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FACTORY LABOR TURNOVER IN MICHIGAN

BY
O. W. BLACKETT



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AUTHOR'S NOTE

During the past year the Bureau of Business Research has co-operated with Michigan firms in the collection and analysis of labor turnover facts. Individual reports have been returned each month to the cooperating companies but heretofore no collection of all the data has been attempted. With the completion of its first year of experience in this field the Bureau submits a summary of the data and an analysis of the leading conclusions.

It would be a great pleasure to acknowledge individually the companies which have associated themselves with the Bureau in this activity. Because of the Bureau's arrangements to keep the names of contributors confidential, this is impossible. The value of their service is, however, fully appreciated.

Special acknowledgement is due the Metropolitan Life Insurance Company which has assisted in many ways to make the collection of data a success. The Metropolitan Life Insurance Company was instrumental in organizing the collection of labor turnover statistics throughout the country and contributes its national averages for use in this bulletin.

Most of the calculations used in the bulletin have been done by Mr. T. A. Veenstra of the Bureau's staff.

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APPENDIX

TABLE I—MEDIAN LABOR TURNOVER RATES, AUGUST 1927—JULY 1928, CLASSIFIED
BY REGIONS

(Rate expressed as monthly percentage of average on payroll)

		Quit Rate	Discharge Rate	Lay-off Rate	Total Separation Rate	Hiring Rate
United States						
August	1927	2.3	0.4	0.7	3.4	3.5
September		3.1	0.6	0.5	4.2	4.3
October		2.2	0.4	0.7	3.3	3.3
November		1.5	0.3	0.7	2.5	2.8
December		1.3	0.3	0.7	2.3	2.1
January	1928	1.4	0.3	0.7	2.4	3.2
February		1.1	0.3	0.7	2.1	2.4
March		1.6	0.4	0.6	2.6	2.9
April		2.1	0.4	0.7	3.2	3.1
May		2.2	0.4	0.7	3.3	3.7
June		2.2	0.4	0.6	3.2	3.0
July		2.0	0.4	0.5	2.9	3.5
Michigan						
August	1927	2.7	0.7	1.6	5.0	6.0
September		2.6	0.8	1.5	4.9	5.5
October		2.0	1.0	1.5	4.5	4.2
November		1.5	0.4	1.4	3.3	3.2
December		1.5	0.4	1.3	3.2	2.8
January	1928	1.9	0.8	1.2	3.9	5.3
February		2.2	0.7	1.1	4.0	6.2
March		3.1	0.7	0.6	4.4	6.6
April		4.6	1.2	0.8	6.6	6.9
May		4.9	1.0	1.2	7.1	8.7
June		3.2	1.0	0.4	4.6	6.8
July		3.8	0.8	0.8	5.4	7.3
Battle Creek						
August	1927	1.8	0.1	5.8	7.7	3.3
September		1.0	0.4	5.2	6.6	6.6
October		1.6	0.4	1.4	3.4	3.1
November		2.6	—0—	2.0	4.6	3.6
December		1.8	0.2	4.8	6.8	2.8

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TABLE 1—(Continued)

		Quit Rate	Discharge Rate	Lay-off Rate	Total Separation Rate	Hiring Rate
January	1928	2.6	1.3	0.6	4.5	5.5
February		3.0	1.6	0.7	5.3	13.2
March		6.3	1.2	0.6	8.1	15.5
April		7.9	0.7	0.9	9.5	13.1
May		5.2	0.6	0.9	6.7	12.3
June		4.4	0.8	0.5	5.7	7.8
July		3.2	1.0	0.9	5.1	8.9
Detroit						
August	1927	2.4	1.0	4.5	7.9	6.3
September		2.4	0.8	3.0	6.2	6.0
October		1.7	1.1	5.8	8.6	4.8
November		1.5	0.6	2.8	4.9	3.5
December		2.0	0.7	1.3	4.0	8.7
January	1928	3.2	1.1	2.2	6.5	16.2
February		3.7	1.2	2.0	6.9	10.6
March		3.1	1.8	0.5	5.4	11.8
April		4.3	1.6	0.6	6.5	7.4
May		5.8	1.2	0.6	7.6	11.7
June		4.8	1.0	1.8	7.6	7.0
July		4.8	1.0	1.7	7.5	10.9
Flint						
August	1927	—	—	—	—	—
September		7.7	1.4	5.0	14.1	7.0
October		3.5	0.8	10.2	14.5	2.6
November		2.9	0.5	1.9	5.3	3.7
December		3.1	0.8	0.5	4.4	21.2
January	1928	3.3	1.0	1.0	5.3	27.1
February		3.8	1.6	2.6	8.0	8.2
March		4.0	0.7	0.7	5.4	6.6
April		4.1	0.8	2.0	6.9	5.5
May		6.9	0.6	0.7	8.2	6.8
June		5.0	1.0	0.7	6.7	11.0
July		11.7	2.1	—0—	13.8	13.4
Grand Rapids						
August	1927	2.4	0.6	—0—	3.0	6.2
September		1.7	1.0	0.3	3.0	5.1
October		2.7	1.5	1.1	5.3	8.8
November		1.2	0.7	2.7	4.6	2.4

