82.3	101.7	96.9	94.1
Service:.....	100.0	97.7	81.8	90.8	91.4	95.7	111.2	(6)	(6)	(6)	(6)	(6)	(6)	(6)
Laundries.....	100.0	97.7	81.8	90.8	91.4	95.7	111.2	(6)	(6)	(6)	(6)	(6)	(6)	(6)

¹ Indexes computed by Women's Bureau from figures published each year in the annual reports of the Department of Labor and Industry of Virginia or unpublished figures supplied by the same department. These figures are based on the average of employment during the period of plant operation rather than for the calendar year. Days worked in all manufacturing varied from 283 to 247. Changes were made in the classifications in 1930; hence this is used as the base year. Industries are included if as many as 500 women were reported in any 2 years.

² Excludes canning fruits and vegetables and, under Negro, canning seafoods; confectionery; peanut cleaning, etc.; and tobacco rehandling.

³ Compiled by Women's Bureau. Includes, besides the detail shown, the following: Bags and burlaps; awnings, tents, sails, and canvas covers; and textiles not elsewhere classified.

⁴ Compiled by Women's Bureau. Includes clothing, outerwear and underwear (exclusive of knit); and hats and caps.

⁵ Compiled by Women's Bureau. Includes, besides cigars and cigarettes, chewing and smoking tobacco and snuff.

⁶ State authorities advised that they had not sufficient data to insure accuracy of this figure.

TABLE V.—INDEXES OF EMPLOYMENT OF WOMEN AND MEN IN IMPORTANT WOMAN-EMPLOYING INDUSTRIES IN NEW YORK, SEPTEMBER OF EACH YEAR, 1928-36 ¹

[June 1923=100]

Industry	Women									Men								
	1928	1929	1930	1931	1932	1933	1934	1935	1936	1928	1929	1930	1931	1932	1933	1934	1935	1936
All manufacturing ²	85	91	80	73	59	68	72	75	81	84	90	77	66	51	62	65	69	75
Textiles.....	69	74	60	56	40	52	48	62	64	79	85	70	68	48	70	64	75	78
Knit goods (except silk).....	55	58	53	48	49	49	46	57	58	67	73	64	61	57	64	59	69	72
Silk and silk goods.....	61	61	56	54	36	53	60	85	93	80	72	73	67	57	85	84	91	87
Woolens, carpets, felt.....	87	100	71	66	40	63	54	64	61	94	107	88	82	52	88	77	94	91
Clothing:																		
Men's clothing.....	87	91	82	79	70	80	86	88	85	69	76	69	66	63	75	75	75	76
Men's furnishings.....	66	67	49	48	37	47	54	50	52	70	70	52	49	44	51	56	63	62
Women's clothing.....	86	96	98	83	65	71	82	93	101	104	117	113	102	80	95	120	127	139
Women's headwear.....	88	86	82	83	77	79	98	75	86	117	111	101	89	78	92	125	108	103
Women's underwear.....	59	65	54	57	47	46	55	60	64	74	83	75	68	63	62	68	75	76
Food:																		
Bakery products.....	91	72	63	61	47	42	40	37	33	95	88	83	75	68	73	72	66	67
Candy.....	102	99	88	105	84	94	93	79	95	104	97	82	91	76	106	113	111	113
Canning and preserving.....	158	204	259	196	158	221	236	245	267	149	173	262	235	174	196	248	247	233
Leather:																		
Gloves, bags, canvas goods.....	94	115	114	90	73	98	99	91	93	87	106	95	67	46	74	73	62	60
Shoes.....	110	141	130	101	76	72	77	78	78	98	107	114	92	78	59	69	73	73
Tobacco.....	57	56	40	39	35	13	20	20	16	75	65	39	39	32	17	25	23	22
Paper and printing:																		
Paper boxes and tubes.....	77	74	68	63	47	63	68	71	84	79	89	81	79	64	87	86	94	100
Printing and bookmaking.....	96	100	84	67	55	65	66	76	84	93	97	92	83	68	71	73	78	84
Metals and machinery (including electric):																		
Machinery and electrical apparatus.....	103	108	72	59	41	63	67	74	84	81	93	70	53	36	48	52	57	66
Sheet metal and hardware.....	116	136	68	61	41	66	59	72	75	83	103	76	58	37	43	50	55	61
Rubber and gutta percha.....	100	72	52	48	39	51	53	46	61	84	80	65	56	42	51	54	59	66
Wood manufactures.....	73	60	56	49	40	51	43	44	44	81	76	49	42	28	43	37	38	45
Chemicals, oils, and paint:																		
Drugs and industrial chemicals.....	75	79	70	61	45	55	50	57	60	78	76	59	47	31	39	36	42	47
Photographic and miscellaneous chemicals.....	84	125	102	105	87	111	115	108	104	113	129	119	108	93	116	121	117	135
Laundering and cleaning.....	93	103	102	85	77	80	101	104	116	112	133	144	117	100	103	126	140	164
Laundry and cleaning.....	125	133	128	126	111	119	114	111	122	106	117	111	113	96	112	103	116	130

¹ From indexes reported each month in the Industrial Bulletin, New York State Department of Labor.

² Includes laundering and cleaning.

PAMPHLET