TABLE I—(Continued)

		Quit Rate	Discharge Rate	Lay-off Rate	Total Separation Rate	Hiring Rate
December		1.2	0.6	2.3	4.1	2.2
January	1928	0.9	0.7	1.5	3.1	6.5
February		1.1	1.3	2.1	4.5	2.5
March		2.0	0.3	1.5	3.8	3.9
April		1.5	1.2	0.6	3.3	2.4
May		2.1	0.2	2.6	4.9	1.1
June		2.4	0.4	—0—	2.8	1.9
July		2.5	0.6	0.8	3.9	5.4
Jackson						
August	1927	1.4	0.8	2.8	5.0	6.1
September		1.6	1.4	0.4	3.4	5.0
October		1.1	1.0	0.4	2.5	5.8
November		1.0	—0—	2.2	3.2	3.6
December		0.8	0.2	5.7	6.7	1.4
January	1928	1.7	1.2	0.9	3.8	13.1
February		1.1	0.4	1.4	2.9	4.7
March		2.1	0.4	0.7	3.2	8.3
April		4.6	1.7	0.5	6.8	10.0
May		2.6	1.9	2.0	6.5	5.4
June		1.6	1.8	0.4	3.8	2.3
July		1.9	1.1	0.7	3.0	2.8
Kalamazoo						
August	1927	4.0	1.5	0.6	6.0	4.6
September		3.4	0.7	2.2	6.3	4.0
October		3.6	1.5	0.1	5.2	4.5
November		2.2	0.6	—0—	2.8	4.4
December		1.4	0.7	0.4	2.5	3.2
January	1928	2.0	0.8	0.3	3.1	3.4
February		3.4	1.4	0.5	5.3	6.1
March		4.2	1.3	0.3	5.8	6.4
April		4.6	1.4	0.5	6.5	4.6
May		5.6	0.8	1.3	7.7	7.1
June		3.1	1.8	0.6	5.5	8.1
July		3.1	1.0	—0—	4.1	7.7
Lansing						
August	1927	4.8	1.0	3.6	9.4	6.2
September		2.1	1.3	0.7	4.1	2.2
October		1.7	0.4	1.5	3.6	2.5
November		1.4	0.8	3.4	5.6	1.8

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TABLE I—(Continued)

		Quit Rate	Discharge Rate	Lay-off Rate	Total Separation Rate	Hiring Rate
December		0.9	0.4	1.2	2.5	2.1
January	1928	1.8	0.9	0.7	3.4	8.4
February		2.1	1.2	0.8	4.1	11.0
March		3.7	1.2	0.3	5.2	18.6
April		8.4	1.8	0.3	10.5	15.6
May		13.0	1.9	1.0	15.9	13.9
June		8.9	2.5	—0—	11.4	13.0
July		5.2	0.9	2.0	8.1	4.0
Muskegon						
August	1927	2.8	2.0	0.4	5.2	18.7
September		3.8	2.6	0.6	7.0	17.0
October		1.1	1.4	7.4	9.9	6.8
November		—	—	—	—	—
December		1.6	0.9	7.5	10.0	4.7
January	1928	2.4	0.6	3.4	6.4	8.1
February		4.0	0.5	1.9	6.4	10.1
March		5.3	2.4	1.9	9.6	13.0
April		9.9	0.9	8.3	19.1	15.0
May		4.3	3.3	0.7	8.3	27.4
June		4.4	1.9	—0—	6.3	14.8
July		10.3	3.4	0.9	14.6	18.1
Saginaw						
August	1927	4.3	1.2	0.3	5.8	6.7
September		5.3	1.4	2.5	9.2	6.4
October		2.0	1.5	0.7	4.2	3.2
November		1.6	0.4	0.8	2.8	2.4
December		1.9	0.4	—0—	2.3	4.0
January	1928	1.7	1.1	0.5	3.3	3.5
February		2.1	0.8	1.3	4.2	2.0
March		3.0	0.6	0.8	4.4	2.3
April		4.2	1.1	2.2	7.5	7.2
May		5.7	0.9	0.2	6.8	8.9
June		3.4	0.4	0.6	4.4	4.9
July		5.2	0.3	1.3	6.8	9.2
Small Towns						
August	1927	2.2	—0—	—0—	2.2	3.3
September		3.4	0.3	—0—	3.7	2.7
October		2.7	0.4	2.8	5.9	3.4

TABLE 1—(Continued)

		Quit Rate	Discharge Rate	Lay-off Rate	Total Separation Rate	Hiring Rate
November		1.8	—0—	2.0	3.8	2.3
December		1.5	0.4	1.3	3.2	2.8
January	1928	1.0	0.3	0.5	1.8	2.9
February		1.2	—0—	0.2	3.4	8.3
March		1.8	—0—	0.7	2.5	4.2
April		4.4	—0—	1.2	5.6	5.1
May		4.6	0.5	2.4	7.5	6.4
June		2.3	—0—	0.1	2.4	5.7
July		3.8	0.1	0.3	4.2	6.7

TABLE 2—MEDIAN LABOR TURNOVER RATES, AUGUST 1927—JULY 1928,
CLASSIFIED BY INDUSTRIES
(Rate expressed as monthly percentage of average on payroll)

		Quit Rate	Discharge Rate	Lay-off Rate	Total Separation Rate	Hiring Rate
Automobile and Accessory						
August	1927	4.0	1.5	7.1	12.6	8.8
September		4.4	1.0	3.8	9.2	7.4
October		2.2	1.0	5.1	8.3	3.0
November		1.8	0.6	3.1	5.5	4.1
December		3.0	0.8	1.5	5.3	12.8
January	1928	3.8	1.3	1.8	6.9	20.8
February		3.8	1.3	2.3	7.4	17.5
March		5.4	1.6	1.0	8.0	16.5
April		7.9	1.6	1.6	11.1	11.6
May		6.7	1.6	1.2	9.5	14.5
June		5.6	1.0	2.5	9.1	11.9
July		6.8	1.1	2.0	9.9	9.2
Forges and Foundries						
August	1927	2.7	1.1	3.3	7.1	5.5
September		2.1	0.4	1.9	4.4	3.1
October		1.8	0.8	5.5	8.1	3.8
November		1.4	—0—	4.8	6.2	2.5
December		0.9	0.6	2.5	4.0	2.3

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TABLE 2—(Continued)

		Quit Rate	Discharge Rate	Lay-off Rate	Total Separation Rate	Hiring Rate
January	1928	0.9	0.7	2.6	4.2	10.2
February		2.8	0.5	1.0	4.3	9.6
March		2.3	1.0	1.4	4.7	11.5
April		6.8	1.5	1.8	10.1	14.5
May		6.0	1.5	1.2	8.7	12.8
June		5.0	1.4	1.7	8.1	14.6
July		5.2	1.1	5.0	11.3	9.1
Paper						
August	1927	8.6	3.5	3.2	15.3	20.0
September		5.0	1.5	0.6	7.1	6.8
October		5.2	1.6	0.1	6.9	10.6
November		2.5	1.7	0.8	5.0	4.4
December		1.4	0.8	0.4	2.6	4.0
January	1928	3.5	0.9	1.3	5.7	2.5
February		3.6	1.1	0.6	5.3	6.3
March		5.2	1.4	0.2	6.8	6.4
April		6.6	1.6	0.5	8.7	8.8
May		7.8	2.1	0.8	10.7	11.5
June		5.0	2.4	0.5	7.9	12.8
July		5.4	1.9	—0—	7.3	10.6
Furniture						
August	1927	2.1	0.4	0.2	2.7	6.5
September		2.2	1.0	0.3	3.5	5.0
October		3.2	1.1	1.2	5.5	6.2
November		1.2	0.3	2.0	3.5	2.4
December		1.3	0.4	3.2	4.9	2.0
January	1928	2.0	0.6	1.4	4.0	4.9
February		1.0	0.5	1.2	2.7	3.2
March		1.9	0.3	1.0	3.2	1.6
April		1.5	0.4	1.3	3.2	3.6
May		2.7	0.4	2.8	5.9	1.3
June		2.2	0.4	—0—	2.6	3.0
July		2.8	0.6	0.7	4.1	6.5
Machine and Tool						
August	1927	2.9	—0—	0.3	3.2	4.3
September		1.9	0.6	2.3	4.8	4.7
October		1.9	1.0	0.5	3.4	4.0

TABLE 2—(Continued)

		Quit Rate	Discharge Rate	Lay-off Rate	Total Separation Rate	Hiring Rate
November		1.5	—0—	0.7	2.2	2.9
December		1.8	0.4	0.3	2.3	2.6
January	1928	1.5	1.0	—0—	2.5	3.6
February		2.1	0.8	0.7	3.6	3.6
March		3.2	0.7	0.5	4.4	5.3
April		3.7	1.3	0.2	5.2	6.8
May		3.4	0.9	1.2	5.5	6.0
June		2.4	1.1	—0—	3.5	2.7
July		3.2	0.8	—0—	4.0	7.2
Public Utilities						
August	1927	2.1	0.7	1.6	4.4	5.6
September		2.0	1.0	0.5	3.5	4.8
October		3.0	0.6	0.8	4.4	4.7
November		1.8	0.9	1.1	3.8	6.0
December		2.8	0.9	4.0	7.7	6.0
January	1928	2.4	0.8	3.5	6.7	4.6
February		1.4	0.5	0.3	2.2	5.7
March		2.0	0.5	1.3	3.8	3.8
April		2.6	1.1	0.8	4.5	4.4
May		3.4	0.9	1.3	5.6	4.8
June		1.6	0.9	0.5	3.0	6.4
July		2.9	1.1	3.1	7.1	8.2
Food Products						
August	1927	0.6	0.2	9.7	10.5	16.2
September		1.6	0.1	4.6	6.3	5.6
October		0.2	—0—	1.0	1.2	0.5
November		0.5	—0—	1.3	1.8	3.8
December		0.3	0.1	6.7	7.1	2.1
January	1928	1.2	0.1	0.4	1.7	2.7
February		0.4	0.6	1.0	2.0	4.9
March		1.0	0.1	1.7	2.8	13.8
April		1.4	0.1	0.3	1.8	7.4
May		1.7	0.1	0.8	2.6	8.1
June		1.7	0.1	2.1	3.9	3.1
July		1.5	0.2	4.2	5.9	3.2
All Others						
August	1927	2.0	—0—	—0—	2.0	5.2
September		1.6	0.7	1.0	3.3	4.1

TABLE 2—(Continued)

	Quit Rate	Discharge Rate	Lay-off Rate	Total Separation Rate	Hiring Rate
October	1.5	1.3	—0—	2.8	3.9
November	1.9	—0—	0.9	2.8	1.7
December	1.1	0.1	0.2	1.4	3.1
January	1928 1.2	0.2	—0—	1.4	5.9
February	1.8	0.4	1.3	3.5	5.1
March	2.9	1.6	—0—	4.5	8.4
April	2.4	0.2	0.4	3.0	4.9
May	4.8	0.5	0.6	5.9	6.6
June	3.2	0.3	—0—	3.5	5.7
July	3.2	0.7	—0—	3.9	8.5

TABLE 3—INDEX OF EMPLOYMENT IN MICHIGAN

Date	Automotive Industry	Foundry and Machine Industry	Shop Furniture Industry	Paper Industry	Combined
1920					
June	100.0	100.0	100.0	100.0	100.0
July	101.3	99.3	99.5	97.7	100.0
August	95.7	99.5	102.2	98.1	98.1
September	59.5	96.1	101.9	99.8	82.3
October	28.5	86.2	102.5	93.7	65.8
November	18.6	77.4	96.7	90.5	57.3
December	18.8	65.5	89.9	87.3	51.9
1921					
January	16.0	46.6	73.2	88.1	41.4
February	19.2	55.0	71.4	77.5	44.7
March	27.6	49.4	73.0	78.1	46.3
April	35.3	51.9	70.0	57.1	48.3
May	39.7	51.0	69.6	73.0	50.9
June	41.8	52.2	73.1	91.3	54.3
July	31.3	50.2	67.5	83.4	47.8
August	32.0	55.4	78.0	84.4	51.7
September	40.6	55.9	87.4	83.8	56.8
October	40.3	62.2	93.3	87.9	60.1
November	40.6	64.4	89.2	90.8	60.6
December	40.6	68.2	87.8	92.6	61.8

TABLE 3—(Continued)

Date	Foundry and				Combined
	Automotive Industry	Machine Shop Industry	Furniture Industry	Paper Industry	
1922					
July	83.2	101.2	94.8	111.4	93.6
August	96.6	106.4	99.7	111.3	101.8
September	87.4	110.3	105.0	120.6	100.9
October	82.2	105.3	110.1	120.6	97.8
November	85.0	110.0	112.0	120.9	101.0
December	87.8	112.0	113.3	108.5	102.0
1923					
January	90.9	109.2	112.8	105.8	102.1
February	90.6	111.7	111.1	108.0	102.7
March	92.9	112.6	112.3	108.7	104.2
April	100.4	112.6	115.5	112.1	108.1
May	99.3	114.6	116.7	115.4	108.7
June	102.3	114.5	120.1	115.1	110.4
July	107.9	111.3	121.7	117.8	111.9
August	96.6	90.8	123.0	120.3	100.4
September	99.3	104.9	115.2	123.6	105.6
October	94.0	100.3	107.7	119.8	100.4
November	92.9	99.3	106.0	124.9	99.8
December	88.2	89.3	104.0	124.9	94.0
1924					
January	80.8	94.9	100.6	131.4	92.9
February	92.3	105.4	100.3	136.0	101.7
March	93.6	102.9	102.3	134.4	101.6
April	76.1	102.9	102.3	138.1	94.6
May	56.3	104.8	101.3	144.5	87.6
June	41.6	94.4	101.2	149.2	78.2
July	38.5	92.7	102.4	143.2	76.1
August	36.9	86.6	103.8	149.8	74.0
September	39.4	87.3	102.1	146.0	74.7
October	47.7	92.6	103.0	152.3	80.7
November	32.8	87.7	104.2	133.8	71.4
December	39.2	96.6	105.6	135.7	77.7
1925					
January	51.7	108.0	112.6	134.7	87.8
February	57.3	102.9	113.0	133.3	88.2
March	72.4	104.5	114.4	135.4	95.3
April	83.4	113.1	121.7	136.7	104.1
May	82.2	106.1	121.7	137.3	101.2
June	57.0	108.4	115.1	145.8	91.4

MICHIGAN BUSINESS STUDIES

TABLE 3—(Continued)

Date	Foundry and			Paper Industry	Combined
	Automotive Industry	Machine Shop Industry	Furniture Industry		
July	75.7	106.3	108.9	149.2	97.6
August	73.9	115.1	111.4	147.1	100.3
September	79.2	116.3	115.8	147.1	103.5
October	79.6	112.1	115.4	146.6	102.1
November	78.7	120.9	114.2	146.6	104.7
December	61.8	131.5	113.4	147.1	101.5
1926					
January	86.2	126.8	113.0	145.7	109.7
February	94.4	127.1	110.9	144.7	112.7
March	95.5	121.4	109.5	144.7	110.9
April	99.8	130.6	107.9	144.7	115.6
May	97.8	122.5	104.1	146.6	111.4
June	101.2	120.4	104.4	148.9	112.4
July	98.5	123.6	107.2	147.9	112.7
August	99.0	116.2	113.2	148.4	111.3
September	101.9	127.9	114.7	148.2	117.0
October	105.5	115.7	114.9	148.1	113.9
November	91.7	113.1	116.7	144.2	107.4
December	64.6	93.6	133.5	145.7	92.1
1927					
January	82.7	93.3	128.8	142.6	98.3
February	119.0	93.9	121.4	138.7	112.0
March	128.7	93.9	118.9	138.6	115.5
April	118.7	90.2	124.7	138.7	111.0
May	123.8	90.7	120.0	146.8	113.2
June	133.5	91.1	119.1	146.9	117.2
July	110.2	91.3	120.1	152.9	108.4
August	103.7	91.0	127.4	156.9	107.1
September	101.1	86.0	125.6	159.9	104.1
October	99.7	82.8	122.2	158.4	101.9
November	94.4	82.4	122.1	156.3	99.3
December	98.1	83.7	116.9	155.8	100.5
1928					
January	108.4	87.1	112.7	152.3	105.0
February	119.7	93.1	113.8	151.3	111.8
March	128.0	96.2	113.4	155.3	116.6
April	135.8	100.1	110.4	150.9	120.3
May	138.7	102.3	105.0	150.6	121.4
June	134.8	105.3	104.5	147.6	120.6
July	132.8	102.1	107.8	154.3	119.6